

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS**

**SPECIAL ASSISTANCE
FOR PROJECT FORMATION
(SAPROF)
FOR
DEDICATED FREIGHT CORRIDOR PROJECT**

**FINAL REPORT
(Volume 1)**

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JANUARY 2010

JAPAN INTERNATIONAL COOPERATION AGENCY

**NIPPON KOEI CO., LTD.
JAPAN RAILWAY TECHNICAL SERVICE**

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**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS**

**SPECIAL ASSISTANCE
FOR PROJECT FORMATION
(SAPROF)
FOR
DEDICATED FREIGHT CORRIDOR PROJECT**

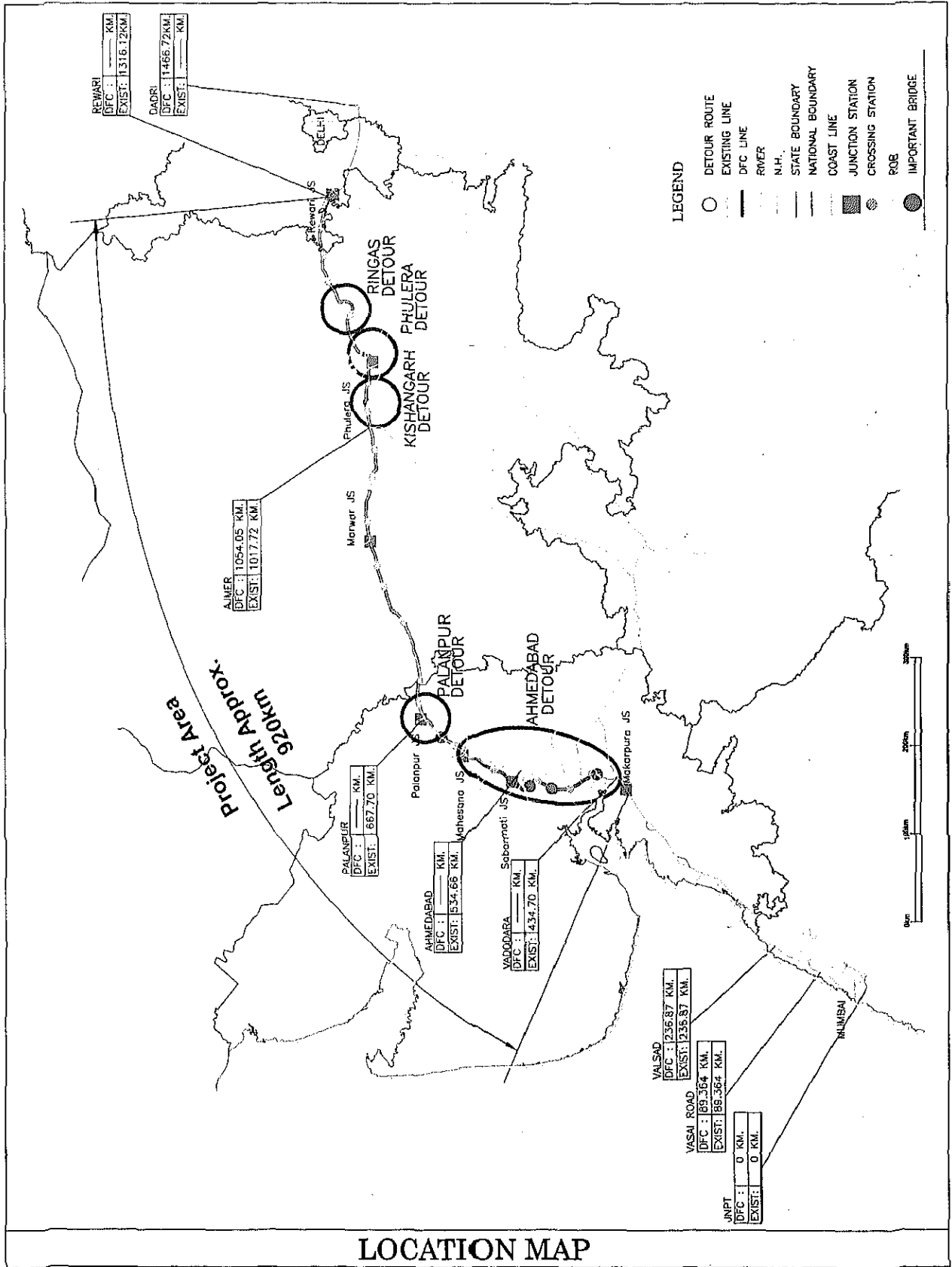
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LOCATION MAP

GOVERNMENT OF INDIA
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SPECIAL ASSISTANCE
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FOR

DEDICATED FREIGHT CORRIDOR
PROJECT

FINAL REPORT
(Executive Summary)

JANUARY 2010

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD.
JAPAN RAILWAY TECHNICAL SERVICE

**Special Assistance for Project Formation (SAPROF)
for
Dedicated Freight Corridor (DFC) Project**

**Final Report
(Executive Summary)**

January 2010

**JICA SAPROF Study Team
- Nippon Koei Co., Ltd.,
- Japan Railway Technical Service**

CONTENTS

Page 1

0. Objectives of the SAPROF Study

1. Recapitulation

- 1.1 The SAPROF Alignment**
- 1.2 Final Location Survey (FLS)**
- 1.3 General Arrangement Drawings (GAD)**

2. FLS Deviation Identified and Validated

3. Reconciliation of Conceptual Design of Junction Stations

4. Activities on Environmental and Social Considerations

- 4.1 Supplementary Survey for ESIMMS (S-ESIMMS)**
- 4.2 Public Consultation Meeting for EIA**
- 4.3 Information Disclosure of the EIA Report**
- 4.4 Draft Rehabilitation and Resettlement Plan**
- 4.5 Public Consultation Meeting for RRP**

5. Recommendations and Conclusions

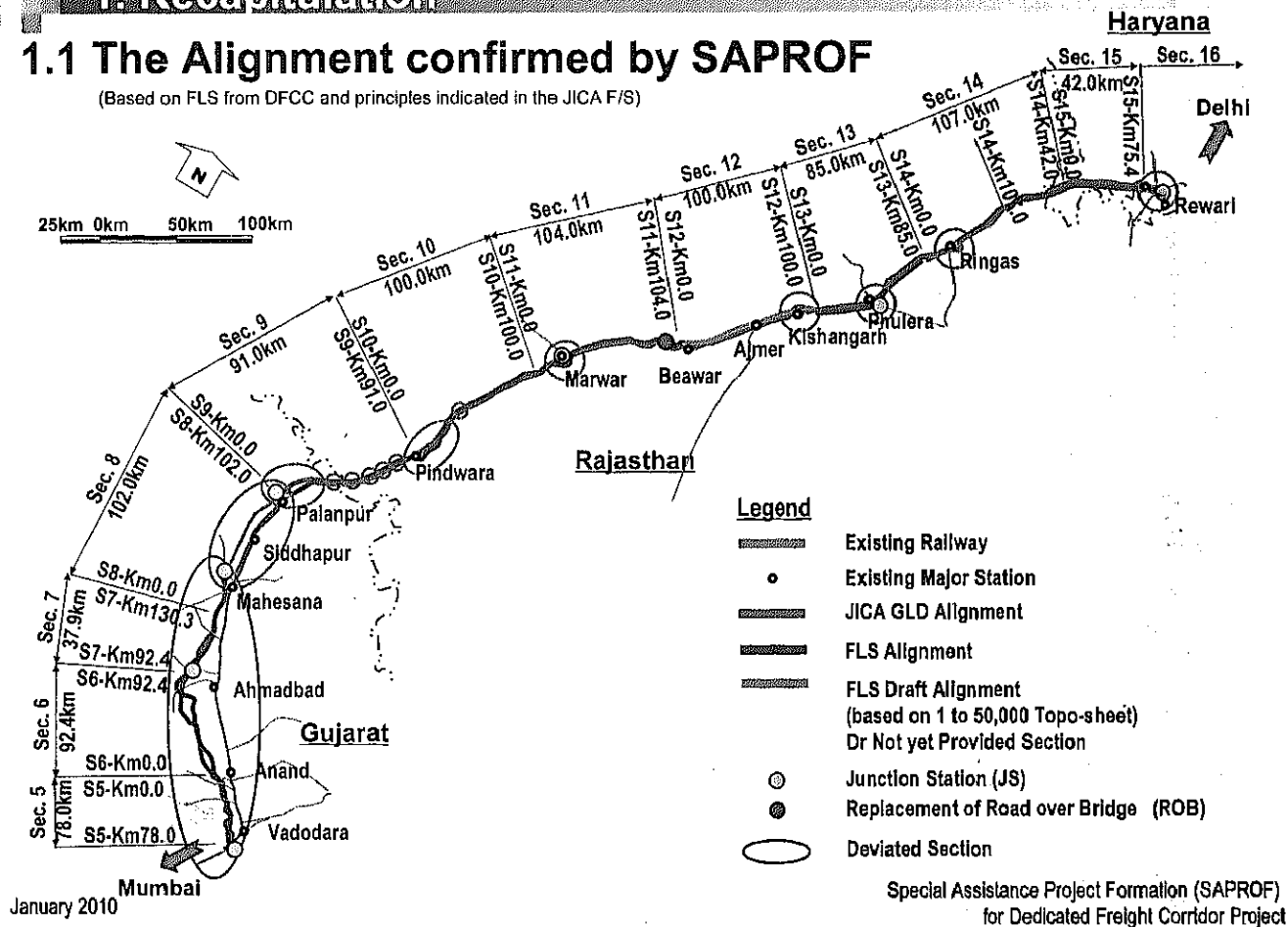
1. Confirm the consistency between the Final Location Survey (FLS) , General Arrangement Drawing (GAD) and the principles of the Guideline Design (GLD) of JICA F/S
2. Execution of Supplementary Environmental and Social Impact Mitigation Measures Study (S-ESIMMS) including preparation of Draft Resettlement and Rehabilitation Plan (RRP) based on confirmed FLS and GAD in accordance with JBIC Guidelines for Confirmation of Environmental and Social Considerations (JBIC Guidelines)
3. Survey of working environment of construction industry, and check measures taken for construction safety.

1. Recapitulation

1. Recapitulation

1.1 The Alignment confirmed by SAPROF

(Based on FLS from DFCC and principles indicated in the JICA F/S)



1. Recapitulation

1.2 Final Location Survey (FLS) Status as of January 2010

Section	Section Length (Km)	Final Handover Date to SAPROF Team	Relative position to the existing line
5	78.0	11 July 2008	Detour to the west side of existing line
6	92.4	16 July 2008	Detour to the west side of existing line
7	38.1	24 Oct 2008	Detour to the west side of existing line
8	102.0	24 Oct 2008	Detour to the west side of existing line
9	91.0	11 July 2008	Parallel to existing line on the east side.
10	100.0	11 July 2008	Parallel to existing line on the east side.
11	104.0	11 July 2008	Parallel to existing line on the east side.
12	100.0	30 July 2008	Parallel to existing line on the east side.
13	85.0	11 July 2008	Parallel to existing line on the east side.
14	107.0	30 July 2008	Parallel to existing line on the east side.
15	42	25 July 2008	Parallel to existing line on the east side. End point at east side of Rewari JS
Total	939.5		

Note: () indicate section out of Project scope.

1. Recapitulation

1.3 General Arrangement Drawings (GAD) No.1

Status of provision of FLS data as of January 2010

Category	Total	Provided	Remarks
Junction Station	7	7	Model plans of: Makarpura, Sabarmati, Mahesana, Palanpur, Marwar, Phulera, Rewari CAD drawings of former 5 JS of above
Crossing station	21	18	Number of CSs Indicated on FLS. Typical plan provided.
Typical cross section	4	4	Detour section only (Embank. & Cut section) Parallel section (Embankment)
Important Bridges / Major Bridges (Length > 100m)	4 / 19	0	Completed hydrological model study, report undisclosed. Tender drawings for bridges south of Vadodara available as reference.
ROB subject to reconstruction (Near Amarpura)	1	0	Tender drawings for Eastern Corridor available as reference.

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for Dedicated Freight Corridor Project

1. Recapitulation

Page 7

1.3 General Arrangement Drawings (GAD) No.2

Status of provision of FLS data as of January 2010

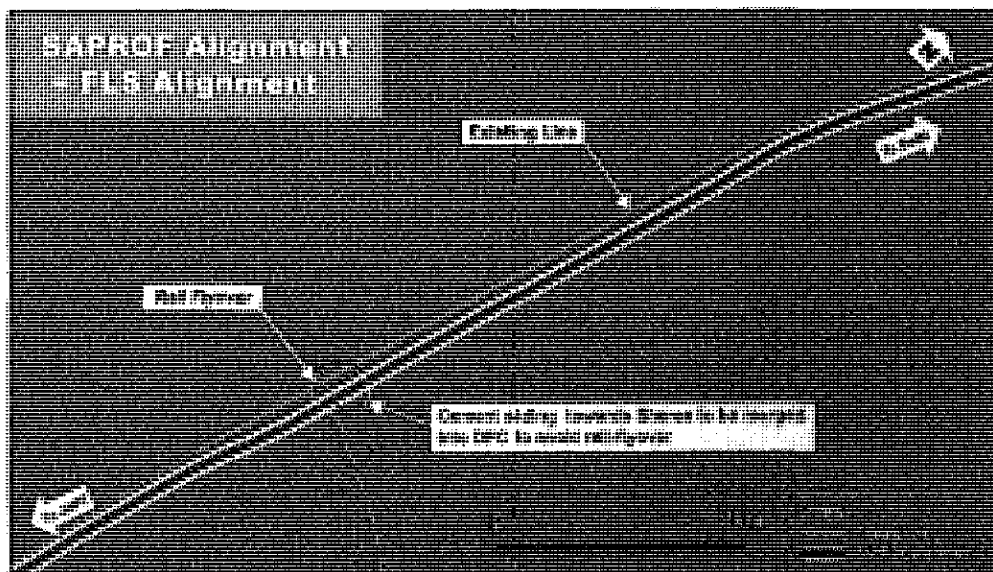
Category	Total	Provided	Remarks
Inland Container Depot	1	0	Indicated as logistic park on Rewari JS drawings but no details available
Loco Depot	Undefined	0	Planning subject to procurement plan and freight transport plan by IR
Maintenance Depot	Undefined	0	To be planned
Substation	Undefined	0	To be planned

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for Dedicated Freight Corridor Project

2. FLS Deviation Identified and Validated

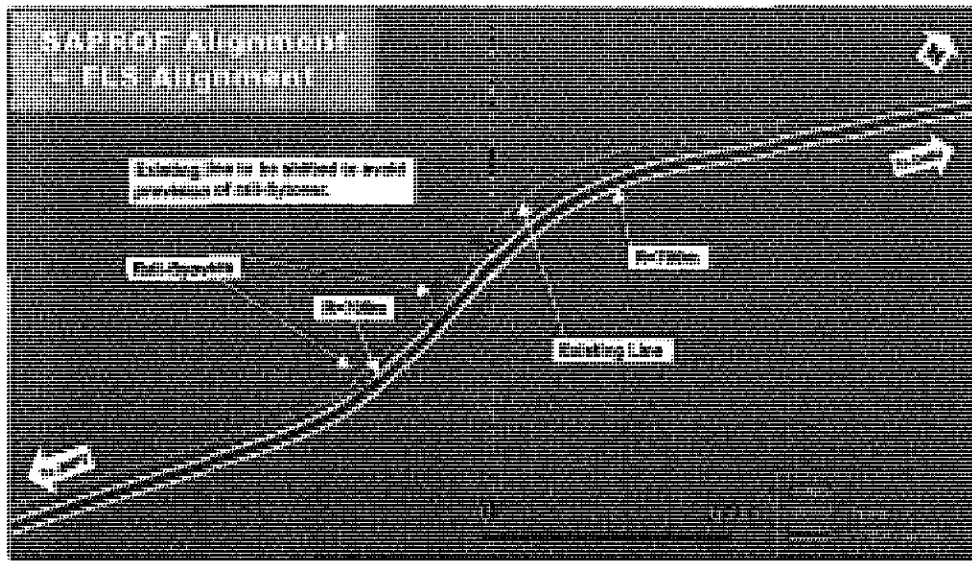
2. FLS Deviation Identified and Validated



No.	Sec.	Km		Type of Section		Reason of Detour, Deviation, etc	Final. Align.
		FLS	GLD	FLS	GLD		
1	12	S12-Km10.4-14.4	Km 976.0 - 980.0	Small Detour	Parallel	FLS alignment is diverted from the parallel section to accommodate the planned crossing station. The SAPROF team understands that the cement siding on the east of the existing line will be shifted to the east and merged in to the DFC with a waiting track. Thus a railway flyover will not be required.	FLS

Figure 1 Bangurgram Stn.

2. FLS Deviation Identified and Validated



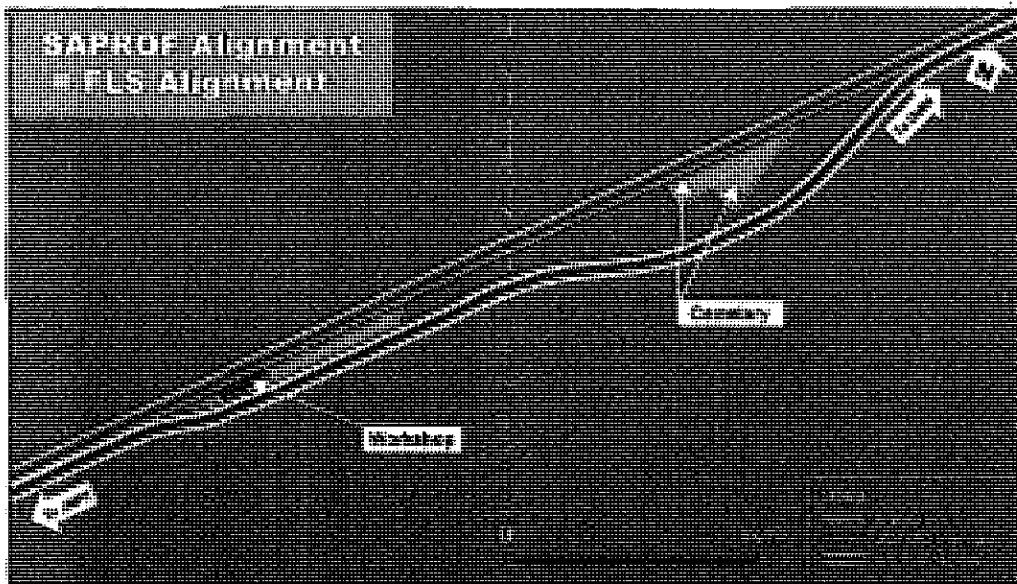
No.	Sec.	Km		Type of Section		Reason of Detour, Deviation, etc	Final. Align.
		FLS	GLD	FLS	GLD		
2	12	S12-Km39.4-40.9	Km 1005.3 - 1006.9	Small Detour	Parallel	FLS alignment is crossing the existing line twice for adopting minimum radius of 700m. SAPROF team suggests that the existing line is to be shifted to the west side along FLS alignment in order to avoid 2 rail-flyovers.	FLS

Figure 2 Near Makrera Stn.

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2. FLS Deviation Identified and Validated

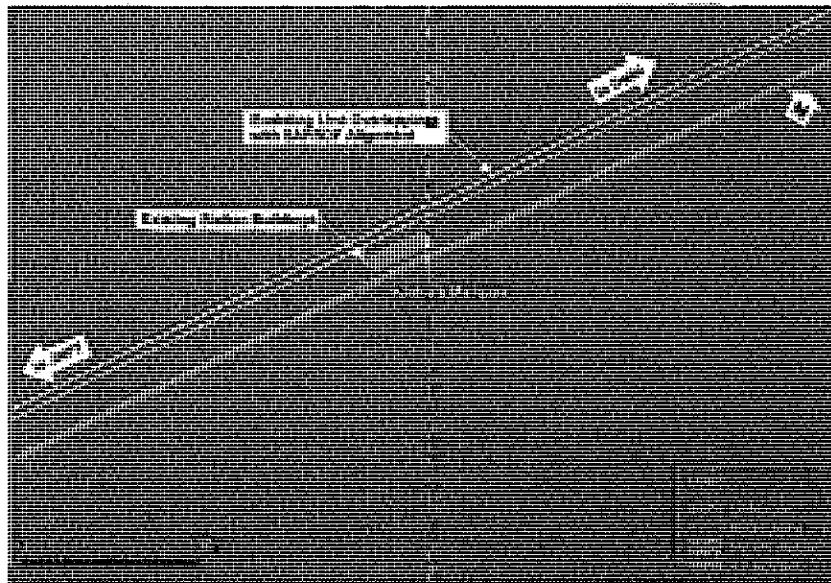


No.	Sec.	Km		Type of Section		Reason of Detour, Deviation, etc	Final. Align.
		FLS	GLD	FLS	GLD		
3	12	S12-Km81.7-85.0	Km 1027.6 - 1030.8	Small Detour	Parallel	Avoided the workshop next to Madar Stn. and grave yard area.	FLS

Figure 3 Madar Stn. Small Detour

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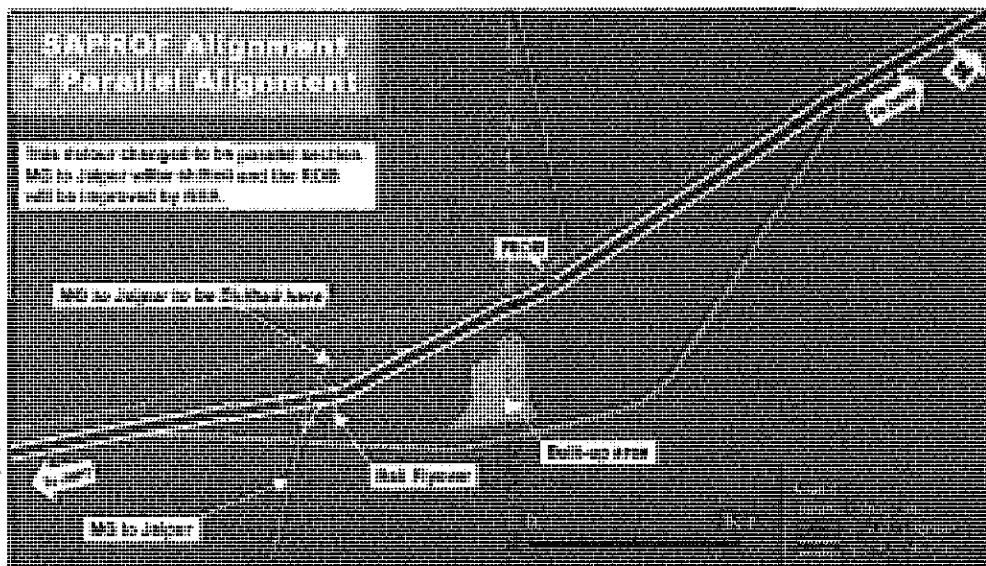


No.	Sec.	Km		Type of Section		Reason of Detour, Deviation, etc	Final. Align.
		FLS	GLD	FLS	GLD		
4	14	S14-Km6.9-8.8	Km 1156.4 - 1158.3	Small Detour	Parallel	FLS planned a small detour alignment to avoid Kishan Manpura Stn. Building and platform. But this plan requires relocation of railway quarters in the premises. SAPROF team suggests to shift the existing line to the west side and utilising its space for DFC alignment.	Parallel (Arranged)

Figure 4 Kishan Manpura Stn.

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No.	Sec.	Km		Type of Section		Reason of Detour, Deviation, etc	Final. Align.
		FLS	GLD	FLS	GLD		
5	14	S14-Km12.6-18.0	Km 1162.1 - 1167.0	Small Detour	Detour	GLD proposed a small detour to avoid an existing ROB and built-up area, however DFCCIL suggested that the ROB was being planned to reconstruct by NHA and changed the plan to a smaller detour by FLS. SAPROF team suggests to adopt a parallel alignment with shifting an existing MG line to be crossed at right-angle with DFC line.	Parallel

Figure 5 Ringas Stn.

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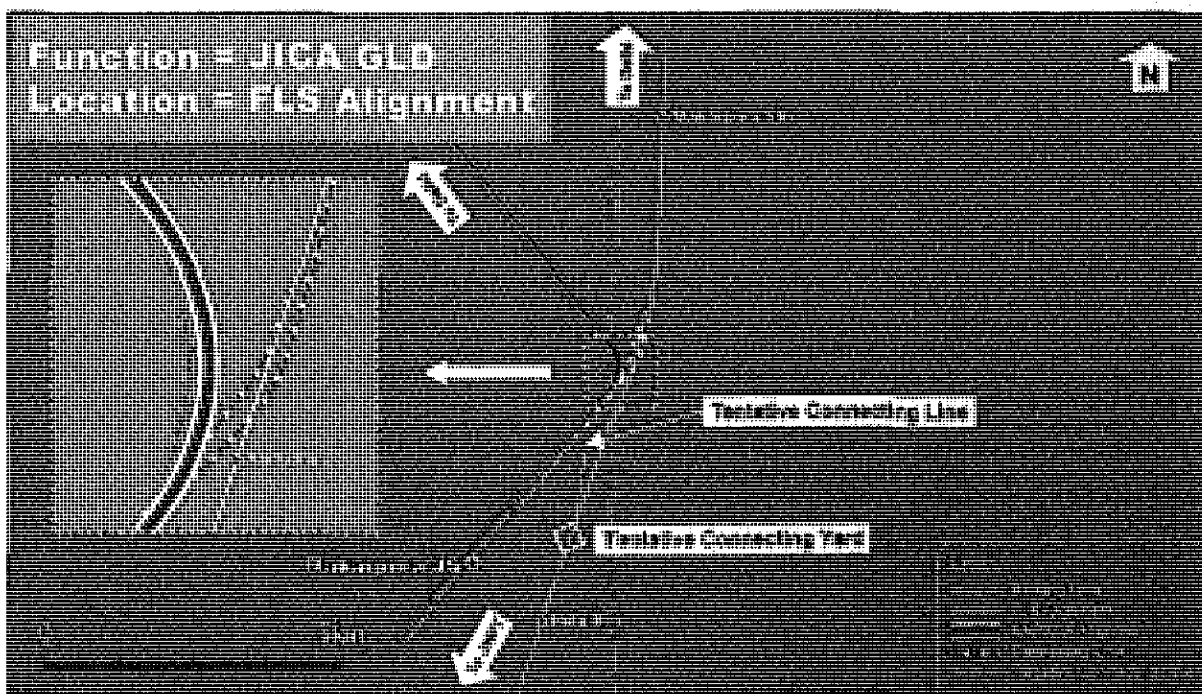
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Other Sections

No.	Sec.	Km		Type of Section		Reason of Detour, Deviation, etc	Final. Allgn.
		FLS	GLD	FLS	GLD		
6	8	Km 65.2 - 88.1	N/A	Large Detour	Large Detour	Width of Right-of-Way (ROW) in some sections are near 400 meters, which is excessive in size for land required to accommodate the DFC.	FLS
7	12	Km 5.48 - 7.76	Km 971.5 - 973.7	Small Detour	Parallel	FLS alignment along Beawar Stn. is overlapping with existing line. For the implementation of the works, the SAPROF team confirmed with DFCCIL that either the operation of the existing line will be temporarily suspended during the works, or the works will be carried out by construction one line at a time with one-line suspension of operation.	FLS
8	12	Km 54.70 - 60.80	Km 1020.2 - 1027.0	Parallel	Parallel	DFC FLS implies existing freight short-cut at Ajmer to be temporarily suspended during the works, or the works will be carried out by construction one line at a time with suspension of operation on one-line.	FLS
9	15	Km 4.75 - 8.75	Km 1261.0 - 1265.0	Small Detour	Parallel	FLS alignment along Narnaul Stn. is adjacent to existing line. For the implementation of the works, the SAPROF team understands that either the operation of the existing line will be temporarily suspended during the works, or the works will be carried out without suspension of operation by shifting the existing line to a safe distance in advance of the construction of the DFC.	FLS

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3. Reconciliation of Conceptual Design of Junction Stations

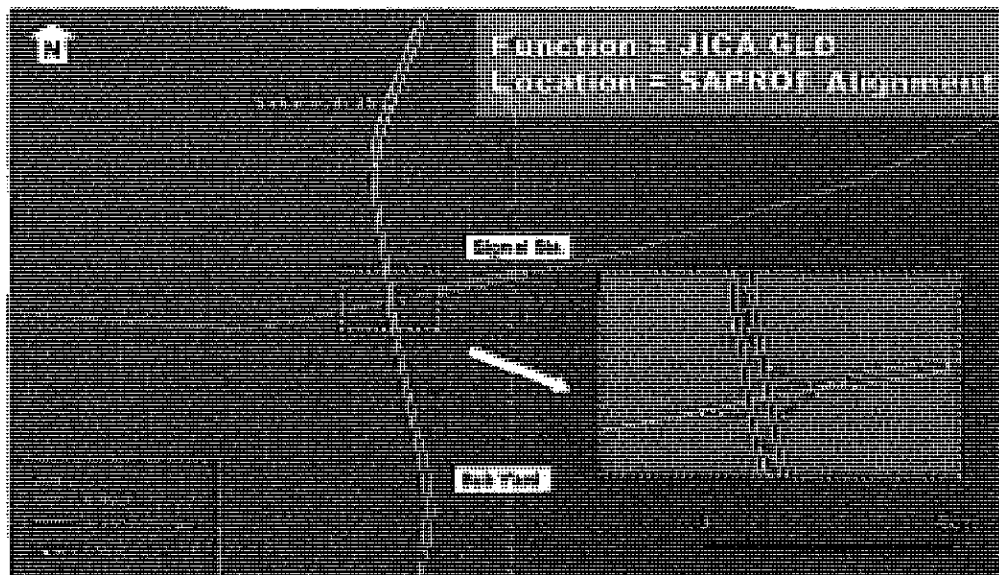


Section (FLS)	Chainage (JICA GLD)	Remark
Sec 5	420.0 km	-Connection point of JS at south side follows the FLS. -Function = JICA GLD; Location = FLS Alignment

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(1) Makarpura JS

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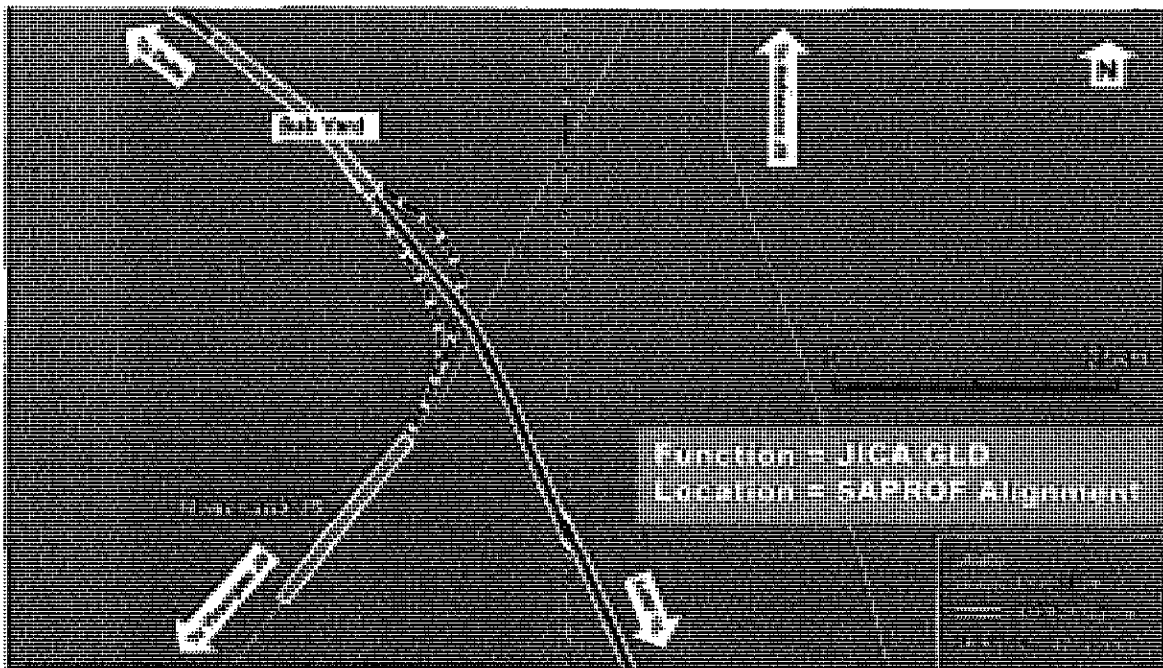


Section (FLS)	Chainage (JICA GLD)	Remark
Sec 6&7	560.0 km	- Route is shifted towards west. - Clover-type layout is rationalized into compact scale preserving the connectivity and functions of the JS enclosed by track, as well as minimizing land enclosed by track. - Provision of connecting line from JNPT to Viramgam is made. - Function = JICA GLD; Location = SAPROF Alignment

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(2) Sabarmati JS

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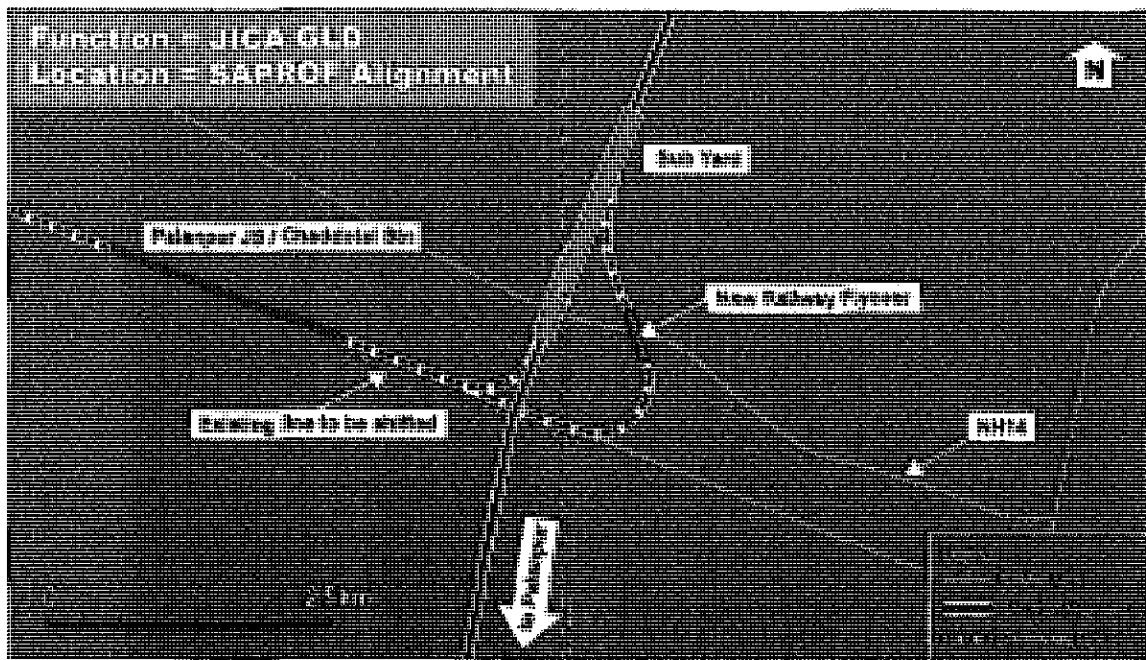


Section (FLS)	Chainage (JICA GLD)	Remark
Sec 7&8	611.0 km	-Provision of waiting track is made as a buffer for at-grade crossing. -Function = JICA GLD; Location = SAPROF Alignment

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(3) Mahesana JS

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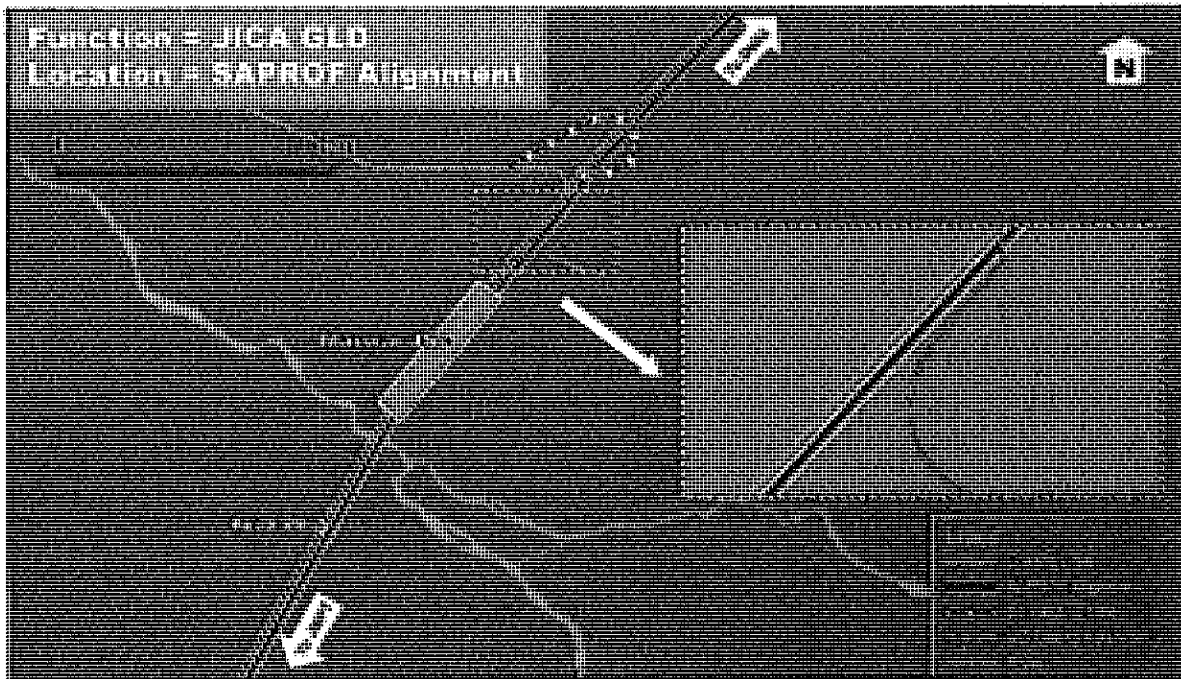


Section (FLS)	Chainage (JICA GLD)	Remark
Sec 8	673.0 km	- Provision of waiting track is made as a buffer for at-grade crossing. -Southbound connection is provided. -Function = JICA GLD; Location = SAPROF Alignment

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(4) Patanpur JS

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for Dedicated Freight Corridor Project

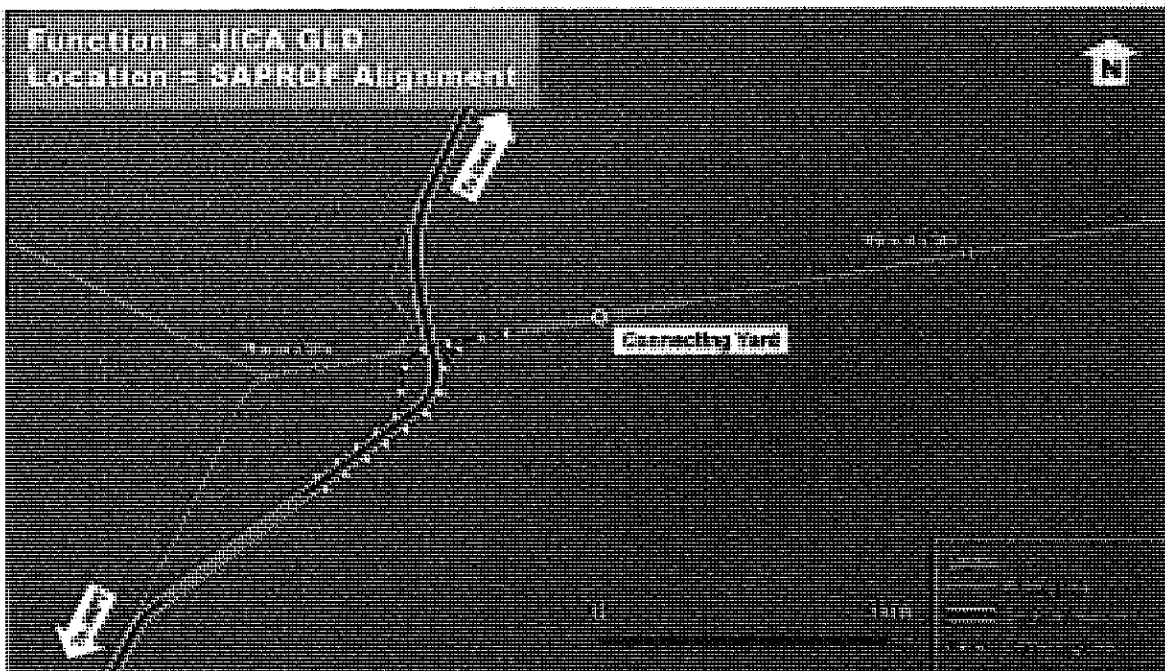


Section (FLS)	Chainage (JICA GLD)	Remark
Sec 11	881.0 km	-MG line is shifted to accommodate the waiting track and DFC line. -Function = JICA GLD; Location = SAPROF Alignment

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(5) Marwar JS

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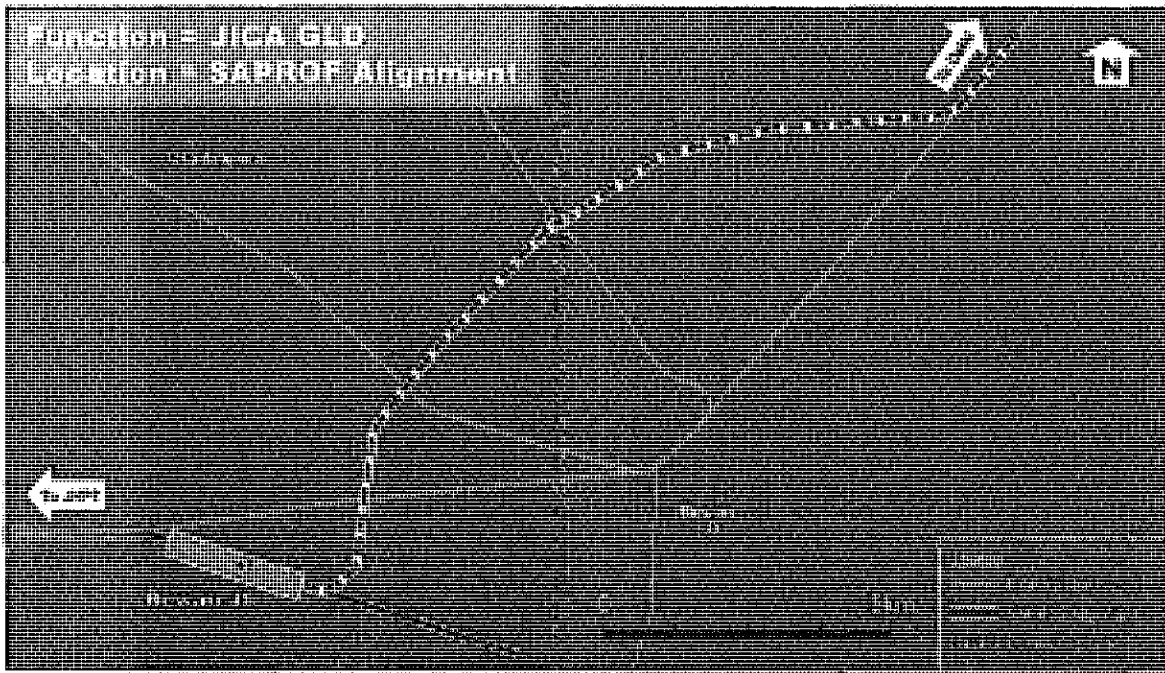


Section (FLS)	Chainage (JICA GLD)	Remark
Sec 13	1100.0 km	-Layout improved to avoid enclosing broad area and reflect the principle of GLD -Function = JICA GLD; Location = SAPROF Alignment

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(6) Phulera JS

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Section (FLS)	Chainage (JICA GLD)	Remark
Sec 15&16	1310.0 km	-Logistic park needs to be planned separately, along the existing line. -Function = JICA GLD ; Location = SAPROF Alignment

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(7) Rewari JS

Special Assistance Project Formation (SAPROF)
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4. Activities on Environmental and Social Considerations

4.1 Supplementary Survey for ESIMMS (S-ESIMMS)

- Objectives and Scopes
 - Supplementary survey for the alignment changed after the JICA F/S
 - Supplementary survey for several items commented by JICA Advisory Councils for ESC Review
 - Noise and vibration study
 - Additional collection of data on natural environment
 - Socio-economic survey for 20% of total PAPs
 - Update of mitigation measures and EMMP
 - PCMs and information disclosure
- EIA report = 3 state-wise ESIMMS reports + S-ESIMMS report
- Final presentation on EIA report: 11th May, 2009
- Approval of the EIA report by MOR/DEA: 17th Aug. 2009

ESIMMS: Environmental and Social Impact Mitigation Measures Study (The EIA Level Study conducted under the JICA F/S in 2007)
S-ESIMMS: Supplemental Survey for ESIMMS (Supplemental survey conducted under the JICA SAPROF in 2008/2009)
EMMP: Environmental Management and Monitoring Plan

4.2 Public Consultation Meeting for EIA

- Objectives
 - Explanation on Project outline and draft EIA report
 - Collecting opinions from the public
- 13 district-wise PCMs
 - Involving 226 villages newly identified due to change of the alignment from GLD after the JICA F/S
 - 15th – 24th Oct. 2008 in Haryana and Gujarat,
10th – 17th Feb. 2009 in Rajasthan (due to state election)
- 940 participants from 214 villages in total
- PCM Results => final EIA report.

4.3 Information Disclosure of the EIA Report

Disclosure in India

■ Disclosure of draft EIA report

- Distribution: 23rd March – 1st April, 2009
- Draft EIA report
 - 4 CPM offices, 17 District Collectorate offices, 28 Major Stations
- Summary
 - 10,000 sets for 569 project affected villages and the above offices
- Comment collection: 68 comments

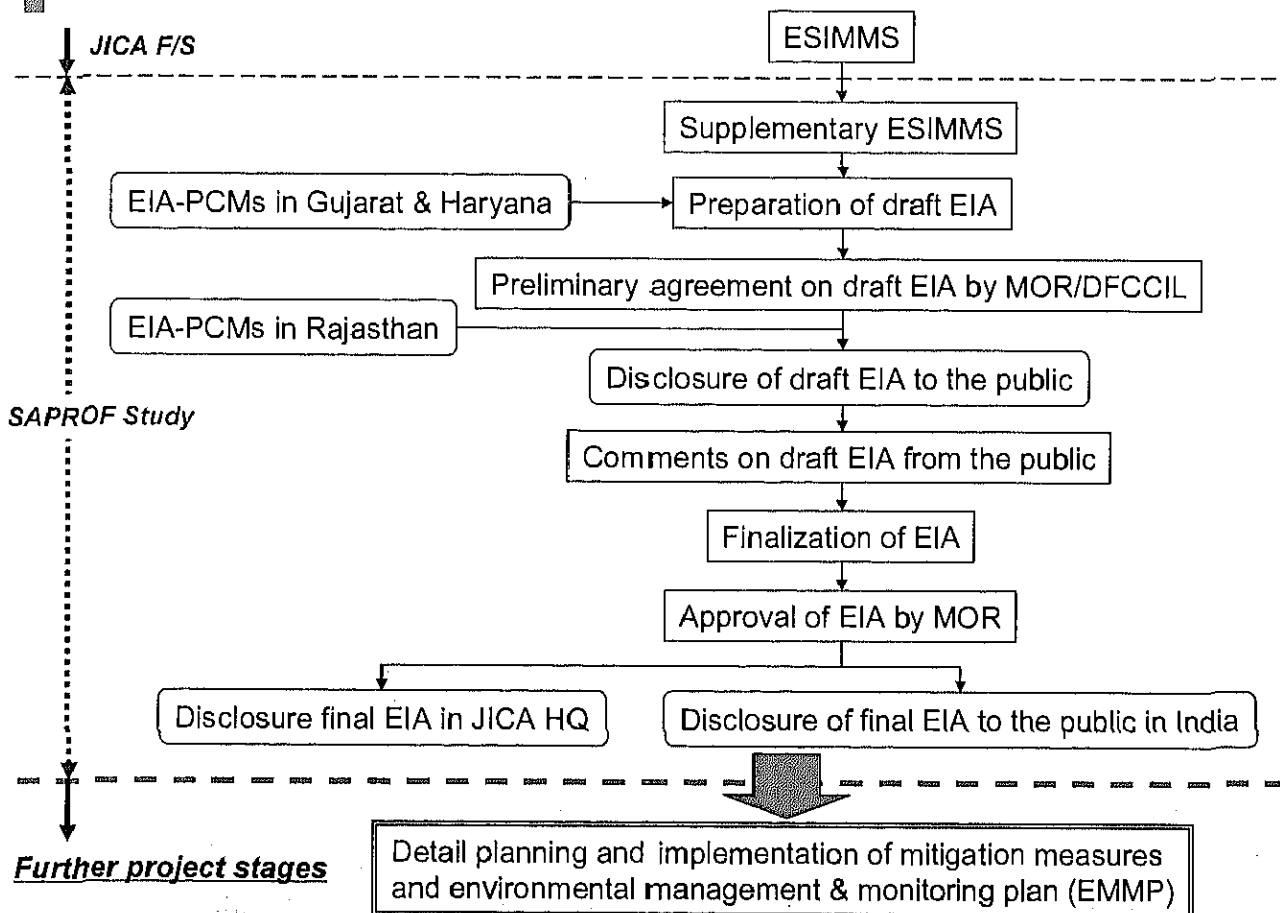
■ Disclosure of final EIA report

- Distribution: 2nd – 27th November, 2009
- Final EIA report: distributed in the same for draft EIA report
- Summary
 - 10,000 sets for 615 project affected villages and the above offices

Disclosure in Japan

■ Disclosure of final EIA report in JICA HQ

- Information on the disclosure from 28th August, 2009
 - 120 days to L/A as per Ex-JBIC guidelines



4.4 Draft Rehabilitation and Resettlement Plan

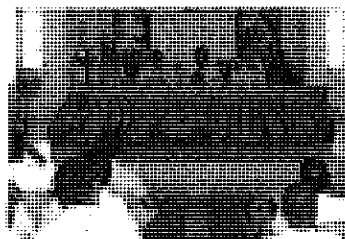
- 1st Draft RRP: presented on 20th Jan. 2009
- 2nd Draft RRP: presented in DF/R of the SAPROF by incorporating results of RRP-PCM results and JICA's comments

Main pending issues:

- Secure livelihood recovery of the PAPs
 - Introducing mechanism to secure the compensation rates of lost assets at level of replacement cost by hiring independent valuator under the Project
- Cut-off date for non-titleholders
 - At the time of the census

4.5 Public Consultation Meeting for RRP

- Objectives
 - Explanation on Project outline and draft RRP, mainly compensation and assistance policy as per RAA 2008 and NRRP 2007
 - Collecting opinions from and clarification with the PAPs
- 44 PCMs involving 453 project-affected villages
- Date: 10th Aug. – 7th Oct. 2009
 - Prerequisite for the PCM: Issuance of Notification 20A
 - After general election in April – May, 2009
- 4,345 participants from 304 villages in total
- PCM results => 2nd draft RRP



5. Recommendations and Conclusions

5. Recommendations and Conclusions

5.1 Project Planning

Confirmation of Consistency Between Finalized FLS for Junction Stations

- 1) Tabulation of final version of the FLS with soft file name
- 2) Integrated CAD plans of FLS and Junction Station CAD drawings
- 3) Tabulation of land plans corresponding to 1) and 2) of above

5. Recommendations and Conclusions

5.1 Project Planning

Confirmation of Finalized GAD

1) Important Bridges

The final report of the hydrological model study of Sabarmati River, that became the base for the design of important bridges.

2) Rail flyovers, Major Bridges, and Minor Bridges

Flexibility in applicability of non-RDSO standard design templates for structural design of Rail flyovers, major and minor bridges.

3) Reconstruction of ROBs

The quantity of ROBs subject to reconstruction in Phase-1 should be confirmed based on finalized FLS drawings.

5. Recommendations and Conclusions

5.1 Project Planning

Confirmation of Base Data of the Preliminary Design

- 1) geotechnical investigation report including data of lab tests
- 2) design report for important/major bridges
- 3) hydrological study report at important bridges
- 4) tabulation of utilities crossing the FLS alignment (high tension power lines, water main, telecom trunk lines, sewer, irrigation canal, gas pipes, etc.)

5. Recommendations and Conclusions

5.1 Project Planning

Inland Container Depot

The SAPROF Study Team suggests that plans for ICD be deliberated and finalized by DFCCIL in the early stage of the Engineering Service stage since its final location may affect the connectivity and configuration of the adjoining junction station.

Loco Depot and Maintenance Depot

The SAPROF Study Team suggests that the location of the depot and maintenance facilities be planned and finalized, by MOR/DFCCIL, in conjunction to the freight transport plan as early as possible.

5. Recommendations and Conclusions

5.2 Environmental and Social Considerations

1. Further Examination based on the EIA

1) Detailed Examination of Mitigation Measures

As regard the mitigation measures proposed in the EIA report depending on the site condition and project features as well as impact evaluation at the time of EIA study, it is recommended that to mitigate concerned environmental and social impacts be examined in detail in further stage of the Project. For example, regarding the noise impact, location of sensitive receptors and houses which are located in the proximity of the DFC alignment should be confirmed in the field by using the latest information. In the case where such likely impact receptors are found, adequate mitigation measures should be examined, if it is necessary as result of impact evaluation.

5.2 Environmental and Social Considerations

1. Further Examination based on the EIA

2) Detailed Examination of EMMP

Based on the Environmental Management and Monitoring Plan (EMMP) proposed in the EIA report, detailed EMMP should be prepared in further stage of the Project, by examining latest project information, to implement EMMP adequately in the construction and operation stage. For this purpose, institutional setting for implementing the EMMP should also be included in the detailed examination.

2. Land Acquisition and Resettlement

1) Sufficient Information Disclosure in the LA Process

As mentioned in Section 3.5.3 in the draft final report of the SAPROF, it was found from the conducted PCM for RRP that many PAPs had no knowledge that the Notification 20A for the DFC Project has been issued and publicised. On the other hand, preparation of Notification 20E is underway for many locations along the proposed alignment for the DFC Project as per official procedure of the RAA 2008. Thus, implementation of the PCM for RRP was an important opportunity for the PAPs who attended the PCM to get this information. Adequate publicity should be given so that all PAPs know about proposed land acquisition and this Project.

Therefore, further information disclosure on the land acquisition process should be conducted immediately to cover such PAPs. In addition, it is suggested that in respect of some locations where objections to the land acquisition were raised strongly in the PCMs, further appropriate action should be taken by DFCCIL/MOR.

2. Land Acquisition and Resettlement

2) Systematic Implementation of the R&R

In situations where the land acquisition process is progressed ahead even though PAPs have not been fully aware about the process, activities related to the resettlement such as preparation of RRP including implementation of the Baseline Survey and Census as per the NRRP 2007 should be taken up.

The Study Team suggests that if the gap between the land acquisition process and RRP preparation are minimized and clarified, the PAPs' consent towards the land acquisition and resettlement can be reinforced and would make administration of land acquisition and resettlement smoother. Therefore, it is recommended to prepare the RRP and disclose it to the PAPs as soon as possible.

2. Land Acquisition and Resettlement

3) Implementation of the Baseline Survey and Census

Although Socio-economic Survey for more than 20% of PAPs and Project-Affected Structure Identification Survey for all affected structure have been conducted under the SAPROF Study, these surveys were conducted based on part of results of FLS and other information available at the time of the surveys, since the Land Plan were not provided by MOR/DFCCIL, which is base information for the Notification 20A. Therefore, it is recommended the Baseline Survey and Census as per NRRP 2007 should be conducted as soon as possible based on latest information from FLS and Land Plan for the Notification 20A, since the results of survey will be used to prepare adequate and required assistance for the PAPs to be provided for by the Project.

2. Land Acquisition and Resettlement

4) Secure Compensation at Level of the Replacement Cost

Through preliminary hearing to the local people in the SAPROF, literature review, and comments from the participants of RRP-PCM, compensation rate under RAA 2008, which is calculated based on governmental market rate may be lower than actual market price to purchase lost assets to be acquired for the Project such as land and house at the same quantity and quality levels. To secure that the compensation rate is to be at the same level of the replacement cost, it is recommended that independent evaluator be hired by the Project to check if there is gap between governmental compensation rate and replacement cost. Further, in the case where gaps found is wide and can not be ignored from viewpoint of livelihood recovery, SAPROF Team suggests that necessary assistance should be examined and provided to such PAPs in addition to the provisions as per RAA 2008 and NRRP 2007.

2. Land Acquisition and Resettlement

5) Implementation of Timely Monitoring and Follow-up Assistance

In addition to provide adequate compensation and assistance in the land acquisition and relocation based on the RRP, SAPROF Team suggests that monitoring on situation of livelihood recovery for PAPs is necessary and in cases where undesirable situation is found for livelihood of the PAPs, additional assistance, especially during transition period of the resettlement may be considered. To implement adequate monitoring activity and provision of follow-up assistance, it is suggested that necessary institutional set-up be examined including preparation of detailed monitoring plan for the RRP.

**SPECIAL ASSISTANCE FOR PROJECT FORMATION
(SAPROF)
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FINAL REPORT**

CONTENTS

LOCATION MAP

EXECUTIVE SUMMARY

ABBREVIATIONS LIST

CHAPTER 1 INTRODUCTION

1.1	BACKGROUND OF THE STUDY	1-1
1.2	SCOPE OF THE PROJECT	1-1
1.3	OBJECTIVES OF THE SAPROF STUDY	1-2
1.4	TASK FLOW CHART	1-2
1.5	ORGANISATION CHART OF THE SAPROF STUDY TEAM.....	1-4
1.6	STAFFING SCHEDULE	1-5

CHAPTER 2 REVIEW OF THE PROJECT PLANNING

2.1	PROCESS OF THE STUDY	2-1
2.2	PROVISION OF DATA FROM DFCCIL	2-2
2.2.1	Provision of FLS Data	2-2
2.2.2	Provision of GAD Data	2-3
2.3	THE PROJECT ALIGNMENT.....	2-4
2.3.1	Integration of the Section Drawings	2-4
2.3.2	Length of Detour Section	2-4
2.3.3	Deviations Identified in the FLS Drawings	2-5
2.3.4	Deviations in the Vertical Alignment on the FLS Drawings.....	2-7
2.4	TRACK STRUCTURES	2-8
2.4.1	Confirmation of Consistency of Track Structure Design	2-8
2.5	JUNCTION STATIONS AND CROSSING STATIONS.....	2-10
2.5.1	Station Distances	2-11
2.5.2	Evaluation of the Location of Junction stations and Crossing Station Planned by DFCCIL	2-12
2.5.3	Junction Stations Planned by DFCCIL.....	2-14
2.5.4	Design Deviations Identified in GAD for Junction Station	2-14
2.5.5	Conceptual Design of the Junction Stations by SAPROF Study Team.....	2-15
2.5.6	Crossing Stations Identified in the Data Provided From DFCCIL	2-16
2.6	BRIDGES	2-17
2.6.1	Important/Major Bridges	2-17
2.6.2	Reconstruction of ROBs.....	2-17
2.7	INLAND CONTAINER DEPOT.....	2-17
2.8	LOCO DEPOT AND MAINTENANCE DEPOT	2-19
2.9	SUBSTATION	2-19

CHAPTER 3 REVIEW OF ENVIRONMENTAL AND SOCIAL CONSIDERATIONS

3.1 SUPPLEMENTARY SURVEY FOR ESIMMS.....	3-1
3.1.1 Background.....	3-1
3.1.2 Objectives of S-ESIMMS.....	3-1
3.1.3 Study Area of S-ESIMMS.....	3-2
3.1.4 Scope of S-ESIMMS.....	3-3
3.2 PUBLIC CONSULTATION MEETING FOR EIA.....	3-11
3.2.1 Introduction.....	3-11
3.2.2 Methodology.....	3-11
3.2.3 Schedule of Public Consultation Meeting.....	3-12
3.2.4 Results of the PCM for EIA.....	3-15
3.3 INFORMATION DISCLOSURE OF THE EIA REPORT.....	3-15
3.3.1 Disclosure of Draft EIA Report.....	3-15
3.3.2 Disclosure of Final EIA Report.....	3-18
3.4 REHABILITATION AND RESETTLEMENT PLAN.....	3-20
3.4.1 Review of Legal Framework.....	3-20
3.4.2 Preparation of 1st Draft Rehabilitation and Resettlement Plan.....	3-26
3.4.3 Preparation of 2nd Draft RRP.....	3-26
3.4.4 Final Draft RRP Prepared by MOR/DFCCIL.....	3-27
3.5 PUBLIC CONSULTATION MEETING FOR RRP.....	3-27
3.5.1 Introduction.....	3-27
3.5.2 Methodology.....	3-27
3.5.3 Results of the PCM for RRP.....	3-31
3.6 ENVIRONMENTAL CHECKLIST.....	3-43

CHAPTER 4 LABOUR ENVIRONMENT DURING THE CONSTRUCTION STAGE

4.1 WORKING SAFETY.....	4-1
4.1.1 Structures and Risks on Safety in Construction of DFC.....	4-1
4.1.2 Precautions/Measures to Ensure Working Safety.....	4-1
4.2 FRAMEWORK FOR ENFORCEMENT OF OCCUPATIONAL SAFETY AND HEALTH.....	4-3
4.2.1 Relevant Laws/Regulations Pertinent to Occupational Safety and Health.....	4-3
4.2.2 Occupational Safety and Health in Similar Projects.....	4-5
4.2.3 DFCCIL Manual for Occupational Safety and Health.....	4-8
4.2.4 Framework for Enforcement of Occupational Safety and Health for DFC.....	4-9

CHAPTER 5 CONCLUSION AND RECOMMENDATIONS

5.1 PROJECT PLANNING.....	5-1
5.1.1 Confirmation of Consistency Between Finalized FLS for Junction Stations.....	5-1
5.1.2 Confirmation of Finalized GAD.....	5-1
5.1.3 Confirmation of Base Data of the Preliminary Design.....	5-2
5.1.4 Inland Container Depot.....	5-2
5.1.5 Loco Depot and Maintenance Depot.....	5-2
5.1.6 Substation.....	5-2
5.2 ENVIRONMENTAL AND SOCIAL CONSIDERATIONS.....	5-3
5.2.1 Further Examination based on the EIA.....	5-3
5.2.2 Land Acquisition and Resettlement.....	5-3

LIST OF TABLES

Table 2-1	FLS Data Provided from DFCCIL to the SAPROF Study Team.....	2-3
Table 2-2	GAD Data Provided to the SAPROF Study Team.....	2-3
Table 2-3	Detour Length of the DFC Alignment Between Rewari-Vadodara	2-5
Table 2-4	Deviations Identified in the FLS Data.....	2-6
Table 2-5	Deviations Identified in the FLS and Determined Alignment.....	2-6
Table 2-6	Track Structures Indicated in JICA GLD	2-8
Table 2-7	GAD of Track Structure	2-8
Table 2-8	Location of Junction Stations and Crossing Station Indicated on FLS	2-10
Table 2-9	Deviations Identified in Model Plans of Junction Stations	2-15
Table 2-10	Result of Finalised Conceptual Design of Junction Stations.....	2-16
Table 2-11	Bridges Subject to Reconstruction	2-17
Table 2-12	Location of New TSS, F.P., S.P. & S.S.P Planned by DFCCIL	2-19
Table 2-13	Size of Land Conceived by DFCCIL for Electrical Facilities.....	2-22
Table 2-14	Proposed Location for New OHE Depot and Tower Wagon Shed	2-22
Table 3-1	Noise and Vibration Measurement Site.....	3-4
Table 3-2	Specifications of Noise and Vibration Unit Level Measurement.....	3-5
Table 3-3	Specifications of Noise and Vibration Measurement of Existing Railways.....	3-6
Table 3-4	Schedule of PCM for EIA	3-14
Table 3-5	Number of Draft EIA (ESIMMS +S-ESIMMS) Reports Distributed	3-16
Table 3-6	Number of Summary of Draft EIA Report Distributed.....	3-16
Table 3-7	District Wise Number of Comments Received Regarding Draft EIA Report.....	3-17
Table 3-8	Classification of Comments regarding Draft EIA	3-18
Table 3-9	Number of Villages for Distribution of Summary of Final EIA Report.....	3-19
Table 3-10	Number of Final EIA (ESIMMS+S-ESIMMS) Reports Distributed	3-19
Table 3-11	District Wise Number of Comments Received Regarding Final EIA Report.....	3-20
Table 3-12	Gap Analysis between RAA 2008/NRRP 2007 and Ex-JBIC Guidelines	3-21
Table 3-13	Demarcation of Works and Supports for the RRP-PCM.....	3-30
Table 3-14	Schedule of the PCMs for RRP	3-31
Table 3-15	Summary Results of Attendances for RRP-PCM.....	3-32
Table 3-16	Results of the RRP-PCM under Jurisdiction of CPM Jaipur.....	3-33
Table 3-17	Results of the RRP-PCM under Jurisdiction of CPM Ajmer	3-33
Table 3-18	Results of the RRP-PCM under Jurisdiction of CPM Ahmedabad	3-34
Table 3-19	Results of the RRP-PCM under Jurisdiction of CPM Vadodara.....	3-34
Table 3-20	Summary of Participants in the PCMs for RRP	3-34
Table 3-21	Facts Found under RRP-PCM	3-37
Table 3-22	Environmental Checklist for Roads and Railways in JICA Environmental Guidelines.....	3-44
Table 3-23	Schedule of Preparation of EIA and RRP	3-50
Table 4-1	Labour Laws Enforced upon Establishments Engaged in Building and Other Construction Work	4-4

LIST OF FIGURES

Figure 1-1	Task Flow Chart of the SAPROF Study.....	1-3
Figure 1-2	Organisation Structure of the SAPROF Study Team	1-4
Figure 1-3	Staffing Schedule of SAPROF Study Team.....	1-5
Figure 2-1	Process for the Review of FLS and GAD Design	2-1
Figure 2-2	Schematic Overview of Deviations between FLS and JICA GLD.....	2-2
Figure 2-3	Result of Integration of FLS Section Drawings	2-4
Figure 2-4	Typical Cross Section for Embankment.....	2-10
Figure 2-5	Typical Cross Section for Cutting	2-10
Figure 2-6	Comparison of Size of Enclosed Land between DFCCIL and SAPROF Study Team	2-14
Figure 2-7	Plan No.1 for ICD Contemplated by DFCCIL	2-18
Figure 2-8	Plan No.2 for ICD indicated by DFCCIL.....	2-18
Figure 3-1	Study Area of S-ESIMMS.....	3-2
Figure 3-2	Noise and Vibration Measurement Site.....	3-4
Figure 3-3	Procedure for Prediction of Noise Level and Vibration Level	3-7
Figure 4-1	Organizations and Roles involved in Safety and Health Control	4-13
Figure-1	Makarpura JS.....	A-1
Figure-2	Vadodara-Mahesana Extensive Detour (1/2)	A-1
Figure-3	Vadodara-Mahesana Extensive Detour (2/2)	A-2
Figure-4	Mahesana-Palanpur Extensive Detour.....	A-2
Figure-5	Palanpur-Iqbal Gadh Detour.....	A-3
Figure-6	Maval Stn. Small Detour	A-3
Figure-7	Abu Road Stn. Small Detour	A-4
Figure-8	Morthala Stn. Small Detour.....	A-4
Figure-9	Kivarli Stn. Small Detour	A-5
Figure-10	Banas Stn. Small Detour.....	A-5
Figure-11	Shirohi Road Stn. Detour	A-6
Figure-12	Jawai Bandh Stn. Small Detour.....	A-6
Figure-13	Marwar JS Detour.....	A-7
Figure-14	Bangurgram Stn.....	A-7
Figure-15	Kishangarh Stn. Detour	A-8
Figure-16	Near Makrera Stn.	A-8
Figure-17	Madar Stn. Small Detour.....	A-9
Figure-18	Phulera JS Detour.....	A-9
Figure-19	Kishan Manpura Stn.	A-10
Figure-20	Ringas Stn.....	A-10
Figure-21	Rewari JS.....	A-11
Figure-22	Makarpura JS.....	A-12
Figure-23	Sabarmati JS	A-12
Figure-24	Mahesana JS	A-13
Figure-25	Palanpur JS	A-13
Figure-26	Marwar JS.....	A-14
Figure-27	Phulera JS	A-14
Figure-28	Rewari JS.....	A-15
Figure-29	Makarpura JS.....	A-16
Figure-30	Sabarmati JS	A-16
Figure-31	Mahesana JS	A-17

Figure-32	Palanpur JS	A-17
Figure-33	Marwar JS.....	A-18
Figure-34	Pulera JS.....	A-18
Figure-35	Rewari JS.....	A-19

LIST OF ATTACHMENTS

Attachment-1	Deviations Identified in the FLS and Determined Alignment	A-1
Attachment-2	Deviations identified in Model Plans of Junction Station	A-12
Attachment-3	Result of Finalized Conceptual Design of Junction Station	A-16
Attachment-4	Terms of Reference of the SAPROF Study	A-20
Attachment-5	Referential Alignment Data Applied in the S-ESIMMS Site Study (Soft data).....	A-24
Attachment-6	Alignment Data Applied in the S-ESIMMS Site Study	A-25
Attachment-7	Minute of Discussion of 30th July 2008	A-28
Attachment-8	Minute of Discussion of 28th August 2008.....	A-44
Attachment-9	Minute of Discussion of 24th September 2008	A-51
Attachment-10	Minute of Discussion of 31st October 2008	A-54
Attachment-11	Minute of Discussion of 21st January 2009	A-57
Attachment-12	List of FLS CAD Files Provided from DFCCIL	A-61
Attachment-13	Minutes of Record of 30th November 2009	A-67

LIST OF APPENDICES FOR CHAPTER 3

Appendix 3-1	S-ESIMMS Report	Compiled in Volume 2
Appendix 3-2	Presentation Material for EIA-PCM	Compiled in Volume 1
Appendix 3-3	Handout for EIA-PCM	Compiled in Volume 1
Appendix 3-4	Record of EIA-PCM	Compiled in Volume 1
Appendix 3-5	Summary of Draft EIA Report	Compiled in Volume 1
Appendix 3-6	<i>Public Notice for Disclosure of Draft EIA Report</i>	<i>Compiled in Volume 1</i>
Appendix 3-7	Distribution List of the Draft EIA Report	Compiled in Volume 1
Appendix 3-8	Public Comments on Draft EIA Report	Compiled in Volume 1
Appendix 3-9	Summary of Final EIA Report	Compiled in Volume 1
Appendix 3-10	Public Notice for Disclosure of Final EIA Report	Compiled in Volume 1
Appendix 3-11	Distribution List of the Final EIA Report	Compiled in Volume 1
Appendix 3-12	Presentation Material on 20th January, 2009 (Discussion on Draft EIA and Draft RRP)	Compiled in Volume 1
Appendix 3-13	Final Draft Rehabilitation and Resettlement Plan	Compiled in Volume 1
Appendix 3-14	Presentation Material for RRP-PCM	Compiled in Volume 1
Appendix 3-15	Handout for RRP-PCM	Compiled in Volume 1
Appendix 3-16	Record of the PCMs for RRP	Compiled in Volume 3
Appendix 3-17	RRP-PCM Data Sheet	Compiled in Volume 3

ABBREVIATIONS LIST

Abb.	Details
AIDS	Acquired Immune Deficiency Syndrome
CAD	Computer Aided Dispatch
CMS	Cast Manganese Steel
CPCB	Central Pollution Control Board
CR	Central Railway
CS	Crossing Stations
CSR	Clear Standing Room
DEA	Department of External Affairs
DFC	Dedicated Freight Corridor
DFCCIL	DFC Corporation of India Ltd.
DMRC	Delhi Metro Rail Corporation
DMRTS	Delhi Mass Rapid Transport System
DO	Dissolved Oxygen
EIA	Environmental Impact Assessment
EMAP	Environmental Management Plan
EMOP	Environmental Monitoring Plan
ESCS	Environment and Social Consideration Study
ESIMMS	Environment and Social Impact Mitigation Measure Study
FLS	Final Location Survey
F/S	Feasibility Study
GAD	General Arrangement Drawings
GLD	Guideline Design
GOI	Government of India
GOJ	Government of Japan
HH	Head Hardened
HIV	Human Immunodeficiency Virus
ICD	Inland Container Depot
IEE	Initial Environmental Examination
IR	Indian Railways
ISO	International Organization for Standardization
JARTS	Japan Railway Technical Service
JBIC	Japan Bank for International Cooperation
JICA	Japan International Cooperation Agency
JIS	Japan Industrial Standard
JN	Junction
JNPCT	Jawaharlal Nehru Port Container Terminal
J.N. Port	Jawaharlal Nehru Port
JS	Junction Station
JST	JICA Study Team
L&A	Land Acquisition
LX	Level Crossing

Abb.	Details
MG	Metre Gauge
MLIT	Ministry of Land Infrastructure and Transport, Japan
MOEF	Ministry of Environment and Forest
MOF	Ministry of Finance
MOR	Ministry of Railways
MORD	Ministry of Rural Development
NCR	North Central Railway
NH	National Highway
NHAI	National Highways Authority of India
NR	Northern Railway
NRRP	National Resettlement & Rehabilitation Programme
NWR	North Western Railway
ODA	Official Development Assistance
OHE	Overhead Equipment
OHSAS	Occupational Health and Safety Assessment System
PAF	Project-affected Families
PAS	Project-affected Structures
PCMs	Public Consultation Meetings
PETS	Preliminary Engineering cum Traffic Study
PPP	Public Private/Public Public Partnership
PSC	Pre-Stressed Concrete
PWL	Sound Power Level
RRA	Railways Amendment Act
RC	Reinforced Concrete
RDSO	Research Designs and Standards Organisation
UTES	Rail India Technical and Economic Services
ROBs	Road Over Bridges
ROW	Right-of-Way
R&R	Resettlement & Rehabilitation
RRP	Resettlement and Rehabilitation Plan
RTRI	Railway Technical Research Institute, Japan
RUBs	Road-under Bridges
SAPROF	Special Assistance for Project Formation
S-ESIMMS	Supplemental Environmental and Social Impact Mitigation Measures Study
SHE	Safety, Health and Environment
SIA	Social Impact Assessment
SLV	Standard Vibration Level
SP	Sectioning Post
SPCB	State Pollution Control Board
SSC	Single-Stack Containers
SSI	Solid State Interlocking
SSP	Sub-sectioning Post

Abb.	Details
sta.	Station (chainage)
STEP	Special Terms for Economic Partnership
Stn	Station
TS	Terminal Station
TSS	Traction Substation
UIC	Union Internationale des Chemins de Fer
UTS	Ultimate Tensile Strength
WCL	Western Coalfield Limited
WCR	West Central Railway
WLS	Wildlife Sanctuary
WR	Western Railway

CHAPTER 1 INTRODUCTION

1.1 BACKGROUND OF THE STUDY

The Government of India (hereinafter referred to as "GOI") recognizing the urgent need to augment the freight transport capacity to support the economic growth along the "Golden Quadrilateral" linking major urban centres of Mumbai, Delhi, Kolkata and Chennai, has requested ODA (Official Development Assistance) Loan to the Government of Japan (hereinafter referred to as "GOJ") for the development of the Dedicated Freight Corridor Project.

In July 2005, GOI officially requested GOJ for the execution of Japan's technical cooperation to assess the feasibility study on the development of Dedicated Freight Corridors for Delhi-Mumbai and Ludhiana - Sonnagar in India (hereinafter referred to as "JICA F/S").

The objective of JICA F/S was to review the Preliminary Engineering cum Traffic Study (hereinafter referred to as PETS) and Final Location Survey (hereinafter referred to as FLS) of DFC that was prepared by the GOI. Since the FLS could not be handed over to JICA Study Team (hereinafter referred to as "JST") within time to incorporate into JICA F/S, the JST devised the Guideline Design (hereinafter referred to as "GLD") so GOI can follow the principle contained therein to finalize the FLS in line with the GLD. At the end of the JICA F/S, an agreement was reached between MOR and JST that FLS work will continue conforming to the principle to the GLD. Based on the GLD, the JST carried out the environmental and social consideration study and drafted the Environment and Social Impact Mitigation Measure Study (hereinafter referred to as ESIMMS) report.

As the result of the JICA Study, GOI requested GOJ for the Japanese ODA Loan assistance utilizing the Special Terms for Economic Partnership (hereinafter referred to as STEP) Scheme.

According to GOI's request, Japan Bank for International Cooperation (hereinafter referred as "JBIC") reviewed the JICA Study and found the need for additional study. JBIC confirmed that Special Assistance for Project Formation (hereinafter referred as "SAPROF") Study should be conducted to formulate the Project in more sustainable and effective manner, especially in environmental and social aspects, so that the expected outputs from the Project would be satisfactory for the beneficiaries.

In July 2008, in accordance with the agreement and scope of works mutually agreed by both Governments, JBIC dispatched a Study Team to undertake the SAPROF Study for Dedicated Freight Corridor (hereinafter referred as "DFC") Project for the priority section of the Western DFC between Vadodara and Rewari.

1.2 SCOPE OF THE PROJECT

The following are scope of the Project agreed in the Minutes of Discussion, dated 28th March 2008, between JBIC and MOR.

- Civil and Building works
- Track works
- Electrical works
- Mechanical works
- Signalling and telecommunication works
- ICD construction works

- Procurement of locomotive and other equipment
- Social development
- Consulting services

The decision to include each of the scope as a subject of JBIC finance depends on the outcome the SAPROF study.

Since the location as well as availability of land for the ICD could not confirmed as of January 2010, the SAPROF Study Team advised that the ICD construction works was be excluded from the Study.

1.3 OBJECTIVES OF THE SAPROF STUDY

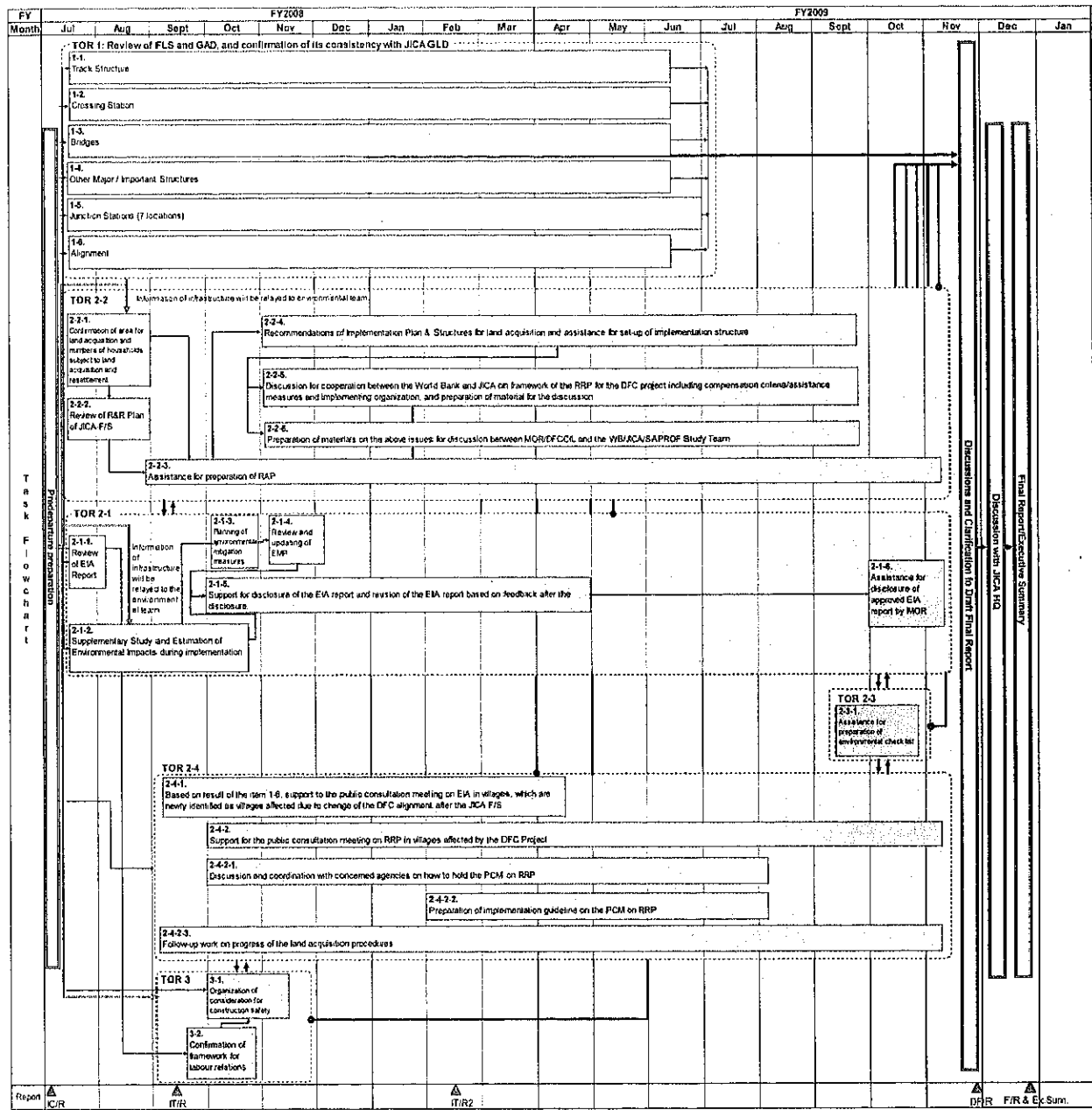
The basic assumption of the SAPROF Study is that the FLS and General Arrangement Drawings (hereinafter referred to as "GAD") is consistent with the GLD.

The objectives of the SAPROF Study are summarised as follows:

- Confirm the consistency between the FLS and GAD with the GLD indicated in the JICA F/S report.
- Execution of Supplementary Environmental and Social Impact Mitigation Measures Study (S-ESIMMS) including preparation of Draft Rehabilitation and Resettlement Plan (RRP) based on confirmed FLS and GAD in accordance with JBIC Guidelines for Confirmation of Environmental and Social Considerations (hereinafter referred to as JBIC Guidelines).
- Survey of working environment of construction industry, and check measures taken for construction safety.

1.4 TASK FLOW CHART

The task flow chart of the SAPROF Study is indicated in the following Figure 1-1.

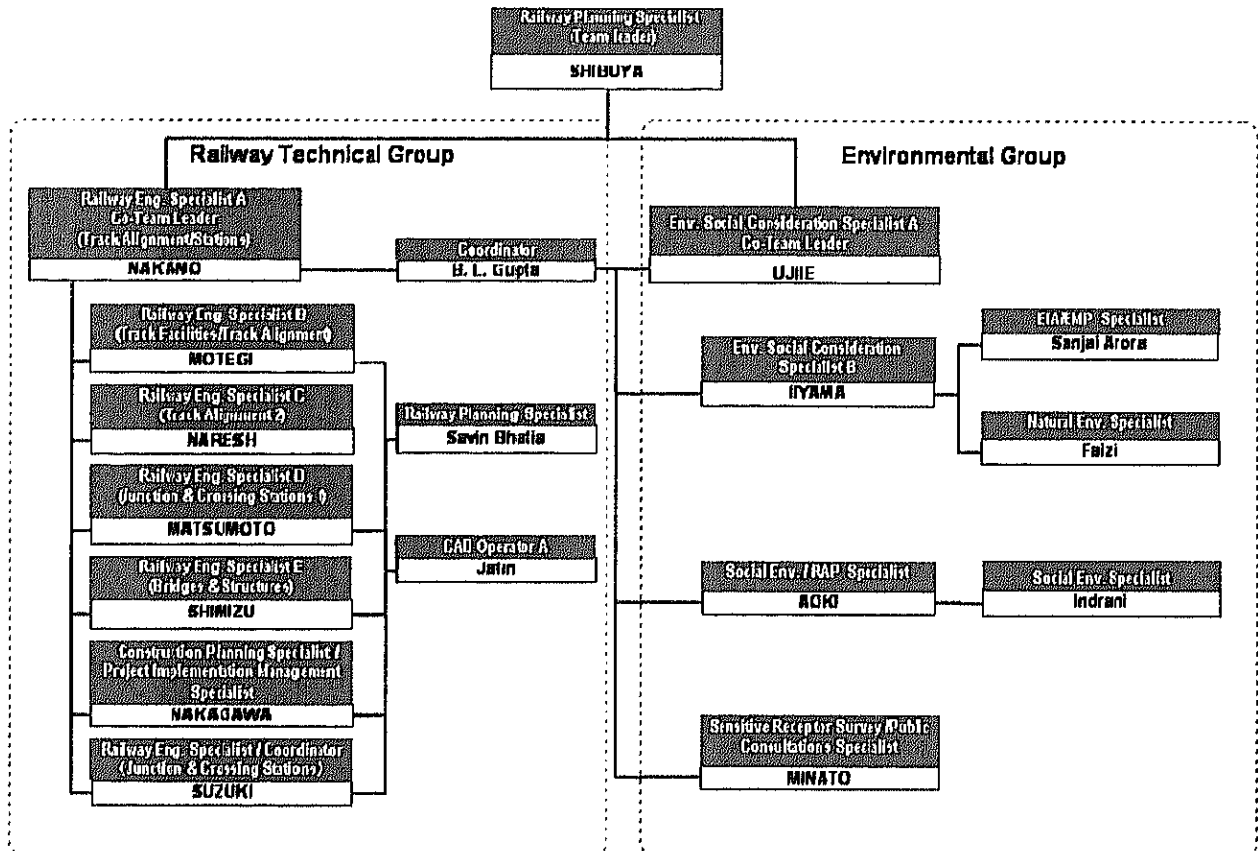


Source: SAPROF Study Team

Figure 1-1 Task Flow Chart of the SAPROF Study

1.5 ORGANISATION CHART OF THE SAPROF STUDY TEAM

Under the leadership of the Team Leader, the SAPROF Team is composed of two Groups, the Railway Technical Group and the Environmental Group.



Source: SAPROF Study Team

Figure 1-2 Organisation Structure of the SAPROF Study Team

1.6 STAFFING SCHEDULE

The staffing schedule of the SAPROF Study Team is indicated in the following Figure 1-3.

Positions	Name	YEAR Firm	2008												2009												2010			
			June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Inda	Japan	Total			
International																														
Railway Planning Expert (Team Leader)	Minoru SHIBUYA	NK																									12.0	6.0	18.0	
Railway Engineering Expert A (Deputy TL/Track Alignment+Stations)	Tetsuo NAKANO	NK																										50.0	12.0	62.0
Railway Engineering Expert B (Track Facilities+Track Alignment 1)	Ryotaro MOTEGI	JARTS																										33.0	6.0	39.0
Railway Engineering Expert C (Track Alignment 2)	Shapil NARESH	NK																										21.0	0.0	21.0
Railway Engineering Expert E (Junction & Crossing Stations 1)	Osami MATSUMOTO	NK																										30.0	6.0	36.0
Railway Engineering Expert F (Bridges+Structures)	Takashi SHIMIZU	NK																										15.0	0.0	15.0
Construction Planning Expert	Makoto NAKAGAWA	NK																										15.0	0.0	15.0
Project Implementation Management	Makoto NAKAGAWA	NK																										(54.0)	(5.0)	(59.0)
Environmental Expert A (Deputy TL)	Toshiyuki UJIE	NK																										71.0	0.0	71.0
Environmental Expert B	Kazuo IYAMA	NK																										136.0	3.0	139.0
Social Environmental Expert	Tamoo AOKI	NK																										227.0	13.0	240.0
Public Consultations	Shusuke MINATO	NK																										69.0	0.0	69.0
Junction/Crossing Stations / Coordinator	Kiyotada SUZUKI	NK																										(67.0)	(6.0)	(73.0)
Report																												699.0	49.0	748.0
Local																														
Railway Engineering Expert	Mr. Savin Bhatia																											174.0		174.0
Coordinator	Mr. B. L. Gupta																											45.0		45.0
CAD Operator A	Mr. Jahn Khurana																											69.0		69.0
EIA/EEMP	Dr. Sanjay Arora																											207.0		207.0
Natural Environmental Engineer	Mr. S. Faiz																											66.0		66.0
Social Environmental Engineer	Ms. Indrani Goewarna																											492.0		492.0
Noise/Vibration	Mr. S. Banerjee																											30.0		30.0
SR Survey/Public Consultation	Mr. S. Pandey																											63.0		63.0
GIS Operator	Mr. B. Shukla																											90.0		90.0
																												1,236.0	0.0	1,236.0

Source: SAPROF Study Team

Figure 1-3 Staffing Schedule of SAPROF Study Team

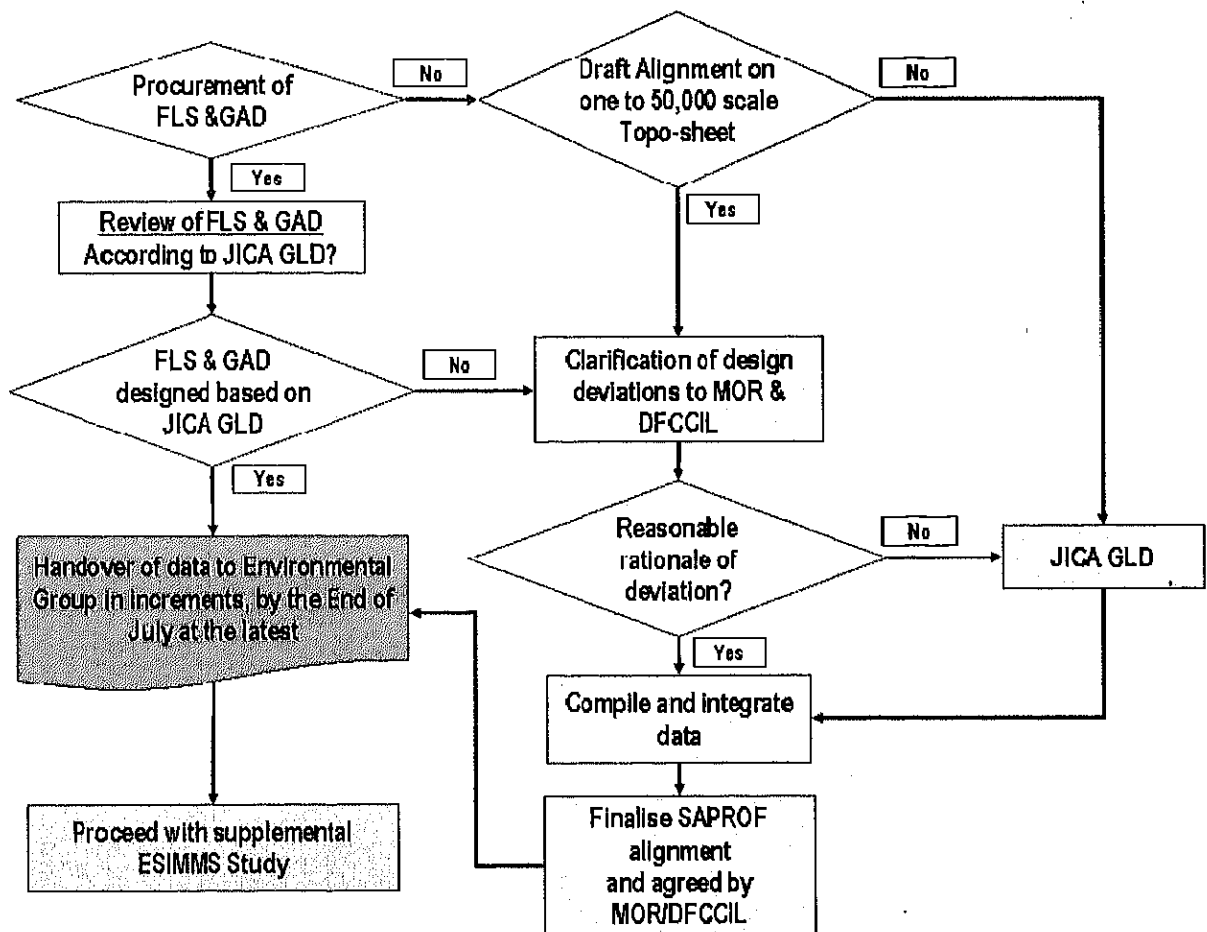
CHAPTER 2 REVIEW OF THE PROJECT PLANNING

2.1 PROCESS OF THE STUDY

The main objective of the SAPROF Study is to determine the final alignment for implementation of the DFC Project. In order to do this, the precondition of the SAPROF Study was the provision of information and drawings, such as the FLS, GAD, Junction Station (JS) that are consistent with the GLD as indicated in the JICA Feasibility Study.

If the FLS and GAD design contains any deviation from the GLD, the SAPROF Study Team will study the rationale of the deviation and determine its acceptability by confirming the impact on natural and social environment, engineering feasibility, and minimal interruption to the operations of the adjacent Indian Railway. If the underlying reason of the deviation of the FLS is not substantiated, the SAPROF Team would endorse the alignment recommended in the GLD of the JICA Feasibility Study. The workflow of the process is indicated in Figure 2-1.

Once the final alignment is determined, the information will be handed over to the Environmental Group for their use in the Study.



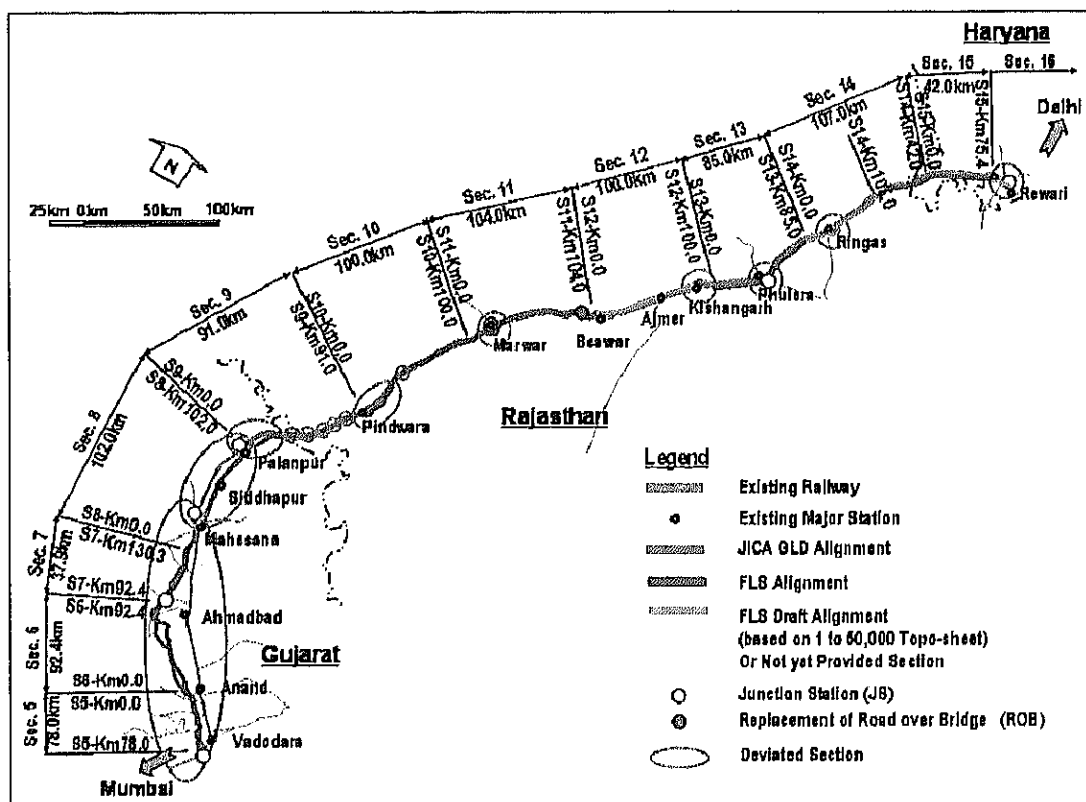
Source: SAPROF Study Team

Figure 2-1 Process for the Review of FLS and GAD Design

2.2 PROVISION OF DATA FROM DFCCIL

The Ministry of Railways simultaneously contracted out the topographic-survey work and preparation of the FLS and GAD drawings to several consultants. The topographic-survey covered in the SAPROF Study consists of eleven (11) sections starting from Section 5 to Section 15, where each section extends approximately 100 kilometres as indicated in Figure 2-2.

The SAPROF Study Team checked the FLS and GAD drawings provided from DFCCIL and identified some deviations from the JICA GLD. The deviations identified are clarified in the following section.



Source: SAPROF Study Team

Figure 2-2 Schematic Overview of Deviations between FLS and JICA GLD

2.2.1 Provision of FLS Data

As of January 2010, the status of provision of FLS Data to the SAPROF Study Team from DFCCIL is summarised in the following Table 2-1. The inventory lists of the FLS drawing provided from DFCCIL are annexed in Attachment-12.

Table 2-1 FLS Data Provided from DFCCIL to the SAPROF Study Team

Section	Section Length (Km)	Final Handover Date to SAPROF Team	Relative position to the existing line
5	78.0	11 July 2008	Detour to the west side of existing line
6	92.4	16 July 2008	Detour to the west side of existing line
7	38.1	24 Oct 2008	Detour to the west side of existing line
8	102.0	24 Oct 2008	Detour to the west side of existing line
9	91.0	11 July 2008	Parallel to existing line on the east side. Revision suggested for detour section at WLS yet to be confirmed.
10	100.0	11 July 2008	Parallel to existing line on the east side
11	104.0	11 July 2008	Parallel to existing line on the east side.
12	100.0	30 July 2008	Parallel to existing line on the east side. Revision suggested for detour section yet to be confirmed.
13	85.0	11 July 2008	Parallel to existing line on the east side.
14	107.0	30 July 2008	Parallel to existing line on the east side. Revision suggested for detour section yet to be confirmed.
15	42.0	25 July 2008	Parallel to existing line on the east side. End point at east side of Rewari JS
Total	939.5		

Source: Information from DFCCIL

2.2.2 Provision of GAD Data

As of January 2010, the status of provision of FLS Data to the SAPROF Study Team from DFCCIL is summarised in the following Table 2-2.

Table 2-2 GAD Data Provided to the SAPROF Study Team

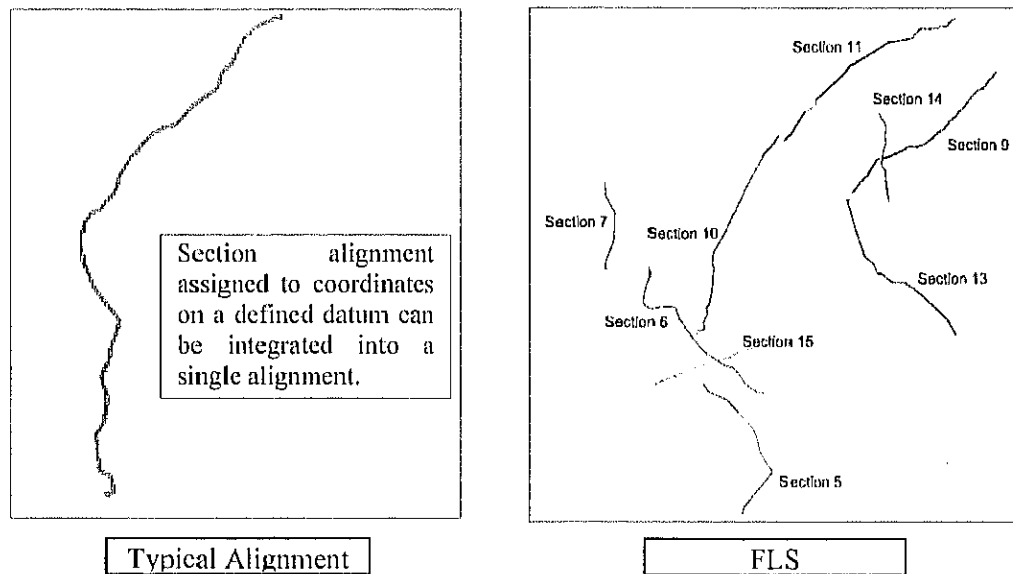
Category	Total	Provided	Remarks
Junction Station	7	7	Model plans of Makarpura, Sabarmati, Mahesana, Palanpur, Marwar, Phulera, Rewari JSs provided. CAD drawings provided for first 5 JSs.
Crossing station	21	18	Indicated on FLS. Typical plan provided.
Typical Cross Section	4	4	Detour section only (Embank. & Cut section) Parallel section (Embankment)
Important Bridges / Major Bridges (Length > 100m)	4/19	0	Completed hydrological model study, but undisclosed. Tender drawings for bridges south of Vadodara available as reference.
ROB subject to reconstruction (Near Amarpura)	1	0	No drawings prepared by DFCCIL Tender drawings for Eastern Corridor available as reference.
Inland Container Depot	1	0	Indicated as multimodal logistic park on Rewari JS. drawing but no details available.
Loco Depot	N/A	0	Decision for electrification of this line was received on 18 th August 2008 from the Railway Board. Hence loco and maintenance depots were not yet planned in detail.
Maintenance Depot	N/A	0	
Substation	1	1	Information on conceptual location of TSS, SP, SSP, OHE depot, and tower wagon shed were provided.

Source: Information from DFCCIL

2.3 THE PROJECT ALIGNMENT

2.3.1 Integration of the Section Drawings

The Study Team confirmed that the with DFCCIL that the FLS was surveyed and mapped on local coordinate system, not referring to triangulation station benchmarks based on GPS coordinates (X, Y, Z) in terms of UTM Projection on WGS-84 datum. Hence, CAD data of each section alignment could not be integrated as shown in the figure below.



Source: FLS CAD data from DFCCIL

Figure 2-3 Result of Integration of FLS Section Drawings

Since the alignment survey of the eleven sections did not refer to any datum coordinates, the SAPROF Study team resorted to integrating the ending and starting points of two adjoining sections by superimposing each section alignment over satellite images referring to landmarks, existing road and railways, rivers, and other identifiable structures. Although the integration of the alignment could not be accurately connected, the relative position of line segments of each alignment and identifiable structures on FLS drawings could be superimposed on satellite images with relative accuracy. The accuracy of the relative distance of each line segment of FLS alignment of the result of planimetric survey was reasonable.

However, the precise position of the DFC alignment on universal coordinate system, particularly the starting and ending points, is suggested to need to be verified in the Engineering Service stage.

2.3.2 Length of Detour Section

The SAPROF Study Team examined the alignment data provided from DFCCIL and the length of parallel and detour section was determined and summarised in the following Table 2-3. Out of the whole section length of 940 km, approximately one-third being identified as detour routes.

Table 2-3 Detour Length of the DFC Alignment Between Rewari-Vadodara

Sec No.	Section Length	Detour Length	Total Length	Detour Total	Chainage of Detour
Sec5	78.0 km	59.4 km	939.5 km	338.5 km	km 0-59.4
Sec6	92.4 km	82.7 km			km 9.7-92.4
Sec7	38.1 km	39.6 km			km 92.4-132.0
Sec8	102.0 km	95.0 km			km 0-95
Sec9	91.0 km	36.9 km			km 40.2-42.4, km 45.9-47.7, km 50.6-53.5, km 58.0-59.5
Sec10	100.0 km	2.7 km			km 38.4-41.1
Sec11	104.0 km	0 km			
Sec12	100.0 km	11.8 km			km 21.0-22.0, km 39.4-40.9, km 54.8-60.8, km 61.7-65.0
Sec13	85.0 km	7.2 km			km 32.8-40.0
Sec14	107.0 km	0 km			
Sec15	42.0 km	3.2 km			km 49.6-52.8

Source: FLS provided from DFCCIL

2.3.3 Deviations Identified in the FLS Drawings

The SAPROF Study Team examined the FLS and assessed the rationale of the deviation identified in the FLS drawings.

Based on the recommendation of the JICA GLD, the SAPROF Team identified several deviations of the FLS and discussed with the management of the DFCCIL to reconcile each one of them.

The discussions with DFCCIL had cleared the queries of the SAPROF Study Team, most of the rationale provided from DFCCIL found being reasonable. The determined Final Alignment defined by the SAPROF Study Team are tabulated in the following Table 2-4.

Table 2-4 Deviations Identified in the FLS Data

Section	Reason of Detour, Deviation, etc
Section 5 to 6 (1/2) Vadodara – Mahesana	Avoided built-up areas & communities, etc.
Section 6 to 7 (2/2) Vadodara- Mahesana	Avoided built-up areas & communities, etc.
Section 9 Near Ext. Maval St.	Avoided hotel and housing structure.
Section 9 Palanpur-Iqbal Gadh	Alignment cutting through wildlife sanctuary as opposed to alignment recommended in JICA GLD.
Section 9 Near Ext. Abu Road St.	Avoided existing workshop.
Section 9 Near Ext. Morthala St.	Avoided running through on a large pond with minimum 700m curvatures.
Section 9 Near Ext. Kivarli St.	Adoption of minimum radius of 700m.
Section 9 Near Ext. Banas St.	DFCCIL plans to merge the existing cement siding into DFC.
Section 10 Near Ext. Sirohi Rd. & Keshavnagar St.	DFCCIL plans to merge the existing cement siding into DFC.
Section 10 Near Ext. Jawai Bandh St.	Avoided water body with minimum radius of 700m.
Section 11 Near Ext. Marwar JS	DFCCIL plans to shift MG line to Mavli and plan DFC in parallel to existing line.
Section 12 Bangurgram Stn.	DFCCIL plans to merge the existing cement siding into DFC.
Section 12 Kishanganarh	Avoided built-up area and marble factories.
Section 12 Near Makrera Stn.	FLS alignment requires to cross the existing line twice to adopt minimum radius of 700m.
Section 12 Madar Stn.	Avoided the workshop next to Madar Stn. and grave yard area.
Section 13 Phulera JS.	FLS avoided built-up areas by a shorter route than GLD.
Section 14 Kishan Manpura Stn.	DFCCIL plans a small detour alignment to avoid Kishan Manpura Stn. building and platform by relocation of some railway quarters in the premises. SAPROF team suggested shifting the existing line to the west side and utilising the vacant space for DFC.
Section 14 Ringas Stn.	GLD recommends a small detour to avoid an existing ROB and built-up area, however DFCCIL suggested that the ROB will be reconstructed by NHAI, and modified the plan to a smaller detour. SAPROF team suggests adoption of parallel alignment by shifting the existing MG line.
Section 15 to 16 Rewari JS Stn.	Rewari Terminal JS needs a large area plus consideration of eastward extension and connection with the existing lines.

Source: DFCCIL information analysed by SAPROF Study Team

Discussions with DFCCIL clarified the rationale of the deviations. The final alignment determined and adjusted by the SAPROF Study Team is summarised in the following Table 2-5.

Table 2-5 Deviations Identified in the FLS and Determined Alignment

Sec.	Chainage (Km)		Character of Alignment	Final Alignment	Remarks (Refer to drawings in Attachment)
	FLS	GLD			
5-6	-	420 – 520	Extensive Detour	FLS	Figure-2 Vadodara-Mahesana (1/2)
6-7	-	515 – 615	Extensive Detour	FLS	Figure-3 Vadodara- Mahesana (2/2)
8	-	590 – 675	Extensive Detour	Pre-FLS	Figure-4 Mahesana-Palanpur
9	-	595 – 675	Extensive Detour	GLD	Figure-5 Palanpur-Iqbal Gadh
9	40.2 - 42.4	712 – 714	Small Detour	FLS	Figure-6 Maval Stn. Small Detour
9	45.9 - 47.7	717 – 720	Small Detour	FLS	Figure-7 Abu Road Stn. Small Detour
9	50.6 - 53.5	722 – 725	Small Detour	FLS	Figure-8 Morthala Stn. Small Detour
9	58.0 - 59.5	730 – 732	Small Detour	FLS	Figure-9 Kivarli Stn. Small Detour
9	78.8 - 83.0	750 – 755	Parallel	GLD	Figure-10 Banas Stn. Small Detour
10	0.20- 14.6	762 – 775	Parallel	GLD	Figure-11 Shirohi Rd. Stn. Detour
10	38.4 - 41.1	798 – 802	Small Detour	FLS	Figure-12 Jawai Bandh Stn. Small Detour
11	17.0 - 25.5	879 – 888	Parallel	GLD	Figure-13 Marwar JS Detour
12	10.4-14.4	976 – 980	Parallel?	FLS	Figure-14 Bangurgram Stn.

Sec.	Chainage (Km)		Character of Alignment	Final Alignment	Remarks (Refer to drawings in Attachment)
	FLS	GLD			
12	-	1041 – 1056	-	Parallel	Figure-15 Kishangarh Stn. Detour
12	39.4 - 40.9	1005 – 1007	Parallel?	FLS	Figure-16 Near Makrera Stn.
12	61.7 - 65.0	1027 – 1030	Parallel?	FLS	Figure-17 Madar Stn. Small Detour
13	32.8 - 40.0	1097 – 1104	Detour	FLS	Figure-18 Phulera JS. Detour
14	6.9 - 8.8	1156 – 1158	Parallel?	FLS	Figure-19 Kishan Manpura Stn.
14	12.6 - 18.0	1161 – 1173	Small Detour	Parallel	Figure-20 Ringas Stn.
15-16	49.6 - 54.6	1300 – 1310	Parallel	FLS&GLD	Figure-21 Rewari JS

Note: Figures are attached in Attachment-1.

Source: DFCCIL information analysed by SAPROF Study Team

After due deliberation and site reconnaissance by DFCCIL, the alignment of four locations of above, namely Banas Stn, Keshavganj Stn, Marwar JS and Bangurgram Stn, in which JICA FS report recommended a small detour, were revised by DFCCIL to take a parallel route by remodeling the existing lines / rerouting the existing cement sidings. The SAPROF team found the modification sound and reasonable. Furthermore, DFCCIL clarified that finalization of plans to relocate the existing railway quarters at Kishan Manpura Stn., and relocation of existing Kishangarh railway station was under way, and the SAPROF team acknowledged that such land swapping measures is effective. The SAPROF team suggested to DFCCIL to remodel the existing lines near Makrera Stn. and Ringas Junction Station.

The SAPROF team concluded that such remodeling and facility relocation plan devised by DFCCIL entails building consensus with IR, local road authorities, private land owners as well as local municipalities, and since such concrete consent is not reached, implementation of early involvement and discussion between relevant stakeholders is desirable to solidify the plan.

2.3.4 Deviations in the Vertical Alignment on the FLS Drawings

The JICA GLD recommended a maximum gradient of 5 to 1000 for the vertical alignment.

The SAPROF Study Team observed the vertical alignment indicated on the FLS CAD drawings and concluded that there were no sections having gradient greater than 1 to 200. Since the FLS CAD drawings lacks topographical information of land adjacent to the DFC alignment, nor were any cross sections provided, the validation of the right-of-way (ROW) indicated on the plan drawing could not be made.

In order to carry out social environmental studies, particularly to identify the number of people who had to be relocated, the boundary of the ROW indicated on FLS and GAD information were utilised. Sections where FLS were not available, a 70-metre width band were used as a substitute of ROW. This was considered feasible because the typical cross section of embankment for detour section and FLS CAD drawings of parallel section provided from DFCCIL could be accommodated within a 70 metres band.

It should be noted that the validation of the vertical alignment as well as the width of the ROW needs to be carried out in the Engineering Services stage after acquiring the data of topographical height assigned to the universal coordinate system.

Also, the vertical alignment of Section 8 and Section 9 wildlife sanctuary detour route suggested by JICA Study Team and JBIC Study Team is yet to be completed by DFCCIL.

2.4 TRACK STRUCTURES

2.4.1 Confirmation of Consistency of Track Structure Design

(1) Track Structures indicated on the GLD of JICA F/S

Track Structures indicated in the GLD of JICA F/S bases on the standards adopted by Indian Railways (IR), and are summarized in Table 2-6.

Consistencies of the design of the track structure of DFCCIL with that of GLD need to be examined. In case inconsistencies exist, adjustments are advised.

Table 2-6 Track Structures Indicated in JICA GLD

Standards of construction	
- Gauge	1,676 mm
- Rails	60 kg/m UIC/90 UTS rail, HH rail
- Sleepers	PSC 1660 nos./km density for main line, 1540 nos./km density for loop line & sidings
- Points & crossings	60 kg rails, 1 in 12 with curved switches and CMS crossings on PSC fan shaped sleepers or FFU (Fibre reinforced Formed Urethane) sleepers Minor loop lines and non-running lines, 1 in 8 1/2 turnout
- Ballast	300 mm cushion
- Maximum speed	100 km/hr
- Type of traffic and axle load	Double stack container movement on well type wagon and 5800 tonne train hauling with 25 tonne axle load
Formation (Detour Route)	
- Bank width for double line	12.5 m
- Slope of embankment	2H: 1V
- Cutting width for double line	14.9 m (11.9 m+1.5 m extra for each side for side drains)
- Slope of cutting	1:1
- Blanketing	0.60 m depth
Track Centres	
Between two tracks of DFC	5.5 m
Between existing track and DFC	6.0 m

Source: JICA F/S Report, Oct. 2007

(2) List of GAD of Track Structure received from DFCCIL

The GAD prepared by DFCCIL which was provided to SAPROF team are listed in the following Table 2-7:

Table 2-7 GAD of Track Structure

Title of Drawing	Scale	Date	Received from DFCCIL
Typical X-Section of Embankment	NTS	May-08	July 16
Typical X-Section of Cutting	NTS	May-08	July 16
Formation in Embankment (Parallel Section)	NTS	May-08	July 30

Note: NTS indicate Not to Scale

Source: Prepared by SAPROF Study Team

(3) Review of Typical Cross Section of the Track Structure

The SAPROF Study Team reviewed the typical cross section drawing provided by DFCCIL and the Tender Documents for HQ/EN/WC/ Bridges/D&B/1, which was downloaded from the internet homepage of DFCCIL. Each point was cross referred against JICA F/S, and the result of review on inconsistencies are summarized as follows:

- i) The aforementioned tender document did not give details of track structures. In the first clause of Invitations for Bids (IfB), it merely gives a general description i.e., "The Project entails construction of mostly double track railway lines capable of handling 32.5 tonne axle load, longer trains and also double stack container trains". On the other hand, the JICA GLD was planned based on the assumes an axle load 25 tonnes for track structures, and 30 tonnes for permanent structures.

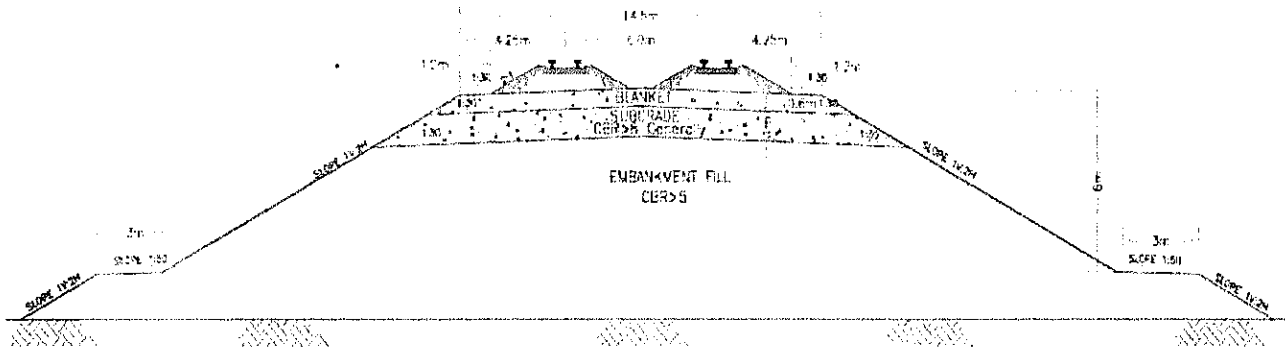
The tender documents showed the required vertical (upper) clearance from the rail level (hereinafter referred to as RL), however the lower vertical clearance, from the RL from the formation level, was not defined because dimensions of rails, sleepers and ballast thickness are not indicated.

The missing information will not affect finalisation of the DFC alignment, however it should be defined clearly by the time of construction tendering notice, otherwise the cost estimate of the works can not be finalized.

- ii) Centre to centre distance between the double tracks of DFC is 6.0 m, which is not consistent with JICA GLD which assumes the track centres are planned 5.5m apart. DFCCIL explained that the minimum space between tracks on tangent section is 5.5m, and that in case of curved sections 6.0m for track centres is considered. On the other hand, the tender document shows that 6.0m is the minimum, and no other explanation is made.
- iii) Distance between existing track centre and the planned adjacent DFC track on parallel section is defined as a 6.0m minimum, which is same as JICA F/S. However, the FLS drawings indicated varying distances, in some sections it is kept 6.0 m, while in other sections more than 10-15m is provided.

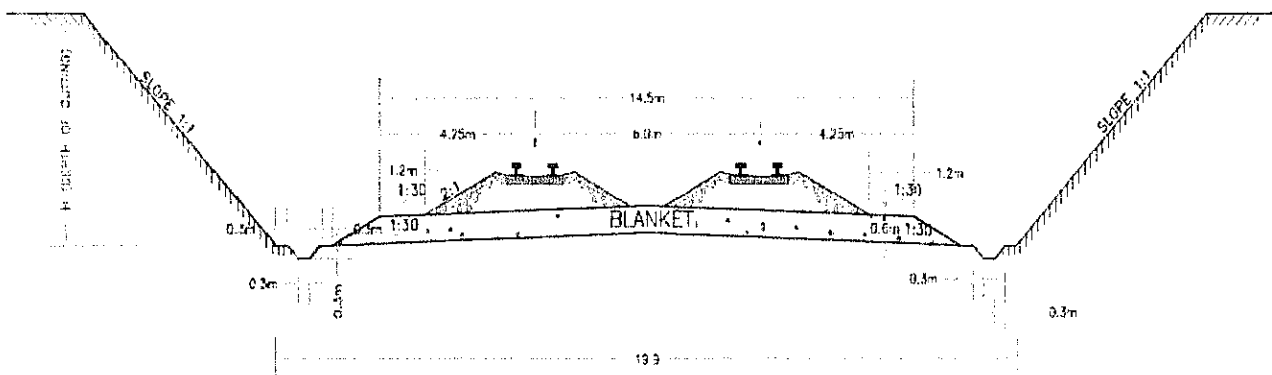
The reason given by DFCCIL engineers is that the extra clearance has to be provided for construction of new bridges adjacent to the existing bridges which may become unstable during construction works of the new bridges. Also, on some sections, existing bridges and culverts stand consecutively, some only several hundred meters apart. The alignment should avoid introduction of an S-curve, so the stretch between bridges also requires a wider space. Another reason provided was that the existing railway and DFC is physically separated due to segregate independent operation, and to avoid false recognition of adjacent signals, space greater than 6.0 m is required. The additional space will add to the increase in width of land acquisition and volume of earthwork. The plan and profile indicated on the FLS drawings should be examined in the Engineering Services stage.

- iv) Formation width for both embankment and cutting is 14.5 m in GAD as shown in Figure 2-4 and Figure 2-5, and are inconsistent with that recommended in JICA GLD which suggests a clearance of 12.5m for embankment, and 12.0m for cutting. DFCCIL engineers explained that modification was decided and directed by MOR. This would cause increase of construction cost. The applicability need to be examined in the Engineering Service stage.



Source: DFCCIL

Figure 2-4 Typical Cross Section for Embankment



Source: DFCCIL

Figure 2-5 Typical Cross Section for Cutting

2.5 JUNCTION STATIONS AND CROSSING STATIONS

The SAPROF Study Team was provided with model plans of the seven junction stations from DFCCIL as soft data, separate from the FLS CAD files. Crossing stations were indicated on the on the FLS CAD drawings, amounting to seventeen.

Although the approximate location and size of the crossing stations was observed on the FLS drawings, information on the location of the junction stations and their connectivity to the existing lines was not available. Thus, for junction station the location and connectivity to existing lines was examined by SAPROF Study Team by integrating the FLS CAD file and junction station model CAD drawings.

The result of the review of the junction stations and crossing stations are tabulated as follows:

Table 2-8 Location of Junction Stations and Crossing Station Indicated on FLS

Sec.	Description	GLD or FLS	FLS (km)		Distance (km)
			From	To	
5	Makarapura JS	SAPROF	59.4	56.9	63.45
6	CS	FLS	14	16	42.00
6	CS	FLS	56	58	31.85
6	Sabarmati JS	SAPROF	88.6	92.4	37.15

Sec.	Description	GLD or FLS	FLS (km)		Distance (km)
			From	To	
8	Mahesana JS	SAPROF	0	3.6	96.20
9	Palanpur JS	SAPROF	0.8	2.8	31.50
9	Shri Amirgadh CS	FLS	31.2	33.8	39.35
9	CS	FLS	70.6	73.1	123.35
10	Nana CS	FLS	22.4	25.4	39.75
10	Biroliya CS	FLS	51.6	54.1	33.70
10	Jawali CS	FLS	85.3	87.8	34.15
11	Marwar JS	SAPROF	17.7	19.7	37.85
11	Chandawal CS	FLS	55.3	57.8	19.20
11	Haripur CS	FLS	74.5	77.0	39.95
12	Bangurgram CS.	FLS	11.4	13.2	36.05
12	Saradhana CS	FLS	47.1	49.6	61.30
13	CS	FLS	10.0	12.5	23.20
13	Phurera JS	SAPROF	33.2	35.7	44.20
13	Malikpur CS	FLS	77.4	79.9	29.55
14	Shri Madhopur CS	FLS	21.9	23.7	37.90
14	Bhagega CS	FLS	59.7	61.7	33.70
12014	Dabla CS	FLS	93.4	95.4	32.70
15	CS	FLS	19.0	21.0	31.55
15	Rewari JS	SAPROF	50.3	52.8	

Source: Information from DFCIL compiled by SAPROF Study Team

2.5.1 Station Distances

The JICA GLD recommends that distances between stations on the DFC including junction/terminal stations and crossing stations should be planned at less than 40 km intervals.

The distance between the junction stations (JS) and crossing stations (CS) indicated in the FLS and GAD ranges from 32 to 45 km, with a few exceptions, where the distance ranges from 90 km to 125 km. It is envisioned that in the initial years after the commissioning of the DFC transport services, trains with different speeds will be running on the DFC line simultaneously, and DFC freight trains need to pass slower IR trains and frequent passing/refuge operations will be required. For long sections identified in the above Table 2.5-1, higher speed freight trains is likely to take over slower speed trains before reaching the CS, and trains will be forced to operate at speed of the slowest train. This will result in the shortage of transport capacity on this long section.

Since the transport and traction/rolling stock plan, as well as the train operation plan are yet to be developed, an optimal distance between such stations can not be determined.

It is noted that maximum distance between stations should be verified synchronously with review of traction/rolling stock and operating plan in the Engineering Services stage.

2.5.2 Evaluation of the Location of Junction Stations and Crossing Station Planned by DFCCIL

As was mentioned in Section 2.3.1, the FLS data is not based on universal coordinate system, and because of this the model plans of the junction station could not be integrated with the FLS. In order to cope with this situation, the SAPROF Study Team utilised satellite images to augment information and evaluate the overall location of junction stations and crossing stations.

The verification of the location, size, and connectivity of the junction stations to existing lines was initiated by first superimposing the FLS alignment on satellite images, and then secondly superimposing the model plans on top.

(1) Recommendation made in the JICA GLD for planning of JS and CS

The JICA GLD recommended that the following considerations be made for the planning of junction stations and crossing stations. These aspects were reviewed to identify the deviations between the design of the GLD for JS and CS.

The planning principles of JS and CS suggested in the JICA GLD are as follows:

- 1) Layout of station yards are planned based on the projected number of trains in 2031 for through traffic and entry/exit by direction as calculated in the demand forecast of the JICA Feasibility Study.
- 2) At-grade crossing is planned when the projected number of trains entering and leaving, to cross the main tracks of the station, is less than 10 trains per day. In this case departure/arrival tracks between both main tracks should be provided.
- 3) If the number of trains entering/leaving is less than 6 trains per day, switch-back operation is adopted and an engine turn-around track was provided. If the number of such train is very few, the main track can be used for engine turn-round.
- 4) In order that the trains entering and leaving do not interfere with the train operation of the main tracks as they wait for clearance of forward route, a departure/arrival track should be provided for each direction. In addition, at least one refuge track should be provided to accommodate malfunctioning trains.
- 5) The quantity of required number of loops at junction stations should consider the stopping time for crew change. (Since almost all trains stop at this station, main tracks can be used for trains to stop for crew change.)
- 6) Apart from the main yard area, if turn-outs are installed for entry /exit between the DFC line and a crossing feeder line, a waiting track at the entry side should be provided.
- 7) Effective track length should be 1,500 m. At stations where at-grade crossing is planned, a loop for uncoupling is provided out of the DFC main yard so that two uncoupled trains should not cross the main track.
- 8) Track layout for grade separation at the station yards should be planned such that it is avoided, as much as possible. If necessary, the intersection angle should be as small as possible. If new tracks are to be constructed, the angle should be 15 degrees using reinforced concrete box culvert structures. If the track is constructed over operating tracks, the angle should be 30 degrees using through-type steel girders/trusses. For both cases the girder structures housing upper tracks should be designed as shallow as possible.

9) In order to prevent lengthy approach banks due to curve compensation for maximum gradient, and to avoid coexistence of a vertical curve with a transition curve, curves should be applied to the tracks on the ground as much as possible to enable alignment of the tracks on the fly-over take a steeper slope. Vertical curves should be located on the upper bridge in order to shorten approach banks, although this will increase the height of the highest point.

10) Consider minimising deterioration of road traffic within the station area premises.

11) Formation width of the yard to be 100 m to accommodate space for various works and buildings.

12) Planning should be carried out with due consideration of future grade separation of the at-grade crossings of existing lines.

13) Planning should be carried out keeping in mind possibility of future crossing of the planned roads.

14) Selection of the sites for junction stations should avoid massive resettlement, and segregation of communities.

(2) Effective length of Station Track

Currently, length of single unit trains operated by IR is approximately 670 m, which is accommodated by station yard with an effective length or clear standing room (CSR) of 686 m. In the future, DFCCIL plans to operate double coupled trains which will require a CSR of 1,500 m. FLS drawings have indicated an exclusive area of 2,000 m to 3,000 m length by approximately 80 m wide strip of land as crossing stations.

The scale of the junction stations are not clearly indicated on the not-to-scale model plan provided from DFCCIL. The model plan of Phulera junction station indicates a wider strip of land exceeding 80 m.

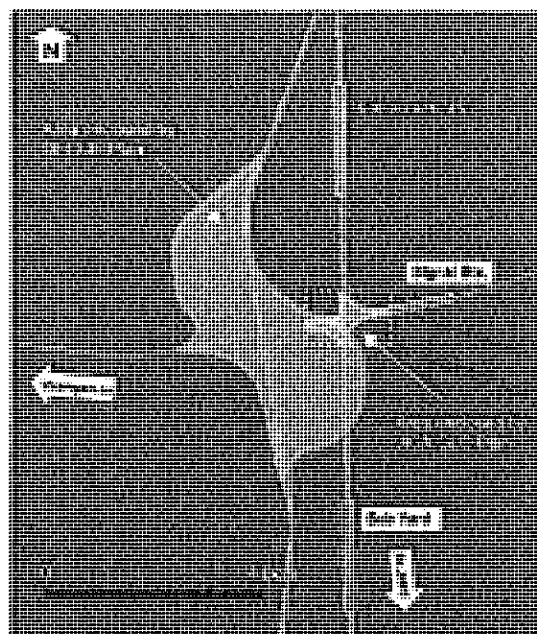
Since a junction station requires facilities of connecting tracks to/from feeder lines, auxiliary main tracks and sidings for waiting or adjusting train operation time, crew change, change of locomotives, and to uncouple/couple trains, as well as associated railway quarters, the SAPROF Team planned the conceptual design of the junctions and crossing station having 2,500 m in length by 80 metres width patch of land.

2.5.3 Junction Stations Planned by DFCCIL

The SAPROF Study Team studied the model plans provided by DFCCIL and found deviation from the planning philosophy and key considerations suggested in the JICA GLD. Examination of the model plans indicated that DFCCIL considered effort to minimise negative social impact such as segregation of the local communities. However the layout of the junction stations was excessive in size which requires massive land acquisition.

Particularly, the philosophy to plan railway flyovers at a perpendicular manner had compelled to configure clover-leaf type alignment as is adopted in highway design. This arrangement encloses a wide area of land. The design of connecting lines to and from the junction stations and the existing lines were planned in a spacious arrangement also made a wide patch of enclosed land.

For illustration the enclosed land created by connecting lines at Sabarmati junction station designed by DFCCIL is indicated in green in the Figure 2-6 on the right. In contrast, the SAPROF team proposes a connecting line arrangement, indicated in pink, having the same function that of DFCCIL, drastically compact in size.



Source: Information from DFCCIL compiled by SAPROF Study Team

Figure 2-6 Comparison of Size of Enclosed Land between DFCCIL and SAPROF Study Team

2.5.4 Design Deviations Identified in GAD for Junction Station

The location of the junction stations and its connectivity to existing IR lines is subject to the current operation of the existing IR lines, natural and social environmental constraints on site, as well as topographical condition of land. The SAPROF Study Team identified the following aspects as deviations in the model plan of junction stations from DFCCIL.

- Excessive number of crossings and turnouts
- Large area enclosed by connecting lines

Crossing Stations should be planned on ground level in principle, however for detour sections, embankment or viaduct may be considered as an exceptional case.

GAD of JS indicates FLS alignment is planned at-grade which is inconsistent with some of the vertical alignment of the detour section of FLS. Checking of horizontal alignment is also necessary. The JICA GLD suggested embankment structures for detour sections.

Table 2-9 Deviations Identified in Model Plans of Junction Stations

Attachment Figure No. /Junction Station	FLS Section No.	JICA GLD Chainage (Km)	Deviations identified (Refer to drawings in Attachment)
Figure-22 Makarpura	5	420.0	<ul style="list-style-type: none"> - North side route is shifted toward south - Large enclosed area created. - South side route is changed to detour.
Figure-23 Sabarmati	6&7	560.0	<ul style="list-style-type: none"> - Route is shifted towards west. - Clover-type layout encloses a wide area of land. - Decision of providing connecting line from JNPT to Viramgam is subject to future traffic demand.
Figure-24 Mahesana	7&8	611.0	<ul style="list-style-type: none"> - Function of JS is impaired by connecting method at "waiting track" and "at-grade crossing"
Figure-25 Palanpur	8	673.0	<ul style="list-style-type: none"> - Function of JS is who impaired by connecting method at "waiting track" - Southbound connection route is missing.
Figure-26 Marwar	11	881.0	<ul style="list-style-type: none"> - Route is shifted toward existing station plaza to built-up area bringing social environment problem.
Figure-27 Phulera	13	1,100.0	<ul style="list-style-type: none"> - Route and location is not reflected GLD of detour route. - Layout can improve to avoid enclosing broad area.
Figure-28 Rewari	15&16	1,310.0	<ul style="list-style-type: none"> - Plan is entirely changed. - Huge logistic park (4.6 km X 1.3 km) is planned with Junction station. - Much rearrangement of existing Rewari Yard is required. - Near existing Rewari JS, extensive land acquisition in built-up area is necessary, and is likely to bring social & environment problem.

Source: Information from DFCCIL compiled by SAPROF Study Team

The SAPROF Study Team reviewed the model plan of the junction stations jointly with the information indicated on the FLS, and prepared the conceptual design of the junction stations adjusting its location as per the finalised alignment maintaining the function and connectivity as was recommended in the JICA GLD. The principle of the modifications were understood and accepted by the management of the DFCCIL, and recorded in the Minutes of Discussion.

2.5.5 Conceptual Design of the Junction Stations by SAPROF Study Team

After review of the model plan of the junction stations, the SAPROF Study Team finalised the junction station plans and their arrangement and conceptual design as suggested by SAPROF Team was accepted by DFCCIL and Railway Board and is summarised in the following Table 2-10.

Table 2-10 Result of Finalised Conceptual Design of Junction Stations

Figure No. /Junction Station	FLS Sec.	JICA GLD Chainage (km)	Remark (Refer to drawings in Attachment)
Figure-29 Makarpura	5	420	- Connection point of JS at JNPT side to follow the FLS alignment. - DFCCIL will provide connectivity to the existing IR line. - Information on profile of Makarpura JS will be provided by DFCCIL – i.e. whether it is at Grade or not. - Function = JICA GLD; Location = FLS Alignment
Figure-30 Sabarmati	6&7	560	- Route is shifted towards west. - Clover-type layout is rationalised into compact scale preserving the connectivity and function of the JS enclosed by track, as well as minimising land enclosed by track. - Provision of connecting line from JNPT to Viramgam is made. - Function = JICA GLD; Location = SAPROF Alignment
Figure-31 Mahesana	7&8	611	- Provision of waiting track is made as a buffer for at-grade crossing. - Function = JICA GLD; Location = SAPROF Alignment
Figure-32 Palanpur	Sec 8	673	- Provision of waiting track is made as a buffer for at-grade crossing. - Southbound connection is provided. - Function = JICA GLD; Location = SAPROF Alignment
Figure-33 Marwar	11	881	- MG line is shifted to accommodate the waiting track and DFC line. - Function = JICA GLD; Location = SAPROF Alignment
Figure-34 Phulera	13	1,100	- Layout improved to avoid enclosing broad area and reflect the principle of GLD - Function = JICA GLD; Location = SAPROF Alignment
Figure-35 Rewari	15&16	1,310	- Logistic park needs to be planned separately along the existing line. - Function = JICA GLD; Location = SAPROF Alignment

Source: Prepared by SAPROF Study Team

In the later stage of the SAPROF Study, the SAPROF Study Team confirmed that the junction station CAD files received from DFCCIL were corrected taking in the suggestion made by the Study Team, and in line with the contents contained in Table 2.5-3 of above.

2.5.6 Crossing Stations Identified in the Data Provided From DFCCIL

Crossing stations are provided to make up for too long distances between stations composed by junction stations/terminal stations only, which ranges from 50 km to 200 km (237 km is the longest). They are required to secure smooth train operation and facility maintenance such as accommodating trains in event of accidents, train brake downs/rolling stock, waiting/passing of trains, changing trains on a single line track, and pulling over or temporary stabling of maintenance machinery.

Junction stations and terminal stations should be located at distances less than 40km interval. For sections between Khurja and Ludhiana where the DFC line is planned as a single line track in phase-Ib, supplemental crossing stations only for train exchange need to be provided, making distance between stations less than 10 km.

Crossing stations are provided only for the purpose of railway operation. Crossing stations have a high freedom for their locations and could be constructed at any place as long as there are few land constraints, and not exceeding the recommended maximum distance between stations.

2.6 BRIDGES

2.6.1 Important/Major Bridges

DFCCIL has carried out a hydrological model studies, for Sabarmati River, however no information regarding the result is available from DFCCIL yet. DFCCIL commented that the results of the model study will be utilised to optimize the distance between the piers of the bridge, the intersecting angle of the bridge with the river, and determine the river training area of the river banks.

2.6.2 Reconstruction of ROBs

The following two existing bridges between Vadodara and Rewari were identified in the JICA Feasibility Study to be reconstructed in the Project.

Table 2-11 Bridges Subject to Reconstruction

Location (Chainage of existing line)	Station in Proximity	Section
km 364+000	Amarpura	Bar - Sendra
km 148+000	Ringas JS	Ringas JS - Shri Madhopur

Source: JICA Feasibility Study Report

DFCCIL has confirmed that they have discussed with NHAI regarding the ongoing reconstruction of the existing ROB at Ringas JS and was confirmed that the clearance under the bridge can accommodate the passage of DFC double stack containers. Hence, the ROB subject to reconstruction in the DFC Project financed by Japanese ODA is only one in Phase-1 section.

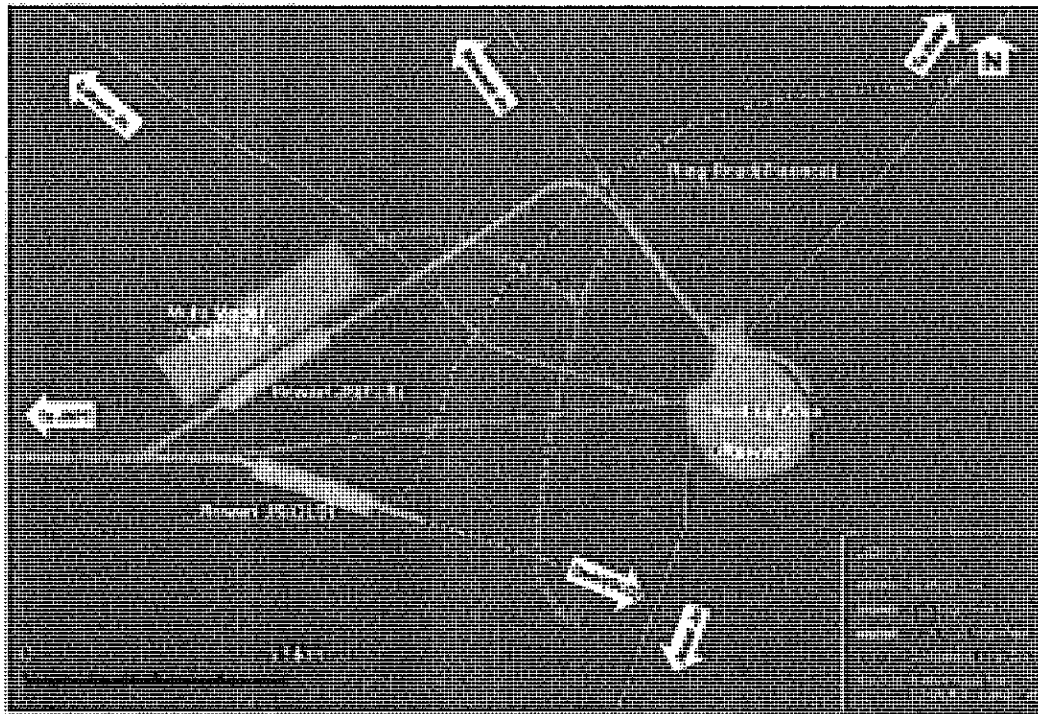
2.7 INLAND CONTAINER DEPOT

Inland container depot (ICD) is a crucial component of the Project since it will be required to temporarily accommodate the containers from JNPT and Mumbai ports to change mode of transport for further transport to city centres. DFCCIL had indicated to SAPROF Study Team, on two separate occasions, with regard to plans of ICD.

After superimposing both plans on satellite images, and checking for negative natural and social impacts, as well as connectivity to existing lines and major roads, the SAPROF Study Team concluded the following:

(1) Plan No.1

An ICD plotted 4.6 km length by 1.3 km width was planned along the FLS alignment west to Rewari city, as indicated in Figure 2-7. DFCCIL clarified that the plan took into consideration connectivity to planned major roads and that land was available in this area. The SAPROF Study Team pointed out that the location of the ICD is not optimal since some local communities were identified in the within the area, FLS alignment was cutting through the northern part of the Rewari city which will cause negative social impact as well as disrupt existing train operation. DFCCIL later confirmed that this plan was shelved.

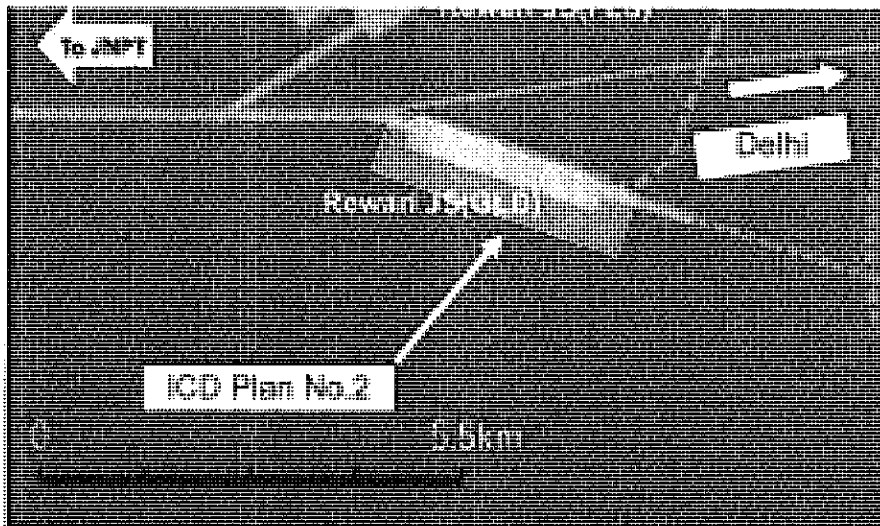


Source: Based on information from DFCCIL and JICA Feasibility Study Report,

Figure 2-7 Plan No.1 for ICD Contemplated by DFCCIL

(2) Plan No.2

Subsequently, DFCCIL verbally communicated to the SAPROF Study Team on another prospective location for the ICD. However, after displaying satellite images that the prospective area has clusters of communities scattered within the particular area, and due to additional information that availability of land was limited, this plan was also retracted.



Source: Based on information from DFCCIL and JICA Feasibility Study Report,

Figure 2-8 Plan No.2 for ICD indicated by DFCCIL

Due to these circumstances, the SAPROF Study Team could not carry out the environmental and social study for the ICD. To date, the location of the ICD has not been decided.

The SAPROF Study Team recommends that plans for ICD be deliberated in the Engineering Service stage, its location be designated by MOR/DFCCIL.

2.8 LOCO DEPOT AND MAINTENANCE DEPOT

DFCCIL is currently elaborating a business plan that entails freight transport plan which considers projected future freight transport demand on the Indian subcontinent level, as well as DFC demand level incorporating traffic of Indian Railways. The loco and maintenance depot plan will be affected by such transport plan.

Since such information is unavailable at this moment even to establish a conceptual plan for loco and maintenance depot, the SAPROF Study Team suggests that, the depot and maintenance facilities should be planned in the Engineering Service stage once information of above becomes available as well as information of the location and size of existing maintenance facilities, junction and crossing stations become available.

2.9 SUBSTATION

In mid August 2008, the Ministry of Railways decided to commission and operate the DFC line between JNPT to Dadri using 2x25kV traction system. DFCCIL has initiated the studies to determine the locations of these substation, thus there are no plans ready for review by the SAPROF Study Team.

The SAPROF Team obtained some information of plans prepared by DFCCIL for the substations along the DFC Corridor. The following table summarizes the information of the substation and its relevant facilities planned by DFCCIL. (TSS - Traction Substation; SP - Sectioning Post; SSP - Sub-sectioning Post):

Table 2-12 Location of New TSS, F.P., S.P. & S.S.P Planned by DFCCIL

Sr. No.	Name of Station or Detour	KM / Ch. No.	Area of Land Available *) x1 (m) by x2 (m) or X3 (Hectare)	TSS/SP/SSP	Section	Name of Village in Proximity	Remarks
1	Detour	02.355 to 02.380	0.0625	SSP	5	Morad	Chainage 0km on Delhi side
2	Detour	12.600 to 12.625	0.0625	SP	5	Napa Vanto	Chainage 0km on Delhi side
3	Detour	15.800 to 15.825	0.0625	SSP	6	Changa	
4	Detour	22.345 to 22.370	0.0625	SSP	5	Asodar	Chainage 0km on Delhi side
5	Detour	32.075 to 32.100	0.0625	SSP	5	Angadh	Chainage 0km on Delhi side
6	Detour	42.400 to 42.540	2.1	T.S.S.+OHE DEPO.+T.W. SHED	5	Bhayli	Chainage 0km on Delhi side
7	Detour	52.336 to 52.361	0.0625	SSP	5	Khatipur	Chainage 0km on Delhi side
8	Detour	29.400 to 29.662	1.6	TSS + OHE Depo + T.W.SHED	6	Heranj	Vaso to SBI River
9	Detour	40.546 to 40.601	0.1375	SSP	6	Wasna Bujarg	Vaso to SBI River
10	Detour	52.012 to 52.067	0.1375	SSP	6	Navagam (Kathwada)	Vaso to SBI River
11	Detour	59.311 to 59.336	0.165	SP	6	Miroli	SBI River to Sanand
12	Detour	71.010 to 71.065	0.1375	SSP	6	Rajoda	SBI River to Sanand

Sr. No.	Name of Station or Detour	KM / Ch. No.	Area of Land Available *) x1 (m) by x2 (m) or X3 (Hectare)	TSS/SP/SSP	Section	Name of Village in Proximity	Remarks
13	Detour	80.449 to 80.504	0.1375	SSP	6	Nanidevti	SBI River to Sanand
14	Detour	91.933 to 92.115	1.6	TSS + OHE Depo + T.W.SHED	6	Sanand Junction	SBI River to Sanand
15	Detour	100.00 to 100.55	0.1375	SSP	6	Nasmed	Sanand to Linch
16	Detour	109.49 to 110.004	0.1375	SSP	6	Hazipur	Sanand to Linch
17	Detour	121.774 to 121.829	0.165	SP	6	Dhanot	Sanand to Linch
18	Detour	130.000 to 130.500	0.1375	SSP	6	Nandasan	Sanand to Linch
Information of Section 7 and 8 was unavailable.							
1	Karjoda	646.32 Km	55X30	SP	9		
2	Jethi	636.32 Km	55X25	SSP	9		
3	Iqbalgarh	630.2Km	55X25	SSP	9		
4	Shriamirgarh	617.32 Km	140X85	TSS	9		
5	Maval	609.2 Km	55X25	SSP	9		
6	Abu Road	599.6 Km	55X25	SSP	9		
7	Kivarti	590.66 Km	55X30	SP	9		
8	Swaroopgani	574.2 Km	55X25	SSP	9		
9	Banas	565.8 Km	55X25	SSP	9		
10	Sirohi Road	555.7 Km	140X85	TSS	9		
11	Keshavganj	547.7 Km	55X25	SSP	10		
12	Nana	538 Km/ 207QO	55X25	SSP	10		
13	Mori Bera	526.7 Km/ 31600	55X30	SP	10		
14	Jawai Bandh	517.08 Km	55X25	SSP	10		
15	Biroliya	508.8 Km	55X25	SSP	10		
16	Falana	500.8 Km	140X85	TSS	10		
17	Rani	486.53 Km	55X25	SSP	10		
18	Bhagwanpura (Viloya)	479 Km/ 80.200	55X25	SSP	10		
19	Jawali	470 km	55X30	SP	10		
20	Bhinmaliya	456.6 Km / 102.600	55X25	SSP	11		
21	Auwa (Karadi Village)	445 Km/ 12.000-12.200	55X25	SSP	11		
22	Marwar Junction	434.41 Km	140X85	TSS	11		
23	Dareswar	426.2 Km/ 31.800	55X25	SSP	11		
24	Sojat Road	416.4 Km/ 41.800	55X25	SSP	11		
25	Bagdi Nagar	408.2 Km/ 50.000	55X30	SP	11		
26	Chandawal	396.2 Km/ 60.000	55X25	SSP	11		
27	Guriya	389.2 Km/ 69.000	55X25	SSP	11		
28	Haripur	380.30 Km /	140X85	TSS	11		
29	Bar (Fatekhhera)	370.3 Km/ 37600	55X25	SSP	11		
30	Sendra	360.7 Km/ 97200	55X25	SSP	11		
31	Amarpura	352.54 Km / 17.500	55X30	SP	12		
32	Bhangan Gram	342.70 Km/ 11.180	55X25	SSP	12		
33	Kharwa	333.70 Km / 21800	55X25	SSP	12		
34	Mangliyawas	320.17 Km/ 32.800	140X85	TSS	12		
35	Saradhana	310.11 Km/ 42.700	55X25	SSP	12		
36	Daurai	302.5 Km/ 50800	55X25	SSP	12		
37	Matter	289.215Km / 63.000	55X30	SP	12		
38	Ladpura	280.34Km / 69.400	55X25	SSP	12		
39	Gogal Akhri	272.873 Km/77.00	55X25	SSP	12		
40	Kishangarh	264 /7-S Km/ 85.400	140X85	TSS	12		
41	Tiloniya	254.462 Km/95.800	55X25	SSP	12		
42	Sali	243.412 Km / 8.400	55X25	SSP	13		
43	Sakun	236.409 Km; 15.400	55X30	SP	13		

Sr. No.	Name of Station or Detour	KM / Ch. No.	Area of Land Available * x1 (m) by x2 (m) or X3 (Hectare)	TSS/SP/SSP	Section	Name of Village in Proximity	Remarks
44	Naraina	226.08 Km/ 125.736	55X25	SSP	13		
45	Bhanwsa	218 Km/ (detour)	55X25	SSP	13		Detour survey in progress
46	Phulera	211 Km. (detour)	140X85	TSS	13		Detour survey in progress
47	Khandel	204.357 Km /47.600	55X25	SSP	13		
48	Sanodiya	197.37Km/54.600	55X25	SSP	13		
49	Minda	186.623 Km/ 65.052	55X30	SP	13		
50	Pachar Malkpura	174.186Km / 78.800	55X25	SSP	13		
51	Kishan Manpura	161/1 Km 17.400	55X25	SSP	14		
52	Ringus	148/12-13Km/21.400	140X85	TSS	14		
53	Shri. Madhopur	138/9-10 Km/ 128.140	55X25	SSP	14		
54	Kachera	129/5-6 Km/37.400	55X25	SSP	14		
55	Kanwat	122/6-7 Km/44.44	55X30	SP	14		
56	Bhagega	110/13-14Km/55.951	55X25	SSP	14		
57	Neem Ka Thana	101//3-4 Km/65.661	55X25	SSP	14		
58	Maonda	91/5-6 Km/75.520	140X85	TSS	14		
59	Jilo	81/5-6 Km/81.600	55X25	SSP	14		
60	Dabla	71/7-8 Km/95.400	55X25	SSP	14		
61	Amarpura Jorasi	60.5 Km 105.900	55X30	SP	15		
62	Namaul	52/2-3 Km/ 5-6	55X25	SSP	15		
63	Mirzapur Bachod	44/12-13 Km /15.000	55X25	SSP	15		
64	Ateli	37/15 Km /21.800	140X85	TSS	15		
65	Kalhuwas	27/14-15 Km/31.900	55X25	SSP	15		
66	Kund	17/5-6 Km / 40.200	55X25	SSP	15		
67	Khorl	7 Km	55X30	SP	15		Survey in progress
68	Pali detour	Detour	55X25	SSP	15		Survey in progress
69	Rewari	0	110X85	TSS	15		Survey in progress

Source: Information from DFCCIL compiled by SAPROF Study Team.

The SAPROF Study Team comments on the findings of the table as follows:

- 1) The origin of the kilometre chain of Section-5 is on Delhi side which is inconsistent with other sections.
- 2) Area of land available for the facility was indicated in either length of two sides of the rectangle dimensions or in area (hectare), which is the area required, not the availability of land.
- 3) The size of the area planned for the facility varies as follows:

Table 2-13 Size of Land Conceived by DFCCIL for Electrical Facilities

Section	Facility	SP	SSP	TSS (Hectare)
5		0.0625 (25 m x 25 m)	0.0625 (25 m x 25 m)	2.100 (140 m x 150 m) 1.600 (260 m x 62 m)
6		0.165 (55 m x 30 m)	0.1375 (55 m x 25 m)	1.600 (182 m x 88 m)
9 to 15		0.165 (55 m x 30 m)	0.1375 (55 m x 25 m)	0.935 (110 m x 85 m) 1.190 (140 m x 85 m)

Source: Information from DFCCIL compiled by SAPROF Study Team

- 4) The size of the sectioning post (SP) and sub-sectioning post (SSP) are relatively compact

and is presumed to fit in within the Right-of-Way.

- 5) The size of the land for Sectioning post and Sub-sectioning post for Section-5 is less than half of what is planned for other Sections. The capacity of the facility for Section-5 needs to be reviewed.
- 6) The location of the TSS needs to be reviewed with respect to the connectivity to the power grid, available size of land, and capacity of the facility corresponding to the operational requirement.
- 7) Plans for in TSS, SP, and SSP for Section 7 and 8 needs to be acquired for review.
- 8) The announcement from MoR regarding the decision of the Railway Board of the Technical Parameters applicable for the DFC Project indicate 2x25kV as electric traction system. The location of each of the electric facilities and capacities need to be reviewed whether it is in line with MoR's decision.

Furthermore, information on the conceived location of the OHE depot and tower wagon shed was provided as follows:

Table 2-14 Proposed Location for New OHE Depot and Tower Wagon Shed

No.	Name of Junction Station /Crossing Station	App. Km From Rewari	Chainage	Location for OHE Depot.	Location for Tower Wagon Shed
1	Shri Amir Garh	617	-	Near Shri Amir Garti CS	Near Shri Amir Garh CS
2	Keshav Ganj	547	-	Near Keshav Ganj CS	Near Keshav Ganj CS
3	Jawali	470	-	Near Jawali CS	Near Jawali CS
4	Chanclawal	398	-	Near Chandawal CS	Near Chandawal CS
5	Bhangur Gram	341	-	Near Bangur Gram CS	Near Bangur Gram CS
6	Kishangarh	275/1-2	75.1	Near Kishangarh CS	Near Kishangarh CS
7	Phulera	211	-	Near Phulera JS	Near Phulera JS
8	Shri Madhopur	145/7-8	21.9	Near Shri Madhopur CS	Near Jawali CS
9	Dabia	-	-	Near Dabla CS	Near Dabla CS
10	Rewari	0.00	-	Near Rewari JS	Near Rewari JS

Note: CS – Crossing Station

Source: DFCCIL

The SAPROF Study Team comments that OHE depot and tower shed wagons be located in the premises of the substations, junction stations and crossing stations which are generally located at approximately 40 km intervals.

The conceived location of the OHE depot and tower wagon station indicated in the above table needs to be reviewed whether the alignment is based on the final alignment.

CHAPTER 3 REVIEW OF ENVIRONMENTAL AND SOCIAL CONSIDERATIONS

3.1 SUPPLEMENTARY SURVEY FOR ESIMMS

3.1.1 Background

The Environmental and Social Considerations Study (ESCS), as an Initial Environmental Examination (IEE) level study, was conducted from November 2006 to March 2007 in the First Year of JICA F/S. Study area of the ESCS consisted of the development stage sections between Dadri, Uttar Pradesh and JNPT, Maharashtra (approx. 1,400 km) for the Western Corridor and the development stage sections between Ludhiana Punjab and Sonnagar, Bihar (approx. 1,200 km) for the Eastern Corridor. The first stage of Public Consultation Meetings was also held in this period in 10 states accordingly. In the ESCS, important environmental and social items to be assessed further as an EIA level study were identified. Based on these results of ESCS, the Environmental and Social Impact Mitigation Measures Study (ESIMMS) was conducted based on the Guideline Design of the JICA F/S (GLD). Study area of the ESIMMS was narrowed down to 37 districts in 5 states. In these 37 districts, the ESIMMS consisting of natural environmental study, pollution control study, social environmental study, and a series of Stakeholder/Public Consultation Meetings (PCMs) at the 2nd and 3rd stages were conducted. Mitigation measures of various environmental and social impacts together with the Environmental Management Plan (EMAP) and Environmental Monitoring Plan (EMOP) have been proposed in the ESIMMS.

However, supplemental surveys and studies to the ESIMMS have been still requested as EIA level study such as consideration of seasonal changes of flora and fauna in the area, more detailed noise and vibration study taking into consideration the distribution of sensitive receptors, and wider socio-economic survey for social impact assessment (SIA). In addition, after JICA F/S, the FLS works have progressed and it has been identified that there are deviations between the alignments proposed in GLD and described in FLS. The deviations of the alignments between Vadodara and Rewari have been reviewed during the study on Special Assistance for Project Formation (SAPROF) of the DFC Project, which has been conducted since July 2008, and the alignments have been finalized together with locations of other important railway facilities such as junction stations. Therefore, the Supplemental Environmental and Social Impact Mitigation Measures Study (S-ESIMMS) has been conducted based on the finalized alignments of the DFC Project between Vadodara and Rewari.

After conducting additional PCMs and information dissemination process of the EIA report, which is composed of state-wise ESIMMS reports and S-ESIMMS report, under the SAPROF Study, the EIA report has been approved by MOR and Department of Economic Affairs (DEA) under Ministry of Finance on 17th August, 2009. S-ESIMMS report is attached in Appendix 3-1.

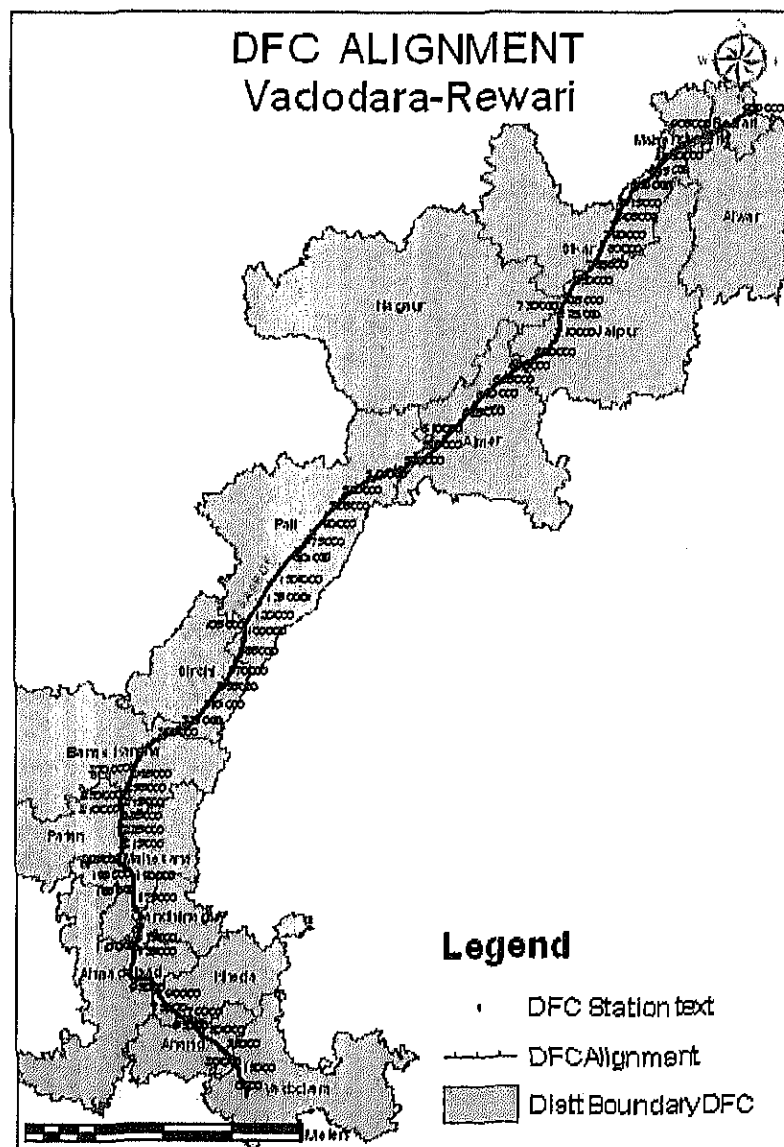
3.1.2 Objectives of S-ESIMMS

The broad objective of the S-ESIMMS is to conduct supplemental environmental and social considerations study for the DFC Project based on the finalized alignments in order to formulate the DFC Project in more sustainable and effective manner, especially in environmental and social aspects, so that the expected outputs from the Project would be satisfactory for the beneficiaries. The specific objectives of the S-ESIMMS are summarised below.

- To confirm the consistency between the FLS and GLD/GAD of JICA F/S from the environmental and social considerations points of view,
- To review the environmental and social considerations of ESIMMS taking into consideration the finalized alignments,
- To conduct supplemental surveys and studies based on the findings from the above,
- To formulate additional mitigation measures based on the results of above supplemental surveys and studies, and
- To review and update EMAP and EMOP which are proposed in ESIMMS.

3.1.3 Study Area of S-ESIMMS

The study area of the S-ESIMMS is along the 1st priority section between Vadodara and Rewari in the electrified Western DFC as shown in Figure 3-1.



Source: Prepared by SAPROF Study Team

Figure 3-1 Study Area of S-ESIMMS

3.1.4 Scope of S-ESIMMS

(1) Pollution Control

The study of pollution control in the S-ESIMMS aims to obtain the adequate baseline data on the potential impacts by the DFC Project such as water quality at the proposed bridge sites and noise and vibration in the areas affected by the DFC Project.

Due to the limited available data of the faster freight train which correspond to the DFC, the impacts on the noise and vibration were anticipated through obtaining field measurement of 1) noise and vibration levels at similar cases of the DFC, and 2) background noise and vibration level at the existing railway in the Western Corridor.

Unit level for noise and vibration were obtained through field measurement of the noise and vibration generated by freight train under the similar operational condition to the DFC, at the west of existing Khurja Junction Station in Aligarh-Dadri section of Northern Central Railway (NCR). The similar operational cases were determined through field observation and interview of the local railway officers to identify suitable location for noise and vibration measurement. The selected locations for noise and vibration measurement were; 1) Mathura-Kosi section of NCR-DRM/Agra (Northern Central Railway) and 2) Aligarh-Dadri section of NCR.

Background noise and vibration levels were measured at densely populated and potentially affected areas in the Western Corridor of DFC Project.

Based on the obtained data on the noise and vibration, the impacts by the DFC were predicted and adequate mitigation measures were proposed.

1) Noise and Vibration Study

a) Objectives

- 1) To obtain unit levels of noise and vibration of freight trains to use for the prediction of the impacts along the alignments of the Dedicated Multimodal High Axle Load Freight Corridor (DFC);
- 2) To grasp current noise and vibration levels at the existing tracks to use for the prediction of the impacts along the parallel sections of the DFC;
- 3) To assess impact of noise and vibration generated by the DFC to establish adequate mitigation measure for the impacts.

b) Scope of Noise and Vibration Study

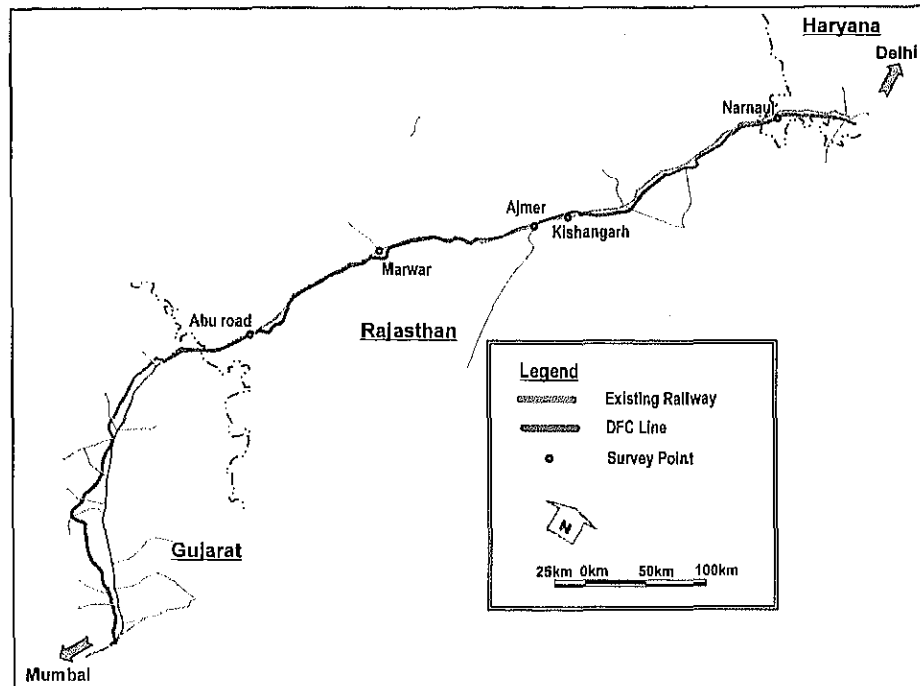
Japanese standard of noise measurement, JIS Z 8731 (Method of Measurement of Noise Level), was used for noise measurements which is same as the ISO standard. Since there is no particular standard method for measuring railway noise in India, noise measurements are generally conducted following the ISO. Similarly, Japanese vibration measurement standard, JIS Z 8735 (Method of Measurement of Vibration Level) was used for vibration measurement. However, X, Y, Z-axis measurement that complies with ISO was used as common method in India instead of the Japanese general method mainly measuring only the Z-axis.

i) Measurement Sites

The adequate number of locations was selected for measurements of unit level of noise and vibration based on the recommendations of MOR. Field reconnaissance was also conducted to find the appropriate location. The selected locations are; 1) Mathura-Kosi section of

NCR-DRM/Agra (Northern Central Railway), 2) Aligarh-Dadri section of NCR, and 3) Orissa.

Noise and vibration due to the existing railway were measured to predict DFC's impact in parallel section. In parallel section, besides newly establish DFC railway, noise and vibration from the existing railway should be considered to minimize the impact at the operation period. The measurements were mainly conducted at the densely populated area in the Western Corridor. The selected areas are located in Narnaul, Kishangarh, Ajmer, Marwar and Abu Road as shown in Figure 3-2 and Table 3-1.



Source: Prepared by SAPROF Study Team

Figure 3-2 Noise and Vibration Measurement Site

Table 3-1 Noise and Vibration Measurement Site

Survey Point	No.	Location		Numbers of measurement point	Reasons
		Latitude	Longitude		
Abu Road	1	24°29'20.34"N	72°47'34.60"E	2 (13.0 m, 26.0 m)	Residential area
	2	24°28'39.42"N	72°46'56.64"E	1 (10.0 m)	Residential area
Marwar	1	25°43'39.87"N	73°36'59.36"E	2 (18.0 m, 32.0 m)	Residential area
	2	25°43'31.48"N	73°36'51.37"E	1 (15 m)	Near temple
Ajmer	1	26°27'22.20"N	74°40'44.28"E	1 (12.5 m)	Residential area
	2	26°25'38.22"N	74°39'10.08"E	2 (3.5 m, 14.1 m)	Residential area
Kishangarh	1	26°35'31.70"N	74°51'45.85"E	2 (15.0 m, 30.0 m)	Near house
	2	26°35'18.31"N	74°51'06.00"E	1 (16.8 m)	Residential area, near temple
	3	26°35'17.19"N	74°51'02.97"E	2 (15.0 m, 22.0 m)	Residential area, near temple
Narnaul	1	28°02'19.36"N	76°06'34.54"E	1 (-)	Residential area
	2	28°02'17.58"N	76°06'26.75"E	1 (-)	Residential area
	3	28°02'06.06"N	76°05'54.60"E	1 (-)	Near school and temple

Note 1: Only background noise measurement was conducted. Currently no train runs in Narnaul because of construction of existing railway.

Note 2: (-) indicates the distance from centre of existing railway line.

Source: SAPROF Study Team

ii) Survey for Unit Levels of Noise and Vibration

Noise and vibration levels of the freight trains have been measured in the existing tracks where the trains run with relatively high speed, heavy load and without the interference of background noise and vibration. Measurement has been conducted in accordance with the guidelines prepared by the SAPROF Study Team. The specifications of noise and vibration unit level measurement are presented in Table 3-2.

Table 3-2 Specifications of Noise and Vibration Unit Level Measurement

Item	Specifications
Noise	
Noise Level Meter	Noise Level Meter which complies with "JIS C 1509-1: 2005 Electroacoustics-Sound Level Meters- Part 1: Specifications"
Measurement Points	Total five points from the centre of the outer railway track
Measurement Parameter	L_{Aeq} (equivalent continuous A-weighted sound pressure level) L_p (peak level)
Frequency Weighting	A
Time Weighting/Response	Slow
Other Data to be Recorded	Date & time, location, train load (container/bulk), number of train cars, train length, passage time, train speed, pictures, information on surrounding environment, etc.
Additional Measurement	Frequency Analysis is conducted. Necessary data are recorded.
Vibration	
Equipment	Vibration Level Meter which complies with "JIS C 1510:1995 Vibration Level Meters"
Measurement Points	Total five points from the centre of the outer railway track
Measurement Parameter	L_p (peak level)
Vibration Directions	X, Y and Z directions
Time Weighting/Response	Slow
Data to be recorded	Date & time, location, train load (container/bulk), number of train cars, train length, passage time, train speed, pictures, information on surrounding environment, etc.
Additional Measurement	Frequency Analysis to identify the predominant frequency is conducted. Necessary data are recorded.

Source: SAPROF Study Team

iii) Background Noise and Vibration Measurement

Survey for current noise and vibration levels along the parallel sections of the DFC was conducted. The location of existing noise and vibration survey has been identified by the SAPROF Study Team. Measurement has been conducted in accordance with the guidelines prepared by the SAPROF Study Team. The specifications of noise & vibration measurement of existing railways are presented in Table 3-3.

Two (2) to three (3) sites were selected in each area for the railway noise and vibration measurement. Similarly, background noise and vibration measurement was conducted at the same sites during the time when trains did not pass through. However, at the Narnaul Station, only background noise was measured due to no train operation caused by the ongoing construction of the railway.

Table 3-3 Specifications of Noise and Vibration Measurement of Existing Railways

Item	Specifications
Noise	
Noise Level Meter	Noise Level Meter which complies with "JIS C 1509-1: 2005 Electroacoustics-Sound Level Meters- Part 1: Specifications"
Measurement Points	Total five points from the centre of the outer railway track
Measurement Parameter	L_{Aeq} (equivalent continuous A-weighted sound pressure level) L_p (peak level)
Frequency Weighting	A
Time Weighting/Response	Slow
No. of Measured Trains	50 trains in the single track + 50 trains in the double tracks = 100
Other Data to be Recorded	Date and time, location, train types (freight/passenger) & load (container/bulk), number of train cars, train length, passage time, train speed, pictures, information on surrounding environment, etc.
Additional Measurement	Frequency analysis is conducted. Necessary data are recorded.
Vibration	
Equipment	Vibration Level Meter which complies with "JIS C 1510:1995 Vibration Level Meters"
Measurement Points	Total five points from the centre of the outer railway track
Measurement Parameter	L_p (peak level)
Vibration Directions	X, Y and Z directions
Time Weighting/Response	Slow
No. of Measured Trains	50 trains in the single track + 50 trains in the double tracks = 100
Data to be recorded	Date and time, location, train load (container/bulk), number of train cars, passage time, train speed, pictures, information on surrounding environment, etc.
Additional Measurement	Frequency analysis to identify the predominant frequency is conducted. Necessary data are recorded.

Source: SAPROF Study Team

iii) Impact prediction and evaluation

Obtaining the Sound Power Level (PWL) in noise and Standard Vibration Level (SLV) in vibration, distance attenuation of noise and vibration were derived using the empirical formulae proposed by Railway Technical Research Institute of Japan in 1996. Based on the attenuation trends of the noise and vibration as following conditions, the impacts were predicted and evaluated to establish adequate mitigation measure and monitoring plan. Overview of the prediction and evaluation on the noise and vibration are summarized in Source: SAPROF Study Team Figure 3-3.

a) Target of Prediction

Target of prediction is railway noise (L_{Aeq}) after DFC would be placed in service.

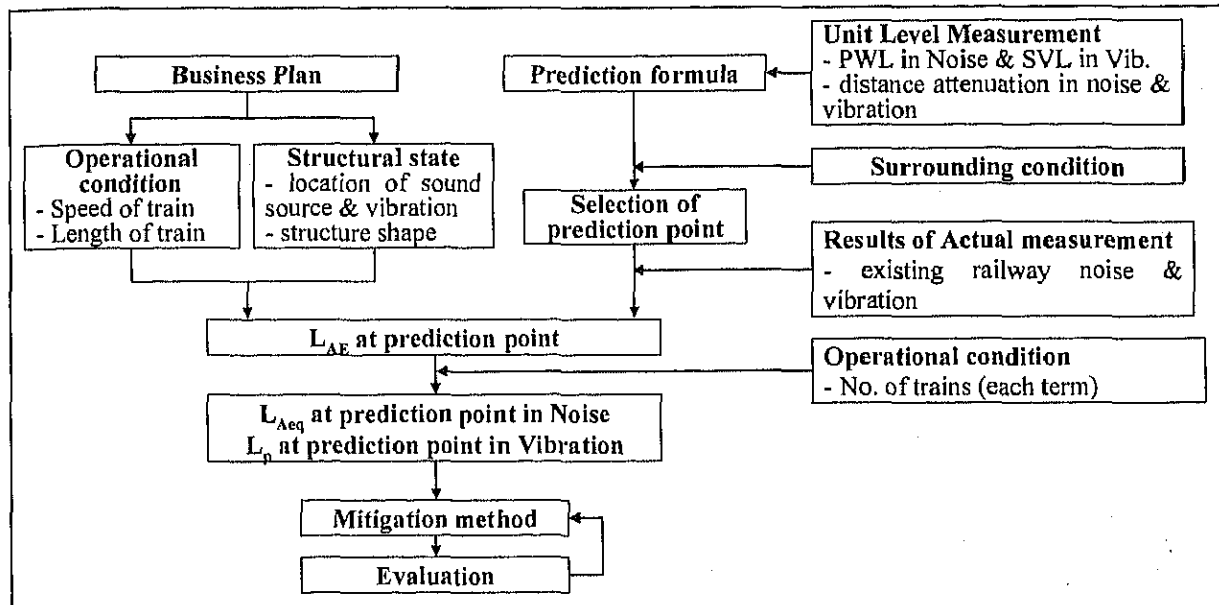
b) Term of Prediction

As the term of prediction, the time when the railway would be operated steadily after placed in service has been targeted.

c) Prediction location

Twelve (12) prediction locations were selected in parallel section and five (5) locations in detour section, in where there are residential area and commercial area

alongside the railway alignment. Here, the impact assessment was not limited only to Sensitive Receptors, but also to the residents of commercial and residential area. In JICA F/S report prediction of the impacts were limited to Sensitive receptors.



Source: SAPROF Study Team

Figure 3-3 Procedure for Prediction of Noise Level and Vibration Level

2) Water Quality Study

a) Objectives

To assess the impact and to establish monitoring procedure, water quality of major rivers flowing within the study area is analyzed. Secondary data on river water quality and flow rate are collected from the State Pollution Control Board (SPCB). Based on the analysis of primary and secondary data, the water quality of major rivers in the study area are determined. The samples for water quality are collected from the proposed location of bridges, as well as from upstream and downstream.

The DFC alignment crosses some important rivers (Sabarmati River, Mahi River, Balam River, Vishwamitri River, Vatrak River, etc.) and canals (Narmada Canal) at different locations in Gujarat. Surface water has been found as an important source for catering to the local needs of water consumption for various purposes, mainly irrigation, domestic as well as drinking. Therefore, any kind of deterioration owing to the developmental activities in the quality of surface water will pose some threat to the population and attention needs to be paid towards maintaining the quality of water using all possible tools such as monitoring with spontaneous remedial suggestions, if required.

b) Scope of Water Quality Study

Keeping in view the importance of surface water to the local people and drawing up the baseline data, 30 representative surface water quality monitoring stations are selected for the monitoring and assessment of surface water quality.

Water samples (grab samples) were collected in the month of August 2008 from all these stations. Prior to departure to the field, all sample containers were initially leached and washed thoroughly with tap water and then with Double-Distilled water and dried. All the basic precautions and care were taken during the sampling to avoid contamination.

The samples were analyzed for relevant physical and chemical parameters for drawing up the baseline data. Parameters such as pH, water temperature and Dissolved Oxygen (DO) were measured in situ. While characterizing water samples, analytical methods for various parameters have been adopted from 'Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF 19th edition (1995)' and standard methods and procedures prescribed by the Central Pollution Control Board (CPCB), e.g. relevant IS Codes (IS:2488 (Part-1 to 5) "Methods for Sampling and Testing of Industrial Effluents").

(2) Natural Environment

The supplemental study was conducted from the beginning of July 2008. The study mainly focus on revealing the impact on newly affected area due to change in alignment, protected species present in the major river environment, flora and faunal situation in the area closely passing through the Wildlife Sanctuary and impact to flora such as vegetation and forest. Considering the time scheme of the study, the comprehensive authentic information was explored about the locations of the protected species by conducting field survey by the expert on the relevant species.

1) Flora Study

a) Objectives

- 1) To verify impacts on the natural environment by the development of the DFC and the relevant facilities by collecting supplementary secondary data and conducting the supplemental field surveys, and
- 2) To update Environmental Management Plan and Environmental Monitoring Plan of the Environmental and Social Impacts Mitigation Measures Survey (ESIMMS) reports including the environmental mitigation measures.

b) Scope of Flora Study

The scopes of study on regarding flora in the S-ESIMMS are summarized below:

- 1) Geological location of the forest area, Reserved Forest/ Protected Forest/ Un-classed Forest, directly affected by DFC is verified. The literature related to natural environment available with local government like district wise Working Plan of the Forest Division, Management Plan of Wildlife Sanctuary, are collected as supplemental secondary data for ESIMMS.
- 2) The species of flora along the final alignment and the boundaries of the relevant facilities are verified by conducting reconnaissance survey in association with Range Officer/ Forest Guards of the State Forest Department. The exact location of the forests and their status are confirmed through interview with the officials and seasonal variation is studied.
- 3) The trees getting directly affected by the railway construction are identified by visual counting method (walk through the railway track). The number of trees to be felled for construction of DFC is counted. Trees having more than 30 cm girth size (diameter) and 1.5 m of height existing within 50m from the centerline of the last track on the eastern side are counted.
- 4) The vegetation of Wildlife Sanctuary/ Reserved Forest areas is characterized by adopting standard quadrat method and random sampling approach. The quadrat technique is easy to use in communities with a profile low enough that a frame can be placed over the area to be sampled and also appropriate for forest communities that are open enough to allow plot boundaries to be marked easily and accurately with a tape measure. Quadrat survey and random sampling are conducted in those places where no data was collected during the ESIMMS.

- 5) The species of flora, fauna; location of Reserved Forest/ Protected Forest/ Un-classed Forest, Wildlife Sanctuary are identified along the finalized alignment of DFC and the boundaries of the relevant facilities by conducting reconnaissance survey in association with Range Officer/ Forest Guards of the State Forest Department.
- 6) Supplemental secondary data in terms of district-wise Working Plan of the Forest Division, Management Plan of Thol Bird Sanctuary; Management Plan of Balaram Ambaji Wildlife Sanctuary are obtained.
- 7) The vegetation of Wildlife Sanctuary/ Reserved Forest area is characterized adopting standard quadrat method and random sampling approach.

2) Fauna Study

a) Objectives

- 1) To verify impacts on the natural environment by the development of the DFC and the relevant facilities by collecting supplementary secondary data and conducting the supplemental field surveys
- 2) To update Environmental Management Plan and Environmental Monitoring Plan of the Environmental and Social Impacts Mitigation Measures Survey (ESIMMS) reports including the environmental mitigation measures.
- 3) To identify potentially affected fauna by the newly determined DFC alignment based on the governmental information and result of interview survey to the academicians, governmental officials and local residents.
- 4) To cover the seasonal difference of the fauna in DFC alignment affected area particularly those areas which are close to the Wildlife sanctuaries.
- 5) To identify the habitats of important species such as Indian Soft-shell Turtles. Field survey with secondary information collection is conducted to study the habitats/distribution of Indian Soft-shell Turtles in the stretches where bridges have been proposed over Mahi River, Viswamitri River, Vatrak River and Sabarmati River. Field survey is conducted covering an area of 10 km stretch of river (5 km upstream & 5 km downstream from the bridge location).

b) Scope of Fauna Study

- 1) Supplemental study on fauna
 - i) Supplemental secondary data on fauna including hearings from local people, research institutes, universities, NGOs and jurisdictional administration offices in the each district and state is collected along the finalized alignment of DFC and WLSs.
- 2) The WLSs to be surveyed are specified below:
 - Mt. Abu WLS in Sirohi, Rajasthan,
 - Balaram Ambaji WLS, Banas Kantha, Gujarat,
 - Jossore, Banaskantha, Gujarat, and
 - Thol Lake WLS (bird sanctuary), Kadi sub-district, Mahesana, Gujarat
 - Sambarh Lake WLS

The data collection is made mainly from the view points of seasonal changes on the habitats of plant and wildlife including invertebrate and migrating activities.

- 3) Supplementary field reconnaissance on the flora, fauna and ecosystem in and around the above-mentioned WLSs is conducted near the finalized alignments and relevant facilities. The field reconnaissance is made by academic experts such as

- research institutes and/or universities of the relevant scientific fields.
- 4) The results of the secondary data collection, hearings and the field reconnaissance are summarized.
 - 5) Impacts on fauna, flora and ecosystem of the WLS near the finalized alignments and relevant facilities are verified in depth by analyzing the results of this supplementary survey and reviewing the previous findings in the ESIMMS.
 - 6) Environmental mitigation measures on the natural environment together with updated Environmental Management Plan and Environmental Monitoring Plan are proposed.
- c) Supplementary Field Survey on the protected faunal species, Habitats of Indian Soft-shell Turtles and other reptile species in the major rivers.
- 1) The secondary data on habitats of Indian Soft-shell Turtles (*Aspideretes gangeticus*) and other important species in and around the sections where the planned bridges crosses Mahi River are collected.
 - 2) Hearings from academic experts in Indian Soft-shell Turtles are conducted.
 - 3) The field survey on habitats of Indian Soft-shell Turtles (*Aspideretes gangeticus*) in and around the sections where the planned bridges crosses Mahi River is conducted together with the academic expert in Indian Soft-shell Turtles. The survey areas include the area in/along the Mahi River starting from 5 km downstream to 5 km upstream from the planned bridge.
 - 4) A series of maps showing habitats of Indian Soft-shell Turtles are prepared along with the record of the information of the field survey such as day & time, locations (longitude and latitude), weather and pictures.
 - 5) The results of the secondary data collection and the field survey are summarized.
 - 6) Environmental mitigation measures on the natural environment together with updated Environmental Management Plan and Environmental Monitoring Plan are proposed.

(3) Social Considerations

1) Project-Affected Structure Identification Survey

A Project-Affected Structure Survey was conducted to identify all the Project Affected Structures and Families (PAFs) in the Right of Way (ROW) of the finalized alignments of the DFC between Rewari in Haryana State and Vadodara in Gujarat State and in the boundaries of the relevant facilities.

In the parallel section, field survey was conducted to identify all the Project Affected Structures (PASSs) coming within 50 m from the centre of the outer railway track on the side of widening along the finalized alignments of the DFC and the boundaries of the relevant facilities. In the detour section, field survey was conducted to identify all the Project Affected Structures (PASSs) coming within the proposed ROW with 70-m width through out the finalized alignments of the DFC and the boundaries of the relevant facilities. During the survey, the number of families in the PAS as Project Affected Families (PAFs)¹ was also counted. Other information on family properties and socio-economic aspects was also

¹ "Project Affected Families (PAFs)" mean families to be relocated or to be affected by the Project in accordance with the National Rehabilitation and Resettlement Policy 2007.

collected using a questionnaire. A data base of Project Affected Structures (PASs) was prepared including the serial number, structure types, picture and other relevant data.

2) Socio-economic Survey

In order to examine possible socio-economic impacts by the Project and assist the counterparts to prepare the Rehabilitation and Resettlement Plan (RRP), the Socio-economic Survey of 20% of the PAFs was conducted through out the stretch including 25 PAFs in each district whose agricultural lands are going to be affected by the project. The survey was conducted through questionnaire. The results of the questionnaire survey were analyzed and summarized.

In addition, the results of the SR and Land Use Surveys for the noise and vibration aspects were also utilized in examination of the social impacts.

Updated Rehabilitation and Resettlement Plan (RRP) was prepared separately from the EIA report as mentioned in Section 3.4.

3.2 PUBLIC CONSULTATION MEETING FOR EIA

3.2.1 Introduction

In the preparation stage of the EIA, the first and second stage of public consultation meetings (PCMs) at district level under the Environmental and Social Impact Mitigation Measures Study (ESIMMS) were held under the JICA F/S between February and July 2007. In addition, during PCMs, feedback meetings at village level were also conducted to secure the information dissemination and opinion collection at the PAP level.

Due to change in the alignment of the DFC Project after the JICA F/S, the PCM has to be conducted for the villages which are newly recognized as the Project-Affected Area. New villages where PCM needed to be conducted are spread in 13 districts of three states. 119 villages in Gujarat, 56 villages in Rajasthan, and 29 villages in Haryana were required to conduct the PCM. Although the PCMs for EIA in Gujarat and Haryana have been conducted in October 2008, the PCMs in 4 districts of Rajasthan have been conducted in February, 2009 to avoid political interference during state election period of Rajasthan in November. Methodology of the PCM for EIA and meeting results are shown below.

3.2.2 Methodology

(1) Initial Information Dissemination

- i) All of the head of districts and gram panchayats, which are directly affected by the DFC Project, were informed in respect of holding PCM.
- ii) Leaflets informing the main alignment and other structures of the DFC Project are prepared and distributed to the head of districts, gram panchayats, and head of villages as well as other key informants such as the head of schools, local organizations of commerce and industries, local NGOs and social groups/organizations, local farmers and residents that are concerned with DFC Project.
- iii) List of invitees is elaborated one so as the participants of the PCM shall assume that they are appropriately representing inter alia all the local population directly affected by the DFC Project.
- iv) No person is prevented from entering and/or leaving the PCM as he/she shall so desire.

(2) Contents of Disclosed Information

Topics of presentation at the PCM are the result of the EIA Study: projected extent, intensity and cumulative effect of the degree of the changes of the natural environment and social environment as a result of the implementation of DFC Project.

(3) Discussions, Questions and Answers

A session for question and answer is prepared after completion of the major information dissemination on the Project. A session for discussion of taking questions from the participants and answering to the questions where correct information is available is appropriately held in order to disseminate full information of the Project at the time of holding the PCM.

(4) Record of the Meeting

i) Record the Participants:

Name, gender, occupation, age, name of the village the participants belong to and other appropriate features is recorded at the entrance of PCM and reproduced in the report.

ii) Record of the Contents of Meeting

The contents of the discussion of the PCM are recorded by electronically recordable device and reproduced by transcribing the contents in the report.

iii) Questionnaire Survey

Elaborate questionnaire survey is prepared but not limited to the questionnaire as follows in order to illustrate representation of the participants of each meeting. The results are analyzed statistically and reproduced in the report.

A questionnaire is less than a sheet of A4 size paper with major points of concern as follows:

- Origin of the participant (native/not native to the state, majority/minority of native tribe);
- Name of the village;
- Age;
- Occupation;
- Level of education;
- Whether the participant is directly affected by the Project as a result of project implementation;
- Opinion on the Project (good or bad for the village/local economy);
- Willingness to resettlement (yes/no/conditional);
- Request to the Project Owner in terms of engineering, social and environmental concerns.

3.2.3 Schedule of Public Consultation Meeting

The PCM under the S-ESIMMS was planned based on the following concept and arrangement:

i) Dissemination of the Final Contents of Environment and Social Considerations

- Any information on the result of environmental and social considerations study for the DFC Project is disseminated by DFCCIL to the general public;

- Any information on the changes of DFC Project since the JICA F/S is disseminated by DFCCIL to the general public;
- Information on what is considered as final in terms of the environmental and social impacts caused by the DFC Project is disseminated by DFCCIL to the general public;
- Environmental management/monitoring plan and impact mitigation measures on the DFC Project is disclosed by DFCCIL to the general public;
- Policy on the resettlement and rehabilitation plan is disseminated by DFCCIL to the general public and that DFCCIL is making firm commitment to implement it; and
- Comments and suggestions on the environmental management and monitoring plan as well as land acquisition and resettlement and rehabilitation plan are obtained from the general public, stakeholder and PAPs.

ii) Correction of the Area Affected by the DFC Project

The following correction of the area affected by the DFC Project is carried out:

- There have been a number of villages that are covered by the JICA F/S while some of them are necessary to exclude as a result of the changes of alignment;
- Because of the changes of alignment of DFC Project after the JICA F/S and upon finalization of it within the framework of the S-ESIMMS, there have been a number of villages that are newly identified as affected villages;
- It is therefore necessary to make correction of the affected area based on the result of latest alignment of the DFC Project.

iii) Target Area of the Public Consultation Meeting

The supplementary PCM within the framework of S-ESIMMS was organised as follows:

- Villages newly identified as affected area are invited for the PCM;
- Public consultation meeting is held once in each district that contains newly identified affected villages during the S-ESIMMS;
- Stakeholders of each district subject to hold public consultation meeting are invited; and
- Despite the fact that there are new village names listed, there is no change of alignment made in the districts of Mahendragarh in Haryana, Nagaur, Sikar and Alwar in Rajasthan. Thus these village names listed in the JICA F/S report are considered falsely listed i.e. no public consultation meeting is held in these districts.

iv) Schedule of Public Consultation Meeting

Schedule of the public consultation meeting is shown in Table 3-4. Because of the socio-political conditions after the PCM held in Vadodara have become not favourable to the DFC Project, the PCMs for Rajasthan have been suspended until February, 2009. In total, 940 persons participated and registered in the PCM.

Table 3-4 Schedule of PCM for EIA

State	District	Venue	Date	Covered District	No of participants
Gujarat	Vadodara	Sanskriti Party Plot, Bil Village	October 21, 2008	Vadodara	90
	Anand	Surya Temple Complex, Borsad	October 16, 2008	Anand	67
	Kheda	Agricultural Produce Marketing Committee, Kheda	October 18, 2008	Kheda	25
	Ahmedabad	Saurashtra Sthanakvasi Jain Vadi Hall, near Talab, Sanand	October 16, 2008	Ahmedabad	113
	Gandhinagar	Rotary Club Hall, Near Kalol College	October 16, 2008	Gandhinagar	38
	Mahesana	Baroj Mata Temple Hall, Unjha	October 22, 2008	Mahesana	44
	Patan	APMC Hall, Siddhpur	October 22, 2008	Patan	88
	Banskantha	Thakkar Bapa Hall, Palanpur	October 24, 2008	Banskantha	137
Sub-total					602
Rajasthan	Sirohi	Shri Agarawal Vishnu Dharamshala, Abu Road	February 17, 2009	Sirohi	40
	Pali	Government Senior Secondary School, Marwar Junction	February 15, 2009	Pali, Nagur	108
	Jaipur	Singhaniya Dharamsala, Gandhi Chowk, Phulera town	February 12, 2009	Jaipur, Ajmer	48
	Sikar	Hotel Ganges Garden, Shahpura Road, Neem Ka Thana	February 10, 2009	Sikar, Alwer	68
Sub-total					264
Haryana	Rewari	Punjabi Dharamshala, Rewari	October 16, 2008	Rewari, Mahendragarh	74
Total					940

Source: SAPROF Study Team

v) Presentation Material

Presentation material used during the PCM contains the following information:

- a) Project Information
 - Objectives of the Project
 - Overall service area of the Project
 - Cost estimation for implementation of the Project
 - Villages and districts directly affected by the Project
 - Schedule of Project implementation
- b) Environmental Impact Assessment
 - Environment and social impacts caused by the Project
 - Area of land acquisition and DFCCIL's policy on the compensation

The presentation material is shown in Appendix 3-2. Handout was prepared and distributed in the PCM as shown in Appendix 3-3. Both materials were prepared in English, in Gujarati for the PCM in Gujarat, and in Hindi for the PCM in Haryana and Rajasthan.

3.2.4 Results of the PCM for EIA

The following are the major points of concern of the participants of PCM for EIA.

- 1) As long as the compensation for land is appropriately assessed and paid in order to replace the current land and/or livelihood, there is no objection to the Project. Thus no circular rate is acceptable as a basis of land acquisition and resettlement and rehabilitation;
- 2) It is not quite clear if the compensation package deals with particulars of the individual needs upon land acquisition and resettlement;
- 3) Permanent crops are never appropriately compensated in the past. Compensation made for their life time yield should be considered;
- 4) There are a number of indirectly affected persons whose livelihood is endangered as a result of the implementation of Project. Land acquisition of dairy farming area indirectly affects the milking cows, which are the major source of income for the dairy farmers. Thus compensation should be made for them;
- 5) Past promises of the local and central government are not kept. Thus it is skeptical if the government will keep what promised to do for the DFC Project;
- 6) There are a large number of flood incidents in Kheda, Anand and Vadodara and the railway construction would worsen the situation. What has been done with engineering design has never been solved to date;
- 7) DFC Project is an industrial and commercial development with no agricultural development in mind i.e. the small scale farmers are not taken care of their livelihood;
- 8) DFC Project's alignment should be made in parallel to the existing railway line in order to minimize land acquisition;
- 9) Alignment is within the boundary of Vadodara's urban development area. Thus re-alignment should be considered with the consultation of Vadodara Urban Development Corporation; and
- 10) Because of the past experiences that the government never appropriately compensated to PAPs, unless compensation package is ensured appropriate, PAPs will protest against the Project.

Records of the PCM for EIA are shown in Appendix 3-4.

3.3 INFORMATION DISCLOSURE OF THE EIA REPORT

3.3.1 Disclosure of Draft EIA Report

(1) Objectives

The objectives of disclosure are as follows:

- 1) Disseminate information on the environmental and social considerations of the DFC Project, including environmental and social impacts, mitigation measures, general plan on the management and monitoring of the environment in the study area.
- 2) Collection of comments and opinions from the public on environment and social issues on the DFC project to be reflected in final EIA report.

(2) Methodology of Information Disclosure and Collection of Comments

The process of information disclosure was arranged in a systematic, time bound and transparent manner ensuring widest possible public participation of the project. Methodology of the process was as follows:

- The distribution of draft EIA reports including summary in vernacular languages (Hindi and Gujarati) and English as shown in Appendix 3-5 started from 23rd March 2009 and completed by 1st April 2009.
- Draft EIA (ESIMMS and S-ESIMMS) Reports had been distributed 4 Chief Project Manager (CPM) offices of DFCCIL, 17 District Collectorate (DC) Offices and 28 Major Stations including Junction Stations along the proposed DFC alignment as shown in Table 3-5. Reports were available there for public viewing.
- Summary of the draft EIA reports were distributed in 569 Project Affected villages, 4 CPM offices, 17 DC Offices and 28 Major Stations including Junction Stations along the proposed DFC alignment. Details are shown in Table 3-6.
- In order to facilitate proper information dissemination of availability of draft EIA reports as well as summary and call for comments, public notice in vernacular languages (Hindi and Gujarati) and English had been put in notice board in CPM, DC and Village Offices and Major Stations. The public notices distributed in the information disclosure process are shown as per Appendix 3-6.
- Last date of sending comments was 15th April, 2009, considering minimum 2 weeks for review by public.
- Comments and opinions were accepted on draft EIA report only in writing through direct delivery, fax, or post and email (dfc.wc.eia@gmail.com) to the respective CPM offices.
- After collection of all comments from CPM offices, it had been sorted out and summarized.
- Collection of the draft EIA reports from Major stations and District Collectorate Offices.
- Finalization of EIA reports by reflecting comments/opinion.

Table 3-5 Number of Draft EIA (ESIMMS +S-ESIMMS) Reports Distributed

	Locations	No. of Set of Reports
1	DFCCIL CPM Offices (4)	5
2	District Collectorate Offices (17)	17
3	Major Railway Stations along the Corridor (28)	28
	Total	50

Note: A detailed list is shown in Appendix 3-7.

ESIMMS reports for both Haryana and Rajasthan were distributed in the CPM Office in Jaipur.

Source: SAPROF Study Team

Table 3-6 Number of Summary of Draft EIA Report Distributed

	Location		Number of Vernacular Language		
	State	Number of Villages	Hindi	Gujarati	English
1	Haryana	67	770	-	360
2	Rajasthan	287	3,415	-	1,585
3	Gujarat	215	-	2,285	1,085
4	CPM Offices (4)	-	15	10	25
5	DC Offices (17)	-	45	40	85
6	Railway Stations (28)	-	90	50	140
	Sub Total	569	4,335	2,385	3,280
	Total	-	10,000		

Note: A detailed list is shown in Appendix 3-7.

ESIMMS reports for both Haryana and Rajasthan were distributed in the CPM Office in Jaipur.

Source: SAPROF Study team

(3) Results of Collected Comments

Various comments and opinions were collected through the information disclosure.

(4) Number of Collected Comments

Total 68 comments were collected. District wise numbers of comments are given in Table 3-7.

Table 3-7 District Wise Number of Comments Received Regarding Draft EIA Report

State	District	No. of Comments Received *
Haryana	Rewari	3
	Mahendergarh	9
	Sub-Total	12
Rajasthan	Alwar	1
	Sikar	1
	Jaipur	9
	Ajmer	18
	Nagaur	0
	Pali	3
	Sirohi	6
	Sub-Total	38
Gujarat	Banaskantha	2
	Patan	1
	Mahesana	1
	Ahmedabad	0
	Gandhinagar	0
	Kheda	0
	Anand	4
	Vadodara	10
Sub-Total	18	
Grand Total		68

Note: Other than this, Number 4 and 22 reports for Valuation of properties were received from Sendra and Sabalpura Villages of District Pali, respectively. It is not considered as comments.

*As of 23rd April, 2009

Source: SAPROF Study Team

(5) Classification of Comments

After scrutinizing these comments, these were categorized in following category like, Natural Environment, Pollution, Sensitive Receptor, Social Environment (except for Land Acquisition and R&R issue), Land and R&R issue and others. Summary table of comments is shown in Table 3-8. Details of comments are shown in Appendix 3-8.

Table 3-8 Classification of Comments regarding Draft EIA

State	District	No. of Comments Received	Type of Party	Classification of Comments						Proposal
				Natural	Pollution	Sensitive Receptor	Social (except Land & Resettlement Issue)	Land & Resettlement	Others	
Haryana	Rewari	3	Group Appeal Village (1), Individual (1), Member of Panchayat(1)	1	01	0	0	2	2	0
	Mahendergarh	9	Business Community (1), Municipal Committee (1), Temple Committee (1), Group Letter from SC Community (1), Ex Village Head (1), Group Appeal from Village (4)	1	6	4	4	8	5	0
	Sub-Total	12		2	6	4	4	10	7	0
Rajasthan	Alwar	1	Group Appeal from Village (1)	0	0	0	0	1	1	
	Sikar	1	Group Appeal from Village (1)	1	1	0	0	1	1	
	Jaipur	9	Group Appeal from Village (7), Individual (2)	1	3	1		8	7	0
	Ajmer	18	Individual Shop owner (7), Individual House Owner (9), Temple Committee (1), Group Appeal from Village (1)	0	17	17	17	17	1	0
	Nagaur	0		0	0	0	0	0	0	0
	Pali	3	Group Appeal from Village (2), Individual (1)	0	0	0	0	3	2	0
	Sirohi	6	Group Appeal from Village (4), Individual (1), MLA(1), Panchayat Samity (1)	0	0	0	0	3	3	3
	Sub-Total	38		2	21	18	17	33	15	3
Gujarat	Banaskantha	2	Individual (2)	0	1	0	2	2	1	0
	Patan	1	Group Appeal from Village (1),	0	0	0	0	1	1	0
	Mahesana	1	Group Appeal from Village (1),	0	0	0	0	1	1	0
	Ahmedabad	0	-	0	0	0	0	0	0	0
	Gandhinagar	0	-	0	0	0	0	0	0	0
	Kheda	0	-	0	0	0	0	0	0	0
	Anand	4	Group Appeal from Village (4),	0	1	0	1	4	4	0
	Vadodara	10	Group Appeal from Village (10),	0	0	0	0	10	10	10
Sub-Total	18		1	2	0	3	18	17	10	
Grand Total	68		5	29	22	24	61	39	13	

Note: As of data available on 23rd April, 2009

Source: SAPROF Study Team

(6) Conclusion

Among these comments, there are no specific comments to be incorporated in the EIA report. These are mainly land acquisition and rehabilitation and resettlement issues. These overall issues except L&A and R&R issues are already discussed in EIA reports. However, these comments will be taken care of at the time of implementation period through mitigation measures and Environmental Management Plan. In addition, L&A and R&R issues will be taken care of at the time of preparation of Rehabilitation and Resettlement Plan.

3.3.2 Disclosure of Final EIA Report

After the EIA report was approved by MOR and DEA on 17th August, 2009, the final EIA report was disclosed on the Web site of JICA Headquarters on 28th August, 2009 and in India in November to meet requirement of JICA Environmental Guidelines in terms of accountability of the environmental and social considerations for the project. Methodology of the disclosure in India was basically same as that for the draft EIA report. Number of the villages for disclosure of the summary was increased from 569 villages in draft EIA to

615 villages since additional Notification 20A were issued with additional villages after the disclosure of the draft EIA report as shown in Table 3-9. Summaries of the final EIA report in English, Hindi, and Gujarati are shown in Appendix 3-9.

Table 3-9 Number of Villages for Distribution of Summary of Final EIA Report

State	Villages Identified under S-ESIMMS	Additional Villages under Notification 20A after draft EIA	Total
Haryana	61	21	82
Rajasthan	217	74	291
Gujarat	191	51	242
Total	469	146	615

Source: SAPROF Study Team

(1) Objectives

The objectives of disclosure are as follows:

- 1) Disseminate information on the environmental and social considerations of the DFC Project, including environmental and social impacts, mitigation measures, general plan on the management and monitoring of the environment in the study area.
- 2) EIA main report needs to be at all times for perusal by project stakeholders such as local residents and that copying is permitted. It also needs to be continuously disclosed at least until the end of construction phase.

(2) Methodology of Information Disclosure

The process of information disclosure was arranged in a systematic, time bound and transparent manner ensuring widest possible public participation of the project. Methodology of the process was as follows:

- The distribution of Final EIA reports including 10,000 copies of summary in vernacular languages (Hindi and Gujarati) and English started from 2nd November 2009 and completed by 27th November 2009.
- Final EIA (ESIMMS and S-ESIMMS) Reports had been distributed 4 Chief Project Manager (CPM) offices of DFCCIL, 17 District Collectorate (DC) Offices and 28 Major Stations including Junction Stations along the proposed DFC alignment. Reports were available there for public viewing.
- Summary of the final EIA reports were distributed in 615 Project Affected villages, 4 CPM offices, 17 DC Offices and 28 Major Stations including Junction Stations along the proposed DFC alignment. All Details are available in Table 3-10.
- In order to facilitate proper information dissemination of availability of Final EIA reports as well as summary public notice in vernacular languages (Hindi and Gujarati) and English had been put in notice board in CPM, DC and Village Offices and Major Stations. The public notices in the information disclosure process are shown as per Appendix 3-10.

Table 3-10 Number of Final EIA (ESIMMS +S-ESIMMS) Reports Distributed

	Locations	No. of Set of Reports
1	DFCCIL CPM Offices (4)	4
2	District Collectorate Offices (17)	17
3	Major Railway Stations along the Corridor (28)	28
	Total	49

Note: A detailed list is shown in Appendix 3-II.

ESIMMS reports for both Haryana and Rajasthan were distributed in the CPM Office in Jaipur.

Source: SAPROF Study Team

Table 3-11 District Wise Number of Comments Received Regarding Final EIA Report

	Location		Number of Vernacular Language		
	State	Number of Villages	Hindi	Gujarati	English
1	Haryana	82	1,230	-	410
2	Rajasthan	291	2,760	-	1,385
3	Gujarat	242	-	2,040	1,020
4	CPM Offices (4)	-	50	50	100
	DFCCIL Head Office		10	10	10
	Ministry of Railways		5	5	5
5	DC Offices (17)	-	90	80	170
6	Railway Stations (28)	-	180	100	280
	Sub Total	615	4,325	2,285	3,390
	Total	-		10,000	

Note: A detailed list is shown in Appendix 3-11.

ESIMMS reports for both Haryana and Rajasthan were distributed in the CPM Office in Jaipur.

Source: SAPROF Study Team

3.4 REHABILITATION AND RESETTLEMENT PLAN

3.4.1 Review of Legal Framework

Legal framework to be adopted to the land acquisition and resettlement for the DFC Project was reviewed, which are mainly the Railways (Amendment) Act, 2008 (RAA 2008) and National Rehabilitation and Resettlement Policy, 2007 (NRRP 2007). Gaps between RAA 2008/NRRP 2007 as national laws in India to be applied for the DFC project and Ex-JBIC Guidelines are examined by comparing the clauses in these documents as shown in Table 3-12. In order to bridge some gaps found here, compensation and rehabilitation/resettlement policy for the DFC project are examined and determined in the subsequent chapters.

Table 3-12 Gap Analysis between RAA 2008/NRRP 2007 and Ex-JBIC Guidelines

RAA 2008 and NRRP 2007	Ex-JBIC Guidelines	Gaps between RAA 2008 / NRRP 2007 and Ex-JBIC Guidelines
<p>1. Avoidance of involuntary resettlement Avoidance of the involuntary resettlement is not stipulated in both RAA 2008 and NRRP 2007.</p>	<p>(p.15, Section 1. of Part 2) Involuntary resettlement and loss of means of livelihood are to be avoided where feasible, exploring all viable alternatives.</p>	<p>Some of the provisions to avoid land acquisition for specific types of land are stipulated in the NRRP 2007.</p>
<p>2. Minimization of involuntary resettlement (para. 1.4, NRRP 2007) The aim should be to minimise large-scale displacement, as far as possible. Only the minimum area of land commensurate with the purpose of the project may be acquired. Also, as far as possible, projects may be set up on wasteland, degraded land or un-irrigated land. Acquisition of agricultural land for non-agricultural use in the project may be kept to the minimum; multi-cropped land may be avoided to the extent possible for such purposes, and acquisition of irrigated land, if unavoidable, may be kept to the minimum. Prior to initiating the acquisition of land for a project, the appropriate Government should, inter alia, take into consideration the alternatives that will (i) minimise the displacement of people due to the acquisition of land for the project; (ii) minimise the total area of land to be acquired for the project; and (iii) minimise the acquisition of agricultural land for non-agricultural use in the project.</p>	<p>(p.15, Section 1. of Part 2) When, after such examination, it is proved unfeasible, effective measures to minimize impact and to compensate for losses must be agreed upon with the people who will be affected.</p>	<p>Basic policy of NRRP 2007 meets that in Ex-JBIC guidelines in general.</p>
<p>3. Mitigation of adverse social impacts (para. 2.1, NRRP 2007) The objectives of the National Rehabilitation and Resettlement Policy are as follows: (a) ... (b) to ensure adequate rehabilitation package and expeditious implementation of the rehabilitation process with the active participation of the affected families; (c) to ensure that special care is taken for protecting the rights of the weaker sections of society, especially members of the Scheduled Castes and Scheduled Tribes, and to create obligations on the State for their treatment with concern and sensitivity;</p>	<p>(p.15, Section 1. of Part 2) When, after such examination, it is proved unfeasible, effective measures to minimize impact and to compensate for losses must be agreed upon with the people who will be affected. People to be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported by the project proponents, etc. in timely manner. The project proponents, etc. must make efforts to enable the people affected by the project, to improve their standard of living, income opportunities and production levels, or at least to restore them to pre-project</p>	<p>Basic policy of NRRP 2007 meets that in Ex-JBIC guidelines in general.</p>

RAA 2008 and NRRP 2007	Ex-JBIC Guidelines	Gaps between RAA 2008 / NRRP 2007 and Ex-JBIC Guidelines
<p>(d) to provide a better standard of living, making concerted efforts for providing sustainable income to the affected families.</p>	<p>levels.</p>	
<p>4. Alternative project design (para. 1.4, NRRP 2007) The options assessment may be in terms of the alternative project plans, potentially suitable sites, technological choices available, or a combination of these. Suitable institutional mechanism should be developed and adopted by the appropriate Government for carrying out the task in a transparent manner.</p>	<p>(p.13, Section 1. of Part 2) Multiple alternative proposals must be examined to prevent or minimize adverse impact and to choose a better project option in terms of environmental and social considerations.</p>	<p>Basic policy of NRRP 2007 meets that in Ex-JBIC guidelines in general.</p>
<p>5. Requirements of Preparation of RRP (para. 6.1, NRRP 2007) Involuntary displacement of four hundred or more families en masse in plain areas, or two hundred or more families en masse in tribal or hilly areas, DDP blocks or areas mentioned in the Schedule V or Schedule VI to the Constitution</p>	<p>Although it is not clearly stipulated in the guidelines, involuntary resettlement with more than 200 persons is subject to preparation of the Resettlement Action Plan with refer to the safeguard policies of WB and ADB.</p>	<p>Although it is not clearly stipulated in the NRRP 2007, the RRP will be prepared at the administrative unit such as district. In the case of the DFC Project, the RRP may not be needed to be prepared since there is no district which has more than 400 families to be relocated, even more than 1,200 families are likely to be relocated.</p>
<p>6. Public consultation in preparation of RRP (para. 4.3.2, NRRP 2007) In cases where both EIA and SIA are required, the public hearing done in the project affected area for EIA shall also cover issues related to SIA. Such public hearing shall be organised by the appropriate Government. (para. 5.5, NRRP 2007) Subject to any general or special order of the appropriate Government, the Administrator for Rehabilitation and Resettlement shall perform the following functions and duties: (i) (ii) hold consultation with the affected families while preparing a rehabilitation and resettlement scheme or plan;</p>	<p>(p.15, Section 1. of Part 2) For projects with a potentially large environmental impact, sufficient consultations with stakeholders, such as local residents, must be conducted via disclosure of information from an early stage where alternative proposals for the project plans may be examined. The outcome of such consultations must be incorporated into the contents of the project plan Appropriate participation by the people affected and their communities must be promoted in planning, implementation and monitoring of involuntary resettlement plans and measures against the loss of their means of livelihood.</p>	<p>Basic policy of NRRP 2007 meets that in Ex-JBIC guidelines in general.</p>

RAA 2008 and NRRP 2007	Ex-JBIC Guidelines	Gaps between RAA 2008 / NRRP 2007 and Ex-JBIC Guidelines
<p>7. Compensation Rate ((8)&(9) of Sec.20F, RAA 2008) (8) The competent authority or the arbitrator while determining the amount of compensation under subsection (1) or subsection (6) , as the case may be , shall take into consideration – (a) The market value of the land on the date of publication of the notification under section 20A- (b) The damage ,if any sustained by the person interested at the time of taking possession of the land ,by reason serving of such land from other land ; (c) The damage, if any, sustained by the person interested at the time of taking possession of the land, by reason of the acquisition injuriously affecting his other immovable property in any manner, or his earnings, (d) If, in consequences of the acquisition of land, the persons to change his residence or place of business, the reasonable expenses, if any, incidental to such change. (9) In addition to the market value of land as above provided, the competent authority or the arbitrator, as the case may be, shall in every case award a sum of sixty per centum on such market-value, in consideration of the compulsory nature of the acquisition. (Criteria and process in assessing and determining the market value of the land are prescribed in (1) - (3) of Sec.20G, RAA 2008) (para. 7.19 of NRRP 2007) In case of linear acquisitions, in projects relating to railway lines, highways, transmission lines, laying of pipelines and other such projects wherein only a narrow stretch of land is acquired for the purpose of the project or is utilised for right of way, each <i>khatedar</i> in the affected family shall be offered by the requiring body an ex-gratia payment of such amount as the appropriate Government may decide but not less than 20,000 rupees, in addition to the compensation or any other benefits due under the Act or programme or scheme under which the land, house or other property is acquired.</p>	<p>(p.15, Section 1. of Part 2) Measures to achieve this may include: providing land and monetary compensation for losses (to cover land and property losses), supporting the means for an alternative sustainable livelihood, and providing the expenses necessary for relocation and the re-establishment of a community at relocation sites.</p>	<p>Although it is not clearly stipulated in the guidelines, application of the replacement cost is considered as preferable way to secure the livelihood recovery with refer to the safeguard policies of WB and ADB. On the other, compensation rate as per RAA 2008 is not necessarily secure the livelihood recovery, even though 60% of solatium is added to the market price prescribed by the Government as well as the ex-gratia payment with 20,000 rupees.</p>

RAA 2008 and NRRP 2007	Ex-JBIC Guidelines	Gaps between RAA 2008 / NRRP 2007 and Ex-JBIC Guidelines
<p>Provided that, if as a result of such land acquisition, the land-holder becomes landless or is reduced to the status of a "small" or "marginal" farmer, other rehabilitation and resettlement benefits available under the RRP shall also be extended to such affected family.</p>		
<p>8. Cut-off date (para. 7.1 of NRRP 2007) The rehabilitation and resettlement benefits shall be extended to all the affected families who are eligible as affected families on the date of publication of the declaration under paragraph 6.1, and any division of assets in the family after the said date may not be taken into account. (para. 3.1 of NRRP 2007) (b) "Affected family" means: (i) (iii) any agricultural or non-agricultural labourer, landless person (not having homestead land, agricultural land, or either homestead or agricultural land), rural artisan, small trader or self-employed person; who has been residing or engaged in any trade, business, occupation or vocation continuously for a period of not less than three years preceding the date of declaration of the affected area, and who has been deprived of earning his livelihood or alienated wholly or substantially from the main source of his trade, business, occupation or vocation because of the acquisition of land in the affected area or being involuntarily displaced for any other reason.</p>	<p>Although it is not clearly stipulated in the guidelines, cut-off date is the date the census begins normally for all PAPs of the land acquisition with refer to the safeguard policies of WB and ADB.</p>	<p>For title holder, basic policy of NRRP 2007 meets that in Ex-JBIC guidelines in general. On the other, such illegal occupants who are identified in the period of the Baseline Survey and Census as per the NRRP 2007 should be subject to the necessary assistance related to the resettlement according to the considerations under the Ex-JBIC guidelines as well as that of ADB and WB.</p>

RAA 2008 and NRRP 2007	Ex-JBIC Guidelines	Gaps between RAA 2008 / NRRP 2007 and Ex-JBIC Guidelines
<p>9. Provisions for socially vulnerable illegal occupants (Item (b), para. 3.1 of NRRP 2007) "Affected family" means: (i) (ii) (iii) any agricultural or non-agricultural labourer, landless person (not having homestead land, agricultural land, or either homestead or agricultural land), rural artisan, small trader or self-employed person; who has been residing or engaged in any trade, business, occupation or vocation continuously for a period of not less than three years preceding the date of declaration of the affected area, and who has been deprived of earning his livelihood or alienated wholly or substantially from the main source of his trade, business, occupation or vocation because of the acquisition of land in the affected area or being involuntarily displaced for any other reason</p>	<p>(p.15, Section 1. of Part 2) Appropriate consideration must be given to vulnerable social groups, such as women, children, the elderly, the poor, and ethnic minorities, all of whom are susceptible to environmental and social impact and who may have little access to the decision-making process within society.</p>	<p>Although the NRRP 2007 covers the socially vulnerable illegal occupants, only those, who has been residing or engaged in any trade, business, occupation or vocation continuously for a period of not less than three years preceding the date of declaration of the affected area, are subject to the assistances prescribed in the NRRP 2007. According to the considerations under the Ex-JBIC guidelines as well as that of ADB and WB, such illegal occupants who are identified in the period of the Baseline Survey and Census as per the NRRP 2007 should be subject to the necessary assistance related to the resettlement.</p>
<p>10. Monitoring (para. 9.1.1 of NRRP 2007) The Central Government shall constitute a National Monitoring Committee, to be chaired by the Secretary, Department of Land Resources for reviewing and monitoring the progress of implementation of rehabilitation and resettlement schemes or plans relating to all cases to which the RRP applies.</p>	<p>(p.16, Section 1. of Part 2) It is desirable that, after a project begins, the project proponents monitor: (i) whether any situations that were unforeseeable before the project began have arisen, (ii) the implementation situation and the effectiveness of the mitigation measures prepared in advance, and that they then take appropriate measures based on the results of such monitoring. It is desirable that project proponents make the results of the monitoring process available to project stakeholders.</p>	<p>Basic policy of NRRP 2007 meets that in Ex-JBIC guidelines in general.</p>

Source: SAPROF Study Team

3.4.2 Preparation of 1st Draft Rehabilitation and Resettlement Plan

First draft RRP report for the DFC Project was prepared by examining the following.

- Relevant legislation in India to be applied for the DFC Project such as RAA 2008 and NRRP 2007.
- Results of social surveys conducted under both JICA F/S and SAPROF Study such as Socio-economic Survey and Project-Affected Structure Identification Survey.
- JICA (Ex-JBIC) Guidelines on Confirmation of Environmental and Social Considerations, 2002.
- Operational Policy 4.12 of the World Bank on Involuntary Resettlement.

Main contents of the 1st Draft RRP are shown below.

1. Outline of the DFC project
2. Scope of Land Acquisition and Resettlement
3. Measures to minimize Land Acquisition and Losses
4. Socio-Economic Feature of the Project-Affected People
5. Resettlement Policy and Entitlement
6. Resettlement Site
7. Income Restoration Program
8. Implementation Arrangement
9. Implementation Schedule
10. Participation and Consultation
11. Monitoring and Supervision
12. Grievance Redress
13. Cost Estimate

A preliminary survey on actual land price along the DFC project was conducted under the S-ESIMMS by inquiring current land prices to the land owners and local peoples. The results showed deviations between compensation rate for the land under the RAA 2008 and actual land prices; actual land price in agricultural area is 1.3 – 10.2 times higher than compensation rate under the RAA 2008 even 60% of solatium is added to the governmental market price, and 1.1 – 10.3 times in residential area, and 3.4 times in total average.

As per the results, it was supposed that the land compensation rate under the RAA, 2008 might be lower than that of replacement cost in some cases. Because of this possibility, it was considered that land-for-land compensation or additional cash compensation and/or assistance would be required as per the JICA Guidelines as well as the WB Policy to fill the gaps, if any in some cases. To clarify existence of such gaps and provide necessary assistance in the case to secure the livelihood recovery of the PAPs, it was suggested that experts on asset valuation should be hired by the Project to secure minimum adequate compensation and assistance.

In the meeting held on 20th January, 2009, outline of the 1st draft RRP report were explained to MOR and DFCCIL as well as results of the S-ESIMMS Study and further activities on environmental and social considerations. Presentation materials for the meeting is shown in Appendix 3-12. In addition, the 1st draft RRP report was submitted to MOR and DFCCIL for their review.

3.4.3 Preparation of 2nd Draft RRP

According to results of the discussion on 1st draft RRP between MOR/DFCCIL and JICA/SAPROF Study Team as well as opinions and comments in the PCM for RRP, the 1st

draft RRP was revised as 2nd draft RRP. Main points of the 2nd RRP revised from the 1st draft RRP are shown below.

- Revision of socio-economic survey due to further change of the alignment
- Revision of entitlement matrix
- Inclusion of results of the public consultation meetings for RRP

3.4.4 Final Draft RRP Prepared by MOR/DFCCIL

Based on discussion between MOR/DFCCIL and JICA in the loan appraisal conducted in December 2009, MOR/DFCCIL revised the 2nd draft RRP as Final Draft RRP in the beginning of January 2010.

- Revision of entitlement matrix (Chapter 5)
- No provision of resettlement site (Chapter 6)
- Institutional arrangement based on current organization (Chapter 8)
- Preparation of implementation schedule (Chapter 9)
- No appointment of NGO in grievance redress (Chapter 12)
- Preparation of cost estimate (Chapter 13)

The Final Draft RRP is shown in Appendix 3-13. The Final Draft RRP is supposed to be disclosed by MOR/DFCCIL to the PAPs to give feedback of the PCM for the RRP.

3.5 PUBLIC CONSULTATION MEETING FOR RRP

3.5.1 Introduction

Public Consultation Meeting for RRP (PCM for RRP) was planned to be held in the all villages to be affected due to land acquisition and resettlement for the DFC Project. Therefore, participants of the PCM were basically limited to the project-affected peoples (PAPs). Approximately 450 villages were subject to the PCM. Methodology of the PCM for RRP and meeting results are shown below.

3.5.2 Methodology

(1) Criteria on Selection of Venues

Since it is infeasible to conduct the PCM in each village under the limited time and resources, several villages were clubbed efficiently, considering various conditions such as physical locations and area under jurisdiction of one competent authority. Main criteria for particular venue selection for conducting PCMs are described below:

- 1) Several villages were clubbed efficiently under one venue, considering maximum distance from far-away villages was 10-12 km, so that people from distant villages also can attend these meetings.
- 2) Since 25 Competent Authority are working for land acquisition process for DFC Project in the section between Rewari and Vadodara, selection of venue under jurisdiction of only one CA.
- 3) Area where more structures are going to be affected also considered selecting one venue.
- 4) These are remote villages. Therefore, availability of meeting hall and other logistic facility were also considered.

(2) Participation from the Project Side

Participation of representatives from the CPM office of DFCCIL, who can appropriately explain about the project and RRP issues and answer to question, was secured to keep adequate initiative of the project proponent for implementation of the PCM for RRP.

In addition, all of the Chief Secretaries of the states of Gujarat, Rajasthan and Haryana along the Competent Authority of the concerned districts were informed about the schedule of the meeting with a request for their honoured presence in the meeting. All the dignitaries were invited 7 to 15 days before the meeting.

The concerned railway division heads, general managers and stations superintendents were intimated about the schedule of the meeting with a request for their presence.

(3) Distribution of Invitation Letters and Notice

Invitation letters and notice in English from Ministry of Railways (MOR) and translated Hindi and Gujarati versions were distributed among the village heads and targeted PAPs. Though all of the PAPs to be affected due to the land acquisition and resettlement are targeted for the PCM for RRP, it was almost impossible to identify all of the PAPs based on the information under the Notification 20A only, since the Census and Baseline Survey under the NRRP 2007 has not been conducted yet. Therefore, invitation letter was distributed to the village head/panchayat offices and it was also put on the notice board in the respective village administrative offices. However, another effort was made to invite persons whose structures are going to be affected in each affected villages by distributing invitation letters personally. The notice contained the date, venue and time of the meetings. The participants were invited for the meeting at least one week before the meeting.

(4) Registration of the Participants

General information of the participants such as name, name of the village, and affected survey number were recorded at the entrance of the PCM.

(5) Contents of Disclosed Information

In principle, current policies in India on land acquisition and resettlement were disclosed and explained in the PCM, which are the Railways Amendment Act 2008 (RAA 2008) and National Rehabilitation and Resettlement Policy.

The presentation material is shown in Appendix 3-14. Handout was prepared and distributed in the PCM as shown in Appendix 3-15. Both materials were prepared in English, in Gujarati for the PCM in Gujarat, and in Hindi for the PCM in Haryana and Rajasthan.

(6) Program Schedule and Agenda

The program schedule and agenda of the PCM is shown below. Duration of the PCM was planned for 2 hours.

- 1) Registration of the participants
- 2) Distribution of handouts, survey questionnaire and writing pad and pen to the participants
- 3) Distribution of soft drinks in the waiting time
- 4) Welcome address to the participants on behalf of MOR & DFCCIL
- 5) Introduction of the DFCCIL and Railway officials present in the PCM to the participants

- 6) Introduction of Competent Authority, wherever present to the participants
- 7) PowerPoint presentation on Draft RRP using laptop and projector.
- 8) Tea Break
- 9) Question-Answer Session where the questions raised by the participants were answered directly by the DFCCIL officials and the Competent Authority
- 10) Assistance in filling up of the questionnaire upon request by the participants and Collection of distributed questionnaire
- 11) Vote of Thanks

(7) Discussions, Questions and Answers

A session for question and answer was prepared after completion of the major information dissemination on the Project in the PCM. A session for discussion of taking questions from the participants and answering to the questions, where correct information was available, was appropriately held in order to disseminate full information of the Project at the time of holding the PCM.

(8) Record of the Meeting

- 1) Record the Participants:

Name, gender, occupation, age, name of the village the participants belong to and other appropriate features was recorded at the entrance of PCM and reproduced in the report.

- 2) Record of the Contents of Meeting

The contents of the discussion of the PCM were recorded by electronically recordable device and reproduced by transcribing the contents in the report.

- 3) Questionnaire Survey

Elaborate questionnaire survey was conducted but not limited to the questionnaire as follows in order to illustrate representation of the participants of each meeting. The results were analyzed statistically and reproduced in the report. A questionnaire is less than one sheet of A4 size paper with major points of concern as follows:

- a) Origin of the participant (native/ not native to the state, majority/minority of native tribe)
- b) Name of the village
- c) Age
- d) Occupation
- e) Level of education
- f) Household income
- g) Whether the property of the participant is affected as per Notification 20A
- h) Type of the affected property (land and/or structure)
- i) Percentage of the property affected
- j) Nature of the property (Own/rented)
- k) Whether livelihood will be affected due to acquisition of the said property.

(9) Demarcation of Works and Supports by SAPROF for the PCM for RRP

The SAPROF Study Team provided some logistic support by using local consultant such as distribution of invitation letter to the respective villages, supportive work in the day of PCM, and minutes recording and reporting. In the preparation process of the PCM, demarcation of

works required for implementation of the PCM for RRP including supports by SAPROF was discussed and determined among MOR, DFCCIL, JICA, and SAPROF Study Team as shown in Table 3-13.

Table 3-13 Demarcation of Works and Supports for the RRP-PCM

Work Items	Responsible Body	Supporting Body	Expenditure borne by
1. Preparatory Work			
(1) Preliminary coordination and preparation			
(a) Preliminary coordination with competent authorities, key persons in the area, and others if any	MOR/DFCCIL	-	-
(b) Preparation of implementation guidelines of the PCMs	-	SAPROF	-
(2) Preparation of brochure to be distributed in PCM			
(a) Preparation of brochure for RRP for distribution in PCMs	-	SAPROF	-
(b) Approval for brochure for RRP PCMs	MOR/DFCCIL	-	-
(3) Preparation of presentation and/or explanatory material			
(a) Preparation of presentation for RRP-PCMs	-	SAPROF	-
(b) Approval for presentation for RRP-PCMs	MOR/DFCCIL	-	-
(4) Venue arrangement			
(a) Searching Meeting Place (Venue)	DFCCIL	-	MOR/DFCCIL
(b) Booking Venue	DFCCIL	-	MOR/DFCCIL
(c) Booking other arrangements such chairs, tables, PC projectors, screen, banners, fans, refreshments, and water	DFCCIL	-	MOR/DFCCIL
(5) Invitation work			
(a) Preparation of draft invitation letters and notices	-	SAPROF	-
(b) Issuance of Invitation letters and notice	MOR/DFCCIL	-	-
(c) Printing of Invitation letters and notice	-	SAPROF	-
(d) Distribution of Invitation letters and notice	-	SAPROF	SAPROF
(e) Distribution of Invitation letters and notice to Competent Authority and Govt. Agency	DFCCIL	SAPROF	MOR/DFCCIL, SAPROF
(6) Preparatory arrangement and works			
(a) Distribution and delivery of letters for security arrangement for day of PCMs	DFCCIL	-	MOR/DFCCIL
(b) Preparation of attendance list	-	SAPROF	SAPROF
(c) Printing of brochures	-	SAPROF	SAPROF
(d) Printing of questionnaire for RRP-PCM	-	SAPROF	SAPROF
2. The Day of PCM			
(a) Confirmation of all arrangements in venue	DFCCIL	-	MOR/DFCCIL
(b) Preparation of venue	DFCCIL	SAPROF	MOR/DFCCIL, SAPROF
(c) Reception	-	SAPROF	SAPROF
(d) Distribution of brochures, questionnaire, and registration of people	-	SAPROF	SAPROF
(e) Meeting facilitation	DFCCIL	-	MOR/DFCCIL
(f) Assure physical presentation of DFCCIL and CA nominated persons till end of meeting	DFCCIL	-	-
(g) Presentation and explanations on the project and land acquisition/resettlement	DFCCIL	-	MOR/DFCCIL
(h) Answers to questions from participants	MOR/DFCCIL	-	-
(i) Minutes recording, video recording and photographs	-	SAPROF	SAPROF
(j) Arrangement of refreshment	DFCCIL	-	MOR/DFCCIL
(k) Distribution of refreshment	-	SAPROF	SAPROF
(l) Security arrangement and crowd Control	DFCCIL	-	DFCCIL
3. Post PCM			
(a) Preparation of PCM reports incl. summary of each PCM, complete minutes, and participants list.	-	SAPROF	SAPROF
(b) Submission of reports to MOR/DFCCIL and JICA	-	SAPROF	SAPROF

Source: SAPROF Study Team

3.5.3 Results of the PCM for RRP

(1) Actual Schedule of the PCM for RRP

The schedule of the PCM for RRP along with the venue and time of the meeting is presented in the following table. Although the duration of the PCM was planned for 2 hours, some of the PCMs extended for more than 2 hours due to many questions and discussions.

Table 3-14 Schedule of the PCMs for RRP

	Venue	District	Date of PCM	Starting Time	Venue	CPM
1	Kund Station	Rewari	10.08.09	10:00	Sansad Hall	Jaipur
2	Ateli Station Area	Mahendergarh	11.08.09	10:00	Radha Krishna Temple	Jaipur
3	Kathoowas ¹	Alwar	11.08.09	15:00	Panchayat Bhawan-Kathoowas	Jaipur
4	Pithrawas	Rewari	21.10.09	11:00	Navjyoti Vidyalaya, Pithrawas	Delhi
5	Narnaul	Mahendergarh	13.08.09	10:00	Jain Hall	Jaipur
6	Neejampur	Mahendergarh	13.08.09	16:00	Senior Secondary School-Neejampur	Jaipur
7	Bihar	Sikar	17.08.09	10:00	Govt Secondary School	Jaipur
8	Neem Kathana	Sikar	17.08.09	16:00	Hotel Gangees Garden	Jaipur
9	Sri Madhopur	Sikar	19.08.09	10:00	Annapurna Hall	Jaipur
10	Ringus	Sikar	19.08.09	16:00	Shri Shyam Bhawan Mandir	Jaipur
11	Kishan manpura	Jaipur	20.08.09	12:00	Senior Secondary School-Kishan Manpura	Jaipur
12	Renwal	Jaipur	24.08.09	16:00	Agarwal Seva Sadan	Jaipur
13	Bhainslana	Jaipur	24.08.09	10:00	Panchayat Bhaban	Jaipur
14	Minda	Nagaur	25.08.09	16:00	Govt Secondary School	Jaipur
15	Narayana	Jaipur	27.08.09	10:00	Dadu Sampraday Hall, Narayana	Jaipur
16	Tilonia	Ajmer	27.08.09	16:00	Senior Secondary School	Jaipur
17	Madar	Ajmer	29.08.09	9:00	Daya Sukh Bhawan	Ajmer
18	Mangaliyawas	Ajmer	29.08.09	16:00	Chummalisa Jat Samaj	Ajmer
19	Peeplaj	Ajmer	31.08.09	10:00	Senior Secondary School, Peeplaj	Ajmer
20	Sarmaliya	Ajmer	31.08.09	16:00	Panchayat Bhaban Sarmaliya	Ajmer
21	Sendra/Jharli	Pali	01.09.09	16:00	Senior Secondary school	Ajmer
22	Bagri Nagar	Pali	03.09.09	11:00	Ashapura Marriage Hall	Ajmer
23	Banta	Pali	04.09.09	11:00	Panchayat Baban - Banta	Ajmer
24	Bhagawanpura Station	Pali	07.09.09	16:00	Upper Primary School, Bhagwanpura Village	Ajmer
25	Falna Station	Pali	08.09.09	16:00	Shri Naminath Jain SitambarTirth, Ambuja Nagar	Ajmer
26	Balwana	Pali	08.09.09	10:00	Community Hall, Balwana	Ajmer
27	Pindwara Jn	Sirohi	10.09.09	11:00	Banarshi Mohan Seva Sadan	Ajmer
28	Abu Road	Sirohi	11.09.09	10:00	Agrawal Vishnu Dharamsala	Ajmer
29	Iqbal garh	Banaskantha	18.09.09	10:00	Agrasen Dharamsala	Ajmer
30	Palanpur	Banaskantha	18.09.09	16:00	Hotel Cappal, Ahmedabad Palanpur Highway, Palanpur	Ahmedabad
31	Nandotri	Patan	17.09.09	11:00	Reliance Community Hall, Nandotri village	Ahmedabad
32	Linch	Mahesana	15.09.09	16:00	Jain wadi hall	Ahmedabad
33	Nandasana	Mahesana	15.09.09	10:00	M P Patel School	Ahmedabad
34	Dhanot	Gandhi Nagar	14.09.09	16:00	Gujarati Primary School	Ahmedabad
35	Hajipur	Gandhi Nagar	14.09.09	10:00	Maha Kali Mandir Hall	Ahmedabad
36	Sanand	Ahmedabad	22.09.09	10:00	Saurashtra Sthanakwasi Jain Wadi	Ahmedabad

	Venue	District	Date of PCM	Starting Time	Venue	CPM
37	Bhat	Ahmedabad	22.09.09	16:00	Bhat Dharamsala	Ahmedabad
38	Vasna Bujarg	Kheda	23.09.09	10:00	Swami Narayan Temple-Vasna Bujaarg	Ahmedabad
39	Pimpara	Kheda	23.09.09	16:00	Pimpara Primary School	Ahmedabad
40	Changa	Anand	07.10.09	12:00	Patelwadi Hall, near Ambe Mata temple	Vadodara
41	Khandhali	Anand	06.10.09	16:00	Community Hall, Panchayat Office	Vadodara
42	Khadol	Anand	06.10.09	11:00	Sri Madhovanand Ashram, Behind Ranchod Rai Temple	Vadodara
43	Chapad	Vadodara	05.10.09	11:00	Satkeival Temple, Patelwadi Hall	Vadodara
44	Samiyala	Vadodara	05.10.09	16:00	Kshtriya Samaj, Rajput Panchniwadi	Vadodara

Source: SAPROF Study Team

(2) Attendance of the PCM for RRP

Summary Results of Attendances for RRP-PCM are shown in Table 3-15. Out of total 453 villages to be affected as per information in the Notification 20A, 307 villages (67.8%) attended the PCMs in total. In addition, out of total 14,030 landowners as per information in the Notification 20A, 4,386 persons attended the PCMs. However, the attendants are not only landowner, but also non-landowner such as leaseholder and non-titleholder. More detailed results of the PCM for RRP are shown in Table 3-16, Table 3-17, Table 3-18, and Table 3-19.

Table 3-15 Summary Results of Attendances for RRP-PCM

	Total PCMs	Total Villages Affected	Number of Village Attended	(%)	Total Landowners	Number of Participants	(%)
		(a)	(b)	=(b)/(a)	(c)	(d)	=(d)/(c)
CPM Jaipur	16	146	110	75.3%	3,875	1993	51.4%
CPM Ajmer	13	154	97	63.0%	4,707	918	19.5%
CPM Ahmedabad	11	110	77	70.0%	3,480	1185	34.1%
CPM Vadodara	4	43	20	46.5%	1,968	290	14.7%
Total	44	453	304	67.1%	14,030	4386	31.3%

Source: SAPROF Study Team

Table 3-16 Results of the RRP-PCM under Jurisdiction of CPM Jaipur

	Venue	Date of PCM	District	Number of Affected Village	Number of Attended Village	Land to be Acquired		Affected Private structures #	Number of Participants	Attendance of MOR/DFCCIL	Attendance of CA
						Area (ha)	Number of Land Owner***				
1	Kund Station ¹⁾	10.08.09	Rewari	4	4	19.5	221	2	100	3	0
2	Ateli Station Area ¹⁾	11.08.09	Mahendergarh	9	9	28.3	316	91	360	4	0
3	Kathooawas ¹⁾	11.08.09	Alwar	1	1	6.1	53	7	18	3	0
4	Pitharawas	21.10.09	Rewari	21	15				130	2	1
5	Narnaul ¹⁾	13.08.09	Mahendergarh	12	10	39.2	382	151	238	3	0
6	Neejampur	13.08.09	Mahendergarh	8	8	25.2	289	50	80	3	0
7	Bihar	17.08.09	Sikar	10	5	102.2	352	0	26	2	0
8	Neem Kathana ¹⁾	17.08.09	Sikar	13	13	110.5	282	57	250	2	0
9	Sri Madhopur ¹⁾	19.08.09	Sikar	9	6	56.1	346	51	90	2	0
10	Ringus ¹⁾	19.08.09	Sikar	7	4	59.6	244	57	11	2	0
11	Kishan manpura ¹⁾	20.08.09	Jaipur	4	4	21.8	121	11	100	3	0
12	Renwal	24.08.09	Jaipur	10	9	91.1	236	71	210	2	0
13	Bhainslana ¹⁾	24.08.09	Jaipur	11	10	100.3	278	13	80	3	0
14	Minda ¹⁾	25.08.09	Nagaur	2	2	6.0	30	0	15	2	0
15	Narayana ¹⁾	27.08.09	Jaipur	17	5	247.9	527	21	85	2	1
16	Tilonia	27.08.09	Ajmer	8	5	68.2	198	9	200	4	0
	Total			146	110	982.0	3,875	591	1193	-	-

Note: 1) denotes villages under 20A Notification
 2) denotes villages under SAPROF Study and 20A not Notified
 * As per information from DFCCIL as of 25.08.2009
 *** As per survey number of 20A Notification
 # As per SAPROF Survey
 Source: SAPROF Study Team

Table 3-17 Results of the RRP-PCM under Jurisdiction of CPM Ajmer

	Venue	Date of PCM	District	Number of Affected Village	Number of Attended Village	Land to be Acquired		Affected Private structures #	Number of Participants	Attendance of MOR/DFCCIL	Attendance of CA
						Area (ha)	Number of Land Owner**				
1	Madar ¹⁾	29.08.09	Ajmer	11	10	125.1	838	0	50	11	0
2	Mangaliya was ¹⁾	29.08.09	Ajmer	12	8	92.1	672	5	80	7	2
3	Peeplaj ¹⁾	31.08.09	Ajmer	4	2	35.7	135	25	45	3	0
4	Sarmaliya ¹⁾	31.08.09	Ajmer	10	6	39.1	314	0	130	5	3
5	Sendra/Jhar Ji ¹⁾	01.09.09	Pali (Jaitran)	17	17	191.7	675	39	140	5	3
6	Bagri Nagar ¹⁾	03.09.09	Pali (Sojat)	9	7	63.8	229	11	50	5	0
7	Banta ¹⁾	04.09.09	Pali (Sojat)	14	5	140.0	293	7	55	4	0
8	Bhagawanpura Station ¹⁾	07.09.09	Pali (Desuri)	11	7	45.4	177	22	60	4	1
9	Falna Station ¹⁾	08.09.09	Pali (Bali)	17	7	155.9	362	4	50	4	1
10	Balwana ¹⁾	08.09.09	Pali (Sumerpur)	1	1	10.9	33	0	20	4	1
11	Pindwara Ji ¹⁾	10.09.09	Sirohi	18	9	94.5	387	13	50	2	1
12	Abu Road ¹⁾	11.09.09	Sirohi	10	8	67.4	324	2	48	4	1
13	Iqbal garh ¹⁾	18.09.09	Banaskantha	20	10	188.3	268	0	140	4	2
	Total			154	97	1,250.0	4,707	128	918	-	-

Note: 1) denotes villages under 20A Notification
 2) denotes villages under SAPROF Study and 20A not Notified
 * As per information from DFCCIL as of 25.08.09
 *** As per survey number of 20A Notification
 # As per SAPROF Survey
 Source: SAPROF Study Team

Table 3-18 Results of the RRP-PCM under Jurisdiction of CPM Ahmedabad

	Venue	Date of PCM	District	Number of Affected Village	Number of Attended Village	Land to be Acquired		Affected Private structures #	Number of Participants	Attendance of MOR/DFCCIL	Attendance of CA
						Area (ha)	Number of Land Owner**				
1	Hajipur ¹⁾	14.09.09	Gandhi Nagar	6	3	70.0	164	0	70	4	1
2	Dhanot ¹⁾	14.09.09	Gandhi Nagar	6	5	68.9	170	2	50	4	1
3	Nandasan ¹⁾	15.09.09	Mahesana	15	9	195.3	526	0	60	4	1
4	Linch	15.09.09	Mahesana	16	9	242.0	747	3	140	4	3
5	Nandotri	17.09.09	Palan	16	11	186.2	444	0	160	3	1
6	Palanpur ¹⁾	18.09.09	Banaskantha	13	13	210.6	357	12	240	3	2
7	Sanand ¹⁾	22.09.09	Ahmedabad	8	5	347.5			140	3	1
8	Bhat ¹⁾	22.09.09	Ahmedabad	7	7				120	4	1
9	Vasna Bujarg ¹⁾	23.09.09	Kheda	8	4	83.7	275	9	50	3	2
10	Pimpara ¹⁾	23.09.09	Kheda	8	6	102.5	392	0	80	7	1
11	Khandali ¹⁾	06.10.09	Anand	7	5	49.7	405	9	75	7	1
Total				110	77	1,556.3	3,480	30	1,185	-	-

Note: 1) denotes villages under 20A Notification
 2) denotes villages under SAPROF Study and 20A not Notified
 * As per information from DFCCIL as of 25.08.2009
 *** As per survey number of 20A Notification
 # As per SAPROF Survey
 Source: SAPROF Study Team

Table 3-19 Results of the RRP-PCM under Jurisdiction of CPM Vadodara

	Venue	Date of PCM	District	Number of Affected Village	Number of Attended Village	Land to be Acquired		Affected Private structures #	Number of Participants	Attendance of MOR/DFCCIL	Attendance of CA
						Area (ha)	Number of Land Owner***				
1	Changa ¹⁾	07.10.09	Anand	12	5	121.1	613	7	75	6	1
2	Khadol	06.10.09	Anand	12	6	107.9	415	12	90	6	1
3	Chapad ¹⁾	05.10.09	Vadodara	12	5	410.0	634	0	65	7	2
4	Samiyala ¹⁾	05.10.09	Vadodara	7	4		306	1	65	8	2
Total				43	20	639.0	1,968	20	295	-	-

Note: 1) denotes villages under 20A Notification
 * As per information from DFCCIL as of 25.08.09
 *** As per survey number of 20A Notification
 # As per SAPROF Survey
 Source: SAPROF Study Team

(3) Analysis of Participants

Notification 20A has been published for 453 villages, and all the villages have been covered during the invitation process. Out of the total of 453 villages, PAPs from 304 villages attended the meeting. As mentioned in the preceding chapters, many of the participants avoided registration and questionnaire survey due to the following prime reasons:

- 1) Protest against the land acquisition
- 2) Protest against the compensation policy
- 3) Fear factor, that DFCCIL may forcibly acquire land without paying compensation by using the signature from the registration list, etc.

The summary of participants in the 44 PCMs is shown in the following table.

Table 3-20 Summary of Participants in the PCMs for RRP

Number of 20A notified villages	453
Invited villages for PCM	453
20A notified villages attended (as per estimation)	304
Total number of participants (as counted in the PCMs)	4,386

Source: SAPROF Study Team

(4) Key Issues discussed in the PCM for RRP

Key issues discussed in the PCM for the RRP are summarized below.

- The participants, irrespective of their location across various districts and type of proposed alignment (detour or parallel) expressed the view that the offered compensation is inadequate for maintaining their livelihood after the proposed land acquisition. The participants were unanimous that the gap between the market price of the land and the compensation to be given as per RAA 2008 and NRRP 2007 is too wide to accept; the DEC rate has not been revised for many areas for years and in places where it has been revised recently, the rate is far from actual market prices of land.
- The participants worried that they cannot purchase similar type of agricultural land in same area from the offered compensation amount and asked the officials for replacement costs.
- The participants raised objection over conversion of agricultural land for commercial purposes by DFCCIL while the compensation is being paid on the basis of agricultural rates. They demanded that the compensation should be provided at commercial rate.
- Reacting sharply on the compensation for only the acquired portion of the land, the participants said in case the piece of land becomes unusable due to small size, compensation must be provided for the entire portion of the land, keeping in view of the involuntary nature of the acquisition.
- Many of the participants expressed that onetime payment of compensation is not sufficient for maintaining their livelihood for those families who will be rendered landless due to the project. Jobs must be provided to at least one member of such families as per the qualification of the candidates.
- In the state of Gujarat, participants said the present alignment being close to major cities and highways have higher land costs; therefore the alignment should be considered on further west of the present alignment, where lower land can be attributed to inaccessibility and infertility (also increased salinity in South Gujarat) of the soil.
- The non-availability of information regarding the Notification 20A readily has affected the villagers badly in the state of Rajasthan while compensation for disputed property and unregistered land plots remained the 'most frequently asked questions' across all the 3 states.
- Participants of Kishangarh-Tilonia area protested heavily against the proposed parallel section and demanded to detour the area to avoid large scale demolition of residential structures and Tilonia Railway Station, which according to the local is historical and worth preserving.
- Compensation for standing crops, utilities and private trees rocked the meetings time to time.

Proceedings of the meeting and analysis of questionnaire survey for the attendants has been elaborated in detail as shown in Appendix 3-16. The PCMs were also recorded by video.

(5) Key Analysis Results from Questionnaire Survey to the Participants

The key findings from the analysis of questionnaire survey to the participants of the PCMs are presented in this section. The word 'respondents' used in this section refers to those participants who choose to participate in the questionnaire survey.

- 100% of the respondents are native in origin.
- The affected household are mostly headed by male members of the family; only 5% of the respondent belongs to women headed households and are vulnerable.
- The family size of the respondents varies widely. Majority of the respondents (49%) belong

- to mid-sized family (6-10 members), followed by small (27%) family having 1 to 5 members. Only 4% of the respondents belong to large families having more than 20 members.
- Majority of the respondents (43%) belong to general caste, followed by respondents from other backward castes (42%). The respondents from SC and ST community are 11% and 3%, respectively.
 - 95% of the respondents are Hindu and 4% are Muslims. Rest of the 1% participants belong to Jain and Sikh religion.
 - Educational Status of the respondents shows 80% of the participants are literate.
 - Occupational Profile: 65% respondents are farmers while 16% of them are daily wage labours. 6% of the respondents belong to each businessman and self employed category and 7% respondents belong to service class (Government & Private jobs).
 - Monthly income of the 81% of respondents is less than 5,000 rupees per month.
 - 96% of the respondents are getting affected as per the Notification 20A. This implies that the intended participants attended the PCM.
 - 59% of the respondents are losing their agricultural land, while 18% respondents are losing their structure due to land acquisition. 17% of the respondents are getting affected in terms of both land and structures.
 - 86% of the respondents said that the land or structure, which is getting affected due to land acquisition for the project, is owned by them.
 - 66% of the respondents said that their livelihood will be affected due to the project. The livelihood of the rest of the respondents is not linked with the proposed land acquisition.

Detailed results of the questionnaire survey to the participants for each PCM are shown in Appendix 3-16. In addition, datasheets on summary of the PCM results are shown in Appendix 3-17.

(6) Fact Found under the PCM for RRP

Based on the meeting records and observation of all the PCMs, facts found are summarized with recommendation and action to be taken as shown in Table 3-21.

Table 3-21 Facts Found under RRP-PCM

	Area of Concern	Fact Found	Reasons and Background for the Fact	Recommendation and Action to be Taken
1	The attendances of the RRP-PCM do not know about how much land will be acquired for DFC Project, even the fact of land acquisition for the Project.	Many PAPs do not know that the Notification 20A has been issued and publicized.	<ol style="list-style-type: none"> PAPs residing in villagers have not regular habit to read newspaper, The newspaper, where the Notification 20A have already been published, may not common newspaper for PAPs, Such PAPs are poor and illiterate in general. 	<ol style="list-style-type: none"> Census and Baseline Survey should be conducted as soon as possible as per NRRP 2007. By conducting the survey, all PAPs can know that they are PAPs with information on land to be acquired and resettlement, since all the PAPs have not attended the RRP-PCMs and the Census and Baseline Survey is supposed to cover all of the PAPs. DFCCIL local office or Competent Authority (CA) office should give proper information & answer, and should show the land plan to PAP in the case where the PAP ask status about their affected land. DFCCIL/CA should communicate with Village Heads of affected villages, sent them copy of the Notification 20A, and request them to inform affected people.
2	People do not know about the boundary of their affected land.	Many people do not know about the Notification 20A as well as physical survey of their land conducted.	<ol style="list-style-type: none"> It may be possible the land survey has not been done in the presence of PAPs. Any landmark for boundary has not been put on each land plot. In the Notification 20A copy, there are not enough information about the land to be acquired: only land area and survey number are listed in the Notification 20A. 	DFCCIL should organise joint measurement of each land by presence of PAP and put landmark for the land to clarify the boundary of land to be acquired.
3	Some land plots are missing in the Notification 20A.	It was found in the RRP-PCM that the survey numbers of affected land plot are missing in the Notification 20A in few cases, while these plot numbers are available in land plan and locating along the proposed railway alignment.	<ol style="list-style-type: none"> It may be clerical error. People are concerned how they can get compensation for this land. To whom they can apply for this correction. 	DFCCIL should review the Notification 20A with land plan and prepare another list for missing plots, if any.

Area of Concern	Fact Found	Reasons and Background for the Fact	Recommendation and Action to be Taken
<p>4</p> <p>Insufficient information in Notification 20A and concern about the time to file an objection as per law</p>	<p>Some PAPs did not know about published 20A Notification for their land to be acquired. Though PAPs can file their objection to Competent Authority within one month as per RAA, 2008, one month has already been passed when such PAPs got to know about the Notification 20A in the time of RRP-PCM. Therefore, they missed the opportunity to file their objection to CA.</p>	<p>Without filing objection to CA they cannot raise questions legally and as well as in 20A notification copy said only survey number and amount of acquired land which is not satisfied people's quires. Only 20E notification can said the name of legal owners and there is also provision for filing objection for compensation policy..</p>	<p>Although DFCCIL explained in the RRP-PCM that PAPs can raise objection in the timing of publication of Notification 20E, objection in such timing has different meaning from that in Notification 20A, though interested person can send claim on his/her title. Therefore, it is suggested to any opinion from PAPs should be received as soon as possible before publicising the Notification 20E.</p>
<p>5</p> <p>Concern about disputed land (Land trading without registration)</p>	<p>1. Since some of PAPs purchased land without transferring the land title from the previous landowners, such PAPs have no registered ownership certificate. As the result, name of previous landowner remain in the governmental document.</p> <p>2. In another case, though some PAPs inherited land from their parents or ancestors without transferring the land title, they have no document on land title, namely they are non-title holder on the land. (In such inherited land, plot owners tend to be more than one person by claiming among the persons inherited.)</p>	<p>1. Such persons wanted to save the money of registration.</p> <p>2. They wanted to save the property tax as well.</p>	<p>1. Such PAPs should register the land immediately to become title holders.</p> <p>2. If any person comes to consult with DFCCIL or CA office, DFCCIL or CA office should give proper suggestion to such PAPs for the legalization of their lands.</p> <p>3. Such PAPs should be informed on case of false mediator for their registration of land as well. Otherwise, they will lose their land as well as money.</p>
<p>6</p> <p>Concern about physical acquisition of land and time for getting compensation</p>	<p>PAPs, who are having structures like houses, shops, and other structures in the land to be acquired, worry very much about the time for getting compensation amount, since they have to build new houses, shops etc. in another area with this compensation amount.</p>	<p>If they do not get compensation money in well advance, they would face difficulties to build new structures. PAPs want rent for the moment till they can get compensation amount, in the case where the timing of compensation payment does not provide enough periods to complete building new houses before physical relocation.</p>	<p>CA should give PAPs compensation in well advance to give proper time for construction of new structures before notifying eviction.</p>

	Area of Concern	Fact Found	Reasons and Background for the Fact	Recommendation and Action to be Taken
7	Notice period for vacating property	Some PAPs are afraid about notice period of vacating property, because only 60 days notice period is short to vacate property.	As per RAA, 2008, only 60 days notice period will be given to PAPs to vacate their land and structure for both residential and commercial after payment of compensation amount. Such PAPs consider 60 days are not enough for seeking new land and constructing new structures. Because after getting payment they have to look after for new land and purchase land, and then they start construction for house. Therefore, they worried they have to have rented house to live for the moment and as well as for their business with additional expenditure to be covered by compensation.	As per NRRP, 2007 shifting allowance should be paid on actual basis with consideration for rent to be paid by PAPs for their transition period.
8	Amount of compensation for land	<ol style="list-style-type: none"> 1. Even PAPs have no problem to give their land for the Project, they want good compensation amount for land compensation. 2. Some PAPs demand land for land compensation. 	It is well known to the public that somehow their land will be acquired for this project. However, due to non-registration or even registration of land with fewer amounts, it shows that District Level Rate (DLC) is very much lower than actual open market rate in local area. If payment is made by governmental rate even with 60% extra as per RAA 2008, PAPs are afraid that they cannot purchase same type of land nearby area since it is known that the Government rate of the land of the area is much lower than the actual transaction rate for land of the area.	Recruitment of Independent Evaluator by Government to assess and provide adequate amount of the compensation at level of replacement cost.
9	Request for acquiring whole land, but not only the land required for the Project, with compensation for total land	Some PAPs requested to DFCCIL to acquire total land but not only the land required for the Project.	Such PAPs afraid that small plot of land remained has no use for cultivation and earning money for livelihood recovery. They want to be acquired whole their land and to be paid in cash for compensation as per actual market rate to find alternative arrangement.	This should be considered at case by case, by examining adequate livelihood recovery for the PAPs based on livelihood information of PAPs to be collected through the Census and Baseline Survey as per NRRP 2007.

	Area of Concern	Fact Found	Reasons and Background for the Fact	Recommendation and Action to be Taken
10	Low compensation rate for structure	Compensation rate for structure would be lower than replacement cost.	<p>Compensation for structures will be given by Basic Schedule Rate (BSR) and it will be calculated by Competent Engineer recruited by CAD/FCCIL.</p> <p>Since it is known that BSR is much lower than actual open market rate and depreciation cost is counted in valuation, PAPs would not be able to built new construction with the compensation amount.</p>	<p>For the calculation of compensation for structures, depreciation cost should not be considered. Any effective method should be used to secure the compensation at level of replacement cost.</p>
11	Compensation for structure for non-titleholder such as illegal occupant and squatter	<p>Some PAPs knew that they won't get any compensation for the land to be acquired because they have no ownership for the land. However, they demanded for proper compensation for their structure, and payment for compensation well in advance and they wanted to know how they will get compensation because they have no document.</p>	<p>Such PAPs knew that the compensation for the structures will be made based on BSR / Govt. rate which is much lower than present actual market value, and want to clarify whether they get compensation before or after completion of structures.</p>	<p>Census and Baseline Survey as per NRRP 2007 should be conducted properly as soon as possible. Adequate compensation and assistance should be examined based on the result of the survey. In addition, compensation payment and assistance should be well in advance and timely manner for construction of new structure.</p>
12	Demands for job and livelihood recovery	<p>Some PAPs are afraid that compensation money for land as per RAA 2008 is not sufficient to buy same quality and quantity of agricultural land nearby area and rest of the land will not be useful for agricultural production. They worried about their livelihood recovery.</p>	<ol style="list-style-type: none"> 1. The compensation rate as per RAA 2008 based on Government rate of the land of the area is much lower than the actual transaction rate for land of the area. 2. Most of the PAPs are farmers. They depend on their livelihood on the agricultural produce. 3. Such PAPs consider 750 days minimum agricultural wages can not meet their income of the family. In the sense, they demand for permanent job to run their family. 	<p>To recovery livelihood adequately, it must be analysed that whether 750 days minimum agricultural wages is enough to livelihood recovery based on result of the Census and Baseline Survey as per NRRP 2007. Income restoration schemes for PAPs run by State Govt. in respective districts and include them should be incorporated in assistance under the Project.</p>

	Area of Concern	Fact Found	Reasons and Background for the Fact	Recommendation and Action to be Taken
13	Concern for compensation of standing crops	Some farmers of PAPs worry about their standing crops to be affected, which have already been invested to produce crops.	As per RAA, 2008, after giving compensation for land and crops, the Competent Authority is supposed to provide 60 days time to vacate the land which is not enough time to grow crops in both original land and alternative site. If DFCCIL acquire the land with crops before harvesting, farmers would face monetary loss.	It is suggested that sufficient time for cutting the full-grown crops be given or compensation for crops be calculated as per actual market value.
14	Concerned about common utilities such as pipeline, bore well, and ponds to be affected	Some farmers of PAPs are afraid about re-construction of general utilities because pipeline, bore wells etc are getting affected due to DFC alignment design.	These bore well and water pipelines are utilized for their cultivation. They use to take water for their field from this pipeline. They afraid that if it is acquired, no one will take responsibility to construct new one. and they will face problem on water supply to their farm land	Appropriate provision of the alternative common utilities should be examined and provided as per RAA, 2008 and NRRP, 2007. Plan of the provision should be informed to the PAPs in advance.
15	Construction of ROB, underpass and side road along DFC line	Some PAPs demanded for ROB, underpass and the road along the DFC since they worried about future use of present road along DFC line.	For easy communication to one village to another as well as two villages opposite to railway line, such PAPs demanded for road, RUB, or ROB to cross the proposed DFC line.	Though it has already been considered in DFC project, adequate location and number should be examined and provided.
16	Concerned noise and vibration produce by DFC track	Some PAPs who reside near track, they afraid that noise and vibration pollution may occur due to high speed freight train of DFC.	In the parallel section, those people usually live nearby existing train line. They suffer from noise and vibration problem since no measure has not usually been taken for railway noise and vibration. This is because there is no provision in the law on this matter. They worried that high speed train of DFC will add more noise and vibration.	It is suggested that noise and vibration control measurement should be examined in further stage of the Project based on the EIA report for the DFC.
17	Change alignment from detour in farm land to parallel in forest area in Gujarat	In RRP-PCM, some PAPs in Gujarat demanded for parallel alignment within forest area.	Some PAPs, who are farmers, demanded for parallel alignment in Gujarat State, because they told in detour alignment, amount of land will be acquired more. They are basically farmers and their livelihood depended upon agriculture. They can not easily switch farming as their current livelihood to the other field due to some reasons such as social and educational backgrounds.	DFCCIL should be taken care and solve this issue very effective manner to pay good compensation for land. Good relationship should be maintained between two parties.

	Area of Concern	Fact Found	Reasons and Background for the Fact	Recommendation and Action to be Taken
18	Change to detour alignment Kishangarh area in Rajasthan	Some PAPS demanded to change into detour route to avoid involuntary resettlement in Ajmer Kishangarh area	There is large number of structures for both titleholder and non-titleholder to be affected and PAPS afraid that compensation rate is low for their livelihood recovery.	This area is very sensitive and due care should be taken to evaluate compensation amount.
19	Direct intervention of Railway Minister to solve compensation issues	Some PAPS wanted direct intervention by Railway Minister to solve the compensation issues. They requested representative from project proponent to forward their concern to Honourable Minister.	They have faith on current Railway Minister regarding distribution of proper compensation, since they felt that the Minister is pro-poor and she can solve the problem easily.	There is no specific recommendation. However, it is preferable that smooth communication between PAPS and project proponent should be considered and implemented continuously.

Source: SAPROF Study Team

3.6 ENVIRONMENTAL CHECKLIST

Based on latest information of the activities on environmental and social considerations for the Project as of end of the SAPROF Study, the environmental checklist of the JICA Environmental Guidelines was prepared as shown in Table 3-22.

Overall schedule of environmental and social considerations for the Project, mainly preparation of EIA and RRP under the SAPROF Study, is shown in Table 3-23.

Table 3-22 Environmental Checklist for Roads and Railways in JICA Environmental Guidelines

Category	Environmental Item	Main Check Items	Confirmation of Environmental Considerations
1 Permits and Explanation	(1) EIA and Environmental Permits	<p>① Have EIA reports been officially completed?</p> <p>② Have EIA reports been approved by authorities of the host country's government?</p> <p>③ Have EIA reports been unconditionally approved? If conditions are imposed on the approval of EIA reports, are the conditions satisfied?</p> <p>④ In addition to the above approvals, have other required environmental permits been obtained from the appropriate regulatory authorities of the host country's government?</p>	<p>① Yes. The EIA report, which is composed of the following reports, has been officially completed by approval of Ministry of Railways (MOR) and Department of Economic Affairs (DEA) under Ministry of Finance on 17th August, 2009.</p> <p>(1) Final Reports of the Environmental and Social Impact Mitigation Measures Study (ESIMMS) for Haryana, Rajasthan, and Gujarat States, October 2007: The reports were prepared in the EIA Level Study conducted under the JICA Feasibility Study on the Development of Dedicated Freight Corridor for Delhi-Mumbai and Ludhiana-Sonnagar in India, completed in October 2007.</p> <p>(2) Final Reports of the Supplemental Survey for ESIMMS (S-ESIMMS), August 2009: The report was prepared in the supplemental survey conducted under the JICA SAPROF Study for Dedicated Freight Corridor Project, completed in December 2009.</p> <p>② Yes. The EIA report has been approved by MOR and DEA on 17th August, 2009, while the railway projects are exempted from the EIA approval under Indian law.</p> <p>③ No. There was no condition.</p> <p>④ No. Other required environmental permits such as forest clearance permit will be obtained in the Engineering Service Stage before land clearance and construction starts.</p>
	(2) Explanation to the Public	<p>① Are contents of the project and the potential impacts adequately explained to the public based on appropriate procedures, including information disclosure? Is understanding obtained from the public?</p> <p>② Are proper responses made to comments from the public and regulatory authorities?</p>	<p>① Outline of the project and EIA study have been explained to the public through the public consultation meetings (PCMs) in the affected area in 3 stages of the JICA F/S as per the Ex-JICA Environmental Guidelines. District level PCMs were conducted in all affected districts (17 districts in total) and feedback meetings at village level for all affected villages were conducted. In addition, additional PCMs in 13 districts were conducted during the JICA SAPROF Study for villages, which were newly recognized to be affected due to change of the railway alignment after the JICA F/S.</p> <p>Regarding the information disclosure, for both draft EIA and final EIA reports were disclosed in all of the affected villages during the JICA SAPROF Study in March and April for the draft EIA report and in September for the final EIA report, respectively.</p> <p>② The comments from the public made in the above PCMs have been responded in the meeting by representative of the project responsible body who attended the PCMs. On the other, the comments collected through the information disclosure of draft EIA report have been responded in and incorporated into the final EIA report. The final EIA report was disclosed to the public.</p>

Category	Environmental Item	Main Check Items	Confirmation of Environmental Considerations
	(1) Air Quality	<p>① Is there a possibility that air pollutants emitted from various sources, such as vehicle traffic will affect ambient air quality? Does ambient air quality comply with the country's ambient air quality standards?</p> <p>② Where industrial areas already exist near the route, is there a possibility that the project will make air pollution worse?</p>	<p>① No. Air pollutant will not be emitted from the freight train system, since the freight trains for the project are operated by electrified locomotives.</p> <p>② No, because the freight train operation does not emit air pollutant.</p>
	(2) Water Quality	<p>① Is there a possibility that soil runoff from the bare lands resulting from earthmoving activities, such as cutting and filling will cause water quality degradation in downstream water areas?</p> <p>② Is there a possibility that surface runoff from roads will contaminate water sources, such as groundwater?</p> <p>③ Do effluents from various facilities, such as stations and parking areas/service areas comply with the country's effluent standards and ambient water quality standards? Is there a possibility that the effluents will cause areas that do not comply with the country's ambient water quality standards?</p>	<p>① Yes. However, adequate measures such as prevention of soil run-off, pre-treatment of wastewater, and implementation of vegetation cover were proposed in the EIA report.</p> <p>② No.</p> <p>③ Yes. To comply with the standards, adequate measures were proposed in the EIA report and detailed measures to be taken will be designed with preparation of detailed environmental management plan in further design stage of the project.</p> <p>No, as long as detailed environmental management plan to be prepared in further design stage of the project, it will not be occurred.</p>
2 Mitigation Measures	(3) Noise and Vibration	<p>① Do noise and vibrations from vehicle and train traffic comply with the country's standards?</p>	<p>① No. There is no standards and regulations on railway noise and vibration in India, which can be referred as the criteria. Regarding the railway noise, Japanese standard was adopted as recommended standard level of railway noise for the evaluation. Along the parallel section, the predicted noise levels (L_{Aeq}) which are sums of railway noise from DFC and existing track, at 30 m and 50 m distances from the center of the DFC alignment exceed the recommended standard level of railway noise at both day and night times, except for 1 section but only for night time. In fact, the results also show that only railway noise levels from the existing railway track already exceed the recommended standard level for the most sites. On the other, along the detour section, it is predicted that the railway noise levels from the DFC operation does not exceed the recommended standard levels even at 30 m distance from the center of the DFC alignment.</p> <p>Regarding the railway vibration, along the parallel section, the predicted vibration level (L_p) including vibration from DFC railway and the existing railway at 30 m and 50 m from center of the DFC alignment is less than the guideline value (70 dB). As for detour section, the predicted vibration level (L_p) which means only DFC railway vibration is also less than the guideline value. However, some sensitive receptors such as religious facility and school (SRs) are located in the vicinity of the alignment and some of the structures may be weak to vibration.</p>
3 Natural Environment	(1) Protected Areas	<p>① Is the project site located in protected areas designated by the country's laws or international treaties and conventions? Is there a possibility that the project will affect the protected areas?</p>	<p>① No. The proposed railway alignment was designed to avoid any protected area by considering detour route.</p>

Category	Environmental Item	Main Check Items	Confirmation of Environmental Considerations
3 Natural Environment	(2) Ecosystem	<p>① Does the project site encompass primeval forests, tropical rain forests, ecologically valuable habitats (e.g., coral reefs, mangroves, or tidal flats)?</p> <p>② Does the project site encompass the protected habitats of endangered species designated by the country's laws or international treaties and conventions?</p> <p>③ If significant ecological impacts are anticipated, are adequate protection measures taken to reduce the impacts on the ecosystem?</p> <p>④ Are adequate protection measures taken to prevent impacts, such as disruption of migration routes, habitat fragmentation, and traffic accident of wildlife and livestock?</p> <p>⑤ Is there a possibility that installation of roads will cause impacts, such as destruction of forest, poaching, desertification, reduction in wetland areas, and disturbance of ecosystems due to introduction of exotic (non-native invasive) species and pests? Are adequate measures for preventing such impacts considered?</p> <p>⑥ In cases where the project site is located at undeveloped areas, is there a possibility that the new development will result in extensive loss of natural environments?</p>	<p>① No. The proposed railway alignment does not encompass such site</p> <p>② Yes. The proposed railway alignment across some rivers which are habitats for protected species such as Indian soft-shell turtle.</p> <p>③ No. Significant ecological impacts are not anticipated.</p> <p>④ Yes. Some mitigation measures such as animal underpass and fencing will be installed in the place where some animal movements are found near the forest area and sanctuary.</p> <p>⑤ No.</p> <p>⑥ No. The proposed railway alignment passes through either built-up area or agricultural area, but not undeveloped area.</p>
	(3) Hydrology	<p>① Is there a possibility that alteration of topographic features and installation of structures, such as tunnels will adversely affect surface water and groundwater flows?</p>	<p>① Yes. Embankment structure of the railway, especially in detour section which is newly developed, would block surface water flow. Therefore, adequate drainage such as culvert will be installed at the adequate location with adequate size to be examined in the further design stage of the project. In addition, bridges which across rivers will be designed and constructed without disturbing the river hydrological situation.</p> <p>② No. There is no soft ground in the project site.</p>
	(4) Topography and Geology	<p>① Is there a soft ground on the route that may cause slope failures or landslides? Are adequate measures considered to prevent slope failures or landslides, where needed?</p> <p>② Is there a possibility that civil works, such as cutting and filling will cause slope failures or landslides? Are adequate measures considered to prevent slope failures or landslides?</p> <p>③ Is there a possibility that soil runoff will result from cut and fill areas, waste soil disposal sites, and borrow sites? Are adequate measures taken to prevent soil runoff?</p>	<p>① No. There is no soft ground in the project site.</p> <p>② Yes. Most of the project sites are flat. However, some project sites to be cut will be covered by vegetation not to cause silt runoff and slope failure as well as implementation of adequate civil works for earthwork.</p> <p>③ Yes. However, implementation of adequate civil works for earthwork will prevent such incident by faithful execution of construction work plan.</p>

Category	Environmental Item	Main Check Items	Confirmation of Environmental Considerations
4 Social Environment	(1) Resettlement	<p>① Is involuntary resettlement caused by project implementation? If involuntary resettlement is caused, are efforts made to minimize the impacts caused by the resettlement?</p> <p>② Is adequate explanation on relocation and compensation given to affected persons prior to resettlement?</p> <p>③ Is the resettlement plan, including proper compensation, restoration of livelihoods and living standards developed based on socioeconomic studies on resettlement?</p> <p>④ Does the resettlement plan pay particular attention to vulnerable groups or persons, including women, children, the elderly, people below the poverty line, ethnic minorities, and indigenous peoples?</p> <p>⑤ Are agreements with the affected persons obtained prior to resettlement?</p> <p>⑥ Is the organizational framework established to properly implement resettlement? Are the capacity and budget secured to implement the plan?</p> <p>⑦ Is a plan developed to monitor the impacts of resettlement?</p>	<p>① Yes. To minimize the involuntary resettlement, the alignment for the DFC was considered to locate in parallel to the existing railway line within the existing railway land. However, since there is not enough land within the existing railway land in the built-up area and large-scale resettlement would be caused, detour route was considered to avoid in such area.</p> <p>② Yes. The public consultation meetings were conducted at 44 locations along the proposed railway alignment by inviting project-affected persons (PAPs) between August and October to explain about draft Rehabilitation and Resettlement Plan (RRP). In the PCMs, relocation and compensation given to the PAPs are explained as well as providing a brochure which explains about the relocation and compensation.</p> <p>③ Yes.</p> <p>④ Yes. The RRP covers such consideration based on the National Rehabilitation and Resettlement Policy 2007 (NRRP 2007).</p> <p>⑤ Yes and No. There is no formal agreement. However, the PAPs can claim after determination of the compensation by the competent authority. Otherwise, it is considered that the PAPs agreed on the land acquisition and resettlement.</p> <p>⑥ Yes. The competent authorities under the state government will basically be in charge of land acquisition process as well as resettlement. In addition, organizational framework by involving relevant parties such as the project executive organization and NGOs are proposed to be established in the RRP.</p> <p>⑦ Yes. A monitoring plan was prepared in the RRP.</p>

Category	Environmental Item	Main Check Items	Confirmation of Environmental Considerations
		<p>① Where roads or railways are newly installed, is there a possibility that the project will affect the existing means of transportation and the associated workers? Is there a possibility that the project will cause significant impacts, such as extensive alteration of existing land uses, changes in sources of livelihood, or unemployment? Are adequate measures considered for preventing these impacts?</p> <p>② Is there a possibility that the project will adversely affect the living conditions of inhabitants other than the affected inhabitants? Are adequate measures considered to reduce the impacts, if necessary?</p> <p>③ Is there a possibility that diseases, including communicable diseases, such as HIV will be introduced due to immigration of workers associated with the project? Are adequate considerations given to public health, if necessary?</p> <p>④ Is there a possibility that the project will adversely affect road traffic in the surrounding areas (e.g., by causing increases in traffic congestion and traffic accidents)?</p> <p>⑤ Is there a possibility that roads and railways will cause impede the movement of inhabitants?</p> <p>⑥ Is there a possibility that structures associated with roads (such as bridges) will cause a sun shading and radio interference?</p>	<p>① No. The project will not affect the existing means of transportation and the associated workers. Mainly because this is freight corridor project, but not passenger train.</p> <p>② No. Such impact is not expected.</p> <p>③ Yes. There is possibility. Adequate considerations are proposed in the EIA report such as proper management of sanitary in work camp. Detailed measures will be examined in the further design stage with preparation of detailed Environmental Management Plan (EMP).</p> <p>④ Yes. During the construction, road traffic around the project site will be affected. Proper traffic management will be implemented by providing adequate detour during construction based on the EMP included in the EIA and to be examined in detail in the further design stage.</p> <p>⑤ Yes. Embankment structure with certain height to be constructed, especially in the detour section will impede the movement of inhabitants. To mitigate the impact, over/underpass will be provided at adequate location and frontage road will be provided along the railway.</p> <p>⑥ No. Such impact is not expected, since the associated facility which may cause both sun shading and radio interference will not be constructed in the built-up area.</p>
	(3) Heritage	<p>① Is there a possibility that the project will damage the local archeological, historical, cultural, and religious heritage sites? Are adequate measures considered to protect these sites in accordance with the country's laws?</p>	<p>① Yes. Relocation of the religious facilities such as temple will be required in some area. However, any damage to the local archeological, historical, and cultural heritage sites have not been identified. Regarding the relocation of religious facilities, adequate measures will be taken to maintain the previous conditions including relocation to adjacent area as possible.</p>
4 Social Environment	(4) Landscape (5) Ethnic Minorities and Indigenous Peoples	<p>① Is there a possibility that the project will adversely affect the local landscape? Are necessary measures taken?</p> <p>① Where ethnic minorities and indigenous peoples are living in the rights-of-way, are considerations given to reduce the impacts on culture and lifestyle of ethnic minorities and indigenous peoples?</p> <p>② Does the project comply with the country's laws for rights of ethnic minorities and indigenous peoples?</p>	<p>① No. Such impact is not expected.</p> <p>① Yes. ② Yes. It will be complied with based on the Environmental Management Plan including such issue.</p>

Category	Environmental Item	Main Check Items	Confirmation of Environmental Considerations
5 Others	(1) Impacts during Construction	<p>① Are adequate measures considered to reduce impacts during construction (e.g., noise, vibrations, turbid water, dust, exhaust gases, and wastes)?</p> <p>② If construction activities adversely affect the natural environment (ecosystem), are adequate measures considered to reduce impacts?</p> <p>③ If construction activities adversely affect the social environment, are adequate measures considered to reduce impacts?</p> <p>④ If necessary, is health and safety education (e.g., traffic safety, public health) provided for project personnel, including workers?</p>	<p>① Yes. Various measures are proposed in the EIA. Detailed plan of the measures will be examined in the further design stage.</p> <p>② Yes. Various measures are proposed in the EIA. Detailed plan of the measures will be examined in the further design stage.</p> <p>③ Yes. Various measures are proposed in the EIA. Detailed plan of the measures will be examined in the further design stage.</p> <p>④ Yes. Such considerations are included in the EMP. Detailed plan will be examined in the further stage.</p>
	(2) Monitoring	<p>① Does the proponent develop and implement monitoring program for the environmental items that are considered to have potential impacts?</p> <p>② Are the items, methods and frequencies included in the monitoring program judged to be appropriate?</p> <p>③ Does the proponent establish an adequate monitoring framework (organization, personnel, equipment, and adequate budget to sustain the monitoring framework)?</p> <p>④ Are any regulatory requirements pertaining to the monitoring report system identified, such as the format and frequency of reports from the proponent to the regulatory authorities?</p>	<p>① Yes. It is included in the EIA report.</p> <p>② Yes. However, further deliberation will be made and detailed monitoring plan will be prepared in the further design stage of the project.</p> <p>③ Yes. Monitoring framework is included in the EIA report. Further, detailed monitoring plan will be prepared in the further design stage of the project.</p> <p>④ No. There is no regulatory requirement.</p>
6 Note	Reference to Checklist of Other Sectors	<p>① Where necessary, pertinent items described in the Forestry Projects checklist should also be checked (e.g., projects including large areas of deforestation).</p> <p>② Where necessary, pertinent items described in the Power Transmission and Distribution Lines checklist should also be checked (e.g., projects including installation of power transmission lines and/or electric distribution facilities).</p>	<p>① Not required, since the project does not cause large areas of deforestation.</p> <p>② The project includes power transmission line and substation/electric distribution facilities. However, since power transmission line is used from the existing railway system and substation/electric distribution facilities will be located within the land for railway alignment or relevant facilities such as crossing station. Therefore, additional environmental and social impacts are not expected by the electric distribution facilities.</p>
	Note on Using Environmental Checklist	<p>① If necessary, the impacts to transboundary or global issues should be confirmed, if necessary (e.g., the project includes factors that may cause problems, such as transboundary waste treatment, acid rain, destruction of the ozone layer, or global warming).</p>	<p>① No transboundary issue is expected to be caused by the project. Regarding the global issue, the project has positive effects to reduce green effect gas such as CO₂ due to change of freight mode from current vehicle transportation such as truck to electrified train with more efficient energy use.</p>

Note: 1) Regarding the term "Country's Standards" mentioned in the above table, in the event that environmental standards in the country where the project is located diverge significantly from international standards, appropriate environmental considerations are made, if necessary.

In cases where local environmental regulations are yet to be established in some areas, considerations should be made based on comparisons with appropriate standards of other countries (including Japan's experience).

2) Environmental checklist provides general environmental items to be checked. It may be necessary to add or delete an item taking into account the characteristics of the project and the particular circumstances of the country and locality in which it is located.

Source: SAPROF Study Team

Table 3-23 Schedule of Preparation of EIA and RRP

Task No.	Task Description	Required Period	Responsible Org.	2009												2010									
				Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	
1.	Preparation of EIA (ESIMMS+S-ESIMMS)																								
(1)	Completion of ESIMMS Reports	3.5 months	SAPROF Team																						
(2)	Implementation of Supplemental Surveys	2.5 months	SAPROF Team																						
(3)	Preparation of 1st draft S-ESIMMS Report	2.8 months	SAPROF Team MOR/ MOR/ MOR/																						
(4)	PCM for EIA in Haryana and Gujarat	3 weeks	DFCCIL																						
(5)	Review of 1st draft S-ESIMMS Report by JICA	15 days	JICA																						
(6)	Comments on 1st draft S-ESIMMS Report by JICA	-	JICA																						
(7)	Preparation of 2nd draft S-ESIMMS Report	10 days	SAPROF Team																						
(8)	Presentation of ESIMMS & 2nd draft S-ESIMMS Reports by SAPROF Team for MOR/DFCCIL's review	2 times	MOR/ DFCCIL																						
(9)	Preparation of Draft EIA Report	21 days	MOR/DFCCIL SAPROF Team																						
(10)	Preparation of PCM for EIA in Rajasthan	7 days	MOR/ DFCCIL																						
(11)	PCM for EIA in Rajasthan	2 weeks	MOR/ DFCCIL																						
(12)	Distribution of Draft EIA Report	10 days	MOR/ DFCCIL																						
(13)	Call for comments/opinions on Draft EIA Report	min. 2 weeks	MOR/DFCCIL SAPROF Team																						
(14)	Preparation of Final S-ESIMMS Report	1 week	MOR/DFCCIL SAPROF Team																						
(15)	Approval procedures of Final EIA Report	3.5 months	MOR																						
(16)	Presentation of Final EIA Report to MOR/DFCCIL	-	SAPROF Team																						
(17)	Approval of Final EIA Report	-	MOR/DEA																						
(18)	Disclosure of Final EIA Report in Japan	min. 30 days	MOR/DFCCIL JICA																						
(19)	Disclosure of Final EIA Report in India	-	MOR/DFCCIL JICA																						
2.	Preparation of RRP																								
(1)	Preparation of 1st draft RRP	2.5 months	SAPROF Team																						
(2)	Review of 1st draft RRP by JICA	1 week	JICA																						
(3)	Comments on 1st draft RRP by JICA	-	JICA																						
(4)	Preparation of revised 1st draft RRP	10 days	SAPROF Team																						
(5)	Presentation of 1st draft RRP by SAPROF Team for MOR/DFCCIL's review	1 time	SAPROF Team																						
(6)	Comments and discussion on 1st draft RRP	3 months	MOR/ DFCCIL																						
(7)	Preparation of revised (1st) draft RRP	1 month	SAPROF Team																						
(8)	Preparation and planning of PCM for RRP	5.5 months	MOR/ DFCCIL																						
(9)	Preparatory work of PCM for RRP by CPM offices	2 weeks + 2	MOR/ DFCCIL																						
(10)	PCM for RRP	2 months	MOR/ DFCCIL																						
(11)	Preparation of (2nd) draft RRP	1 month	SAPROF Team																						
(12)	Finalization of RRP	1 month	MOR/ DFCCIL																						
(13)	Disclosure of RRP to PAPS	-	MOR/ DFCCIL																						
-	Issuance of Notification 20A	-	MOR/ DFCCIL																						
-	General election: 4/16 - 5/16	-	-																						
-	JICA SAPROF Study	-	-																						

ESIMMS: Environmental and Social Impact Mitigation Measures Study (The EIA Level Study conducted under the JICA F/S), S-ESIMMS: Supplemental Survey for ESIMMS (Supplemental survey conducted under the JICA SAPROF)
Draft EIA Report: ESIMMS Reports + Draft S-ESIMMS Report, Final EIA Report: ESIMMS Reports + Final S-ESIMMS Report, RRP: Rehabilitation and Resettlement Plan
MOR: Ministry of Railways, DFCCIL: Dedicated Freight Corridor Corporation of India Ltd., DEA: Department of Economic Affairs (Ministry of Finance), JICA: Japan International Cooperation Agency
Source: Prepared by SAPROF Study Team

CHAPTER 4 LABOUR ENVIRONMENT DURING THE CONSTRUCTION STAGE

4.1 WORKING SAFETY

4.1.1 Structures and Risks on Safety in Construction of DFC

Important or major bridges, ROB/flyover and RUB are major structures which need particular precautions for safety to eliminate risks of any accident, incident or injury to any workers or public during construction. Further to those structures, safety precautions have to be taken for the section where the construction is in close vicinity of the running line.

Major risks in the construction which have to be eliminated are as follows:

Structure	Risks to be eliminated
Important Bridges	- Collapse of the girders/slabs during erection and construction
Major Bridges	- Falls from elevations - Settlement of the piers/abutments of the adjacent bridge of the running line
ROB Rail flyover	- Fall of the existing ROB structures over the running line at the time of removal - Collapse of the girders/slabs during erection and construction - Falls from elevations - Adverse effect on the operation of the running line during construction
RUB	- Settlement of the foundations of the running line in the vicinity of RUB
Construction in close vicinity of the running line (580km of the total length of 920m)	- Deformation of the foundations of the running line during excavation and fill - Injury of workers by trains on the running line

Source: SAPROF Study Team

4.1.2 Precautions/Measures to Ensure Working Safety

(1) Fall/collapse of girders/slabs during construction of bridges or demolishing existing ROB

Fall or collapse of elevated structures causes fatalities involving workers on and under the structures. Method statements for the construction or the demolishing have to be scrutinized in view of safety. The following are important items:

- i) Permanent structures should be of sufficient strength against not only permanent loads but also temporary loads for construction/erection.
- ii) Temporary supports for construction/erection should be of sufficient strength and rigidity for the purpose for which they are used.
- iii) Foundations of the temporary supports should be designed so that risks of foundation stability in terms of settlement, sliding and overturning are eliminated.
- iv) The construction/erection should be in accordance with the method statements approved by the Employer.

Every structure such as scaffold, false work and launching girder should have its design calculations which are included in the method statements.

Safety managements including descriptions of potential risks and measures to eliminate them should also be included in the method statements.

Mechanical facilities for launching beams/girders should be well maintained and the operation should be with the greatest care in accordance with the prescribed procedures and manual.

(2) Falls from elevations

Falls are the leading cause of fatalities in construction works. Sides, edges and openings have to be protected wherever workers are exposed to a fall. Fall arrest systems should be provided when a worker is exposed to vertical drop.

Scaffolds should be constructed according to the manufacturer's instructions and provided with guardrail systems.

Toe boards, screens, or guardrails on scaffolds/platform should be provided to prevent objects from falling at overhead works. The areas in the vicinity should be barricaded with warning signs.

(3) Settlement or deformation of the structures on the running line during construction

Designer should judge at the design stage if structures to be constructed will cause risks of adverse effect to the stabilities of the structures on the existing adjacent line during construction. Wherever such risks are not reasonably practicable to avoid, this information with specifications or outline method statements including tolerable values of settlement/deformation of the structure on the adjacent line should be included in drawings for dealing with the risks.

The Contractor should prepare detailed method statements with methods for dealing with the risks including methods of monitoring of settlement or deformation of the structures on the adjacent running line. The statements should include alert system to stop an approaching train on the adjacent line.

(4) Construction in close vicinity of the running line

The works will be in close vicinity of the running line under the operation by IR. Ensuring safety of workers, passengers, trains and general public and ensuring no hindrance of the running line are of particular importance. The rules and regulations of IR should be observed for the construction works and close coordination with IR is necessary. The following are some points to which attention should be paid.

Barricading in parallel with the running line is essential wherever the work is in progress in close vicinity of the running line so that SOD (Schedule of Dimensions) of the running line cannot be infringed and safe working zone can be available for deployment of workers and machinery. Barricading has to be provided in parallel with the existing running line along the entire stretch taken up for the execution of the work with sufficient clearance from the minimum clearance provided in SOD. Care has to be taken for turning/reversal of vehicles and machinery without infringing the running line. The work site should be manned to keep a watch on the movement of the Contractor's workers and machinery without jeopardizing the safety of the running line.

The areas where the works are concentrated in close vicinity of a busy road or urban area should be provided with barricades and gates to prevent entry by unauthorized persons to the work areas.

The rules provided for in the Railway's Manual should be addressed for the construction.

4.2 FRAMEWORK FOR ENFORCEMENT OF OCCUPATIONAL SAFETY AND HEALTH

4.2.1 Relevant Laws/Regulations Pertinent to Occupational Safety and Health

Major labour laws and their salient features relevant to establishments engaged in building and other construction works are reproduced from one of DFCCIL Design and Build Contracts and presented in Table 4.2-1. Most of contracts for railway construction present these laws/regulations and stipulate that Contractors and his sub-contractors shall comply fully with them in engagement, payment and upkeep of the labour in India. Occupational Safety and health is the mandate of the Ministry of Labour and Employment.

The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) ACT, 1996 is at present a comprehensive and detailed legislation to regulate the employment and conditions of service of building and other construction workers and to provide for their safety, health and welfare measures, of which main provisions are as follows:

- 1) Registration of establishments employing construction workers to ensure there are no malpractices and to discourage noncompliance of law by circumventing
- 2) Registration of construction workers as beneficiaries under the Act and provision for their identity cards
- 3) Constitution of Welfare Board by every State Government
- 4) Function of Welfare Board
- 5) Adequate safety and health measures for construction workers
- 6) Constitution of safety committees and safety officers
- 7) Fixing hours for normal working day, weekly paid rest day, wages for overtime
- 8) Provision of basic welfare amenities (medical facilities, drinking water, latrines and urinals, creches, canteens, etc.) and temporary living accommodation in the vicinity of the construction place
- 9) Appointment of inspectors including Director-General of Inspection (Central level) and Inspector-General (State level)
- 10) Penalties of fines and imprisonment for contravention, obstructions, violation and offence

For carrying out the provisions of the Act, the Central Government notified Building and Other Construction Workers' (Regulations of Employment and Conditions of Service) **Central Rules**, 1998 regarding the measures to be taken for the safety and health of building and other construction workers.

The Act regulates that every State Government shall constitute Building and Other Construction Workers' Welfare Board. The Board provides building and other construction workers registered under the Act with welfare measures and facilities such as immediate assistance in case of accident, old age pension, loans and advances for construction of a house, premia for group insurance, financial assistance for the education of children, medical treatment, maternity benefit, etc. Building and Other Construction Workers' Welfare Fund is constituted by the Board.

The Central Rules regulates hours of work. No worker is required or allowed to work for more than 9 hours a day or 48 hours a week. When every employee works in construction works for more than 9 hours on any day or for more than 48 hours in any week, he is entitled to wedge at double the ordinary rate in respect of overtime work.

Employment of children below 14 years of age is prohibited in building and construction industry under Child Labour (Prohibition & Regulation) Act 1986.

Table 4.2-1 Labour Laws Enforced upon Establishments Engaged in Building and Other Construction Work

No.	Law	Concise stipulations
1	Workmen compensation act 1923	The act provides for compensation in case of injury by accidents arising out of and during the course of employment.
2	Payment of gratuity Act 1972	Gratuity is payable to an employee under the act on satisfaction of certain condition on separation if an employee has completed 5 years service or more or on death at the rate of 15 days wages for every completed year of service. The Act is applicable to all establishment employing 10 or more employees.
3	Employees PF and miscellaneous provision Act 1952	The act provides for monthly contributions by the employees/workers as applicable. The benefits payable under the act are: (i) Pension or family pension on retirement or death, as the case may be. (ii) Deposit linked insurance on the death in harness of the worker. (iii) Payment of PF accumulation on retirements/death etc.
4	Maternity Benefit Act 1951	The act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
5	Contract labour (Regulation & Abolition) Act 1970	The Act provides for certain welfare measures to be provided by the contractor to contract labour and in case the contractor fails to provide, the same are required to be provided, by the Principal Employer by law. The Principal Employer is required to take Certificate of Registration and the Contractor is required to take license from the designated officer. The act is applicable to the Establishments or Contractor or Principal Employer, if they employ 20 or more contract labour.
6	Minimum Wages Act 1948	The Employer is supposed to pay not less than the minimum wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of Buildings, Roads, and Runways are scheduled employments.
7	Payment of Wages Act 1936	It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
8	Equal Remuneration Act 1979	The Act provides for payment of equal wages for work of equal nature to male and female workers and for not making discrimination against Female employees in the matters of transfers, training and promotions etc. DFCC Design & Build Contract NKWD-NGAQ Eastern Corridor.
9	Payment of Bonus Act 1965	The Act is applicable to all establishments employing 20 or more employees. The Act provides for payments of annual bonus subject to a minimum of 8.33% of wages and maximum of 20% of wages to employees drawing Rs.3500/- per month or less. The bonus to be paid to employees getting Rs.2500/- per month or above up to Rs.3500/- per month shall be worked out by taking wages as Rs.2500/- per month only. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. Some of the State Governments gave reduced the employment size from 20 to 10 for the purpose of applicability of this Act.
10	Industrial Disputes Act 1947	The Act lays down the machinery and procedure for resolution of industrial disputes, in what situations a strike or lock-out becomes

No.	Law	Concise stipulations
		illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
11	Industrial Employment (Standing Orders) Act 1946	It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the states and Central Government to 50). The Act provides for laying down rules governing the conditions of employment by the Employee on matters provided in the Act and get the same certified by the designated Authority.
12	Trade Unions Act 1926	The act lays down the procedure for registration of trade unions of workmen and employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.
13	Child Labour (Prohibition & Regulation) Act 1986	The Act prohibits employment of children below 14 years of age in certain occupations and process and provides for regulation of employment of children in all other occupations and process. Employment of child labour is prohibited in Building and Construction Industry.
13	Inter-state Migrant workmen's (Regulation of Employment & Conditions of Service) Act 1979	The Act is applicable to an establishment which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-state migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, traveling expenses from home up to the establishment and back, etc.
14	The Building and other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996	All the establishments who carry on any building or other construction work and employs 10 or more workers are covered under the Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the Building or construction work and other welfare measures, such as Canteens, First-Aid facilities, Ambulance, Housing accommodation for workers near the work place etc. the Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.
15	Factories Act 1948	The Act lays down the procedure for approval at plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process. Provisions of Mines Act 1952:- The Act lays down the rules and regulations for carrying out any mining activity.
16	Provisions of Mines Act 1952	The Act lays down the rules and regulations for carrying out any mining activities.

Source: Prepared by SAPROF Study Team

4.2.2 Occupational Safety and Health in Similar Projects

(1) **Manual for Occupational Safety and Health of Delhi Metro Rail Corporation Ltd. (DMRC)**

DMRC has included SHE (Safety, Health and Environment) manual in the contracts of civil works for Phase -2 of which the construction started in 2006. This manual bound in the contracts intends to further raise the standards of safety and health in construction Phase-2 succeeding Phase-1. The Contractors are required to comply with the employer's requirements on safety, health and environment stipulated in the manual to ensure that adequate precautions are taken to avoid accidents, occupational illness and harmful effects on

the environment during construction. The Contractors are requested to develop their Site SHE Plans to satisfy the required safety and health standards in the manual. The manual includes:

- Duties of the Contractors for safety, health and environment
- Safety training and promotion
- Safety inspections and follow up action
- Contractor's site safety committees
- Reporting of accidents, investigation and accident statistics
- Hazard identification and risk assessment, and emergency preparedness plans
- Industrial health and welfare
- Safety instructions for each category of works involving safety risks

A set of standardized forms for the Contractor to use when reporting to the Employer is provided in the manual.

The manual requires the full cooperation of the Contractors, sub-contractors and the persons employed by them for securing safe, healthy places of works. It also requires that the responsibility shall be clearly detailed in the Contractor's Site SHE Plan from the level of the most senior manager downward. The Contractors and sub-contractors are responsible for complying with all statutory and contractual requirements on construction safety and health.

Fines are levied against the Contractors who do not comply with the requirements of the manual.

All contractors are required to get certificates of OHSAS18001 and ISO14001 as mandatory requirement of the Contract.

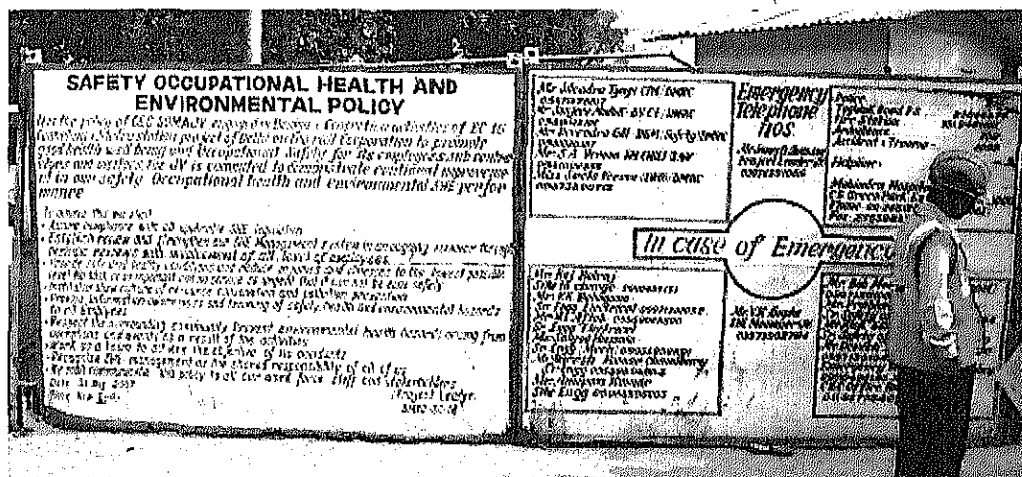
(2) Interview with DMRC

The following are main points the SAPROF team got through an interview:

- 1) The SHE manual is a part of the contract.
- 2) The primary role of DMRC is to monitor compliance of provisions under SHE. Every 2-3 weeks safety meetings are held corridor wise to discuss compliance of various rules and regulations regarding safety, health and environment.
- 3) There are various authorities to monitor and ensure compliance of Labour Safety & Health as well as Environmental regulations. DMRC has various authorities viz., a safety officer designated as Deputy (Dy.) General Manager (Safety), and two General Consultants, with a team of officers. These GCs work independently and have powers to stop work at site or impose fine on the Contractor if anything is found lacking with regards to compliance of Labour Safety and Health Regulations. Similar powers rest with the Dy. General Manager (Safety) of DMRC.
- 4) As per the conditions of DMRC's contracts, each contractor is to have its own Safety officer to monitor safety and health of the workers such as provision of safe drinking water helmets, safety gears, urinals and toilets, rest rooms, crèche (for the use of children of female workers). He also ensures that the workers get minimum wages as prescribed under the rules. The safety organizations of the Contractors include environmental officers, occupational health experts, barricading managers etc. Large number of experts in the field is working at construction sites. Safety bulletins are also circulated to site and other engineers every month.
- 5) DMRC has taken a unique step by creating a welfare fund to help victims of accident. Under this scheme whenever there is some accident at the construction site Rs. 1 lakh (=Rs. One Hundred Thousand) is taken from the Contractor to be credited to this fund. DMRC also contributes Rs. 1 lakh. Besides another Rs. 5 lakhs are taken from the Contractor as

penalty if it is found that the accident has occurred due to the negligence of the Contractor.

- 6) The final compensation to be paid in case of the accident is decided by a committee of officers of DMRC and the Contractor. Under this scheme the maximum compensation which can be given to the family of the workers is Rs. 7 lakhs. This is in addition to the compensation paid under Workmen Compensation Act of the Govt. of India.
- 7) For the welfare of the labour, there is yet another fund maintained by Government of Delhi. This fund is known as Delhi Construction and Building Workers' Welfare Fund. Under its provision 1% of the total value of the contract (Civil & Electrical) is taken from the Contractor and credited to this fund. So far DMRC has contributed Rs. 30 crores (Rs. Three Hundred Million) to this fund.
- 8) Though DMRC lays emphasis on prevention of accidents but if there is any accident at the project site, DMRC ensures that the injured worker gets the best treatment in the best hospital and that the entire expenditure on the treatment is borne by the Contractor. Besides if there is grievous injury some amount in cash is also given to the family of the worker. In case of death Rs.50,000 are given immediately. Rest of the help is given after detailed enquiry.
- 9) For the prevention of HIV/AIDS among workers in particular migrant workers who are especially at risk for HIV/AIDS, DMRC assigns this job to a NGO who regularly visits the construction sites and educates the workers.



(Contractor's SHE Policy and Contact Addresses in Case of Emergency on Notice Board on Road)

Source: Photo taken by SAPROF Study Team

(3) Interview with IRCON International Ltd.

IRCON is a central public sector enterprise as a government company in installing or maintaining railways and also in executing railway projects for private sector.

The following are main points the SAPROF team got through an interview with IRCON officer:

- 1) IRCON is a commercial organization and is executing different type of projects. Also the type and nature of the projects being executed is different for each other. Therefore the requirement of safety and health regulations are also different for each project. IRCON has a Corporate Safety Manual. To ensure implementation of the guidelines in the manual, IRCON has a system of Internal Quality Audit wherein safety aspects are also checked.
- 2) Regular awareness programs are arranged for IRCON officers working at sites. IRCON have laid down certain guidelines to be followed by sub-contractors such as implementation of instructions in the project safety manual, provisions of helmets, goggles, safety gears,

barricading etc. It is ensured that a list of hospitals along with telephone numbers and a vehicle are always kept available at the project site for use in case of emergency.

- 3) IRCON have recently compiled it own SHE manual which is used as a guideline according to the requirements of the clients.
- 4) Relevant IRCON manuals are for internal circulation only and cannot be available to the SAPROF team.

(4) Overseas Construction Association of Japan in Delhi

The following are main points the SAPROF team got through an interview with Overseas Construction Association of Japan in Delhi:

- 1) Construction accidents often get into the papers. Safety regulations seem to be not always observed.
- 2) Turnovers of construction companies have been increasing owing to the recent construction boom. Safety managements in construction fields seem to have been under improvement in Delhi areas.
- 3) Most of labours in Delhi are migrant workers. Labour camps with fence, water supply and toilet facilities are provided at most of major construction sites in Delhi areas.
- 4) Employment of children below 14 years of age is prohibited in construction industry. It seems that this is well observed in Delhi areas.
- 5) Due to the recent construction boom in the Middle East, skilled labours are in short in India.

4.2.3 DFCCIL Manual for Occupational Safety and Health

Adhering to the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) ACT, 1996 and Central Rules, 1998, DFCCIL included his SHE (safety, health and environment) manual in tender documents in July 2008 for contracts of civil works for a part of the DFC eastern corridor and a part of the western corridor. The construction works of these tenders are yet to start.

The Contractors are required to develop their Site SHE Plans to satisfy the required safety and health standards in the SHE manual.

The manual comprises of 5 parts;

Part 1: SHE Management

Purpose and objective of the manual, Relevant laws and regulations, SHE targets/goals, Requirements on the contractor's SHE policy and plan, Designer's role, Requirements on the contractor's SHE organization, Terms of reference and constituent members of the contractor's SHE committee and frequency of holding committee meetings, Issuing ID card and SHE orientation at first day, Procedure and requirements on SHE training, Procedure of SHE inspection and audit, SHE communication, SHE documentation, Accident report and investigation, Emergency plan, etc.

Part 2: Safety

The contractor's responsibility for risk avoidance, manner and method of safety assurance, requirements of facilities/equipment/materials for safety at work, safety instructions for particular works covering 24 items such as housekeeping, working at height, overhead protection, lifting appliances, launching operation, construction machinery, site electricity, fire protection and fighting, work adjacent to live railways,

etc.

Part 3: Occupational Health and Welfare

The contractor's obligations for medical examination of his employees, requirements of medical facilities at work, HIV/AIDS prevention and control, prevention of mosquito breeding, measures to prevent excessive noise and vibration, provision of ventilation and illumination, control of use of radio active substances and apparatus, requirements of welfare measures such as latrine and urinal accommodation, canteen, arrangement for serving tea and refreshment, supply of drinking water, labour accommodation and crèches, etc.

Part 4: Environmental Management

Precautions to minimize fugitive dust emissions, precautions to avoid water pollution, landscaping and greenery, permission of felling trees, waste management, etc.

Part 5: Penalty and Award

Amounts deductible from the contract to recover loss/damage suffered by employer due to the contractor's violation (27 items), conditions of stoppage of work, categories to be considered for awards

It is stipulated that the manual shall be read together with OHSAS 18001, Occupational Health and Safety Assessment System and ISO 14001 Environmental Management Systems. The manual requires that every contractor shall aim to achieve certifications of OHSAS18001 and ISO14001 during the currency of the contract.

For HIV/AIDS prevention and control, the manual stipulates that the Contractors shall adopt DFCCIL Policy on "HIV/AIDS Prevention and Control for Workmen Engaged by the Contractors". The policy consists of four components:

- i) Creating awareness about HIV and AIDS among workers
- ii) Institutional capacity building by training, establishing linkages for diagnosis and treatment of affected workers, effective monitoring of implementation and documentation
- iii) Establishing peer educators
- iv) Promotion of social marketing of condoms

DFCCIL engages a professional agency for implementing the policy and communicating the Contractors. The Contractors are required to extend necessary support to the agency for implementing the policy. It is also the requirement that the Contractor identifies peer educators (1 for every 100 workers). They serve after training by the professional agency as the focal point for any information, education and awareness campaign among the workmen. They are paid a monthly honorarium by DFCCIL for rendering their services in addition to their regular services. The above policy and the manner of prevention and control of HIV/AIDS are similar to those applied by DMRC which are described in Corporate Responses to HIV/AIDS, Case Studies from India, The World Bank, 2007.

4.2.4 Framework for Enforcement of Occupational Safety and Health for DFC

(1) Laws and Regulations

Major laws and regulations pertinent to workers safety, health and welfare in construction industry are presented in Table 4.2-1. The Contract should require the Contractor that he shall comply fully with the laws and regulations for workers' safety, health and welfare. A list

of relevant laws and regulations should be attached to the Tender documents and bound in the Contract.

(2) Requirements to be incorporated in the Contract

The Contractor shall be fully responsible for the prevention of unsafe or unhealthy conditions and practices and for the promotion of safety and healthy working practices at the Site. The Contractor is the main player to undertake the task of the safety and health in executing the works at site.

(3) DFCCIL Policy and Manual for Safety and Health

DFCCIL shall establish his safety policy in respect of workers' safety and health in construction and notify it in the Tender Documents. The DFCCIL manual for safety and health prepared to achieve the policy shall be included in the Tender Documents for the Tenderers to be aware of the DFCCIL requirements for safety and health as well as to allow for the cost in their Tenders for the budget to achieve the safety and health requirements.

(4) Contractor's Policy and Plan for Safety and Health

Each Tenderer shall submit with his Tender, as a commitment, statements of his policy and managements he proposes to adopt in accordance with the law/regulations and the DFCCIL policy and manual for safety and health and to fulfil his obligations in regard to safety and health conditions. The statements of the Tenderer's policy and management should include:

- i) Intentions and commitment regarding safety and health
- ii) Arrangement of safety and health organization including Safety Committee to carry out the policy
- iii) Responsibilities of officers in the organization
- iv) Methods for assessment of safety risks involved in construction of each structure and remedial measures
- v) Arrangements for training of workers, supervisors or other persons involved in the work
- vi) Arrangements of welfare facilities for workers
- vii) Arrangements for prevention and control of HIV/AIDS
- viii) Procedures for reporting and investigating accidents or dangerous occurrences.
- ix) Other arrangements for making the policy effective

The Tenderer's statements are one of the items subject to the tender evaluation.

The Contractor shall, immediately after the Contract, prepare comprehensive site specific plans to satisfy the required safety and health standards in the Contract and the DFCCIL manual. The plans shall include detailed policy, procedures, regulations and measures for safety and health including organization, responsibilities of each member of the organization, safe work procedures and instructions for each category of the construction works, arrangement for prevention and control of HIV/AIDS. The plans are subject to the DFCCIL approval.

(5) Design and Method Statement

Under the responsibilities of designers, the design of permanent structures as well as temporary structures should be assessed in terms of risks against safety and health involved in

construction of the structures. Method statements for construction should include measures and methods for dealing with the risks in construction. The method statements are subject to the DFCCIL approval.

(6) Safety and Health on Site

DFCCIL nominates his Chief Safety Officer who is responsible for monitoring safety and health in executing the works to ensure the safe and healthy working conditions as well as the satisfaction of the stakeholders and the general public.

The Engineer (or Employer's Representative) provides experts to work exclusively for monitoring the Contractors' supervisory on safety and health and their manners and methods for safety and health in construction at work places. They should be authorized to instruct the Contractors to remedy, take measures, impose fines or stop works at site if the works endanger safety and health.

The Contractor appoints his safety and health officers and establishes the Contractor's safety and health organization. Work experience and qualification of each officer should be submitted to DFCCIL for his approval to authorize the officer to work. The Contractor establishes site Safety Committee represented by the Contractor's management, safety and health officers and representatives of sub-contractor, labour contractor and workers. The main functions of the Committee include:

- i) to monitor the adequacy of the Contractor's Safety and Health Plan and ensure its implementation
- ii) to review site safety training
- iii) to review the Contractor's reports (regular safety report, safety inspection report, accident report)
- iv) to identify probable causes of accident and unsafe practices/conditions and to suggest remedial measures
- v) to promote safety and health on site
- vi) to reflect workers' opinions/views on safety and health
- vii) to hold safety committee meeting regularly
- viii) to conduct site inspection before committee meeting
- ix) to take follow up actions of minutes of committee meeting

The DFCCIL officers and the Engineer's experts attend the committee meeting as their representatives.

Minutes of every committee meeting is displayed on a notice board.

Taking account of the assessment results of safety risk involved in structures or the current degree of achievement in safety and health conditions, the Contractor establishes specific safety targets and measures for the improvement to be achieved within a given time.

It is recommended that the DFCCIL officers in charge of safety and health should be trained under a training course of JICA or National Safety Council of India for improving their ability in managements of safety and health control.

(7) Inspection and Audit

Site inspections for monitoring compliance of Safety and Health should be conducted on a periodical basis by the Safety Committee, safety officers or construction supervisor as appropriate. The Contractor, DFCCIL and the Engineer participate in the inspection conducted by the Safety Committee. Inspection records and reports are kept by the Committee. In addition to the above internal inspection, Government Labour Department conducts mandatory inspection. Stakeholders inspect safety and health conditions whenever they deem it necessary.

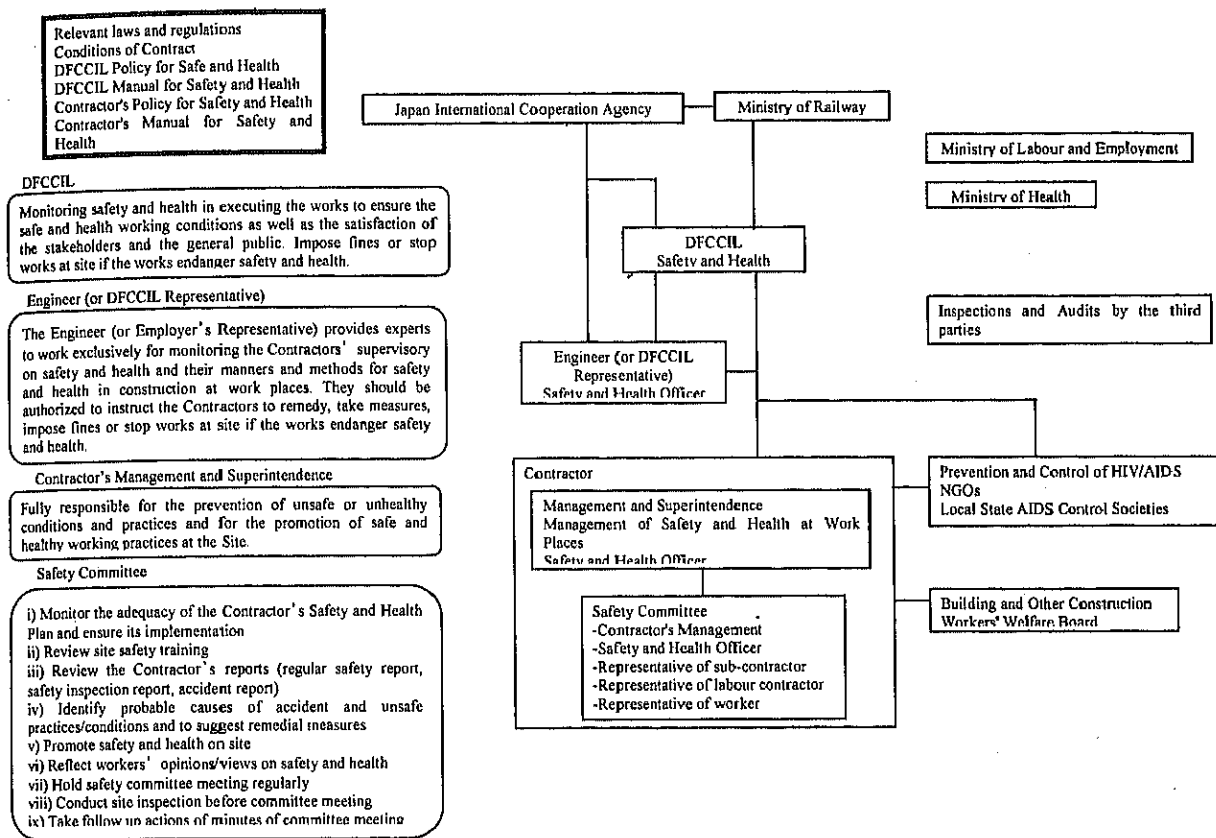
Audit is to assess on a periodic basis the degree of compliance with the requirements of the Contractor's site Plan for safety and health, for which a team consists of the Contractor, DFCCIL and the Engineer. The results of the audit are compiled in a report and sent to all parties concerned. Separately from the internal audits, external audits by National Safety Council or qualified auditors are conducted according to the guidelines of ISO.

The results of the inspections and audits should be reflected in improvement of the safety and health conditions.

(8) Prevention and Control of HIV/AIDS

HIV/AIDS prevention and control for the Contractors' workers is included in the DFCCIL manual bound in the Contract, for ensuring sustainable commitment and finance. Migrant workers are particularly at high-risk of contracting HIV. The management for HIV/AIDS prevention and control should be in accordance with the DFCCIL policy and in partnership with local NGOs and local State AIDS Control Societies who have a role in steering the fight against HIV/AIDS. The Contractor is required to extend necessary organizational supports to the local NGOs and the local State AIDS Control Society for the effective implementation of the DFCCIL policy.

Organizations and roles in safety and health for DFC are shown in Figure 4-1.



Source: Prepared by SAPROF Study Team

Figure 4-1 Organizations and Roles involved in Safety and Health Control

CHAPTER 5 CONCLUSION AND RECOMMENDATIONS

The SAPROF Study Team concludes and recommends as follows of the Study, with particular attention on the information that need to be clarified for the smooth implementation of the coming JICA appraisal mission for the Project.

5.1 PROJECT PLANNING

5.1.1 Confirmation of Consistency Between Finalized FLS for Junction Stations

The Team appreciates that correction and reconfiguration of the layout were made to the Junction Station by DFCCIL according to the suggestion made by the SAPROF Study Team in August 2008. The SAPROF Team was provided with the information in series, and received the final batch of CAD plan of Marwar Junction in June 2009.

The SAPROF Study Team has learnt that new corrections were made to some of the Junction Stations, albeit details of the could not be confirmed. The SAPROF Team explained that the following points are to be confirmed further.

- 1) Tabulation of final version of the FLS with soft file name
- 2) Integrated CAD plans of FLS and Junction Station CAD drawings
- 3) Tabulation of land plans corresponding to 1) and 2) of above

5.1.2 Confirmation of Finalized GAD

The Study Team explained that the GAD for the following subjects are yet to be confirmed.

1) Important Bridges

The results of the hydrological model study for new important bridges over Sabarmati River should be reflected on the design, particularly in the optimization of the arrangement and distance between the piers, the intersecting angle of the bridge with the river, and determine the river training area of the river banks.

2) Rail flyovers, Major Bridges, and Minor Bridges

Standard structure design templates established by RDSO are utilized for design of rail flyover/major/minor bridges on IR railway infrastructure. The intersection angle of the bridge axis and the river flow/road crossing/rail crossing are set at a right angle to minimize the crossing distance. If the intersection angle is accepted to be less than a right angle, i.e. allowing a skewed arrangement in the design, would shorten the distance of the approach section for the crossing, cost savings of the earth works realizing. Flexibility in the application of the design templates are yet to be confirmed.

3) Reconstruction of ROBs

As was indicated in Section 2.6.2, the Study Team deduced that the ROB subject to reconstruction in the Phase-I section is only one near Amarpura Station. The quantity of ROBs subject to reconstruction in Phase-I is yet to be reconfirmed based on finalized .FLS drawings.

5.1.3 Confirmation of Base Data of the Preliminary Design

The SAPROF Study Team was provided with CAD drawings of FLS and junction stations, however, as was pointed out in the earlier sections of this report, topographical information, tabulation of benchmarks, reference points, and referential coordinate system was not available to verify the engineering soundness of the FLS alignment.

In the same context, the Study Team's observation is that base information used for engineering deliberation is sufficient. The Study Team view that major engineering base information be confirmed since they are the parameters that formulated the design, and any deficiencies may stall or even hamper the design activities of the Engineering Consultant in the subsequent stage. Such base information that need to be confirmed are, but not limited to:

- 1) geotechnical investigation report including data of lab tests
- 2) design report for important/major bridges
- 3) hydrological study report at important bridges
- 4) tabulation of utilities crossing the FLS alignment (high tension power lines, water main, telecom trunk lines, sewer, irrigation canal, gas pipes, etc.)

5.1.4 Inland Container Depot

Since the location of the ICD is not fixed to date, environmental studies that would have substantiated the inclusion as one of the Project component could not be carried out.

The Study Team suggests that plans for ICD be deliberated and finalised by DFCCIL in the early stage of the Engineering Service stage, since its final location may affect the connectivity and configuration of the adjoining junction station.

5.1.5 Loco Depot and Maintenance Depot

Due to shortage of information on DFC, during the study period, the maintenance requirement and size of facility of the loco depot and maintenance depot could not be determined. The Study Team suggests that the location and size for the depot and maintenance facilities be planned and finalised, by MOR/DFCCIL, in conjunction to the freight transport plan as early as possible.

5.1.6 Substation

The SAPROF Study Team view that OHE depot and tower shed wagons be located in the premises of the substations, junction stations and crossing stations to consolidate the facilities and achieve efficiency and economics.

The conceived location of the OHE depot and tower wagon station indicated in Table 2.9-3 should be reviewed to confirm its planned location is based on the finalized alignment.

5.2 ENVIRONMENTAL AND SOCIAL CONSIDERATIONS

5.2.1 Further Examination based on the EIA

(1) Detailed Examination of Mitigation Measures

As regard the mitigation measures proposed in the EIA report depending on the site condition and project features as well as impact evaluation at the time of EIA study, it is recommended that to mitigate concerned environmental and social impacts be examined in detail in further stage of the Project. For example, regarding the noise impact, location of sensitive receptors and houses which are located in the proximity of the DFC alignment should be confirmed in the field by using the latest information. In the case where such likely impact receptors are found, adequate mitigation measures should be examined, if it is necessary as result of impact evaluation.

(2) Detailed Examination of Environmental Management and Monitoring Plan

Based on the Environmental Management and Monitoring Plan (EMMP) proposed in the EIA report, detailed EMMP should be prepared in further stage of the Project, by examining latest project information, to implement EMMP adequately in the construction and operation stage. For this purpose, institutional setting for implementing the EMMP should also be included in the detailed examination.

5.2.2 Land Acquisition and Resettlement

(1) Sufficient Information Disclosure in the Land Acquisition Process

As mentioned in Section 3.5.3 in the draft final report of the SAPROF, it was found from the conducted PCM for RRP that many PAPs had no knowledge that the Notification 20A for the DFC Project has been issued and publicised. On the other hand, preparation of Notification 20E is underway for many locations along the proposed alignment for the DFC Project as per official procedure of the RAA 2008. Thus, implementation of the PCM for RRP was an important opportunity for the PAPs who attended the PCM to get this information. Adequate publicity should be given so that all PAPs know about proposed land acquisition and this Project.

Therefore, further information disclosure on the land acquisition process should be conducted immediately to cover such PAPs. In addition, it is suggested that in respect of some locations where objections to the land acquisition were raised strongly in the PCMs, further appropriate action should be taken by DFCCIL/MOR.

(2) Systematic Implementation of the Rehabilitation and Resettlement

In situations where the land acquisition process is progressed ahead even though PAPs have not been fully aware about the process, activities related to the resettlement such as preparation of RRP including implementation of the Baseline Survey and Census as per the NRRP 2007 should be taken up.

The Study Team suggests that if the gap between the land acquisition process and RRP preparation are minimized and clarified, the PAPs' consent towards the land acquisition and resettlement can be reinforced and would make administration of land acquisition and resettlement smoother. Therefore, it is recommended to prepare the RRP and disclose it to the PAPs as soon as possible.

(3) Implementation of the Baseline Survey and Census as per NRRP 2007

Although Socio-economic Survey for more than 20% of PAPs and Project-Affected Structure Identification Survey for all affected structure have been conducted under the SAPROF Study, these surveys were conducted based on part of results of FLS and other information available at the time of the surveys, since the Land Plan were not provided by MOR/DFCCIL, which is base information for the Notification 20A. Therefore, it is recommended the Baseline Survey and Census as per NRRP 2007 should be conducted as soon as possible based on latest information from FLS and Land Plan for the Notification 20A, since the results of survey will be used to prepare adequate and required assistance for the PAPs to be provided for by the Project.

(4) Secure of Compensation at Level of the Replacement Cost

Through preliminary hearing to the local people in the SAPROF, literature review, and comments from the participants of RRP-PCM, compensation rate under RAA 2008, which is calculated based on governmental market rate may be lower than actual market price to purchase lost assets to be acquired for the Project such as land and house at the same quantity and quality levels. To secure that the compensation rate is to be at the same level of the replacement cost, it is recommended that independent evaluator be hired by the Project to check if there is gap between governmental compensation rate and replacement cost. Further, in the case where gaps found is wide and can not be ignored from viewpoint of livelihood recovery, SAPROF Team suggests that necessary assistance should be examined and provided to such PAPs in addition to the provisions as per RAA 2008 and NRRP 2007.

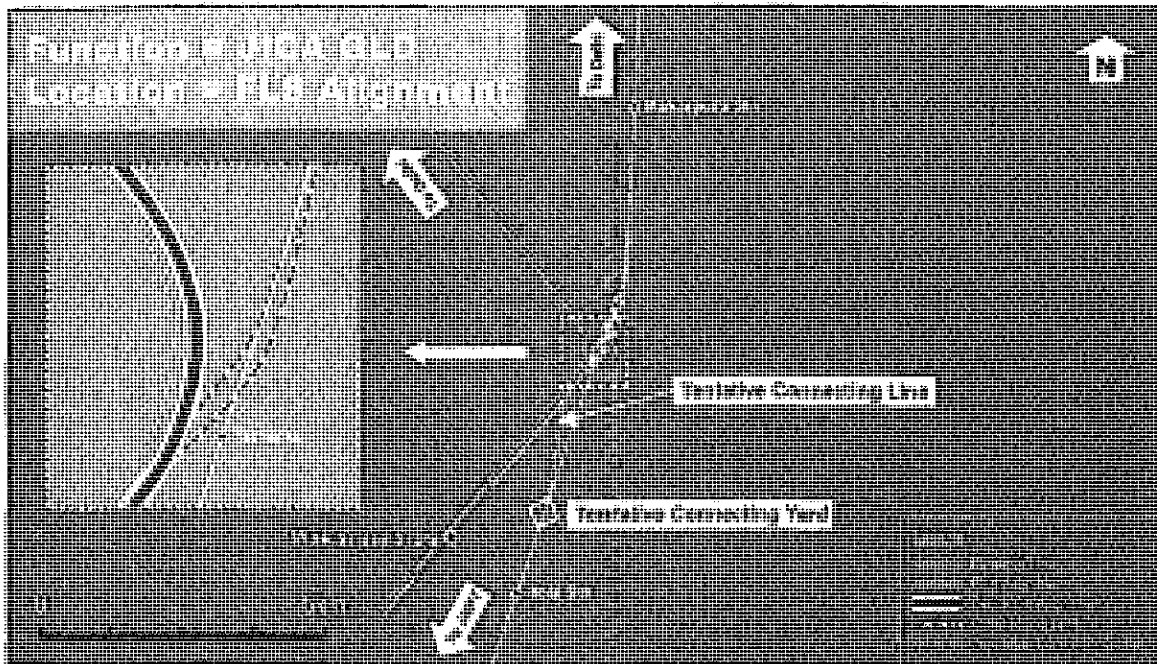
(5) Implementation of Timely Monitoring and Follow-up Assistance

In addition to provide adequate compensation and assistance in the land acquisition and relocation based on the RRP, SAPROF Team suggests that monitoring on situation of livelihood recovery for PAPs is necessary and in cases where undesirable situation is found for livelihood of the PAPs, additional assistance, especially during transition period of the resettlement may be considered. To implement adequate monitoring activity and provision of follow-up assistance, it is suggested that necessary institutional set-up be examined including preparation of detailed monitoring plan for the RRP.

ATTACHMENTS

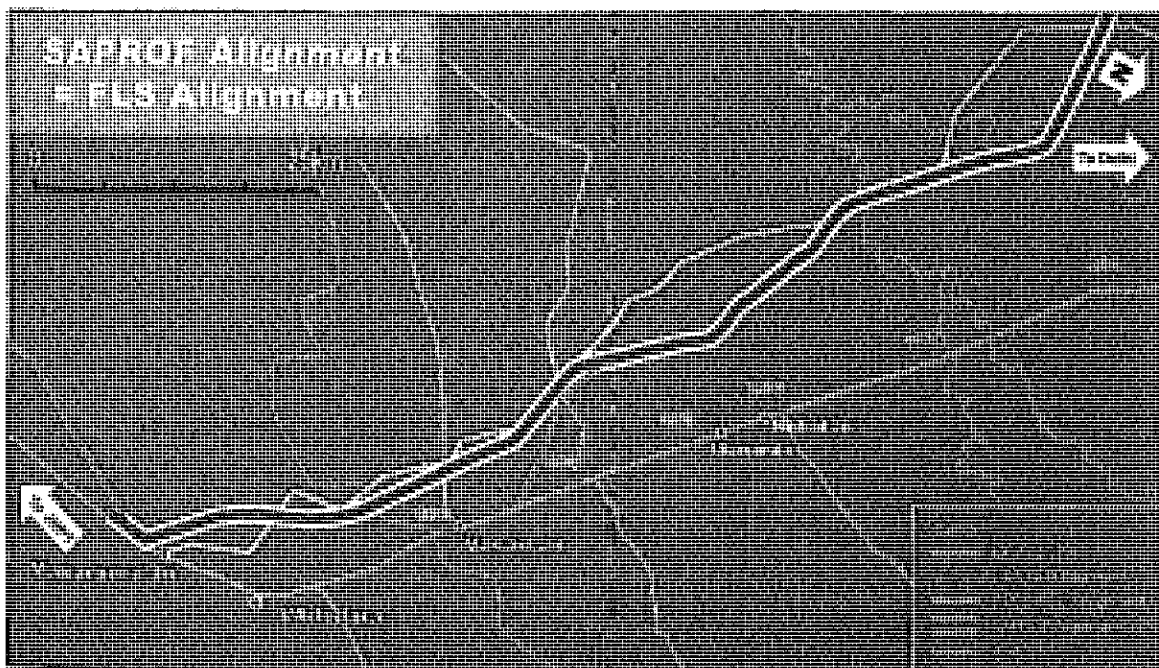
- Attachment-1 Deviations Identified in the FLS and Determined Alignment
 - Attachment-2 Deviations identified in Model Plans of Junction Station
 - Attachment-3 Result of Finalized Conceptual Design of Junction Station
 - Attachment-4 Terms of Reference of the SAPROF Study
 - Attachment-5 Referential Alignment Data Applied in the S-ESIMMS Site Study (Soft data)
 - Attachment-6 Alignment Data Applied in the S-ESIMMS Site Study
 - Attachment-7 Minute of Discussion of 30th July 2008
 - Attachment-8 Minute of Discussion of 28th August 2008
 - Attachment-9 Minute of Discussion of 24th September 2008
 - Attachment-10 Minute of Discussion of 31st October 2008
 - Attachment-11 Minute of Discussion of 21st January 2009
 - Attachment-12 List of FLS CAD Files Provided from DFCCIL
 - Attachment-13 Minute of Discussion of 30th November 2009
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Attachment-1 Deviations Identified in the FLS and Determined Alignment



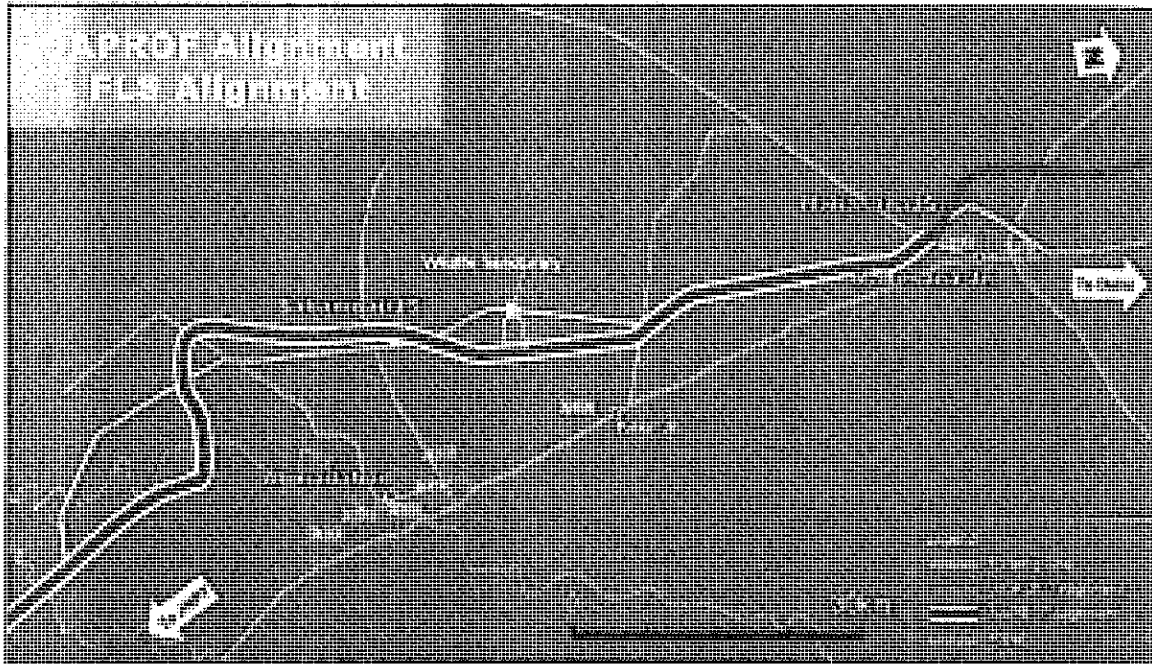
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-1 Makarpura JS



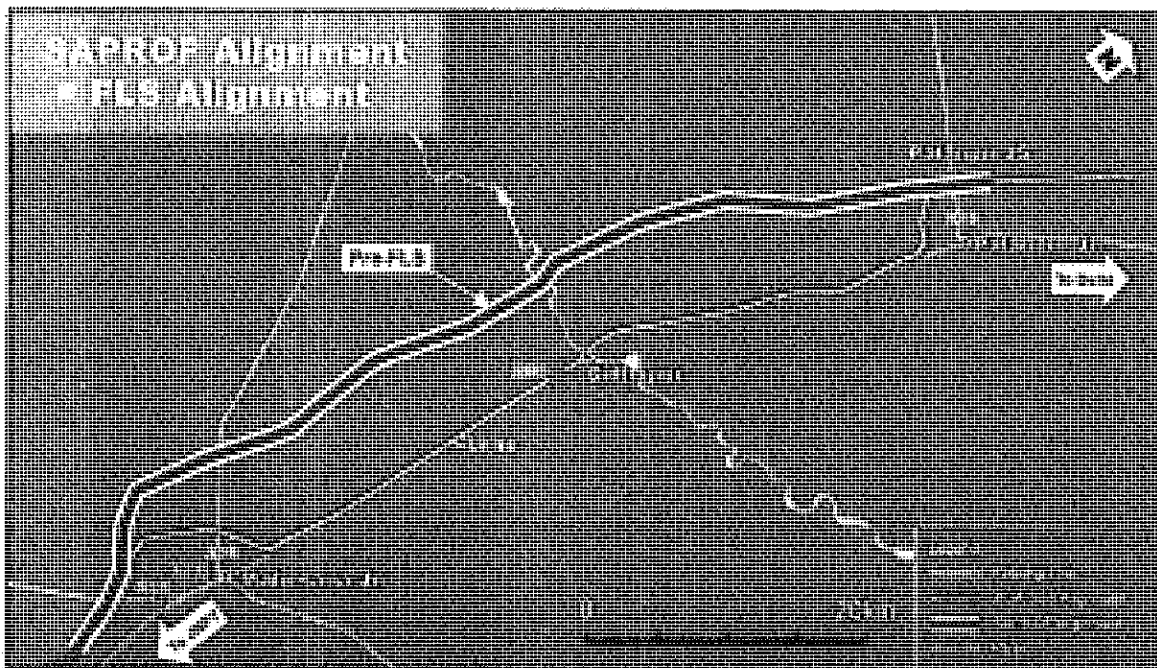
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-2 Vadodara-Mahesana Extensive Detour (1/2)



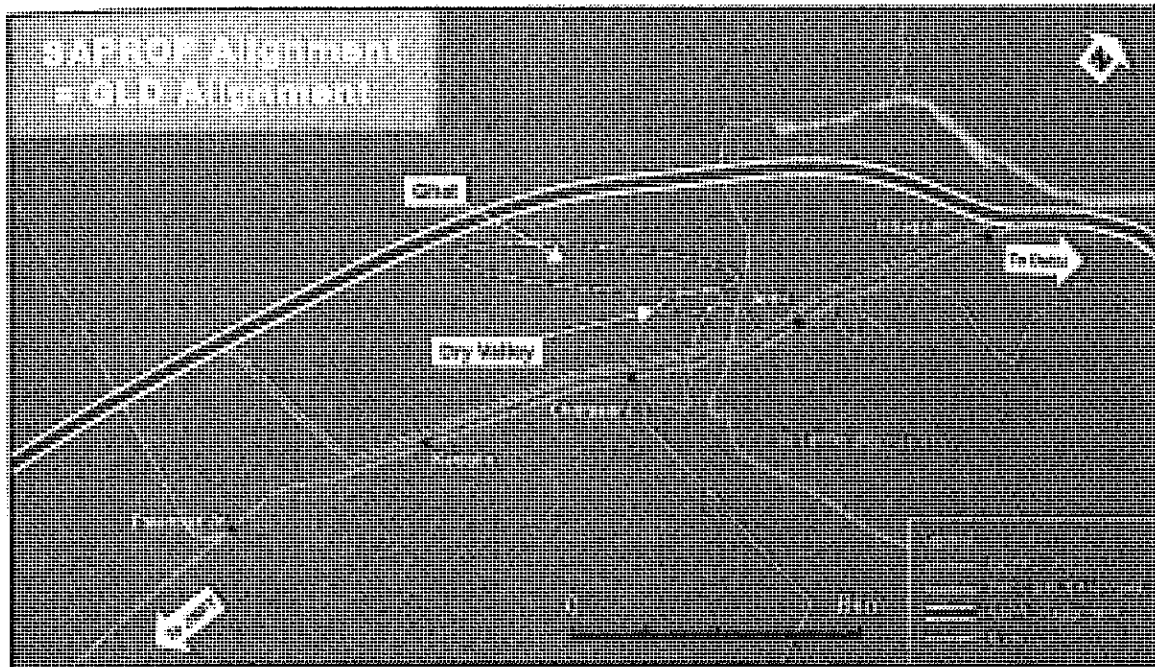
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-3 Vadodra-Mahesana Extensive Detour (2/2)



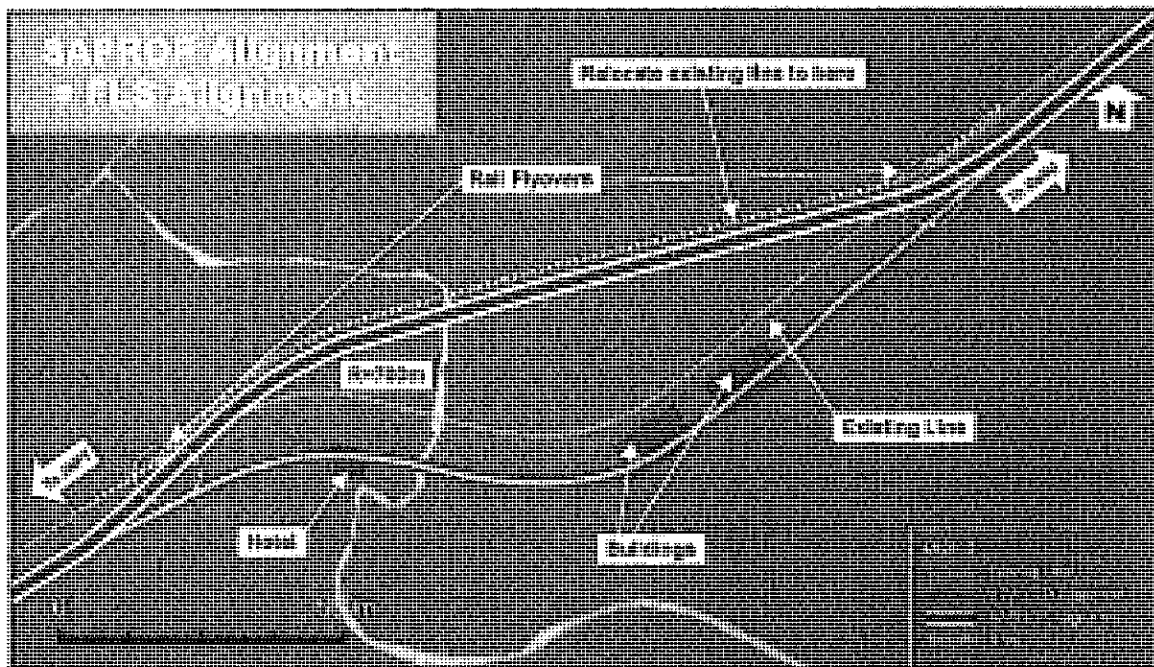
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-4 Mahesana-Palanpur Extensive Detour



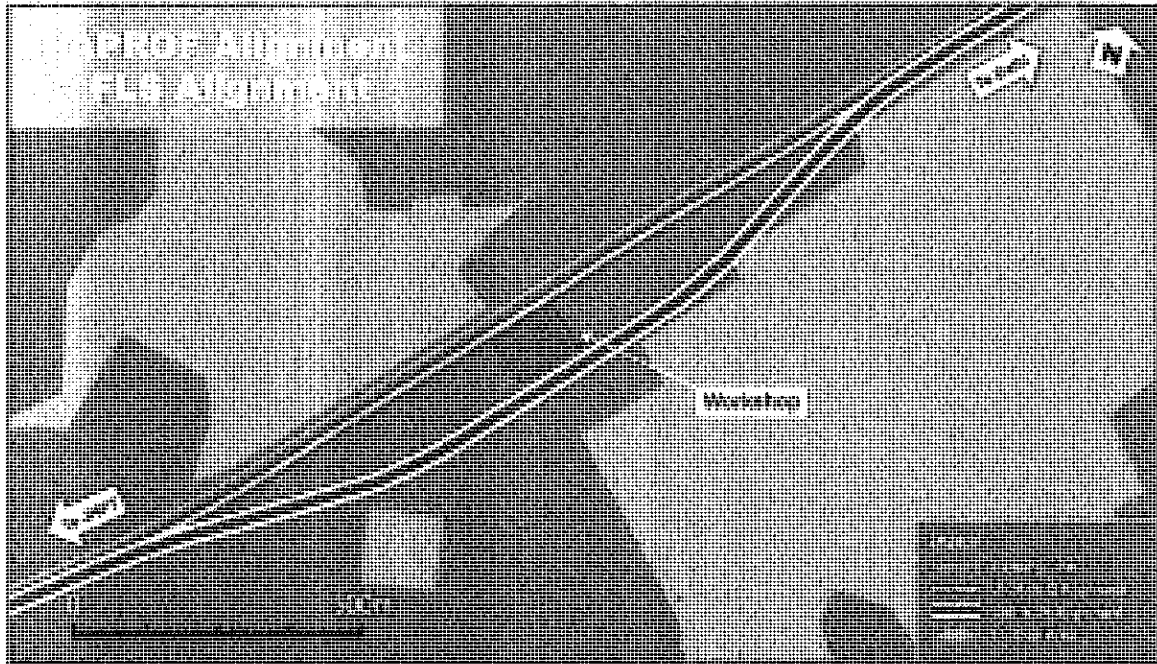
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-5 Palanpur-Iqbal Gadh Detour



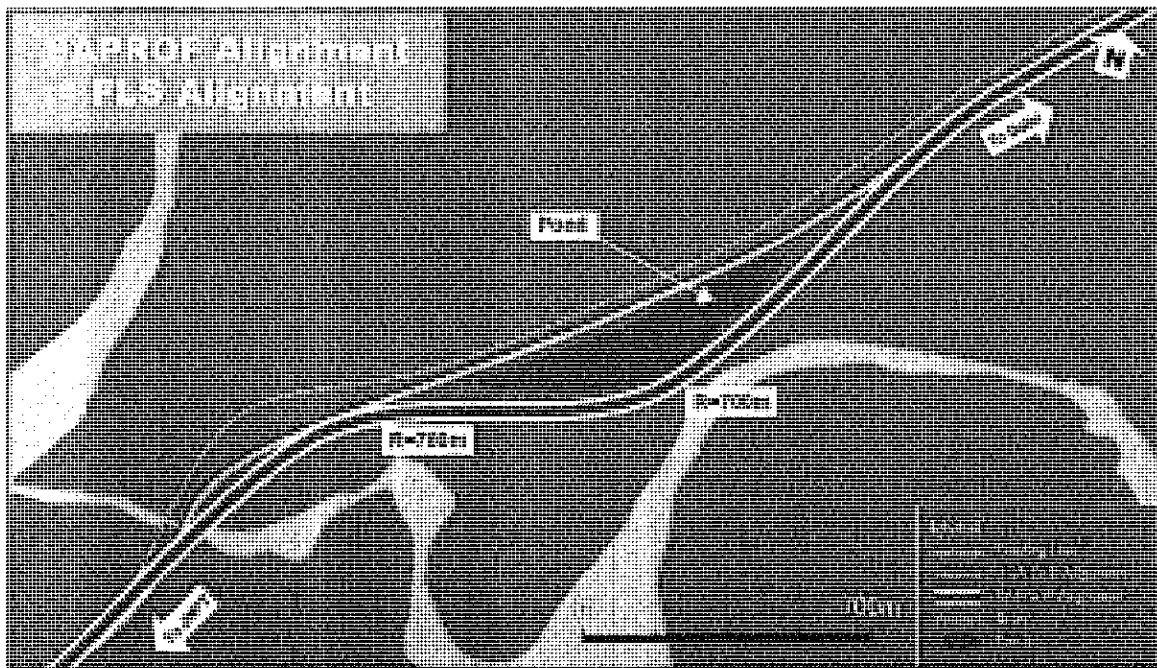
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-6 Maval Stn. Small Detour



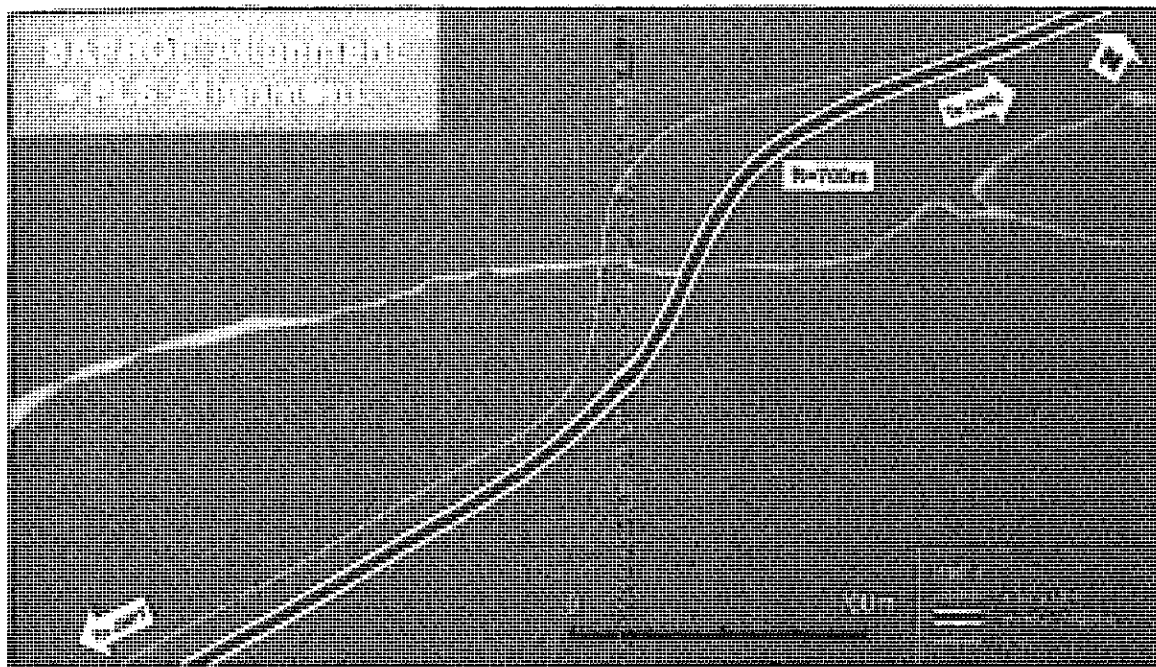
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-7 Abu Road Stn. Small Detour



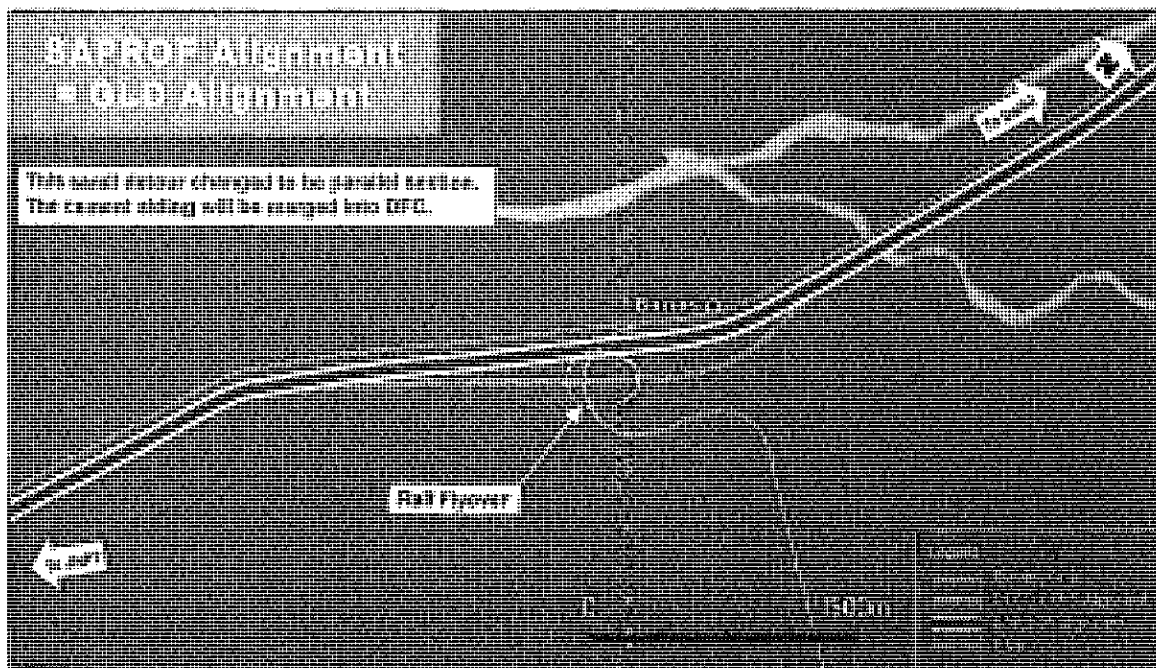
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-8 Morthala Stn. Small Detour



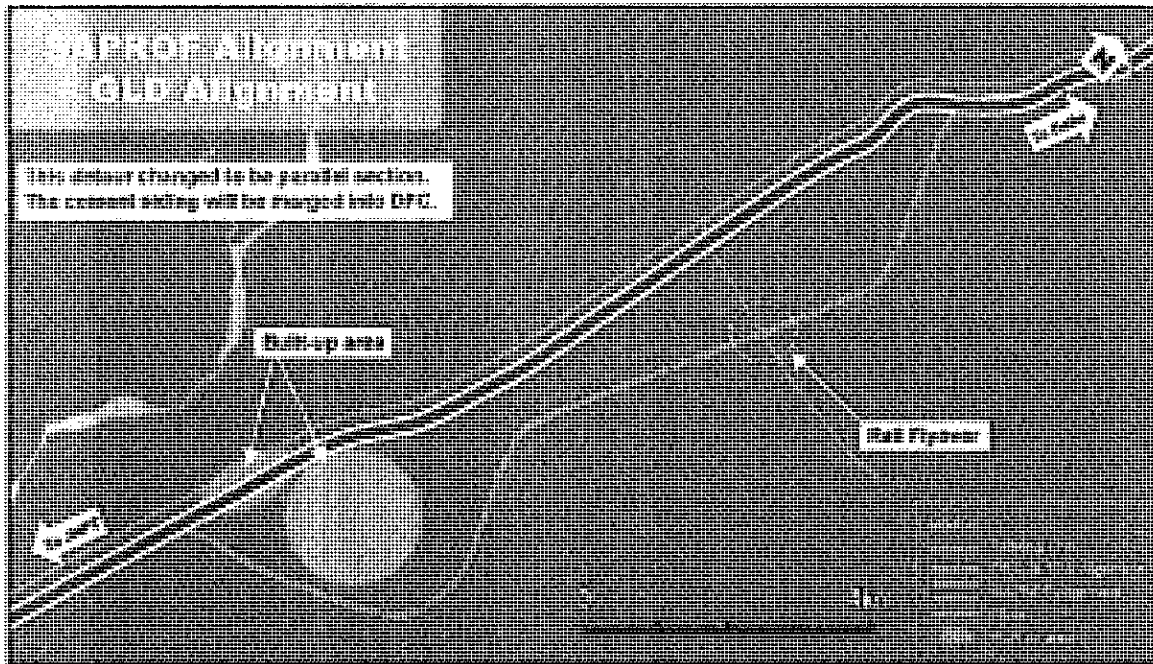
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-9 Kivarli Stn. Small Detour



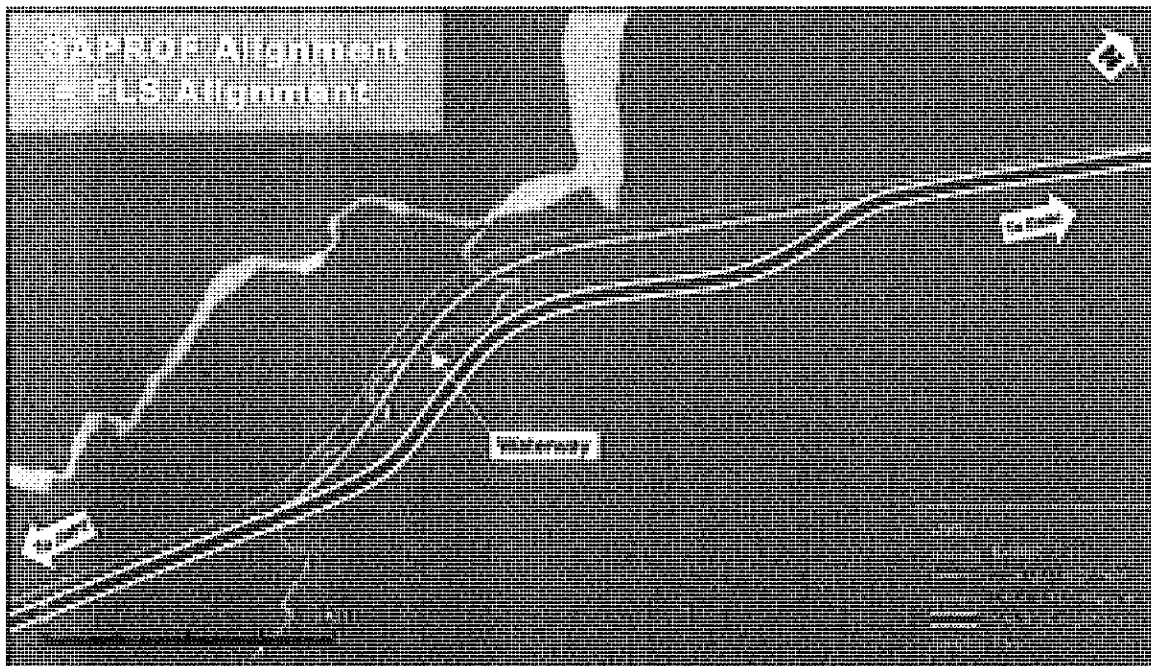
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-10 Banas Stn. Small Detour



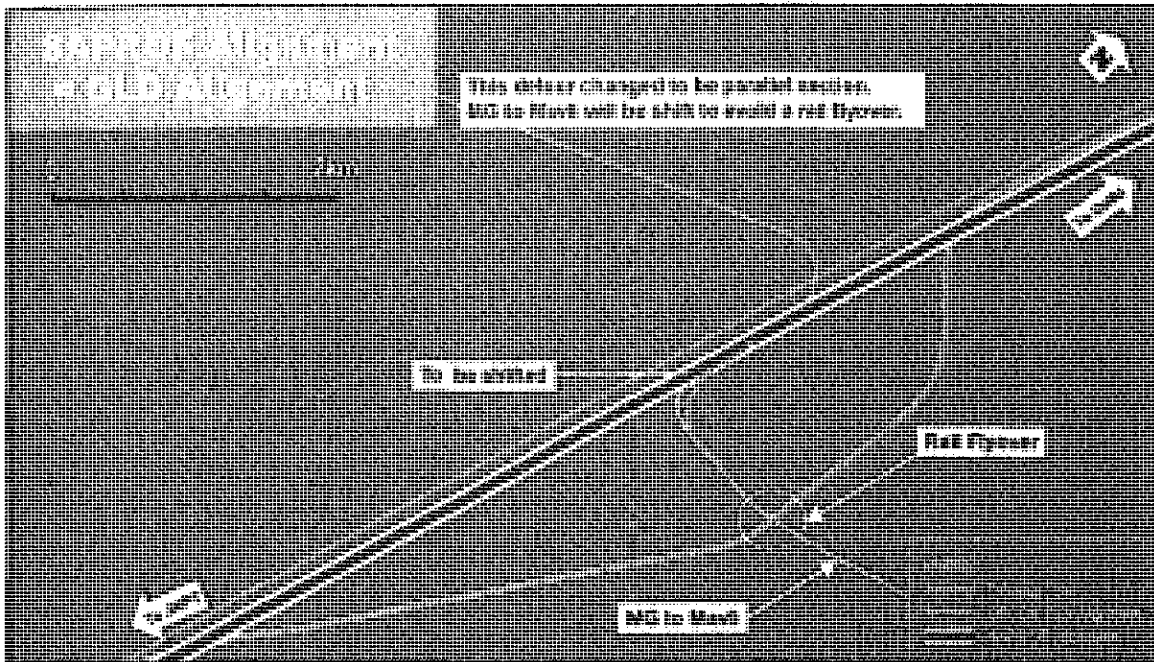
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-11 Shirohi Road Stn. Detour



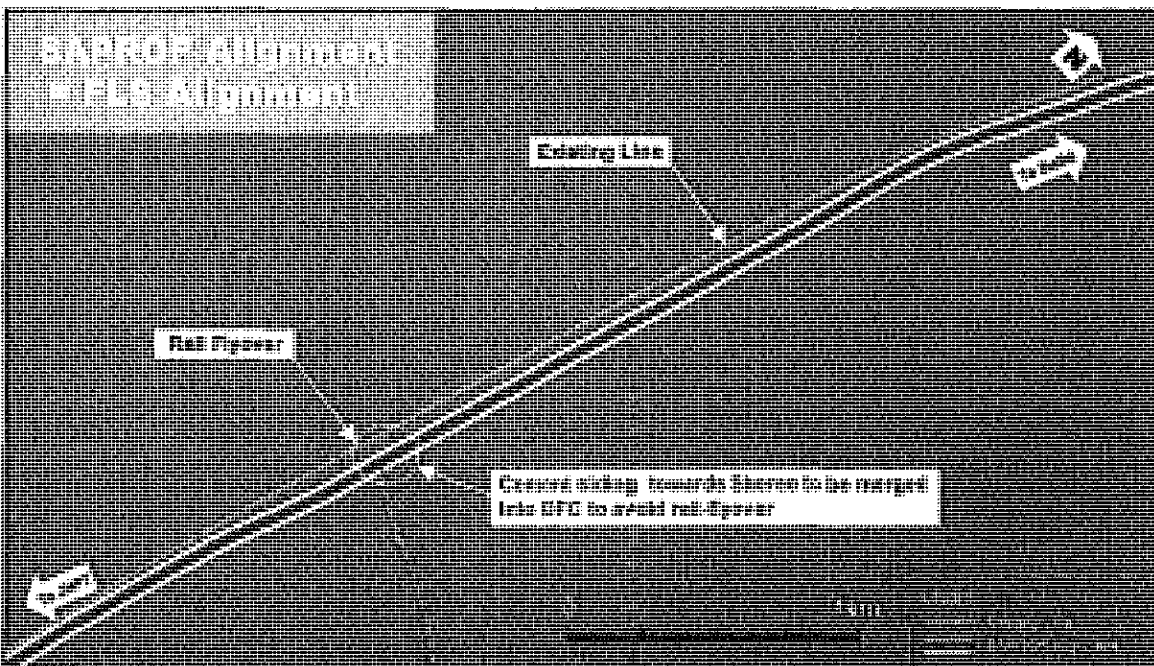
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-12 Jawai Bandh Stn. Small Detour



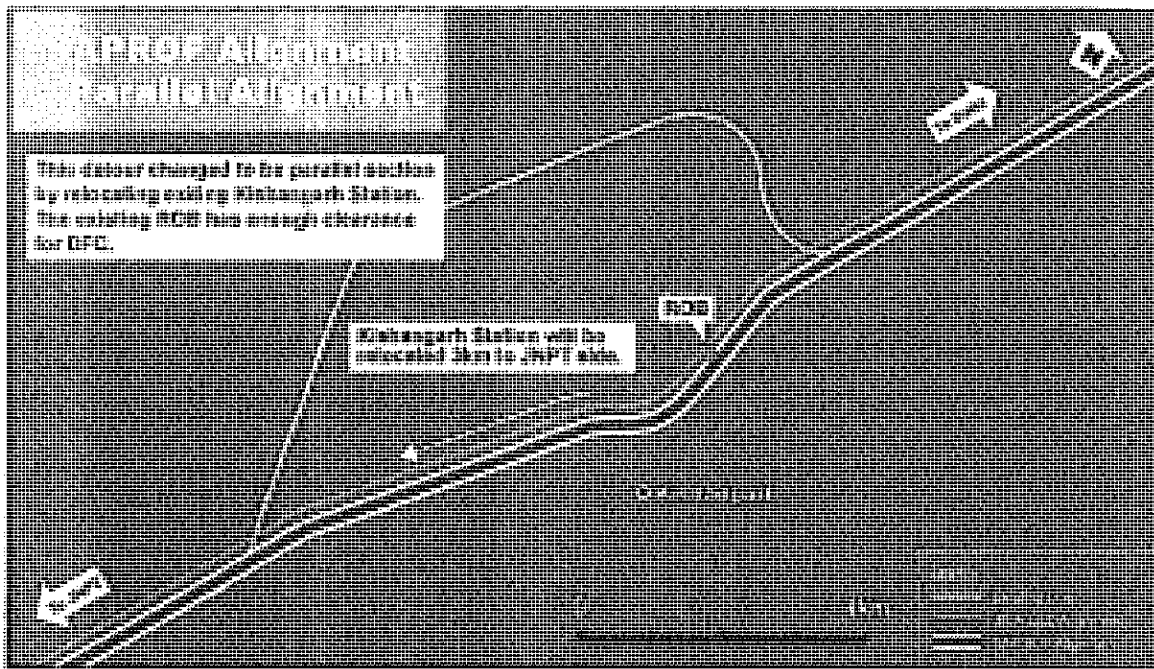
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-13 Marwar JS Detour



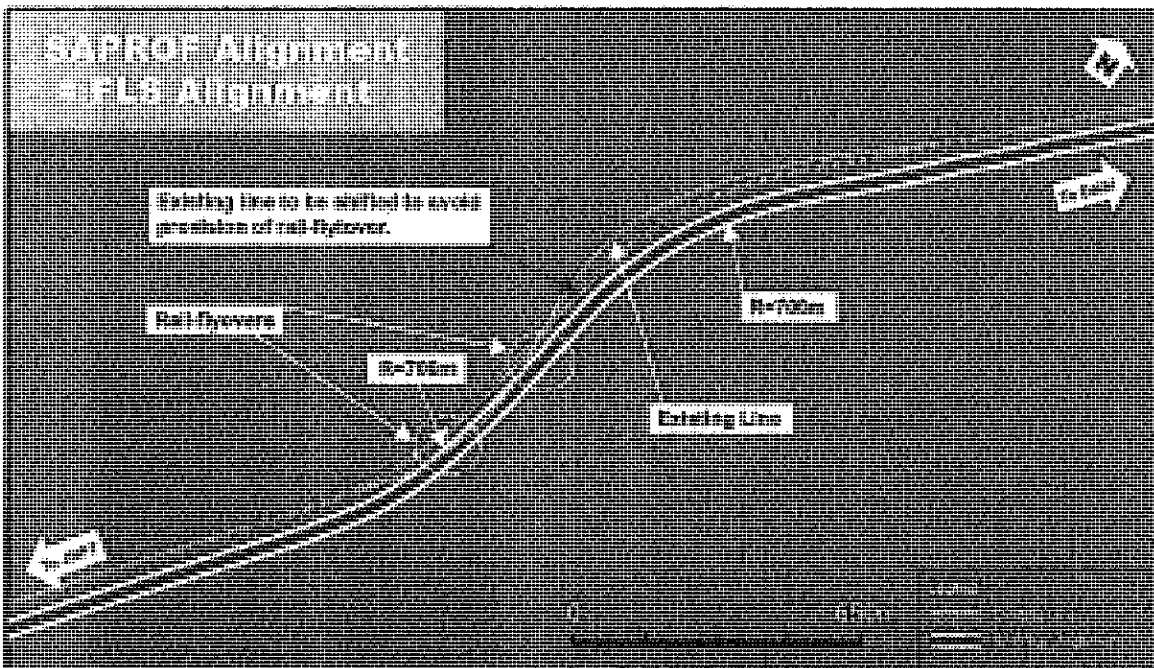
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-14 Bangurgram Stn.



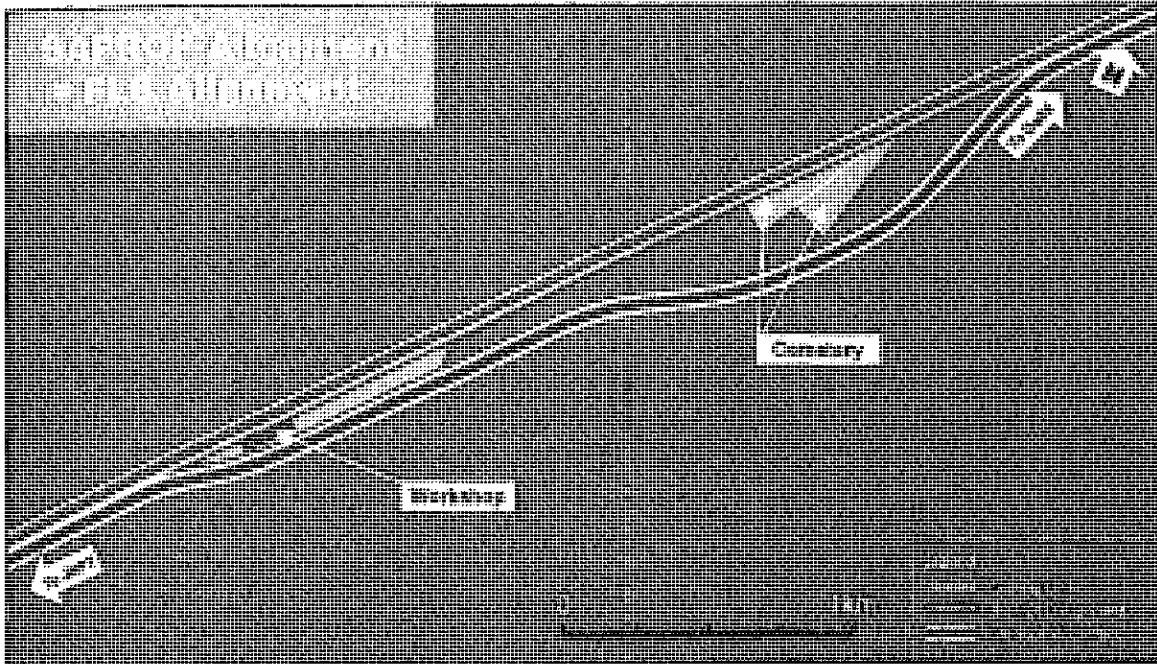
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-15 Kishangarh Stn. Detour



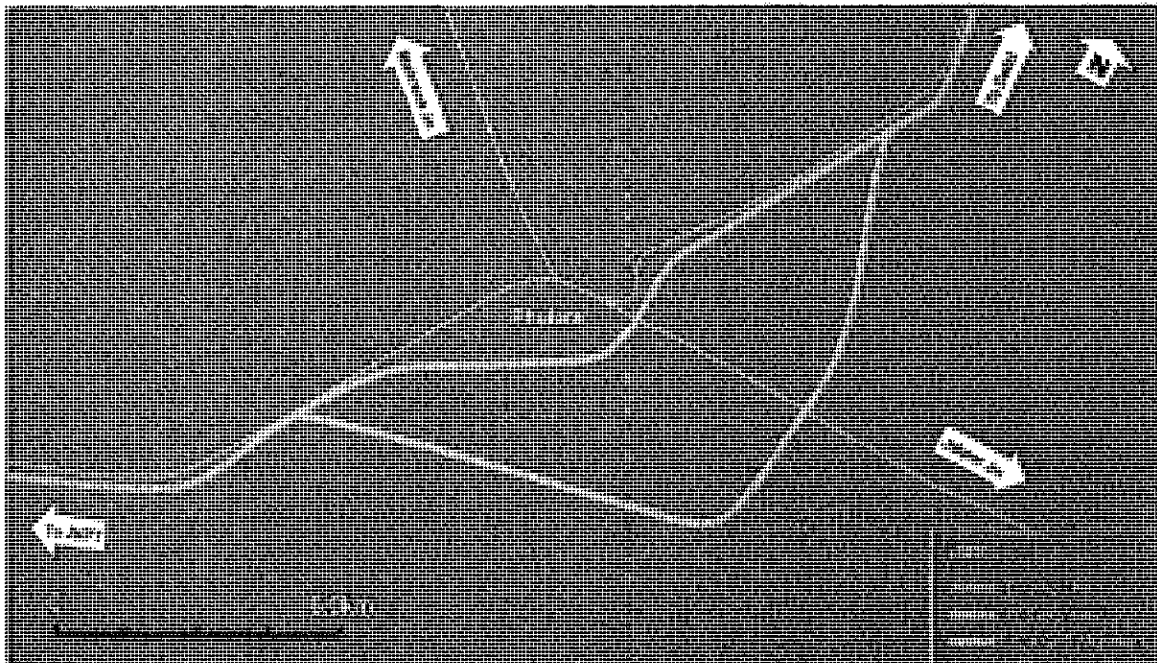
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-16 Near Makrera Stn.



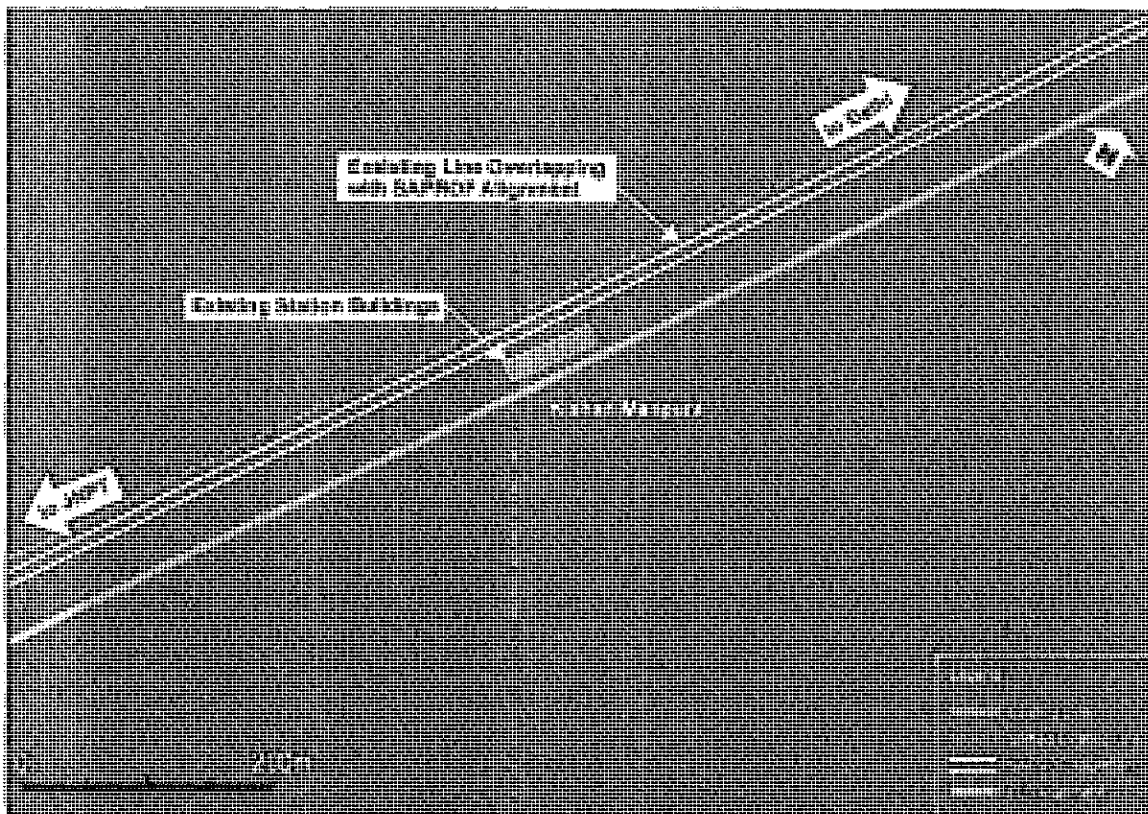
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-17 Madar Stn. Small Detour



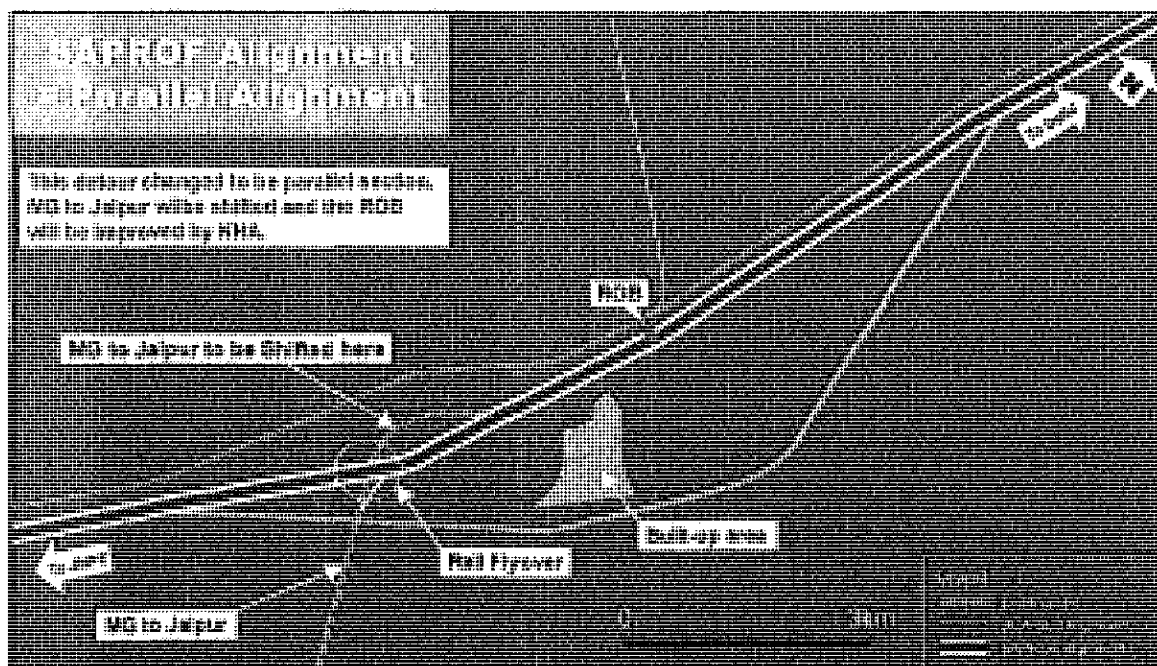
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-18 Phulera JS Detour



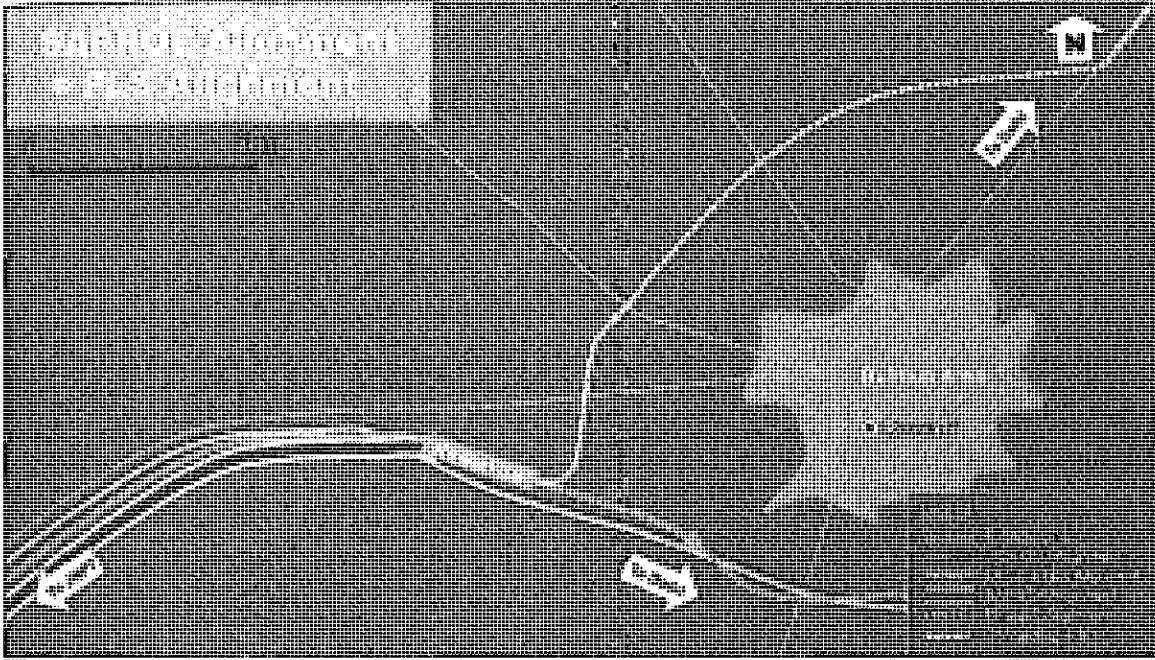
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-19 Kishan Manpura Stn.



Source: Based on information from DFCCIL and JICA Feasibility Study Report

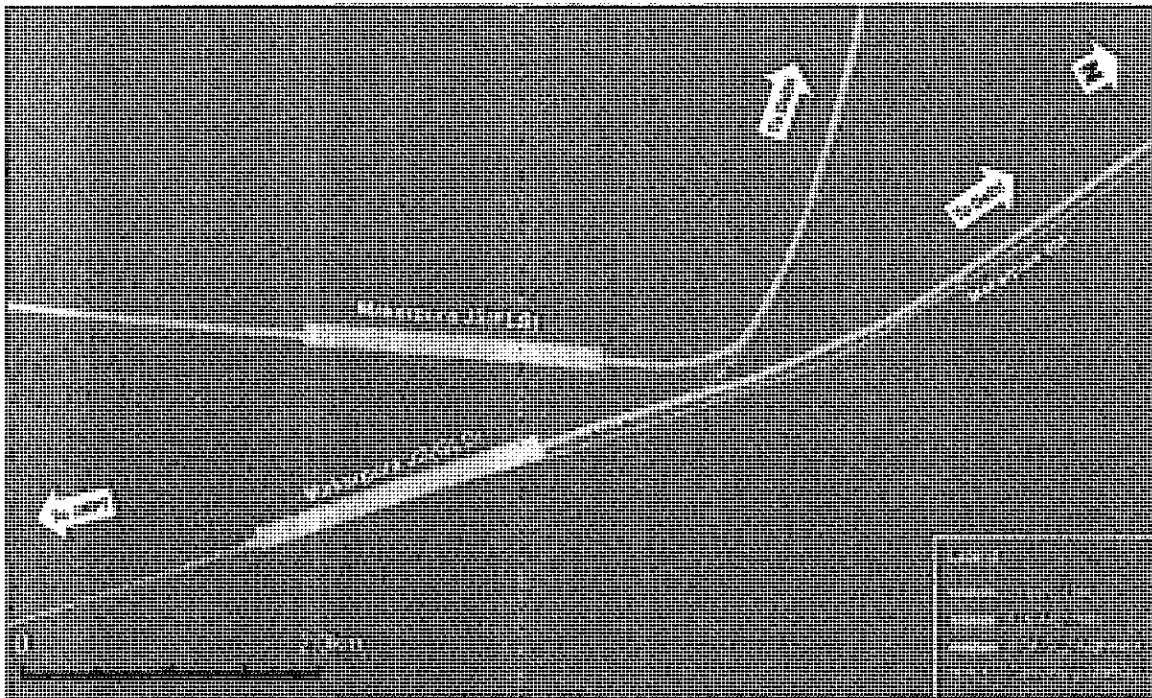
Figure-20 Ringas Stn.



Source: Based on information from DFCCIL and JICA Feasibility Study Report,

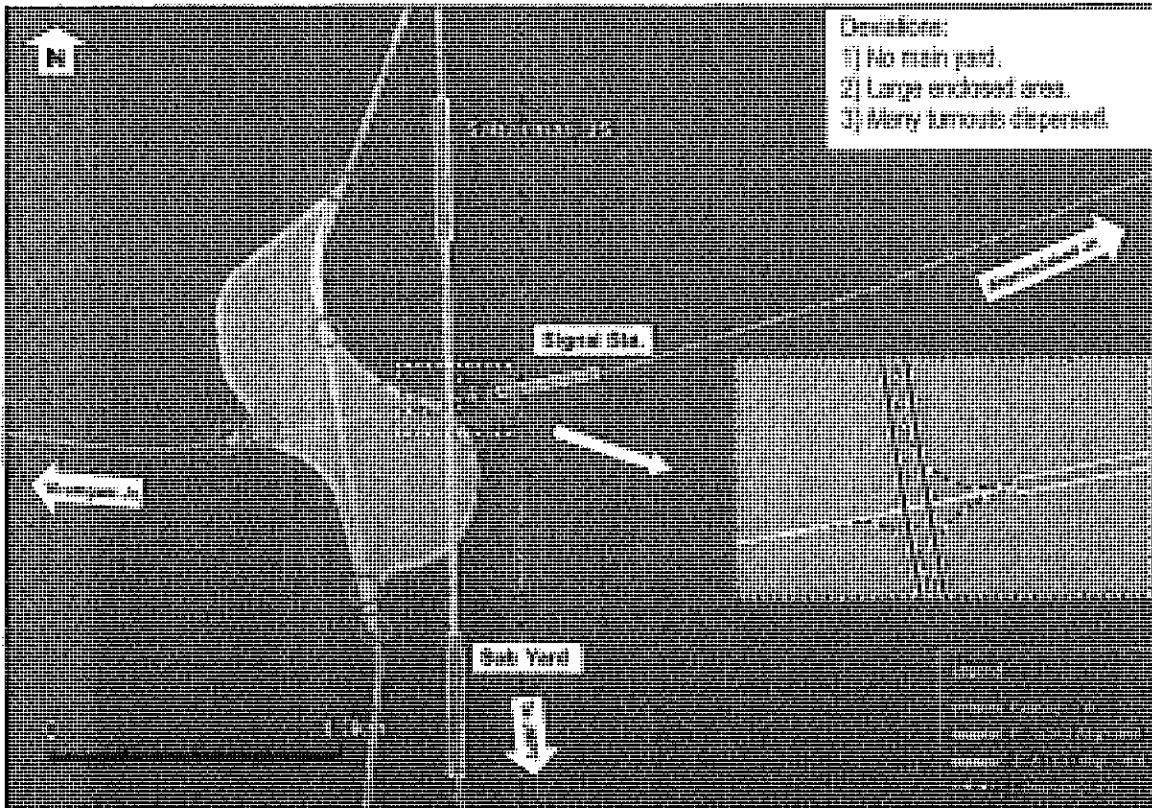
Figure-21 Rewari JS

Attachment-2 Deviations identified in Model Plans of Junction Station



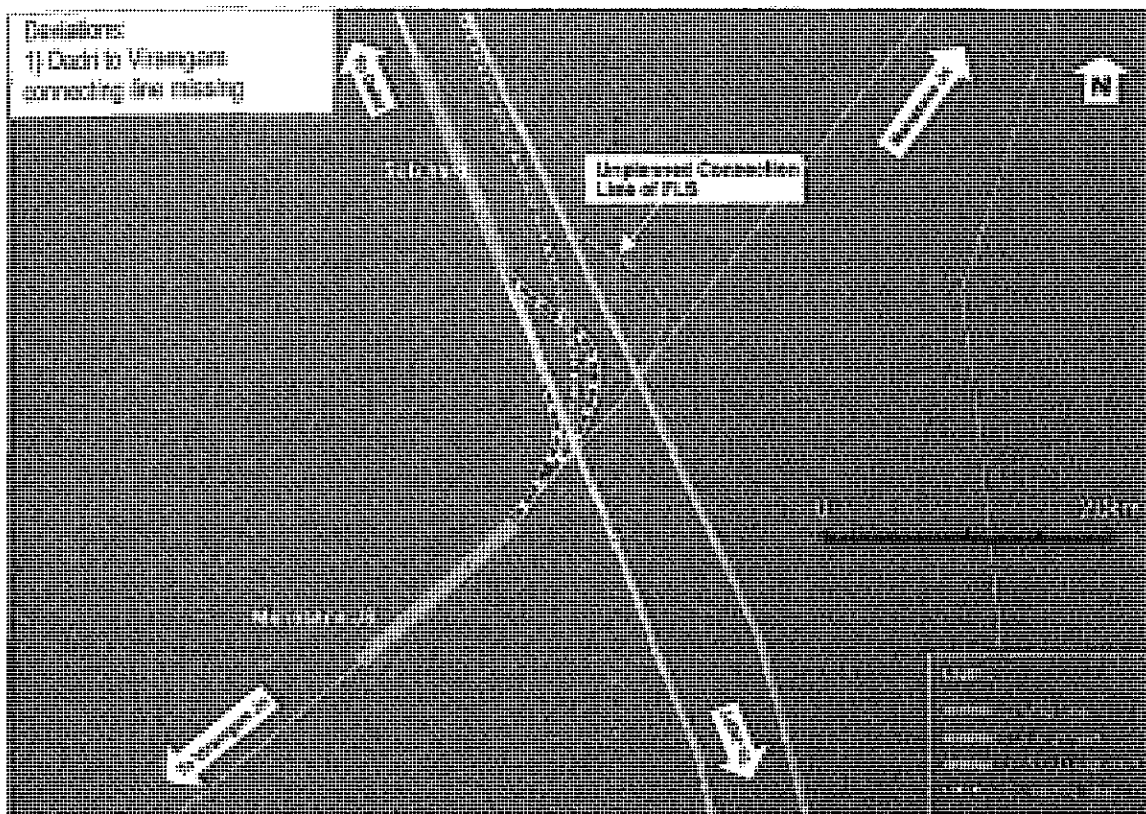
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-22 Makarpura JS



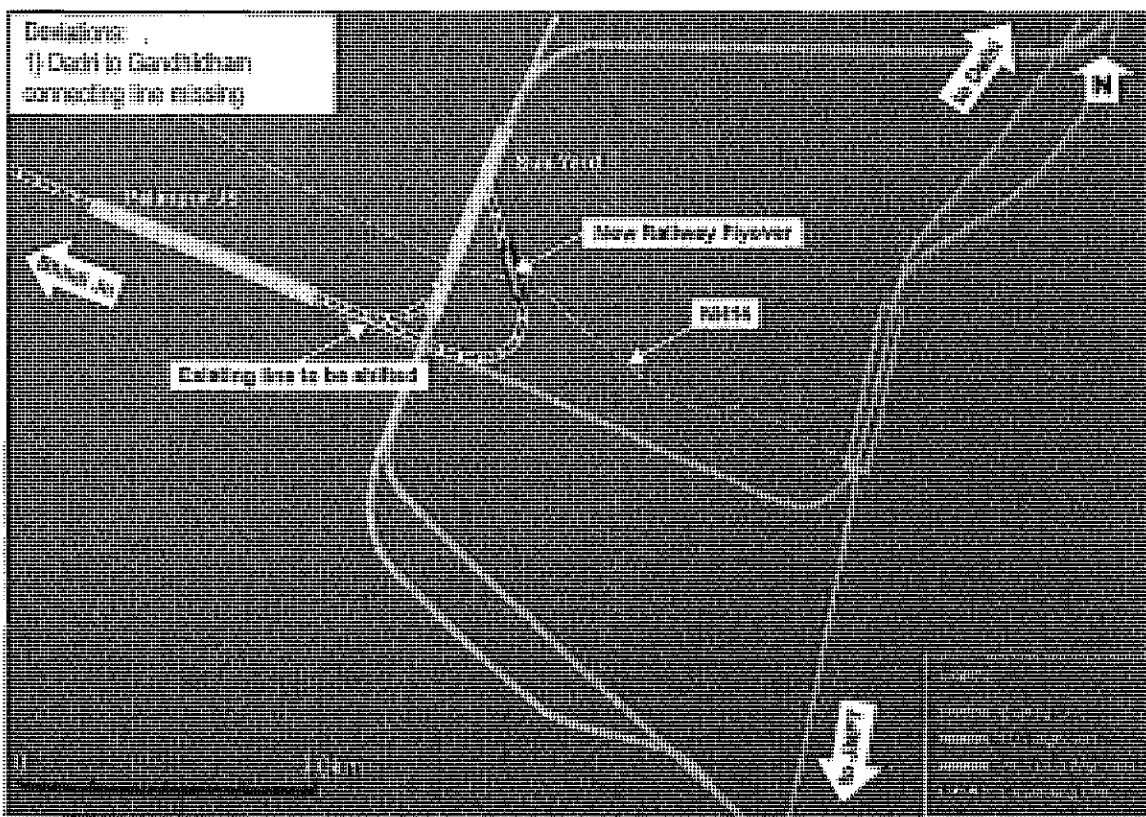
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-23 Sabarmati JS



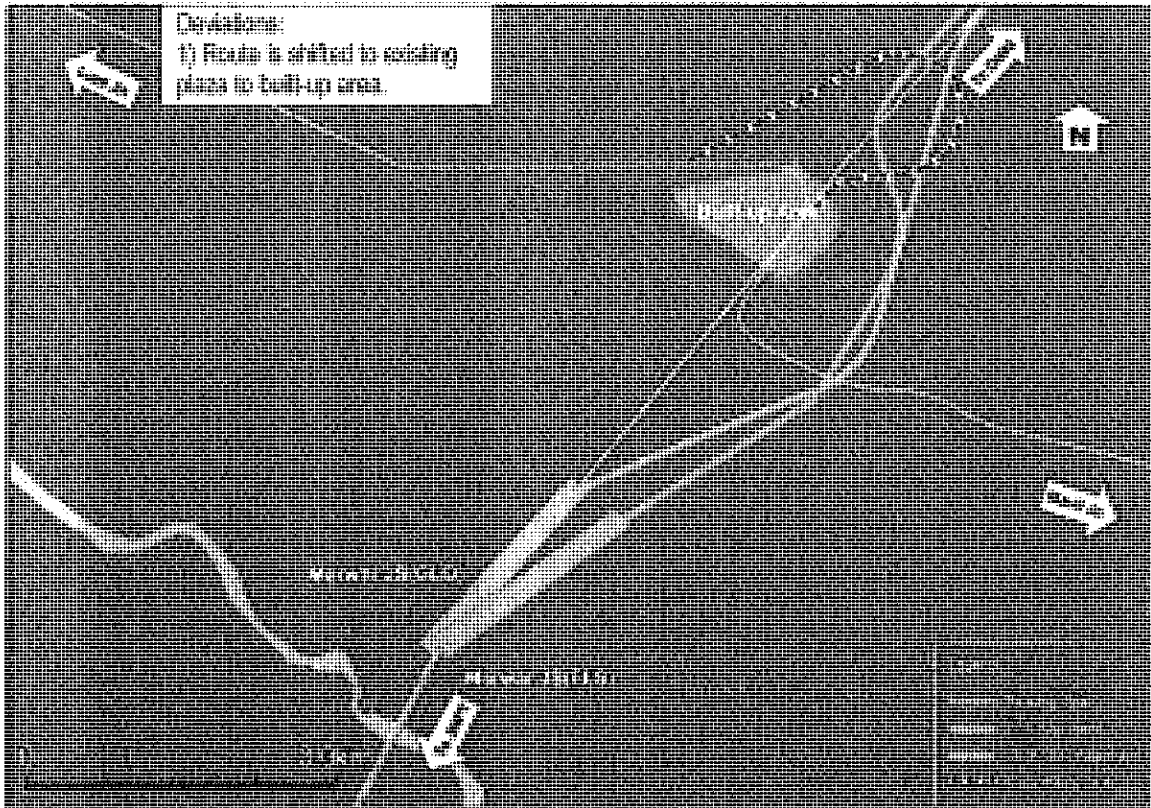
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Figure-24 Mahesana JS



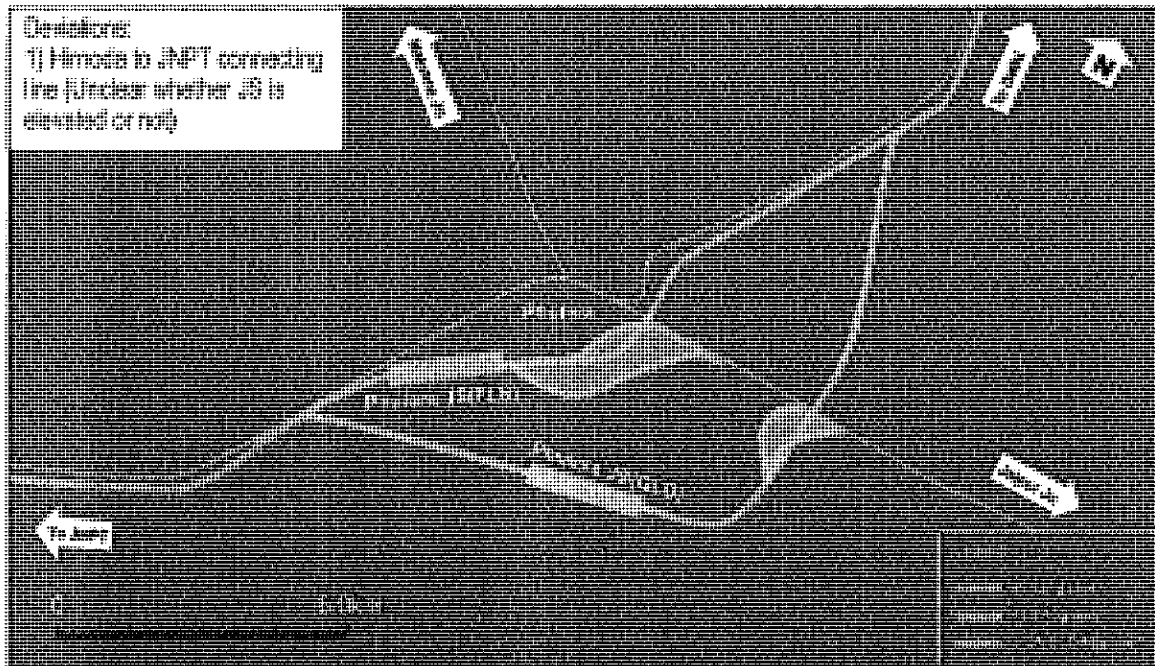
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-25 Palanpur JS



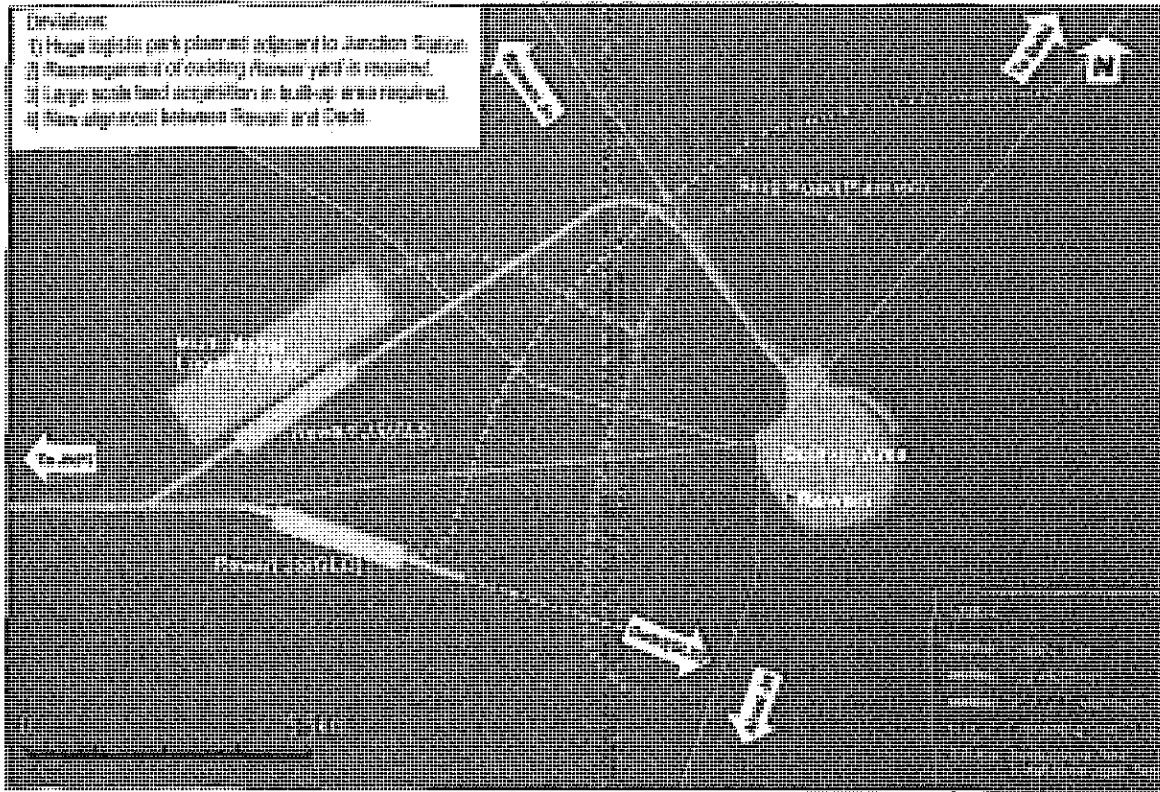
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-26 Marwar JS



Source: Based on information from DFCCIL and JICA Feasibility Study Report

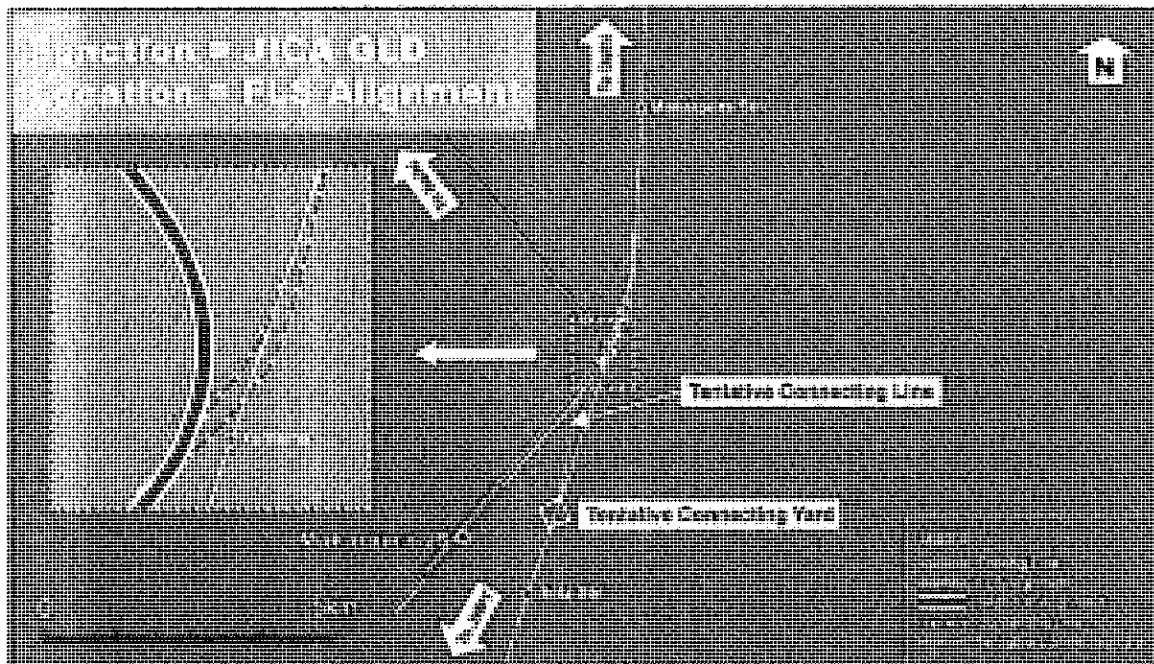
Figure-27 Phulera JS



Source: Based on information from DFCCIL and JICA Feasibility Study Report

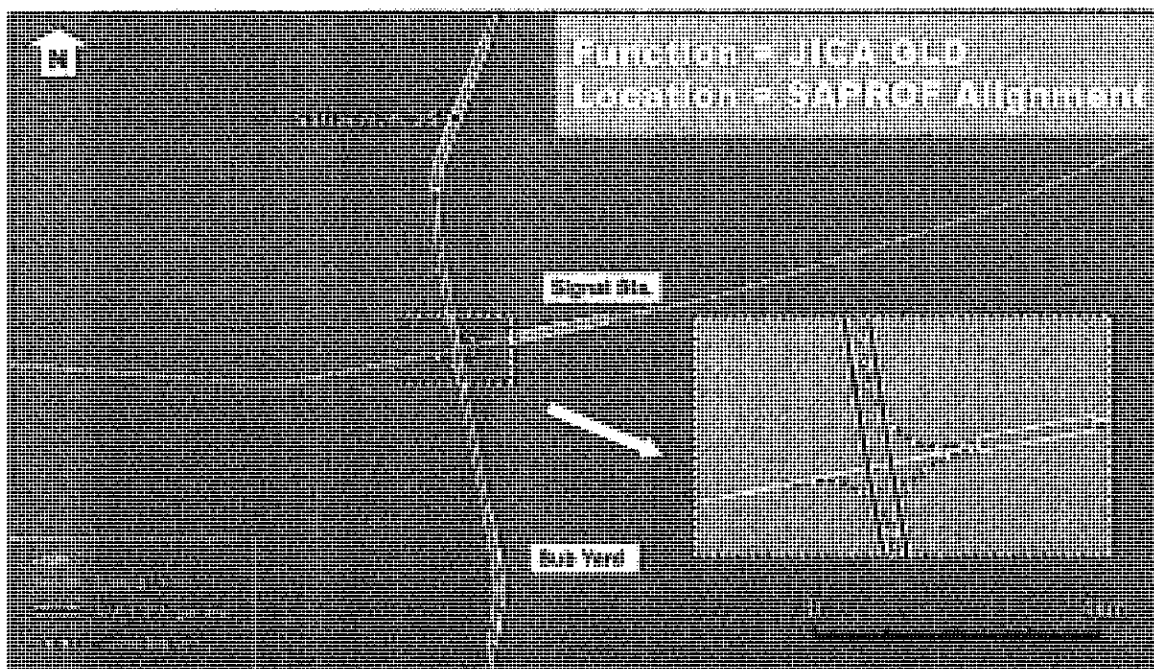
Figure-28 Rewari JS

Attachment-3 Result of Finalised Conceptual Design of Junction Station



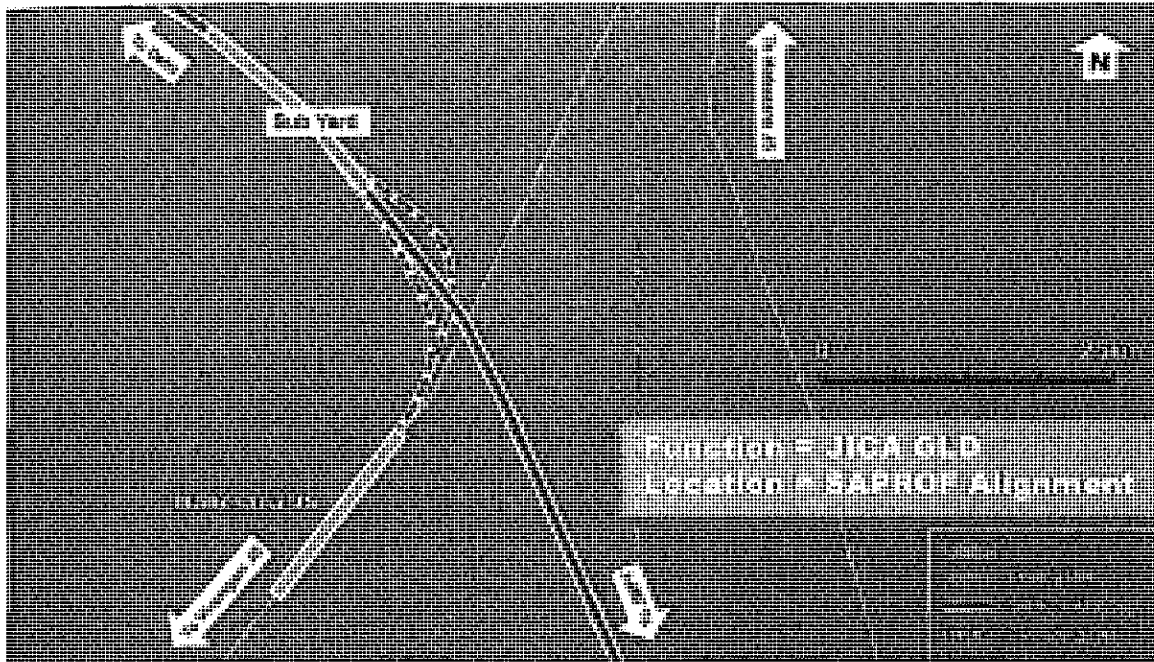
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Figure-29 Makarpura JS



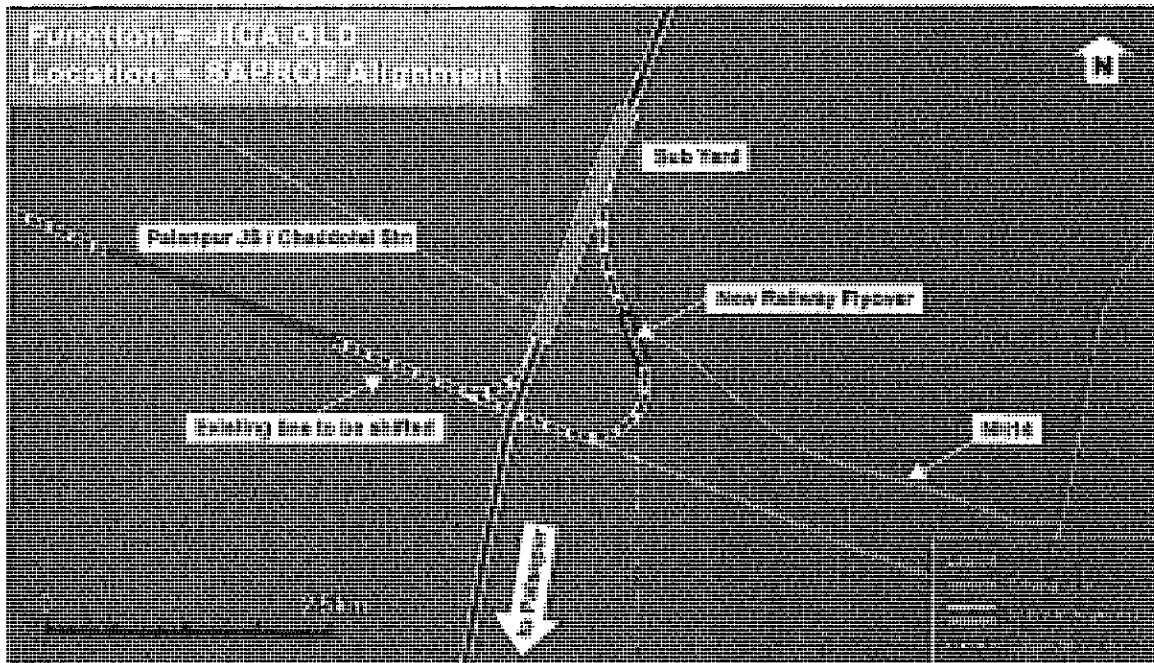
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Figure-30 Sabarmati JS



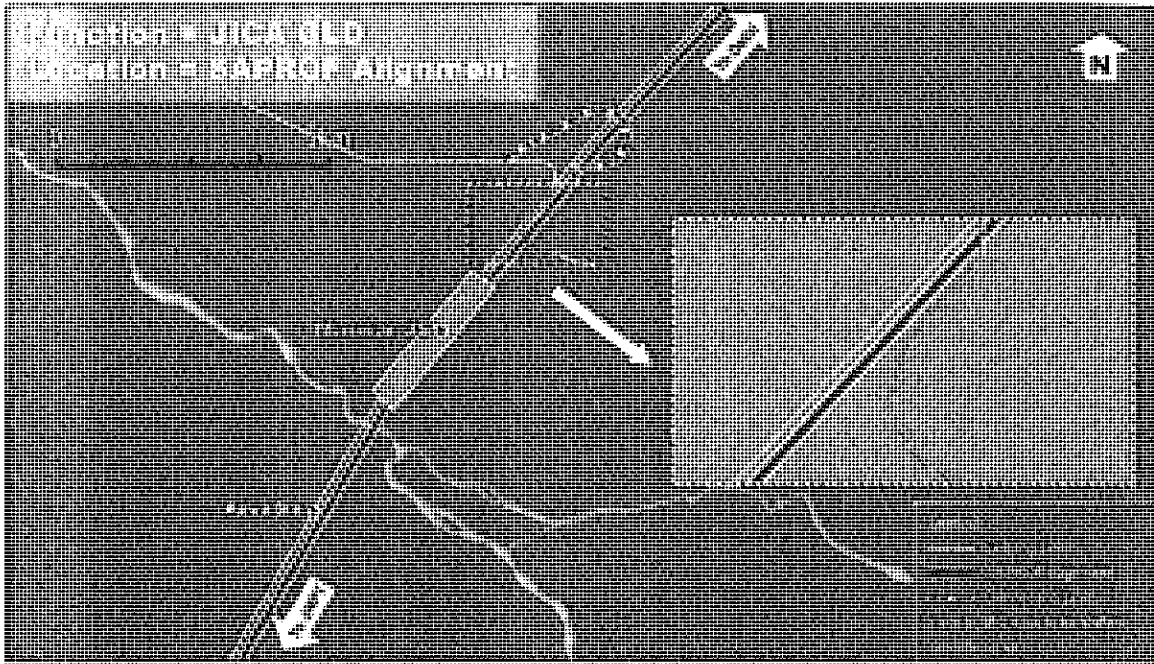
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Figure-31 Mahesana JS



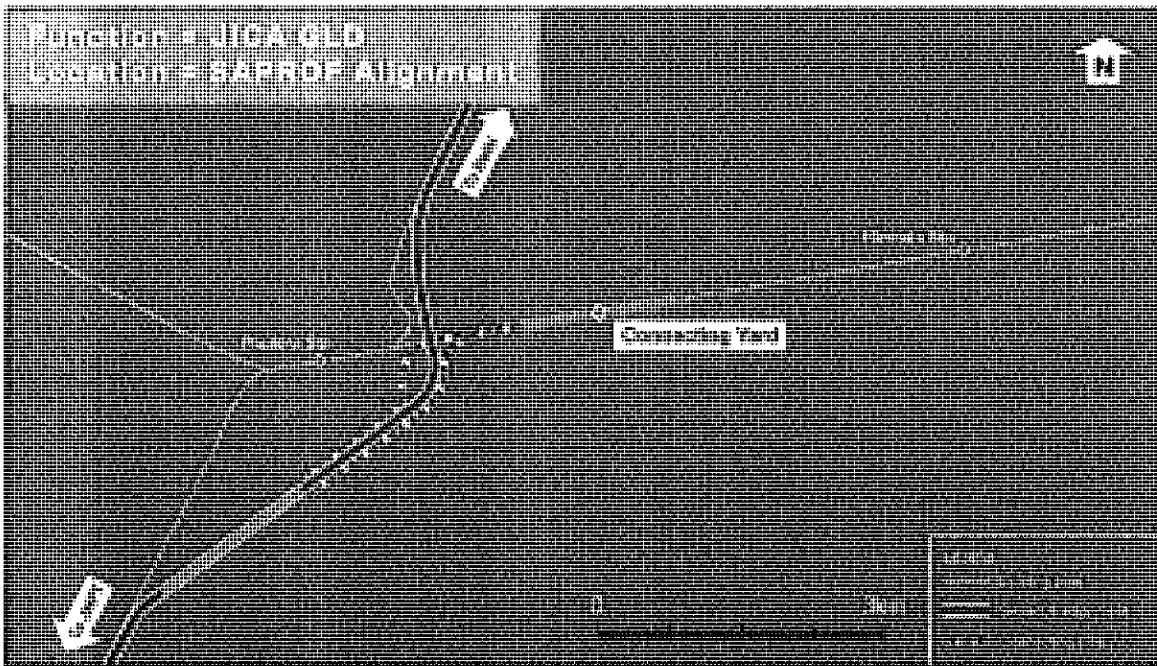
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Figure-32 Palanpur JS



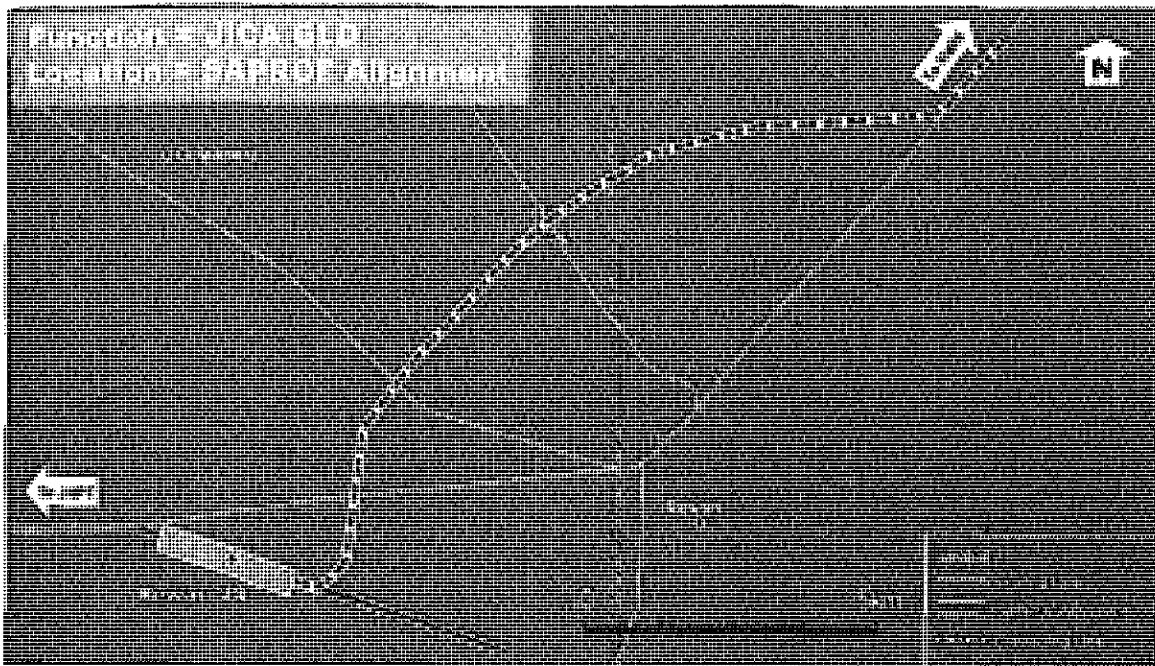
Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-33 Marwar JS



Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-34 Pulera JS



Source: Based on information from DFCCIL and JICA Feasibility Study Report

Figure-35 Rewari JS

Attachment-4 Terms of Reference of the SAPROF Study

TOR1: Review of Project Planning

1-1 Review of FLS and confirmation of its consistency with GAD

(1) Track Structure

<Review Target>

- Design Standard and Typical Cross Section in GAD

<Review Points>

(Standard Specifications)

- Gauge
- Ballast thickness
- Container types and axle load

(Embankment: Diversion Section)

- Embankment width in double track section
- Cut width in double track section
- Distance between up-line and down-line of DFC
- Distance between existing line and DFC

(2) Junction Station

<Review Target>

- Junction Station (JS : 7 locations) in GAD
- Crossing Station (CS : 21 locations) in GAD

<Review Points>

Confirm the 14 design issues pointed out in JICA FS Report for design of junction stations.

(3) Bridge

<Review Target>

- 4 Important Bridges in GAD
- 19 Major Bridges (bridge length more than 100m)

<Review Points>

- Design Consistencies between FLS and GAD (centreline coordinates)
- Relationship between Centre Line & Current Direction
- Bridge Abutment Locations
- Pier Design (pier section shape, disturbance ratio for river cross section)

(4) Other Major / Important Structures (ROBs, new ICD)

<Review Target>

- Existing ROBs at site
- New ICD in FLS and/or GAD
- Location of Substations in FLS and/or satellite photo

<Review Points>

- Design Conditions
- Design Consistencies between FLS and GAD (centerline coordinates)

- Bridge Abutment Locations (disturbance for operation line) / Span length and Girder height / Keeping Construction Gauge
- Location and Size of new ICD
- Location and Size of Substations

(5) Alignment

<Review Target>

- Parallel Section (length : approx. 630km)
- Diversion Section (length : approx. 290km)
Vadodara-Ahmedabad Detour / Palanpur Detour / Kishangarh Detour
Phulera Detour / Ringas Detour
- Check for considerations of the following
Avoidance of local communities, wildlife sanctuary, city planning area, marble stone factories, residential area, large excavation and others
Minimised diverted length

<Review Points>

- Design conditions (Gradient, Minimum Curve Radius, Maximum Gradient etc.)
- Location gap between GLD and FLS

TOR2: Review of Environmental and Social Consideration

1. Verification of the Process of Approval and Implementation of Environmental Social Impact Mitigation Measures Study (ESIMMS) in India
 - 1) The Minutes of Meeting of the Steering Committee of the JICA Feasibility Study records that MOR will approve the ESIMMS that will be finalized by MOR/DFCCIL.
 - 2) The results of the SAPROF study are recognized as a supplemental study in addition to the ESIMMS of the JICA Feasibility Study.
 - 3) Based on the result of above, it is expected by JBIC that MOR/DFCCIL will finalise the EIA Report, in accordance to the JBIC Environmental Guideline, and its subsequent approval.

2. Review of the tasks on environmental and social considerations to be implemented by MOR/DFCCIL.
 - 1) Based on the JICA Feasibility study, the environmental and social issues that should be considered throughout the pre-construction phase to operation phase will be reviewed.
 - 2) The final report of the SAPROF study will be compiled as the supplemental information for MOR/DFCCIL to implement environmental and social considerations to be confirmed in the JBIC appraisal.
 - 3) Main outputs of the study on environmental and social considerations are as follows:
 - Recommendation of the Environmental Mitigation Measures
 - Updated Environmental Management Plan and Environmental Monitoring Plan
 - Recommendation on the RRAP (draft basic plan)
 - Recommendation on the implementation plan and on the established section/division/department by MOR/DFCCIL that will deal with land acquisition and resettlement.
 - Reviewing the environmental and social considerations to be step-wisely implemented by MOR/DFCCIL.
 - Supplementary ESIMMS

3. Supplemental survey on the Natural Environmental study including Wildlife Sanctuaries (WLSs).

<Natural Environmental Study>

- 1) Supplemental secondary data collection on the WLS near the DFC alignment
 - Mt. Abu WLS (Sirohi, Rajasthan)
 - Balaram Ambaji WLS (Banas Kantha, Gujarat)
 - Jessore WLS (Banas Kantha)
 - Thol Lake WLS (Bird Sanctuary, Mahesana, Gujarat)
- 2) An interview survey shall be conducted on the experts available in the field related to these Sanctuaries (ex. Divisional office, University, Research Institute).
- 3) Ecological Survey of Indian Soft-shell turtle (Primary Data & Secondary Data)

<Water Quality Survey>

- 1) Water quality survey in the important rivers (primary & secondary data collection)
 - 4 rivers : Saraswati, Sabarmati, Sajhi (Vatrak), and Mahi Rivers
 - Secondary data on the rivers
 - Water quality survey during the rainy season will be conducted on these rivers (parameter : flow rate, temperature, pH, DO, Turbidity/SS, and BOD. 5 sampling points for each survey locations. 2 locations for the wider rivers.)

4. Recommendation of counter-measures for the noise and vibration caused by High Axle Load Freight Corridor

<Survey on the Sensitive Receptors (SR)>

- 1) Identification of the distribution of the SR (school, hospital, temple and courthouse, etc.) which requires tranquil environment based on the sampling survey (by sampling of 20% of total).
- 2) Mapping the locations of surveyed SRs.
- 3) The present land use condition will be recorded with the locations.

<Noise and Vibration Measurement Survey>

- 1) Experimental freight train with test run used in the on-going JICA Technical Cooperation Project will be utilized for the measurement.
- 2) The test run to be provided by MOR is a prerequisite for the measurement (Expected No. of test run is 80 trains but the sampling No. subject to the measuring condition).
- 3) Measurement of the noise and vibration unit levels of the freight trains used in the test runs of JICA Technical Cooperation Project.
- 4) Measurement of noise and vibration levels of trains of the existing railways (Expected No. of trains is 50 trains but the sampling No. is subject to the measuring condition).
- 5) Prediction of noise and vibration levels by patterns such as train speeds, loading Quantity (Wagon load with freight), train length and train frequency, referring to the data obtained ESCS and ESIMMS.
- 6) Comparison with the Japanese noise guideline level and vibration guideline level for the railway.

5. Confirmation of scale of land acquisition and resettlement, and support to MOR/DFCCIL in preparation of basic plan of RRAP

<Confirmation of the scale of land acquisition and resettlement>

- 1) Confirmation of required land acquisition area based on the result of TOR1.
- 2) Estimate of preliminary land acquisition cost.
- 3) Confirmation of scale of the resettlement
- Estimation of the number of project-affected structures to be relocated based on TOR1 by using FLS CAD data.
- Estimation of approximate number of resettlement household based on mean household number per structure based on the socio-economic sampling survey.

<Supplemental study and support for preparation of Rehabilitation and Resettlement Action Plan>

- 1) Implementation of socio-economic survey of by sampling 20% of total number of project-affected structures (structured questionnaire used in the JICA F/S)
- 2) Technical support for MOR/DFCCIL to prepare basic plan for Rehabilitation and Resettlement Action Plan.

<Support of implementation of Public Consultation Meeting>

- 1) In the first stage of the PCMs at district level to be conducted in October, the first draft basic plan of RRAP will be explained to the PAPs and opinions will be collected in the meeting.
- 2) SAPROF Team will assist to prepare 2nd draft basic plan of RRAP based on the result of 1st stage of the PCMs.
- 3) It is requested by JBIC that the MOR/DFCCIL will organize the second stage of the PCMs to inform the 2nd draft basic plan of RRAP based on feedback of 1st stage of the PCMs to local stakeholders.

TOR3: Confirmation of Labour Environment during Construction Stage

3-1 Prepare precautions/measures to ensure working safety during construction work

Identify risks on construction site (long bridges, ROB, RUB, track addition work etc.) in the updated FLS and GAD.

- Risk during fall accident
- Influence on existing structures by adjacent construction
- Consideration for operating lines
- Works within/near operating lines

3-2 Confirm the framework for enforcement of occupational safety and health (HIV/AIDS prevention) for construction workers

<Confirm>

- prevailing administration framework
- examples in similar railway construction projects in India

Attachment-5 Referential Alignment Data Applied in the S-ESIMMS Site Study (Soft data)

Section	Drawing Title
5	2. Section 5 chainage 00.0 to 22.0.dwg 3. Section 5 chainage 22.0 to 52.0.dwg 4. Section 5 chainage 52.0 to 78.0.dwg
6	Section 6 (0 to 25).dwg Section-6 (KM 25 to 47.400).dwg Section-6 Part II Revised with 2nd line on Right side Dated 01-04-2008 (Sheet-1,3&5).dwg Section-6 Part II Revised with 2nd line on Right Side Dated 01-04-2008(Sheet-2&4).dwg
7	Section-7-Revised with 2nd line of Right side Dated 01-04-2008.dwg
8	Gujrat (1_PCL_Rev-30.07.08)_final.dwg
9	KM 0 TO 40.dwg section 9 km40 to km 91.730.l.dwg
10	Sec10 Plan & L-section 0 to 50 Date 31-03-08.dwg Sec10 Plan & L-section 50 to 60 falna revision.dwg Sec10 Plan & L-section 60 to 100.dwg
11	km 0 to 50.dwg km 50 to 71800.dwg km 71800 to 104.dwg
12	Section-12 KM (00-50)18-06-08.dwg Section-12 KM 50 to 100(1-07-08).dwg
13	0 TO 30 & 50 to 85.dwg 30TO50.dwg
14	Section 14 Plan & Profile (km0 tokm64.380)-18-06-2008.dwg Section 14 Plan & L-Section (km 64.380 to 107.120)-16.05.2008.dwg
15	section-15-04-04-08 (AMARPUR-KHORI-).dwg khori-silani 36 to 54.dwg khori-silani 55 to 68.dwg khori-silani 69 to 74.dwg khori-silani 75 to 84.dwg
16	section16-sent to DFCon 30-06-2008.dwg

Attachment-6 Alignment Data Applied in the S-ESIMMS Site Study

Attachment-6 Alignment Data Applied in the S-ESIMMS Site Study

Sec.	Route Description	GILD or FLS	FLS (km)		SAPROF(km)		Description	Base Data
			From	To	From	To		
5	Makarapura JS	SAPROF	59.4	56.9 (Reverse chainage)	0	2.0	JS is on the detour. Connecting line to existing line is checked by DFCCIL	kmz
5	Makarapura - near Anand	FLS	56.9	0 (Reverse)	2.0	58.2	Detour to the west side of existing line	dwg
6	Near Anand - Mehela	FLS	9.7	14.0	58.2	62.2	Detour to the west side of existing line (FLS: 1km-9.7km: ignored)	dwg
6	CS	FLS	14.0	16.0	62.2	64.2		
6	Mehela - Jetalpur	FLS	16.0	56.0	64.2	105.2	Detour to the west side of existing line	dwg
6	CS	FLS	56.0	58.0	105.2	106.2		dwg
6	Jetalpur	FLS	58.0	88.6	106.2	136.8	Detour to the west side of existing line	dwg
6	Sabarnati JS	SAPROF	88.6	92.4	136.8	140.7	On the detour	kmz
7			92.4	96.7	140.7	144.9		
7	Near Ahmedabad - Nandasan	FLS	96.7	131.8	144.9	180.0	Detour to the west side of existing line	dwg
8	Mahesana JS	SAPROF	0	3.6	180.0	203.4	On the detour	kmz
8	Shobhasan - Palanpur	FLS	3.6	95.1	203.4	275.1	Detour to the west side of existing line	dwg
8	Palanpur	Arranged	95.1	96.2	275.1	276.2	Due to connect between FLS and GLD	kmz
8	Palanpur	Arranged	0	0.8	276.2	277.1	Due to connect between FLS and GLD	kmz
9	Palanpur JS	SAPROF	0.8	2.8	277.2	279.2	Sub Yard. Main Yard is on the existing	kmz
9	Palanpur - Iqbal Gadh	GLD	2.0	19.1	279.2	302.3	Detour to the west side of existing line	kmz
9	Iqbal Gadh - Shri Amirgadh	FLS	19.1	31.2	302.3	314.5	Parallel to existing line on the east side	dwg
9	Shri Amirgadh CS	FLS	31.2	33.8	314.5	317.2		dwg
9	Shri Amirgadh - Maval	FLS	33.8	40.2	317.2	323.6	Parallel to existing line on the east side	dwg
9	Near Maval	FLS	40.2	42.4	323.6	325.6	Existing line to be shifted to west side along DFC Line (Near Maval Stn.)	Image and dwg
9	Maval - Swarupganj	FLS	42.4	70.6	325.6	353.9	Parallel to the east side of existing line	dwg
9	CS	FLS	70.6	73.1	353.9	356.4		dwg
9	Swarupganj - Near Banas	FLS	73.1	78.8	356.4	362.2	Parallel to the east side of existing line	dwg
9	Banas Stn.	GLD	78.8	83.0	362.2	366.4	Parallel to the east side of existing line	Image
9	Near Banas - Shirohi Rd	FLS	83.0	90.5	366.4	373.8	Parallel to the east side of existing line	dwg
10	Shirohi Rd Stn.	GLD	0	14.6	373.8	386.5	Parallel to the east side of existing line	Image
10	Shirohi Rd - Nana	FLS	14.6	105.2	386.5	394.3	Parallel to the east side of existing line	dwg
10	Nana CS	FLS	22.4	25.4	394.3	397.3		dwg
10	Nana - Biroliya	FLS	14.6	51.6	397.3	423.6	Parallel to the east side of existing line	dwg
10	Biroliya CS	FLS	51.6	54.1	423.6	427.0		dwg
10	Biroliya - Jawali	FLS	54.1	85.3	427.0	457.2	Parallel to the east side of existing line	dwg

Attachment-6 Alignment Data Applied in the S-ESIMMS Site Study

Sec.	Route Description	GLD or FLS	FLS (km)		SAPROF(km)		Description	Base Data
			From	To	From	To		
10	Jawali CS	FLS	85.3	87.8	457.2	459.7		dwg
10	Jawali - Bhinwalya	FLS	87.8	103.2	459.7	475.1	Parallel to the east side of existing line	dwg
11	Bhinwalya - Near Marwar	FLS	1.2	16.9	475.1	490.8	Parallel to the east side of existing line	dwg
11	Marwar	GLD	16.9	17.7	490.8	491.7	Parallel to the east side of existing line (Marwar Jn Stn.)	Image
11	Marwar JS	SAPROF	17.7	19.7	491.7	494.2	Along the existing line	kmz
11	Marwar	GLD	19.7	25.5	494.6	498.7	Parallel to the east side of existing line (Marwar Jn Stn.)	Image
11	Near Marwar - Bagri Sajjanpur	FLS	25.5	55.3	498.7	528.4	Parallel to the east side of existing line	dwg
11	Chandawal CS	FLS	55.3	57.8	528.4	530.9		dwg
11	Chandawal - Near Haripur	FLS	57.8	74.5	530.9	547.6	Parallel to the east side of existing line	dwg
11	Haripur CS	FLS	74.5	77.0	547.6	550.1		dwg
11	Haripur - Amarpura	FLS	77.0	104.1	550.1	577.8	Parallel to the east side of existing line	dwg
12	Amarpura - Bangurgram	FLS	0.7	10.4	577.8	587.7	Parallel to the east side of existing line	dwg
12	Bangurgram	FLS	10.4	11.4	587.7	588.6	Small Detour to the east side of existing line. (Bangurgram Stn.)	dwg
12	Bangurgram CS.	FLS	11.4	13.2	588.6	590.8		dwg
12	Bangurgram	FLS	13.2	14.4	590.8	591.6	Small Detour to the east side of existing line. (Bangurgram Stn.)	dwg
12	Bangurgram - Makrera	FLS	14.4	39.4	591.6	616.8	Parallel to the east side of existing line	dwg
12	Makrera	FLS	39.4	40.9	616.8	618.2	Existing line to be shifted to west side along DFC Line (Near Makrera Stn.)	dwg and kmz
12	Makrera - Saradhana	FLS	40.9	47.1	618.2	624.2	Parallel to the east side of existing line	dwg
12	Saradhana CS	FLS	47.1	49.6	624.4	626.9		dwg
12	Saradhana - Near Ajmer	FLS	49.6	54.7	626.9	631.9	Parallel to the east side of existing line	dwg
12	Near Ajmer - Madar	FLS	54.7	61.7	631.9	638.5	Re-use the existing goods line (single track)	dwg
12	Madar	FLS	61.7	65.0	638.6	642.2	Avoided the workshop next to Madar Stn. and grave yard area	dwg
12	Madar - Gehlota	FLS	65.0	98.4	642.2	675.6	Parallel to the east side of existing line	dwg
13	Gehlota - Sakhun	FLS	0	10.0	675.6	685.7	Parallel to the east side of existing line	dwg
13	CS	FLS	10.0	12.5	685.7	688.2		dwg
13	Sakhun - Near Phurela	FLS	12.5	32.8	688.2	708.5	Parallel to the east side of existing line	dwg
13	Phurela	FLS	32.8	33.2	708.5	708.9	Detour to the east side of existing line (Phurela Jn.)	dwg
13	Phurera JS	SAPROF	33.2	35.7	708.9	711.4	On the detour	kmz
13	Phurela	FLS	35.7	40.0	711.4	715.7	Detour to the east side of existing line (Phurela Jn.)	dwg
13	Near Phurela - Pachar Malikpura	FLS	40.0	77.4	715.7	753.1	Parallel to the east side of existing line	dwg

Attachment-6 Alignment Data Applied in the S-ESIMMS Site Study

Sec.	Route Description	GLD or FLS	FLS (km)		SAPROF(km)		Description	Base Data
			From	To	From	To		
13	Malikpur CS	FLS	77.4	79.9	753.1	755.6		dwg
13	Pachar Malikpura - Badhal	FLS	79.9	85.4	755.6	761.1	Parallel to the east side of existing line	dwg
14	Badhal- Near Ringas	FLS	0	12.6	761.1	773.8	Parallel to the east side of existing line	dwg
14	Ringas Jn Stn.	Parallel	12.6	18.0	773.8	778.7	Parallel to the east side of existing line Existing MG line to be shifted	Image and kmz
14	Ringas -	FLS	18.0	21.9	778.7	782.6	Parallel to the east side of existing line.	dwg
14	Shri Madhopur CS	FLS	21.9	23.7	782.6	784.4		dwg
14	Shri Madhopur - Bhagega	FLS	23.7	59.7	784.4	820.4	Parallel to the east side of existing line.	dwg
14	Bhagega CS	FLS	59.7	61.7	820.4	822.4		dwg
14	Bhagega - Dabla	FLS	61.7	93.4	822.4	854.1	Parallel to the east side of existing line.	dwg
14	Dabla CS	FLS	93.4	95.4	854.1	856.1		dwg
14	Dabla- Amarpur Jorasi	FLS	95.4	107.1	856.1	867.6	Parallel to the east side of existing line.	dwg
15	Amarpur Jorasi - Ateli	FLS	0	19.0	867.8	886.8	Parallel to the east side of existing line.	dwg
15	CS	FLS	19.0	21.0	886.8	888.8		dwg
15	Ateli - Khori	FLS	21.0	49.6	888.8	917.8	Parallel to the east side of existing line. (FLS-42-49.6km missing)	dwg
15	Khori	FLS	49.6	50.3	917.8	918.4	Detour to east side of existing line	dwg
15	Rewari JS	SAPROF	50.3	52.8	918.4	920.9		kmz
-	Rewari - Dadri	Connecting Line	-	-	920.9	939.4	Connecting Line to Garhi Harsaru Jn	kmz

Source: SAPROF Study

Attachment-7 Minute of Discussion of 30th July 2008

MINUTES OF DISCUSSION
ON
JBIC SPECIAL ASSISTANCE PROJECT FORMATION (SAPROF)
FOR
DEDICATED FREIGHT CORRIDOR PROJECT
BETWEEN
JAPAN BANK FOR INTERNATIONAL COOPERATION
AND
MINISTRY OF RAILWAYS, GOVERNMENT OF INDIA

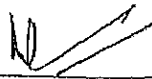
DATE: July 30th, 2008
PLACE: New Delhi, India

1. The Japan Bank for International Cooperation (hereinafter referred to as "JBIC") Special Assistance for Project Formation (hereinafter referred as "SAPROF") Study Team had discussions on the preliminary report of the SAPROF Study for Dedicated Freight Corridor Project (hereinafter referred to as "the Project") with officials of Ministry of Railways, Government of India (hereinafter referred to as "MOR") on 29th July, 2008.
2. The JBIC SAPROF Study Team and MOR agreed upon the contents of the record of Main Points Discussed as per following pages, subject to the approval by the competent higher authorities of both sides. It should be noted that this document does not imply any decision or commitment by JBIC to extend its loan for the Project at this stage.

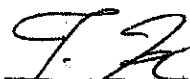
Delhi, 30th July, 2008



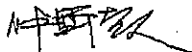
Mr. Bharat Salhotra
General Manager (Finance),
DFCCIL



Mr. G. PILLAI
Executive Director
Perspective Planning,
Railway Board
Ministry of Railways



Mr. T. KON
Representative,
JBIC Rep. Office in New Delhi



Mr. T. Nakano
Co-Team Leader,
JBIC SAPROF Study Team

Since the Kick-off Meeting of the SAPROF Study which was held on 8th July 2008, the SAPROF Study Team (hereinafter, the Study Team) has been carrying out the review work of the Final Location Survey (FLS) and General Arrangement Drawings (GAD), and supplementary environmental survey according to the basic approach and methodology presented in the Inception Report.

On 22nd July 2008, the Study Team presented the result of the findings of the initial activities as a Preliminary Report to the representatives of MOR, representatives of the DFCCIL, and to the representatives from JBIC. In the meeting, several pending issues that require urgent decision by DFCCIL were highlighted, and in that meeting, another meeting was decided to be convened on 23rd with DFCCIL to address the issues.

The following items were confirmed and decided through the discussions between the Study Team and DFCCIL.

1. Status of Data Provision

1.1 Final Location Survey (FLS) Horizontal Alignment Data

As of July 29th 2008, DFCCIL has provided the following FLS CAD data as follows:

Section	Total Length (Km)	Provided (Km)	Awaiting (Km)	Handover Target Date to SAPROF Team.	Remarks
5	58	58	0	-	
6	94	94	0	-	
7	40	40	0	-	
8	95	95	0	-	Received CAD without FLS.
9	91	91	0	-	
10	100	100	0	-	
11	104	104	0	-	
12	100	0	100	Not within SAPROF study period	Adoption of parallel alignment
13	85	85	0	-	
14	117	42	75	Not within SAPROF study period	Adoption of parallel alignment
15	116	116	0	-	Missing km42 to km49 no FLS alignment.
Total	1000	825	175		

Note: Total length exceed Length of SAPROF Study area 920km since overlapping of survey was allowed for connectivity of alignment of Sections.

2 General Arrangement Drawings (GAD)

As of July 29th 2008, DFCCIL has provided the following GAD data as follows:

Category	Total	Provided	Awaiting	Remarks
Junction Station	7	7	0	Model plans of Makarpura, Sabarmati, Mahesana, Palanpur, Marwar, Phulera, Rewari
Crossing station	21	9	12	Indicated on FLS. Typical plan provided.
Typical cross section	4	2	2	Detour section only (Embank. & Cut section) Parallel section awaiting
Important Bridges / Major Bridges (Length > 100m)	4 / 19	0	4 / 19	Undergoing hydrological model study. Tender drawings for bridges south of Vadodara available as reference.
ROB subject to reconstruction	2	0	2	No drawings prepared by DFCCIL. Tender drawings for Eastern Corridor available as reference.
Inland Container Depot	1	0	1	Indicated in multimodal logistic park on Rewari JS drawing but no details available.
Loco Depot	N/A	0	N/A	Subject to procurement plan and freight transport plan by IR
Maintenance Depot	N/A	0	N/A	Not planned
Substation	N/A	0	N/A	Awaiting decision by MOR for electrification

Note: N/A – Information not available.

3. Precision of Integration of Section Drawings Provided from DFCCIL

Since GPS coordinates (X, Y) of benchmarks based on indicated on each FLS Section drawings in terms of UTM Projection on WGS-84 datum were not available, the integration of the section drawings were carried out by superimposition of section CAD data on available satellite images in reference to the land marks, existing road and railways, rivers, and other identifiable features. Thus, the precision of the position of the alignment and the connectivity of the section data contains error within 1 to 50,000.

4. Deviation of FLS Alignment and GAD from GLD

4.1 Deviation of FLS Alignment from GLD

The deviation of the FLS from GLD was presented to MOR/DFCCIL on 22nd July 2008 in the Preliminary Report by Study Team. Following the presentation and subsequent discussions with DFCCIL, the Study Team confirmed the rationale of the deviation being reasonable which were substantiated by the information from regional officers of DFCCIL.

4.2 Deviation of GAD Alignment from GLD

The deviation of the GAD from GLD was presented to MD, DFCCIL in the same meeting of 23rd July, particular with regard to Junction Station (JS) and typical cross section. The Study Team clarified that compared to the GAD the GLD of the JS requires less land, less trackside facility thus higher maintainability, and functionally equivalent. DFCCIL suggested some facility to be provided to allow required movement, however agreed in principle to incorporate the JS arrangement of the GLD.

5. Final Alignment Defined in SAPROF Study

The Study Team reviewed and evaluated the FLS CAD drawings provided from DFCCIL, and presented it to DFCCIL. The result of the discussion with the senior management of DFCCIL reconciled the deviated portion of each Section and finalised the alignment (hereinafter referred to as the Final Alignment Defined in SAPROF Study), as per the following table. (Refer to Attachment No.1 for Drawings)

Table Finalised Alignment of Deviated Portion

Section	FLS Chainage of Deviated portion (km)	GLD Chainage of Deviated Portion (km)	Finalised Alignment of Deviated Portion	Type of Section	Remarks (Refer to drawings of the Intermediate Report from the SAPROF Study Team)
5	-				Fig-1 Makarpura JS
5-6	-	420 - 520	FLS	Extensive Detour	Fig-2 Vadodara-Mahesana (1/2)
6-7	-	515 - 615	FLS	Extensive Detour	Fig-3 Vadodara-Mahesana (2/2)
8	-	590 - 675	Pre FLS	Extensive Detour	Fig-4 Mahesana-Palanpur
9	-	595 - 675	GLD	Extensive Detour	Fig-5 Palanpur-Iqbal Gadh
9	40.2 - 42.4	712 - 714	FLS	Small Detour	Fig-6 Near Ext. Maval Stn.
9	45.9 - 47.7	717 - 720	FLS	Small Detour	Fig-7 Near Ext. Abu Road Stn.
9	50.6 - 53.5	722 - 725	FLS	Small Detour	Fig-8 Ext. Morthala Stn.
9	58.0 - 59.5	730 - 732	FLS	Small Detour	Fig-9 Near Ext. Kivarli Stn.
9	78.8 - 83.0	750 - 755	GLD	Parallel	Fig-10 Ext. Banas Stn.
10	0.20 - 14.6	762 - 775	GLD	Parallel	Fig-11. Ext. Sirohi Rd.& Keshavganj Stn.
10	38.4 - 41.1	798 - 802	FLS	Small Detour	Fig-12 Near Ext. Jawal Bandh Stn.
11	17.0 - 25.5	879 - 888	GLD	Parallel	Fig-13 Ext. Marwar JS
12	-	1041 - 1056	Parallel	-	Fig-14 Kishangarh Stn.
13	32.8 - 40.0	1097 - 1104	FLS	Detour	Fig-15 Phulera JS
14	-	1161 - 1173	Parallel	Small Detour	Fig-16 Ringas Stn.
15-16	-	1300 - 1310	FLS&GLD	Parallel	Fig-17 Rewari JS

6. Completion of the FLS Conforming to Final Alignment Defined in SAPROF Study

The Study Team explained that it was absolutely necessary that DFCCIL ensure that the ongoing FLS for Section 8, 12 and 14, as well as detour between Palanpur – Iqbal Gadh, located in Section 8 and 9, comply with the principles and location of the SAPROF Alignment for the subsequent timely administration of the Project.

7. Completion of FLS and GAD by DFCCIL

DFCCIL indicated that FLS alignment drawings for Section 8, 12, and 14 are still undergoing, and DFCCIL will communicate to Representative Office in New Delhi of JBIC of the dates by the end of July.

8. Environmental and Social Considerations

8.1 Environmental Considerations

(1) Environmental and Social Impacts Mitigation Measures Study Report

There are 17 Environmental and Social Impacts Mitigation Measures Study (hereinafter referred to as "the ESIMMS") reports relating to the Project. The Study Team explained that these ESIMMS

reports are being compiled by the Study Team into three by state base, and then will be compiled to one. The supplemental environmental and social considerations study under this SAPROF Study will produce the supplemental documents to these compiled documents. A set of the compiled ESIMMS reports and the supplemental documents as the results of the SAPROF Study on environmental and social considerations is required to be finalized and approved by MOR in November before dissemination of the documents to the public according to the JBIC Guidelines for Confirmation of Environmental and Social Considerations (JBIC Guidelines).

(2) Noise and Vibration Survey

Preliminary noise and vibration level survey was conducted along the test run and existing tracks on 9th and 10th July, 2008 in Orissa State. However, the number of trains surveyed and their operational conditions and patterns were not sufficient to predict future conditions. Besides, no more test run is planned in Orissa. Therefore, the Study Team consulted with MOR about how to conduct noise and vibration level survey and decided to conduct along the other sections of existing tracks such as Mathura - Kosi, Aligarh - Dadri, and Ranchi - Kotshita which have similar conditions as the DFC. DFCCIL was requested to secure the security during the survey and arrange possible high-speed operation of freight trains between mid of August and mid of September, 2008.

(3) Other

The Study Team was informed that DFCCIL had been conducting hydrological analysis for the construction of important bridges. The Study Team requested DFCCIL to provide the results by 15th September, 2008 so that the results can be included in the supplemental ESIMMS.

8.2 Social Considerations

(1) Land Acquisition

DFCCIL has explained that five consultants on Western corridor have been engaged for preparation of Land Acquisition Plan to be submitted to the competent authorities. By the end of August 2008, the Land Acquisition Plans for the entire corridor will be submitted by the consultants and by September 2008, 20-A Notification of the Railways (Amendment Act), 2008 for entire corridor will be completed and by June 2009 the land will be acquired by DFCCIL base on the Railways (Amendment) Act, 2008.

(2) Preparation of the Framework of Rehabilitation and Resettlement Plan (RRP)

The Study Team emphasized that, in addition to the compensation package and resettlement assistance for legal title holders which are prescribed in the "Railways (Amendment) Act, 2008", assistance package for rehabilitation of Project-Affected Persons (PAPs) including illegal occupants (squatters) should be taken into considerations according to the National Rehabilitation and Resettlement Policy 2007 of India (NRRP 2007) and JBIC Guidelines. The compensation package, resettlement assistance, and rehabilitation assistances, which improve their standard of living, income opportunities and production levels, or at least to restore them to pre-project levels, to be applied for the project will be compiled as a draft of the Rehabilitation and Resettlement Plan (RRP) with implementing setting such as necessary detailed surveys, legislative arrangement, institutional setting, implementation schedule, monitoring and supervision plan, and financial plan. The draft of the RRP has to be finalized before JBIC Appraisal, and the final RRP has to be completed before commencement of land acquisition and resettlement and before L/A, reflecting results of series of the public consultation meetings (PCMs) explained below.

8.3 Public Consultation Meeting

The Study Team explained two types of the public consultation meetings (PCMs) to be held

according to the JBIC Guidelines as follows. The PCMs for both types will not only be conducted at district-wise in individual district, but also with several districts combined in the case where physical location of the affected villages are adjacent and there is no problem on access to the venue of the PCM from time and transportation viewpoints for the participants, several locations at one district in the case where the project largely cover the respective district, or village-wise, depending on the local situation.

(1) PCM as a Process of the EIA

A series of PCMs have to be held by DFCCIL with technical support of the Study Team to cover all the new villages, which are newly recognized as project-affected villages due to the deviation of FLS alignment and GAD from GLD, as a process of the Environmental Impact Assessment (EIA). In the PCMs, outline of the project, expected environmental and social impacts, conceivable mitigation measures, and environmental management and monitoring plan should be explained as well as obtaining opinions from participants to be reflected to the ESIMMS and supplemental EIA study, as already implemented to the respective villages along the GLD through the district-wise PCMs and village-wise feedback meetings in the JICA F/S. Schedule and methodology of the PCMs will be decided based on all of the new project-affected villages to be identified after the SAPROF alignment is fixed as above-mentioned.

(2) PCM as a process of Preparation of the Framework of Rehabilitation and Resettlement Plan (RRP)

At least, two stages of the PCMs have to be held as a process of preparation of the framework of RRP. First stage of the PCM will be held by DFCCIL with technical support of the Study Team for the PAPs on 1st draft of the RRP in respective 17 districts in October. Likewise, second stage of the PCMs has to be held by DFCCIL on 2nd draft of the RRP before L/A. Before the 1st stage of the PCMs, contents of the 1st draft of the RRP have to be deliberated by DFCCIL with commitment for the implementation, especially rehabilitation assistances for both legal and illegal title holders to meet the requirements under the JBIC Guidelines. Based on results of the 1st stage PCMs, 2nd draft of the RRP have to be prepared by DFCCIL and disseminated to all the PAPs in the 2nd stage of the PCMs.

8.4 Implementing Organisation

Land Acquisition Cell has been set up under DFCCIL. However, their actual functions/capabilities are limited for land acquisition only. In order to cover all environmental and social considerations, set up of an environmental cell in charge of the environmental considerations, especially implementation of the environmental management and monitoring, and nomination of officers in charge of the PCM were requested.

8.5 Right-of-Way (ROW)

To identify the PAPs related to the land acquisition of the Project, the boundary of the ROW is required to be defined. For sections where FLS and GAD data are available, ROW indicated on the CAD drawings shall be applied, however sections where FLS data are not available a 70-metre width will be applied for the SAPROF study.

The typical cross section of embankment for detour section, and FLS CAD drawings of parallel section provided from DFCCIL indicates that the corridor contained within the ROW width of 70 metres is sufficient to identify the structures affected by the Project.

8.6 Disclosure of the EIA Report

The Study Team explained that, according to the JBIC Guidelines, the EIA report of the Category A project has to be disclosed by JBIC in JBIC headquarters with 120 days prior to the date of L/A.

Therefore, a set of ESIMMS report and supplemental document to be prepared in the SAPROF Study (EIA report for the Project) has to be submitted to and disclosed by JBIC after the EIA report for the Project is approved by MOR. Assuming that the L/A will be made in the middle March of 2009, the above procedures have to be completed by the middle of November of 2008. In addition, the EIA report is required to be made available in the country and to the local residents where the project is to be implemented, according to the JBIC Guidelines. Therefore, the EIA report for the Project has to be disclosed by MOR/DFCCIL in India as well.

9. Action Points for Strict Compliance by MOR/DFCCIL

The Study Team explained the conditions/requirements to be met for realization of the Project as follows. The failure to comply with the following 1) and 2) may delay in the timing of the procedures for the Loan Agreement.

- 1) Finalization of the FLS of Sections 8, 12, 14, and Palanpur - Iqbal Gadh Section in strict conformance to SAPROF Alignment.
- 2) Finalisation of GAD for JS conforming to SAPROF Alignment and strict conformance to principles indicated in letter No.ADM-OG-016/08, dated 24th July 2008.
- 3) Subject to MOR's decision for the electrification of the DFC Western Corridor, MOR/DFCCIL shall provide to the SAPROF Team, through JBIC (Rep. office in New Delhi), information of plans of substations.
- 4) MOR/DFCCIL shall provide plans of Inland Container Depot, through JBIC (Rep. office in New Delhi), once the conceptual plan is done.

10. Request Reiterated from the SAPROF Study Team

Nomination of two teams under each Chief Project Manager of DFCCIL for interacting with the SAPROF Study Team, each team supporting the completion of the environmental and social field surveys, respectively.

11. Schedule of SAPROF Study

The SAPROF Study Team presented the time table of the SAPROF Study. Approval of the EIA and disclosure to the public by MOR/DFCCIL, and preparation of RRP have to be done as shown in the table below:

As indicated in the following figure, the SAPROF Study Team reiterated that the schedule need to be met by all parties concerned to maintain the timing of subsequent process for the administration of the Project.

	Responsibility	Supported by	2008					2009			
			Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1. Supplemental ESIMMS											
(1) Completion of the Existing ESIMMSs	DFCCIL	SAPROF Study Team	■	■							
(2) Implementation of supplemental surveys	DFCCIL	SAPROF Study Team	■	■	■						
(3) S-ESIMMS Preparation (1st Draft)	DFCCIL	SAPROF Study Team			■	■	■				
(4) PCM for EIA	DFCCIL	SAPROF Study Team				■	■				
(5) Finalization of S-ESIMMS	DFCCIL	SAPROF Study Team					■	■			
(6) Submission of ESIMMS & S-ESIMMS to MOR	DFCCIL	---					●				
(7) Review of ESIMMS & S-ESIMMS	MOR	---									
(8) Approval of ESIMMS & S-ESIMMS	MOR	---									
(9) Disclosure of ESIMMS & S-ESIMMS in Japan	JBIC	---									
(10) Disclosure of ESIMMS & S-ESIMMS in India	MOR/DFCCIL	---									
(11) L/A (tentative)	---	---									
2. Preparation of draft RRP											
(1) Preparation of 1st draft RRP	DFCCIL	SAPROF Study Team			■	■	■				
(2) Submission of 1st draft RRP to MOR	DFCCIL	---									
(3) Review and Approval of 1st draft RRP	DFCCIL	---									
(4) 1st Stage PCM for 1st draft RRP	DFCCIL	SAPROF Study Team				■	■	■			
(5) Preparation of 2nd draft RRP	DFCCIL	SAPROF Study Team						■	■		
(6) Submission of 2nd draft RRP to MOR	DFCCIL	---									
(7) Review and Approval of 2nd draft RRP	DFCCIL	---									
(7) 2nd and Further Stages PCM for 2nd draft RRP	DFCCIL	---									
(8) Final Approval of RRP (Before L/A)	MOR	---									

12. Others

12.1 Design Axle Load

The SAPROF Team learnt from the tender document of the DFC works for sections south of Vadodara, that the design axle load is 32.5 tonne. Since the JICA GLD assumes axle load of 25 tonnes for track structures and 30 tonnes for permanent structures, there is likely to be cost implications.

Also, since the tender documents give no details of track structure, particular regarding the size of rail, sleeper, and thickness of ballast, resulting to undefined vertical clearance, the design of the over-track structures will be affected.

12.2 Provision of Drawings

The SAPROF Study team requested the provision of the following information and MOR/DFCCIL agreed to provide them as per the following schedule.

No.	Subject	Date of Provision
1	Typical cross section of embankment at parallel section with indication of ROW distance	July 30 th , 2008
2	Typical cross section of track structure above formation level for design axle load of 32.5 tonne with indication of height of rail, sleeper, rubber pad, and thickness of ballast.	July 30 th , 2008
3	FLS CAD of Section 12 and Section 14	July 31 st , 2008
4	Definitive alignment and connection point at JNPT side of planned Makarpura JS.	July 30 th , 2008

Attachments

- Attachment No.1: Letter No.ADM-OG-016/08, dated 24th July 2008-07-25 (Excerpt of etter)
- Attachment No.2: Attendance List of the Meeting for the Preliminary Report by SAPROF Study Team
- Attachment No.3: Attendance List of the Meeting for the Intermediate Report by SAPROF Study Team

Attachment No.1

Letter No.ADM-OG-016/08, dated 24th July 2008-07-25

**JBIC Special Assistance for Project Formation (SAPROF)
For
Dedicated Freight Corridor Project**

Our Ref. No.ADM-OG-016/08 Your Ref No. Date: 24th July 2008
Letter Fax Page 1/11

Mr. V. K. Kaul
Managing Director
DFCCIL
Palika Bhawan

Re: Confirmation of Result of Discussion Between SAPROF Study Team and DFCCIL

Dear Sir,

We thank you for assembling a joint meeting on 23rd July 2008 with your staff and taking crucial decisions on the major pending issues with regard to the Project alignment and junction station design concept. These decisions will help us completing the study and going in to the next stage. Your inputs help us to conclude a number of issues.

We are enclosing herewith all the decisions you have taken at the meeting and thank you for effective meeting.

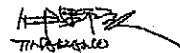
Subsequent to the meeting, there were few issues pending regarding the FLS data. We have come to understand that there is difficulty receiving the FLS data for section 12 and 14 within the SAPROF Study period. However, we were also informed from staff that your regional staff have confirmed on site that the alignment of those two sections can be frozen as parallel, which the SAPROF Team will base the environmental and social consideration study.

We also would like to bring to your attention that there seems to be some revision to the cross section of the track structures and earthwork which has major cost implications. We would like you to help us understand the reason for the increase of distance between the track centre to 6.0m, the increase of the distance between the track centre to ballast shoulder to 4.25m at both side of the embankment, and considerations made for widening of track centre distance for double track lines at curve sections, and the increase of width for embankment at curve sections.

Your kind perusal and acknowledgement to the contents will be highly appreciated.

Thanking you once again for your cooperation,

Yours Sincerely,


Minoru SHIBUYA

Team Leader
SAPROF Study Team

Cc:

- 1) Mr. B. Salhotra, GM (Finance), DFCCIL
- 2) Mr. G. Pillai, ED/PP, MOR
- 3) Mr. M. Seito, Representative Office in New Delhi, JBIC

OFFICE ADDRESS

SU - 7 & 8, Bhikaji Cama Bhawan, Bhikaji Cama Place, New Delhi - 110066, India.
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**JBIC Special Assistance for Project Formation (SAPROF)
For
Dedicated Freight Corridor Project**

Our Ref. No.ADM-OG-018/08 Your Ref No. Date: 24th July 2008
Letter Fax Page 2/11

Attachment

1. Benchmark Coordinates of Each Section

GPS Coordinates (X, Y) of benchmarks based on indicated on each FLS Section drawings. (in terms of UTM Projection on WGS-84 datum as required by Survey of India)

2. SAPROF Alignment

No.	Sec.	Reason of Detour, Deviation, etc	Agreed Alignment	Remarks
4	8	DFCCIL found physical constraints on the parallel route and adopted a detour route. This detour also avoids the replacement of ROB and congested area of Sidhapur St. Since the preparation of the FLS CAD drawings is still in progress by DFCCIL, it will be provided according to study schedule of Environmental Team, with some lead time.	FLS Draft (Topo-sheet)	Fig-4. Mahesana-Palanpur
5	9	DFCCIL agreed to adopt the alignment proposed in the JICA GLD since the modalities involved in getting the clearances in the Wildlife Sanctuary would impede execution of the project	GLD	Fig-5. Palanpur-Iqbal Gadh
10	9	DFCCIL originally planned a detour with a rail flyover on existing cement siding, however decided to merge the cement siding into the DFC with provision of waiting track. Cement train traffic was confirmed to be one to two rakes per day.	GLD	Fig.-10. Ext. Banas Station.
11	10	DFCCIL original planned to avoid built-up area near Sirahl Rd St. and provide a rail flyover on existing cement siding at Keshavganj St., however this has been changed to parallel section by merging the cement siding into the DFC with provision of a waiting track.	GLD	Fig.-11. Ext. Sirahl Rd. & Keshavganj Station.
13	11	DFCCIL confirmed that this detour was planned to avoid the built up area consisting of railway quarters near Manwar St. and provide rail flyover on existing MG line to Mavli. However, DFCCIL decided to take a parallel alignment by shifting the MG line to the East, and dismantling the 60 to 70 railway quarters after rebuilding them at a new location.	GLD	Fig.-13. Ext. Marwar Junction Station.
14	12	Avoided built-up area and Marble Factories. Since the preparation of the FLS CAD drawings is still in progress by DFCCIL, its provision to the SAPROF team will not be possible within the study period.	Parallel	Fig-14. Kishangarh Station.
16	14	Avoided built-up area and existing ROB. Since the preparation of the FLS CAD drawings is still in progress by DFCCIL, its provision to the SAPROF team will not be possible within the study period.	Parallel	Fig-16. Ringas Station.
17	16-16	Location of Rewari Jn St. and intermodal logistic park still being debated. After discussion with DFCCIL, it was concluded that the alignment suggested by DFCCIL that JICA GLD is acceptable as part of SAPROF alignment, and the location of ICD needs to be planned along the existing line.	GLD	Fig-17. Rewari Jn Station.

Note: Discussion on sections of alignment which the SAPROF Team find the FLS proposition being reasonable was not conducted, and is not tabulated above.

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**JBIC Special Assistance for Project Formation (SAPROF)
For
Dedicated Freight Corridor Project**

Our Ref. No. ADM-OG-018/08 Your Ref No. Date: 24th July 2008
Letter Fax Page 3/11

3. Junction Station (JS)

No.	JS	Confirmed Items
	General	1) Function and configuration of connectivity conforms to the principles indicated in the JICA Guideline Design. 2) Detour sections are confirmed to be elevated. 3) Except for Rewari JS, where many connectivity to existing lines are required, the width of JS is 80 metres.
1	Makarpara	1) Adjust the location of the JS indicated on GLD to connect with the FLS detour line. 2) The DFC main line on JNPT side indicated on FLS needs to be shifted to the proximity of the existing line. 3) The JS will be planned at-grade as per GLD.
2	Sabarmati	1) Adjust the location of the JS indicated on GLD to connect with the FLS detour line. 2) Provide a connecting line between JNPT and existing Viramgam Junction Station.
3	Mehesana	1) Adjust the location of the JS indicated on GLD to connect with the FLS detour line.
4	Palanpur	1) JS indicated on GLD will be adopted.
5	Marwar	1) Yard layout of GLD is adopted. 2) DFC main line will be in parallel to the existing line. Railway quarters on the east will be dismantled. 3) Minimise the space between DFC tracks and existing line, maintaining the width of the existing yard. 4) Connection line to the current MG line, which is planned to be converted to BG line, is not required. The planned third line on the east side of the DFC main line will be connected towards Jodhpur. 5) Provision of connection line to Jodhpur is not necessary for the time being.
6	Phulera	1) Adjust the location of JS indicated on GLD to connect with the FLS detour line. 2) Main yard of JS shall be at-grade to connect with the adjacent parallel section. Thus, the connecting line towards the east will not pass under the DFC main line. 3) The Phulera - Jaipur line should be planned as a double BG line. 4) Exchange yard and Himoda Station, will be integrated into a common yard.
7	Rewari	1) Location and configuration of JS as per GLD will be adopted. 2) Provide connection route from Rewari JS to Jaipur via existing Rewari Junction station. 3) Gurgaon ICD plan indicated on GLD is not feasible due to difficulty of land acquisition. ICD is to be planned between Rewari and Gurgaon.

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Attachment No.2

Attendance List of the Meeting for the Preliminary Report by SAPROF Study Team

**JBIC Special Assistance for Project Formation (SAPROF)
For
Dedicated Freight Corridor Project**

**PRELIMINARY REPORT BY SAPROF STUDY TEAM ON 22ND JULY 2008
ATTENDANCE SHEET**

No.	Name	Organisation/ Designation	Contact no./ E-mail	Signature
1	SAVIN BHATTIA	RAILWAY EXPERT, SAPROF	savin_bhattia@ yahoo.co.in	<i>Savin Bhattia</i>
2	TETSUO NAKANO	Co-Team leader, Railway Expert	25367@n-koei.co.jp	<i>Tetsuo Nakano</i>
3	OSAMI MATSUHOTO	Railway Expert (Station Part)	25732@- - -	<i>Osami Matsuoto</i>
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7	Tomoo Aoki	"	aoki-th@n-koei.co.jp	<i>T. Aoki</i>
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9	Sanjay Arora	EIA/EMP Specialist SAPROF TEAM	sanjayarora31@ hotmail.com	<i>S. Arora</i>
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11	IYAMA KAZUO	SAPROF TEAM	k-iyama@n-koei.jp	<i>K. Iyama</i>
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15	Randap Bhatwaj	Advertiser	-	<i>R. Bhatwaj</i>
16	G. PILLAI	LE/PP		<i>G. Pillai</i>
17	S. P. Bera	OPSP1	23383525	<i>S. P. Bera</i>
18	Rampal Singh	TD/NUMS	23070335	<i>R. Singh</i>

No.	Name	Organisation/ Designation	Contact no./ E-mail	Signature
19	Mil Kumar	ED/RE	9910487330	ML
20	Rajiv Chandelny	EDWP	9910487384	RC
21	Mitsunori SAITO	JBIC	9811014365	SAITO
22	P. PARHI	MOR	9910487455	P
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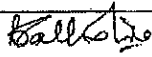


Attachment No.3

Attendance List of the Meeting for the Intermediate Report by SAPROF Study Team held on 29th July 2008

JBIC Special Assistance for Project Formation (SAPROF)
For
Dedicated Freight Corridor Project

INTERMEDIATE REPORT BY SAPROF STUDY TEAM ON 29TH JULY 2008
ATTENDANCE SHEET

S. No.	Name	Organisation/ Designation	Contact no./ E-mail	Signature
1	TERUO NAKANO	SAPROF STUDY TEAM	25367@n-koei.co.jp	
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4	Toshiyuki Ujire	" "	a342@n-koei.co.jp	
5	Takashi Shimizu	" "	a3708@n-koei.co.jp	
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12	D. Gowami	" "	gowami.eindia@yahoo.com	
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14	R.L Gupta	" "	9999973948	
15	K. Suzuki	" "	a6359@n-koei.co.jp	
16	S.K. Lamin	DFCC S/O B/Broad	9897197192	
17	D. J. Shinde	DFCC	9958590992	
18	B. B. Saran	DFCC	9958590994	


S. No.	Name	Organization/ Designation	Contact no./ E-mail	Signature
19	Bharat Salhotra	DFCCIL	salhotra@alum.mit.edu	
20	Pradip Bhattacharya	LLY Board	23389215	
21	G. PILLAI	EPDRy Bd	23389101	
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Attachment-8 Minute of Discussion of 28th August 2008

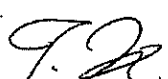
MINUTES OF DISCUSSION
ON
JBIC SPECIAL ASSISTANCE PROJECT FORMATION (SAPROF)
FOR
DEDICATED FREIGHT CORRIDOR PROJECT
BETWEEN
JAPAN BANK FOR INTERNATIONAL COOPERATION
AND
MINISTRY OF RAILWAYS, GOVERNMENT OF INDIA

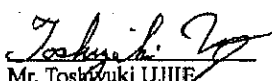
DATE: August 28th, 2008
PLACE: New Delhi, India

1. The Japan Bank for International Cooperation (hereinafter referred to as "JBIC") Special Assistance for Project Formation (hereinafter referred to as "SAPROF") Study Team has presented the second report of the SAPROF Study for Dedicated Freight Corridor Project (hereinafter referred to as "the Project") with officials of Ministry of Railways, Government of India (hereinafter referred to as "MOR") and management of DFCCIL on 26th August, 2008.
2. The JBIC SAPROF Study Team and MOR and DFCCIL agreed upon the contents of the record of Main Points Discussed as per following pages, subject to the approval by the competent higher authorities of both sides. It should be noted that this document does not imply any decision or commitment by JBIC to extend its loan for the Project at this stage.


Mr. Bharat SALHOTRA
General Manager, Finance
DFCCIL


Mr. Girish PILLAI
Executive Director
Perspective Planning,
Railway Board
Ministry of Railways


Mr. Tetsutaro KON
Representative,
JBIC Rep. Office in New Delhi


Mr. Toshiyuki UJIE
Co-Team Leader,
JBIC SAPROF Study Team

p.1 / 7

Subsequent to the Intermediate Reporting to the management of DFCCIL which was held on 29th July 2008, and the conclusions reached thereafter was compiled in the Minutes of Discussion of 30th July, the SAPROF Study Team (hereinafter, the Study Team) was provided from DFCCIL with the pending information of the Final Location Survey (FLS) for Section 8, 12, and 14.

The Study Team has reviewed the information received and has also carried out the conceptual design of the Junction Station based on the decision of DFCCIL which is covered in the Minutes of Discussion.

Subsequently, a meeting was convened on August 26th in which the Study Team presented the result of the findings on the deviations to the MOR and DFCCIL and discussed on several issues that require urgent confirmation and decision by DFCCIL on the alignment defined by the Study Team.

The purpose of this document is to record the developments after the first mission of the Study Team that ended in end of July 2008, record the findings of the deviation of the information against the JICA Guideline Design (GLD) by the Study Team, conclusion of the meeting between the Study Team and MOR/DFCCIL, confirm and agree on the outcome presented in the second report.

The following items were confirmed and decided through the discussions between the Study Team and MOR/DFCCIL. The Study Team pointed out that the contents contained in the Minutes of Discussion of 30th July 2008 are effective, unless otherwise mentioned in this document.

1. Status of Data Provision

1.1 Final Location Survey (FLS) Data

The status of the provision of the FLS CAD data from DFCCIL as on August 26th 2008 is as follows:

Section	Total Length (Km)	Handover Date to Study Team	Remarks
5	55	11 July	Detour to the west side of existing line
6	83	16 July	Detour to the west side of existing line
7	42	16 July	Detour to the west side of existing line
8	106	16, 25 & 31 July	Detour to the west side of existing line
9	92	11 July	Parallel to existing line on the east side. Revision required for detour section at WLS area.
10	103	11 July	Parallel to existing line on the east side.
11	104	11 July	Parallel to existing line on the east side.
12	100	30 July	Parallel to existing line on the east side. Partial revision necessary
13	85	11 July	Parallel to existing line on the east side.
14	107	30 July	Parallel to existing line on the east side. Partial revision necessary
15	53 (42/68)	11 & 25 July	Parallel to existing line on the east side. End point at east side of Rewari JS
(16)	(64)	24 July	Parallel and new line
Total	930 (1051)		

Note:

- 1) The Study Team understands that for each Section, information provided most recently from DFCCIL is the latest information, which SAPROF Study will be based on.
- 2) () indicate section out of Project scope.

1.2 General Arrangement Drawings (GAD)

The status of the provision of the GAD data from DFCCIL as on August 26th 2008 is as follows:

Category	Total	Provided	Awaiting	Remarks
Junction Station	7	7	0	Model plans of Makarpura, Sabarmati, Mahesana, Palanpur, Marwar, Phulera, Rewari
Crossing Station	21	17	4	Indicated on FLS. Typical plan provided.
Typical cross section	3	3	0	Detour section (Embank. & Cut section) Parallel section (Embankment)
Important Bridges / Major Bridges (Length > 100m)	4 / 19	0	4 / 19	Undergoing hydrological model study. Tender drawings for bridges south of Vadodara available as reference.
ROB subject to reconstruction	1	0	1	Drawings being prepared by DFCCIL and would be available in two to three months.
Inland Container Depot	1	0	1	Indicated in multimodal logistic park on Rewari JS drawing but no details available.
Loco Depot	N/A	0	N/A	Decision for electrification of this line was received only recently from Railway Board, hence Loco and maintenance Depots and substations were not yet identified.
Maintenance Depot	N/A	0	N/A	
Substation	N/A	0	N/A	

Note: N/A – Information not available.

2. Deviation of FLS Alignment of Section 8, 12 and 14 from GLD

The deviation of the FLS for Section 8, 12 and 14 from GLD was presented to MOR/DFCCIL on 26th August 2008 in the Second Report by the Study Team. Following the presentation and subsequent discussions with DFCCIL, the Study Team and MOR/DFCCIL agreed on the Final Alignment for implementation of the DFC Project.

The Study Team and DFCCIL reconciled the difference between GLD and FLS of each Section and concluded the DFC alignment, as per the following table.

Section	Deviated portion (km)			Reason of Detour, Deviation, etc	Remarks (Refer to drawings of the Second Report from the SAPROF Study Team)
	FLS Chainage (km)	GLD Chainage (km)	Finalised Alignment		
12	10.4 - 14.4	976.0 - 980.0	FLS	The cement siding on the east of the existing line will be shifted to the east and merged in to the DFC with a surface connection from DFC to Bangurgram station.	Figure 1 Bangurgram Stn.
12	39.4 - 40.9	1005.3 - 1006.9	FLS	FLS alignment overlaps with the existing line twice while adopting minimum radius of 700m. The existing line will be shifted to the west side along FLS alignment in order to avoid provision of two rail-flyovers.	Figure 2 Near Makrera Stn.
12	61.7 - 65.0	1027.6 - 1030.8	FLS	The FLS alignment avoids the workshop next to Madar Stn. and grave yard area.	Figure 3 Madar Stn.
14	6.9 - 8.8	1156.4 - 1158.3	FLS	The FLS alignment was adopted since DFCCIL and IR officials decided not to relocate existing interlocking facilities and not interfere with existing train operations.	Figure 4 Kishan Manpura Str.

Section	Deviated portion (km)			Reason of Detour, Deviation, etc	Remarks (Refer to drawings of the Second Report from the SAPROF Study Team)
	FLS Chainage (km)	GLD Chainage (km)	Finalised Alignment		
14	12.6	1162.1	Parallel	DFCCIL has agreed to the proposition of the Study Team to shift the existing MG line to the west and construct a cross over over DFC by a rail-flyover at a right-angle. Provision should be made to accommodate four lines for the rail-flyover which will over pass the DFC and existing MG lines (under conversion to BG) which will be shifted toward the DFC line in the future. With this change, at-grade crossing of MG line at the existing Ringas Stn. will be eliminated.	Figure 5 Ringas Stn.
	18.0	1167.0			

Notes:

- 1) The contents above supersede the contents of the presentation material of the Second Report.
- 2) Other deviation mentioned in the Minutes of Discussion of 30th July are still effective.
- 3) As per "Item 3. Precision of Integration of Section Drawings Provided from DFCCIL" which is recorded on the Minutes of Discussion of 30th July 2008, the precision of the position of the alignment and the connectivity of the section data may have a margin of error. These errors need to be verified and adjusted in the coming engineering service stage.

3. Other Issues Identified and its Conclusion

The following issues were flagged by the Study Team. The corresponding approach for solution was discussed with DFCCIL and concluded as per the following table:

Sec	Km		Type of Section		Reason of Detour, Deviation, etc	Final. Align.	Remarks
	FLS	GLD	FLS	GLD			
8	65.2 - 88.1	N/A	Large Detour	Large Detour	Width of Right-of-Way (ROW) in some sections indicated in the drawings, which were provided on 31 st July, was nearly 400 meters. DFCCIL clarified that the maximum ROW would be 75 m only and DFCCIL would provide the relevant Land Plans of the area near Mehsana and Palanpur.	FLS	No Figure
12	5.48 - 7.76	971.5 - 973.7	Small Detour	Parallel	In response to the query of Study Team regarding the FLS drawings, DFCCIL clarified that the overlapping of the DFC lines on the existing lines is because the platform will be taken over by DFC and space for the second line will be created by shifting the loading lines on the west side which will leave three tracks, i.e. 1 loop, 1 existing and 1 track to be added in the future.	FLS	Figure 6 Beawar Stn.
12	54.70 - 60.80	1020.2 - 1027.0	Parallel	Parallel	DFCCIL clarified that the freight bypass line will be taken over by DFC and one additional line about 7 km will be provided to IR by DFCCIL from Dorai to Ajmer to augment the transport capacity.	FLS	Figure 7 Ajmer Stn
15	4.75 - 8.75	1261.0 - 1265.0	Small Detour	Parallel	DFCCIL clarified that the construction of the DFC that is planned adjacent and parallel to existing IR tracks will be	FLS	Figure 8 Narnaul Stn.

Sec	Km		Type of Section		Reason of Detour, Deviation, etc	Final. Align.	Remarks
	FLS	GLD	FLS	GLD			
					carried out by shifting some portion of the tracks to the west side, and taking working blocks from IR. Similar situation arrangement will be made at Kishangarh.		

4. Conceptual Design of the Junction Stations

The Junction stations arrangement and conceptual design as suggested by SAPROF Team was accepted by DFCCIL and Railway Board and summarised as the following table:

JS	Section (FLS)	Chainage (JICA GLD)	Remark
Makarapura	5	420.0 km	<ul style="list-style-type: none"> - Connection point of JS at JNPT side to follow the FLS alignment. - DFCCIL will provide connectivity to the existing IR line. - Information on profile of Makarpura JS will be provided by DFCCIL – i.e. whether it is at Grade or not. - Function = JICA GLD; Location = FLS Alignment
Sabarmati	6&7	560.0 km	<ul style="list-style-type: none"> - Route is shifted towards west. - Clover-type layout is rationalised into compact scale preserving the connectivity and function of the JS enclosed by track, as well as minimising land enclosed by track. - Provision of connecting line from JNPT to Virangam is made. - Function = JICA GLD; Location = SAPROF Alignment
Mahesana	7&8	611.0 km	<ul style="list-style-type: none"> - Provision of waiting track is made as a buffer for at-grade crossing. - Function = JICA GLD; Location = SAPROF Alignment
Palanpur	Sec 8	673.0 km	<ul style="list-style-type: none"> - Provision of waiting track is made as a buffer for at-grade crossing. - Southbound connection is provided. - Function = JICA GLD; Location = SAPROF Alignment
Marwar	11	881.0 km	<ul style="list-style-type: none"> - MG line is shifted to accommodate the waiting track and DFC line. - Function = JICA GLD; Location = SAPROF Alignment
Phulera	13	1100.0 km	<ul style="list-style-type: none"> - Layout improved to avoid enclosing broad area and reflect the principle of GLD - Function = JICA GLD; Location = SAPROF Alignment
Rewari	15&16	1310.0 km	<ul style="list-style-type: none"> - Logistic park needs to be planned separately along the existing line. - Function = JICA GLD; Location = SAPROF Alignment

Notes:

- 1) The contents above supersede the contents of the presentation material of the Second Report.
- 2) Other deviation mentioned in the Minutes of Discussion of 30th July are still effective.

5. Completion of the FLS Conforming to Final Alignment Defined in the SAPROF Study

The Study Team explained that the FLS between Section 8 and 9 detouring the wildlife sanctuary located between Palanpur – Iqbal Gadh that will be finalised by DFCCIL needs to conform to the principles and location of the SAPROF Alignment for the subsequent timely administration of the Project. For this purpose, as referential information, the Study Team will provide satellite imagery information to

DFCCIL before departure, so their topo-surveyor can smoothly connect the FLS alignment of Section 8 to the GLD alignment.

6. Location of Inland Container Depot (ICD)

DFCCIL suggested that the availability of land adjacent to the south of planned Rewari JS is being investigated. DFCCIL will communicate the result to JBIC Representative Office in New Delhi. Since the location and the size of the ICD can be decided only after the confirmation of the availability of land, the time to carry out the environmental survey for the ICD may become insufficient. DFCCIL will communicate with JBIC on this issue and decide on the treatment of the ICD.

7. Decision on the Electrification of the Western DFC

The MOR/DFCCIL has advised the Study Team that the MOR has decided to electrify the Western DFC and has officially communicated to Government of Japan earlier. MOR/DFCCIL has agreed to provide to the SAPROF Team, through JBIC (Representative office in New Delhi), information of conceptual plans up to date.

8. Provision of information from DFCCIL to the Study Team

MOR/DFCCIL agreed to provide the following information to the SAPROF Study team as per the following schedule.

No.	Subject	Scheduled Handover Date
1	List of Existing Important Bridges (A3 size)	Received on August 27th, 2008
2	Details of Flyovers on Western DFC (A3 size)	
3	Sample of Land Use Map (A4 size)	
4	GAD for ROB, near Amarpura, subject to reconstruction.	December 25th, 2008
5	ROW information for Section 8 for 40km	September 5th, 2008
6	Land Plans for Kishangarh and Namaul stations, and typical cross section drawings indicating distance between DFC and IR tracks.	September 2nd, 2008

9. Provision of information from the Study Team to DFCCIL

DFCCIL has requested the following information from SAPROF team:

No.	Subject	Handover Date
1	Softcopy of the presentation	August 27 th , 2008
2	Satellite imagery information in kmz file format for: 1) Palanpur – Iqbal Gadh Detour (source GLD) 2) FLS North End (Palanpur) (source FLS Section 8) 3) Rewari JS	August 27 th , 2008

Notes:

- 1) KMZ files are only for reference and does not indicate the accurate position. The accurate location of the FLS alignment and Junction Stations should base on the FLS. Particularly, the location of the JS depends on the topographical information of site, profile plan, and horizontal curve plan.
- 2) The SAPROF team provided the kmz file as referential information for DFCCIL regional office as a guiding tool for topo-survey and FLS preparation.

Attendance List

JBIC Special Assistance for Project Formation (SAPROF)
For
Dedicated Freight Corridor Project

SECOND REPORT BY SAPROF STUDY TEAM ON 26TH AUGUST 2008
ATTENDANCE SHEET

S. No.	Name	Organisation/ Designation	Contact no./ E-mail	Signature
1	SKRISHNA	ICAD/EnggE	9971297192	
2	G. PILLAI	ED/PP, RBD	9910487453	
3	B. B. Saran	Dir (PP)	995859099+	
4	PN Shankar	Dir (OP&SD)	9950590992	
5	T. KON	JBIC (NDL)		
6	Toshiyuki Ujira	JBIC SAPROF Team	aj481@n-koei.co.jp	
7	Savitri Bhatia	Consultant, SAPROF	9211113619	
8	Ryuzaro MOTEKI	JARTS, SAPROF	leo-mtg@jarts.or.jp	
9	MATSUMOTO Osami	JBIC SAPROF	9811534184	
10	Takanori NAKANO	-	95367@n-koei.co.jp (971-1234-770)	
11	Shizuko Saito	Nippon Koei	94903@n-koei.co.jp	
12	K. Suzuki	JBIC, SAPROF	96359@n-koei.co.jp	
13	B. L. Gupta	ICAD	9999973948	
14				
15				
16				
17				
18				

Attachment-9 Minute of Discussion of 24th September 2008

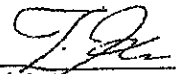
MINUTES OF DISCUSSION
ON
JBIC SPECIAL ASSISTANCE PROJECT FORMATION (SAPROF)
FOR
DEDICATED FREIGHT CORRIDOR PROJECT
BETWEEN
JAPAN BANK FOR INTERNATIONAL COOPERATION
AND
MINISTRY OF RAILWAYS, GOVERNMENT OF INDIA

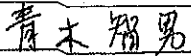
DATE: September 24th, 2008
PLACE: New Delhi, India

1. The Japan Bank for International Cooperation (hereinafter referred to as "JBIC") Special Assistance for Project Formation (hereinafter referred as "SAPROF") Study Team had discussions on the Public Consultation Meeting and draft Rehabilitation and Resettlement Plan of the SAPROF Study for Dedicated Freight Corridor Project (hereinafter referred to as "the Project") with officials of Ministry of Railways, Government of India (hereinafter referred to as "MOR") and management of DFCCIL on 23rd September, 2008.
2. The JBIC SAPROF Study Team and MOR and DFCCIL agreed upon the contents of the record of Main Points Discussed as per following pages, subject to the approval by the competent higher authorities of both sides. It should be noted that this document does not imply any decision or commitment by JBIC to extend its loan for the Project at this stage.


Mr. Bharat SALHOTRA
General Manager (Finance)
DFCCIL


Mr. G. PILLAI
Executive Director
Perspective Planning,
Railway Board
Ministry of Railways


Mr. T. KON
Representative,
JBIC Rep. Office in New Delhi


Mr. Tomoo Aoki
Social Environment/RAP Specialist,
JBIC SAPROF Study Team

The following items were confirmed and decided through the discussion between the Study Team and MOR/DFCCIL.

1. Public Consultation Meetings (PCM) in Planning Process

JBIC SAPROF Team explained that as per JBIC Guidelines for Confirmation of Environmental and Social Considerations, 2002 (JBIC Guidelines), two types of PCMs need to be conducted by the executing agency (MOR /DFCCIL) in the planning phase of the Project. The two types are PCMs for EIA and PCMs for draft Rehabilitation and Resettlement Plan (RRP). JBIC also reiterated that according to JBIC Guidelines the executing agency shall be responsible for environmental and social considerations for the project.

PCMs for EIA need to be conducted in only those villages which are getting affected due to change in the alignment after the JICA Study. These PCMs will present potential environmental impacts, mitigation measures, Environmental Management Plan (EMP) and monitoring plan to as many people as possible. It was agreed that PCMs for EIA will be conducted with the support of JBIC SAPROF Team with attendance of representatives of MOR/DFCCIL, where considered necessary.

JBIC SAPROF Team explained that PCMs for RRP need to be conducted, with attendance of relevant representatives of MOR/DFCCIL, in all the seventeen districts of Haryana, Rajasthan and Gujarat through which DFC alignment passes. Further, it was explained that PCMs for RRP will present 1st draft of RRP which include policy of rehabilitation and resettlement to the potential Project Affected People (PAPs). MOR and DFCCIL stated that in PCMs for RRP it has to be emphasised that policy of rehabilitation and resettlement will be based on National Rehabilitation and Resettlement Policy, 2007 (NRRP 2007) and Railways (Amendment) Act, 2008 (RAA 2008). These PCMs should be held after issue of notification under section 20A of the RAA 2008. JBIC mentioned that after hearing opinions of PAPs in PCMs, the second draft of RRP is to be prepared which would satisfy NRRP 2007, RAA 2008 and JBIC Guidelines. The second draft of RRP then needs to be disseminated to the PAPs. JBIC will also examine the process to disseminate RRP to the PAPs as a preparation for the Second Phase of the Project.

2. Schedule of PCMs

JBIC SAPROF Team explained the schedule of Environmental and Social Considerations Study including conducting of PCMs and draft RRP preparation. MOR and DFCCIL agreed with the schedule of conducting of PCMs for EIA in October and November and 1st PCMs for RRP after issuing the Notification 20A of the RAA 2008. The Notification 20A regarding the Land acquisition of DFC corridor from Rewari to Vadodara is expected to be issued by December 2008.

3. Compensation and Assistance Policies for the DFC Project

JBIC SAPROF Team explained that assistances prescribed in NRRP 2007 are basically acceptable for the DFC Project as per JBIC Guidelines. JBIC representative stated that, according to JBIC Guidelines, all efforts are to be made to improve the standard of living and income opportunities of the PAPs. JBIC SAPROF Team also explained that during field survey the SAPROF Team has observed the difference in Government Land rate and the actual Market Land rate. MOR and DFCCIL explained that as per Government of Indian policy, the RRP and compensation will have to be based only on the NRRP 2007.

**JBIC Special Assistance for Project Formation (SAPROF)
For
Dedicated Freight Corridor Project**

**PRESENTATION BY SAPROF STUDY TEAM ON 29th SEPTEMBER 2008
ON ENVIRONMENT AND SOCIAL CONSIDERATION**

ATTENDANCE SHEET

S. No.	Name	Organization/ Designation	Contact no./ E-mail	Signature
1	S. P. Bawa	MOR	9910187452 dplg@plc.co.in	S. P. Bawa
2	S. M. Rana	OPIC	9987397192	S. M. Rana
3	G. Pillai	Yin f 28	011-23389101	G. Pillai
4	R. K. Sinha	Director (Gen) DE-666	9953570991	R. K. Sinha
5	B. B. Saran	DNC/PP/Gen	9957590934	B. B. Saran
6	B. S. Sathya	GM/F&C/O	9810814732	B. S. Sathya
7	T. KON	JBIC representation	9811159922	T. KON
8	Sanjay Arora	JBIC SAPROF Team	9810740941	Sanjay Arora
9	Indrani Ganes	JBIC SAPROF Team	9944973948	Indrani Ganes
10	G. L. Gupta	JBIC SAPROF Team	9944973948	G. L. Gupta
11	SAVIN BHATTIA	JBIC SAPROF Team	9944973948	Savin Bhattia
12	S. Minato	JBIC SAPROF Team	9944973948	S. Minato
13	S. U. Pathan	W&ES/Gen	9972397193	S. U. Pathan
14	Primal Dubey	JGM/LA	9910166886	Primal Dubey
15	Tamoo Auki	SAPROF Team		Tamoo Auki
16				
17				

Attachment-10 Minute of Discussion of 31st October 2008

**JBIC Special Assistance for Project Formation (SAPROF)
For
Dedicated Freight Corridor Project**

Our Ref. No ADM-OG-040038	Your Ref No	Date: 10 th November 2008
Letter #	Fax #	Page 1/1

The Managing Director,
Dedicated Freight Corridor Corporation of India Ltd.
5th Floor, Pragati Maidan Metro Station
New Delhi -110002.

[KIND ATTN: MR. BHARAT SALHOTRA, GM (F) & CIO]

Sub: Minutes of Discussion for meeting held on 31st October, 2008 regarding
SAPROF for DFC Project

Dear Sir,

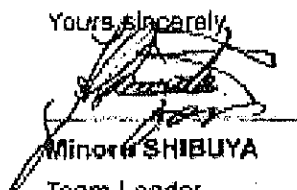
Find enclosed herewith 'Minutes of Discussion for meeting held on 31st October, 2008 regarding
SAPROF for DFC Project' at Rail Bhavan. This meeting was attended by representatives of
JICA, MoR, DFCCIL and SAPROF Team members

We request you to kindly confirm these discussions at the earliest for timely completion of the
SAPROF Study

Thanking You,

With Kind Regards,

Yours sincerely,



Minoru SHIBUYA

Team Leader

SAPROF Study Team

Copy to:

1. Mr. Gush Pillai, ED/PP, MoR.
2. JICA, New Delhi.

OFFICE ADDRESS

SU - 7, Bhikaji Cama Bhawan, Bhikaji Cama Place, New Delhi - 110066, India
Telefax: +91-011-46032029

Minutes of Discussion on SAPROF for DFC Project

This minutes of discussion has been prepared in order to confirm the contents of the record of main points discussed by representatives of Ministry of Railways (MOR), DFCCIL, JICA (Ex-JBIC) India Office and JICA (Ex-JBIC) SAPROF Study Team at a meeting held on 31st October, 2008 at a meeting room of MOR.

1. Public Consultation Meetings (PCMs) for EIA

JICA SAPROF Team explained that Public Consultation Meetings (PCMs) for EIA for newly project affected villages have been held in Haryana and Gujarat States as per agreed minutes by MOR, DFCCIL, JICA and JICA SAPROF Team in the meeting held on 23rd September 2008. DFCCIL mentioned that an article has appeared in Indian Express Dated 24th October regarding the participants' opinions which were raised at the time of PCM in Vadodara as per attached (Appendix 1). In view of this, DFCCIL proposed that PCMs for EIA in the remaining districts in Rajasthan State should be postponed as state elections are due in November-December 2008. On the other hand, JICA emphasized that proper PCMs for EIA are essential in the process of EIA report finalization as per JICA Guidelines for Consultation of Environmental and Social Consideration, 2002 (JICA Guidelines). After the discussions, it was agreed by MOR, DFCCIL, JICA and JICA SAPROF Team that PCMs for EIA in Rajasthan State would be held after the state election. It was also agreed that PCMs in Rajasthan should be held for EIA and Rehabilitation and Resettlement Plan (RRP) together because most of the participants of PCMs (mainly project affected peoples) tend to be more interested in RRP and compensation package even though the PCMs are held for EIA. So, DFCCIL mentioned that the PCMs in Rajasthan should be held after the Notification 20A is issued and publicized in the local news papers. Based on this argument, it was confirmed that overall schedule of the EIA reports (ESIMMS & S-ESIMMS) finalization would be delayed accordingly. As EIA has to be disclosed to the public 120 days before the signing of L/A, the delay in finalization of the EIA reports will also affect the processing of DFC Project Phase II accordingly. Mr. DFCCIL committed to provide the status of issue and publication of the Notification 20A from Rewari to Vadodara as soon as possible, so that JICA SAPROF Team could consider the revised schedule for PCMs for EIA/RRP and finalization of the EIA reports.

2. Information Disclosure of Draft EIA and EIA Reports

JICA SAPROF Team explained that, in addition to PCMs for EIA, draft EIA report (ESIMMS & draft S-ESIMMS) should be disclosed to the public as much as possible in order to collect comments and opinions on draft EIA report from the public. The suggested ways of the disclosure are as follows:

- Draft EIA report shall be disclosed at each DFCCIL office and major existing railway stations along the DFC route
- Summary of draft EIA report will be distributed to all project affected villages along the DFC alignment between Rewari to Vadodara
- Comments and opinions from the public shall be collected in a written form and forwarded to MOR and DFCCIL in Delhi

The comments and opinions received shall be incorporated into the final EIA report during its finalization. MOR and DFCCIL agreed to disseminate draft EIA report to the public by the method suggested by the JICA SAPROF Study Team.

Further, Final EIA report (ESIMMS & S ESIMMS) shall also be disclosed to the public in Japan and India through their relevant websites, DFCCIL offices and major existing railway stations along the DFC route.

3. Approval of EIA Report

MOR was requested to explain the procedure and time required for approval of the EIA report and ED/PP will provide reply after consulting within the Ministry.

End of document.

Attachment-11 Minute of Discussion of 21st January 2009

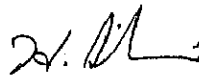
MINUTES OF DISCUSSION
ON
JICA SPECIAL ASSISTANCE PROJECT FORMATION (SAPROF)
FOR
DEDICATED FREIGHT CORRIDOR PROJECT
BETWEEN
JAPAN INTERNATIONAL COOPERATION AGENCY
AND
MINISTRY OF RAILWAYS, GOVERNMENT OF INDIA

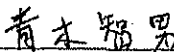
DATE: January 21st, 2009
PLACE: New Delhi, India

1. The Japan International Cooperation Agency (hereinafter referred to as "JICA") Special Assistance for Project Formation (hereinafter referred to as "SAPROF") Study Team had discussions on the draft Environmental Impact Assessment and draft Rehabilitation and Resettlement Plan for the Dedicated Freight Corridor Project (hereinafter referred to as "the Project") with officials of Ministry of Railways, Government of India (hereinafter referred to as "MOR") and management of DFCCIL on 20th January, 2009.
2. The JICA SAPROF Study Team and MOR and DFCCIL agreed upon the contents of the record of Main Points Discussed as per following pages, subject to the approval by the competent higher authorities of both sides. It should be noted that this document does not imply any decision or commitment by JICA to extend its loan for the Project at this stage.


Mr. Bharat SALHOTRA
General Manager (Finance)
DFCCIL


Mr. G. PILLAI
Executive Director
Perspective Planning,
Railway Board
Ministry of Railways


Mr. H. IRIGAKI
Chief Representative,
JBIC Rep. Office in New Delhi


Mr. Tomoo Aoki
Social Environment/RAP Specialist,
JBIC SAPROF Study Team

Minutes of Meeting on Presentation on Draft EIA and Draft RRP

Date: 20th January, 2009
Venue: Committee Room, MOR
Time: 3.00 p.m. – 5.00 p.m.

1. DRAFT EIA Report

The SAPROF Study Team submitted Draft EIA (ESIMMS + draft S-ESIMMS) Report to MOR and DFCCIL from Rewari to Vadodara section of DFC Project for the review and comments. ESIMMS report was in three volumes basically state wise for Haryana, Rajasthan and Gujarat States. Draft S-ESIMMS Report included supplementary surveys for natural and social environment, pollution control, updated impacts and mitigation measures and updated environmental management and monitoring plan. The SAPROF Study Team presented the summarized details of Draft EIA Report.

The SAPROF Study Team presented that predicted noise levels in parallel section of DFC will exceed the recommended noise standards of Japan available for Railways. The mitigation measures proposed include construction of soundproof wall at selected locations and shifting the night time operation of some trains to daytime. MOR mentioned that predicted noise levels due to operation of DFC are compared with the recommended noise standards of Japan available for Railways. In India, no noise standards for railways are available hence predicted noise levels could be compared with ambient noise standards existing in India. Regarding mitigation measures construction of soundproof wall will have practical difficulty as in parallel section there are many at grade crossings used by public transportation. The SAPROF Study Team emphasized that at grade crossing could lead to safety hazard for the public. MOR mentioned that shifting night time operation will be also difficult as the distance traveled is more than 900 km. The SAPROF Study Team mentioned that at certain location such as Ajmer, only shifting train time table and without constructing sound proof wall could mitigate the impact of noise at night. Detailed study is to be carried out during Engineering Services to identify the location of soundproof wall or shifting of train operation time table.

The SAPROF Study Team presented the details of forest land to be diverted and number of trees to be felled. The SAPROF Study Team also presented the details of structures to be relocated and number of project affected families. The SAPROF Study Team also mentioned that updated Environmental Management and Monitoring Plan for pre-construction, construction and operation phases is explained in S-ESIMMS Report in detail.

2. DRAFT RRP

The SAPROF Study Team submitted 1st Draft RRP to MOR and DFCCIL for the review and comments. The SAPROF Study Team presented the summarized details of the 1st Draft RRP. The 1st Draft RRP is prepared based on RAA 2008, NRRP 2007, and "JICA Guidelines for Environmental and Social Considerations". The SAPROF Study Team mentioned that while preparing compensation for rehabilitation and resettlement all efforts are to be made to restore the standards of living of the Project Affected Persons (PAPs) to the level existing before the execution of the Project. Therefore, land price is to be assessed at the actual prevailing market price and for assessing market price appropriate mechanism is to be devised. MOR mentioned that the 1st Draft RRP stipulates provisions which may be beyond requirements of RAA 2008 and NRRP 2007 so MOR would review the Draft RRP and would discuss in the next meeting to be held at the end of January 2009.

The SAPROF Study Team submitted "Sample Brochure" to be distributed to the PAPs during PCMs for RRP for MOR's review and comments.

3. Further Environmental and Social Activities

The SAPROF Study Team presented further activities and schedule related to EIA, RRP, and PCMs for EIA and RRP. Role and responsibilities of MOR/DFCCIL and the SAPROF Study Team regarding further

activities of EIA, RRP, and PCMs were explained.

MOR mentioned that since the contents of 1st Draft RRP proposed by the SAPROF Study Team is required to be examined and discussed with JICA and the SAPROF Study Team. Therefore, MOR requested that PCMs for EIA should be conducted separately from the PCMs for RRP so as to comply the schedule of approval of the final EIA by the end of April, 2009. MOR/DFCCIL and the SAPROF Study Team agreed to conduct the PCMs for EIA in Rajasthan in early February, and MOR/DFCCIL confirmed to attend the PCMs for EIA.

MOR requested the SAPROF Study Team to submit draft of Executive Summary of EIA report, which will be disclosed to the PAs, for MOR's review and approval. The SAPROF Study Team also explained that MOR shall approve Draft EIA report prepared by the SAPROF Study Team together with EIA report prepared by JICA F/S by end of April 2009. The SAPROF Study Team will provide support to MOR/DFCCIL for the disclosure of draft EIA and final EIA, however disclosure of summary of final EIA to the public is the sole responsibility of MOR/DFCCIL.

JICA emphasized that conducting PCMs for RRP for complying "JICA Guidelines for Environmental and Social Considerations" is prerequisite of JICA's appraisal for the main loan of the project. Therefore, the PCMs for RRP should also be conducted as soon as possible to avoid further delay for the processing of the main loan. Therefore, it is agreed that in the next meeting to be held in February 2009, gaps between RAA 2008/NRRP 2007 and "JICA Guidelines for Environmental and Social Considerations" should be discussed and appropriate draft RRP be concluded before holding the PCM for RRP.

DFCCIL informed that Mr. S.K. Jain, GM SEMU, will be in charge of social and environmental issues from DFCCIL.

Attachment

PRESENTATION FOR DRFAT FINAL REPORT OF ESIMMS,
S-EIMMS AND RRP ON 20TH JANUARY, 2009
AT MOR, NEW DELHI

ATTENDANCE SHEET

S.No	Name	Organisation/Designation	Contact No./E-mail	Signature
1	P. D. Sharma	MOR / ED/ICF	9910487304 colla@icf.mor.gov.in	
2	P. BHATTARAI	MOR / AD/ICF	9910487452	
3	G. PILLAI	ESIPP; R. B	9910487453	
4	Rajiv Chandhry	EDWD, Rly Bd	9910487384	
5	Ashok Salhotra	GM/FDIT	9810814732	
6	S.K. Jain	GM/ Law/DFC	99771397200	
7	Jeetendra Sin	DP/SPU/DFC	9910487456	
8	P. PAETHI	JD/TP	9910487455	
9	AK SINGH	DIR/works	9910487318	
10	S MADHUKAR	Sr. Development Specialist JICA	9891342195	
11	T. KON	Representative JICA	9810487318 kon.t@jica.go.jp	
12	H. IRIGAKI	Chief Representative JICA	9811014366	
13	Tomoo Aoki	SAPROF Study Team	9711234984	
14	Indrani Goswami	SAPROF Study Team/DFC	9810740991	
15	Sanjay Arora	"	9811159927	
16	SAYIN BHATIA	"	9811525634	

Attachment-12 List of CAD Files Provided from DFCCIL

Section-5 (section between Sachin to Nadiad 251/6 to 451/6)
Prepared by: CEG

No.	Dwg name:	Dwg no.	Date	Scale
1	Detail Plan & Profile Section-5 Km 00/000 to Km 10/260	CEG/SACHIN-NADIAD/PLAN-PROFILE/S-5/1	May 2008	H=1:2000, V=1:200
2	Detail Plan & Profile Section-5 Km 10/260 to Km 20/520	CEG/SACHIN-NADIAD/PLAN-PROFILE/S-5/2	May 2008	H=1:2000, V=1:200
3	Detail Plan & Profile Section-5 Km 20/520 to Km 22/005	CEG/SACHIN-NADIAD/PLAN-PROFILE/S-5/3	May 2008	H=1:2000, V=1:200
4	Detail Plan & Profile Section-5 Km 22/000 to Km 30/000	CEG/SACHIN-NADIAD/PLAN-PROFILE/S-5/4	May 2008	H=1:2000, V=1:200
5	Detail Plan & Profile Section-5 Km 30/000 to Km 40/000	CEG/SACHIN-NADIAD/PLAN-PROFILE/S-5/5	May 2008	H=1:2000, V=1:200
6	Detail Plan & Profile Section-5 Km 40/000 to Km 50/000	CEG/SACHIN-NADIAD/PLAN-PROFILE/S-5/6	May 2008	H=1:2000, V=1:200
7	Detail Plan & Profile Section-5 Km 50/000 to Km 52/130	CEG/SACHIN-NADIAD/PLAN-PROFILE/S-5/7	May 2008	H=1:2000, V=1:200
8	Detail Plan & Profile Section-5 Km 52/130 to Km 60/000	CEG/SACHIN-NADIAD/PLAN-PROFILE/S-5/8	May 2008	H=1:2000, V=1:200
9	Detail Plan & Profile Section-5 Km 60/000 to Km 70/000	CEG/SACHIN-NADIAD/PLAN-PROFILE/S-5/9	June 2008	H=1:2000, V=1:200
10	Detail Plan & Profile Section-5 Km 70/000 to Km 78/805	CEG/SACHIN-NADIAD/PLAN-PROFILE/S-5/10	June 2008	H=1:2000, V=1:200

Section-6

Prepared by: RITES later work taken over by CEG (Consulting Engineering Group)

No.	Dwg name:	Dwg no.	Date	Scale
1	Detailed Plan & Profile Section 6 Km 00/000 to Km 9/000	CEG/SACHIN-NADIAD/PLAN-PROFILE/S-5/1	May 2008	H=1:2000, V=1:200
2	Detailed Plan & Profile Section 6 Km 9/000 to Km 19/000	CEG/SACHIN-NADIAD/PLAN-PROFILE/S-5/2	May 2008	H=1:2000, V=1:200
3	Detailed Plan & Profile Section 6 Km 19/000 to Km 25/000	CEG/SACHIN-NADIAD/PLAN-PROFILE/S-5/3	May 2008	H=1:2000, V=1:200
4	Detailed Plan & Profile Section 6 Km 25/000 to Km 35/000	CEG/SACHIN-NADIAD/PLAN-PROFILE/S-5/4	May 2008	H=1:2000, V=1:200
5	Detailed Plan & Profile Section 6 Km 35/000 to Km 45/000	CEG/SACHIN-NADIAD/PLAN-PROFILE/S-5/5	May 2008	H=1:2000, V=1:200
6	Detailed Plan & Profile Section 6 Km 45/000 to Km 47/400	CEG/SACHIN-NADIAD/PLAN-PROFILE/S-5/6	May 2008	H=1:2000, V=1:200
7	Detailed Plan & Profile Section 6 Km 47/400 to Km 57/400	PD/RITES/R/1T&S/DFC/EC/Sec-6/PP/SHEET NO.1	-	H=1:2000, V=1:200
8	Detailed Plan & Profile Section 6 Km 57/400 to Km 67/500	PD/RITES/R/1T&S/DFC/EC/Sec-6/PP/SHEET NO.2	-	H=1:2000, V=1:200
9	Detailed Plan & Profile Section 6 Km 67/400 to Km 77/500	PD/RITES/R/1T&S/DFC/EC/Sec-6/PP/SHEET NO.3	-	H=1:2000, V=1:200
10	Detailed Plan & Profile Section 6 Km 77/400 to Km 87/500	PD/RITES/R/1T&S/DFC/EC/Sec-6/PP/SHEET NO.4	-	H=1:2000, V=1:200
11	Detailed Plan & Profile Section 6 Km 87/400 to Km 92/400	PD/RITES/R/1T&S/DFC/EC/Sec-6/PP/SHEET NO.5	-	H=1:2000, V=1:200

Section-7

Prepared by: RITES

No.	Dwg name:	Dwg no.	Date	Scale
1	Detailed Plan & Profile Section-7 Km 91/600 to Km 101/600	PD/RITES/R/1T&S/DFC/EC/Sec-7/PP/SHEET NO.1	None	H=1:2000, V=1:200
2	Detailed Plan & Profile Section-7 Km 101/600 to Km 111/600	PD/RITES/R/1T&S/DFC/EC/Sec-7/PP/SHEET NO.2	None	H=1:2000, V=1:200
3	Detailed Plan & Profile Section-7 Km 111/600 to Km 121/600	PD/RITES/R/1T&S/DFC/EC/Sec-7/PP/SHEET NO.3	None	H=1:2000, V=1:200
4	Detailed Plan & Profile Section-7 Km 121/600 to Km 133/378.639	PD/RITES/R/1T&S/DFC/EC/Sec-7/PP/SHEET NO.4	None	H=1:2000, V=1:200

Section-8

Prepared by: RITES later work taken over by Rodic Consultants Pvt. Ltd.

No	Dwg name:	Dwg no.	Date	Scale
1	Revised Detailed Plan & Profile Km 132.000 to Km 142.000	PD/RITES/R1/T&S/DFC/EC/Sec-8/PPP/SHEET NO.1	-	H=1:2000, V=1:200
2	Revised Detailed Plan & Profile Km 142.000 to Km 152.000	PD/RITES/R1/T&S/DFC/EC/Sec-8/PPP/SHEET NO.2	-	H=1:2000, V=1:200
3	Revised Detailed Plan & Profile Km 152.000 to Km 162.000	PD/RITES/R1/T&S/DFC/EC/Sec-8/PPP/SHEET NO.3	-	H=1:2000, V=1:200
4	Revised Detailed Plan & Profile Km 162.000 to Km 172.000	PD/RITES/R1/T&S/DFC/EC/Sec-8/PPP/SHEET NO.4	-	H=1:2000, V=1:200
5	Revised Detailed Plan & Profile Km 172.000 to Km 182.000	PD/RITES/R1/T&S/DFC/EC/Sec-8/PPP/SHEET NO.5	-	H=1:2000, V=1:200
6	Revised Detailed Plan & Profile Km 182.000 to Km 183.400	DFC/RCPLWCNP-SEC-8/036	Oct. 2008	H=1:2000, V=1:200
7	Revised Detailed Plan & Profile Km 183.400 to Km 184.800	DFC/RCPLWCNP-SEC-8/037	Oct. 2008	H=1:2000, V=1:200
8	Revised Detailed Plan & Profile Km 184.800 to Km 186.200	DFC/RCPLWCNP-SEC-8/038	Oct. 2008	H=1:2000, V=1:200
9	Revised Detailed Plan & Profile Km 186.200 to Km 187.600	DFC/RCPLWCNP-SEC-8/039	Oct. 2008	H=1:2000, V=1:200
10	Revised Detailed Plan & Profile Km 187.600 to Km 189.000	DFC/RCPLWCNP-SEC-8/040	Oct. 2008	H=1:2000, V=1:200
11	Revised Detailed Plan & Profile Km 189.000 to Km 190.400	DFC/RCPLWCNP-SEC-8/041	Oct. 2008	H=1:2000, V=1:200
12	Revised Detailed Plan & Profile Km 190.400 to Km 191.800	DFC/RCPLWCNP-SEC-8/042	Oct. 2008	H=1:2000, V=1:200
13	Revised Detailed Plan & Profile Km 191.800 to Km 193.200	DFC/RCPLWCNP-SEC-8/043	Oct. 2008	H=1:2000, V=1:200
14	Revised Detailed Plan & Profile Km 193.200 to Km 194.600	DFC/RCPLWCNP-SEC-8/044	Oct. 2008	H=1:2000, V=1:200
15	Revised Detailed Plan & Profile Km 194.600 to Km 196.000	DFC/RCPLWCNP-SEC-8/045	Oct. 2008	H=1:2000, V=1:200
16	Revised Detailed Plan & Profile Km 196.000 to Km 197.400	DFC/RCPLWCNP-SEC-8/046	Oct. 2008	H=1:2000, V=1:200
17	Revised Detailed Plan & Profile Km 197.400 to Km 198.800	DFC/RCPLWCNP-SEC-8/047	Oct. 2008	H=1:2000, V=1:200
18	Revised Detailed Plan & Profile Km 198.800 to Km 200.200	DFC/RCPLWCNP-SEC-8/048	Oct. 2008	H=1:2000, V=1:200
19	Revised Detailed Plan & Profile Km 200.200 to Km 201.600	DFC/RCPLWCNP-SEC-8/049	Oct. 2008	H=1:2000, V=1:200
20	Revised Detailed Plan & Profile Km 201.600 to Km 203.000	DFC/RCPLWCNP-SEC-8/050	Oct. 2008	H=1:2000, V=1:200
21	Revised Detailed Plan & Profile Km 203.000 to Km 204.400	DFC/RCPLWCNP-SEC-8/051	Oct. 2008	H=1:2000, V=1:200
22	Revised Detailed Plan & Profile Km 204.400 to Km 205.800	DFC/RCPLWCNP-SEC-8/052	Oct. 2008	H=1:2000, V=1:200
23	Revised Detailed Plan & Profile Km 205.800 to Km 207.200	DFC/RCPLWCNP-SEC-8/053	Oct. 2008	H=1:2000, V=1:200
24	Revised Detailed Plan & Profile Km 207.200 to Km 208.600	DFC/RCPLWCNP-SEC-8/054	Oct. 2008	H=1:2000, V=1:200
25	Revised Detailed Plan & Profile Km 208.600 to Km 210.000	DFC/RCPLWCNP-SEC-8/055	Oct. 2008	H=1:2000, V=1:200
26	Revised Detailed Plan & Profile Km 210.000 to Km 211.400	DFC/RCPLWCNP-SEC-8/056	Oct. 2008	H=1:2000, V=1:200
27	Revised Detailed Plan & Profile Km 211.400 to Km 212.800	DFC/RCPLWCNP-SEC-8/057	Oct. 2008	H=1:2000, V=1:200
28	Revised Detailed Plan & Profile Km 212.800 to Km 214.200	DFC/RCPLWCNP-SEC-8/058	Oct. 2008	H=1:2000, V=1:200
29	Revised Detailed Plan & Profile Km 214.200 to Km 215.600	DFC/RCPLWCNP-SEC-8/059	Oct. 2008	H=1:2000, V=1:200
30	Revised Detailed Plan & Profile Km 215.600 to Km 217.000	DFC/RCPLWCNP-SEC-8/060	Oct. 2008	H=1:2000, V=1:200
31	Revised Detailed Plan & Profile Km 217.000 to Km 218.400	DFC/RCPLWCNP-SEC-8/061	Oct. 2008	H=1:2000, V=1:200
32	Revised Detailed Plan & Profile Km 218.400 to Km 219.800	DFC/RCPLWCNP-SEC-8/062	Oct. 2008	H=1:2000, V=1:200
33	Revised Detailed Plan & Profile Km 219.800 to Km 221.200	DFG/RCPLWCNP-SEC-8/063	Oct. 2008	H=1:2000, V=1:200
34	Revised Detailed Plan & Profile Km 221.200 to Km 222.600	DFC/RCPLWCNP-SEC-8/064	Oct. 2008	H=1:2000, V=1:200
35	Revised Detailed Plan & Profile Km 222.600 to Km 224.000	DFC/RCPLWCNP-SEC-8/065	Oct. 2008	H=1:2000, V=1:200
36	Revised Detailed Plan & Profile Km 224.000 to Km 225.400	DFC/RCPLWCNP-SEC-8/066	Oct. 2008	H=1:2000, V=1:200
37	Revised Detailed Plan & Profile Km 225.400 to Km 226.800	DFC/RCPLWCNP-SEC-8/067	Oct. 2008	H=1:2000, V=1:200
38	Revised Detailed Plan & Profile Km 226.800 to Km 228.200	DFC/RCPLWCNP-SEC-8/068	Oct. 2008	H=1:2000, V=1:200
39	Revised Detailed Plan & Profile Km 228.200 to Km 229.600	DFC/RCPLWCNP-SEC-8/069	Oct. 2008	H=1:2000, V=1:200
40	Revised Detailed Plan & Profile Km 229.600 to Km 231.000	DFC/RCPLWCNP-SEC-8/070	Oct. 2008	H=1:2000, V=1:200
41	Revised Detailed Plan & Profile Km 231.000 to Km 232.400	DFC/RCPLWCNP-SEC-8/071	Oct. 2008	H=1:2000, V=1:200
42	Revised Detailed Plan & Profile Km 232.400 to Km 233.800	DFC/RCPLWCNP-SEC-8/072	Oct. 2008	H=1:2000, V=1:200
43	Revised Detailed Plan & Profile Km 233.800 to Km 234.530	DFC/RCPLWCNP-SEC-8/073	Oct. 2008	H=1:2000, V=1:200

Section-9

Prepared by: RITES

No.	Dwg name:	Dwg no.	Date	Scale
1	Detailed Plan & Profile Section-9 Km 00/000 to Km 10/000	PD/RITES/R1/T&S/IDFCWC/Sec-09/PP/01	08-01-2008	H=1:2000, V=1:200
2	Detailed Plan & Profile Section-9 Km 10/000 to Km 20/000	PD/RITES/R1/T&S/IDFCWC/Sec-09/PP/02	08-01-2008	H=1:2000, V=1:200
3	Detailed Plan & Profile Section-9 Km 20/000 to Km 30/000	PD/RITES/R1/T&S/IDFCWC/Sec-09/PP/03	08-01-2008	H=1:2000, V=1:200
4	Detailed Plan & Profile Section-9 Km 30/000 to Km 40/590	PD/RITES/R1/T&S/IDFCWC/Sec-09/PP/04	08-01-2008	H=1:2000, V=1:200
5	Detailed Plan & Profile Section-9 Km 40/000 to Km 50/000	PD/RITES/R1/T&S/IDFCWC/Sec-09/PP/05	22-02-2008	H=1:2000, V=1:200
6	Detailed Plan & Profile Section-9 Km 50/000 to Km 60/000	PD/RITES/R1/T&S/IDFCWC/Sec-09/PP/06	22-02-2008	H=1:2000, V=1:200
7	Detailed Plan & Profile Section-9 Km 60/000 to Km 70/000	PD/RITES/R1/T&S/IDFCWC/Sec-09/PP/07	25-02-2008	H=1:2000, V=1:200
8	Detailed Plan & Profile Section-9 Km 70/000 to Km 80/000	PD/RITES/R1/T&S/IDFCWC/Sec-09/PP/08	25-02-2008	H=1:2000, V=1:200
9	Detailed Plan & Profile Section-9 Km 80/000 to Km 91/730	PD/RITES/R1/T&S/IDFCWC/Sec-09/PP/09	25-02-2008	H=1:2000, V=1:200

Section-10

Prepared by: RITES

No.	Dwg name:	Dwg no.	Date	Scale
1	Detailed Plan & Profile Section-10 Km 00/000 to Km 10/000	PD/RITES/R1/T&S/IDFCWC/Sec-10/PP/1	01-04-2008	H=1:1000, V=1:100
2	Detailed Plan & Profile Section-10 Km 10/000 to Km 20/000	PD/RITES/R1/T&S/IDFCWC/Sec-10/PP/2	01-04-2008	H=1:1000, V=1:100
3	Detailed Plan & Profile Section-10 Km 20/000 to Km 30/000	PD/RITES/R1/T&S/IDFCWC/Sec-10/PP/3	01-04-2008	H=1:1000, V=1:100
4	Detailed Plan & Profile Section-10 Km 30/000 to Km 40/590	PD/RITES/R1/T&S/IDFCWC/Sec-10/PP/4	01-04-2008	H=1:1000, V=1:100
5	Detailed Plan & Profile Section-10 Km 40/000 to Km 50/000	PD/RITES/R1/T&S/IDFCWC/Sec-10/PP/5	01-04-2008	H=1:1000, V=1:100
6	Detailed Plan & Profile Section-10 Km 50/000 to Km 60/000	PD/RITES/R1/T&S/IDFCWC/Sec-10/PP/6	25-04-2008	H=1:1000, V=1:100
7	Detailed Plan & Profile Section-10 Km 60/000 to Km 70/000	PD/RITES/R1/T&S/IDFCWC/Sec-10/PP/7	01-04-2008	H=1:1000, V=1:100
8	Detailed Plan & Profile Section-10 Km 70/000 to Km 80/000	PD/RITES/R1/T&S/IDFCWC/Sec-10/PP/8	01-04-2008	H=1:1000, V=1:100
9	Detailed Plan & Profile Section-10 Km 80/000 to Km 90/000	PD/RITES/R1/T&S/IDFCWC/Sec-10/PP/9	01-04-2008	H=1:1000, V=1:100
10	Detailed Plan & Profile Section-10 Km 90/000 to Km 100/000	PD/RITES/R1/T&S/IDFCWC/Sec-10/PP/10	01-04-2008	H=1:1000, V=1:100
11	Detailed Plan & Profile Section-10 Km 100/000 to Km 103/220	PD/RITES/R1/T&S/IDFCWC/Sec-10/PP/11	01-04-2008	H=1:1000, V=1:100

Section-11

Prepared by: RITES

No.	Dwg name:	Dwg no.	Date	Scale
1	Detailed Plan & Profile Section-11 Km 01/200 to Km 10/000	PD/RITES/R1/T&S/IDFCWC/Sec-11/PP/01	20-02-2008	H=1:2000, V=1:200
2	Detailed Plan & Profile Section-11 Km 10/000 to Km 20/000	PD/RITES/R1/T&S/IDFCWC/Sec-11/PP/02	20-02-2008	H=1:2000, V=1:200
3	Detailed Plan & Profile Section-11 Km 20/000 to Km 30/000	PD/RITES/R1/T&S/IDFCWC/Sec-11/PP/03-REV	20-02-2008	H=1:2000, V=1:200
4	Detailed Plan & Profile Section-11 Km 30/000 to Km 40/000	PD/RITES/R1/T&S/IDFCWC/Sec-11/PP/04	20-02-2008	H=1:2000, V=1:200
5	Detailed Plan & Profile Section-11 Km 40/000 to Km 49/786	PD/RITES/R1/T&S/IDFCWC/Sec-11/PP/05	20-02-2008	H=1:2000, V=1:200
6	Detailed Plan & Profile Section-11 Km 50/000 to Km 60/000	PD/RITES/R1/T&S/IDFCWC/Sec-09/PP/02	18-01-2008	H=1:2000, V=1:200
7	Detailed Plan & Profile Section-11 Km 60/000 to Km 70/000	PD/RITES/R1/T&S/IDFCWC/Sec-09/PP/03	18-01-2008	H=1:2000, V=1:200
8	Detailed Plan & Profile Section-11 Km 70/000 to Km 80/000	PD/RITES/R1/T&S/IDFCWC/Sec-09/PP/04	18-01-2008	H=1:2000, V=1:200
9	Detailed Plan & Profile Section-11 Km 71/800 to Km 80/000	PD/RITES/R1/T&S/IDFCWC/Sec-11/PP/08/REV-1	23-05-2008	H=1:2000, V=1:200
10	Detailed Plan & Profile Section-11 Km 80/000 to Km 90/000	PD/RITES/R1/T&S/IDFCWC/Sec-11/PP/09/REV-1	23-05-2008	H=1:2000, V=1:200
11	Detailed Plan & Profile Section-11 Km 90/000 to Km 100/000	PD/RITES/R1/T&S/IDFCWC/Sec-11/PP/10/REV-1	23-05-2008	H=1:2000, V=1:200
12	Detailed Plan & Profile Section-11 Km 100/000 to Km 104/000	PD/RITES/R1/T&S/IDFCWC/Sec-11/PP/11/REV-1	23-05-2008	H=1:2000, V=1:200

Section-12

Prepared by: RITES

No.	Dwg name:	Dwg no.	Date	Scale
1	Detailed Plan & Profile Section-12 Km 00/000 to Km 10/000	PD/RITES/R1/T&S/DFCWC/Sec-12/PP/01	12-06-2008	H=1:2000, V=1:200
2	Detailed Plan & Profile Section-12 Km 10/000 to Km 20/000	PD/RITES/R1/T&S/DFCWC/Sec-12/PP/02	判読付加	H=1:2000, V=1:200
3	Detailed Plan & Profile Section-12 Km 20/000 to Km 30/000	PD/RITES/R1/T&S/DFCWC/Sec-12/PP/03	12-06-2008	H=1:2000, V=1:200
4	Detailed Plan & Profile Section-12 Km 30/000 to Km 40/000	PD/RITES/R1/T&S/DFCWC/Sec-12/PP/04	18-06-2008	H=1:2000, V=1:200
5	Detailed Plan & Profile Section-12 Km 40/000 to Km 50/000	PD/RITES/R1/T&S/DFCWC/Sec-12/PP/05	16-06-2008	H=1:2000, V=1:200
6	Detailed Plan & Profile Section-12 Km 50/000 to Km 60/000	PD/RITES/R1/T&S/DFCWC/Sec-12/PP/06	2-07-2008	H=1:2000, V=1:200
7	Detailed Plan & Profile Section-12 Km 60/000 to Km 70/000	PD/RITES/R1/T&S/DFCWC/Sec-12/PP/07	2-05-2008	H=1:2000, V=1:200
8	Detailed Plan & Profile Section-12 Km 70/000 to Km 80/000	PD/RITES/R1/T&S/DFCWC/Sec-12/PP/08	H=1:2000, V=1:200	H=1:2000, V=1:200
9	Detailed Plan & Profile Section-12 Km 80/000 to Km 90/000	PD/RITES/R1/T&S/DFCWC/Sec-12/PP/09	2-07-2008	H=1:2000, V=1:200
10	Detailed Plan & Profile Section-12 Km 90/000 to Km 100/000	PD/RITES/R1/T&S/DFCWC/Sec-12/PP/10	2-07-2008	H=1:2000, V=1:200

Section-13

Prepared by: RITES

No.	Dwg name:	Dwg no.	Date	Scale
1	Detailed Plan & Profile Section-13 Km 00/000 to Km 10/000	PD/RITES/R1/T&S/DFCWC/Sec-13/PP/0		H=1:1000, V=1:100
2	Detailed Plan & Profile Section-13 Km 10/000 to Km 20/000	PD/RITES/R1/T&S/DFCWC/Sec-13/PP/2	22-02-2008	H=1:1000, V=1:100
3	Detailed Plan & Profile Section-13 Km 20/000 to Km 30/000	PD/RITES/R1/T&S/DFCWC/Sec-13/PP/3	22-02-2008	H=1:1000, V=1:100
4	Detailed Plan & Profile Section-13 Km 30/000 to Km 40/000	PD/RITES/R1/T&S/DFCWC/Sec-13/PP/4	22-02-2008	H=1:1000, V=1:100
5	Detailed Plan & Profile Section-13 Km 40/000 to Km 45/000	PD/RITES/R1/T&S/DFCWC/Sec-13/PP/5A	22-02-2008	H=1:1000, V=1:100
6	Detailed Plan & Profile Section-13 Km 45/000 to Km 50/000	PD/RITES/R1/T&S/DFCWC/Sec-13/PP/5B	29-02-2008	H=1:1000, V=1:100
7	Detailed Plan & Profile Section-13 Km 50/000 to Km 60/000	PD/RITES/R1/T&S/DFCWC/Sec-13/PP/6	22-02-2008	H=1:1000, V=1:100
8	Detailed Plan & Profile Section-13 Km 60/000 to Km 70/000	PD/RITES/R1/T&S/DFCWC/Sec-13/PP/7	22-02-2008	H=1:1000, V=1:100
9	Detailed Plan & Profile Section-13 Km 70/000 to Km 80/000	PD/RITES/R1/T&S/DFCWC/Sec-13/PP/8	22-02-2008	H=1:1000, V=1:100
10	Detailed Plan & Profile Section-13 Km 80/000 to Km 85/400	PD/RITES/R1/T&S/DFCWC/Sec-13/PP/9	22-02-2008	H=1:1000, V=1:100

Section-14

Prepared by: RITES

No.	Dwg name:	Dwg no.	Date	Scale
1	Detailed Plan & Profile Section-14 Km 00/000 to Km 10/000	PD/RITES/R1/T&S/DFCWC/Sec-14/PP/SHEET NO.1	18-06-2008	H=1:2000, V=1:200
2	Detailed Plan & Profile Section-14 Km 10/000 to Km 20/000	PD/RITES/R1/T&S/DFCWC/Sec-14/PP/SHEET NO.2	18-06-2008	H=1:2000, V=1:200
3	Detailed Plan & Profile Section-14 Km 20/000 to Km 30/000	PD/RITES/R1/T&S/DFCWC/Sec-14/PP/SHEET NO.3	18-06-2008	H=1:2000, V=1:200
4	Detailed Plan & Profile Section-14 Km 30/000 to Km 40/000	PD/RITES/R1/T&S/DFCWC/Sec-14/PP/SHEET NO.4	18-06-2008	H=1:2000, V=1:200
5	Detailed Plan & Profile Section-14 Km 40/000 to Km 50/000	PD/RITES/R1/T&S/DFCWC/Sec-14/PP/SHEET NO.5	18-06-2008	H=1:2000, V=1:200
6	Detailed Plan & Profile Section-14 Km 50/000 to Km 64/380	PD/RITES/R1/T&S/DFCWC/Sec-14/PP/SHEET NO.6	18-06-2008	H=1:2000, V=1:200
7	Detailed Plan & Profile Section-14 Km 64/380 to Km 74/380	PD/RITES/R1/T&S/DFCWC/Sec-14/PP/SHEET NO.7	18-06-2008	H=1:2000, V=1:200
8	Detailed Plan & Profile Section-14 Km 74/380 to Km 84/380	PD/RITES/R1/T&S/DFCWC/Sec-14/PP/SHEET NO.8	18-06-2008	H=1:2000, V=1:200
9	Detailed Plan & Profile Section-14 Km 84/380 to Km 94/380	PD/RITES/R1/T&S/DFCWC/Sec-14/PP/SHEET NO.9	18-06-2008	H=1:2000, V=1:200
10	Detailed Plan & Profile Section-14 Km 94/380 to Km 104/380	PD/RITES/R1/T&S/DFCWC/Sec-14/PP/SHEET NO.10	18-06-2008	H=1:2000, V=1:200
11	Detailed Plan & Profile Section-14 Km 104/380 to Km 107/120	PD/RITES/R1/T&S/DFCWC/Sec-14/PP/SHEET NO.11	18-06-2008	H=1:2000, V=1:200

Section-15

Prepared by: RITES

No	Dwg name:	Dwg no.	Date	Scale
1	Detailed Plan & Profile Section-15 Km 00/000 to Km 10/000	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/SHEETNO.1	-	H=1:2000, V=1:200
2	Detailed Plan & Profile Section-15 Km 10/000 to Km 20/000	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/SHEETNO.2	-	H=1:2000, V=1:200
3	Detailed Plan & Profile Section-15 Km 20/000 to Km 30/000	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/SHEETNO.3	-	H=1:2000, V=1:200
4	Detailed Plan & Profile Section-15 Km 30/000 to Km 42/000	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/SHEETNO.4	-	H=1:2000, V=1:200
5	Missing			
6	Detailed Plan & Profile Section-15 Km 49/000 to Km 50/400	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/36A	05-09-2007	H=1:1000, V=1:100
7	Detailed Plan & Profile Section-15 Km 50/400 to Km 51/800	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/37	05-09-2007	H=1:1000, V=1:100
8	Detailed Plan & Profile Section-15 Km 51/800 to Km 53/200	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/38	05-09-2007	H=1:1000, V=1:100
9	Detailed Plan & Profile Section-15 Km 53/200 to Km 54/600	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/39	05-09-2007	H=1:1000, V=1:100
10	Detailed Plan & Profile Section-15 Km 54/600 to Km 56/000	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/40	05-09-2007	H=1:1000, V=1:100
11	Detailed Plan & Profile Section-15 Km 56/000 to Km 57/400	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/41	05-09-2007	H=1:1000, V=1:100
12	Detailed Plan & Profile Section-15 Km 57/400 to Km 58/800	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/42	05-09-2007	H=1:1000, V=1:100
13	Detailed Plan & Profile Section-15 Km 58/800 to Km 60/200	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/43	05-09-2007	H=1:1000, V=1:100
14	Detailed Plan & Profile Section-15 Km 60/200 to Km 61/600	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/44	05-09-2007	H=1:1000, V=1:100
15	Detailed Plan & Profile Section-15 Km 61/600 to Km 63/000	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/45	05-09-2007	H=1:1000, V=1:100
16	Detailed Plan & Profile Section-15 Km 63/000 to Km 64/400	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/46	05-09-2007	H=1:1000, V=1:100
17	Detailed Plan & Profile Section-15 Km 64/400 to Km 65/800	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/47	05-09-2007	H=1:1000, V=1:100
18	Detailed Plan & Profile Section-15 Km 65/800 to Km 67/200	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/48	05-09-2007	H=1:1000, V=1:100
19	Detailed Plan & Profile Section-15 Km 67/200 to Km 68/600	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/49	05-09-2007	H=1:1000, V=1:100
20	Detailed Plan & Profile Section-15 Km 68/600 to Km 70/000	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/50	05-09-2007	H=1:1000, V=1:100
21	Detailed Plan & Profile Section-15 Km 70/000 to Km 71/400	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/51	05-09-2007	H=1:1000, V=1:100
22	Detailed Plan & Profile Section-15 Km 71/400 to Km 72/800	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/52	05-09-2007	H=1:1000, V=1:100
23	Detailed Plan & Profile Section-15 Km 72/800 to Km 74/200	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/53	05-09-2007	H=1:1000, V=1:100
24	Detailed Plan & Profile Section-15 Km 74/200 to Km 75/600	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/54	05-09-2007	H=1:1000, V=1:100
25	Detailed Plan & Profile Section-15 Km 75/600 to Km 77/000	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/55	05-09-2007	H=1:1000, V=1:100
26	Detailed Plan & Profile Section-15 Km 77/000 to Km 78/400	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/56	05-09-2007	H=1:1000, V=1:100
27	Detailed Plan & Profile Section-15 Km 78/400 to Km 79/800	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/57	05-09-2007	H=1:1000, V=1:100
28	Detailed Plan & Profile Section-15 Km 79/800 to Km 81/200	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/58	05-09-2007	H=1:1000, V=1:100
29	Detailed Plan & Profile Section-15 Km 81/200 to Km 82/600	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/59	05-09-2007	H=1:1000, V=1:100
30	Detailed Plan & Profile Section-15 Km 82/600 to Km 84/000	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/60	05-09-2007	H=1:1000, V=1:100
31	Detailed Plan & Profile Section-15 Km 84/000 to Km 85/400	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/61	05-09-2007	H=1:1000, V=1:100
32	Detailed Plan & Profile Section-15 Km 85/400 to Km 86/800	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/62	05-09-2007	H=1:1000, V=1:100
33	Detailed Plan & Profile Section-15 Km 86/800 to Km 88/200	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/63	05-09-2007	H=1:1000, V=1:100
34	Detailed Plan & Profile Section-15 Km 88/200 to Km 89/600	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/64	05-09-2007	H=1:1000, V=1:100
35	Detailed Plan & Profile Section-15 Km 89/600 to Km 91/000	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/65	05-09-2007	H=1:1000, V=1:100
36	Detailed Plan & Profile Section-15 Km 91/000 to Km 92/400	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/66	05-09-2007	H=1:1000, V=1:100
37	Detailed Plan & Profile Section-15 Km 92/400 to Km 93/800	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/67	05-09-2007	H=1:1000, V=1:100
38	Detailed Plan & Profile Section-15 Km 93/800 to Km 95/200	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/68	05-09-2007	H=1:1000, V=1:100
39	Detailed Plan & Profile Section-15 Km 95/200 to Km 96/600	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/69	05-09-2007	H=1:1000, V=1:100
40	Detailed Plan & Profile Section-15 Km 96/600 to Km 98/000	PD/RITES/R1/T&S/DFCWC/Sec-15/PP/70	05-09-2007	H=1:1000, V=1:100

No	Dwg name:	Dwg no.	Date	Scale
41	Detailed Plan & Profile Section-15 Km 98/000 to Km 99/400	PD/RITES/R1/T&S/DFC/MC/Sec-15/PP/71	05-09-2007	H=1:1000, V=1:100
42	Detailed Plan & Profile Section-15 Km 99/400 to Km 100/800	PD/RITES/R1/T&S/DFC/MC/Sec-15/PP/72	05-09-2007	H=1:1000, V=1:100
43	Detailed Plan & Profile Section-15 Km 100/800 to Km 102/200	PD/RITES/R1/T&S/DFC/MC/Sec-15/PP/73	05-09-2007	H=1:1000, V=1:100
44	Detailed Plan & Profile Section-15 Km 102/200 to Km 103/600	PD/RITES/R1/T&S/DFC/MC/Sec-15/PP/74	05-09-2007	H=1:1000, V=1:100
45	Detailed Plan & Profile Section-15 Km 103/600 to Km 105/000	PD/RITES/R1/T&S/DFC/MC/Sec-15/PP/75	05-09-2007	H=1:1000, V=1:100
46	Detailed Plan & Profile Section-15 Km 105/000 to Km 106/400	PD/RITES/R1/T&S/DFC/MC/Sec-15/PP/76	05-09-2007	H=1:1000, V=1:100
47	Detailed Plan & Profile Section-15 Km 106/400 to Km 107/800	PD/RITES/R1/T&S/DFC/MC/Sec-15/PP/77	05-09-2007	H=1:1000, V=1:100
48	Detailed Plan & Profile Section-15 Km 107/800 to Km 109/200	PD/RITES/R1/T&S/DFC/MC/Sec-15/PP/78	05-09-2007	H=1:1000, V=1:100
49	Detailed Plan & Profile Section-15 Km 109/200 to Km 110/600	PD/RITES/R1/T&S/DFC/MC/Sec-15/PP/79	05-09-2007	H=1:1000, V=1:100
50	Detailed Plan & Profile Section-15 Km 110/600 to Km 112/000	PD/RITES/R1/T&S/DFC/MC/Sec-15/PP/80	05-09-2007	H=1:1000, V=1:100
51	Detailed Plan & Profile Section-15 Km 112/000 to Km 113/400	PD/RITES/R1/T&S/DFC/MC/Sec-15/PP/81	05-09-2007	H=1:1000, V=1:100
52	Detailed Plan & Profile Section-15 Km 113/400 to Km 114/800	PD/RITES/R1/T&S/DFC/MC/Sec-15/PP/82	05-09-2007	H=1:1000, V=1:100
53	Detailed Plan & Profile Section-15 Km 114/800 to Km 116/200	PD/RITES/R1/T&S/DFC/MC/Sec-15/PP/83	05-09-2007	H=1:1000, V=1:100
54	Detailed Plan & Profile Section-15 Km 116/200 to Km 117/600	PD/RITES/R1/T&S/DFC/MC/Sec-15/PP/84	05-09-2007	H=1:1000, V=1:100

Source: Prepared by SAPROF Study

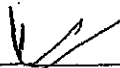
Attachment-13 Minute of Discussion of 30th November 2009

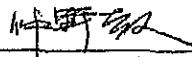
MINUTES OF RECORD
ON
JICA SPECIAL ASSISTANCE FOR PROJECT FORMATION (SAPROF)
FOR
DEDICATED FREIGHT CORRIDOR PROJECT.
BETWEEN
JAPAN INTERNATIONAL COOPERATION AGENCY
AND
MINISTRY OF RAILWAYS, GOVERNMENT OF INDIA

DATE: November 30th, 2009
PLACE: New Delhi, India

1. The Japan International Cooperation Agency (hereinafter referred to as "JICA") Special Assistance for Project Formation (hereinafter referred to as "SAPROF") Study Team has presented the Draft Final Report of the SAPROF Study for Dedicated Freight Corridor Project (hereinafter referred to as "the Project") to the officials of Ministry of Railways, Government of India (hereinafter referred to as "MOR") and DFCCIL on 30th November, 2009.
2. The JICA SAPROF Study Team and MOR and DFCCIL hereby record the contents of the main points of discussion as per following pages.

Delhi, 30th November, 2009


Mr. Girish PILLAI
Executive Director
Perspective Planning,
Railway Board
Ministry of Railways


Mr. Teisuto NAKANO
Co-Team Leader,
JICA SAPROF Study Team


Mr. Tomoo AOKI
Social Environmental Expert,
JICA SAPROF Study Team

Subsequent to the series of discussion made in the previous SAPROF Missions, and the agreements reached therein between the JICA SAPROF Study Team (hereinafter, the Study Team) and the officials of Ministry of Railways and DFCCIL, the Study Team presented the Draft Final Report of the Study, that summarized the conclusion and recommendation of the Study therein, on 30th November 2009.

The Study Team reported that the following three objectives of the Study were accomplished, with exception of certain specific items indicated further below that can be addressed in the subsequent stage of the Project by MoR/DFCCIL

- 1) Confirmation of consistency between the FLS and GAD with the GLD indicated in the JICA F/S Report
- 2) Execution of Supplementary Environmental and Social Impact Mitigation Measures Study (S-ESIMMS) including preparation of Draft Rehabilitation and Resettlement Plan (RRP) based on confirmed FLS and GAD in accordance with JBIC Guidelines for Confirmation of Environmental and Social Considerations (hereinafter referred to as JBIC Guidelines)
- 3) Survey of working environment of construction industry, and check measures taken for construction safety

The Study Team suggested that the following specific items be addressed in the subsequent stage of the Project.

1. Project Planning

1.1 Confirmation of Consistency Between Finalized FLS for Junction Stations

The Study Team explained that the following points are to be confirmed further.

- 1) Tabulation of final version of the FLS with soft file name
- 2) Integrated CAD plans of FLS and Junction Station CAD drawings
- 3) Tabulation of land plans corresponding to 1) and 2) of above

1.2 Confirmation of Finalized GAD

- 1) The final report of the hydrological model study of Sabarmati River, that became the base for the design of important bridges.
- 2) Flexibility in applicability of non-RDSO standard design templates for structural design of Rail flyovers, major and minor bridges.
- 3) The quantity of RGBs subject to reconstruction in Phase-I are yet to be reconfirmed based on finalized FLS drawings.

1.3 Confirmation of Base Data of the Preliminary Design as follows:

- 1) geotechnical investigation report including data of lab tests
- 2) design report for important/major bridges
- 3) hydrological study report at important bridges
- 4) tabulation of utilities crossing the FLS alignment (high tension power lines, water main, telecom trunk lines, sewer, irrigation canal, gas pipes, etc.)

1.4 Inland Container Depot

The Study Team suggests that plans for ICD be deliberated and finalised by DFCCIL in the early stage of the Engineering Service stage, since its final location may affect the connectivity and configuration of the adjoining junction station.

1.5 Loco Depot and Maintenance Depot

The Study Team suggests that the location and size for the depot and maintenance facilities be planned and finalised, by MoR/DFCCIL, in conjunction to the freight transport plan as early as possible.

2. Environmental And Social Considerations

2.1 Further Examination based on the EIA

1) Detailed Examination of Mitigation Measures

As regard the mitigation measures proposed in the EIA report depending on the site condition and project features as well as impact evaluation at the time of EIA study, it is recommended that to mitigate concerned environmental and social impacts be examined in detail in further stage of the Project. For example, regarding the noise impact, location of sensitive receptors and houses which are located in the proximity of the DFC alignment should be confirmed in the field by using the latest information. In the case where such likely impact receptors are found, adequate mitigation measures should be examined, if it is necessary as result of impact evaluation.

2) Detailed Examination of Environmental Management and Monitoring Plan

Based on the Environmental Management and Monitoring Plan (EMMP) proposed in the EIA report, detailed EMMP should be prepared in further stage of the Project, by examining latest project information, to implement EMMP adequately in the construction and operation stage. For this purpose, institutional setting for implementing the EMMP should also be included in the detailed examination.

2.2 Land Acquisition and Resettlement

1) Sufficient Information Disclosure in the Land Acquisition Process

As mentioned in Section 3.5.3 in the draft final report of the SAPROF, it was found from the conducted PCM for RRP that many PAPs had no knowledge that the Notification 20A for the DFC Project has been issued and publicised. On the other hand, preparation of Notification 20B is underway for many locations along the proposed alignment for the DFC Project as per official procedure of the RAA 2008. Thus, implementation of the PCM for RRP was an important opportunity for the PAPs who attended the PCM to get this information. Adequate publicity should be given so that all PAPs know about proposed land acquisition and this Project. Therefore, further information disclosure on the land acquisition process should be conducted immediately to cover such PAPs. In addition, it is suggested that in respect of some locations where objections to the land acquisition were raised strongly in the PCMs, further appropriate action should be taken by DFCCIL/MOR.

2) Systematic Implementation of the Rehabilitation and Resettlement

In situations where the land acquisition process is progressed ahead even though PAPs have not been fully aware about the process, activities related to the resettlement such as preparation of RRP including implementation of the Baseline Survey and Census as per the NRRP 2007 should be taken up.

The Study Team suggests that if the gap between the land acquisition process and RRP preparation are minimized and clarified, the PAPs' consent towards the land acquisition and resettlement can be reinforced and would make administration of land acquisition and resettlement smoother. Therefore, it is recommended to prepare the RRP and disclose it to the PAPs as soon as possible.

3) Implementation of the Baseline Survey and Census as per NRRP 2007

Although Socio-economic Survey for more than 20% of PAPs and Project-Affected Structure Identification Survey for all affected structure have been conducted under the SAPROF Study, these surveys were conducted based on part of results of FLS and other information available at the time of the surveys, since the Land Plan were not provided by MOR/DFCCIL, which is base information for the Notification 20A. Therefore, it is recommended the Baseline Survey and Census as per NRRP 2007 should be conducted as soon as possible based on latest information

from FLS and Land Plan for the Notification 20A, since the results of survey will be used to prepare adequate and required assistance for the PAPs to be provided for by the Project.

4) **Secure Compensation at Level of the Replacement Cost**

Through preliminary hearing to the local people in the SAPROF, literature review, and comments from the participants of RRP-PCM, compensation rate under RAA 2008, which is calculated based on governmental market rate may be lower than actual market price to purchase lost assets to be acquired for the Project such as land and house at the same quantity and quality levels. To secure that the compensation rate is to be at the same level of the replacement cost, it is recommended that independent evaluator be hired by the Project to check if there is gap between governmental compensation rate and replacement cost. Further, in the case where gaps found is wide and can not be ignored from viewpoint of livelihood recovery, SAPROF Team suggests that necessary assistance should be examined and provided to such PAPs in addition to the provisions as per RAA 2008 and NRRP 2007.

5) **Implementation of Timely Monitoring and Follow-up Assistance**

In addition to provide adequate compensation and assistance in the land acquisition and relocation based on the RRP, SAPROF Team suggests that monitoring on situation of livelihood recovery for PAPs is necessary and in cases where undesirable situation is found for livelihood of the PAPs, additional assistance, especially during transition period of the resettlement may be considered. To implement adequate monitoring activity and provision of follow-up assistance, it is suggested that necessary institutional set-up be examined including preparation of detailed monitoring plan for the RRP.

DFCCIL clarified that the items 1.1, 1.2, 1.3, 2.1, and 2.2 '3) are expected to be addressed in the Engineering Services stage. MOR/DFCCIL took note of the remaining items.

The statements recorded in the previous Minutes of Discussion, as per its contents indicated in Attachment No.1 are recorded herewith for further reference.

The Study team requested MOR for providing comments on the Draft RRP by 18th December 2009 in order to reflect the results in the Final Report, and the timely of the same to JICA.

p.4/6

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Attachments

Attachment-I Previous Minutes of Discussion

Minutes of Discussion 30th July 2008	
1.	Status of Data Provision
1.1	Final Location Survey Horizontal Alignment Data
2.	General Arrangement Drawings (GAD)
3.	Precision of Integration of Section Drawings Provided from DFCCIL
4.	Deviation of PLS Alignment and GAD from GLD
5.	Final Alignment Defined in SAPROF Study
6.	Completion of the FLS Conforming to Final Alignment Defined in SAPROF Study
7.	Completion of FLS and GAD by DFCCIL
8.	Environmental and Social Consideration
8.1	Environmental Considerations
8.2	Social Considerations
8.3	Public Consideration Meeting
8.4	Implementing Organization
8.5	Right-of Way (ROW)
8.6	Disclosure of EIA Report
9.	Action Plan for Strict Compliance by MOR/DFCCIL
10.	Request from the SAPROF Study Team
11.	Schedule of SAPROF Study
12.	Others
12.1	Design Axle Load
12.2	Provision of Drawings
Minutes of Discussion 28th August 2008	
1.	Status of Data Provision
1.1	Final Location Survey (FLS) Data
1.2	General Arrangement Drawings (GAD)
2.	Deviation of PLS Alignment of Section 8, 12 and 14 from GLD
3.	Other Issues Identified and Its Conclusion
4.	Conceptual Design of the Junction Stations
5.	Completion of the FLS Conforming to Final Alignment Defined in the SAPROF Study
6.	Location of Inland Container Depot (ICD)
7.	Decision on the Electrification of the Western Corridor
8.	Provision of Information from DFCCIL to the Study Team
9.	Provision of Information from the Study Team to DFCCIL
Minutes of Discussion 24th September 2008	
1.	Public Consultation Meeting (PCM) in Planning Process
2.	Schedule of PCMs
3.	Compensation and Assistance Policies for the DFC Project
Minutes of Discussion 31st October 2008	
1.	Public Consultation Meetings (PCMs) for EIA
2.	Information Disclosure of Draft EIA and EIA Reports
3.	Approval of EIA Report
Minutes of Discussion 21st January 2009	
1.	Draft EIA Report
2.	Draft RRP
3.	Further Environmental and Social Activities

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Attachment No.2 Attendance List

S.N	Name	Contact No.	Signature
1	TETINIO NABAND JICA SAPROF STUDY TEAM	011-46082024	
2	Tanvir Ahsan JICA SAPROF Study Team		
3	SAVIN BHATTIA RAILWAY EXPERT, SAPROF TEAM	9811535694	
4	Indranil Ghosh Social Representative	9810740991	
5	SANJAY MOHOLKAR S. District Spokes, JICA	9891342195	
6	Tatavdas Kulkarni Representative JICA	9811099280	
7	S.K. Kishore	910971297192	
8	Pradeep Bhattacharya Advocate		
9	Srinath Pillai	5000	
10	Jayendra Singh	081861	
11	S. K.		
12			
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Appendix 3-1 S-ESIMMS Report

(Appendix 3-1 is shown in Volume No. 2 of the Report)

Appendix 3-2 Presentation Material for EIA-PCM

Dedicated Freight Corridor Corporation of India Ltd.
(DFCCIL)

Welcomes
the Participants for

Public Consultation Meeting
on DFC Project

Project Authority

Ministry of Railways:
Borrower of International Fund and Planning

DFCCIL:
Construction, Operation and Maintenance

Agencies Involved

- JBIC*: Technical & Financial Assistance
- SAPROF Study Team: Observer to confirm the planning process of MOR. It is dispatched by JBIC*.
- CES (I) Pvt. Ltd. – Local consultant engaged by SAPROF Study Team to assist MOR for conducting PCM

Note: * - JBIC has been merged with JICA as of 1st October 2008.

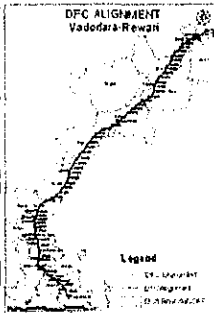
DFC Project

- Western Corridor of DFC – Rewari (Haryana) to JNPT (Maharashtra)
- Alignment finalised - Rewari (Haryana) to Vadodara (Gujarat) section of Western Corridor
- Length of Rewari to Vadodara Section of DFC – Approx. 939.4 km

Project Schedule

- Project planning work – 2006 to 2008
- Detailed design work – Scheduled to begin in 2009
- Project implementation/construction work - 4-5 years (Scheduled to begin in 2010)

Alignment of DFC Project: General



Section	States		
	Gujarat	Rajasthan	Haryana
Parallel Section	627 km		
Detour Section	246 km	47 km	19.4 km
Districts	1. Banaskantha 2. Patan 3. Mehsana 4. Gandhinagar 5. Ahmedabad 6. Kheda 7. Anand 8. Vadodara	1. Alwar 2. Sikar 3. Nagaur 4. Jalpur 5. Ajmer 6. Pall 7. Sirsi	1. Rewari 2. Mahendragarh

Project Affected Area

- Parallel section: within the 30 m to 50 m wide area from the centre of the last railway line on the east side of expansion.
- Detour section: 70m wide area

Objective of PCM

- Dissemination of information on the Project and its Environment and Social Impacts caused
- A platform for likely affected persons and other concerned stakeholders to voice their concern on the project
- Outcome of PCM to be fed-back to project authority

GUJARAT

ENVIRONMENTAL and SOCIAL IMPACTS

Environmental Impacts

Geographical/ Geological Changes	<ul style="list-style-type: none"> • During construction phase, changes in topography is envisaged due to clearing of land, felling trees, cutting and filling of railway embankment. • The detour section is likely to traverse through agricultural and forest land which will require clearing of the land. • Changes are limited within ROW of DFC Project . • Clearing of land, cutting of trees, excavation of borrow areas could change natural waterway to a small extent.
Soil	<ul style="list-style-type: none"> • Clearing of land, cutting of trees, excavation of borrow areas are likely to trigger soil erosion. • Soil of the agricultural area is fertile and consists of alluvial deposits; loss of fertile top soil is likely to occur. • The borrow areas are likely to cause soil erosion and affect agricultural areas to some extent.

Contd....

Environmental Impacts

Pollution	<ul style="list-style-type: none"> • During construction phase workforce camp could cause localized pollution of sewage. • Moving vehicles/construction machinery/equipment and working force could cause dust pollution. • During construction phase pollution of groundwater is likely to occur due to seepage and runoff from construction site.
Hydrological conditions	<ul style="list-style-type: none"> • Local drainage may be affected during construction phase due to formation of embankments. • Drainage pattern of the area should be studied in detail for which suitable environmental management plan is prepared during the detailed design stage.

Contd....

Environmental Impacts

Flora	<ul style="list-style-type: none"> • Trees along the railway corridor and trees falling in private land need to be felled. Near Kishangarh, approximately 1838 trees would be affected by the project. • The tree species likely to be affected are Sheesham (<i>Dalbergia sisoo</i>), Vilayti Baool (<i>Prosopis Spp.</i>), Neem (<i>Azadirachta indica</i>), Desi Babool (<i>Acacia Spp.</i>), Ber (<i>Zizyphus mauritiana</i>), and Eucalyptus (<i>Eucalyptus hybrid</i>) which are planted outside forest area. • Acquisition of the forest land and construction activity likely to disturb the habitat of wildlife.
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Contd....

Presentation in English - Gujarat PCMs

Social Impact Assessment

• **METHODOLOGY**

- Census of all affected structures within the proposed corridor of impact.
- Socio-economic survey (20%) of affected families as listed out by census.
- Census and socio-economic survey were conducted by administering questionnaire to likely affected families by the local consultant.

Project Affected Districts/Villages

District	Villages (No.)
Banaskantha	34
Patan	13
Mehsana	43
Gandhinagar	16
Ahmedabad	20
Kheda	18
Anand	29
Vadodara	16
TOTAL	189

Affected villages & structures

District	Villages (No.)	Structure
Banaskantha	34	74
Pata	13	11
Mehsana	4	77
Gandhinagar	16	06
Ahmedabad	20	00
Kheda	18	10
Anand	29	41
Vadodara	16	01
TOTAL	189	220

Analysis of the Social Impacts

1) Total structures to be affected	220
2) Residential and commercial	197
3) Religious structures	7
4) Others	16

Analysis of the Social Impacts

- Permanent structures 55%
- Semi permanent 43%
- Title Holders 95%
- General 61%
- SC 13%

Analysis of the Social Impacts

- No. of families affected – 223
- No. of persons affected – 1333
Male -707; Female – 626
- Average family size – 5.9

Analysis of the Social Impacts

Places where major impact is likely to occur

- a. Mahesana (Gorad-70)
- b. Banaskantha (Antroli-17, Amrigadh-13, Awal Gumti-12)

Analysis of the Social Impacts

TYOLOGY OF AFFECTED STRUCTURES

- 1) Permanent – 121
- 2) Semi permanent – 95
- 3) Temporary – 4

Analysis of the Social Impacts

- Important structure likely to be affected :

Banaskantha

Dhanpura [three storey buildings (2 no.) of staff quarters of Balaram Cement Factory]

Compensation Policy

Railway (Amendment) Act 2008	<ul style="list-style-type: none">• Compensation of land would be 60 % of over and above the circle rate• Notification for land acquisition is issued for objection and further hearing• Land Acquisition Act, 1894 and its amendments is not applicable
National Resettlement & Rehabilitation Policy 2007	<ul style="list-style-type: none">• Affected persons must be compensated to replace their lost assets and to restore/improve their living standards• Non-title holders are eligible if substantiation is made that he/she has been residing there for more than three years• Assistance for moving, vocational trainings, etc. are available.• Transaction and transition costs are compensated

**Thanks
for
Your Participation**

Presentation in English - Rajasthan & Haryana PCMs

Dedicated Freight Corridor Corporation of India Ltd. (DFCCIL)
under
Ministry of Railways

Welcomes
the Participants for

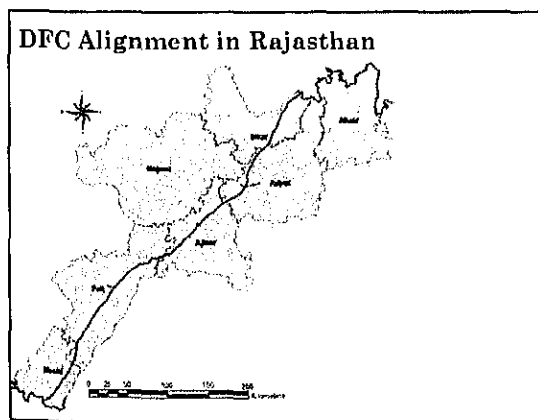
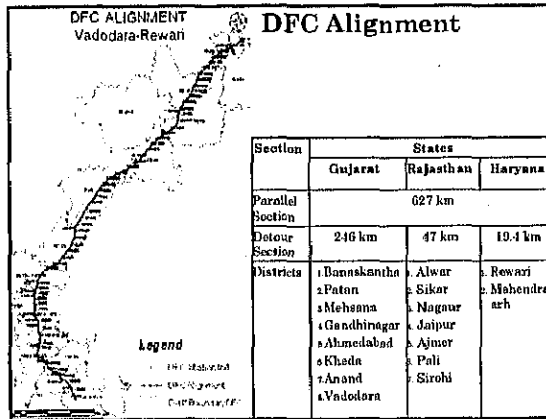
Public Consultation Meeting on EIA
 on
DFC Project

Agencies Involved

- Japan International Cooperation Agency (JICA):
 Technical & Financial Assistance
- SAPROF Study Team:
 Observer to confirm the planning process of MOR. It is dispatched by JICA.
- CES (I) Pvt. Ltd. :
 Local consultant engaged by SAPROF Study Team to assist MOR for conducting PCM

DFC Project

- Alignment finalised - Rewari (Haryana) to Vadodara (Gujarat) section of Western Corridor
- Length of Rewari to Vadodara Section of DFC --
 Approx. 939.4 km



Project Schedule

- Project planning work : 2006 to 2009
- Detailed design work : Scheduled to begin in 2009
- Project implementation/construction work:
 4-5 years (Scheduled to begin in 2011)

Presentation in English - Rajasthan & Haryana PCMs

Area directly affected byDFC

- Parallel Section: within the 30m to 50m wide area from the centre of the last railway line on the east side of expansion
- Detour Section: 70m wide area

Public Consultation Meeting

Objectives

- Dissemination of information on the Project and its Environmental & Social Impacts and Mitigation Measures proposed
- To receive opinions from the public
- Outcome of PCM to be fed-back to Project Authority

Environmental Impacts & Mitigation Measures

Environmental Impacts & Mitigation Measures

Topography & Geology

- During construction phase, changes in topography is envisaged due to clearing of land, felling of trees, cutting and filling of railway embankment.
- Changes are limited within ROW of DFC Project
- Clearing of land, cutting of trees, excavation of borrow areas could change natural waterway to a small extent.
- Appropriate measures will be adopted to minimize the impacts

Environmental Impacts & Mitigation Measures

Soil

- Loss of productive top soil from agricultural fields due to creation of borrow pits and development of detour section
- Measures like adequate drainage, embankment consolidation & slope stabilization will be taken along the track to avoid soil erosion.
- Top soils (15 cm) of the borrow pit sites will be conserved and restored after excavation is over.

Environmental Impacts & Mitigation Measures

Drainage

- Increased incidence and duration of floods due to obstruction of natural drainage courses by the embankment
- Adequate drain will be provided along the track
- Capacity of existing drainage structures will be duly augmented
- Filling of existing drainage courses will be strictly avoided

Presentation in English - Rajasthan & Haryana PCMs

Environmental Impacts & Mitigation Measures

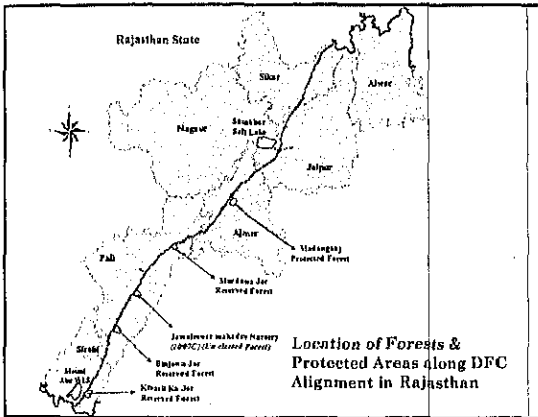
Flora

- Approximately 14,447 no of trees have to felled for construction of new line
- Predominant tree species are Deshi Babul, Bilayti Babul, Izarail Babul, Khair & Khejri
- No rare or endangered species is reported within the proposed ROW
- To compensate the felling, trees will be planted along the railway under Greenbelt Development Programme
- More valuable tree species will be planted in place of existing non-valuable trees

Environmental Impacts & Mitigation Measures

Forest

Name of the Forest	District	Land to be diverted	Trees to be felled
Murdawa Jor Reserved Forest	Pali	1.7 ha	650
Binjawa Jor Reserved Forest	Pali	2.7 ha	1,904
Jawaleswar Mahadev Un-classed Forest	Pali	0.1 ha	99
Kivarli Ka Jor Reserved Forest	Sirohi	0.8 ha	850
TOTAL		5.3 ha	3,503



Environmental Impacts & Mitigation Measures

Forest

- Monetary compensation will be provided to Forest Department for forest land and compensatory afforestation
- No rare or endangered species is reported within the Forest area
- To compensate the felling, adequate trees will be planted under Greenbelt Development Programme
- More valuable tree species will be planted in place of existing non-valuable trees

Environmental Impacts & Mitigation Measures

Fauna

- No significant impact on fauna due to the proposed development other than loss of habitat
- Due to plantation along the alignment, habitat of avifauna will be restored within 1-2 years

Environmental Impacts & Mitigation Measures

Access

- RUB/ROB will be provided at every road crossing
- 4m wide service road will be provided on either side of detour section
- Underpass will be provided after every 2km along the DFC alignment
- Footpath will be provided on either side of the carriageway in each RUDs



Presentation in English - Rajasthan & Haryana PCMs

Noise & Vibration Levels

- Noise level measurements were carried out by Electroacoustics sound level meters
- Measurement was carried out at 12.5m, 25m, 50m, 100m from the centre line of the outer track
- Measurement carried out at 4 stations in Rajasthan - Kishangarh, Ajmer, Marwar Jn and Abu Road
- Background noise levels are in the range of 43-60 dB and satisfies the day time norm of 60 db

Noise & Vibration Levels

- Railway Noise levels are found to be 80-90 dB of LAE, in general and maximum of 100 dB is recorded.
- Predicted noise level due to DFC is in the range of 60-70 dB at 30-60 m distance from the railway track.
- Predicted vibration level and existing railway vibration at 30 m and 50 m from center of DFC embankment were less than 70 dB of the guideline value.
- Impact due to railway vibration is insignificant.

Social Impacts

Methodology

- Survey of all affected structures within the proposed corridor of impact
- Socio-economic survey (20%) of affected families as listed out by survey as well as survey of 25 agricultural PAPs
- Socio-economic survey were conducted by administering questionnaire to likely affected families by the local Consultant

Social Impacts

Project Affected Districts and Villages

District	Villages (Nos.)
Alwar	2
Sikar	35
Nagaur	2
Jaipur	39
Ajmer	42
Pali	73
Sirohi	27

Environmental Management Plan

- Destruction of existing trees will be minimized.
- The plantation of trees will be completed in the construction stage so that substantial growth is achieved when the project is completed
- The construction debris will be disposed of in suitable pre-identified dumping areas in tune with the local condition to avoid land degradation & water logging due to indiscriminate dumping.
- Dumping areas will be reclaimed through top soil cover & plantation.
- The contractor is required to take quarry material only from licensed quarries.

Environmental Management Plan

- At all construction camps and other workplace, good and sufficient water supply shall be maintained to eliminate chances of waterborne diseases to ensure the health and hygiene of the workers.
- Equipment and plants shall be located at least 100 m away from any water body.
- At construction camps and at all workplaces first aid equipment and nursing staff must be provided.
- To minimize stress on existing sources, recharging through water harvesting structures along the project corridor will be considered.
- The Contractor will take every precaution (water sprinkling etc.) to reduce the level of dust generating from construction site.

Presentation in English - Rajasthan & Haryana PCMs

Environmental Management Plan

- The Contractor will ensure that all vehicles, equipments and machineries used for construction are regularly maintained and confirm that pollution emission levels comply with the relevant requirements of State Pollution Control Board (SPCB).

**Thanks for YOUR
participation**

रेल मंत्रालय, भारत सरकार
अन्तर्गत
डेडीकैटेड ग्रेट कॉरिडोर कॉर्पोरेशन इण्डिया लिमिटेड (डी०एफ०सी०सी०आई०एल०)

लोक संवाद बैठक (पर्यावरणीय प्रभावों का मुल्यांकन)

आप सभी का हार्दिक स्वागत हैं

सहायक एजेंसी

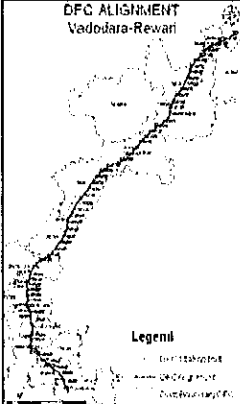
- जापान इंटरनेशनल कॉर्पोरेशन एजेंसी तकनीकी एवं आर्थिक सहायता
- सेप्रोक अध्ययन दल योजना प्रारूप तैयार करने में रेल मंत्रालय के कार्य की देख-रेख हेतु
- सीईएस(ईन्डिया) प्रा लि रेलवे मंत्रालय की लोक संवाद आयोजन में सहायता के लिए सेप्रोक अध्ययन दल द्वारा नियुक्त स्थानिय सलाहकार

डी एफ सी परियोजना

- अन्तिम रेलमार्ग प्रारूप पश्चिमी कॉरिडोर का रेवाड़ी (हरियाणा) से बड़ोदरा (गुजरात) अनुभाग
- रेवाड़ी से बड़ोदरा डी० एफ० सी० अनुभाग की लम्बाई लगभग 939.4 किमी

डी एफ सी परियोजना

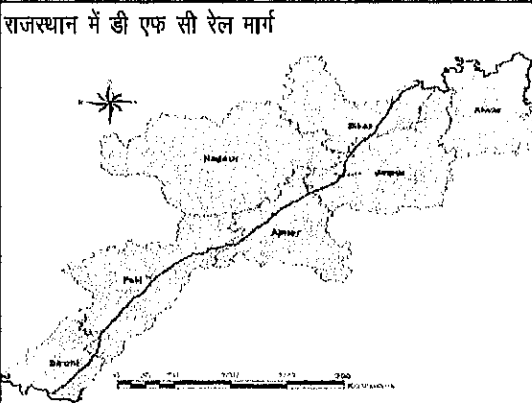
DFC ALIGNMENT Vadodara-Rewari



अनुभाग	राज्य		
	गुजरात	राजस्थान	हरियाणा
सामान्य अनुभाग	627 किमी		
आईएस	246 किमी	47 किमी	19.4 किमी
श्रेणियाँ	1 बनारसखोला 2 चारन 3 पड़ोसगा 4 गोपीनगर 5 अहमदाबाद 6 धौड़ा 7 खानंद 8 बड़ोदरा	1 अतरर 2 सीकर 3 नागौर 4 जयपुर 5 अजमेर 6 पाली 7 सिरोही	1 रेवाड़ी 2 महेंद्रगढ़

Legend

राजस्थान में डी एफ सी रेल मार्ग



परियोजना समय सूची

- योजना कार्य 2008 से 2009
- विस्तृत रूपांकन कार्य का प्रारम्भ : वर्ष 2009
- परियोजना निर्माण कार्य का प्रारम्भ : 2011
- निर्माण कार्य अवधि : 4 से 5 वर्ष

परियोजना से प्रत्यक्ष रूप से प्रभावित क्षेत्र

- समान्तर अनुभाग : रेलमार्ग की अन्तिम पटरी (पूर्व दिशा) के मध्य से 30 मीटर से 50 मीटर भूमि
- बाईपास अनुभाग : 70 मीटर भूमि

लोक संवाद बैठक के उद्देश्य

- परियोजना के पर्यावरण एवं सामाजिक प्रभावों के बारे में जानकारी देना
- परियोजना के बारे में प्रभावित लोगों के विचार जानना
- बैठक में विचार किये गये मुद्दों की प्राधिकारियों को प्रतिपुष्टि

पर्यावरणीय प्रभाव एवं निराकरण

पर्यावरणीय प्रभाव एवं निराकरण के उपाय

स्थलाकृति एवं भूविज्ञान

- भूमि को समतल बनाना, पेड़ों की कटान तथा तटबन्ध निर्माण कार्य के समय स्थलाकृति में बदलाव परियोजना के लिए ली गयी जमीन तक सीमित रहेगा
- भूमि को समतल बनाने का कार्य, पेड़ों की कटान तथा जमीन की खुदाई कार्य के कारण पानी निकास व्यवस्था पर सीमित प्रभाव
- प्रभावों को न्यूनतम करने की पर्याप्त व्यवस्था का प्रावधान

पर्यावरणीय प्रभाव एवं निराकरण के उपाय

मृदा

- जमीन की खुदाई के कारण कृषि उपयोगी उपरी मृदा (15 सेन्टीमीटर) का नुकसान
- भू-क्षरण रोकने के लिए पर्याप्त निकासी व्यवस्था, तटबन्ध दृढीकरण तथा ढाल स्थिरीकरण का प्रावधान
- कृषि उपयोगी उपरी मृदा (15 सेन्टीमीटर) का संरक्षण एवं प्रत्यावर्तन

पर्यावरणीय प्रभाव एवं निराकरण के उपाय

निकासी व्यवस्था

- तटबन्ध निर्माण के कारण जल मराव की समस्या
- रेल मार्ग के दोनों तरफ पर्याप्त निकासी व्यवस्था का प्रावधान
- मौजूदा नालियों की क्षमता का आर्वधन
- वर्तमान निकासी व्यवस्था का उचित रखरखाव

पर्यावरणीय प्रभाव एवं निराकरण के उपाय

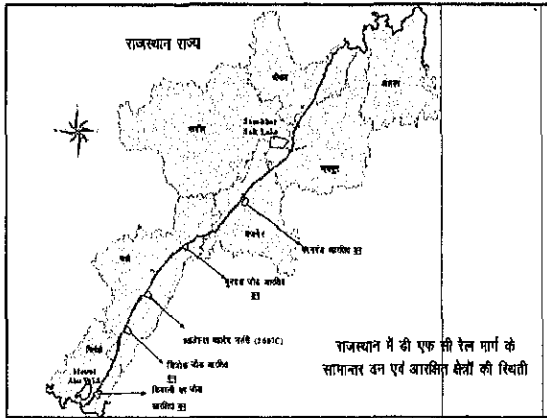
पेड़ पौधे

- परियोजना के लिए लगभग 14,500 पेड़ों की कटान
- प्रमुख पेड़ प्रजातियाँ : देशी बबूल, विलायती बबूल, इजरायली बबूल, खैर एवं खैजड़ी
- कटने वाले पेड़ों में लुप्तप्राय प्रजाति अविद्यमान
- पेड़ कटान की क्षति पूर्ति हेतु पौध रोपण तथा हरित पट्टी का विकास
- हरित पट्टी में बहुमूल्य पौध रोपण

पर्यावरणीय प्रभाव एवं निराकरण के उपाय

वन

वन का नाम	जिला	परिवर्तित होने वाली भूमि	कटने वाले पेड़ों की संख्या
शुरदवा जोड़ आरक्षित वन	पाली	1.7 हेक्	650
विजोया जोड़ आरक्षित वन	पाली	2.7 हेक्	1,904
ज्वालेश्वर महादेव नर्सरी	पाली	0.1 हेक्	99
किवरली का जोड़ आरक्षित वन	सिरोही	0.8 हेक्	850
	कुल	5.3 हेक्	3,503



पर्यावरणीय प्रभाव एवं निराकरण के उपाय

वन

- पेड़ कटान के लिए वन विभाग को आर्थिक क्षतिपूर्ति
- कटने वाले पेड़ों में लुप्तप्राय प्रजाति अविद्यमान
- काटे गये पेड़ों की क्षतिपूर्ति हेतु हरित पट्टी विकास के तहत पौधरोपण
- हरित पट्टी में अमूल्य पेड़ों के स्थान पर बहुमूल्य पौध रोपण

पर्यावरणीय प्रभाव एवं निराकरण के उपाय



जीव जन्तु

- जीवजन्तुओं पर आवास हानी के अलावा कोई उल्लेखनीय प्रभाव नहीं
- रेल मार्ग के सामान्तर पौधारोपण से 1-2 वर्ष में पंक्षियों का प्रत्यावर्तन

पर्यावरणीय प्रभाव एवं निराकरण के उपाय

पहुँच

- प्रत्येक क्रॉसिंग पर पट्टरी के नीचे अथवा पट्टरी के ऊपर (RUB/ROB) सड़क का प्रावधान
- बाईपास में पट्टरी के दोनों तरफ 4 मी चौड़ी सर्विस रोड़ का प्रावधान
- प्रत्येक दो किमी दूरी पर अन्डर पास का प्रावधान
- RUB** के दोनों तरफ फुटपाथ का प्रावधान.

ध्वनि और कम्पन मात्रा

- ध्वनि और कम्पन का मापन इलेक्ट्रो एकासटिक यन्त्र द्वारा किया गया था
- मापन बाहरी रेल पटरी से 12.5 मी, 25 मी, 50 मी एवं 100 मी दूरी पर किया गया था
- ध्वनि और कम्पन का मापन राजस्थान में किशनगढ़, अजमेर, मारवाड़ जंक्शन, तथा आबू रोड़, में किया गया था
- ध्वनि की मात्रा रेल चालन रहित स्थिति में 43-60 डेसीबल पाया गया है जोकि सामान्य है

ध्वनि और कम्पन मात्रा

- रेलगाडी आवाजाही के समय ध्वनि की मात्रा सामान्यतः 80-90 डेसीबल पाया गया है और अधिकतम मात्रा 100 डेसीबल तक पाया गया है
- परियोजना से रेल पटरी से 30-60 मीटर दूरी पे लगभग 60-70 डेसीबल ध्वनि की मात्रा का अनुमान है
- परियोजना के तटबंध के मध्य से 30-50 मीटर दूरी तक वर्तमान एवं अनुमानित कम्पन की मात्रा स्वीकृत 70 डेसीबल से कम है

सामाजिक प्रभाव

कार्य प्रणाली

- सभी प्रभावित भवनों/ढाचों का सर्वेक्षण
- प्रभावित परिवारों का (20 फीसदी) आर्थिक-सामाजिक सर्वेक्षण एवं प्रत्येक प्रभावित जिले में 25 प्रभावित किसानों का सर्वेक्षण
- प्रभावित परिवारों का आर्थिक-सामाजिक सर्वेक्षण स्थानिय सलाहकार द्वारा प्रश्नावली द्वारा किया गया

सामाजिक प्रभाव

परियोजना से प्रभावित जिले और गाँव

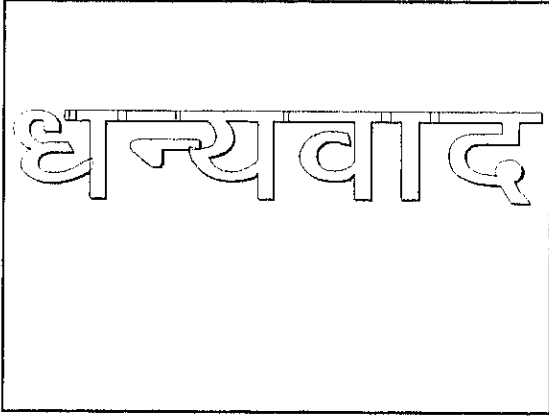
जिला	गाँव
अलवर	2
सीकर	35
नागौर	2
जयपुर	39
अजमेर	42
पाली	73
सिरोही	27

पर्यावरणीय प्रबंधन योजना

- कम से कम पेड़ों की कटाई
- निर्माण कार्य के समय वृक्षारोपण ताकि कार्य पूर्ण होने तक पेड़ प्रयाप्त बड़े हो सके
- निर्माण कार्य के समय उत्पन्न मलवे का प्रयाप्त निपटान
- मलवा निपटान स्थानों का वृक्षारोपण एवं उपरी मृदा द्वारा पूर्णउत्थान
- ठेकेदार केवल स्वीकृत गृहों से ही निर्माण सामग्री का दोहन करेगा

पर्यावरणीय प्रबंधन योजना

- जलजनित बिमारियों से बचाव हेतु श्रमिक शिवरों में प्रयाप्त पानी, बिजली तथा ईंधन का प्रबंधन
- उपकरणों को जल स्थानों से 100 मी दूर स्थापित किया जाएगा
- कृषि उपयोगी उपरी मृदा का संरक्षण तथा मलबा निपात स्थान का पूर्वा स्थान में प्रत्यावर्तन
- धूल को उड़ने से रोकने के लिए प्रयाप्त (पानी छिड़कने का) प्रावधान
- निर्माण कार्य हेतु उपयोग होने वाले यन्त्र गाड़ी आदि का उचित देखरेख ताकि प्रदुषण की मात्रा केन्द्रिय प्रदुषण नियन्त्रण बोर्ड के निर्देशों के अनुसार हो



Presentation in Gujarati - Gujarat PCMs



સરકારી સેવા ગોશાલો
(સામાજિક સ્થળો સંસ્થાઓ)
સામાજિક સેવા સંસ્થાઓ સંબંધે

લોક સંવાદ બેઠક

આવેશ સરકારીઓનું સ્થાપના કરે છે.

સરકારી સેવા ગોશાલો
સરકારી સેવા ગોશાલો
સરકારી સેવા ગોશાલો સંબંધે

સરકારી સેવા ગોશાલો
સરકારી સેવા ગોશાલો સંબંધે

સરકારી સેવા ગોશાલો
સરકારી સેવા ગોશાલો
સરકારી સેવા ગોશાલો સંબંધે

સરકારી સેવા ગોશાલો
સરકારી સેવા ગોશાલો સંબંધે

સરકારી સેવા ગોશાલો
સરકારી સેવા ગોશાલો
સરકારી સેવા ગોશાલો સંબંધે

સરકારી સેવા ગોશાલો
સરકારી સેવા ગોશાલો સંબંધે

સરકારી સેવા ગોશાલો
સરકારી સેવા ગોશાલો
સરકારી સેવા ગોશાલો સંબંધે

સરકારી સેવા ગોશાલો
સરકારી સેવા ગોશાલો સંબંધે

Presentation in Gujarati - Gujarat PCMs

સામાજિક ન્યાય અને સમાજ સુધારા
 આંદોલનના અગ્રણી નેતાઓમાં સમાવેશ થાય છે.
 આંદોલનના અગ્રણી નેતાઓમાં સમાવેશ થાય છે.
 આંદોલનના અગ્રણી નેતાઓમાં સમાવેશ થાય છે.
 આંદોલનના અગ્રણી નેતાઓમાં સમાવેશ થાય છે.
 આંદોલનના અગ્રણી નેતાઓમાં સમાવેશ થાય છે.
 આંદોલનના અગ્રણી નેતાઓમાં સમાવેશ થાય છે.

સામાજિક ન્યાય અને સમાજ સુધારા
 આંદોલનના અગ્રણી નેતાઓમાં સમાવેશ થાય છે.
 આંદોલનના અગ્રણી નેતાઓમાં સમાવેશ થાય છે.
 આંદોલનના અગ્રણી નેતાઓમાં સમાવેશ થાય છે.
 આંદોલનના અગ્રણી નેતાઓમાં સમાવેશ થાય છે.
 આંદોલનના અગ્રણી નેતાઓમાં સમાવેશ થાય છે.
 આંદોલનના અગ્રણી નેતાઓમાં સમાવેશ થાય છે.

વર્ગ	સંખ્યા
૧	૧૫
૨	૧૫
૩	૧૫
૪	૧૫
૫	૧૫
૬	૧૫
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૮	૧૫
૯	૧૫
૧૦	૧૫
કુલ	૧૫૦

વર્ગ	સંખ્યા
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૨	૧૫
૩	૧૫
૪	૧૫
૫	૧૫
૬	૧૫
૭	૧૫
૮	૧૫
૯	૧૫
૧૦	૧૫
કુલ	૧૫૦

વર્ગ	સંખ્યા
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૬	૧૫
૭	૧૫
૮	૧૫
૯	૧૫
૧૦	૧૫
કુલ	૧૫૦

વર્ગ	સંખ્યા
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૨	૧૫
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૫	૧૫
૬	૧૫
૭	૧૫
૮	૧૫
૯	૧૫
૧૦	૧૫
કુલ	૧૫૦

Presentation in Gujarati - Gujarat PCMs

વસ્તુ	સંખ્યા
વિદ્યાર્થીઓ (સંખ્યા)	૨૨૩
વિદ્યાર્થીની વ્યક્તિઓ	૧૩૩૩
ગુરુઓ	૬૦૭
આચાર્ય	૬૨૬

વિદ્યાર્થીઓની સંખ્યા વિસ્તારો	
વિદ્યાર્થીઓ	૨૨૩
વિદ્યાર્થીની વ્યક્તિઓ	૧૩૩૩
ગુરુઓ	૬૦૭
આચાર્ય	૬૨૬

વિદ્યાર્થીઓની સંખ્યા વિસ્તારો	
વિદ્યાર્થીઓ	૨૨૩
વિદ્યાર્થીની વ્યક્તિઓ	૧૩૩૩
ગુરુઓ	૬૦૭
આચાર્ય	૬૨૬

વિદ્યાર્થીઓની સંખ્યા વિસ્તારો	
વિદ્યાર્થીઓ	૨૨૩
વિદ્યાર્થીની વ્યક્તિઓ	૧૩૩૩
ગુરુઓ	૬૦૭
આચાર્ય	૬૨૬

વિદ્યાર્થીઓની સંખ્યા વિસ્તારો

વિદ્યાર્થીઓ ૨૨૩

વિદ્યાર્થીની વ્યક્તિઓ ૧૩૩૩

ગુરુઓ ૬૦૭

આચાર્ય ૬૨૬

વિદ્યાર્થીઓની સંખ્યા વિસ્તારો

વિદ્યાર્થીઓ ૨૨૩

વિદ્યાર્થીની વ્યક્તિઓ ૧૩૩૩

ગુરુઓ ૬૦૭

આચાર્ય ૬૨૬

Appendix 3-3 Handout for EIA-PCM

**PUBLIC CONSULTATION MEETING
FOR
DEDICATED FREIGHT CORRIDOR
(DFC) PROJECT**

**Objective
of Public Consultation Meeting:**

MOR is implementing DFC Project, which is Multiple High Axle Load Freight Corridor with Computerized Control on the Western Industrial Corridor, connecting from Rewari in Haryana to Vadodara in Gujarat. Its detailed design work is scheduled to begin in the middle of 2009 followed by the 4 -5 years of construction works which should begin by the end of 2010.

MOR is concerned with

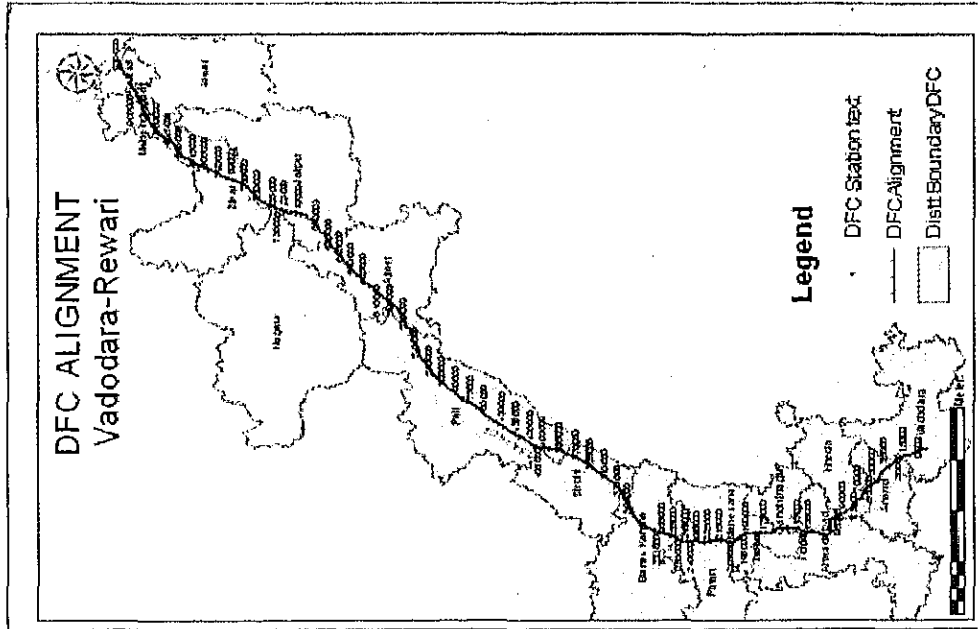
- 1) The level of understanding and acceptance of DFC Project among the general public living alongside the proposed railway line;
 - 2) Dissemination of information on the project in respect of the likely environmental and social impacts induced by the project;
 - 3) Public Consultation Meeting is to offer opportunities to stakeholders to voice their concern on the project during the planning stage; and
 - 4) Opinions raise during public consultation meeting are fed-back to the planning process of the Project.
- Therefore MOR would like to hold public consultation meeting at this stage of the Project planning.

Project at a Glance:

General Features:

DFC Project in the Western Industrial Corridor runs from Rewari to JNPT, out of which Rewari (Haryana) to Vadodara (Gujarat) section is a total length of 940 km and that the final alignment of this section has been designed.

Upon completion, it runs with electric traction system, double stack containers, and computerized signal system at the maximum speed of 100km/hour.



Economic Impacts:

DFC Project aims to help boosting the present trends of growth of the economy in India. It is designed to carry a total freight of 37.7 million tones in the fiscal year 2013-2014.

At the same time it should create job opportunities and the growth of household income in general for the better interests of the public at large.

Environmental Impacts:

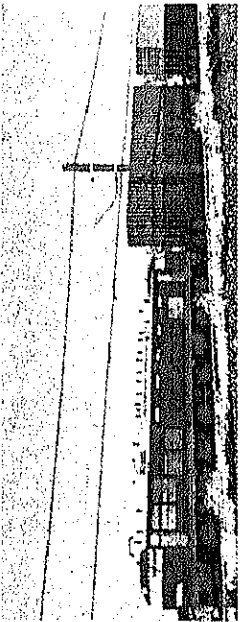
The laws and regulations of EIA in India do not require EIA study for the linear development of railway project. However, as an internationally funded project, all efforts need to be made in the DFC Project for minimizing environmental impacts caused.

The section between Rewari and Vadodara under the final design stage induces various levels of environmental and social impacts in the districts of: 1) Rewari, and Mehendragarh in Haryana; 2) Alwar, Ajmer, Sikar, Jaipur, Pali, Nagaur and Sirohi in Rajasthan; and 3) Banaskantha, Patan, Mahesana, Gandhinagar, Ahmedabad, Kheda, Anand and Vadodara in Gujarat.

In Haryana and Rajasthan the alignment runs parallel to the present railway line while in Gujarat it takes a detour to the west of existing railway line in order to avoid major settlements which might cause negative social impacts in Gujarat. Thus considerable number of land owners and households are affected.

In the northern part of Gujarat, the alignment of DFC Project avoids Balaram Ambaji Wildlife Sanctuary and that the alignment runs in the area to the north of the sanctuary.

In the middle of Gujarat, the alignment of DFC Project also avoids Thol Wildlife Sanctuary in Mahesana District and that the alignment runs in the area to the west of the sanctuary.



Project Components:

- Main line construction works in Haryana and Rajasthan, DFC Project line is constructed generally on the eastern/southern side of the existing railway. The width differs from 30 – 50 m depending on the topography. In Gujarat, the main line is constructed on the 70 m wide embankment so as to avoid railway crossing with the existing road.
- Seven junction and crossing stations of approximately 60 m wide and 1,600 m long each at Makarpura in Vadodara, Sabarmati in Ahmedabad, Mehsana in Mehsana, Palanpur in Banaskantha, Marwar Junction in Pali, Phulera in Jaipur, and Rewari Junction in Haryana.
- Major bridges crossing over important rivers as well as minor bridges; and
- ROB between Bar-Amarpura station in Pali District.

Assistance Extended by Japan Bank of International Cooperation (JBIC)

Indian Government made a request of assistance to the Government of Japan, who has sent *SAPROF Study Team* in order to verify the planning process of DFC Project and that CES (India) Private Ltd, New Delhi as local consultants should assist MOR to facilitate the meeting as per JBIC Guidelines on the Environment and Social Considerations.

Information Disclosed at Public Consultation Meeting:

To assess and address the likely social and environmental impacts, public consultation meetings are therefore organized in 8 districts of Gujarat, districts of Rajasthan and 2 districts of Haryana.

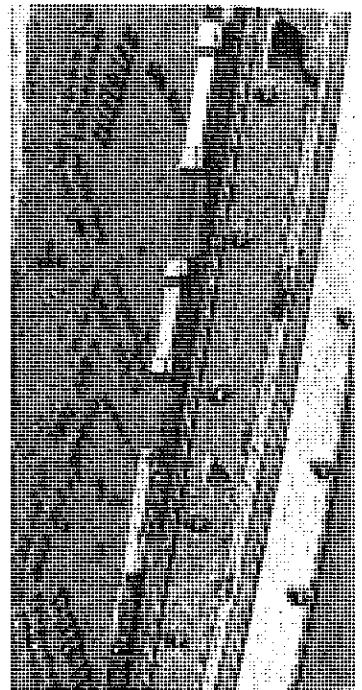
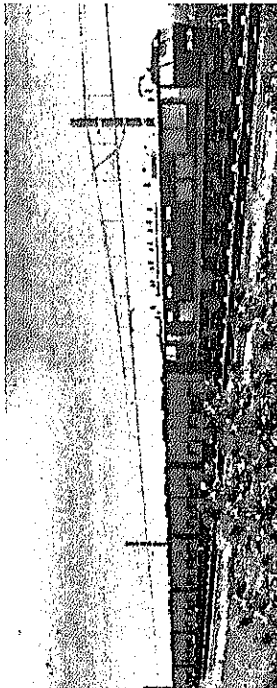
In these meetings MOR would like to disclose the final DFC alignment, major findings related to social and environmental impacts.

Because of the changes of alignment made after JICA Study Report which was completed in October 2007, there are a number of extra villages identified that are directly affected by the implementation of DFC Project.

Thus focusing on those villages, and as per the above context, we would like to call upon all the stakeholders of the newly identified villages/hamlets, NGO representatives, officials of the local government and opinion leaders having social and environmental concerns relevant to this project, to attend the public consultation meeting scheduled to be held:

Place:
 Time: from to
 Date:

**Public Consultation Meeting
 For
 Dedicated Freight Corridor
 (DFC) Project**



लोक संवाद का उद्देश्य:

भारत सरकार का रेल मंत्रालय माल लाने व ले जाने हेतु एक परियोजना का क्रियान्वयन करने जा रहा है उस परियोजना का नाम है 'समर्पित मालवाहक परियोजना' इस परियोजना के तहत अत्याधुनिक एवं कम्प्यूटर संचालित बहुउद्देश्य उच्चगति क्षमता का माल (फ्रेट) कॉरिडोर बनना है, जो कि पश्चिमी औद्योगिक कॉरिडोर को हरियाणा राज्य में रिवाड़ी एवं गुजरात राज्य में बड़ोदरा को जोड़ेगा। इस परियोजना का विस्तृत प्रारूप वर्ष 2009 के मध्य से शुरू होगा और निर्माण कार्य में 4 से 5 वर्ष का समय लगेगा ऐसी सम्भावना है कि वर्ष 2010के अन्त तक परियोजना शुरू हो जायेगी।

रेल मंत्रालय निम्न मुद्दों से सम्बन्धित है:

1. डी.एफ.सी. परियोजना के प्रस्तावित रेलमार्ग के दोनों ओर रहने वाले सामान्य जनमानस में, परियोजना को लेकर आपत्ती सहमती एवं स्वीकृती।
2. परियोजना से होने वाले सम्भावित सामाजिक एवं पर्यावरण सम्बन्धी असर के बारे में सूचना प्रदान करना।
3. इस परियोजना में लोक संवाद बैठक के माध्यम से प्रत्येक हितधारक (स्टेक होल्डर) के सुझावों को योजना स्तर पर आमंत्रित करना।
4. लोक संवाद बैठक के दौरान एकत्र किये गये विचारों/सुझावों को प्रति पुष्टि (फ्रीड बैक) के बाद योजना स्तर पर सम्मिलित करना।

अतः रेल मंत्रालय डी. एफ. सी. परियोजना के दौरान एक लोक संवाद बैठक आमन्त्रित करता है।

परियोजना की झलक:

सामान्य विशेषता:

डी.एफ.सी. परियोजना में पश्चिमी औद्योगिक कॉरिडोर हेतु रिवाड़ी से जवाहर लाल नेहरू पोर्ट ट्रस्ट तक रेल मार्ग प्रस्तावित है। जिसमें हरियाणा राज्य के रिवाड़ी और गुजरात राज्य के बड़ोदरा अनुभाग तक रेल मार्ग की लम्बाई 940 किमी0 है। इस अनुभाग का रेलमार्ग प्रारूप बनाया जा चुका है।

परियोजना के पूर्ण होने पर इस रेलमार्ग पर दौड़ने वाली मालगाड़ी की अधिकतम गति 100 किमी./घण्टा होगी एवं इसमें विद्युत सार्कषण प्रणाली, दोहरा मार, और कम्प्यूटरकृत सिग्नल प्रणाली शामिल है।

आर्थिक प्रभाव:

डी. एफ. सी. परियोजना का मुख्य उद्देश्य देश की वर्तमान आर्थिक विकास में सहयोग देना है। इस परियोजना के प्रारूप के तहत राजस्व सम्बन्धी वर्ष 2013 - 2014 में कुल माल जो कि 37.7 मिलियन टन को लाना, ले जाना है। इसी समय में रोजगार के अवसर पैदा होंगे और सामान्यतः पारिवारिक आय में वृद्धि होगी एवं उच्च स्तर पर बेहतर हित अपेक्षित है।

पर्यावरण सम्बन्धी प्रभाव

भारत देश के पर्यावरण सम्बन्धी नियम/अधिनियम के अनुसार, रेलवे परियोजना के रेखीय विकास हेतु पर्यावरण सम्बन्धी असर का अध्ययन आवश्यक नहीं है। फिर भी, यह परियोजना अन्तरराष्ट्रीय निधि 7 से जुड़ी है, इसलिए ऐसे सभी प्रयास करने की आवश्यकता है कि डी.एफ.सी. परियोजना से पर्यावरण पर कम से कम असर पड़े।

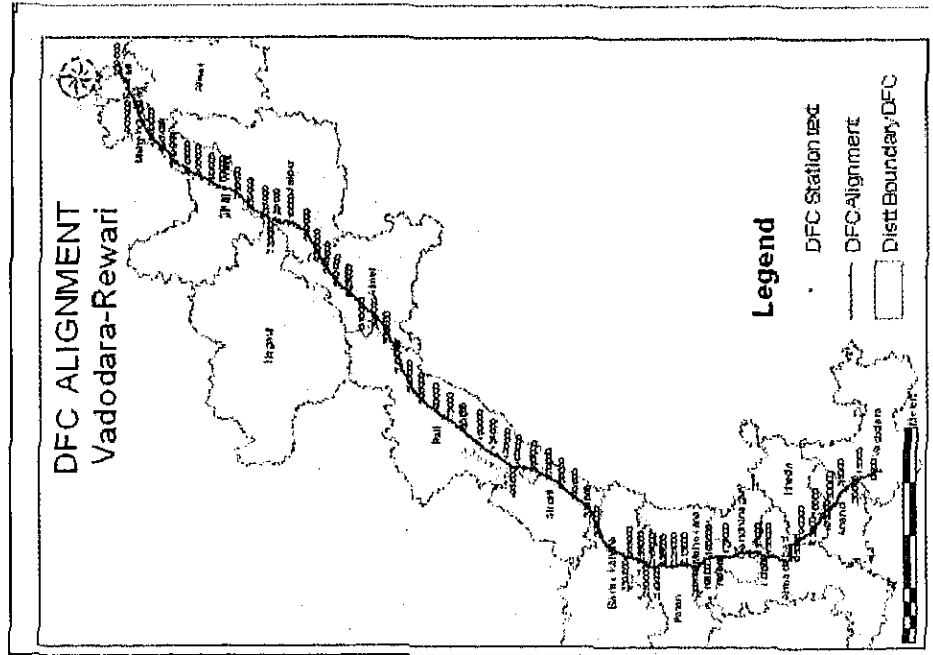
रिवाड़ी बड़ोदरा अनुभाग के मध्य जो अन्तिम प्रारूप तैयार किया गया है उसमें निम्न स्तरों पर सामाजिक एवं पर्यावरण सम्बन्धी प्रभाव अभी क्षत है। इस अनुभाग में हरियाणा राज्य के दो जिले रिवाड़ी और महेन्द्रगढ़ सम्मिलित है। राजस्थान राज्य के अलवर, अजमेर, सीकर, पाली, नागौर और सिरोंही जिले सम्मिलित है। और गुजरात राज्य में बानासकांठा, पाटन, महेसाणा, गांधीनगर, अहमदाबाद, खेड़ा, आनन्द और बड़ोदरा जिले शामिल है।

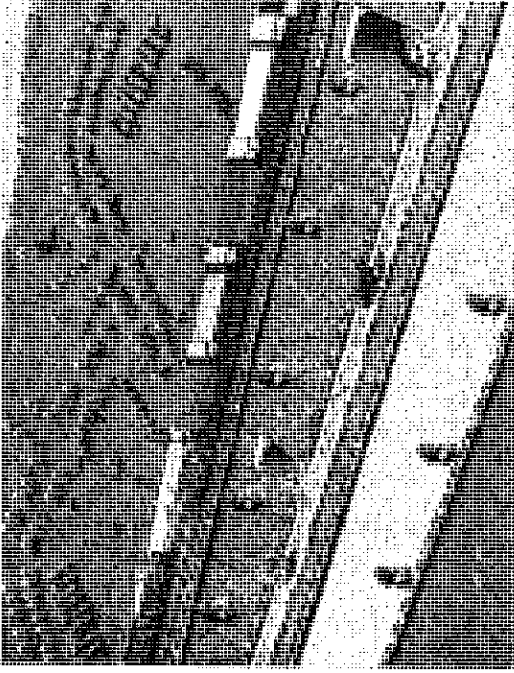
हरियाणा एवं राजस्थान में प्रस्तावित रेलमार्ग वर्तमान रेलमार्ग के सामान्तर चलेगा जबकि गुजरात राज्य में वर्तमान रेलमार्ग के पश्चिमी भाग से एक चक्कर (बाईपास) लगाते हुए निकलेगा।

ऐसा इसलिए किया जा रहा है कि मुख्य आबादी क्षेत्रों पर विपरीत सामाजिक प्रभाव न पड़े। इस स्थिति में भूमि मालिकों और कुछ परिवारों पर प्रभाव पड़ सकता है।

गुजरात राज्य के उत्तरीय भाग में, प्रस्तावित रेलमार्ग बालाराम अम्बाजी वन्यजीव अभ्यारण्य को बचाते हुए, अभ्यारण्य के उत्तर से गुजरेगा।

गुजरात राज्य के मध्य में, प्रस्तावित डी.एफ.सी. रेलमार्ग थोल वन्यजीव अभ्यारण्य जो कि महेसाणा जिले में स्थित है, को बचाते हुए गुजरेगा ऐसी स्थिति में प्रस्तावित रेलमार्ग अभ्यारण्य के पश्चिमी क्षेत्रों से गुजरेगा।





परियोजना के घटक:

- हरियाणा और राजस्थान राज्य में प्रस्तावित मालवाहक रेलमार्ग, सामान्यतयक वर्तमान रेलमार्ग के पूर्वी दक्षिणी छोर की ओर निर्मित होगा। रेलमार्ग की चौड़ाई 30 से 50 मी. तक प्रस्तावित है, ऐसा भौगोलिक स्थिती पर निर्भर करेगा। गुजरात राज्य में, प्रस्तावित रेलमार्ग हेतू 70 मी. की चौड़ाई अपेक्षित है क्योंकि प्रस्तावित रेल मार्ग में वर्तमान सड़कों को रास्ता देना आवश्यक है, इसलिए प्रस्तावित रेल मार्ग हेतू पुस्ता (तटबन्ध) आवश्यक है।
- लगभग 60 मी. चौड़ाई और 1600 मी. लम्बाई प्रत्येक जक्शन और क्रासिंग स्टेशन पर आवश्यक है। इन जक्शन और क्रासिंग स्टेशन की कुल संख्या 7 है हरियाणा में फुलेरा (जयपुर) एवं मारवाड़ जक्शन (पाली) और गुजरात राज्य में पालनपुर (बनासकांठा 1081) महेसाणा, साबरमती (अहमदाबाद) और मक. रुपुर (बड़ेदरा) हैं।
- नदियों/नालोंपर मुख्य/लघु पुलों का निर्माण।
- पाली जिले में बार-अमरपुरा स्टेशन पर रेल उपर गामी पुल का निर्माण।

जपान इंटरनेशनल कोर्पोरेशन ऐजन्सी (जे.आई.सी.ए.) का सहायता देना:

भारत सरकार के अनुरोध पर जपान सरकार ने सेप्रोफ अध्वनदल का गठन किया जो कि डी.एफ.सी. परियोजना को योजनाबद्ध तरीके से सहायता प्रदान करेगा। इस कार्य हेतू सी.ई. एस. (इण्डिया) प्राईवेट लिमिटेड, नई दिल्ली को स्थानीय कन्सल्टेंट नियुक्त किया गया है, जो कि जे.आई.सी.ए. द्वारा रचित सामाजिक एवं पर्यावरण सम्बन्धी मार्गदर्शिका का पालन करते हुये रेल मंत्रालय, भारत सरकार की सहायता करेगा।

लोक संवाद बैठक में सुचनाएँ जाहिर करना:

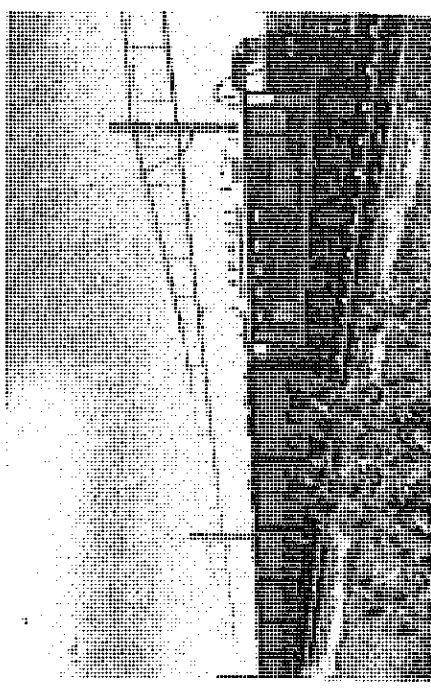
सामाजिक एवं पर्यावरण सम्बन्धी प्रभावों को आकना एवं प्रकट करने हेतू हरियाणा राज्य के दो जिले में, राजस्थान के 7 जिलों में और गुजरात राज्य के 8 जिलों में लोक संवाद बैठकों का आयोजन किया जाएगा। इन बैठकों में रेल मंत्रालय डी.एफ.सी. रेल मार्ग का प्रारूप के बारे में बताएगा एवं इसके साथ-साथ सामाजिक एवं पर्यावरण सम्बन्धी प्रभावों की भी जानकारी प्रदान करेगा।

अक्टूबर 2007 की जे.आई.सी.ए.स्टडी रिपोर्ट के आधार पर रेलमार्ग में कुछ बदलाव किया गया है, इस दौरान कुछ नये गाँवों की पहचान हुई है जोकि डी.एफ.सी.परियोजना के क्रियान्वयन के समय सीधे तौर पर प्रभावित होंगे।

इसलिए उन नये गाँवों को केन्द्र में रखते हुए, उपरी सर्वेस के अनुसार, हम सभी, हितधारकों (स्टेक होल्डर्स) को आमंत्रित करते हैं। ऐसे हितधारक नये गाँव/दानी, गैर शासकिय संस्थान के प्रतिनिधि, स्थानिय प्रशासन के अधिकारी, और जन नेता इत्यादि हो सकते हैं। ये सभी हित धारक परियोजना के सामाजिक एवं पर्यावरण सम्बन्धी मुद्दों पर लोक संवाद बैठक में चर्चा करेंगे।

समर्पित मालवाहक कॉरिडोर (डी. एफ. सी.) परियोजना हेतू लोक संवाद बैठक

रेल मंत्रालय भारत सरकार



**માલવહન સમર્પિત રેલ્વે માર્ગ
લોકસંવાદ બેઠક
(DFC Project)**

લોકસંવાદ બેઠકના હેતુઓ:

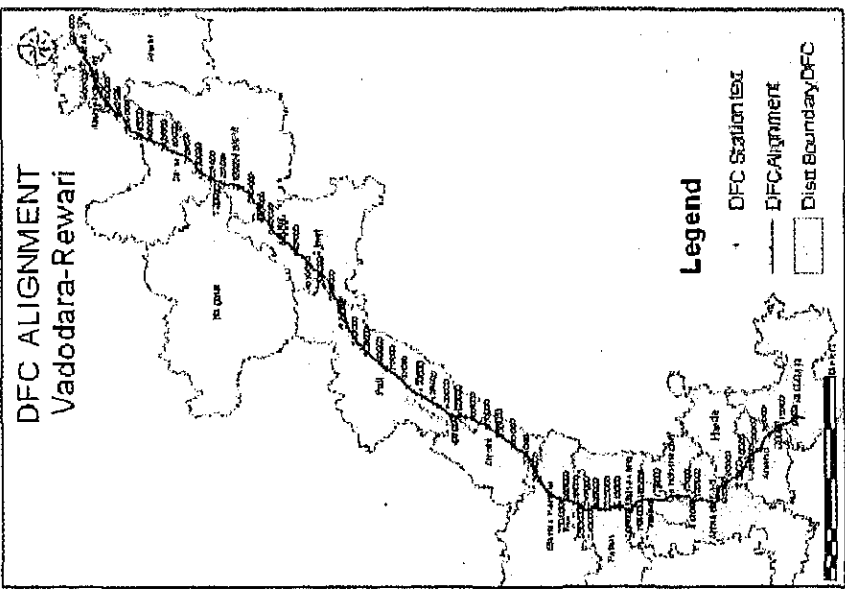
રેલ્વે મંત્રાલય દ્વારા 'મલ્ટીપલ હાઈ એક્સલ લોડ ફેઈટ ક્રીડોર'નું અમલીકરણ થનાર છે, જેના પશ્ચિમ ઔદ્યોગિક વિસ્તારમાં હરિયાણાના રેવાડીથી ગુજરાતનું વડોદરા જોડાનાર છે. આ માલવહન સમર્પિત રેલ્વે માર્ગની વિગતવાર ડિઝાઈન ૨૦૦૮ના મધ્યભાગમાં તૈયાર થઈ જશે અને ૨૦૧૦માં કામ શરૂ કરી ૪-૫ વર્ષમાં પૂરું કરાશે.

રેલ્વે મંત્રાલયની નિસ્ખત:

- (૧) બહુજન સમાજ અને સૂચિત રેલ્વેમાર્ગની આસપાસના લોકો માલવહન સમર્પિત રેલ્વે માર્ગને સમજી અને સ્વિકૃતિ આપે;
 - (૨) પ્રોજેક્ટને કારણે થનાર પર્યાવરણિય અને સામાજિક અસરો અંગેની જાણકારીનું વિતરણ કરવું;
 - (૩) આયોજનના તબક્કા દરમિયાન લોકસંવાદ બેઠકો દ્વારા લોકોને નિસ્ખત ધરાવતી બાબતો અંગે રજૂઆત કરવાની તક પૂરી પાડવી; અને
 - (૪) લોકસંવાદ બેઠકો દરમિયાન મળેલા અભિપ્રાયોને આયોજન પ્રક્રિયામાં કામે લેવાય.
- ઉપરોક્ત હેતુઓને ધ્યાનમાં રાખી રેલ્વે મંત્રાલય આ તબક્કે લોક સંવાદ બેઠકો યોજવા માગે છે.

પ્રોજેક્ટ-ઉડતી નજરે:

પશ્ચિમ ઔદ્યોગિક વિસ્તારમાં આવનાર માલવહન સમર્પિત રેલ્વે માર્ગ રેવાડીથી જવાહરલાલ નેહરુ પોર્ટ-મુંબઈ સુધી જશે, જેમાં હરિયાણાના રેવાડીથી ગુજરાતના વડોદરા સુધીના ૮૪૦ કિલોમીટર વિસ્તાર અંગેની ડિઝાઈન અને સૂચિત માર્ગ તૈયાર થઈ ગયેલ છે. આ રેલ્વેમાર્ગ પુરો થતાં તેના પર વધુમાં વધુ ૧૦૦ કિલોમીટરની ઝડપે સંપૂર્ણપણે કોમ્પ્યુટર સંચાલિત સીગ્નલ સીસ્ટમથી ઈલેક્ટ્રિક ટ્રેક્સન સીસ્ટમથી ડબલ સ્ટેક કન્ટેઈનર દોડશે.



આર્થિક અસરો:

માલવહન સમર્પિત રેલ્વેમાર્ગનો હેતુ ભારતના વર્તમાન વિકાસ દરને બળ પુરું પાડવાનો છે. ૨૦૧૩-૨૦૧૪ના વર્ષથી ૩૭૭ લાખ ટન માલવહન કરવાનું આયોજન છે. સાથે સાથે લોકહિતની દૃષ્ટિએ જોઈએ તો રોજગારીની તકો ઉભી થતાં લોકોની આવકમાં વધારો થશે.

પર્યાવરણિય અસરો:

ભારત સરકારના પર્યાવરણિય અસરોનો અભ્યાસ કરવાના ધારાધોરણ અને કાયદાઓ અનુસાર રેલ્વેના આ પ્રકારના લીનીયર પ્રોજેક્ટ માટે પર્યાવરણિય અસરોનો અભ્યાસ કરવાની આવશ્યકતા નથી. તેમ છતાં આ એક આંતરરાષ્ટ્રીય નાણાકીય મદદથી પ્રોજેક્ટ થતો હોવાથી માલવહન સમર્પિત રેલ્વેમાર્ગમાં એવો પૂરો પ્રયત્ન થવો જોઈએ કે જેથી પર્યાવરણની નકારાત્મક અસરો ઓછામાં ઓછી થાય. રેવાડી અને વડોદરા વચ્ચેના વિભાગમાં ડિઝાઈનના અંતિમ તબક્કામાં નીચેના વિસ્તારોમાં વિવિધ પ્રકારની સામાજિક તથા પર્યાવરણિય અસરો થશે. (૧) હરિયાણાના રેવાડી તથા મહેન્દ્રગઢ જિલ્લાઓ (૨) રાજસ્થાનના અલ્વર, અજમેર, સિકર, જયપુર, પાલી, નગૂર અને શિરોહી જિલ્લાઓ (૩) ગુજરાતના બનાસકાંઠા, પાટણ, મહેસાણા, ગાંધીનગર, અમદાવાદ, ખેડા, આણંદ અને વડોદરા જિલ્લાઓ. હરિયાણા અને રાજસ્થાનમાં વર્તમાન રેલ્વેલાઈનને સમાંતર જ માલવહન સમર્પિત રેલ્વે માર્ગ થશે જ્યારે ગુજરાતમાં વર્તમાન રેલ્વેમાર્ગની પશ્ચિમે ડીટુર-હાઈવર્કન-કરીને લઈ જવાશે જેથી મોટાભાગની વસાહતો પર થનારી સંભવિત નકારાત્મક સામાજિક અસરોને નિવારી શકાય. આથી ઘણાં જમીનધારકો અને ઘરોને અસર થશે.

ઉત્તર ગુજરાતના બાલારામ-અંબાજી વન્યજીવન અભયારણ્ય પર થનારી અસરોને નિવારવા માટે માલવહન સમર્પિત રેલ્વે માર્ગ અભયારણ્યની પશ્ચિમે લઈ જવાયો છે. મધ્ય ગુજરાતના મહેસાણાના યોળ વન્યજીવન અભયારણ્ય પરની અસર નિવારવા માટે માલવહન સમર્પિત માર્ગ તેની પશ્ચિમમાંથી લઈ જવાયો છે.

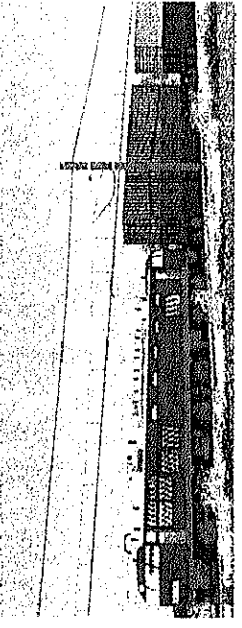
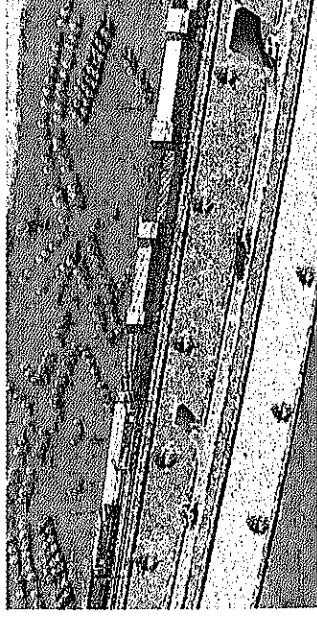
લોક સંવાદ બેઠકોમાં જાહેર કરવાની માહિતી:

સંભવિત પર્યાવરણિય તથા સામાજિક અસરો વિશે જાણવા-જણાવવાની દૃષ્ટિએ હરિયાણાના બે જિલ્લાઓ, રાજસ્થાનના ચાર જિલ્લાઓ અને ગુજરાતના આઠ જિલ્લાઓમાં લોકસંવાદ બેઠકોનું આયોજન કરાયું છે.

આ બેઠકોમાં રેલ્વે મંત્રાલય માલવહન સમર્પિત રેલ્વેમાર્ગના નક્કી થયેલા અંતિમ એલાર્થ-મેટ માર્ગની જાહેરાત કરશે અને યોજનાની સામાજિક તથા પર્યાવરણ અસરો અંગે થયેલા અભ્યાસના મહત્વના તારણો રજૂ કરશે.

ઓક્ટોબર ૨૦૦૭માં પુરો કરવામાં આવેલ જાપકા (JICA) અભ્યાસના અહેવાલના આધારે માલવહન સમર્પિત રેલ્વેમાર્ગના એલાર્થન-મેટમાં ફેરફારો કરવામાં આવ્યા છે જેના કારણે અનેક નવા ગામોને માલવહન સમર્પિત રેલ્વે માર્ગના કારણે સીધી અસરો થશે. આથી આ બધા ગામડાઓને ધ્યાનમાં રાખીને, ઉપર દર્શાવ્યા પ્રમાણેના સંદર્ભ અનુસાર નવા સ્વૈરિછક અસરગ્રસ્ત વિસ્તારના તમામ હિતધારકોને-ગ્રામજનો, વસાહતજનો, સ્વૈરિછક સંસ્થાઓના પ્રતિનિધિઓ, સ્થાનિક સ્વરાજ્યની સંસ્થાઓના પ્રતિનિધિઓ, સ્થાનિક સરકારી પ્રતિનિધિઓ, નેતાઓ, પર્યાવરણિય તથા સામાજિક બાબતો સાથે નિસ્ખત ધરાવતા લોકોને નીચેની લોક સંવાદ બેઠકમાં હાજરી આપવા આમંત્રણ આપવામાં આવે છે.

શુભ-
સમય-
તારીખ-
થી



યોજનાના મુખ્ય વિભાગો :

-રાજસ્થાન તથા હરિયાણા ખાતે મુખ્ય રેલ્વે લાઈન બનાવશે. વર્તમાન રેલ્વેમાર્ગના પૂર્વોત્તર ભાગમાં માલવહન રેલ્વેમાર્ગ થશે.

- સ્થાનિક ભૂરચનોને ધ્યાનમાં લેતાં ૩૦ થી ૫૦ મીટર પહોળાઈ હશે. ગુજરાતમાં મુખ્ય લાઈન ૭૦ મીટર પહોળા એસ્કેક્રેમેન્ટ પર નખાશે જેથી વર્તમાન રસ્તાઓ અને રેલ્વેમાર્ગના કોસીંગ નિવારી શકાય.

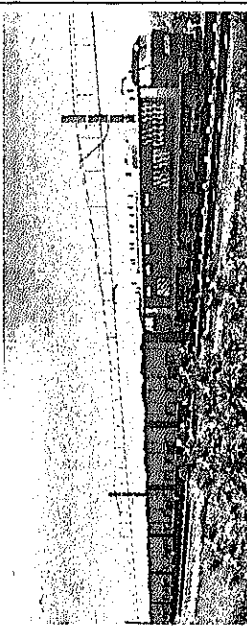
- વડોદરામાં મકરપૂરા ખાતે, અમદાવાદમાં સાબરમતી ખાતે, મહેસાણામાં મહેસાણા ખાતે, બનાસકાંઠામાં પાલનપુર ખાતે, પાલીમાં મારવાડ ખાતે, જયપુરમાં કુલેરા ખાતે (રાજસ્થાન) હરિયાણામાં રેવાડી ખાતે આમ સાત ૬૦ મીટર પહોળા અને ૧,૬૦૦ મીટર લાંબા જંકશન અને કોસીંગ સ્ટેશનો થશે.

- અનેક નાના પુલો અને મહત્વની નદીઓ પર મોટા પુલો બનાવાશે તથા

- પાલી જિલ્લામાં બર-અમરપુર ખાતે **ROB** પુલપર રસ્તો થશે. આંતરરાષ્ટ્રીય સહકાર માટેની જાપાન બેંક (JIBC) દ્વારા મદદ. ભારત સરકારને મદદ માટે કરેલી વિનંતિના અનુસંધાને જાપાન સરકારે **SAPROF Study Team**-અભ્યાસ ટુકડી મોકલી હતી જેણે માલવહન સમર્પિત રેલ્વેમાર્ગની આયોજન પ્રક્રિયાની ચકાસણી કરી હતી.

દિલ્હીની કન્સલ્ટીંગ એન્જિનીયરીંગ કંપની (ભારત) પ્રાયવેટ લીમીટેડ સ્થાનિક કન્સલ્ટન્ટની હેસીયતથી **JIBC** ની માર્ગદર્શિકા અનુસાર પર્યાવરણિય અને સામાજિક પરિબળોને ધ્યાનમાં લઈ લોક સંવાદ બેઠકો માટે મદદરૂપ થશે.

માલવહન સમર્પિત રેલ્વે માર્ગ માટેની લોક-સંવાદ બેઠક



રેલ્વે મંત્રાલય,
રેલ્વે ભવન -નવી દિલ્હી.

Appendix 3-4 Record of EIA-PCM

Public Consultation Meeting

Rewari, Haryana

Date: 15th October, 2008
Venue: Punjabi Dharamsala, Rewari
Time: 11:00 AM – 13:00 PM

Villagers of the newly identified villages under S-ESIMMS were present. Out of the total 26 villages that are affected by the DFC Project, representatives of 19 villages participated the meeting. Of the attended, all were from new villages identified during the S-ESIMMS. A total of approximately 90 participants including 10 females were present in the meeting. The participants at the PCM were from the below mentioned villages:

1. CHILLAR
2. BHURTHAL THEIHAR
3. BHURTHAL JAT
4. GANGAYACHA AHIR
5. SHEKHPUR SHIKARPUR
6. RAJPUR KHALSA
7. GINDO KHAR/KINDO KHAR
8. LAKHNOR
9. JADARA
10. BANGARWA
11. MAHA KHARIA
12. SUNDROD
13. DHANI SANTO
14. DHANJ SUNDROD
15. PITHERAWAS
16. GUMINA
17. RAJPURA ISTAMRAR
18. KHORI
19. MAMARIA THETHAR

Only Mailawas Village had no representative in the PCM.

Power point presentation of the DFC Project, covering alignment of DFC Project, summary of Social and Environment Impact Assessment including environmental management and mitigation plan and key elements of the Railways (Amendment) Act 2008 and National Rehabilitation and Resettlement Policy 2007 were discussed in vernacular (Hindi) language.

Issues Raised by Participants

Various issues raised by participants are as follows:

1. Majority of people were interested to know about the compensation rate and resettlement and rehabilitation measures that would be offered by the first participant. They wanted to know the specific answer with respect to these issues. Some of the participants informed that the present market rate of land in the affected area is close to Rs. 10,000,000/per acre.
2. A few participants cited the example of Rewari-Jhajjar-Rohtak railway line project for which land was acquired in recent past. One of the affected persons of the said project informed that Rs. 2,400,000/- per acre was paid as compensation which was more or less close to prevailing market price in the area. Compensation less than the prevailing market rate would not be acceptable as participants contended. If not, the project would face resistance and warned of taking recourse of court. Some of the participants also provided examples of Nandigram and Singur in West Bengal (Tata's Nano project)
3. A few participants raised questions on the proposed alignment and wanted to know why the alignment has been fixed in zig-zag manner i.e, the logic of fixing the alignment. Several participants disagreed with the explanation provided by the SAPROF representative as engineering concern. Few participants also suggested alternate the alignment instead of the proposed one.
4. Severance of land acquisition due to DFC Project is the local participants' concern. Participants were of the opinion that a plot is bisected into two parts spoils the value of land and hence some additional measures should be provided to those land owners whose land is severed due to the project.

5. **Accessibility problems** such as taking of agricultural instruments, tractor and animal etc. to other side of the railway line would become a problem. Majority of people were interested to know how the project has addressed these issues and what built-in provisions have been made in the project.
6. One of the female participants made the request that alternative arrangements for resettlement and rehabilitation should be made **before dismantling** the structure affected by the project.
7. One of the participants from **Scheduled Castes category** enquired about any special provision for **vulnerable** community.
8. Several participants demanded that there should be provision of **employment** for at least one member of the project affected families and compensation must be paid at the prevailing market rate and not the circle rate.
9. Provision of **royalty from Haryana Government** is paid to land losers for 33 years. Some of the participants enquired whether the same would apply for DFC Project section in Haryana.

Major Outcome of the Meeting

1. Majority of participants requested for a re-consideration of the alignment.
2. Participants demanded a clear answer with respect to the details on compensation for land acquisition and resettlement and rehabilitation.
3. Compensation should be based on the prevailing market rate.

Others

Upon completion of the meeting, Haryana News (TV) channel took interviews of SAPROF representatives and few participants after the public consultation meeting was over.

Public Consultation Meeting

Gandhinagar, Gujarat

Date: 16th October, 2008

Venue: Rotary Club, Kalol, Gandhinagar District, Gujarat. (GPS coordinates: 72 29 37 E, 22 14 03 N)

Time: 11:00 – 13:00

Besides the SAPROF study team members, Mr. Rankawat, GM, DFCCIL, Ahmedabad Division, along with his team members, Mr. Shrivastav and Mr. Pawan Kumar attended the meeting. Raju Bhai of Jeevan Tirth, a Gandhi Nagar based NGO made the vernacular-Gujrati presentation. A total of approximately 50 participants were present in the meeting.

Villagers from 8 newly identified villages under the S-ESIMMS were present. Village representatives from earlier village, Kasindra which is identified during the JICA F/S Study participated in the meeting. Out of the total 16 villages that are affected by the DFC Project, representatives of 9 villages participated the meeting. Of the attended, 8 villages are new villages identified during the S-ESIMMS and 1 Village- Kasindra is the old village identified during the JICA F/S Study and is excluded from the S-ESIMMS. The participants of the PCM are from the villages of:

1. CHHATRAL
2. PIYAJ
3. RAMNAGAR
4. KHATRAJ
5. SANAVAD
6. KAROLI
7. VANSJADA
8. JETHLAJ
9. BHOYAN MOTI
10. KASINDRA

Power point presentation of the DFC Project, covering alignment of DFC Project, summary of social and environment impact assessment including environmental management and mitigation plan and key elements of the Railways (Amendment) Act 2008 and National Rehabilitation and Resettlement Policy 2007 were discussed in vernacular language of Gujarati.

Issues Raised by Participants

1. DFC Project should go along the existing railway line. Many opposed the detour which goes through fertile agricultural land. This area is one of the most fertile patches of Gujarat, any loss of agricultural land due to project is irreplaceable.
2. Participants were of the opinion that division of a plot into two parts spoils the value of land and hence some additional measures should be provided to those land holders whose land is severed due to the project.
3. Many pointed out that unlike road projects where adjoining land to new or upgraded roads fetch higher market price for land, in case of railway projects, it is generally just the opposite scenario. There was premonition that the land price would drop in the adjoining land area as DFC Project is implemented. Mr. Rankawat of DFCCIL defended by stating that DFC Project and associated industrial development along the corridor might increase land price in future.
4. Accessibility problems such as taking of agricultural instruments, tractor and animal etc to other side of the railway line should occur if the land was split into two parts. Thus there must of a provision of facilities on the embankment that enable farmers moving from one side to another. Majority of people were interested to know how the project has addressed these issues and what built-in provisions have been made in the project.
The Railway Authority replied that provision of water pipeline from one side of the railway line to other side is made. Implementing Authority would provide such facilities free of cost only if they are intimated well before time.
5. Whether there would be any special provision for marginal and small farmers who would be affected by the DFC Project should be clearly stated in the resettlement plan.

6. Several participants demanded that there should be a provision of **employment** for at least one member of the project affected family and compensation must be paid at the **prevailing market rate and not the circle rate**.
7. **Retention of "farmer's title"** by some certificate or by-law should be made so that he can buy agricultural land in future even when he ceases to have any agricultural land lost due to the DFC Project.
8. Many demanded **land for land** in case of land acquisition.
9. There was a general demand for **underpass at regular intervals** on the embankment of the railway so that farmers could cross from one side to the other without hassle.
10. Majority of people were interested to know about the **compensation rate and resettlement and rehabilitation** measures that would be offered, by the competent authority.
11. The most sensitive area is Khatraj, a **small industrial area where DFC Project's alignment goes through. The alignment should be changed.**
12. The presence of DFCCIL representative in the meeting lends authenticity and their explanations to the participant's queries and his formal and informal interactions with the participants made the PCM a success. They also informed that the complete report with survey numbers have been submitted to the District Collector on 15th October, 2008 for his approval and it can be expected that notification would be issued within a month's time. Participants were made aware that all leading newspapers would carry the details of the land plots to be acquired and any complaint against the project can be officially filed within a month to the competent authority.

Major Outcome of the Meeting

1. Majority of participants requested for **parallel alignment** and demanded **are-routing of the Project**.
2. Loss of agricultural land should be compensated by the same quality of land or the market rate should be the basis of compensation.
3. **Contents of the Resettlement and Rehabilitation Plan is not clear except for which the embankment of the Project would provide RUB, drainage, local road along the embankment.**

Media Coverage

The local news papers covered the public consultation meeting.

Public Consultation Meeting

Ahmedabad, Gujarat

Date: 16th October, 2008
Venue: Saurashtra Sthanakvasi Jain Vadi Hall, Sanand District, Gujarat.
GPS coordinates: 72 22 50.3 E, 22 59 22.8 N.
Time: 14:30 – 17:00

Besides the SAPROF study team members, Mr. Rankawat, GM, DFCCIL, Ahmedabad Division, along with his team member of Mr. Shrivastav and Mr. Pawan Kumar attended the meeting. Raju Bhai of Jeevan Tirth, a Gandhi Nagar based NGO made the Gujarati language presentation. A total of 140 participants were present in the meeting.

Villagers from 15 newly identified villages under the S-ESIMMS were present. Out of the total 16 villages that are affected by the DFC Project, representatives of mostly the new villages participated the meeting. The participants at the PCM were from the below mentioned villages:

1. GARODIYA
2. GODHAVI
3. NIDHRAD
4. KANETI
5. SANAND
6. PIPAN
7. MOTI DEVTI
8. NANI DEVTI
9. PALWADA
10. MODASAR
11. MATODA
12. RAJODA
13. KAVITHA
14. BHAT
15. BADARKHA

Power point presentation of the DFC Project, covering alignment of DFC Project, summary of social and environment impact assessment including environmental management and mitigation plan and key elements of the Railways (Amendment) Act 2008 and National Rehabilitation and Resettlement Policy 2007 were discussed in vernacular language of Gujarati.

Issues Raised by Participants

1. **Retention of "Farmer's Title"** by some certificate or by-law should be made so that he can buy agricultural land in future even when he ceases to have any agricultural land lost due to DFC Project.
2. Many had family sentiments attached to their **ancestral land** so no money could compensate that.
3. Many pointed out that **unlike road projects** (eg. of **ring road** around Ahmedabad-Gandhinagar) where adjoining land to new or upgraded roads fetch higher market price for land, in case of railway projects, it is generally just the opposite scenario. There was premonition that the **land price would drop** of the adjoining land plots as a result of the implementation of the DFC Project. Mr. Rankawat of DFCCIL defended by stating that DFC Project and associated industrial development along the corridor might increase land price in future.
4. There was a general concern as how to cross the DFC Railway in case their land was bisected. There was demand for **underpass at regular intervals** so that farmers could cross from one side to the other without hassle. To this Mr. Rankawat answered that the **implementing authority would provide such facilities free of cost only if they are intimated well before time**. He cited examples from his past experiences where he had undertaken such tasks.
5. Many farmers pointed out that they have already **invested a lot of money on irrigation**, (drip irrigation, lift irrigation etc.) and DFC Project affected farmers would incur huge loss due to the project. They requested the implementing authority to address this problem.

6. There was apprehension that DFC Project would trigger off **flooding** in the adjoining lowland. Mr. Rankawat answered that proper drainage along the service roads would be provided to combat such natural hazard.
7. It was emphasized that this area is one of the **most fertile area** of Gujarat where **vegetables, fruits like papaya, banana and sugarcane** are grown extensively and marketed all over North India. For 1 acre, papaya worth 2 lakh is sold by the farmer in one season. Thus lifetime loss of orchard should be compensated.
8. The **role of middlemen** in selling agricultural produce should be curtailed and any benefit due to DFC Project made out for affected persons should be **direct and transparent**.
9. Most people **objected to training** as an option for rehabilitation measure. They emphasized that they are farmers for generations and have no other skill for livelihood supplement and were not interested to take up any other livelihood.
10. Whether there would be any special provision for **marginal and small farmers** who would be affected by the DFC Project should be clearly stated in the RRP policy.
11. Several participants demanded that there should be provision of **employment** for at least one member of the project affected families.
12. Participants were of the opinion that division of a plot into two parts diminishes the value of land. In most cases, the left-over portion of land holding becomes **uneconomic and unfit** for farming and also for re-sale. The implementing authority should then consider the **entire land is acquired** and calculate compensation and assistance accordingly, even though the entire land might not be acquired.

Major Outcome of Consultations

Majority of participants requested:

- 1) Parallel alignment along the existing railway should be the option and the participants demanded re-routing of the alignment of the Project.
- 2) Compensation package is not clear at all. PAPs should be appropriately compensated for which a sustainable period of good standard of living is possible to maintain if the Project is implemented.
- 3) Compensation of the perennial crops should be considered for their life time.
- 4) Farmer's title should be retained upon sale of land in order to purchase agricultural land elsewhere and resume agriculture.
- 5) No job training is necessary since the local area is agricultural area. Upon resettlement agriculture as our vocation should be ensured by the laws and regulations.
- 6) The presence of DFCCIL representative in the meeting lends authenticity and Mr. Rankawat's explanations to the participant's queries and his formal and informal interactions with the participants made the PCM a success.

Media Coverage

The local news papers covered the public consultation meeting.

Public Consultation Meeting

Kheda, Gujarat

Date: 18th October, 2008
Venue: Agricultural Produce Marketing Committee, Kheda District, Gujarat
(GPS coordinates: 72 41 3.7" E, 22 44 56.5" N)
Time: 11:30 - 13:00

Besides the SAPROF study team members, Mr. Pawan Kumar of DFCCIL, Ahmedabad division attended the meeting. Raju Bhai of Jeevan Tirth, a Gandhi Nagar based NGO made the vernacular-Gujarati presentation. A total of approximately 50 participants were present in the meeting.

Villagers from 7 newly identified villages under the S-ESIMMS were present. Out of the total 18 villages that are affected by the DFC Project, representatives of mostly the new villages participated the meeting. The participants at the PCM were from the below mentioned villages:

1. KATHWADA
2. CHALINDRA
3. NAIKA
4. SHETRA
5. VASNA BUJARG (old)
6. MATAR
7. GARMALA
8. HARANJ

Power point presentation of the DFC Project, covering alignment of DFC Project, summary of social and environment impact assessment including environmental management and mitigation plan and key elements of the Railways (Amendment) Act 2008 and National Rehabilitation and Resettlement Policy 2007 were discussed in vernacular language of Gujarati.

Issues Raised by Participants

The attendance at the meeting was comparatively poor than Sanand and Gandhinagar. This may be because of two reasons:

- a) The new villages that would be affected by the DFC Project were relatively far from the venue at Kheda Township;
- b) Two villages presently identified affected during the S-ESIMMS are the old villages of Vasna Bujurg and Govindpura. The Sarpanch of Vasna Bujurg came to attend the meeting but when he was told that no survey number of affected land would be disclosed here, he left quite agitated and also compelled the Sarpanch of Govindpura to leave the meeting with him. It is assumed on this basis that they might have dissuaded many other village heads not to attend the public consultation meeting as a mark of protest against the Project.

Issues Raised by Participants

1. Whether there would be any special provision for marginal and small farmers who would be affected by the DFC Project was the first issue raised at the meeting.
2. There was a question if 70 m wide of land have been proposed for ROW. DFC Project should manage with less land i.e. less impact.
3. There was an objection on the embankment of DFC Project as that might induce more flooding with associated drainage problems. Participants mentioned that Kheda is a district with 7 rivers and flooding is an annual phenomenon. Water logging is a problem for 2-3 months in a year in this part of Gujarat.
4. How the implementing authority would address the problem of accessibility and how to cross the railway in case the land was bisected. There was general concern as to how would the water and electricity pipeline be connected to the other side of the field in case their land was bisected by the DFC Project. Implementing authority would provide such facilities free of cost only if they are intimated well in advance.

5. The flood problem is a chronic problem in Kheda because of heavy rains, low-lying basin and also poor drainage. The general opinion of the participants was that with DFC Project this problem would be further aggravated. The local people have put their petition on this problem forwarded to the MOR. DFCCIL staff replied that Project Authorities would solve the problem with engineering design by keeping provision of drainage canals along the corridor and also embankments on either side of bridge.
6. Villagers are ready to migrate and re-settle in other areas because of the flood problems.
7. No villagers are interested in monetary compensation. Land for land was the preferred option.
8. Retention of "Farmer's Title" by certificate or by-law should be made so that farmers can buy agricultural land in future even when he ceases to possess any agricultural land as a result of DFC Project implementation.
9. Villagers have stated that DFC Project would no doubt induce industrial development but no improvement for farmers and so they opposed the project. Unless there was appropriate agricultural development plan, many threatened to fast unto death.
10. A few villagers have mentioned the issue of indirect impact to farmers in respect of hindrance to accessibility to their farmland, disruption of water accessibility and drainage, etc. The question was whether they would be considered within the project affected persons.
11. The general mood of the participants was against the project and many left the meeting before it was over.

Major Outcome of consultations

Majority of participants requested:

1. Agricultural development should be associated with DFC Project, which is a part of industrial and commercial development. There must be appropriate development plan for farming communities;
2. Parallel alignment along the existing railway should be the option and the participants demanded re-routing of the alignment of the Project.
3. Compensation package is not clear at all. PAPs should be appropriately compensated for which a sustainable period of good standard of living is possible to maintain if the Project is implemented.
4. Compensation of the perennial crops should be considered for their life time.
5. Farmer's title should be retained upon sale of land in order to purchase agricultural land elsewhere and resume agriculture.
6. No job training is necessary since the local area is agricultural area. Upon resettlement agriculture as our vocation should be ensured by the laws and regulations.
7. Flood incidents in the district should worsen upon implementation of the Project. Whatever the government promises, they always make mistakes and the farmers are always victimised.

Public Consultation Meeting

Anand, Gujarat

Date: 18th October, 2008

Venue: Surya Temple Complex, Borsad, Anand (GPS coordinates: 72 54 20.2" E, 22 24 53.6" N)

Time: 14:00 – 17:00

The meeting started at 2:00 p.m. Besides the SAPROF study team members, Mr. A.S. Chaudhary and L.R. Maurya of DFCCIL's Vadodara division attended the meeting. Raju Bhai of Jeevan Firth, a Gandhi Nagar based NGO made the vernacular-Gujarati presentation. A total of approximately 80 participants were present in the meeting.

There are 11 villages participated the meeting. Villagers from 9 newly identified villages under the S-ESIMMS were present, out of the total 30 villages that are affected by the DFC Project. The participants at the PCM were from the below mentioned villages:

1. Deva Vanta
2. Run
3. Petlli
4. Sandesar
5. Boriya
6. Meghva Gana
7. Khandhali
8. Napad Vanto
9. Betasi Ka Bagh
10. Bhaganpure
11. Ambali

Issues Raised by Participants

At the initiation of the meeting, several participants complained that many villages that would be affected by the DFC Project have not been intimated of this public consultation meeting. It was explained to them that newly identified villages that they would be affected were of priority for this time of PCM. These new villages were intimated by CES's staff visiting to each individual village head and distributed the leaflet and the letter along with it. As for the old villages identified during the JICA F/S Study, all village heads were contacted over telephone and intimated of the purpose of PCM. Project authorities would take further measures to disseminate information on the Project as notification is issued.

Various issues raised by participants are as follows:

1. Participants questioned the basis of estimated number of PAPs if it would be on the conservative side. CES replied that the number of PAPs was based on SIA information while it is still preliminary information and that it would be bound to differ when detailed survey result was released.
2. Whether there would be any special provision for **marginal and small farmers**.
3. **How the project authorities would addressing the problem of accessibility and how to cross the DFC railway in case their land was split into two areas. There was general concern as to how would the water and electricity pipeline be connected to the other side of the field in case the land was bisected. The Project Authority would provide such facilities free of cost only if they are intimated well in advance.**
4. Many objected to the **high embankment** of the DFC Corridor as that might induce more flooding with associated drainage problems.
5. One participant requested to establish a DFCCIL Office if another should be established in Anand.
6. Market rate for compensation, circle rate not acceptable should be the commitment of the Project Authorities. DFCCIL representative explained if any PAP could produce evidence of transaction at market rate, similar compensation package would be considered to provide.
7. Betasi ka Bagh village's representative stated that about 15 structures near the temple (all permanent) would be affected by the DFC Project. They requested for re-alignment of the Project.

8. DFCCIL representative mentioned that this kind of PCM was held for the first time to those newly identified villages for gathering public opinion. While they would take care of social and engineering concerns, the District administration would take care of compensation and related issues.

Major Outcome of consultations

The following is a major outcome of the meeting:

1. Majority of participants requested for re-alignment of the project;
2. Appropriate compensation for land acquisition based on the market rate should be made for resettlement;
3. Details of the resettlement and rehabilitation plan is not quite clear for the PAPs;
4. Flood incidents should increase upon implementation of the Project. Appropriate and explicit measures to avoid worsening flood incidents are not clear. Detailed drawing etc. should be presented.

Public Consultation Meeting

Vadodara, Gujarat

Date: 21st October, 2008

Venue: Sanskruti Party Plot, Bil village, Vadodara District (GPS coordinates: 73 07 57.1 E, 22 15 58.5 N)

Time: 11:00 – 13:30

Besides the SAPROF study team members, Mr. Pradeep K. Rai and Mr. Rajesh B. Shroff of DFCCIL, Vadodara Division, attended the meeting. Raju Bhai of Jeevan Tirth, a Gandhi Nagar based NGO made the presentation in vernacular language of Gujarati. A total of approximately 100 participants were present in the meeting.

Villagers from the area affected by the alignment of DFC Project, including the old villages that are identified during the JICA F/S Study have been invited. The following is the villages that have attended the PCM:

1. TRIKANPURA
2. JESSORE PURA
3. KRISNA NAGAR
4. SEVASI
5. MAHAPURA
6. BHAYALI
7. GOKULPURA
8. SAMIYALA
9. JEEVARI
10. BIL
11. CHAPAD
12. KHALIPUR
13. VARNAMA
14. VADASALA
15. KARALI
16. ITOLA

The villages which had no representative in the meeting are mostly located at northern part of the alignment such as Anagadh, Kotna, Sherghi, Alamgir, and Maretha.

Power point presentation of the DFC Project, covering alignment of DFC Project, summary of social and environment impact assessment were discussed in vernacular language of Gujarati.

Issues Raised by Participants

Various issues raised by participants are summarised as follows:

1. Hasmukh Patel, District Secretary of farmers' union and advocate by profession interrupted several times and was most vocal. He voiced the opinion on behalf of most farmers. The present alignment he stated, is passing through dense residential area which would soon be engulfed by the ever-expanding area of Vadodara Urban Development Authority (VUDA). He stated that the DFC Project would become in the area within the "would-be extended city limits" in 50 years from now. Since this would be high speed train corridor, it would entail disturbance to future city dwellers in many ways.
2. He also said that here the market rate is measured in square feet and the implementing authority would not be able to give that much compensation.
3. He further stated that only farmers suffer due to such developmental projects. In reality, big industrial and business houses benefit from such projects, not the farmers.
4. Few complained that request made by GEB (Gujarat Electricity Board) to pass the electric line across the narrow gauge railway line connecting to Padra from Vadodara is not allowed. If this was the case how could GEB trust that implementing authority of DFCCIL would allow electricity line to go across the railway as DFC Project is implemented.
5. Many stated that their past experiences with such developmental projects like Narmada Dam/Canal has been bitter. Since what the government promised to do have never been kept, the farmers had no benefit from such projects. So the local farmers oppose the DFC.

6. Many suggested that alternative alignment should be proposed so as to avoid all settlements in Vadodara District. Alternative route should be laid down in the coastal region.
7. Participants are unanimously agree of the opinion that the 600 m wide land that runs up to Delhi acquired by VUDA for multiple project use approximately 18-20 years ago should be utilized since it has been kept idle to date. The area should be fruitfully utilized by the DFC Project. This fact however needs ground verification. Participants were agitated with the lack of coordination between the local and central government agencies resulting in the misery of farmers.
8. Many warned that circle rate was not acceptable for land acquisition and they would not settle for anything less than the prevailing market price of land.
9. Quite a few of the participants pointed out that agricultural land has been acquired by either the State or Central Government in the past for such developmental projects like DFC Project. Thus very little land is left with original farmers to practice cultivation. Thus the local farmers are in no mood to further sacrifice their land to DFC Project.
10. The process of acquiring land should be transparent. This is another allegation against the Ministry of Railways that it first starts acquiring a narrow strip of land and then gradually increases its need to acquire more land in the name of development.
11. Some participants raised the issue of indirect impact that would occur to many farmers due to the project by losing access to their fields, or sharing irrigation facilities etc. The implementing authority should have some provision for them.
12. Retention of "Farmer's Title" by certificate or by-law should be provided so that he can buy agricultural land in future even when he ceases to have any agricultural land due to DFC Project.
13. There was apprehension that DFC Project would trigger flooding in the adjoining lowland area. To this DFCCIL personnel answered that proper drainage along the service roads would be provided so as to combat such natural hazard.
14. There should be special provision for marginal and small farmers who would be affected by the DFC Project.
15. Several participants demanded that there should be a provision of employment for at least one member of the project affected families.
16. Severance of land acquisition due to DFC Project should be considered very important. Participants were of the opinion that division of a plot into two parts diminishes the value of land. In most cases, the left over portion of land becomes uneconomic and unfit for farming and also for re-sale. The implementing authority should therefore consider the entire land is acquired and calculate compensation and assistance accordingly, even though the entire land might not be used.
17. DFCCIL representative Mr. Pradeep Rai explained the logic behind the present alignment and why there was no scope to shift further towards the sea as suggested by several participants. He explained that since DFC Project would be a heavily loaded double-stuck container train operation and the axle load of the track would need stable and solid base soil, shifting alignment close to the sea is not technically viable. On the other hand, he agreed to take a look at the urban development map of Vadodara for further design study.

Major Outcome of the Meeting

The participants requested for:

1. The alignment of DFC Project should be re-aligned so as to avoid the urban area of Vadodara;
2. Participants opposed the Project and refused to hear major SIA and EIA findings;
3. Participants were not ready to hear anything about the land acquisition process under Railways Amendment Act 2008;
4. Participants warned JBIC to withdraw their commitment for this project as their investment would go waste since no farmer would give up their land;
5. If JBIC did not withdraw from DFC Project, they would protest the Project in a way what happened in Singur of West Bengal State.

Media Coverage

Local news papers – Dainik Bhaskar and Gujarat Samachar covered the public consultation meeting along with local TV news channel who also took interview of SAPROF team members.

PUBLIC CONSULTATION MEETING

Mahesana, Gujarat

Date: 22nd October, 2008

Venue: Baroj Mata Temple Hall, Unjha (GPS coordinates: 72 23 5.3 E, 23 48 15.8 N)

Time: 11:00 – 13:00

Besides the SAPROF study team members, Mr. Shrivastav of DFCCIL, Ahmedabad division, attended the meeting. Station Master of Mahesana could not attend the meeting but he requested the station master of Unjha, Mr. Meena to attend. Mr. Raju Bhai of Jeevan Tirth, a Gandhi Nagar based NGO made the presentation in vernacular language of Gujarati.

A total of approximately 50 participants were present in the meeting. Most of the newly identified villages were present in the meeting. The villages that had representation in the PCM are:

1. VISNOL
2. AMUDH
3. SUNAK
4. DABHI
5. ALODA
6. HARDESAN
7. NUGAR
8. KARSHANPURA

The villages which have had no representative in the meeting are, Indrad, Irana, Rajpur, Kherpur, Nandasan, Mathasur, Ganeshpura, Dhanali, Tundali, and Baliyasan.

Power point presentation of the DFC Project, covering alignment of DFC Project, summary of social and environment impact assessment as well as environmental management programme, mitigation measures and monitoring programme were discussed in vernacular language of Gujarati.

Issues Raised by Participants

Issues raised during the public consultation meeting are as follows:

1. **Tube-wells getting affected** by the DFC Project. This is a complex issue as approximately 60-70 families depend on one tube-well for mainly irrigation purposes while the farmer owning the well would be compensated i.e. tube-well users are forced to find other sources of irrigation water. Participants therefore questioned what provisions would be provided for farmers who would **not be directly affected** by DFC Project but are dependent of tube-well irrigation system.
2. There was a question whether there would be any special provision for **marginal and small farmers** who would be affected by the DFC Project.
3. **Retention of "Farmer's Title"** by certificate or by-law is requested so that he can buy agricultural land in future even when he ceases to own any agricultural land due to DFC Project.
4. **People of Mahesana District practise animal husbandry. When the land is lost, they are forced to sell milk cows, which is very difficult to sell. Thus the loss of land for grazing area as well as farming area the significant loss of livelihood should be experienced.**
5. Since **animal husbandry** is an activity which all farmers are engaged along with vegetable farming, many argued that their loss of land would be felt double as with land acquisition not only do they lose land for cultivation but also they are not able to rear animals. It was roughly estimated that on an average 10 animals are bred per family and average income from milking them is **IRP. 20,000/ per month**. So when implementing authority estimates compensation, this should be taken into account.
6. Many pointed out that even if they are compensated, **it would be a one time payment** which most likely would be spent in very short period. Many questioned if any share of DFCCIL would be available to the affected persons just like pension to retired officials.
7. Participants demanded that **compensation** should be paid by competent authority **before any land acquisition** takes place.
8. Many questioned about **Japanese investment** for the DFC Project if it was only technical cooperation or including financial contribution. Role of JBIC was then explained by SAPROF Study team member.

9. Participants of the meeting demanded **land for land** as compensation. The participants clearly stated that no monetary compensation could suffice for the land acquired.
10. Many stated that their past experience with such developmental projects **has been bitter**. The farmers had no benefit from such projects and no promises made by the government were realized. Thus the participants opposed DFC Project.
11. Many warned that **circle rate was not acceptable** to them for compensation of land acquisition. The participants stated that they would not settle for anything less than market price of land.
12. *There was general apprehension that with DFC Project **land price of adjoining land would decline.***

Major Outcome of Meeting

The following summarises the major outcome of the meeting:

- 1) Land acquisition due to DFC Project could induce greater impacts than other districts due to the loss of land because of the milk cows are forced to sell if alternative land was not readily available;
- 2) Provision of employment to every PAF should partially solve the problem of the loss of livelihood;
- 3) Compensation for land acquisition should be made based on the prevailing market rate or land to land compensation should be considered. Unless otherwise appropriate compensation is made, the local population should unanimously oppose the project;
- 4) Details of resettlement and rehabilitation plan are not clear. Explicit resettlement package should be presented.

Media Coverage

Local news paper of "Sandesh" covered the public consultation meeting.

Public Consultation Meeting

Patan, Gujarat

Date: 22nd October, 2008
Venue: APMC Hall, Siddhpur (GPS coordinates: 23 55 28.8 N, 72 22 4.2 E)
Time: 16:00 – 18:00

Besides the SAPROF study team members, Mr. Shrivastav of DFCCIL, Ahmedabad Division, was present in the PCM. Also the Station Master of Siddhpur, Mr. P.A. Chauhan presided over the meeting. Raju Bhai of Jeevan Tirth, a Gandhi Nagar based NGO made the presentation in vernacular language of Gujarati. A total of approximately 65 participants were present in the meeting.

Representation from all newly affected villages due to the changes of alignment was relatively high. The villages that had representation in the PCM are:

1. KAKOSI
2. METRANA
3. RASULPUR
4. THAKRASAN
5. DETHLI
6. NEDRA
7. DERASANA
8. KANI
9. VISAL VASNA
10. RUVAVI
11. MANUND
12. PALASAR

Power point presentation of the DFC Project, covering alignment of DFC Project, summary of social and environment impact assessment as well as environmental management programme, mitigation measures and monitoring programme were discussed in vernacular language of Gujarati.

Issues Raised by Participants

Issues raised by participants are as follows:

1. The meeting started with one participant who prepared a **hand written memo** containing several issues on problems induced by the project, expected impacts and suggestions for possible solutions. He stated that the villagers in Patan are aware of the **negative environmental impacts** due to project implementation. He explained about the various environmental mitigation measures that would have to be adopted in this project – some standard ones and some especially designed for DFC. He also raised the issue of **monitoring the social and environmental impact** due to DFC Project implementation and that he demanded that NGOs should undertake periodical monitoring to assess the impact of the project.
2. A few villagers charged of **corruption against the revenue officials** who would actually be involved in the distribution of compensation from the competent authority.
3. Others also alleged that post acquisition of land if railway authority would **sell the acquired land to private parties**.
4. Most of the participants preferred an option of **land for land compensation**. When they were cautioned that they might not get good quality land, most of them agreed that whatever available land was given to them, they would accept only after the land was developed to a standard fit for cultivation.
5. Many warned that **circle rate was not acceptable** for compensation of land. They would not settle for anything less than prevailing market price of land. Prevailing market rate was 125 % more than the circular rate.
6. Another participant suggested that there already exists an **unused metre gauge railway line connecting Kakosi to Patan**. It is almost parallel to the existing line and suggested that this should be used in order to avoid land acquisition.
7. Since this area is rich in cash crops like wheat, bajra, cotton, castor oil etc. which are mostly sent across entire India, there was a **demand for a loading station at Siddhpur**. It was estimated that annually Rs.1,000 crore worth of cash crops are traded at Siddhpur.

DFCCIL replied that a provision of 4 junction stations - Palanpur, Mahesana, Sabarmati and Vadodara - have been planned to construct. They should cater for the local traffic of commodities. These junction stations could serve the entire Siddhpur zone in Patan District.

8. Provisions to address vulnerable families who would be affected by DFC should be clearly stated.
9. Suggestion for alternative alignment which would pass through vacant village land in Rasulpur Village. It is an unproductive vacant land in the southeast corner of the village.
10. There was a request to run passenger trains on the DFC Project's railway track. DFCCIL staff explained that this was a dedicated freight corridor for goods train. More passenger trains could be added to the existing railway as goods trains are reduced from the existing railway.
11. Retention of "Farmer's Title" by certificate or by-law should be considered so that a farmer can buy agricultural land in future even when he ceases to own any agricultural land due to DFC Project.
12. There was a general apprehension among the participants that, with DFC Project, land price of adjoining land would decline.

Major Outcome of the Meeting

The following is a major outcome of the meeting:

1. Participants were made aware of the various aspects of Railways (Amendment) Act, 2008 while they asserted that prevailing market rate should be the basis of compensation for land acquisition;
2. It is not quite clear, during the design work, if there was a thought that land acquisition should be minimised by using the land belongs to Indian Railway.
3. Appropriate environmental management and monitoring plan with NGOs employed for it is inevitable.
- 4.

Media Coverage

"The Times of India" covered the public consultation meeting.

Public Consultation Meeting

Banaskantha, Gujarat

Date: 24th October, 2008

Venue: Thakkar Bapa Hall, Palanpur, (GPS coordinates: 24 09' 57.7" N, 72 26' 9.2" E)

Time: 11:00 – 13:00

Besides the SAPROF study team members, Mr. Shrivastav of DFCCIL, Ahmedabad Division, was present in the PCM. Also the station master of Palanpur, Mr. Babulal Shrimani presided over the meeting. The District collector of Banaskantha, Mr. R. J. Patel attended the meeting and addressed the gathering at the end of the public consultation with much applause.

A total of approximately 70 participants were present in the meeting. Most of them are the representatives of newly identified villages during the S-ESIMMS. The villages that had representation in the PCM are:

1. KHUNIYA
2. GHANGHU
3. JUNI ROH SAROTRI
4. ZANZARVAV
5. JETHI
6. MALANA
7. PAKHANWA
8. LUNWA
9. PARPADA
10. CHADOTAR
11. KHODLA
12. AKASAN
13. GATHAMAN
14. BADARPURA
15. CHANGWADA
16. CHANGA
17. BASU

A few villages that are identified during the JICA F/S Study period such as Amirgadh, Dungarpura, Bantawada, Pirojpura and Meta are not present.

Power point presentation of the DFC Project, covering alignment of DFC Project, summary of social and environment impact assessment including environmental impact mitigation measures, environmental management and monitoring plan was made in vernacular language of Gujarati followed by question and answer session.

Issues Raised by Participants

Various issues raised by participants are summarised as follows:

1. Almost all the participants **protested the detour** alignment of DFC Project. They questioned whether the available ROW of railways is really insufficient to accommodate the DFC Project. Most participants demanded to keep the **alignment parallel** to the existing railway line. Suggestion was made to use the unused railway line from Porbander to Deesa which is lying idle.
2. Demand for employment in DFC Project was made from project affected families.
3. **Most farmers preferred option of land for land compensation.**
4. The issue of land bifurcation due to the project implementation and the provisions of measures suggested by the implementing authority in order to solve the issue were addressed.
5. The issue of tube wells serving not one but many families was addressed. What provisions should the authority provide to such families is that not only directly affected person should be compensated but also indirectly affected persons should be compensated.
6. Many warned that **circle rate was not acceptable** for compensation of land acquisition and they would **not settle for anything less than market price** of land.
7. Some complained that project authorities were conducting **survey without prior information** which is creating inconvenience especially to the female members of local villages.

8. Someone cited the **example of western railways** – how judiciously the several tracks are laid down in suburban Mumbai within a narrow strip of land. The DFC should follow the same example.
9. Participants demanded to know all available options of the alignment of DFC Project and the basis for selecting the present alignment.
10. There was a demand that the District Collector should speak on the occasion. Thus D C, Mr. R. J. Patel obliged and would play an important role as a perfect mediator.
 - a. Mr. R. J. Patel, District Collector of Banaskantha spoke in local language of Gujarati and calmed the crowd who were very excited and in complete protesting mood. He shared his experiences of Sardar Sarovar Project and Ukai Dam projects where he had first hand experience of dealing with resettlement and rehabilitation issues.
 - b. He mentioned that being from a farmer's family he understood the sentiments of farmers and would try to be fair to them.
 - c. He would like to push the District of Banaskantha forward by welcoming big projects of which DFC is one of them.
 - d. He appreciated DFCCIL personnel who attended the meeting and how he tried to answer the queries which the people had.
 - e. He stated that public consultation meeting organized by DFCCIL was the first of its kind. Thus the villagers should appreciate the effort of the project authorities that they are try to interact with local people. The sincere attempts to bring the Project into confidence are the most important process of realization of such large scale project.
 - f. He cleared some doubts which existed in the minds of the general crowd on the issues of drainage and the associated problems.

Major Outcome of consultations

There was a general demand made by the participants as follows:

- 1) Appropriate compensation, including the market rate for land acquisition, should be made before the project implementation begins;
- 2) Farmers made a demand of land to land compensation;
- 3) Process of the decision making on the alignment of DFC Project is not clear. Alternative alignment should be explicitly explained and that the presently available land area that belongs to India Railway should be optimally utilised;
- 4) For the farmers, land to land compensation should be the option for land acquisition.

Media Coverage

- 1) "The Times of India" covered the public consultation meeting.
- 2) TV news person from "Sahara Samay" tried to cover the meeting while his abusive language to the SAPROF Study Team members inflamed participants. Thus no appropriate coverage was made.

Public Consultation Meeting

Sikar, Rajasthan

Date: 10th February, 2009
Venue: Hotel Ganges Garden, Shahpura Road, Neem Ka Thana,
(GPS coordinates: 27° 44' 16.8" N, 75° 46' 45.3" E)
Time: 13:00 – 15:00

Besides the SAPROF study team members, Mr. Fateh Singh Yadav and Mr. Vijay Mittal of DFCCIL Jaipur, Mr. P L Meena, Station Master of Sri Madhopur, and Mr. Pratap Singh, Station Master of Kathuawas were present in the PCM.

A total of approximately 70 participants were present in the meeting. Most of them are the representatives of newly identified villages during the S-ESIMMS. The villages that had representation in the PCM are:

1. KATHOOWAS
2. NALOT
3. JORAWAR NAGAR
4. DERA WALI DHANI
5. SRI MADHOPUR
6. BHARNI
7. MAHAROLI
8. GURHA
9. SIRSA
10. JUGALPURA
11. KANWAT
12. KALIYAWAS
13. JAITUSAR
14. BHADWARI
15. KANWAR KI NAGAL
16. DABLA
17. RAJPUTO KI DHANI
18. MAWANDA
19. MANDOLI
20. GODAWAS
21. NEEM KA THANA
22. SIROHI
23. GOVINDPURA
24. JASSI KA BAS
25. THIKARIYA KHURD

Power point presentation on the DFC project, explaining the proposed DFC alignment, in general, and alignment in Rajasthan in particular, summary of environmental impact assessment including environmental mitigation measures and management plan (EMP), brief summary of affected villages and structures etc was made before the participants in Hindi language.

Issues Raised by Participants

Various issues raised by participants are summarised as follows:

1. The project related information obtained from various agencies over past 2 years has confused the villagers. In 2007, it was told that 100 m land will be acquired but later on it was reduced to 50 m. He told that the lack of clarity about various components of the proposed project has created confusion and anxiety among villagers. He wanted to have clarification on several survey teams being deputed for the survey work over this two year period.
2. A participant has requested for a provision of noise barrier at Dabla to safeguard the villagers from increased noise and vibration levels. He expressed his concern over bifurcation of his village into two parts due to development of the corridor and envisaged the problem of accessibility across the bifurcated parts.

3. A participant has requested for implementation of National R&R policy 2007 and requested for evaluation of assets like cupboards, showcase etc through survey. He wished that the evaluation survey to be supervised by IAS rank officials of state government. Mr. Banerjee replied that the PCM intends to discuss environmental impacts due to the project; the social impacts and R&R policy will be discussed in forthcoming PCM-RRP meetings in March 2009.
4. A participant has requested that the people residing in immediate vicinity of the proposed corridor to be paid monetary compensation against increased environmental hazards due to noise and vibration, dust and accidental risks. A facilitator of the PCM has explained him the increase in noise and vibration level will be of much significance and regular water sprinkling will be carried out as dust suppression measures during the construction phase.
5. A participant pointed out the local people should get employed as labours during the construction phase of the project. He commented that the recent gauge conversion project (conversion of existing meter gauge railway track to broad gauge track) has set bad precedents by hiring labours from other States, who often got engaged in confrontation with local residents. Therefore, the stakeholders find it hard to believe that they will be get employment opportunity during the construction phase of the DFC project. A facilitator of the PCM has replied that the concern will duly be forwarded to competent authorities.
6. A participant have shared the view with another participant that the local villagers were not employed during the ongoing broad gauge conversion work. A participant and several other villagers from different villages echoed the same view. He requested that the local people should be provided employment opportunity and a portion of the construction materials to be procured locally. DFCCIL representatives agreed to take up this issue to the higher authorities and informed that local people will be employed during the construction period.
7. A participant requested to ensure the quality of work and viewed that local people, being stakeholders, are naturally motivated to carry out quality work. He requested to make qualification as the only criteria for getting employment opportunity. He also requested to provide the insurance cover for the structures in immediate vicinity of the proposed corridor for development of cracks and other damages due to railway vibration. He requested for payment of compensation to stakeholders residing close to the railway track against environmental hazards due to increased dust, noise and vibration levels. A facilitator of the PCM informed that the anticipated increase in noise and vibration level due to rail movement being marginal and insignificant, damages of the structures are not envisaged. However, he informed that the concern of the stakeholders will be forwarded to the concerned authorities.
8. Most of the participants viewed the project as beneficial and requested for timely completion of construction work. A participant viewed the project as booster of local economy and development. He requested the project authorities to provide job for at least one member of each project affected families. A facilitator of the PCM explained him the meeting intends to discuss the environmental impacts due to the project and the social issues including R&R policy will be discussed in forthcoming meetings in March 2009.
9. A participant requested DFCCIL and railway officials to consider creation of more gates across the existing railway to facilitate crossing of camel carts and bullock carts. He told that closure of many existing gates have created tremendous problem among the residents. The railway officials present in the meeting said they will take up the matter seriously and forward it to the concerned authorities.
10. A participant said the utilities (like wells, hand pumps etc) are required to be relocated. A facilitator of the PCM explained him the meeting intends to discuss the environmental impacts due to the project and the social issues including R&R policy will be discussed in forthcoming meetings in March 2009. However, he continued that there are several families who have negotiated with temple management committees for construction of houses in the surplus land belonging to temple committee. Most of these families are retired priests of the temple. These families do not have land records in their names as land belongs to temple committee. Many of such structures will be affected and the residents are mentally upset over the issue. He requested for an amicable solution to the problem. The DFCCIL officials promised to look into the matter seriously and assured him to solve the problem.
11. A participant said that the rumour has been spread that level crossing number of 86 on the existing railway is going to be closed. He wanted clarification on the issue. A facilitator of the PCM referred the question to the railway officials who confirmed that the level crossing will remain functional and requested the participants not to pay heed to any rumour.
12. A participant welcomed the project and said the construction work should be put in fast track to avoid cost escalation. He also echoed the view of another participant that some mechanism should be

developed to provide relief to the people who have constructed house on temple land. DFCCIL and railway officials assured the stakeholders that they will look into the matter on priority basis.

13. A participant said the project affected persons whose land as well as structure will be acquired should be provided government land in the same village so that he remains in close contact with his community. He also requested that PAPs below the poverty line should be provided jobs in railway or in other government departments. A facilitator of the PCM explained him the meeting intends to discuss the environmental impacts due to the project and the social issues including R&R policy will be discussed in forthcoming meetings in March 2009.
14. A participant also requested to reopen the level crossing no 88 located close to his village. He expressed the view that railway has good amount of surplus land along its tracks and requested to remove all encroachments along the track. He welcomed the project as it will benefit the region as well as the Nation as a whole and requested railway officials to examine the possibility of running passenger train on the newly constructed track in future. DFCCIL representative replied that only goods trains are proposed to run on the newly developed track but the view of the participant will be forwarded to higher authorities.
15. A participant welcomed the project and requested the authorities to start the construction work as early as possible. He also supported the view of a participant that running of passenger train may be considered in future. He reiterated that goods trains are proposed to run on the newly developed track but the view of him will be forwarded to higher authorities.

Major Outcome of consultations

Overwhelming majority of the participants have welcomed the project as pro-development and requested to ensure timely completion. The participants are found to be more concerned on the social issues than the environmental issues due to the project. The issues raised by the participants are summarised as follows:

- 1) Need of clarity and uniformity in disseminated information
- 2) Safeguard from increased noise and vibration levels
- 3) Accessibility across the corridor, especially in the bifurcated settlements
- 4) Evaluation for fixed assets for compensation
- 5) Regular monetary compensation for increased environmental risks and hazards
- 6) Employment of local villagers during as labourer during construction phase
- 7) Local procurement of construction materials, wherever possible
- 8) Adherence to quality norms for construction and operation
- 9) Jobs for BPL PAPs
- 10) Possibility of passenger train operation in the DFC track

Media Coverage

- 1) Rajasthan Patrika (Hindi daily - Sikar edition)
- 2) Dainik Bhaswar (Hindi daily - Sikar edition)

Public Consultation Meeting

Phulera, Rajasthan

Date: 12th February, 2009
Venue: Singhaniya Dharmasala, Gandhi Chowk, Phulera town,
(GPS coordinates: 26° 52' 28.38" N, 75° 14' 30.59" E)
Time: 11:00 – 13:00

Besides the SAPROF study team members, Mr. Shailendra Jain of DFCCIL Ajmer, Mr. Vijay Kumar Mittal of DFCCIL Jaipur, Mr. R K Vijaya, SS (P) FL, Phulera Junction, Jaipur District, Mr. Rajendra Maurya, Station Manager of Makrera Station, Ajmer District, and Mr. Jagmohan Singh Chowdhury, Station Manager of Phulera Station, Jaipur District were present in the PCM.

A total of approximately 50 participants were present in the meeting. Most of them are the representatives of newly identified villages during the S-ESIMMS. The villages that had representation in the PCM are:

1. ITAWA
2. RENWAL
3. SINODIYA
4. PRITHVI PURA
5. JAIPURA
6. KANCHRODA
7. PHULERA
8. NARAYANA
9. DOODIYAN KA BAS
10. NADRI
11. PREMPURA
12. KISHAN MANPURA
13. SIRSI
14. KALALI KI BADAI
15. AJMER
16. KISHANGARH CITY
17. MADANGANJ
18. SOMALPUR

Power point presentation on the DFC project, explaining the proposed DFC alignment, in general, and alignment in Rajasthan in particular, summary of environmental impact assessment including environmental mitigation measures and management plan (EMP), brief summary of affected villages and structures etc was made before the participants in Hindi language.

Issues Raised by Participants

Various issues raised by participants are summarised as follows:

1. A participant has expressed concern over the impacts on drainage due to the project and possibility of water logging after construction of rail embankment. A facilitator of the PCM replied that provision of both longitudinal and cross drains have been considered for the project and drainage system will developed with due consideration of local requirement. Cross drainage structures will be provided at regular intervals.
2. A participant said that the all level crossings across the existing Rewari-Vadodara meter gauge line (which is being converted into broad gauge) are said to be closed after gauge conversion. Therefore, the facilities provided by the DFC authorities for unhindered access across the corridor will be of limited or no use as the passenger rail track will be located just adjacent to the DFC. A representative of DFCCIL Ajmer replied that the access facilities across the DFC will also be extended over the existing railway track. Further, the existing level crossing will also continue to be operational.
3. A participant asked the reason for varying construction width of 30-50m and the gradient of the new track. A representative of DFCCIL Ajmer replied that the construction width varies due to variation in embankment height. As the gradient of the track is kept as low as 1:200 for DFC instead of the standard

gradient of 1:100 of Indian Railways to make DFC a high speed track, longer embankments are required.

4. A participant expressed his concern over increased noise and vibration level due to the movement of high speed goods trains. He also enquired whether the noise levels will increase in hilly areas due to reflection of noise. A facilitator of the PCM replied that noise and vibration levels have been studied at 4 locations in Rajasthan. The background noise and vibration levels as well as the same during the movement of goods trains (of different types of wagons) have been recorded at varying distances (12.5m, 25m, 50m and 100m) from the railway track. Based on the measurement, noise and vibration levels have been predicted using latest modelling techniques and the anticipated increase in noise and vibration level at a distance of 30m is found to be insignificant.
5. A participant asked about the length of the junction stations and a representative of DFCCIL Ajmer replied that the average length of the junction stations will be 1600 m approximately.
6. A participant expressed also his concern over increased noise and vibration levels due to movement of goods train, who was explained about the insignificant change in the noise and vibration level by a facilitator of the PCM. The participant asked whether the measurement of trains were conducted in both loaded and unloaded condition. A facilitator of the PCM clarified him that measurement has been conducted in all possible conditionals for several days for different types of goods carriers.
7. A participant enquired about the competent authority for supervision work during construction phase of the project, which will be responsible for implementation of the environmental mitigation measures suggested in the EMP. He also spoke at length about the height of the speed-breakers at the both sides of the level crossing in his area, which has damaged two vehicles considerably within a week's time. He sought information about the competent authority for lodging formal complaints and claiming of compensation, if possible. He was replied by the railway officials present in the meeting that he can lodge formal complaint with PWD officials for inspection of site to find out whether the allegations are true. However, he could not throw much light about the compensation part. DFCCIL representatives informed the participants that the supervision of construction work will probably be monitored by independent supervision consultants appointed by DFCCIL.
8. A participant enquired about the details of land to be acquired for the project. Another participant enquired about the compensation package for acquired land and structures. A facilitator of the PCM replied that these issues will be discussed in March 08 when separate PCMs will be conducted at village level on R&R issues.
9. A participant welcomed the project and enquired for project time schedule, specially the construction phase. He envisaged that accessibility across the corridor is the most important issue among others. A facilitator of the PCM explained him the project time schedule and informed him the construction is likely to begin in 2011. Accessibility across DFC will be ensured by providing ROB/RUB at each road-rail crossing and also at regular intervals at the detour sections.

Major Outcome of consultations

Overwhelming majority of the participants have welcomed the project as pro-development and requested to ensure timely completion. The participants are found to be more concerned on the social issues than the environmental issues due to the project. The issues raised by the participants are summarised as follows:

1. Drainage and water logging
2. Accessibility across the corridor, especially in the bifurcated settlements
3. Land requirement along the corridor and junction station
4. Safeguard from increased noise and vibration levels
5. Adherence to quality norms for construction and operation

Media Coverage

- 1) Rajasthan Patrika (Hindi daily - Jaipur edition)

Public Consultation Meeting

Pali, Rajasthan

Date: 15th February, 2009
Venue: Government Senior Secondary School, Marwar Junction,
(GPS coordinates: 25° 43' 35.6" N, 73° 36' 42.3" E)
Time: 11:00 – 13:00

Besides the SAPROF study team members, Mr. Shailendra Jain of DFCCIL Ajmer and Mr. Hansraj Sharma, Station Master of Dhareshwar were present in the PCM.

A total of approximately 110 participants were present in the meeting. Most of them are the representatives of newly identified villages during the S-ESIMMS. The villages that had representation in the PCM are:

1. JAWALI BANDH
2. SARKHEJARA
3. MOKHAMPURA
4. RAGHUNATHPURA
5. NANA
6. DUDOR
7. HEMLIYAWAS KALAN
8. MARWAR JUNCTION
9. AUWA
10. BITHORA KHURD/KALAN
11. NARSINGHPURA
12. KARCHI
13. SOJAT ROAD
14. SABALPURA
15. LAKA JI KI DHANI
16. GURIYA
17. RANI

Power point presentation on the DFC project, explaining the proposed DFC alignment, in general, and alignment in Rajasthan in particular, summary of environmental impact assessment including environmental mitigation measures and management plan (EMP), brief summary of affected villages and structures etc was made before the participants in Hindi language.

Issues Raised by Participants

Various issues raised by participants are summarised as follows:

1. A participant has expressed the view that the project related information obtained from various agencies over past 2 years has confused the villagers. In 2007, it was told that 100 m land will be acquired but later on it was reduced to 50 m. He told that the lack of clarity about various components of the proposed project has created confusion and anxiety among villagers. He wanted to have clarification on several survey teams being deputed for the survey work over this two year period. A facilitator of the PCM has explained about various components of the DFC project. He also replied that the mega projects of this magnitude requires careful assessment and consideration of all factors before implementation. Therefore, a number of surveys have been conducted over the period of last two years. Further, the design work for the project is scheduled to begin in 2009, when further survey may be required.
2. A participant has requested for implementation of National R&R policy 2007 and requested for evaluation of assets like cupboards, showcase etc through survey. Mr. Banerjee replied that the PCM intends to discuss environmental impacts due to the project; the social impacts and R&R policy will be discussed in forthcoming PCM-RRP meetings in March 2009.
3. A participant pointed out the local people should get employed as labours during the construction phase of the project. She commented that the railways in most cases hire labours from other States, depriving the locals. Therefore, the stakeholders find it hard to believe that they will be get employment

- opportunity during the construction phase of the DFC project. A facilitator of the PCM has replied that the concern will duly be forwarded to competent authorities.
4. A participant along with several other participants has shared his view that the local villagers were not employed by railways. He requested that a portion of the construction materials should be procured locally. DFCCIL representatives agreed to take up this issue to the higher authorities and informed that local people will be employed during the construction period.
 5. A participant enquired about the details of exact alignment and significance of colours of the pillars, if any. He also said that he has sold some portion of his agricultural land at handsome amount. He anticipates that compensation from DFCCIL for his acquired land will be meagre low. He further said that he has forwarded his complaint to DFCCIL Ajmer office a few months back but no response, even acknowledgement of his letter has been received yet. A facilitator of the PCM explained him the meeting intends to discuss the environmental impacts due to the project and the social issues including R&R policy will be discussed in forthcoming meetings in March 2009. A representative of DFCCIL Ajmer assured him to give reply to his letter shortly.
 6. A participant said that the level crossing at the town clogged in traffic for hours together, and the project will only add to this problem unless ROB is provided. A representative of DFCCIL Ajmer replied that ROB will be provided at each road-rail crossing and provision for ROB at Marwar Junction will be duly considered.
 7. A participant said that plantation under compensatory afforestation scheme should be started early so that the trees will grow sufficiently by the time the construction activity will be over. A facilitator of the PCM replied that his view will be forwarded with due importance to the concerned authorities.
 8. A participant commented that detour was proposed at Marwar Junction which was not considered in later stages of the project. He opined that the detour option is better for the town as it will avoid large scale involuntary displacement of people. A representative of DFCCIL Ajmer replied that the detour has not been considered due to techno-economical reasons and proper compensation will be distributed among the affected persons. A facilitator of the PCM explained him the meeting intends to discuss the environmental impacts due to the project and the social issues including R&R policy will be discussed in forthcoming meetings in March 2009.
 9. Most of the participants viewed the project as beneficial and requested for timely completion of construction work. A participant viewed the project as booster of local economy and development. He requested the project authorities to provide job for at least one member of each project affected families. A facilitator of the PCM explained him the meeting intends to discuss the environmental impacts due to the project and the social issues including R&R policy will be discussed in forthcoming meetings in March 2009.
 10. A participant requested DFCCIL and railway officials to consider creation of more gates across the existing railway to facilitate crossing of camel carts and bullock carts. He told that closure of many existing gates have created tremendous problem among the residents. The railway officials present in the meeting said they will take up the matter seriously and forward it to the concerned authorities.
 11. A participant said the utilities (like wells, hand pumps etc) are required to be relocated. A facilitator of the PCM explained him the meeting intends to discuss the environmental impacts due to the project and the social issues including R&R policy will be discussed in forthcoming meetings in March 2009. However, a representative of DFCCIL Ajmer continued that there are several families who have negotiated with temple management committees for construction of houses in the surplus land belonging to temple committee. Most of these families are retired priests of the temple. These families do not have land records in their names as land belongs to temple committee. Many of such structures will be affected and the residents are mentally upset over the issue. Mr. Singh requested for an amicable solution to the problem. The DFCCIL officials promised to look into the matter seriously and assured him to solve the problem.
 12. A participant said that the rumour has been spread that level crossing number of 86 on the existing railway is going to be closed. He wanted clarification on the issue. A facilitator of the PCM referred the question to the railway officials who confirmed that the level crossing will remain functional and requested the participants not to pay heed to any rumour.
 13. A participant welcomed the project and said the construction work should be put in fast track to avoid cost escalation. He also echoed other participant's view that some mechanism should be developed to

provide relief to the people who have constructed house on temple land. DFCCIL and railway officials assured the stakeholders that they will look into the matter on priority basis.

14. A participant said the project affected persons whose land as well as structure will be acquired should be provided government land in the same village so that he remains in close contact with his community. He also requested that PAPs below the poverty line should be provided jobs in railway or in other government departments. A facilitator of the PCM explained him the meeting intends to discuss the environmental impacts due to the project and the social issues including R&R policy will be discussed in forthcoming meetings in March 2009.
15. A participant also requested to reopen the level crossing no 88 located close to his village. He expressed the view that railway has good amount of surplus land along its tracks and requested to remove all encroachments along the track. He welcomed the project as it will benefit the region as well as the Nation as a whole and requested railway officials to examine the possibility of running passenger train on the newly constructed track in future. A representative of DFCCIL replied that only goods trains are proposed to run on the newly developed track but the view of him will be forwarded to higher authorities.
16. A participant welcomed the project and requested the authorities to start the construction work as early as possible. He also supported the other participant's view that running of passenger train may be considered in future. He reiterated that goods trains are proposed to run on the newly developed track but the other participant's view will be forwarded to higher authorities.

Major Outcome of consultations

Overwhelming majority of the participants have welcomed the project as pro-development and requested to ensure timely completion. The participants are found to be more concerned on the social issues than the environmental issues due to the project. The issues raised by the participants are summarised as follows:

1. Need of clarity and uniformity in disseminated information
2. Accessibility across the corridor, especially in the bifurcated settlements
3. Evaluation for fixed assets for compensation
4. Employment of local villagers during as labourer during construction phase
5. Local procurement of construction materials, wherever possible

Media Coverage

- 1) Rajasthan Patrika (Hindi daily - Pali edition)
- 2) Dainik Bhaswar (Hindi daily - Pali edition)

Public Consultation Meeting

Sirohi, Rajasthan

Date: 17th February, 2009
Venue: Shri Agarawal Vishnu Dharamshala, Abu Road,
(GPS coordinates: 24° 29' 02.7"N 72° 47' 01.2"E)
Time: 11:00 – 13:00

Besides the SAPROF study team members, Mr. Sanjay Gupta of DFCCIL Abu Road and Mr. Jitendra Sharma, Station Master of Bhimana were present in the PCM

A total of approximately 40 participants were present in the meeting. Most of them are the representatives of newly identified villages during the S-ESIMMS. The villages that had representation in the PCM are:

1. KIWARLI
2. OR
3. KHADAT
4. SANGNA
5. KUI
6. ABU ROAD
7. CHANDRAWATI
8. KHARA
9. MAVAL
10. AJARI
11. CHAWARLI
12. BANAS
13. SWAROOP GANJ
14. BHIMANA
15. BHARJA

Power point presentation on the DFC project, explaining the proposed DFC alignment, in general, and alignment in Rajasthan in particular, summary of environmental impact assessment including environmental mitigation measures and management plan (EMP), brief summary of affected villages and structures etc was made before the participants in Hindi language.

Issues Raised by Participants

Various issues raised by participants are summarised as follows:

1. A participant said that along with the common tree species, some valuable trees like Neem etc. would also be felled. He enquired whether there is any provision for monetary compensation against felling of private trees. Further, he also wanted to know about the compensation to be provided for acquired properties. A facilitator of the PCM explained that prior permission would be taken from forest department before felling of any tree and compensation would be given to the forest department for government owned trees as well as to individuals for private trees. Plantation will be carried out double the number of trees felled as per the provision of Indian Forest Conservation Act, 1980.
2. A participant also enquired about R&R policy. He was also eager to know about the details of land acquisition process. Mr. Hira Lal asked for specific dates for commencement of land acquisition process in Sirohi district. A facilitator of the PCM replied that the PCM intends to discuss environmental impacts due to the project; the social impacts and R&R policy will be discussed in forthcoming PCM-RRP meetings in March 2009.
3. A participant said that preference should be given to local contractors for award of petty contracts during the construction phase of the project which will eventually generate employment in the area. He also complained that the railways, in most cases, hire labours from other States, depriving the locals. He also added that a portion of the construction materials should be procured locally. A facilitator of the PCM has replied that the concern will duly be forwarded to competent authorities.
4. A participant enquired about the details of exact alignment. He told that the project related information obtained from various agencies has confused the villagers and there is a need for comprehensive

information from a single authority/source. A facilitator of the PCM explained him that the information related to the project gets changed from time to time because the project planning work is still being continued. A mega project of this magnitude requires involvement of various agencies but the flow of information to the stakeholders at grass root level are always monitored at central level by DFCCIL, who is the competent authority for implementation of the project. As the stakeholders have been taken into confidence since the beginning of the project and have been involved actively in the project formulation stages, the changes in the project information such as alignment etc are also promptly disseminated to the concerned stakeholders for their feedback.

5. A participant wanted enquired about the time provided to the stakeholders for lodging formal complaints, if any from the time he gets notice from the government about acquisition of his property. A representative of DFCCIL replied that the stakeholders can do so within 60 days from getting the land acquisition notice from SDM. He also added that the suggestions/complaints can only be lodged with SDM office of respective jurisdiction.
6. A participant said that the level crossing at the town remain clogged in traffic for hours together, and the project will only add to this problem unless ROBs are provided. A representative of DFCCIL replied that ROB will be provided at each road-rail crossing and provision for ROB at Abu Road will be duly considered.
7. A participant requested DFCCIL and railway officials to consider creation of more gates across the existing railway to facilitate crossing of camel carts and bullock carts. He told that closure of many existing gates have created tremendous problem among the residents. The railway officials present in the meeting said they will take up the matter seriously and forward it to the concerned authorities.
8. A participant welcomed the project and said the construction work should be put in fast track and requested to relocate the utilities like wells, hand pumps etc. DFCCIL and railway officials assured the stakeholders that they will look into the matter and forward their concern to the competent authority.
9. A participant said the project affected persons whose land as well structure will be acquired should be provided government land in the same village so that he remains in close contact with his community. He also requested that PAPs below the poverty line should be provided jobs in railway or in other government departments. A facilitator of the PCM explained him the meeting intends to discuss the environmental impacts due to the project and the social issues including R&R policy will be discussed in forthcoming meetings in March 2009.
10. A participant welcomed the project and requested the authorities to start the construction work as early as possible.

Major Outcome of consultations

Overwhelming majority of the participants have welcomed the project as pro-development and requested to ensure timely completion. The participants are found to be more concerned on the social issues than the environmental issues due to the project. Some of the participants raised questions on environment, the real agenda of the PCM. The issues raised by the participants are summarised as follows:

1. Need of clarity and uniformity in disseminated information
2. Accessibility across the corridor, especially in the bifurcated settlements
3. Evaluation for fixed assets for compensation
4. Employment of local villagers during as labourer during construction phase
5. Local procurement of construction materials, wherever possible

Media Coverage

- 1) Rajasthan Patrika (Hindi daily - Sirohi edition)

Appendix 3-5 Summary of Draft EIA Report



MINISTRY OF RAILWAYS
DFCC of India Ltd. (DFCCIL)

**Western Corridor of the DFC Project
between Vadodara and Rewari
Summary of the Environmental Impact Assessment**

March 2009



This summary explains outline of environmental and social considerations for Western Corridor of the Dedicated Freight Corridor (DFC) Project between Vadodara and Rewari as first priority section of the Dedicated Freight Corridor in India. This summary is distributed to the public as an information disclosure process under the project by responsible bodies; Ministry of Railway (MOR) as competent ministry and Dedicated Freight Corridor Corporation of India Limited (DFCCIL) as project executing agency. Any comments and opinions are welcome on the project from viewpoints of environmental and social considerations, and will be reflected into the Environmental Impact Assessment (EIA) report for the DFC Project with deliberations in the preparation process of finalization of the EIA report.

Outline of the Project

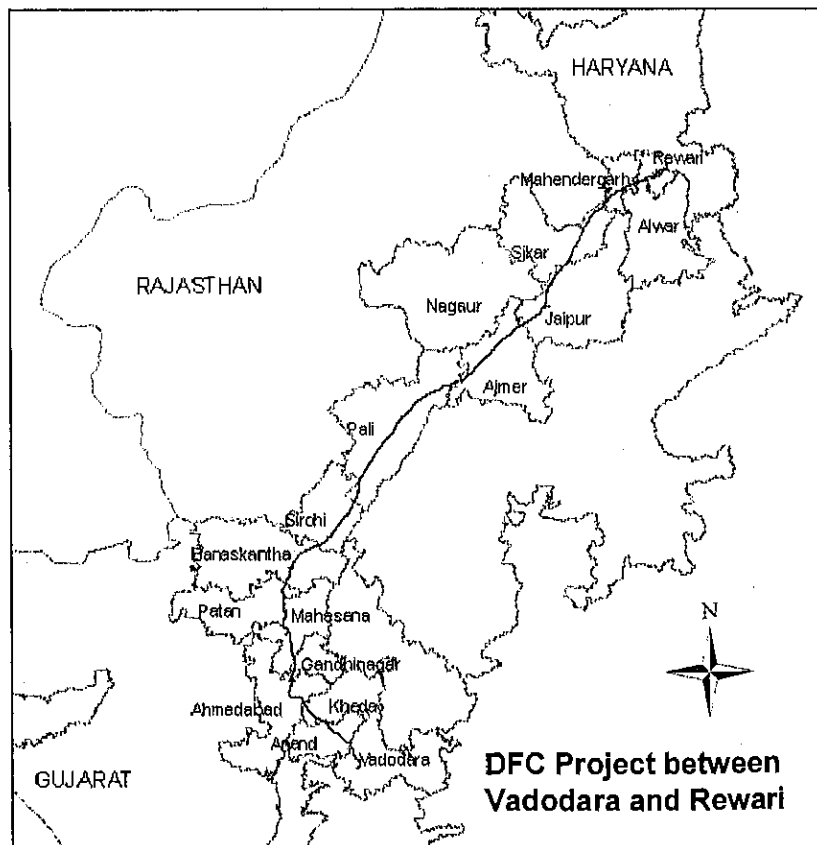
Ministry of Railway is implementing Computerized Multi Modal High Axle Load Dedicated Freight Corridor Project (DFC Project) to facilitate speedier and smooth transportation of bulk goods without any interruption between the two metropolises Delhi and Mumbai and their respective hinterlands at lesser transport cost and lesser time.

DFC Project aims to help boosting the present trends of growth of the economy in India. It is designed to carry a total freight line of 37.7 million tones in the fiscal year 2013-2014. At the same time, it is anticipated that the construction of DFC would induce economic development, generate employment and above all improve economic integration of regions in the country with improved links among major economic and trade centres.

Dedicated Freight Corridor Corporation of India Limited (DFCCIL) under Ministry of Railways, Government of India is an executing agency for the development of DFC. DFC Project in the Western Corridor between Vadodara and Rewari passes through approx. 470 villages in 17 districts of three states; Haryana, Rajasthan and Gujarat. Length of the proposed alignment is approximately 920 km.

The project is now under planning stage. Detailed design will start in the middle of 2009 till around 2011. Project implementation / construction work is scheduled after 2011 for 4-5 years.

State / District
Gujarat
Vadodara
Anand
Kheda
Ahmedabad
Gandhinagar
Mahesana
Patan
Banaskantha
Rajasthan
Sirohi
Pali
Ajmer
Jaipur
Nagaur
Sikar
Alwar
Haryana
Mahendragarh
Rewari



Proposed DFC Alignment and Facilities

Western Corridor of the DFC Project subject to implementation is traversing Vadodara – Ahmedabad – Palanpur – Rewari as double track. The proposed alignment passes through the states of Gujarat, Rajasthan and Haryana. In principle, the alignment for the DFC Project was designed as parallel to the existing railway within the land of Indian Railways. However, some sections where there is no enough land along the existing railway are designed as detour route to avoid resettlement as much as possible. Alignment for detour route of the DFC Project was designed, considering avoidance of local communities, wildlife sanctuary, city planning area, marble stone factories, residential area, large excavation, etc. to minimize environmental and social impacts as possible.

Environmental and Social Considerations Study for the Project

There is no provision of the Environmental Impact Assessment (EIA) for railway development under the Indian laws and regulations. However, since the DFC Project is the large-scale project which would cause large and various environmental and social impacts such as noise pollution and involuntary resettlement, comprehensive examinations on environmental and social considerations for the railway development have been carried out for the DFC Project from the planning stage of the development.

Under the situation, MOR/DFCCIL has prepared draft EIA for the Western Corridor of the DFC Project between Vadodara and Rewari under technical support by the Japan International Cooperation Agency (JICA), which are composed of ESIMMS¹

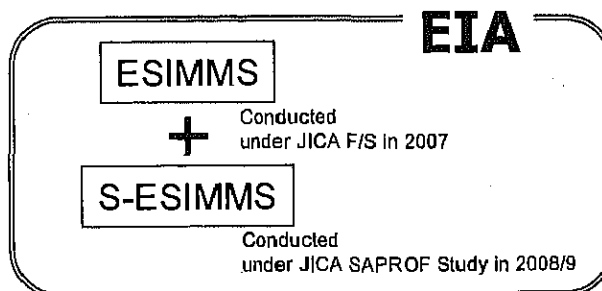
conducted under the JICA Feasibility Study in 2007 and S-ESIMMS² conducted under the JICA SAPROF³ Study in 2008/9. Draft EIA report is composed of state-wise ESIMMS reports



Field survey on flora

for 3 states and S-ESIMMS report covering whole project area.

Both ESIMMS and S-ESIMMS covered impacts potentially induced from nature of the project, physical and social conditions of the project sites for natural environment, pollution control, and social issues. In the S-ESIMMS, further detailed studies were conducted such

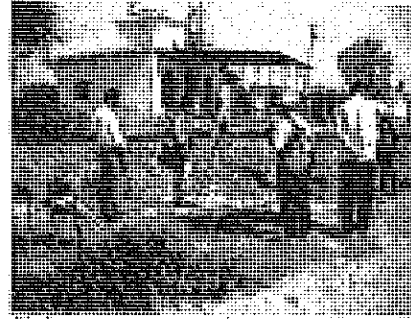


¹ ESIMMS: Environmental and Social Impact Mitigation Measures Study as EIA Level Study under the JICA Guideline for Environmental and Social Considerations, 2004.

² S-ESIMMS: Supplementary ESIMMS

³ SAPROF: Special Assistance for Project Formulation

as detailed prediction of the railway noise and vibration as well as sensitive receptor⁴ and land use surveys, detailed survey for the protected area nearby DFC alignment and major rivers to cover data for all seasons, and survey on structures to be relocated and further socio-economic survey, in addition to supplementary surveys for area which is newly affected due to change of alignment after the JICA F/S.



Noise measurement survey along the existing railway

Potential Impacts and Mitigation Measures

Various environmental and social impacts were identified through the series of the surveys. Mitigation measures are proposed to minimize the environmental impacts which are unavoidable after examinations. Mitigation measures for major items of the environmental and social impacts are shown below.

List of Potential Impacts and Mitigation Measures

Potential Impacts	Mitigation Measures
Air Quality	
<i>Construction Phase</i>	
Deterioration of air quality due to particulate matter such as dust, especially during dry condition, and gaseous emissions from construction equipment and vehicular traffic.	<ul style="list-style-type: none"> ➤ Storage of construction materials in covered godowns or enclosed spaces ➤ Coverage of truck carrying soil, sand and stone to avoid spilling. ➤ Adequate dust suppression measures such as regular water sprinkling on unpaved haul roads and vulnerable areas of the construction sites ➤ Use of low emission construction equipment, vehicles and generator sets.
Noise and Vibration Levels	
<i>Construction phase</i>	
Noise and vibration due to movement of vehicles, and operation of light and heavy construction machineries	<ul style="list-style-type: none"> ➤ Use of low noise construction equipment ➤ Place of stationary construction equipment away from inhabited areas, and 200 m away from the sensitive receptors (SRs) i.e. school, hospital ➤ Construction activities carried out near residential area preferably in daytime ➤ Provision of protective gears such as ear plugs etc. to construction personnel exposed to high noise levels
<i>Operation Phase:</i>	
Noise and vibration due to movement of trains and related facilities	<ul style="list-style-type: none"> ➤ New technologies incorporated to lower noise and vibration generation with respect to structures and rolling stocks. ➤ Use of long welded rails ➤ Appropriate maintenance of locomotives, tracks and structures. ➤ Control of running speed of freight trains in the urban area ➤ Provision of soundproof wall to the sections where houses and Sensitive Receptors are located near railway tracks, if required.

⁴ Sensitive facility is public facility, which is sensitive to the noise and vibration impacts, such as hospital, school, and religious facilities.

Potential Impacts	Mitigation Measures
Water Quality	
<i>Construction phase</i>	
<ul style="list-style-type: none"> Wastewater from construction activities with suspended impurities. Wastewater disposal from the workers camp and sludge generated from construction sites 	<ul style="list-style-type: none"> Provision of silt fencing near water bodies Control of quality of construction wastewater emanating from the construction site through suitable drainage system with sediment traps Provision of proper sanitation facilities at the construction site to prevent health related problems due to water contamination.
<i>Operation Phase:</i>	
Wastewater generated from rail depot, train washing, heavy cleaning, workshops and maintenance activities	<ul style="list-style-type: none"> Reuse of treated water by removal of suspended solids, oil and grease, organic matter, toxic elements and neutralization of pH through waste water treatment plant.
Topography and Geology	
<i>Construction stage</i>	
<ul style="list-style-type: none"> Change in topography due to clearing of land, felling of trees, cutting and filling of land and construction of structures. Disfigurements of topography due to indiscriminate digging of borrow pits. 	<ul style="list-style-type: none"> Use of only identified borrow pits and quarry sites to avoid any disfiguration of topography. Avoidance of uncontrolled digging of borrow pits to prevent water accumulation in abandoned pits resulting in breeding ground of vector disease. Procurement of construction materials from existing approved and licensed quarries only
Soil	
<i>Construction stage</i>	
<ul style="list-style-type: none"> Disruption and loss of productive top soil from agricultural fields due to creation of borrow pits and development of detour section Loosening of top soil and loss of vegetative cover due to excavation and back filling Deterioration of soil quality 	<ul style="list-style-type: none"> Utilization of fly ash, if technically suitable and available within 100 km distance of the DFC alignment for construction of embankment to save soil resource. Adequate measures like adequate drainage, embankment consolidation and slope stabilization Conservation and restoration of top soils of the borrow pit sites Avoidance of accidental spills Proper disposal of used bentonite slurry
Hydrological Conditions	
<i>Construction stage</i>	
<ul style="list-style-type: none"> Increased incidence and duration of floods due to obstruction of natural drainage courses by the embankment 	<ul style="list-style-type: none"> Provision of adequate drains along the track Augmentation of capacity of existing drainage works Provision of adequate drainage works for smooth passage of runoff to avoid flooding and formation of water pool.
<i>Operation stage</i>	
Impact to local drainage due to formation of railway embankment	<ul style="list-style-type: none"> Provision of longitudinal drains of sufficient capacity on both sides of the track to accommodate increased run-off.
Flora	
<i>Construction stage</i>	
Loss of flora due to felling of trees along the ROW	<ul style="list-style-type: none"> Appropriate compensatory plantation with about 2 times the number of trees felled. Compensation for forest land and trees to be felled in forest area and private land, Mixed plantation consisting of flowering shrubs and evergreen ornamental trees
Deposition of fugitive dust on pubescent leaves of nearby vegetation	<ul style="list-style-type: none"> Strip plantation in available open spaces on both sides of the railway track Provision of cooking fuel to construction workers to avoid cutting/felling of trees for fuel wood.
Diverslon of Forest Land	
<i>Pre-construction stage</i>	
The alignment passes through several patches of Reserved Forest and open forest area	<ul style="list-style-type: none"> Compensation shall be provided to the forest department towards the cost of forest land to be diverted and cost of compensatory afforestation. Before start any activity within the Reserved Forest area, Forest clearance must be obtained.
Fauna	
<i>Pre-construction stage</i>	
Thol Wildlife (Bird) Sanctuary in the west of DFC alignment (detour section) in Mahesana District.	<ul style="list-style-type: none"> Construction activity within 3 km radius of sanctuary shall be carried out by taking special care so as to cause the least disturbance as per the provisions of the law.

Potential Impacts	Mitigation Measures
<i>Construction stage</i>	
<ul style="list-style-type: none"> • Disturbance to avifauna in reserved forests and Thol Wildlife (Bird) Sanctuary due to noise generated from construction machinery. • Temporary loss of habitat of Indian Soft-shell Turtle and Mugger Crocodile during bridge construction over Mahi, Vishwamitri, and Vatrak Rivers 	<ul style="list-style-type: none"> ➤ All the construction equipment and vehicles used are in good working condition, properly lubricated and maintained to keep noise within the permissible limits and engines turned off when not in use to reduce noise. ➤ Construction of bridge shall be constructed during dry season but working may resorted in monsoon if it does not affect the habitat of endangered species. ➤ Provision of fencing along the boundary of construction site as per site requirement
<i>Operation stage</i>	
Disturbance of corridor of wildlife movement due to acquisition of Reserved Forest land in Banaskantha District.	➤ Initiation of appropriate compensatory plantation to compensate the habitat loss due to felling of trees for site clearing.
<ul style="list-style-type: none"> • Effect on aquatic fauna in case of accidental oil spill and toxic chemical release into water bodies. • Restriction of the movement of wildlife on either side of the track. • Collision of wildlife with train. 	<ul style="list-style-type: none"> ➤ Contingent actions for speedy cleaning up of oil spills, fuel and toxic chemicals in the event of accidents. ➤ Provision of animal underpasses for wildlife near forest areas ➤ Provision of fencing, if feasible, along DFC in wildlife habitat concentration areas to avoid collision.
Land Acquisition and Resettlement	
<i>Pre-construction stage</i>	
Loss of livelihood and properties	➤ Compensation and assistance package will be planned in the Rehabilitation and Resettlement Plan (RRP), separately from the EIA.
<i>Construction stage</i>	
Disturbance of vehicle traffic and pedestrian (farmers) passage	➤ Provision of detour with adequate sign board and instruction
<i>Operation stage</i>	
Regional severance and disturbance of movement for local people and farmers due to embankment structure of the DFC	<ul style="list-style-type: none"> ➤ Provision of road-under-bridge (RUB) or road-over-bridge (ROB) at road crossing as per the policy and need. ➤ Existing road and proposed RUB/ROB/Level Crossing (LC) will cater for the movement of local people. ➤ Underpass or the level crossing shall be provided in the detour section as per the existing road network. ➤ Provision of footpath on side of the carriageway as per existing practice of the Indian Railway Code (IRC).

Note: Major impact items and mitigation measures are shown in the table. Further impact items and mitigation measures are considered in the draft EIA report.

Environmental Management Plan

Environmental Management Plan (EMP) is the key to ensure a safe and clean environment. The expected results from the environmental mitigation measures proposed in the project may not be obtained without a management plan to assure its proper implementation and function. The EMP envisages the plans for the proper implementation of mitigation measures to reduce the adverse impacts arising out of the project activities during pre-construction, construction and operation stages. EMP is prepared addressing the issues as follows.

- 1) Details of Management Plan proposed are mentioned below.
 - a) Greenbelt Development Plan
 - b) Solid Waste Management Plan
 - c) Management / Rehabilitation Plan for Quarry / Borrow Areas
 - d) Guidelines for Sanitation and House Keeping at the Construction Labour Camps
 - e) Procedures for Storage, Handling & Emergency Response for Hazardous Chemical
 - f) Land Acquisitions and Resettlement
- 2) Stage wise Environmental Management Measures are proposed for the following environmental and social issues.
 - a) Pre-construction stage
 - land acquisition, diversion of reserved forest land, preservation of trees, borrow area, quarry area, site identification for disposal of unsuitable materials, construction camp, arrangement for temporary yard, orientation of implementation agency and contractors
 - b) Construction stage
 - Site clearance, procurement of construction materials, construction work (drainage, siltation, slope protection, etc.), water pollution, air pollution, noise, safety, labour camp management, contractor's demobilization (clean-up operation, restoration and rehabilitation)
 - c) Operation stage
 - Monitoring of operation performance of various mitigation measures, pollution monitoring

Environmental Monitoring

The purpose of the environmental monitoring plan is to ensure that the envisaged purpose of the project is achieved and results in desired benefits to the target population. To ensure the effective implementation of the EMP, it is essential that an effective monitoring plan be designed and carried out. The environmental monitoring plan consists of performance indicators and environmental monitoring programme.

Performance indicators

- 1) Pre-construction stage: land acquisition, dumping locations, construction camps, borrow areas;

- 2) Construction stage: air quality, noise & vibration levels, water quality, tree plantation, top soil, construction workers;
- 3) Operation stage: survival rate of trees, rehabilitation of borrow areas, utility of noise barriers for sensitive receptors

Environmental monitoring programme

For the following items of environmental items, a) parameters to be monitored, b) location of the monitoring sites, c) frequency and duration of monitoring, and d) institutional responsibilities for implementation and supervision.

- Air quality, water quality, noise and vibration level, soil erosion, plantation, flora and fauna

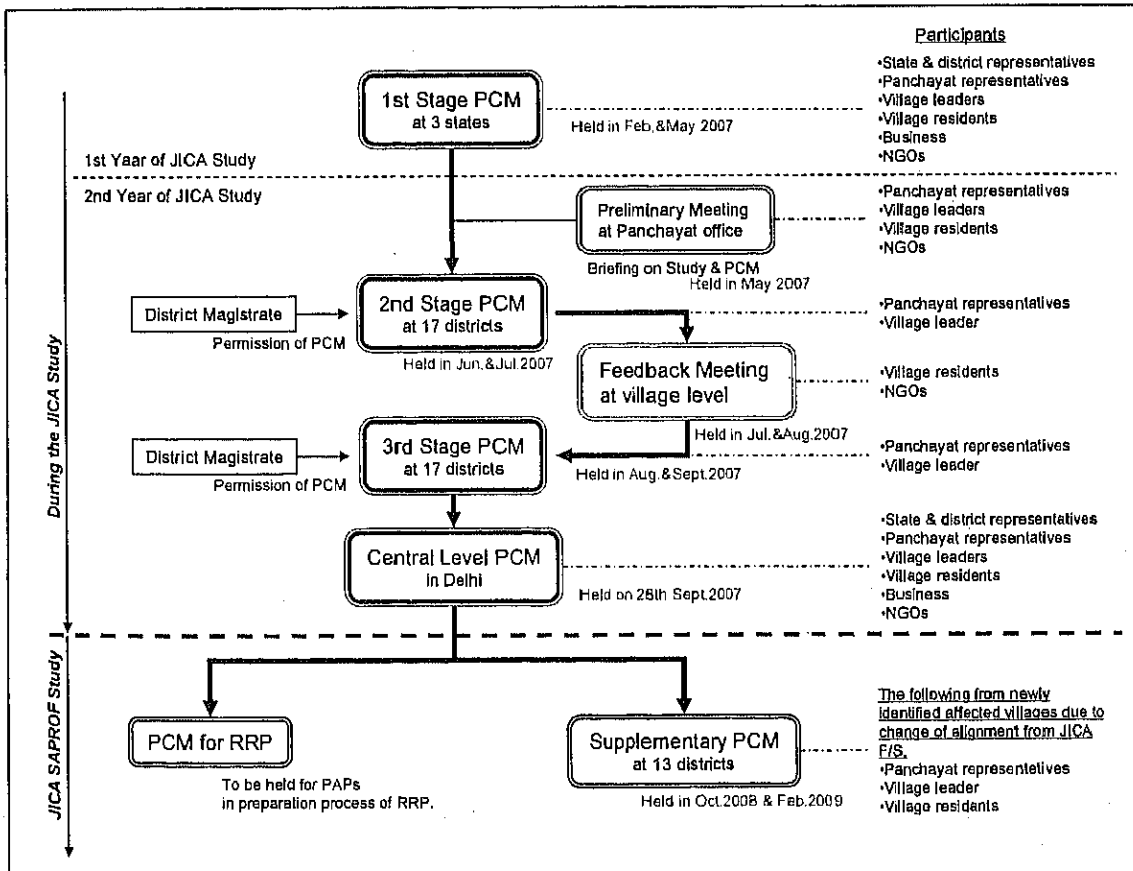
Public Consultation Meeting

Series of the Public Consultation Meetings (PCMs) were held during the ESIMMS under the JICA-funded Feasibility Study to disclose project information to as well as to get opinions and comments from the public. In addition, additional district-wise PCMs were held during the S-ESIMMS under the JICA funded SAPROF Study targeting for newly identified project-affected villages due to change of design of DFC alignment after the JICA F/S. Various comments and opinions were collected through the PCMs and incorporated into the project design such as provision of culvert to make vehicles, residents, and farmers access smoothly for both sides of the embankment section of the DFC.

On the other hand, PCM for Rehabilitation and Resettlement Plan (RRP) will be separately conducted in preparation process of the RRP to disclose to and obtain comments and opinions from project-affected peoples subject to the land acquisition and resettlement (PAPs).



Public Consultation Meeting



Further Schedule

- Finalization of the draft EIA report by reflecting the comments and opinions from the public.
- Disclosure of the finalized EIA report to the public after MOR reviews and approves the finalized EIA report.
- Full set of the finalized EIA report will be available for review by the public in the same locations where the draft EIA report was disclosed; respective Chief Project Manager (CPM) offices of DFCCIL, major stations along the proposed DFC alignment, and respective District Offices, in May 2009, as well as summary of the finalized EIA report in all of the project-affected villages.

Calling for Comments and Opinions

Please send your comments and opinions on environmental and social issues on the DFC Project only in writing with your name, address, and contact number, if any, through direct delivery, fax, or post to the respective CPM offices. Sending the comments/opinions through the e-mail is also acceptable (dfc.wc.eia@gmail.com). Full set of the draft EIA report, which is composed of the state-wise ESIMMS reports and draft S-ESIMMS report, is available for any person, who is interested in the EIA in detail, in the relevant CPM offices, major stations along the proposed stations, and respective District Offices.

Comments/opinions are kindly requested to send not later than 15th April, 2009.

Address of the CPM offices of the DFCCIL

- CPM office in Jaipur
B-12, Hanuman Nagar, Opp. Metro Hospital, Sirsi Road, Jaipur, Tel: 0141-4028741, Fax: 0141-4028740
- CPM office in Ajmer
Mall Road, Opp DRM Office, Ajmer-305001, Tel/Fax: 0145-2625548
- CPM office in Ahmedabad
1st Floor, Old DRM Office Building, Kalupur, Ahmedabad-380002, Tel: 079-22175107, Fax: 079-22163101
- CPM office in Vadodara
13-14, 17-18, Panorama Complex, 3rd Floor, R.C. Dutt Road, Alkapuri, Vadodara-7, Tel: 0265-2326024, Fax: 0265-2326027

Major Stations where the draft EIA report is available

- Gujarat
Palanpur (Jn), Siddhapur, Unjha, Mahesana (Jn), Sabarmati (Jn), Ahmedabad (Jn), Nadiad (Jn), Anand (Jn), Vasad (Jn), Vadodara (Jn)
- Rajasthan
Alwar (Jn), Kund, Neem Ka Thana, Sri Madhopur, Ringus (Jn), Jaipur (Jn), Phulera (Jn), Kishangarh, Ajmer (Jn), Beawar, Sojat Road, Marwar Jn, Falna, Sirohi Road, Abu Road
- Haryana
Rewari (Jn), Narnaul, Dabla (Jn)

Thank you very much for your cooperation for the project.



रेल मंत्रालय
डी.एफ.सी.सी.आई.एल.

वडोदरा एवं रेवाड़ी के मध्य समर्पित मालभाड़ा कारीडोर परियोजना का
पश्चिमी कारीडोर
पर्यावरणीय प्रभावों का मुल्यांकन का संक्षेप

मार्च 2009



यह भारत में वडोदरा एवं रेवाड़ी के मध्य समर्पित मालभाड़ा कारीडोर (डी.एफ.सी.) परियोजना के पश्चिमी कारीडोर के पर्यावरणीय एवं समाजिक प्रभावों का संक्षेप है। यह संक्षेप परियोजना के सूचना प्रकटीकरण प्रक्रिया के तहत जन समुदाय में आवंटित होना है, जिसके लिए रेल मंत्रालय अधिकारिक मंत्रालय है एवं डी.एफ.सी.सी.आई.एल. कार्यकारी संस्था है। हम इस परियोजना के लिए पर्यावरणीय एवं सामाजिक विषयों पर आपके विचारों का स्वागत करते हैं। आपके विचार डी.एफ.सी. परियोजना की अन्तिम पर्यावरणीय प्रभावों का मुल्यांकन रिपोर्ट पूर्ण करने में सहायक सिद्ध होंगे।

परियोजना की मुख्यताएँ

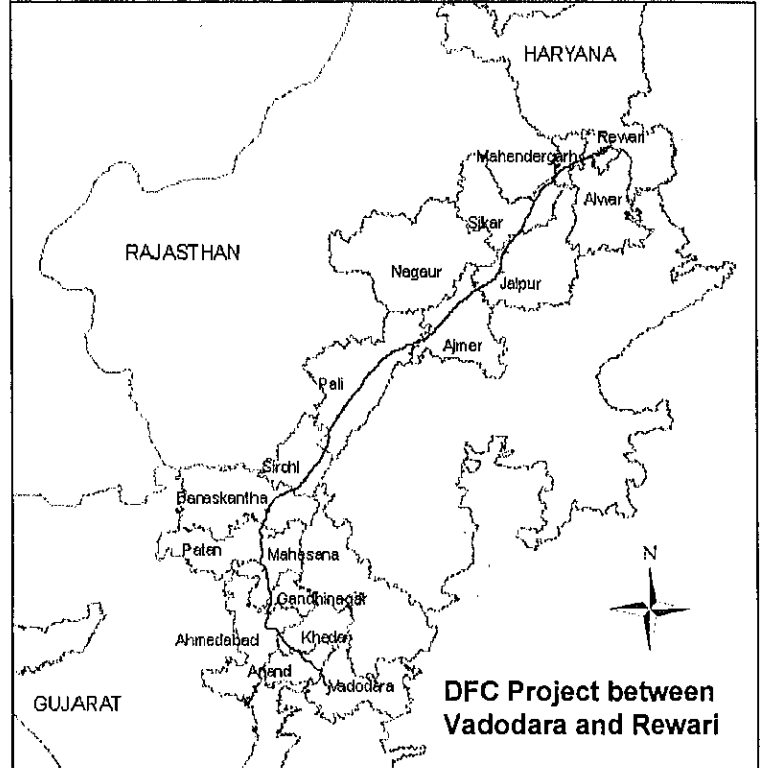
रेल मंत्रालय दिल्ली और मुम्बई महानगरों एवं इनके आसपास के स्थानों के मध्य माल के अतिशीघ्र एवं अबाधित आवागमन हेतु कम्प्यूटरिकृत समर्पित मालभाड़ा कारीडोर परियोजना को मूर्तरूप देने जा रहा है। जिससे माल बिना किसी बाधा के अपने गंतव्य स्थान तक कम समय एवं न्यूनतम परिवहन लागत में पहुँच सके।

डी.एफ.सी. परियोजना का उद्देश्य भारत की वर्तमान आर्थिक उन्नति के पथ को सुदृढ़ करना है। वर्ष 2013-2014 तक इस परियोजना द्वारा 37.7 मिलियन टन माल का परिवहन हो सकेगा। परियोजना के निर्माण से आर्थिक उन्नति एवं रोजगार के नये अवसर उत्पन्न होंगे। साथ ही राष्ट्र में प्रान्तों के मध्य आर्थिक विनिमय एवं प्रमुख व्यापार केन्द्रों का परस्पर सुधार होगा।

भारत सरकार के रेल मंत्रालय के अधिनस्त डी.एफ.सी.सी.आई.एल. इस परियोजना के विकास के क्रियान्वयन संस्था है। डी.एफ.सी. परियोजना का पश्चिमी कारीडोर का वडोदरा से रेवाड़ी के मध्य का भाग हरियाणा, राजस्थान एवं गुजरात राज्य के 17 जिलों के 470 गाँवों से होकर गुजरता है। जिसकी लम्बाई करीब 920 कि.मी. है।

परियोजना अभी प्लानिंग अवस्था में है। वर्ष 2009 के मध्य से लगभग 2011 तक परियोजना का विस्तृत प्रारूप कार्य किया जायेगा। परियोजना का निर्माण कार्य वर्ष 2011 से आरम्भ होगा एवं 4-5 वर्ष में पूर्ण होगा।

राज्य/जिले
गुजरात
वडोदरा
आनंद
खेड़ा
अहमदाबाद
गोधिनगर
महेसाणा
पाटन
बनासकांठा
राजस्थान
सिरोही
पाली
अजमेर
नागौर
जयपुर
सीकर
अलवर
हरियाणा
महेन्द्रगढ़
रेवाड़ी



प्रस्तावित DFC रेलमार्ग एवं संलग्न सुविधाएँ

समर्पित मालभाड़ा कारीडोर परियोजना का पश्चिमी कारीडोर वडोदरा-अहमदाबाद-पालनपुर-रेवाड़ी से गुजरता हुआ दो तरफा रेलमार्ग होगा। यह प्रस्तावित मार्ग गुजरात, राजस्थान एवं हरियाणा राज्य से होकर गुजरता है। परियोजना का मार्ग मुख्यतया भारतीय रेल विभाग की भूमि पर वर्तमान रेल मार्ग के समान्तर नियोजित किया गया है। जबकि कुछ स्थानों पर वर्तमान रेल लाईन के समान्तर पर्याप्त भूमि उपलब्ध न होने के कारण तथा जहाँ तक सम्भव हो पुर्नवास से बचाने हेतु बाईपास का प्रावधान रखा गया है। बाईपास मार्ग की योजना बनाने समय स्थानीय समुदाय, जीव अभयारण, शहरी योजना क्षेत्र, मार्बल उद्योग, आबादी क्षेत्रों, खदान आदि को बचाने का ध्यान रखा गया, ताकि प्रतिकूल पर्यावरण एवं सामाजिक प्रभावों को यथा सम्भव कम किया जा सके।

परियोजना हेतु पर्यावरण एवं सामाजिक अध्ययन

भारतीय कानून व नियमों में रेल परियोजनाओं हेतु पर्यावरणीय प्रभावों के मुल्यांकन करने का कोई प्रावधान नहीं है। चूंकि डी.एफ.सी. परियोजना वृहत परियोजना है जिससे विपरीत पर्यावरणीय एवं सामाजिक प्रभावों की सम्भावना है। अतः परियोजना के योजना कार्यकाल से ही पर्यावरणीय एवं सामाजिक मुद्दों का विस्तृत अध्ययन किया गया है।

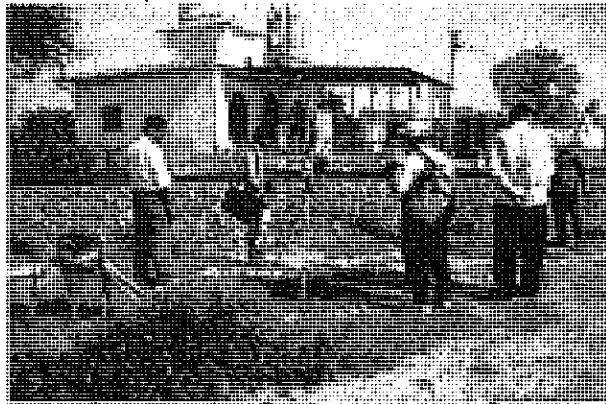
इस संदर्भ में रेल मंत्रालय/डी.एफ.सी.सी.आई.एल. ने जापान इंटरनेशनल कांफ़रेंशन ऐजन्सी

(जे.आई.सी.ए.) के तकनीकी सहयोग से डी.एफ.सी. परियोजना के पश्चिमी कारीडोर की झ्रूपट पर्यावरणीय प्रभावों का मुल्यांकन (ई.आई.ए.) रिपोर्ट तैयार किया है, जो कि जे.आई.सी.ए. (JICA) अध्ययन रिपोर्ट 2007 (ESIMMS¹) एवं



पेड़ पौधों का सर्वेक्षण

संवेदनशील अभिग्राहकों पर ध्वनि एवं कम्पन का प्रभाव, भूमि उपयोग सर्वेक्षण, प्रस्तावित रेल मार्ग के निकट संरक्षित क्षेत्रों एवं प्रमुख नदियों के प्रत्येक मौसम के आंकड़ों का संकलन तथा विस्तृत विश्लेषण, स्थानान्तरित होने वाले ढाचों का सर्वेक्षण एवं तदोपरान्त सामाजिक-आर्थिक सर्वेक्षण आदि विषय सम्मिलित हैं। इसके अतिरिक्त जे.आई.सी.ए. (JICA) अध्ययन के बाद स्थानान्तरित हुए रेलमार्ग से नवप्रभावित क्षेत्रों का पूरक सर्वेक्षण भी सम्मिलित है।



रेल द्वारा पर्यावरण एवं सामाजिक प्रभावों का सर्वेक्षण

¹ ESIMMS: जे.आई.सी.ए. की 'पर्यावरणीय एवं सामाजिक निमित्त 2004 मार्गदर्शिका' के अनुसार बनाये गये पर्यावरणीय एवं सामाजिक प्रभावों का मुल्यांकन रिपोर्ट

² S-ESIMMS: जे.आई.सी.ए. की 'पर्यावरणीय एवं सामाजिक निमित्त 2004 मार्गदर्शिका' के अनुसार बनाये गये पर्यावरणीय एवं सामाजिक प्रभावों का मुल्यांकन की पूरक रिपोर्ट

³ SAPROF स्पेशल असिस्टेन्स फॉर प्रोजेक्ट फॉर्मेशन

ESIMMS

+

S-ESIMMS

वर्ष 2007 में जे.आई.सी.ए. मार्गदर्शिका के अनुरूप बनायी गयी रिपोर्ट

वर्ष 2008/9 में जे.आई.सी.ए. सेप्रोफ अध्ययन के अनुरूप बनायी गयी रिपोर्ट

जे.आई.सी.ए.—सेप्रोफ (SAPROF³) अध्ययन रिपोर्ट 2008-09 (S-ESIMMS²) का सम्मिलित रूप है। झ्रूपट पर्यावरणीय प्रभावों का मुल्यांकन (ई.आई.ए.) रिपोर्ट तीनों प्रदेशों की ESIMMS रिपोर्ट एवं S-ESIMMS रिपोर्ट का मिश्रित रूप है, जो पूरे परियोजना प्रभावित क्षेत्र का वर्णन करता है।

दोनों ESIMMS एवं S-ESIMMS रिपोर्ट, परियोजना से उत्पन्न प्रभावों, परियोजना क्षेत्र की सामाजिक एवं भौतिक अवस्थाएँ, प्रदूषण नियंत्रण एवं सामाजिक विषयों पर आधारित है। S-ESIMMS रिपोर्ट में अध्ययन किए गये प्रमुख विषयों में रेल द्वारा उत्पन्न ध्वनि एवं कम्पन का पुर्वानुमान तथा

संभावित प्रभाव एवं निराकरण के उपाय

सर्वेक्षणों में अनेक प्रतिकूल पर्यावरणीय एवं सामाजिक प्रभावों का पता चला है। इन विपरित प्रभावों को न्यूनतम करने के सुझाव प्रस्तावित किये गये हैं। प्रमुख पर्यावरणीय व सामाजिक प्रभावों के निराकरण के सुझाव नीचे दिये गये हैं।

प्रभावों एवं निराकरण के उपायों की तालिका

संभावित प्रभाव	निराकरण के उपाय
वायु गुणवत्ता	
निर्माणावधि धूल के सूक्ष्म कणों, निर्माण कार्य में प्रयुक्त उपकरणों एवं वाहनों द्वारा वायु प्रदुषण	→ निर्माण कार्य में प्रयुक्त माल को बन्द स्थानों अथवा ढके गोदामों में रखने की व्यवस्था → ढुलाई वाले वाहनो से मिट्टी, पत्थर आदि छलकने से बचाव → निर्माण क्षेत्र की कच्ची सड़कों एवं अन्य स्थानों पर धूल उड़ने से बचाव के लिए पानी के छिड़काव की व्यवस्था → कम धुआँ उत्पन्न करने वाले उपकरणों, जनेटरो एवं परिवहन के साधनो का प्रयोग
ध्वनि एवं कम्पन स्तर	
निर्माणावधि निर्माण कार्य में प्रयुक्त हल्की तथा भारी मशीनों व वाहनो द्वारा ध्वनि एवं कम्पन	→ न्यूनतम ध्वनि उत्पन्न करने वाले उपकरणों का प्रयोग → स्थिर निर्माण उपकरणों को आवासीय क्षेत्रों, शिक्षण संस्थानों एवं चिकित्सालय जैसे स्थानों से 200 मी. की दूरी पर स्थापित करना → आवासीय क्षेत्रों में निर्माण कार्य दिन के समय ही करने का प्रयास होगा → अतिध्वनित स्थानों पर श्रमिकों को ध्वनि बचाव उपकरण उपलब्ध कराने की व्यवस्था
संचालन अवधि ट्रेनों तथा अन्य सम्बन्धित वाहनो के अवागमन से उत्पन्न ध्वनि एवं कम्पन	→ न्यूनतम ध्वनि एवं कम्पन पैदा करने वाली तकनीक का प्रयोग → जुड़ी हुई लम्बी पटरीयों का प्रयोग → रेलगाड़ी, पटरी एवं इमारतों का सही रखरखाव → शहरी क्षेत्रों में मालगाड़ी की नियन्त्रित गति → रेल पटरी के आस-पास स्थित मकानों एवं संवेदनशील अभिग्राहकों पर आवश्यकतानुसार ध्वनिरोधक दीवारों के निर्माण का प्रावधान
जल गुणवत्ता	
निर्माणावधि • निर्माण कार्य के दौरान घुली गंदगी युक्त दूषित जल • श्रमिक शिविरों से उत्पन्न दूषित जल एवं निर्माण क्षेत्रों से उत्पन्न कीचड़ इत्यादि	→ जल क्षेत्रों के निकट गाद निरोधक आड़ का प्रावधान → अवसाद अलग कर गुणवत्ता नियंत्रित करने के पश्चात निर्माण क्षेत्र से उत्पन्न दूषित जल का निकास का प्रावधान → दूषित जल से होने वाली स्वास्थ्य समस्याओं की रोक थाम हेतु प्रयाप्त आरोग्यकर सुविधाओं का प्रावधान
संचालन अवधि रेल डिपो, रेलगाड़ियों की धुलाई एवं कारखाने की रखरखाव क्रियाओं द्वारा उत्पन्न दूषित जल	→ जल शोधन संयंत्र द्वारा दूषित जल से घुलनशील पदार्थ, तेल एवं चिकनाई, कार्बनिक पदार्थ एवं जहरीले तत्व दूर कर एवं अम्लता उदासीन कर उपचारित जल का पुनः उपयोग
स्थलाकृति एवं भूगर्भ विज्ञान	
निर्माणावधि • पेड़ों की कटाई, जमीन की खुदाई, जमीन का भराव एवं निर्माण कार्य द्वारा स्थलाकृति बदलाव • गर्त खुदाई से स्थलाकृति का विकृत होना	→ स्थलाकृति के विकृत होने से बचाव के लिए प्रयोजित गर्त एवं खदान का उपयोग → अनियंत्रित गर्त खुदाई से बचाव, ताकि त्यागे गये गर्तों में एकत्रित जल संक्रामक रोग कारकों के प्रजनन का स्थान ना बन सके → निर्माण सामग्री का केवल स्वीकृत एवं अनुमोदित खाईयों से दोहन

संभावित प्रभाव	निराकरण के उपाय
मृदा	
निर्माणावधि <ul style="list-style-type: none"> मिट्टी दोहन गतों एवं बाईपास अनुभाग के विकास के कारण उपरी उपजाऊ मृदा की हानि खुदाई के कारण उपरी मृदा का ढीला होना एवं वनस्पतिय आच्छादन की हानि मृदा गुणवत्ता की अवनति 	<ul style="list-style-type: none"> तटबन्धों के निर्माण में मृदा श्रोतों को बचाने हेतु तापीय संयंत्रों से निकली राख का प्रयोग (यदि तकनीकी रूप से अनुकूल एवं 100 किमी में स्थित हो) प्रयाप्त जल निकास व्यवस्था तटबन्ध दृढीकरण एवं ढलान स्थितिकरण जैसे उपाय मृदा दोहन गतों वाले स्थानों की उपरी मृदा का बचाव तथा पुनर्विकरण चिकनाई एवं तेल के रिसाव से बचाव का प्रावधान निर्माण कार्य से उत्पन्न कीचड़ का प्रयाप्त निपटान
जल विज्ञान सम्बन्धि दशाएँ	
निर्माणावधि <ul style="list-style-type: none"> तटबन्ध निर्माण से प्राकृतिक जल निकास में बाधा के कारण बाढ़ के संयोग एवं उसकी अवधि में वृद्धि 	<ul style="list-style-type: none"> रेल मार्ग के साथ-साथ प्रयाप्त नालियों का प्रावधान वर्तमान जल निकास नालियों की क्षमता में वृद्धि बाढ़ एवं जल भराव से बचाव हेतु प्रयाप्त जल निकास का प्रावधान
संचालन अवधि <ul style="list-style-type: none"> तटबन्ध निर्माण के कारण स्थानीय जल निकास पर प्रभाव 	<ul style="list-style-type: none"> वर्धित अपवाह के समायोजन हेतु रेल मार्ग के दोनों ओर प्रयाप्त क्षमता की रेल मार्ग के समान्तर नालियों का प्रावधान
वनस्पति	
निर्माणावधि <ul style="list-style-type: none"> परियोजना के लिए अधिग्रहित भूमि पर पेड़ों के कटान से वनस्पति का नुकसान निकटस्थ वृक्षादि की पत्तियों पर धूल का जमाव 	<ul style="list-style-type: none"> काटे गये पेड़ों की दुगनी संख्या में क्षतिपूरक वृक्षारोपण वन्य भूमि एवं व्यक्तिगत भूमि स्थित काटे गये वृक्षों की क्षति पूर्ति अधिग्रहित वन्य भूमि हेतु क्षति पूर्ति फूल वाली झाड़ियों एवं सदाबहार वृक्षों युक्त मिश्रित पौधारोपण प्रस्तावित रेल मार्ग के दोनों ओर उपलब्ध स्थानों पर पट्टीदार वृक्षारोपण ईंधन के लिए श्रमिकों द्वारा वृक्षों की कटाई की रोकथाम हेतु ईंधन का प्रावधान
वन भूमि परिवर्तन	
पूर्व निर्माणावधि <ul style="list-style-type: none"> प्रस्तावित रेल मार्ग के कुछ स्थानों पर आरक्षित वन क्षेत्रों से गुजरना 	<ul style="list-style-type: none"> वन भूमि के परिवर्तन एवं काटे गये वृक्षों की वन विभाग को क्षतिपूर्ति आरक्षित वन क्षेत्र में किसी क्रिया कलाप से पूर्व वन विभाग की अनापत्ति प्राप्त की जायेगी
जीव-जन्तु	
पूर्व निर्माणावधि <ul style="list-style-type: none"> महेसाणा जिले में डी.एफ.सी. रेल मार्ग (बाईपास अनुभाग) के पश्चिम में थोल वन्य जीव (पंक्षी) अभ्यारण 	<ul style="list-style-type: none"> अभ्यारण की 3 कि.मी. पश्चिमी में निर्माण कार्य विशेष सावधानी पूर्वक एवं कानून अनुसार किया जायेगा ताकि अभ्यारण में न्यूनतम विघ्न हो
निर्माणावधि <ul style="list-style-type: none"> निर्माण कार्य में प्रयुक्त यंत्रों से उत्पन्न ध्वनि द्वारा आरक्षित वनों एवं थोल वन्यजीव अभ्यारण के पक्षियों का प्रभावित होना मही, विश्वामित्री एवं वनक नदियों पर पुल निर्माण के समय मृदुकाय कछुआ एवं मुग्गर मगरमच्छ के आवास का अल्पकालिक क्षति 	<ul style="list-style-type: none"> निर्माण कार्य में प्रयुक्त उपकरण एवं वाहनों का प्रयाप्त रखरखाव एवं व्यर्थ उपयोग से बचाव, ताकि स्वीकृत मात्रा में ही ध्वनि उत्पन्न हो पुलों का निर्माण कार्य शुष्क मौसम में किया जायेगा, यदि तुल्यप्राय प्रजातियों के आवास पर प्रभाव ना पड़े तो वर्षाकाल में भी कार्य किया जा सकता है निर्माण क्षेत्र की आवश्यकता अनुसार सीमाओं पर आड़ लगाने का प्रावधान
संचालन अवधि <ul style="list-style-type: none"> बनासकांठा जिले में आरक्षित वन्य भूमि के अधिग्रहण से वन्यजीवों का आवागमन प्रभावित होना 	<ul style="list-style-type: none"> वृक्षों के कटान से नष्ट हुए वन्य जीव आवासों की क्षतिपूर्ति हेतु पौधारोपण

संभावित प्रभाव	निराकरण के उपाय
<ul style="list-style-type: none"> • जल क्षेत्रों में तेल एवं जहरीले रसायनों के रिसाव से जलीय जीवों पर प्रभाव • रेल मार्ग के आसपास वन्य जीवों के आवागमन में बाधा • वन्य जीवों की रेलगाड़ियों द्वारा दुर्घटनाग्रस्त होने की सम्भावना 	<ul style="list-style-type: none"> → तेल, ईंधन एवं जहरीले तत्वों का दुर्घटना से हुए रिसाव के समय तत्काल सफाई की व्यवस्था → वन्य क्षेत्रों के पास रेल मार्ग के नीचे से पशुओं के अवागमन की व्यवस्था का प्रावधान → दुर्घटनाओं को टालने के लिए वन्यजीवों की अधिकता वाले स्थानों पर आवश्यकतानुसार आड़ लगाने का प्रावधान
भूमि अधिग्रहण एवं पुनर्स्थापन	
पूर्व निर्माणावधि सम्पत्ति एवं जीविका की हानि	→ पर्यावरणीय प्रभावों के मुल्यांकन के अलावा पुनरोद्धार एवं पुनर्वास योजना के अर्न्तगत क्षतिपूर्ति एवं सहायता की योजना बनाई जाएगी
निर्माणावधि पैदल यात्रियों एवं वाहन के आवागमन में बाधा	→ बाईपास का प्रावधान एवं उपयुक्त जगहों पर सूचना एवं दिशा निर्देशक बोर्ड
संचालन अवधि डी.एफ.सी. के तटबन्ध निर्माण के कारण स्थानीय लोगों एवं किसानों के आवागमन में बाधा	<ul style="list-style-type: none"> → नीति एवं आवश्यकतानुसार रेल-सड़क क्रॉसिंग पर या तो रेल के निचे से (RUB) अथवा रेल के ऊपर (ROB) से सड़क का प्रावधान → वर्तमान सड़क एवं प्रस्तावित RUB/ ROB/रेल-सड़क क्रॉसिंग स्थानीय लोगों की आवश्यकताएँ पूरी करेंगे → बाईपास अनुभाग में रेलमार्ग के निचे से सड़क एवं रेल-सड़क क्रॉसिंग वर्तमान सड़क नेटवर्क के अनुसार होगा → भारतीय रेल की वर्तमान कार्यप्रणाली अनुसार RUB तथा ROB में सड़क के दोनो ओर पैदलपथ (फुटपाथ) का प्रावधान

नोट : प्रमुख प्रभाव एवं निराकरण के उपाय तालिका में दिये गये हैं। अन्य प्रभाव एवं उपाय पर्यावरण के प्रभावों का मुल्यांकन रिपोर्ट में दिए गये हैं।

पर्यावरणीय प्रबन्ध योजना

पर्यावरणीय प्रबन्ध योजना स्वच्छ एवं सुरक्षित पर्यावरण की कुंजी है। पर्यावरण प्रबन्ध योजना एवं इसके प्रयाप्त क्रियान्वयन को सुनिश्चित किए बिना सुझाए गये निराकरण के उपायों का वांछित नतीजा मिलना सम्भव नहीं है।

पर्यावरण प्रबन्ध योजना, निर्माण पूर्व अवस्था, निर्माण अवस्था एवं क्रियान्वयन अवस्था के समय परियोजना क्रियाकलापों द्वारा उत्पन्न विपरीत प्रभावों को कम करने के लिए सुझाए गये उपायों के क्रियान्वयन की योजना बताता है। पर्यावरण प्रबन्ध योजना निम्न बिन्दुओं पर आधारित होती है।

1) प्रस्तावित प्रबन्ध योजना इस प्रकार है -

- हरित पट्टी विकास योजना
- अपशिष्ट प्रबन्ध योजना
- खाईयों एवं मृदा आपूर्ति वाले क्षेत्रों के प्रबन्ध/पुनरोद्धार योजना
- श्रमिक शिविरों की स्वच्छता एवं रखरखाव की निर्देशिका
- हानिकारक रसायनों के भण्डारण, रखरखाव एवं आपातकालीन उपायों के नियम
- भू-अधिग्रहण एवं पुनर्वास

2) निम्न पर्यावरण एवं सामाजिक बिन्दुओं के लिए आवश्यकतानुसार पर्यावरण प्रबन्ध उपाय प्रस्तावित है -

- निर्माण पूर्ण अवस्था
 - भू-अधिग्रहण, वन भूमि के परिवर्तन, वृक्षों का संरक्षण, मृदा दोहन गर्तों, खाईयों का बचाव, अवाञ्छित सामग्री के निपटान के लिए एवं श्रमिक शिविरों के लिए जगह का चुनाव, अल्पकालीन रेल यार्ड की व्यवस्था, क्रियान्वयन ऐजन्सी एवं ठेकेदारों का अभिविन्यास

ख) निर्माण अवस्था

- कार्य क्षेत्र की सफाई, निर्माण सामग्री का उपार्जन, निर्माण कार्य (जल निकास, ढलान स्थापित करना आदि) जल प्रदूषण, वायु प्रदूषण, ध्वनि, श्रमिक शिविरों का प्रबन्धन, ठेकेदारों की कार्य समाप्ती

ग) क्रियान्वयन अवस्था

- विभिन्न निराकरण के उपायों के सम्पादन की समीक्षा, प्रदूषण समीक्षा

पर्यावरण प्रबोधन

पर्यावरण प्रबोधन का उद्देश्य यह सुनिश्चित करना है कि परियोजना के निर्धारित उद्देश्य एवं इच्छित परिणाम पा लिया गया है। पर्यावरण प्रबन्ध योजना के क्रियान्वयन को सुनिश्चित करने के लिए प्रभावशाली पर्यावरण प्रबोधन योजना तैयार करना जरूरी है। पर्यावरण प्रबोधन योजना दो तत्वों, कार्य सम्पादन सूचक एवं पर्यावरण प्रबोधन कार्यक्रम से मिलकर बना है।

कार्य सम्पादन सूचक

क) निर्माणपूर्व अवस्था : भूमि अधिग्रहण, निस्तारण स्थान, निर्माण शिविर, मृदा दोहन गर्त

ख) निर्माण अवस्था : वायु गुणवत्ता, ध्वनि एवं कम्पन स्तर, जल गुणवत्ता, पौधारोपण, उपरी मृदा, श्रमिक

ग) क्रियान्वयन अवस्था : पौधों के जीवित रहने का अनुपात, मृदा दोहन गर्तों का पुनरोद्धार, संवेदनशील स्थानों पर ध्वनिरोधकों की उपयोगिता

पर्यावरणीय प्रबोधन कार्यक्रम

पर्यावरणीय प्रबोधन कार्यक्रम में निम्नलिखित विषयों पर ध्यान दिया जायेगा :-

क) प्रबोधन योग्य मद

ख) प्रबोधन का स्थान

ग) प्रबोधन की अवधि एवं तीव्रता

घ) क्रियान्वयन एवं निरीक्षण की संस्थानिक जिम्मेदारी

उपरोक्त विषयों के आधार पर पर्यावरणीय प्रबोधन कार्यक्रम में निम्न मदों का प्रबोधन किया जायेगा :-

क) वायु गुणवत्ता

ख) जल गुणवत्ता

ग) ध्वनि एवं कम्पन स्तर

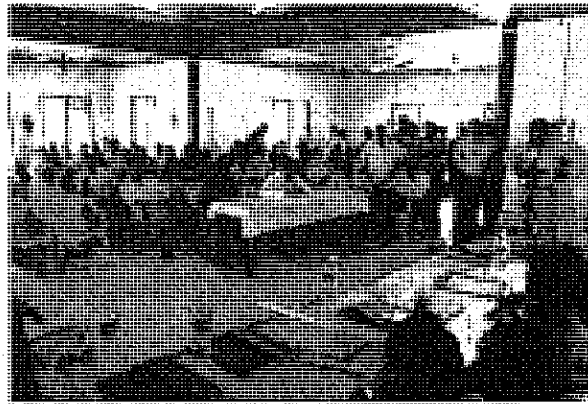
घ) भूमि कटाव

ङ) पौधारोपण

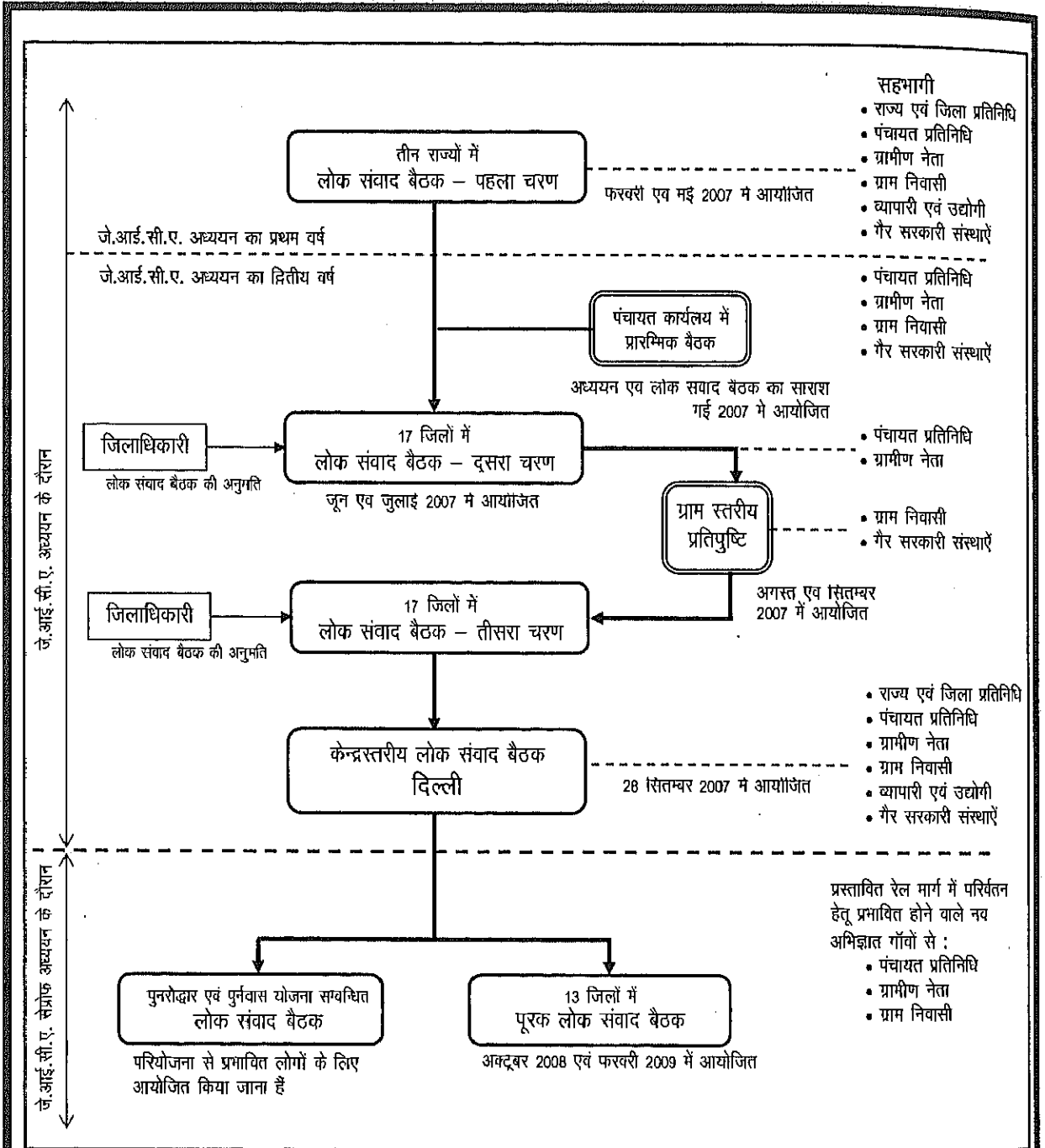
च) वनस्पति एवं जीवजन्तु

लोक संवाद बैठक

जन समुदाय तक परियोजना की जानकारी पहुँचाने एवं उनके विचार जानने के लिए जे.आइ.सी.ए. की आर्थिक सहायता से किए गये पर्यावरण एवं सामाजिक प्रभावों एवं उपायों के अध्ययन के समय लोक संवाद बैठक का आयोजन किया गया था। इसके अलावा जे.आइ.सी.ए. की आर्थिक सहायता से किए गये सेप्रोफ अध्ययन के समय डी.एफ.सी. रेलमार्ग में परिवर्तन के कारण नये प्रभावित गाँवों को ध्यान में रखते हुए जिलानुसार लोक संवाद बैठकों का आयोजन किया गया था। इन लोक संवाद बैठकों से विभिन्न सुझाव प्राप्त हुए जिन्हें परियोजना प्रारूप में सम्मिलित किया गया है जैसे वाहनों, किसानों एवं स्थानीय लोगों के आवागमन हेतु तटबन्ध अनुभाग में पुलिया का प्रावधान। दूसरी तरफ पुनरोद्धार एवं पुर्नवास योजना का प्रकटीकरण एवं परियोजना प्रभावित लोगों के भू-अधिग्रहण एवं पुर्नवास सम्बन्धित विचार जानने के लिए अलग से लोक संवाद बैठक का आयोजन किया जायेगा।



लोक संवाद बैठक



आगला कार्यक्रम

- ड्राफ्ट पर्यावरणीय प्रभावों का मुल्यांकन रिपोर्ट में जन समुदाय के विचारों को सम्मिलित कर अन्तिम रूप देना।
- रेल मंत्रालय द्वारा स्वीकृत होने के पश्चात अन्तिम पर्यावरण रिपोर्ट को जनसाधारण के लिए उपलब्ध करना।
- पूर्ण पर्यावरण रिपोर्ट जन साधारण की समीक्षा के लिए उन स्थानों पर उपलब्ध होगी जहाँ पर ड्राफ्ट रिपोर्ट उपलब्ध कराई गयी थी। रिपोर्ट सम्बन्धित डी.एफ.सी.सी.आई.एल. के मुख्य परियोजना प्रबन्धक, प्रस्तावित डी एफ सी रेल मार्ग के साथ प्रमुख रेल स्टेशन एवं सम्बन्धित जिला कार्यलय में मई 2009 में उपलब्ध होगी। अन्तिम रिपोर्ट का सारांश सभी परियोजना प्रभावित गाँवों में उपलब्ध होगा।

विचारों एवं सुझावों का स्वागत

कृपया डी.एफ.सी. परियोजना सम्बन्धित पर्यावरणीय एवं सामाजिक विषयों पर अपने सुझाव एवं विचार अपने नाम पते एवं फोन नम्बर (यदि है तो) सहित लिखित में, व्यक्तिगत रूप में, डाक या फेक्स द्वारा सम्बन्धित प्रमुख परियोजना अधिकारी कार्यालय पर भेजें। आप अपने विचार ई मेल (dfc.wc.eia@gmail.com) द्वारा भी भेज सकते हैं। ड्राफ्ट पर्यावरणीय प्रभावों का मुल्यांकन रिपोर्ट डी.एफ.सी.सी.आई.एल. के सम्बन्धित प्रमुख परियोजना अधिकारी कार्यालय, रेलमार्ग के समीप प्रमुख स्टेशनों एवं जिला कार्यालय में उपलब्ध है।

कृपया अपने विचार एवं टिप्पणीयाँ 15 अप्रैल 2009 से पहले भेजें

मुख्य परियोजना प्रबन्धक (डी.एफ.सी.सी.आई.एल.) कार्यालय का पता

- मुख्य परियोजना प्रबन्धक कार्यालय – जयपुर
बी 12, हनुमान नगर, मेट्रो हॉस्पिटल के सामने, सिरसी रोड़, जयपुर,
दूरभाष : 0141-4028741 फैक्स : 0141-4028740
- मुख्य परियोजना प्रबन्धक कार्यालय – अजमेर
माल रोड़, डी आर एम कार्यालय के सामने, अजमेर-305001
दूरभाष : 0145-2625548 फैक्स-0145-2625548
- मुख्य परियोजना प्रबन्धक कार्यालय – अहमदाबाद
पुरानी डी आर एम भवन, पहली मंजिल
अहमदाबाद रेल्वे स्टेशन, अहमदाबाद -380002
दूरभाष : 079-22175107
- मुख्य परियोजना प्रबन्धक कार्यालय – वडोदरा
13-14, 17-18, पैनोरामा कॉम्प्लेक्स, तीसरी मंजिल
आर सी दत्त रोड़, अल्कापूरी वडोदरा -7
दूरभाष : 0265-2326024, फैक्स-0265-2326027

प्रमुख स्टेशन जहाँ पर ड्राफ्ट रिपोर्ट उपलब्ध हैं

- गुजरात
पालनपुर (जंक्शन), सिद्धपुर, ऊंजा, महेसाणा (जंक्शन), साबरमती (जंक्शन), अहमदाबाद (जंक्शन), नडियाद (जंक्शन), आन्नद (जंक्शन), वासाड (जंक्शन) एवं वडोदरा (जंक्शन)
- राजस्थान
अलवर (जंक्शन), कुण्ड, नीम का थाना, श्री माधोपुरा, रिगस (जंक्शन), जयपुर (जंक्शन), फुलेरा (जंक्शन), किशनगढ़, अजमेर (जंक्शन), ब्यावर, सोजत रोड़, मारवाड़ (जंक्शन), फालना, सिरोही रोड़ एवं आबू रोड़
- हरियाणा
रेवाड़ी (जंक्शन), नारनौल एवं डाबला (जंक्शन)

॥ परियोजना में आपके सहयोग के लिए धन्यवाद ॥



ડી.એફ.સી.સી.આઈ.એલ. કોર્પોરેશન

રેલ મંત્રાલય
ડી.એફ.સી.સી.આઈ.એલ.

વડોદરા અને રેવાડી વચ્ચે સમર્પિત માલભાડા કોરિડોર પરિયોજનાનાં પશ્ચિમી કોરિડોર (વિભાગ)

પર્યાવરણિય અસરોના મુલ્યાંકનોનો સંક્ષેપ

માર્ચ ૨૦૦૮



ભારતમાં વડોદરાથી રેવાડી વચ્ચે સમર્પિત માલભાડા કોરિડોર (ડી.એફ.સી.) પરિયોજનાએ પશ્ચિમી વિભાગની પર્યાવરણિય તેમજ સામાજિક અસરોનો વિભાગ છે. આ વિભાગની પરિયોજનાનાં સુચનોને જન-સમુદાય સુધી પહોંચાડવામાં આવશે. જેના માટે રેલવે મંત્રાલય દ્વારા અધિકારી મંત્રાલય તેમજ ડી.એફ.સી.સી.આઈ.એલ. કાર્યકારી સંસ્થા છે. અમે આ પરિયોજના માટે પર્યાવરણિય તેમજ સામાજિક વિષયો બાબત તમારા મંતવ્યોને આવકારીએ છીએ. તમારા મંતવ્યો તેમજ વિચારો ડી.એફ.સી. પરિયોજનાની પર્યાવરણિય અસરોના મુલ્યાંકનોનાં રિપોર્ટને પુર્ણ કરવામાં ઉપયોગી સ્થિત થશે.

પરિયોજના ની વિશેષતાઓ

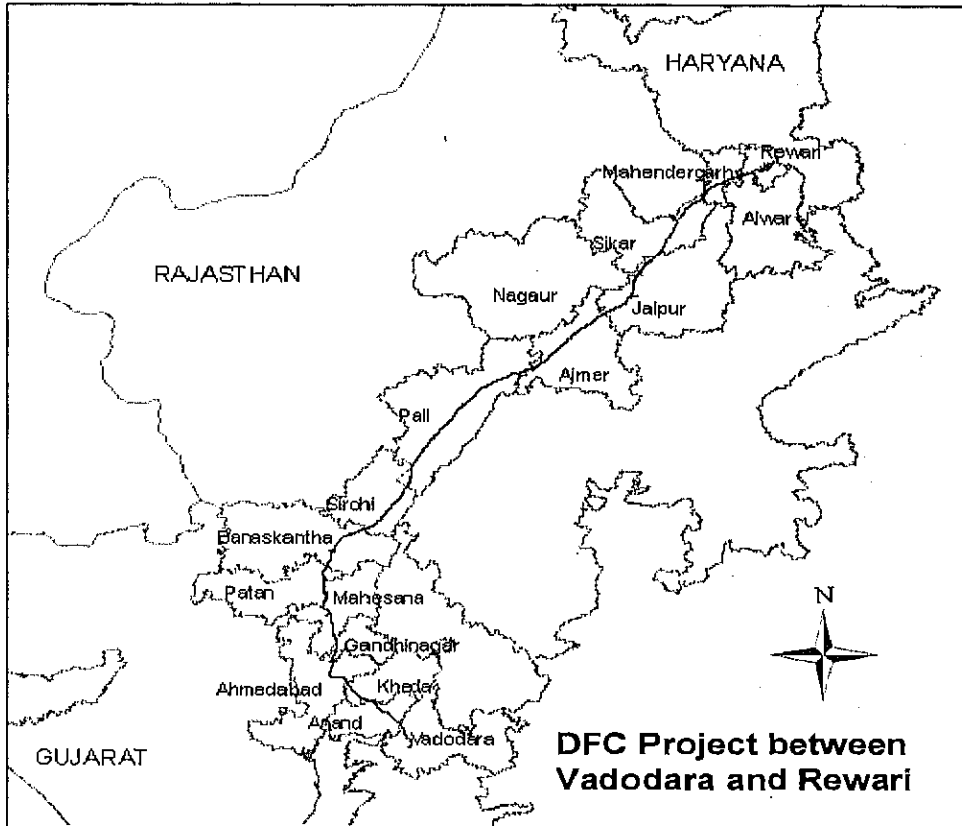
રેલ્વે મંત્રાલય દિલ્હી અને મુંબઈ મહાનગર સુધી તેમજ આસ-પાસના સ્થાનો પરથી માલ-સામાનની ઝડપી હેરફેર હેતુથી કમ્પ્યુટર સંચાલિત સમર્પિત માલવાહક પરિયોજનાનું આયોજન કરી રહેલ છે. જેના કારણે માલ-સામાનને યોગ્ય સ્થાને ઝડપી અને ઓછા ખર્ચમાં પહોંચાડી શકાય.

ડી.એફ.સી. પરિયોજનાનો મુખ્ય ઉદ્દેશ્ય ભારતના વર્તમાન વિકાસ દરને બળ પૂરુ પાડવાનો છે. વર્ષ:2013-2014 સુધી આ યોજના દ્વારા 37.7 મિલિયન ટન માલ-સામાનની હેરફેર થશે. આ યોજનાનાં નિર્માણથી આર્થિક ઉન્નતિ અને રોજગારની નવી તકો ઊભી થશે. સાથે-સાથે રાષ્ટ્રના આંતરીક પ્રાંતો વચ્ચે આર્થિક વિનિમય ઉપરાંત મુખ્ય વ્યાપાર કેન્દ્રોમાં પરસ્પર સુધારો થશે.

ભારત સરકારના રેલ્વે મંત્રાલય તરફથી ડી.એફ.સી.સી.આઈ.એલ. આ પરિયોજનાની વિકાસશીલ અને કાર્યક્ષમ સંસ્થા છે. ડી.એફ.સી. પરિયોજનાનાં 'પશ્ચિમ કોરિડોરમાં' વડોદરાથી રેવાડીનામધ્ય ભાગમાં હરિયાણા, રાજસ્થાન તેમજ ગુજરાત રાજ્યના 17 જિલ્લાઓના 470 ગામડાંઓમાંથી પસાર થાય છે. જેની લંબાઈ લગભગ 920 કી.મી. છે.

પરિયોજના અત્યારે આયોજનના તબક્કે છે, આ પરિયોજના લગભગ 2009 ના મધ્યભાગમા વિસ્તૃત રૂપાંતર પામશે. પરિયોજના નું નિર્માણ કાર્ય વર્ષ 2011 થી શરુ થઈ 4 થી 5 વર્ષ માં પુરું કરવાનું લક્ષ્ય છે.

રાજ્ય/ જિલ્લા
ગુજરાત
વડોદરા
ખેડા
અમદાવાદ
ગાંધીનગર
મહેસાણા
પાટણ
બનાસકાંઠા
રાજસ્થાન
સિરોહી
પાલી
અજમેર
જયપુર
સીકર
અલવર
હરિયાણા
મહેન્દ્રગઢ
રેવાડી



પ્રસ્તાવિત ડી.એફ.સી. રેલ્વે માર્ગ અને સંલગ્ન સુવિધાઓ

સમર્પિત માલવાહક કોરિડોર પરિયોજનાનાં પશ્ચિમી વિભાગ વડોદરા, અમદાવાદ, પાલનપુર, રેવાડી દ્વિમાર્ગીય રેલ્વેમાર્ગ છે. આ પ્રસ્તાવિત માર્ગ ગુજરાત, રાજસ્થાન અને હરિયાણા રાજ્યથી પસાર થાય છે. પરિયોજનાનો મુખ્ય માર્ગ ભારતીય રેલ વિભાગની જમીન પર વર્તમાન રેલ માર્ગની સમાંતર આયોજન કરી રહેલ છે. જોકે કોઈ સ્થાનો પર વર્તમાન રેલ્વે લાઈનની સમાંતર પર્યાપ્ત જમીન ઉપલબ્ધ ન હોવાને કારણે તેમજ મોટા ભાગની વસાહતોને બચાવવા હેતુ બાઈપાસ આપવામા આવ્યો છે, બાઈપાસ આપતી વખતે જીવઅભ્યારણીય, શહેરી યોજનાક્ષેત્ર, માર્બલ ઉદ્યોગ, આબાદી ક્ષેત્રો, વગેરેને ધ્યાનમાં રાખવામાં આવ્યા છે. જેથી પર્યાવરણ તેમજ સમાજનાં અર્થતંત્ર પર થનારી અસરોને બને તેટલી ઓછી કરી શકાય.

પરિયોજના માટે પર્યાવરણ અને સામાજિક અધ્યયન

ભારત. સરકારના પર્યાવરણિય અસરોના અભ્યાસ પર્યાવરણિય અસરોનો અભ્યાસ કરવાની આવશ્યકતા નથી. તેમ છતાં ડી.એફ.સી.એ ઘણી મોટી પરિયોજના છે, જે વિપરીત પર્યાવરણિય તેમજ સામાજિક અસરોને ધ્યાનમાં રાખીને યોજના નાં કાર્ય સમયમાં પર્યાવરણિય તેમજ સામાજિક મુદ્દાઓ ઉપર વિસ્તૃત અભ્યાસ કરવામાં આવ્યો છે.

આસંદર્ભ માં રેલ્વે મંત્રાલય, ડી.એફ.સી.સી.આઈ.એલ. એ જાપાન ઈન્ટરનેશનલ કોર્પોરેશન એવન્સી(જે.આઈ.સી.એ.)ના ટેકનીકલ સહયોગથી ડી.એફ.સી. પરિયોજનાનાં પશ્ચિમી કોરિડોરના પર્યાવરણિય અસરો(ઈ,આઈ,એ)નો ડ્રાફ્ટ રિપોર્ટ તૈયાર કરી દેવામાં આવ્યો છે, જ્યારે જે.આઈ.સી.એ. (JICA) અધ્યયન રિપોર્ટ 2007 (ESIMMS¹) તેમજ જે.આઈ.સી.એ.-સેપ્રોફ (SAPROF³) અધ્યયન રિપોર્ટ 2008/2009 (S-ESIMMS²) નું



વૃક્ષોનો સર્વે

પ્રસ્તાવીત રેલ્વેમાર્ગની પાસેના સંરક્ષિત વિસ્તારો તેમજ મુખ્ય નદીઓના પ્રત્યેક મોસમ માં મળેલ આંકડાઓના સંકલન તથા વિસ્તૃત વિશ્લેષણ, સ્થાનાન્તરીત કરવામાં આવનાર ઢાંચાઓનું સર્વેક્ષણ, તેમજ સામાજિક આર્થિક સર્વેક્ષણ, એનાથી વધારે જે.આઈ.સી.એ.(JICA) ના અભ્યાસ પછી સ્થાનાન્તરીત થયેલ રેલ્વે માર્ગથી નવા અસર પામનાર ક્ષેત્રોનાં પૂરક સર્વેક્ષણ વગેરે વિષયો સામિલ છે.

¹ ESIMMS જે.આઈ.સી.એ. ની 'પર્યાવરણ તેમજ સામાજિક નિયમો 2004 માર્ગદર્શિકા' અનુસાર બનાવવા માં આવેલ પર્યાવરણિય તેમજ સામાજિક અસરોનો મુલ્યાંકન રિપોર્ટ.

² S-ESIMMS જે.આઈ.સી.એ. ની 'પર્યાવરણિય તેમજ સામાજિક નિયમો' 2004 માર્ગદર્શિકા' અનુસાર બનાવવાં માં આવેલ પર્યાવરણિય તેમજ સામાજિક અસરોનાં મુલ્યાંકન રિપોર્ટની પહેલાનો રિપોર્ટ

³ SAPAROF સ્પેશલ આસિસ્ટેન્સ ફોર પ્રોજેક્ટ ફોરમેશન

પર્યાવરણિય અસરોનાં મુલ્યાંકન રિપોર્ટ

ESIMMS	વર્ષ 2007 માં જે.આઈ.સી.એ. ના માર્ગદર્શન દ્વારા બનાવવામાં આવેલ રિપોર્ટ
S-ESIMMS	વર્ષ 2008/09 માં જે.આઈ.સી.એ. ના સેપ્રોફ અધ્યયન દ્વારા બનાવવામાં આવેલ રિપોર્ટ

સમ્મલિત રૂપ છે. પર્યાવરણિય અસરોનાં મુલ્યાંકન(ઈ.આઈ.એ)નાં ડ્રાફ્ટ રિપોર્ટને ત્રણ પ્રદેશોના ESIMMS રિપોર્ટ તેમજ S-ESIMMS તે રિપોર્ટનું સમલિત રૂપ છે, જે પરિયોજનાથી અસર પામનાર ક્ષેત્રોનું વર્ણન કરે છે.

બંને ESIMMS તેમજ S-ESIMMS રિપોર્ટ પરિયોજનાથી થનારી અસરો, પરિયોજના ક્ષેત્રની સામાજિક તેમજ ભૌતિક અવસ્થાઓ, પ્રદૂષણનિયંત્રણ તેમજ સામાજિક વિષયો પર આધારિત છે. S-ESIMMS રિપોર્ટના અભ્યાસ કરવામાં આવેલ મુખ્ય વિષયોમાં રેલ્વે દ્વારા ઉત્પન્ન ધ્વનિ અને કમ્પનનાં પહેલાના અનુમાન તથા સંવેદનશીલ અભિગ્રાહકો પર ધ્વનિ તેમજ કમ્પનની અસર, જમીન ઉપયોગી સર્વેક્ષણ,



રેલ્વે દ્વારા ઉત્પન્ન ધ્વનિ તેમજ કમ્પનનું સર્વેક્ષણ

સંભવિત અસરો તેમજ નિરાકરણના ઉપાયો

સર્વક્ષણમાં અનેક પર્યાવરણિય તથા સામાજિક અસરો વિશે જાણવા મળેલ છે, પરિક્ષણથી જાણવા મળેલ પર્યાવરણિય અસરોને ઓછી કરવાના સુઝાવો મળ્યા છે, જેનો નીચે ઉલ્લેખ કરવામાં આવ્યો છે.

અસરો તેમજ તેના નિરાકરણ માટેની સૂચિ:

સંભવિત અસરો	નિરાકરણના ઉપાયો
વાયુની ગુણવત્તા	
નિર્માણ સમયે <ul style="list-style-type: none"> નિર્માણ કરતી વખતે બાંધકામના સમય દરમિયાન વાહનો તથા મશિનરીઓની ફેરફારોને કારણે ધુળના સુક્ષ્મકણો દ્વારા વાયુ પ્રદૂષણ 	<ul style="list-style-type: none"> નિર્માણ કાર્યમાં ઉપયોગમાં આવનાર માલ-સામાનને ગોડાઉનમાં તેમજ ઢાંકીને રાખવાની વ્યવસ્થા ભરેલા વાહનોથી માટી તથા પથ્થર છલકે નહીં તેની કાળાજી નિર્માણ વિસ્તારમાં કાચા રસ્તાઓ તેમજ અન્ય સ્થાનો પર ધુળને ઊડતી રોકવા માટે પાણીનો છંટકાવ કરાવવાની વ્યવસ્થા ઓછો ધૂમાડો ઉત્પન્ન કરે તેવા સાધનો તેમજ વાહનોનો ઉપયોગ
ધ્વનિ અને કમ્પન માત્રા	
નિર્માણ સમયે <ul style="list-style-type: none"> નિર્માણ કાર્ય સમયે ઉપયોગમાં આવનાર કલકા તેમજ ભારી વાહનો દ્વારા ધ્વનિ તેમજ કમ્પન 	<ul style="list-style-type: none"> ઓછો અવાજ ઉત્પન્ન કરે તેવા ઉપકરણોનો પ્રયોગ નિર્માણ કાર્યમાં સ્થાયી રહેનાર ઉપકરણોને રહેણાંક વિસ્તાર તેમજ સ્કૂલ, પ્રાથમિક આરોગ્ય કેન્દ્રો જેવા સ્થાનોથી ૨૦૦મી. દૂર સ્થાપિત કરવા જોઈએ રહેણાંકવાળી જગ્યાએ કામ-કાજ ફક્ત દિવસે જ થવું જોઈએ. ખુબ અવાજ ઉત્પન્ન થતો હોય તેવા કામના સ્થાનો પર કામ કરનાર વ્યક્તિઓને અવાજથી બચાવ કરે તેવા ઉપકરણોની વ્યવસ્થા કરાવવી
સંચાલન સમયે <ul style="list-style-type: none"> રેલગાડી તેમજ અન્ય વાહનોના આવાગમનથી ઉત્પન્ન થતો અવાજ અને કમ્પન 	<ul style="list-style-type: none"> ઓછો અવાજ તથા કમ્પન ઉત્પન્ન કરે તેવી ટેકનોલોજીનો ઉપયોગ લાંબી તેમજ જોઈન્ટ પટ્ટરીનો પ્રયોગ કરવો રેલવેગાડી, પટ્ટરી, તેમજ મકાનોની સમય-સમય પર દેખરેખ શહેરી વિસ્તારમાં માલગાડીની નીચંત્રિત ગતિ રેલવેપટ્ટરીની આજુ-બાજુ સ્થિત મકાનો તેમજ સંવેદનશીલ જગ્યાઓ પર જરૂરીયાત અનુસાર ધ્વનિ રોધક દિવાલોનું નિર્માણ કરવું
પાણીની ગુણવત્તા	
નિર્માણ સમયે <ul style="list-style-type: none"> નિર્માણ સમય દરમિયાન ધૂળ તથા ગંદકીથી દૂષિત પાણી. કામગારોના રહેઠાણથી ઉત્પન્ન દૂષિત પાણી તેમજ નિર્માણના વિસ્તારથી ઉત્પન્ન કીચડ વગેરે 	<ul style="list-style-type: none"> પાણીવાળા ક્ષેત્રોથી કીચડ ન ફેલાય તેવી આડનું નિર્માણ ઉપયોગ થયેલ પાણીને અલગ કરી તેમજ ગુણવત્તા નિયંત્રણ કર્યા પછી તેના નિકાસની વ્યવસ્થા દૂષિત પાણીથી થનાર સ્વાસ્થ્ય સમસ્યાઓને રોકવા માટે સ્વાસ્થ્ય સુવિધાઓની પ્રાથમિકતા.
સંચાલન સમયે <ul style="list-style-type: none"> રેલવે ગોડાઉન, રેલ ગાડીઓની ધોવાણથી તેમજ કારખાનાઓની સાફ-સફાય દ્વારા ઉત્પન્ન દૂષિત પાણી 	<ul style="list-style-type: none"> જળ સંશોધન ચંત્રો દ્વારા પાણીમાં દૂષિત રહેલ દૂષિત પદાર્થો, તૈલીય, ચિકણાય, કાર્બનીક પદાર્થ તેમજ ઝેરીલા તત્વોને દૂર કરી પાણી ઉપયોગમાં આવે તેવા ઉપાય કરવા જોઈએ
સ્થળ આકૃતિ તેમજ ભુગર્ભ વિજ્ઞાન	
નિર્માણ સમયે <ul style="list-style-type: none"> વૃક્ષો કાપવા, જમીન સાફ કરવી, માટી લેવાની જગ્યાએ થતા ખોદકામ જેવા કામોને 	<ul style="list-style-type: none"> સ્થળ આકૃતિઓને વિકૃત થતી બચાવવા માટે વર્તમાન ખાઈઓ તેમજ ખાડાઓનો ઉપયોગ કરવો

સંબંધિત અસરો	નિરાકરણના ઉપાયો
<p>લીધે, બાંધકામના કારણે થતા ભુમિગત ભૌગોલિક ફેર-ફાર.</p> <ul style="list-style-type: none"> • ઊંડા ખોદકામથી સ્થળોમાં થતા વિકૃત ફેર-ફાર. 	<ul style="list-style-type: none"> • અનિયંત્રિત ખોદકામ ન કરવું કારણ કે પછી ખોદાયેલ ખાડાઓ તેમજ ખાઈઓમાં પાણી ભરાય ન રહે તેમજ રોગ ફેલાવનારા જીવ જંતુઓનું જન્મ સ્થળ બની ન રહે. • બાંધકામ માટે ફક્ત સ્વિકૃતી તેમજ અનુમતી મળેલ ખાઈઓથી જ ખોદકામ કરવું.
જમીન(માટી)	
<p>નિર્માણ સમય</p> <ul style="list-style-type: none"> • બાય-પાસ વિભાગ ખેતીની ફળદ્રુપ જમીનમાંથી પસાર થશે. જેના કારણે જમીનની ઉપરી ફળદ્રુપતાનો નાશ થવો સંભવ છે • ખોદકામના કારણે ઉપરની જમીનનું ધોવણ થશે તેમજ વનસ્પતિનો નાશ • માટીની ગુણવત્તાની ચકાસણી 	<ul style="list-style-type: none"> • એમ્બેકમેન્ટના નિર્માણમાં માટીના સ્ત્રોતને બચાવવા માટે સ્થાપિત ચંત્રોથી નીકળેલ રાખનો પ્રયોગ કરવો (ચંત્રો ૧૦૦ કિ.મી.માં સ્થાપિત હોય તો) • પાણીના નિકાલ, એમ્બેકમેન્ટની મજબુતાઈ તેમજ ઢોળાવના સ્થિતિકરણ જેવા ઉપાયો • માટી ખોદાયેલ સ્થાનોપર ઉપરના સ્તરની માટીને બચાવવા નવીનીકરણ કરવું • ચિકણાય તેમજ તેલના બગાડથી બચાવ • નિર્માણ કામથી ઉત્પન્ન થતી કીચડ નો નિકાલ
જળ વિજ્ઞાન સંબંધિત બાબત	
<p>નિર્માણ સમય</p> <ul style="list-style-type: none"> • એમ્બેકમેન્ટના નિર્માણથી પાણી નીકાસના કુદરતી માર્ગમાં અવરોધ પેદા થશે, જેના કારણે પૂર તેમજ પૂરના પાણીમાં વધારો થશે 	<ul style="list-style-type: none"> • રેલ્વે માર્ગની સાથે-સાથે જરૂરીયાત મુજબ નાળાઓનું નિર્માણ • વર્તમાન નાળાઓની સંખ્યામાં વધારો કરવો તેમજ તેની ક્ષમતામાં વધારો કરવો • પૂર તેમજ પાણીનાં ભરાવાથી બચવા માટે તેમજ વ્યર્થ પાણીના નિકાસ માટેના ઉપચારો
<p>સંચાલન સમય</p> <ul style="list-style-type: none"> • રેલ્વે માર્ગના એમ્બેકમેન્ટ નિર્માણથી સ્થાનિક જળ નિકાસ પર અસર. 	<ul style="list-style-type: none"> • વરસાદ તેમજ વ્યર્થ વહી જતા પાણીના નિકાલ માટે રેલ્વે માર્ગની બન્ને બાજુ ક્ષમતાવાળી નાળીઓનું આયોજન
વનસ્પતિ	
<p>નિર્માણ સમય</p> <ul style="list-style-type: none"> • પરિયોજના માટે સંપાદિત ભૂમિપર વૃક્ષોની કાપણીથી વનસ્પતિનો નાશ. 	<ul style="list-style-type: none"> • કપાયેલ વૃક્ષોની ડબલ સંખ્યામાં ખામીમુક્ત વૃક્ષા રોપણ થવું જોઈએ • વન્ય ભૂમિ તેમજ વ્યક્તિગત ભૂમિ પરથી કપાયેલ વૃક્ષો તેમજ વન્ય ભૂમિની ક્ષતી(નુકસાની)પૂર્ણ કરવી જોઈએ. • ફૂલોવાળી ઝાડીઓ તેમજ સદાબહાર વૃક્ષો ચુકત મિશ્રિત વૃક્ષારોપણ થવું જોઈએ
<ul style="list-style-type: none"> • પરિયોજનાની આસ-પાસના વૃક્ષોની ડાળીઓ તેમજ પાંદડા પર ધૂળની જમાવટ 	<ul style="list-style-type: none"> • રેલ્વે પટ્ટરીની બન્ને બાજુ રહેલ જગ્યા પર પટ્ટીદાર વૃક્ષારોપણ કરવું • બળતણ માટે કામદારો દ્વારા વૃક્ષોની કાપણી પર રોકથામ માટે તેઓને બળતણ પુરું પાડવું
વનભૂમિ નું પરિવર્તન	
<p>નિર્માણ સમય પહેલા</p> <ul style="list-style-type: none"> • રેલ્વે માર્ગ ઘણા બધાં અભ્યારણ્ય (રિઝર્વોયરેસ્ટ) માંથી પસાર થાય છે 	<ul style="list-style-type: none"> • વન ભૂમિમાં પરિવર્તન તેમજ કપાયેલ વૃક્ષોની ક્ષતિપૂર્તિ વનવિભાગને કરવી • અભ્યારણ્ય ક્ષેત્રમાં કોઈપણ કાર્ય કરતા પહેલાં વનવિભાગની મંજૂરી પ્રાપ્ત કરવી

સંબંધિત અસરો	નિરાકરણના ઉપાયો
જીવ-જંતુ	
નિર્માણ સમય પહેલા <ul style="list-style-type: none"> ડી.એફ.સી. રેલ્વે માર્ગ (બાઈ-પાસ વિભાગ) માં મહેસાણા જિલ્લાનાં પશ્ચિમમાં થોલનું વન્યજીવ(પક્ષી) અભ્યારણ 	<ul style="list-style-type: none"> અભ્યારણ ની ૩ કિ.મી.પરિઘમા કોઈ નિર્માણ કાર્ય સાવધાનીપૂર્વક તેમજ નિયમાનુસાર કરવામા આવે જેનાથી અભ્યારણમા નુકસાન ઓછુ થાય
નિર્માણ સમયે <ul style="list-style-type: none"> નિર્માણ કાર્યમાં ઉપયોગી મશીનો દ્વારા ઉત્પન્ન ધ્વનિ દ્વારા રિઝર્વ તેમજ થોલ વન્યજીવીય અભ્યારણ નાં પક્ષીઓ પર થનાર અસર મહી, વિશ્વામિત્રી, તેમજ વાત્રક નદીઓ પર પુલોના નિર્માણ સમયે મોટીકાયબ તેમજ પ્રગરમચ્છનાં રહેણાંક સ્થાનો થોડા સમય માટે નાશ પામશે. 	<ul style="list-style-type: none"> નિર્માણ કાર્યમા ઉપયોગી ઉપકરણો ઉપરાંત વાહનોની ચોકકસ દેખભાળ તેમજ ખોટા ઉપયોગથી બચાવ,જેથી સ્વિકૃતિ મુજબ ધ્વનિ ઉત્પન્ન થાય પુલાનું નિર્માણ કાર્ય શુષ્કમોસમમાં કરવામાં આવે, (પરંતુ જો કાર્યની ગુણવત્તામા કોઈ અસર ન પડે તો મોનસૂનમા પણ કામ કરી શકાય) કામ-કાજના ક્ષેત્રમાં આવશ્યકતા અનુસાર આડ બનાવવામાં આવે
સંચાલન સમયે <ul style="list-style-type: none"> બનાસકાંઠા જિલ્લાના વન્યજીવ અભ્યારણ વિસ્તારની જમીન લેવાથી વન્યજીવોના આવાગમન પર થનારી અસર પાણીવાળા ક્ષેત્રોં મા તેલીચ તેમજ ઝેરીલા રસાયણોનાં બહાવથી જલીય જીવ-જંતુ પર અસર વન્ય જીવોને રેલ્વેની બીજ બાજુ જતા રોકવા નું આયોજન વન્ય જીવોની રેલ્વેગાડીઓ દ્વારા દુર્ઘટના થવી 	<ul style="list-style-type: none"> વૃક્ષોની કાપણીથી નષ્ટ થયેલ વન્ય જીવોના આવાસોની ક્ષતી પૂર્ણ કરવા માટે વૃક્ષારોપણ કરવું તેલ, ઈંધણ તેમજ ઝેરીલા તત્વોના રિસાવ સમયે તાત્કાલિક સફાઈની વ્યવસ્થા કરવી જંગલ વિસ્તારમાં રેલ્વે માર્ગ નીચેથી પશુઓની આવાગમન માટેની વ્યવસ્થા દુર્ઘટના રોકવા માટે વન્ય જીવોની વધુ માત્રાવાળા વિસ્તારોમાં આવશ્યકતા મુજબ વાડ કરવી
જમીન સંપાદન તેમજ પુનઃ સ્થાપન	
નિર્માણ સમય પહેલા <ul style="list-style-type: none"> સંપતિ તેમજ જીવન વ્યવહારની હાની 	<ul style="list-style-type: none"> પર્યાવરણીય અસરો ના મુલ્યાંકન પછી પુનરોદ્ધાર તેમજ પુનઃવસન યોજના દ્વારા ક્ષતીપૂર્તિ તેમજ સહાયતાનુ આયોજન
નિર્માણ સમયે <ul style="list-style-type: none"> પગપાળા મુસાફરો તેમજ વાહનો ની અવરજવર માં મુશ્કેલી 	<ul style="list-style-type: none"> બાઈપાસ વિસ્તારમાં સુચનો તેમજ નિર્દેશ બોર્ડ લગાવવામાં આવે
સંચાલન સમયે <ul style="list-style-type: none"> ડી.એફ.સી. એમ્બેકમેન્ટના નિર્માણથી સ્થાનીય લોકો તેમજ કિસાનો ની અવરજવર માં મુશ્કેલી 	<ul style="list-style-type: none"> નિયમ તેમજ આવશ્યકતા મુજબ દરેક રેલ્વે/ રસ્તા કોસિંગ પર ચાતો રેલ્વેની નીચેથી (RUB) અથવા રેલ્વેની ઉપર(ROB) થી રસ્તાનું આયોજન હાલમા સ્થિત રસ્તા તેમજ RUB/ROB/ રેલ્વે-રસ્તા કોસિંગનું નવિનીકરણ બાઈપાસ વિભાગમાં રેલ્વે નીચેથી તેમજ રેલ્વે-રસ્તા કોસિંગ પ્લાનિંગ મુજબ હોવા જોઈએ ભારતીય રેલ્વેની વર્તમાન કાર્ય પ્રણાલી અનુસાર બાઈપાસ વિભાગમા પ્રત્યેક RUB તથા ROB માં બન્ને તરફ રસ્તાની બાજુમાં ફૂટપાથ નું આયોજન

નોંધ- મુખ્ય અસરો તેમજ નિવારવાના ઉપાયો ઉપરોક્ત સૂચીમા બતાવવામાં આવ્યા છે. અન્ય અસરો તેમજ ઉપયો પર્યાવરણનાં અસરો ના મુલ્યાંકનના રિપોર્ટમાં આપવામાં આવ્યા છે.

પર્યાવરણીય પ્રબંધ યોજના

પર્યાવરણીય પ્રબંધ યોજના સ્વચ્છ તેમજ સુરક્ષીત પર્યાવરણની ચાવી છે. પર્યાવરણીય પ્રબંધ યોજના તેમજ તેના કાર્યને સુનિશ્ચિત કર્યા વગર નિરાકરણના વાંચિત કારણો મળવા સંભવ નથી.

પર્યાવરણ પ્રબંધ યોજના, નિર્માણ પહેલાની સ્થિતિ, નિર્માણ સમયની સ્થિતિ, તેમજ કામની સ્થિતિના સમયે પરિયોજનાનાં ક્રિયા કાર્યો દ્વારા ઉત્પન્ન થયેલ વિપરીત અસરોને ઓછી કરવા માટે બતાવવામા આવેલ ઉપાયોને કાર્ય કાળની યોજના બતાવવામા આવે છે. પર્યાવરણીય પ્રબંધ યોજના નીચેનાં બિંદુઓ પર આધારિત છે.

૧) પ્રસ્તાવિત પ્રબંધ યોજના આ મુજબ છે.

ક) હરિતપટ્ટી વિકાસ યોજના

ખ) અવશિષ્ટ પ્રબંધ યોજના

ગ) ખાઈઓ તેમજ માટીની અપૂર્તિવાળા વિસ્તારોનો પ્રબંધ/ પુનરોદ્ધાર યોજના

ઘ) કામદાર શિબિરોની સ્વચ્છતા તેમજ રખ-રખાવ માટે નિર્દેશનો

ચ) ક્ષાનીકારક રસાયણોના ભંડારોના રખ-રખાવ માટે નિર્દેશ તેમજ સંકટ સમયના ઉપાયોના નિયમો.

છ) જમીન સંપાદન તેમજ પુનઃવાસ

૨) નિમ્ન પર્યાવરણ તેમજ સામાજિક બિંદુઓ માટે આવશ્યકતા અનુસાર પર્યાવરણ પ્રબંધ ઉપાય પ્રસ્તાવિત છે.

ક) નિર્માણ પહેલાની સ્થિતિ.

- જમીન સંપાદન, વન ભૂમિના પરિવર્તન, વૃક્ષોનું સંરક્ષણ, જમિનની ખોદાઈ, ખાઈઓનો બચાવ, ત્યાગી દિધેલ સામગ્રીના નિકાલ તેમજ કામદાર શિબિરો માટે જગ્યાની પસંદગી, થોડા સમય માટે રેલ્વેચાર્ડની વ્યવસ્થા, નિર્માણ એજન્ડિસઓ તેમજ કોન્ટ્રાક્ટરોની પસંદગી

ખ) નિર્માણ સમયની સ્થિતિ.

- કાર્યના ક્ષેત્રની સફાઈ, નિર્માણ સામગ્રીના સાધનો, નિર્માણકાર્યમાં(પાણીના નિકાલ, ઢોળાવ, સ્થળીકરણ વગેરે) જલ પ્રદૂષણ, વાયુ પ્રદૂષણ, ધ્વનિ, કામદાર શિબિરોના પ્રબંધ, કોન્ટ્રાક્ટરોના કામની સમાપ્તી

ગ) કાર્ય કાળની સ્થિતિ

- દરેક પ્રકારના નિરકરણના ઉપાયોના સંપાદનની સમીક્ષા, પ્રદૂષણ સમીક્ષા

પર્યાવરણ પ્રબોધન

પર્યાવરણ પ્રબોધનનો ઉદ્દેશ્ય એ સુનિશ્ચિત કરે છે કે, પરિયોજનાનાં નિર્ધારણના ઉદ્દેશ્ય તેમજ ઈચ્છિત પરિણામ મળી ગયેલ છે. પર્યાવરણ પ્રબંધ યોજનાનાં ક્રિયાકાળને સુનિશ્ચિત કરવા માટે પ્રભાવશાળી પર્યાવરણ પ્રબંધ યોજના તૈયાર કરવાની જરૂર છે. પર્યાવરણ પ્રબંધ યોજના બે તત્વો, કાર્યસંપાદન સુચક અને પર્યાવરણ પ્રબોધન કાર્યક્રમથી મળીને બને છે.

કાર્ય સંપાદન ના સૂચન:

ક) નિર્માણ પહેલાની સ્થિતિ: જમીન સંપાદન, નિસ્તારણ સ્થાન, નિર્માણ શિબિરો, માટી ખોદવા માટેના ખાડઓ

ખ) નિર્માણ સમયની સ્થિતિ: વાયુની ગુણવત્તા, ધ્વનિ અને કમ્પન્ન સ્તર, પાણીની ગુણવત્તા, વૃક્ષારોપણ, ઉપરની માટી, કામદારો

ગ) વૃક્ષોના જીવીત રહેવાનો અનુપાત, માટી ખોદાયેલા ખાડાઓનો પુનરોદ્ધાર, સંવેદનશીલ સ્થાનો પર ધ્વનિરોધકોની ઉપયોગીતા

પર્યાવરણીય પ્રબોધન કાર્યક્રમ

પર્યાવરણીય પ્રબોધન કાર્યક્રમમાં નીચે આપવામાં આવેલ વિષયોને ધ્યાનમાં રાખવામા આવ્યા છે.

ક) પ્રબોધન યોગ્ય મદદ

ખ) પ્રબોધનનું સ્થાન

ગ) પ્રબોધનમાં વધારો તેમજ તિવ્રતા

ઘ) કામ-કાજ તેમજ નિરીક્ષણની સ્થાનિક જવાબદારી

ઉપરોક્ત વિષયો આધારે પર્યાવરણીય પ્રબોધન કાર્યક્રમમાં નીચેના મુદ્દાઓનું પ્રબોધન કરવામાં આવશે

ક) હવાની ગુણવત્તા
ઘ) જમીનની ખોદાય

ખ) પાણીની ગુણવત્તા
ચ) વૃક્ષારોપણ

ગ) ધ્વનિ તેમજ કંપન સ્તર
છ) વનસ્પતિ તેમજ જીવ જંતુ

લોકસંવાદ બેઠક

સામાન્ય જનતા સુધી પરિયોજનાની જાણકારી પહોંચે તેમજ તેમના વિચારોને જાણવા માટે જે.આઈ.સી.એ. ની આર્થિક સહાયથી કરવામાં આવેલ પર્યાવરણ તેમજ સમાજપર થનાર અસરો તેમજ તેના ઉપાયો માટે અભ્યાસ સમયે લોકસંવાદ બેઠકનું આયોજન કરવામાં આવ્યું હતું. તેનાથી જે.આઈ.સી.એ ની આર્થિક સહાયથી કરવામાં આવેલ સેપ્રોફ અભ્યાસ સમયે ડી.એફ.સી. રેલવેમાર્ગમાં અનેક ફેરફાર કરવામાં આવ્યા છે જેના કારણે અનેક નવા ગામોને સીધી અસર થશે. આથી આ બધા ગામડાઓને ધ્યાનમાં રાખીને જિલ્લા વાર લોકસંવાદ બેઠકનું આયોજન કરવામાં આવ્યું હતું. આ લોક સંવાદ બેઠકથી વિવિધ સુચનો



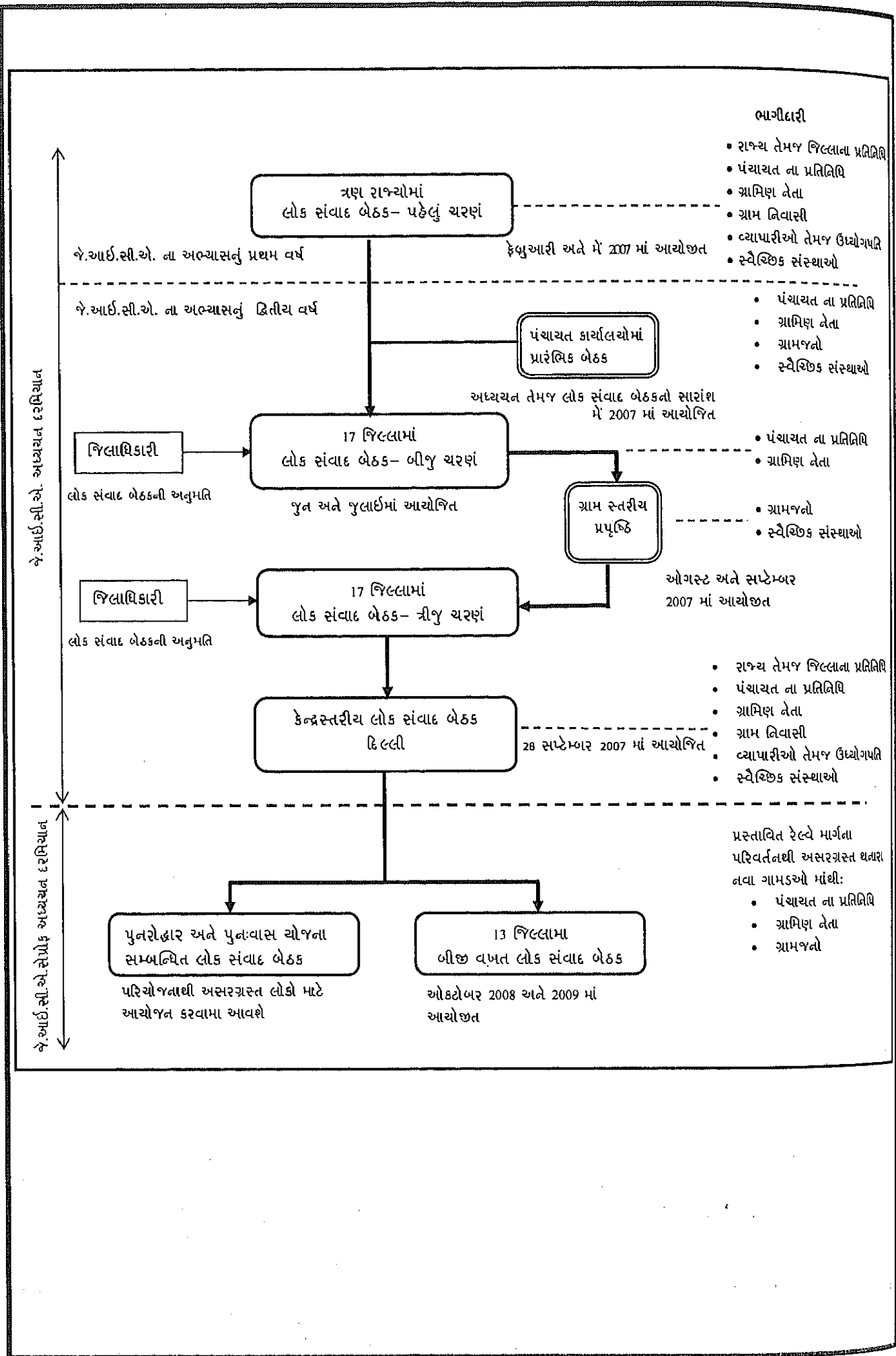
લોકસંવાદ બેઠક

(પ્રતિભાવો/સુઝાવો) જાણવા મળ્યા છે, જેને

પરિયોજનામાં સામેલ કરવામાં આવ્યા છે. જેવા કે, વાહનો, ખેડૂતો તેમજ સ્થાનિક લોકોની અવરજવર માટે યોગ્ય જગ્યાએ અને જરૂરીયાત વાળી જગ્યાઓએ પુલોનું નિર્માણ. બીજી તરફ પુનરોદ્ધાર તેમજ પુનઃવાસ યોજનાનાં પ્રકટીકરણ તેમજ પરિયોજનાથી અસર પામેલ લોકોને જમીન આપી પુનઃવાસ સમ્બંધિત મંતવ્યો જાણવા માટે અલગથી લોકસંવાદ બેઠકનું આયોજન કરવામાં આવશે.

આગળનો કાર્યક્રમ

- પર્યાવરણિય અસરોનાં મુલ્યાંકનનાં ડ્રાફ્ટ રિપોર્ટમાં લોકોના મંતવ્યોને શામીલ કરી અંતિમરૂપ આપવું
- રેલવે મંત્રાલય દ્વારા સ્વીકૃતિ મળ્યા પછી પર્યાવરણના ફાઈનલ રિપોર્ટને જન સમુદાય સુધી પહોંચાડવો
- પર્યાવરણના ફાઈનલ રિપોર્ટને જન સમુદાયની સમીક્ષા માટે એવી જગ્યાએ આપવામાં આવશે કે જ્યાં ડ્રાફ્ટ રિપોર્ટ આપવામાં આવ્યો હતો. રિપોર્ટ સંબંધિત માહિતી ડી.એફ.સી.સી.આઈ.એલ. નાં મુખ્ય પરિયોજના પ્રબંધક, પ્રસ્તાવિત ડી.એફ.સી. રેલવે માર્ગની સાથે મુખ્ય રેલવે સ્ટેશન તેમજ સમ્બંધિત જિલ્લા કાર્યાલયોમાં મે ૨૦૦૮ માં ઉપલબ્ધ કરાવવામાં આવશે. ફાઈનલ રિપોર્ટનો સારાંશ પરિયોજના પ્રભાવિત બધા જ ગામડાંઓમાં પહોંચાડવામાં આવશે.



મંતવ્યયો તેમજ સૂઝાવો આવકાર્થ

કૃપયા ડી.એફ.સી. પરિયોજના સંબંધિત પર્યાવરણિય તેમજ સામજિક વિષયો બાબત મંતવ્યો તેમજ સૂઝાવ તમારા નામ, સરનામા સહિત ફોન નંબર(હોયતો) સાથે લેખીતમા પોસ્ટ તેમજ ફેક્સ દ્વારા સંબંધિત મુખ્ય પરિયોજના અધિકારી કાર્યાલય પર મોકલી શકો છો. તમે તમારા સૂઝાવોને ઈ-મેલ (dfc.wc.eia@gmail.com) દ્વારા મોકલી શકો છો. પર્યાવરણિય અસરોનાં મુલ્યાંકનનાં ડ્રાફ્ટ રિપોર્ટ સંબંધી માહિતી મુખ્ય પરિયોજના અધિકારી કાર્યાલય, ડી.એફ.સી. રેલ્વે માર્ગની પાસેના મુખ્ય સ્ટેશનો તેમજ જિલ્લા કાર્યાલયોમા ઉપલબ્ધ છે.

કૃપયા તમારાં વિચારો અને ટિપ્પણીઓ 27 માર્ચ 2009 પહેલા મોકલો.

મુખ્ય પરિયોજના અધિકારી(ડી.એફ.સી.સી.આઈ.એલ.) કાર્યાલયોનાં સરનામા

- મુખ્ય પરિયોજના અધિકારી કાર્યાલય- જયપુર
બી ૧૨, હનુમાન નગર, મેટ્રો હોસ્પિટલની સામે, સિરસી રોડ, જયપુર
ફોન નં: 0141-4028741 ફેક્સ: 0141-4028740
- મુખ્ય પરિયોજના અધિકારી કાર્યાલય- અજમેર
માલ રોડ, ડી આર એમ કાર્યાલયની સામે, અજમેર-305001
ફોન નં: 0145-2625548 ફેક્સ: 0145-2625548
- મુખ્ય પરિયોજના અધિકારી કાર્યાલય- અમદાવાદ
જુના ડી.આર.એમ.ભવન, પહેલો માળ, અમદાવાદ રેલ્વે સ્ટેશન, અમદાવાદ-380002 ફોન નં: 079-22165107
- મુખ્ય પરિયોજના અધિકારી કાર્યાલય- વડોદરા
13-14, 17-18, પનોરમા કોમ્પ્લેક્સ, ત્રીજો માળ, આર સી દત્ત રોડ, અલકાપુરી વડોદરા-7
ફોન નં: 0265-2326024 ફેક્સ: 0265-2326027

મુખ્ય સ્ટેશનો કે જ્યાં ડ્રાફ્ટ રિપોર્ટ મળવા પાત્ર છે.

- ગુજરાત
પાલનપુર(જંકશન), સિધ્ધપુર, ઉંઝા, મહેસાણા(જંકશન), સાબરમતી(જંકશન), અમદાવાદ(જંકશન), નડિયાદ(જંકશન), આણંદ(જંકશન), વાસદ(જંકશન) તેમજ વડોદરા(જંકશન)
- રાજસ્થાન
અલવર(જંકશન), કુન્ડ(જંકશન), નીમ કા થાના, શ્રી માધોપુરા, રિંગસ(જંકશન), જયપુર(જંકશન), ફૂલેરા(જંકશન), કિશનગઢ, અજમેર(જંકશન), બ્યાવર, સોજત રોડ, મારવાડ(જંકશન), ફાલના, સિરોહિ રોડ તેમજ આબુ રોડ
- હરિયાણા
રેવાડી(જંકશન), નારનોલ તેમજ ડાબલા(જંકશન)

॥ પરિયોજના માં આપના સહયોગ બદલ આભાર ॥

Appendix 3-6 Public Notice for Disclosure of Draft EIA Report

PUBLIC NOTICE

Ministry of Railway hereby inform that disclosure of draft EIA (ESIMMS + draft S-ESIMMS) reports of proposed DFC (Dedicated Freight Corridor) Project between Vadodara and Rewari will start from 23rd March 2009 and will be completed by 1st April 2009.

Summary of EIA reports in vernacular language and in English version will be distributed to all the affected village offices between Rewari and Vadodara. A full set of draft EIA reports will be available in the CPM offices of DFCCIL (Dedicated Freight Corridor Corporation of India), major stations along the proposed DFC alignment and districts offices as mentioned below.

Comments from people will be accepted only at CPM offices of DFCCIL through direct delivery, fax or post. Interested persons can also send comments at the email address (dfc.wc.eia@gmail.com).

Comments/opinions will be received up to 15th April, 2009.

Draft EIA report is available and Comments shall be received at the following CPM offices of the DFCCIL

CPM office in Jaipur

B-12, Hanuman Nagar, Opp. Metro Hospital, Sirsi Road, Jaipur,
Tel: 0141-4028741, Fax: 0141-4028740

CPM office in Ajmer

Mall Road, Opp DRM Office, Ajmer-305001, Tel/Fax: 0145-2625548

CPM office in Ahmedabad

1st Floor, Old DRM Office Building, Kalupur, Ahmedabad-380002, Tel: 079-22175107, Fax: 079-22163101

CPM office in Vadodara

13-14, 17-18, Panorama Complex, 3rd Floor, R.C. Dutt Road, Alkapuri, Vadodara-7,
Tel: 0265-2326024, Fax: 0265-2326027

Draft EIA report is available at the following Major Stations

Haryana

Rewari (Jn), Narnaul, Dabla (Jn)

Rajasthan

Alwar (Jn), Kund, Neem Ka Thana, Sri Madhopur, Ringus (Jn), Jaipur (Jn), Phulera (Jn), Kishangarh, Ajmer (Jn), Beawar, Sojat Road, Marwar Jn, Faina, Sirohi Road, Abu Road

Gujarat

Palanpur (Jn), Siddhapur, Unjha, Mahesana (Jn), Sabarmati (Jn), Ahmedabad (Jn), Nadiad (Jn), Anand (Jn), Vasad (Jn), Vadodara (Jn)

Draft EIA report is available at the following District Collectorate Offices

Haryana

Rewari, Mahendergarh

Rajasthan

Sikar, Alwar, Jaipur, Nagaur, Ajmer, Pali, Sirohi

Gujarat

Banaskantha, Patan, Mahesana, Gandhinagar, Ahmedabad, Kheda, Anand, Vadodara

Jeeendra Singh
(Jeeendra Singh)
Director/Planning (Spl.)
Room No 143
Rail Bhavan, New Delhi
Ministry of Railways

विज्ञप्ति

रेल मंत्रालय सूचित करता है कि वडोदरा एवं रेवाड़ी के मध्य समर्पित मालगाड़ा कारीडोर (डी.एफ.सी.) परियोजना के परिचयी कारीडोर की पर्यावरणीय एवं सामाजिक प्रभावों का मुल्यांकन (ई.आई.ए.) ड्राफ्ट रिपोर्ट (ESIMMS¹ + ड्राफ्ट S-ESIMMS²) की प्रकटीकरण प्रक्रिया 23 मार्च 2009 से शुरू होकर 1 अप्रैल 2009 तक पूरी कर ली जाएगी।

पर्यावरणीय एवं सामाजिक प्रभावों का मुल्यांकन (ई.आई.ए.) रिपोर्ट का संक्षेप स्थानीय एवं अंग्रेजी भाषा में वडोदरा एवं रेवाड़ी के मध्य सभी प्रभावित गांवों के दफ्तरों में वितरित किया जाएगा। ड्राफ्ट पर्यावरणीय प्रभावों का मुल्यांकन रिपोर्ट डी.एफ.सी.सी.आई.एल. के सम्बन्धित प्रमुख परियोजना अधिकारी कार्यालय, रेलमार्ग के समीप प्रमुख स्टेशनों एवं निम्नलिखित जिला कार्यालयों में उपलब्ध होगी।

कृपया अपनी टिप्पणीयों व्यक्तिगत रूप से, डाक या फेक्स द्वारा डेडीकैटेड फेट कारीडोर कॉर्पोरेशन इन्डिया लि. के सम्बन्धित प्रमुख परियोजना अधिकारी कार्यालयों पर भेजें। आप अपनी टिप्पणीयों ई-मेल (dfc.wc.eia@gmail.com) द्वारा भी भेज सकते हैं।

कृपया अपने विचार एवं टिप्पणीयों 15 अप्रैल 2009 से पहले भेजें।

डी.एफ.सी.सी.आई.एल. के निम्नलिखित प्रमुख परियोजना अधिकारी कार्यालयों पर ड्राफ्ट रिपोर्ट उपलब्ध हैं एवं टिप्पणीयों भेजी जा सकती हैं।

मुख्य परियोजना प्रबन्धक (डी.एफ.सी.सी.आई.एल.) कार्यालय का पता

- मुख्य परियोजना प्रबन्धक कार्यालय - जयपुर
बी 12, हनुमान नगर, मेट्रो हॉस्पिटल के सामने, सिरसी रोड़, जयपुर दूरभाष : 0141-4028741 फेक्स : 0141-4028740
- मुख्य परियोजना प्रबन्धक कार्यालय - अजमेर
माल रोड़, डी आर एम कार्यालय के सामने, अजमेर-305001 दूरभाष : 0145-2625548 फेक्स : 0145-2625548
- मुख्य परियोजना प्रबन्धक कार्यालय - अहमदाबाद
पुरानी डी आर एम भवन, पहली मंजिल, अहमदाबाद रेल्वे स्टेशन, अहमदाबाद-380002 दूरभाष : 079-22175107 फेक्स : 079-22163101
- मुख्य परियोजना प्रबन्धक कार्यालय - वडोदरा
13-14, 17-18, पैनोरामा कॉम्प्लेक्स, तीसरी मंजिल, आर सी दत्त रोड़, अल्कापूरी, वडोदरा-7
दूरभाष : 0265-2326024 फेक्स-0265-2326027

प्रमुख स्टेशन जहाँ पर ड्राफ्ट रिपोर्ट उपलब्ध हैं

हरियाणा: रेवाड़ी (जंक्शन), नारनौल एवं डाबला (जंक्शन)

राजस्थान: अलवर (जंक्शन), कुण्ड, नीम का थाना, श्रीमाधोपुर, रिंगस (जंक्शन), जयपुर (जंक्शन), फुलेरा (जंक्शन), किशनगढ़, अजमेर (जंक्शन), व्यावर, सोजत रोड़, मारवाड़ (जंक्शन), फालना, सिरौही रोड़ एवं आबू रोड़

गुजरात: पालनपुर (जंक्शन), सिद्धपुर, ऊंझा, महेसाणा (जंक्शन), साबरमती (जंक्शन), अहमदाबाद (जंक्शन), नडियाद (जंक्शन), आन्द (जंक्शन), वासड (जंक्शन) एवं वडोदरा (जंक्शन)

जिला कार्यालय जहाँ पर ड्राफ्ट रिपोर्ट उपलब्ध हैं

हरियाणा: रेवाड़ी एवं महेंद्रगढ़

राजस्थान: सीकर, अलवर, जयपुर, नागौर, अजमेर, पाली एवं सिरौही

गुजरात: बनासकांठा, पाटन, महेसाणा, गाँधीनगर, अहमदाबाद, खेड़ा, आँद एवं वडोदरा

¹ ESIMMS: जे.आई.सी.ए. की 'पर्यावरणीय एवं सामाजिक निमित्त 2004 मार्गदर्शिका' के अनुसार बनाये गये पर्यावरणीय एवं सामाजिक प्रभावों का मुल्यांकन रिपोर्ट।

² S-ESIMMS: जे.आई.सी.ए. की 'पर्यावरणीय एवं सामाजिक निमित्त 2004 मार्गदर्शिका' के अनुसार बनाये गये पर्यावरणीय एवं सामाजिक प्रभावों का मुल्यांकन की पूरक रिपोर्ट।

रेल मंत्रालय

જાહેર નોટીસ

રેલ્વે મંત્રાલય દ્વારા જાહેર કરવામાં આવે છે કે વડોદરાથી રેવાડી વચ્ચે માલભાડા સમર્પિત રેલ્વે માર્ગ (ડી.એફ.સી.) પરિયોજનાનાં પશ્ચિમી વિભાગના પર્યાવરણિય તેમજ સામાજિક અસરોના મુલ્યાંકન (ઈ.આઈ.એ.) ડ્રાફ્ટ રિપોર્ટ (ESIMMS¹ + ડ્રાફ્ટ S-ESIMMS²) ની પ્રકટીકરણ પ્રક્રિયા ૨૩ માર્ચ ૨૦૦૯ થી શરૂ કરી ૧ એપ્રિલ ૨૦૦૯ સુધી પુરી કરવામાં આવશે.

પર્યાવરણિય તેમજ સામાજિક અસરોના મુલ્યાંકન (ઈ.આઈ.એ.) રિપોર્ટનાસંક્ષેપ ને સ્થાનિય તેમજ અંગ્રેજી ભાષામાં વડોદરાથી રેવાડી વચ્ચેનાં બધાજ પ્રભાવિત ગામોની પંચાયત કાર્યાલયોમાં વિતરીત કરવામા આવશે. ડ્રાફ્ટ પર્યાવરણિય અસરોના મુલ્યાંકન રિપોર્ટ સંબંધિત માહિતિ મુખ્ય પરિયોજના અધિકારી કાર્યાલય ડી.એફ.સી.સી.આઈ.એલ. તેમજ રેલ્વે માર્ગની સાથે મુખ્ય સ્ટેશનો તથા સમ્બંધિત જિલ્લા કાર્યાલયમાં ઉપલબ્ધ છે.

તમે સુઝાવોને લેખિતમા વ્યક્તિગત, પત્ર દ્વારા તેમજ ફેક્સ દ્વારા ડેડીકેટેડ ફેટ કોરિડોર કોર્પોરેશન ઈન્ડીયા લિ ના સમ્બંધિતપરિયોજના ના મુખ્ય અધિકારી કાર્યાલય પર મોકલી શકો છો. તમે તમારા સુઝાવો અથવા મતવ્યો ને ઈ-મેલ (dfc.wc.eia@gmail.com) દ્વારા મોકલી શકો છો.

કૃપયા તમારા વિચારો અને ટિપ્પણીઓ 15 એપ્રિલ 2009 પહેલાં મોકલો.

તીચે બતાવવામાં આવેલ ડી.એફ.સી.સી.આઈ.એલ. ના મુખ્ય પરિયોજના અધિકારી કાર્યાલયો પર તમે તમારાં મતવ્યો મોકલી શકો છો, તેમજ આ કાર્યાલયો પર ડ્રાફ્ટ રિપોર્ટ ઉપલબ્ધ છે.

મુખ્ય પરિયોજના અધિકારી(ડી.એફ.સી.સી.આઈ.એલ.) કાર્યાલયોનાં સરનામાં

- ◆ મુખ્ય પરિયોજના અધિકારી કાર્યાલય-જયપુર
બી ૧૨, હનુમાન નગર, મેટ્રો હોસ્પિટલની સામે, સિરસી રોડ, જયપુર ફોન નં : ૦૧૪૧-૪૦૨૮૭૪૧ ફેક્સ : ૦૧૪૧-૪૦૨૮૭૪૦
- ◆ મુખ્ય પરિયોજના અધિકારી કાર્યાલય-અજમેર
માલ રોડ, ડી.આર.એમ.કાર્યાલયની સામે, અજમેર ફોન નં : ૦૧૪૫-૨૬૨૫૫૪૮ ફેક્સ:૦૧૪૫-૨૬૨૫૫૪૮
- ◆ મુખ્ય પરિયોજના અધિકારી કાર્યાલય-અમદાવાદ
યુની ડી.આર.એમ.ભવન, પહેલો માળ, અમદાવાદ રેલ્વે સ્ટેશન, અમદાવાદ-૩૮૦૦૦૨
ફોન નં : ૦૭૯-૨૨૧૭૫૧૦૭ ફેક્સ : ૦૭૯-૨૨૧૬૩૧૦૧
- ◆ મુખ્ય પરિયોજના અધિકારી કાર્યાલય-વડોદરા
૧૩-૧૪, ૧૭-૧૮, પનોરમા કોમ્પ્લેક્સ, ત્રીજો માળ, આર.સી. દત્ત રોડ, અલકાપુરી, વડોદરા-૭
ફોન નં : ૦૨૬૫-૨૩૨૬૦૨૪ ફેક્સ : ૦૨૬૫-૨૩૨૬૦૨૭

મુખ્ય સ્ટેશનો કે જ્યાં ડ્રાફ્ટ રિપોર્ટ મળવા પાત્ર છે

ઠરિયાણા: રેવાડી(જંકશન), નારનોલ, અને ડાબલ્લા(જંકશન)

રાજસ્થાન: અલવર(જંકશન), કુન્ડ(જંકશન), નીમ કા થાના, શ્રી માધોપુરા, રિંગસ(જંકશન), જયપુર(જંકશન), ફૂલેરા(જંકશન), ડિશનગઢ, અજમેર(જંકશન), બ્યાવર, સોજત રોડ, મારવાડ(જંકશન), ફાલના, સિરોહિ રોડ અને આબુ રોડ.

ગુજરાત: પાલનપુર(જંકશન), સિધ્ધપુર, ઉંઝા, મહેસાણા(જંકશન), સાબરમતી(જંકશન), અમદાવાદ(જંકશન), નડિયાદ(જંકશન), આણંદ(જંકશન), વાસદ(જંકશન) અને વડોદરા(જંકશન).

જિલ્લા કાર્યાલય કે જ્યાં ડ્રાફ્ટ રિપોર્ટ માળવા પાત્ર છે

ઠરિયાણા: રેવાડી, મેન્દ્રગઢ

રાજસ્થાન: સીકર, અલવર, જયપુર, નાગૌર, અજમેર, પાલી, સિરોહી

ગુજરાત: બનાસકાંઠા, પાટણ, મહેસાણા, ગાંધીનગર, અમદાવાદ, ખેડા, આણંદ, વડોદરા

¹ ESIMMS: જે.આઈ.સી.એ. ની 'પર્યાવરણ તેમજ સામાજિક નિયમો ૨૦૦૪ માર્ગદર્શિકા' અનુસાર બનાવવા માં આવેલ પર્યાવરણિય તેમજ સામાજિક અસરો નો મુલ્યાંક રિપોર્ટ

² S-ESIMMS જે.આઈ.સી.એ. ની 'પર્યાવરણ તેમજ સામાજિક નિયમો ૨૦૦૪ માર્ગદર્શિકા' અનુસાર બનાવવા માં આવેલ પર્યાવરણિય તેમજ સામાજિક અસરોનાં મુલ્યાંક રિપોર્ટની પહેલાનો રિપોર્ટ

Appendix 3-7 Distribution List of the Draft EIA Report



Appendix 3-7 Distribution List of the Draft EIA Report

1. Distribution of Full Set of the Draft EIA Report

- A set of draft EIA report (ESIMMS + draft S-ESIMMS Reports) was distributed to each of the following.

Distribution of EIA report (ESIMMS + draft S-ESIMMS Reports)

ESIMMS and draft S-ESIMMS Report	CPM Office	Major Sta.	District Office
ESIMMS (Haryana), Draft S-ESIMMS Report	1) CPM Jaipur*	1) Rewari (Jn) 2) Narnaul 3) Dabla (Jn)	1) Mahendragarh 2) Rewari
ESIMMS (Rajasthan), Draft S-ESIMMS Report	1) CPM Jaipur* 2) CPM Ajmer	1) Alwar (Jn) 2) Kund 3) Neem Ka Thana 4) Sri Madhopur 5) Ringus (Jn) 6) Jaipur (Jn) 7) Phulera (Jn) 8) Kishangarh 9) Ajmer (Jn) 10) Beawar 11) Sojat Road 12) Marwar Jn 13) Falna 14) Sirohi Road 15) Abu Road	1) Jaipur 2) Nagaur 3) Sikar 4) Alwar 5) Sirohi 6) Pali 7) Ajmer
ESIMMS (Gujarat), Draft S-ESIMMS Report	1) CPM Ahmedabad 2) CPM Vadodara	1) Palanpur (Jn) 2) Siddhapur 3) Unjha 4) Mahesana(Jn) 5) Sabarmati (Jn) 6) Ahmedabad (Jn) 7) Nadiad (Jn) 8) Anand(Jn) 9) Vasad (Jn) 10) Vadodara (Jn)	1) Vadodara 2) Anand 3) Kheda 4) Ahmedabad 5) Gandhinagar 6) Mahesana 7) Patan 8) Banaskantha

Note: ESIMMS reports for both Haryana and Rajasthan were distributed in the CPM office in Jaipur.

**List of Villages where the Summary of the Draft EIA Reports were Distributed
< Haryana >**

District	Sub-district	S. No	Affected Villages
Rewari	Rewari	1	Chillar
		2	Bhutil Tetihar
		3	Bhutil Jat
		4	Gangaachariya ahir
		5	Sekhpur sikar Pur
		6	Rajpur Khalsa
		7	Gindokhar
		8	Lakhnor
		9	Jadara
		10	Mahakharia
		11	Dhanlawas
		12	Sundrod
		13	Mailawas
		14	Dhanisundrod
		15	Pitherawas
		16	Gumina
		17	Rajpura Istamrar
		18	Khori
		19	Teent
		20	Govind Puri
		21	Mamariatethar
		22	Gothara Thappa Khori
		23	Pali
		24	Majra Mutsal Bhalaki
		25	Bhalaki
		26	Manethi
		27	Padla/Kund Station Area
	Sub-total	27	
Total District		27	
Mahendragarh	Narnaul	1	Sujapur
		2	Hasanpur
		3	Gokal Pur
		4	Beghpur
		5	Uninda
		6	Dhanunda
		7	Ateli
		8	Khor Part
		9	Tobra
		10	Fathepur
		11	Tajpur
		12	Bhilwara
		13	Bachhod
		14	Sarai Bahadurnangar
		15	Sheonath Pura
		16	Bhusan Khurd
		17	Shah Pur Doyam
		18	Patikara
		19	Faizlipur
		20	Narnaul Urban
		21	Narnaul Rural
		22	Nuni Awal
		23	Mukand Pur
		24	Tajpur
		25	Amarpur Jorasi
		26	Kaloli
		27	Bhasir pur
		28	Gtatasar
		29	Pavera
		30	Chhilro ki Dhani
		31	Napla
		32	Bamanwasnau
		33	Bamanwas
		34	Narehri
		35	Azmabad Mokhta

District	Sub-district	S. No	Affected Villages
		36	Neejampur
		37	Bejhad
		38	Chandpura and Ganiyar
		39	Nangal
		40	Talot
	<u>Sub-total</u>	40	
<u>Total District</u>		40	
<u>Total State</u>		67	

**List of Villages where the Summary of the Draft EIA Report were Distributed
< Rajasthan >**

District	Sub-district	S. No	Affected Villages	
Alwar	Behror	1	Kathoowas	
		2	Hudiyi Khurd	
	<u>Sub-total</u>	2		
<u>Total: District</u>		2		
SIKAR	Sri Madhopur	1	Nalot	
		2	Kanchrapur @ kanchanpur	
		3	Jorawar nagar	
		4	Jawswant Pura	
		5	Derawali Dhani	
		6	Chak Jaswant pura	
		7	Hanspura	
		8	Sri Madhopur	
		9	Bharni	
		10	Maharoli	
		11	Gurha	
		12	Sirsa	
		13	Ringus	
		14	Jugalpura	
		15	Madhopura	
		16	Madho Ka Was	
		17	Kanwat	
		18	Bhadwari	
		19	Kafyanpura	
		20	Patwari Ki Bass	
		21	Malakali	
		22	Jaitusar	
		23	Kaliyawas	
		<u>Sub-total</u>	23	
		Neem Ka Thana	1	Kanwar Ki Nagal
			2	Dabla
	3		Bihar	
	4		Beharipur	
	5		Jeelo	
	6		Kurwara @ Ramnagar	
	7		Rajputon Ki Dhani	
	8		Mawanda	
	9		Nawanda Railway Station	
	10		Shyama Wali	
	11		Makri	
	12		Mandoli	
	13		Godawas	
	14	Ranasar		
	15	Neem Ka thana		
	16	Agawari		
	17	Sirohi		
	18	Govindpura		
	19	Jassi Ka Bas		
	20	Harjanpura		
	21	Bhagot		
	22	Bhagega		
	23	Kurbada		
	24	Chak Charwas		
	25	Shyam Nagar		
	26	Natha Ka Nangal		

District	Sub-district	S. No	Affected Villages
		27	Jhalara
		28	Bagwada
		29	Simli
		30	Ratan Nagar
		31	Jatala
		Sub-total	31
Total : District		54	
NAGAUR	Nava	1	Naya Bas
		2	Thikariya Khurd
		3	Minda
		4	Baori
		Sub-total	4
Total: District		4	
JAIPUR	Phulera and Dadu	1	Kanawar Pura
		2	Badhal
		3	Itawa
		4	Kabron Ka Bas
		5	Charanwas
		6	Bajiyon Ka Bs
		7	Malik Pura
		8	Kishanpura @ Nathi Ka Bas
		9	Renwal
		10	Meendi
		11	Bhookhron Ki Dhani
		12	Bhainslana
		13	Paharpura
		14	Kathowari Khurd
		15	Sinodiya
		16	Dodwadiyon Ka Bas
		17	Prithvi Pura
		18	Khandel
		19	Jaitpura
		20	Peepli Ka Bas
		21	Itawa
		22	Rojri
		23	Hironmda
		24	Kanchroda(Subhash Colony)
		25	Phulera
		26	Samalpura/Sawalpura
		27	Haripura
		28	Narayana
		29	Kothera
		30	Jhakolar
		31	Beegolao
		32	Bokrawas
		33	Deopura
		34	Safi
		35	Gahlota
		36	Shakun
		37	Hatupura
		38	Mandha
		39	Nadri
		40	Deva Ka Bas
		41	Prempura
		42	Kandeoli
Sub-total	42		
	Chomu	1	Bagri
		2	Nangal Govind
		3	Kishan Manpura
		4	Asti Kalan
		5	Sirsi
		6	Ranjeet pura
Sub-total	6		
Total: District		48	
AJMER	Beawar	1	Renpur
		2	Theekrana Goojran
		3	Sarmaliya

District	Sub-district	S. No	Affected Villages		
		4	Mediya (Naya Nagar)		
		5	Beawar		
		6	Kalali Ka Badai		
		7	Bedia Gena		
		8	Ratanpura Sardara		
		9	Fatehpuria Doyam		
		10	Chhawani Pared		
		11	Narsinghpura		
		12	Daulatgarh Singha		
		13	Rampura Mevatiyan		
		14	Daulatpura Balaiyan		
		15	Bhawani Kheda		
			<u>Sub-total</u>	15	
		Masuda		1	Kharwa (Rani Sagar)
				2	Peeplaj
3	Bhawani pura				
4	Rampura				
	<u>Sub-total</u>	4			
Ajmer & Nasirabad		1	Jalli		
		2	Akhri		
		3	Gegal		
		4	Muhami (Mohami)		
		5	Bhoodol		
		6	Ladpura		
		7	Gudha		
		8	Guwardi		
		9	Nareli		
		10	Madar		
		11	Ajmer		
		12	Doomra		
	<u>Sub-total</u>	12			
Kishangarh		1	Kakniyawas		
		2	Buharoo		
		3	Tiloniya		
		4	Bhojiyawas		
		5	Phaloda		
		6	Mandawariya		
		7	Kishangarh city		
		8	Swantsar		
		9	Madanganj		
		10	Farshia		
	<u>Sub-total</u>	10			
Peesangan		1	Saradhana		
		2	Shivpura		
		3	Keshav pura		
		4	Makera		
		5	Arjunpura Khalsa		
		6	Mangaliyawas		
		7	Lamana		
		8	Daulat Khera		
		9	Jeethana		
		10	Somalpur		
		11	Daurai (Rural)		
		12	Tabecji (Rural)		
	<u>Sub Total</u>	12			
Total: District		53			
PALI	Sumerpur	1	Koliwara		
		2	Balwana		
		3	Jawali Bandh		
		<u>Sub-total</u>	3		
	Bali		1	Sarkhejra	
			2	Mokhampura	
			3	Kheemal	
			4	Phalna (Rural)	
			5	Phalna Stn	
			6	Jadri	
			7	Beral	

District	Sub-district	S. No	Affected Villages		
		8	Beeroliya		
		9	Beesalpur		
		10	Doodni		
		11	Kothar		
		12	Bhandar		
		13	Malnoo		
		14	Moribeda Station		
		15	Nana		
		16	Perva		
		17	Khudala		
		18	Virampur		
		19	Chamunderi Ranawatan		
		20	Rughnathpura		
		21	Saila		
			<u>Sub-total</u>	21	
		Pali (Sojat) Marwar JN.		1	Dadiya
				2	Dhundhala
				3	Reesaniya
				4	Jor Dudor
				5	Dudor
				6	Hemliyawas Kalan
7	Hemliyawas Khurd (Rural)				
8	Marwar Junction				
9	Auwa				
10	Surya Nagar				
11	Bithora Khurd/Kalan				
12	Borsa				
13	Bhagwanpura				
14	Karari				
15	Dhamli				
16	Banta				
17	Bhimadia				
18	Narsingh Pura				
19	Karchi				
20	Sawrad				
	<u>Sub-total</u>	20			
Sojat		1	Karmawas		
		2	Udeshi Kua		
		3	Chandawal		
		4	Murdawa		
		5	Pachudo Kalan		
		6	Sojat Road		
		7	Bagri Nagar		
		8	Bhesana		
		9	Guda Bachhraj		
	<u>Sub-total</u>	9			
Raipur / Pali (Jaitran)		1	Rampura Mewatiyan (Rural)		
		2	Amarpura		
		3	Saradhana		
		4	Shergarh		
		5	Manpura		
		6	Sabalpura		
		7	Kurantiya		
		8	Sendara/Jharli		
		9	Jhala Ki Chauki		
		10	Kaya Bheela		
		11	Phata Khera		
		12	Malni		
		13	Megarda		
		14	Deepawas		
		15	Haripur		
		16	Aasan		
		17	Laka Ji Ki Dhani		
		18	Dholiya		
		19	Jhoontha		
		20	Guriya		
		21	Gujro Ka dhani		

District	Sub-district	S. No	Affected Villages	
		22	Raipur-II	
		23	Lavacha	
		24	Lalpura	
		25	Chang	
		Sub-total	25	
	Desuri		1	Indarwara
			2	Bhadarlau
			3	Somesar
			4	Jawali
			5	Salariya
			6	Ajaneshwar
			7	Bhagwanpura Station
			8	Beejowa
			9	Rani
			10	Dhuteriya
11	Etandra Meditan			
12	Nandha Jodhan			
Sub-total	12			
Total District		90		
SIROHI	Abu Road	1	Kiwarli	
		2	Or	
		3	Derna	
		4	Khadat	
		5	Sangna	
		6	Kui	
		7	Abu Road	
		8	Chandrawati	
		9	Amba	
		10	Khara	
		11	Maval	
		12	Wasda	
		13	Morthala	
		14	Tartoli	
		15	Sant pur	
	Sub-total	15		
	Pindwara		1	Sadalwa
			2	Pindwara Jn
			3	Ajari
			4	Chawarli
			5	Ghodiawas
			6	Banas
			7	Peshua
			8	Kodarla
			9	Swaroop Gunj
			10	Bhavri
			11	Vatera
			12	Udavariya
			13	Bhimana
			14	Bharja
			15	Wara
	16	Keshav ganj		
	17	Bilar		
	18	Pindwara II		
	19	Golya		
20	Nai Dhaneri			
Sub-total	20			
Total District		35		
Total State		286		

**List of Villages where the Summary of the Draft EIA Report were Distributed
< Gujarat >**

District	Sub-district	S. No	Affected Villages
Banaskantha	Amirgadh	1	Awal Gonti
		2	Dungarpura
		3	Amirgadh
		4	Kitodar

District	Sub-district	S. No	Affected Villages	
		5	Dholia	
		6	Iqbalgarh	
		7	Baniawada	
		8	Deri	
		9	Mahadevia	
		10	Dhanpura	
		11	Umarkot	
		12	Karja	
		13	Kalimati	
		<u>Sub-total</u>	<u>13</u>	
		Palanpur	1	Antroli
			2	Pirjopura (Tankani)
			3	Lunawa
	4		Parpapada	
	5		Kholda	
	6		Chodotar	
	7		Akasan	
	8		Gathamam	
	9		Bhagal (Jagana)	
	10		Sagrosana	
	11		Vasna (Jagana)	
	12		Badarpura (Kalusana)	
	13		Pakhanwa	
	14		Moriya	
	15	Sangla		
	16	Uttampura		
	17	Tokariya		
	<u>Sub-total</u>	<u>17</u>		
	Vadgan	1	Changwada	
		2	Changa	
		3	Basu	
		4	Meta	
		5	Mumuwada	
	<u>Sub-total</u>	<u>5</u>		
	<u>Total District</u>		<u>35</u>	
Patan	Sidhpur	1	Kakoshi	
		2	Rasulpur	
		3	Metrana	
		4	Vaghana	
		5	Thakrasan	
		6	Dethali	
		7	Dindrol	
		8	Karan	
		9	Nedra	
		10	Chandravati	
		11	Chandanswar	
		12	Nandotri	
		13	Momvada	
		14	Kunvara	
	<u>Sub-total</u>	<u>14</u>		
	Patan	1	Derasana	
		2	Kani	
		3	Visal Vasna	
		4	Manund	
5		Ruvavi		
<u>Sub-total</u>	<u>5</u>			
<u>Total District</u>		<u>19</u>		
Mahesana	Unjha	1	Lindi	
		2	Amudh	
		3	Sunoka	
		4	Sujerupura (Dabi)	
		5	Chandravati	
		6	Pali	
		7	Dabhi	
	<u>Sub-total</u>	<u>7</u>		
	Mahesana	1	Allora	
2		Hardesan		

District	Sub-district	S. No	Affected Villages		
		3	Bodla		
		4	Nugar		
		5	Maguna		
		6	Karshanpura		
		7	Sametra		
		8	Heduva-Rajgar		
		9	Vadosan		
		10	Boriavi		
		11	Linch		
		12	Ambasan		
		13	Baliyasan		
		14	Bhasariya		
		15	Tundali		
		16	Matpur		
		17	Padi		
		18	Kanthravi		
		19	Gorad		
		20	Gilosan		
		21	Chatiyarda		
		22	Mareda		
		23	Sabkheda		
		24	Veerata		
		25	Surpura		
		26	Revavi		
		27	Dabri		
		28	Mandali		
		29	Jagudan		
			Sub-total	29	
			Kadi	1	Ganeshpura
2	Mathasur				
3	Nandasan				
4	Kherpur				
5	Rajpur				
6	Irana				
7	Indrad				
8	Narain Pura				
9	Lakshmipura				
10	Ankhol				
11	Vamaj				
12	Lunasan				
	Sub-total	12			
Total District		48			
Gandhinagar	Kalol	1	Dhanot		
		2	Chhatral		
		3	Piyaj		
		4	Ramnagar		
		5	Vansajeda		
		6	Bhoyan Moti		
		7	Khatraj		
		8	Sanavad		
		9	Nasmed		
		10	Rancharada		
		11	Karoli		
		12	Boriyavi		
		13	Jethlaj		
		14	Dabla		
		15	Vasnol		
		16	Vansjeda Dhedia		
		17	Unali		
		18	Hajipur		
	Sub-total	18			
Total District		18			
Ahmedabad	Sanand	1	Garodiya		
		2	Godhavi		
		3	Kaneti		
		4	Nidhard		
		5	Sanand		

District	Sub-district	S. No	Affected Villages		
		6	Pipan		
		7	Moti Devti		
		8	Nani Devti		
		9	Palwada		
		10	Soila		
		11	Sari		
		12	Matoda		
		13	Vasna Chacharavadi		
		14	Lodariyal		
		Sub-total	14		
		Bhavla		1	Rajoda
				2	Kavitha
				3	Modasar
		Sub-total	3		
Daskroi		1	Miroli		
		2	Mahijda		
		3	Rampura		
		4	Timba		
		5	Kashindra		
		6	Bhat		
Sub-total	6				
Total District		21			
Kheda	Kheda	1	Adasar		
		2	Kathwada		
		3	Chalindra		
		4	TOI Vasna		
		5	Naika Navi Vasad (Not Revenue village)		
		6	Naika Chalendra(Not Revenue village)		
		7	Navagam		
		8	Shetra		
		9	Vasna Bujarg		
		10	Dharampura		
		11	Govindpura		
		12	Dharoda		
	Sub-total	12			
	Matar		1	Pimpara	
			2	Koshiyal	
			3	Matar	
			4	Traj	
			5	Garmala	
			6	Machhiet	
			7	Hernaj	
			8	Khandhli	
	9	Laval			
10	Maliataj				
Sub-total	10				
Total District		22			
Anand	Sojitra	1	Deva Vanta		
		2	Roon		
	Sub-total	2			
	Petlad		1	Demol	
			2	Changa	
			3	Mahelav	
			4	Ravipura	
			5	Morad	
			6	Boriya	
			7	Thaladi	
			8	Padgol	
			9	Radupura	
			10	Kaisy Kua	
	11	Navagam			
	12	Vishnoli			
Sub-total	12				
Anand		1	Sandesar		
		2	Gana		
		3	Meghva Gana		

District	Sub-district	S. No	Affected Villages	
		4	Vans Khiliya	
		5	Khandhali	
		6	Napad Vanto	
		Sub-total	6	
	Borsad	1	Napa Vanto	
		2	Kasumbad	
		Sub-total	2	
	Anklav	1	Khadol (Haldari)	
		2	Haldari	
		3	Bhetasi (Talpad)	
		4	Laxmi Pura*	
		5	Lalpura*	
		6	Ambali*	
		7	Khanvadi	
		Sub-total	7	
	Total District		29	
	Vadodara	Vadodara	1	Bil
2			Kotna	
3			Sherkhi	
4			Sonarkoi	
5			Trikanpura	
6			Krisna nagar	
7			Mahapura	
8			Bhayali	
9			Gokul Pura	
10			Samiyala	
11			Jeevari	
12			Chapad	
13			Khalipur	
14			Vadasala	
15			Karali	
16			Itola	
17			Maneja	
18			Sevasi	
19			Jambua (Vadodara City)	
20			Anagarh	
21			Raypura	
22			Maretha	
23			Vernama	
	Sub-total	23		
Total District		23		
Total State		215		

Appendix 3-8 Public Comments on Draft EIA Report

Appendix 3-8 Public Comments on the Draft EIA Report

SUMMARY OF THE COMMENTS

[Haryana State]

State:	Haryana	District:	Rewari	Village:	Gangaachariya Ahir
Category of Comments:	Natural Environment; Land and R&R Issues				
Type of Comments:	Community				
Abstract:					
	<ol style="list-style-type: none"> 1. The only pond of the village may get affected due to the proposed DFC track, resulting adverse impact on the drinking water source of cattle as well the natural environment of the area. The railway track should be at least 1 km away from the pond. 2. The villagers losing their land due to the project will have long term adverse economic impacts. They should be paid a compensation of 10 million INR per 0.41 ha. Further, royalty should be paid for 30 years. 3. Jobs should be provided in railway/other government departments to at least one member of the affected families. Insurance cover should be provided to every affected family. 				

State:	Haryana	District:	Rewari	Village:	Rajpur Khalsa
Category of Comments:	Social except land and R&R Issues				
Type of Comments:	Individual				
Abstract:					
	<p>A man of Rajpur Khalsa village owns a piece of agricultural land which is not affected by the project. However, irrigation water to his land is being supplied from a tube well through 2 km long PVC pipeline, costing about 0.6 million INR. The pipeline and the tube well will get affected by the project. The man has requested to kindly save these installations.</p>				

State:	Haryana	District:	Rewari	Village:	Majra
Category of Comments:	Land and R&R Issues				
Type of Comments:	Individual				
Abstract:					
	<p>The village head requests to pay the compensation against acquired land as per the market rate (2.5 million INR per acre) and anticipates difficulty is sustaining the life of the villagers if compensation is paid as per government rate.</p>				

State:	Haryana	District:	Mahendragarh	Village:	Ateli Mandi
Category of Comments:	Natural Environment; Land and R&R Issues				
Type of Comments:	Community				
Abstract:					
	<p>The Secretary of Haryana Byapar Mandal (Haryana Traders Association), Ateli Mandi has raised the following issues:</p> <ol style="list-style-type: none"> 1. The project will increase environmental pollution 2. The increased noise pollution level will disturb the students and will also increase the deafness among the residents. 3. Major chunk of the settlement is located on the south, by the railway. Therefore, the project will affect a good number of residential buildings. 4. A bypass (detour) should be considered for Ateli Mandi region. 5. The temple and crematorium ground will be affected by the project. 6. This project will affect a number of villages in the area which is located close to the railway tracks. 7. The water supply tank and rest house of Ateli Mandi will be affected due to the project. 8. The increased vibration level will damage the belongings of the residents. 9. Radha Krishna temple, a century old shrine is quite popular among the residents. This temple will be affected, which will hurt the religious sentiments of the locals. 10. Potential losses due to land acquisition are anticipated to be of high magnitude. Further, the newspapers have reported that only meager amount will be paid as compensation. 11. The level crossing is usually closed for train operation in almost half an hour interval. The proposed DFC corridor will increase the frequency of train movement and will eventually lead to traffic snarls at the crossing. This will not only increase the environmental pollution but also stall the development of the town. 12. The drainage system of the town runs parallel to the existing track for about 1.6 km and then terminates across the railway line. The proposed project will affect the drainage system causing great inconvenience to the residents. Therefore, bypass (detour) must be considered for Ateli Mandi area. 				

*Draft Final Report
The SAPROF Study for Dedicated Freight Corridor Project*

State:	Haryana	District:	Mahendragarh	Village:	Ateli Mandi
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Community				
Abstract	<p>A man, Chairman, Ateli Mandi Municipal Corporation has raised the following issues:</p> <ol style="list-style-type: none"> 1. The project will increase environmental pollution 2. The increased noise pollution level will disturb the students and will also increase the deafness among the residents. 3. Major chunk of the settlement is located on the south, by the railway. Therefore, the project will affect a good number of residential buildings. 4. A bypass (detour) should be considered for Ateli Mandi region. 5. The temple and crematorium ground will be affected by the project. 6. This project will affect a number of villages in the area which is located close to the railway tracks. 7. The water supply tank and rest house of Ateli Mandi will be affected due to the project. 8. The increased vibration level will damage the belongings of the residents. 9. Radha Krishna temple, a century old shrine is quite popular among the residents. This temple will be affected, which will hurt the religious sentiments of the locals. 10. Potential losses due to land acquisition are anticipated to be of high magnitude. Further, the newspapers have reported that only meager amount will be paid as compensation. 				

State:	Haryana	District:	Mahendragarh	Village:	Ateli Mandi
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Community				
Abstract	<p>A man, Shiv Mandir Raksha Committee (Forum for saving Shiv Temple), Ateli Mandi has raised the following issues:</p> <ol style="list-style-type: none"> 1. The project will increase environmental pollution 2. The increased noise pollution level will disturb the students and will also increase the deafness among the residents. 3. Major chunk of the settlement is located on the south, by the railway. Therefore, the project will affect a good number of residential buildings. 4. A bypass (detour) should be considered for Ateli Mandi region. 5. The temple and crematorium ground will be affected by the project. 6. This project will affect a number of villages in the area which is located close to the railway tracks. 7. The water supply tank and rest house of Ateli Mandi will be affected due to the project. 8. The increased vibration level will damage the belongings of the residents. 9. Radha Krishna temple, a century old shrine is quite popular among the residents. This temple will be affected, which will hurt the religious sentiments of the locals. 10. Potential losses due to land acquisition are anticipated to be of high magnitude. Further, the newspapers have reported that only meager amount will be paid as compensation. 11. The level crossing is usually closed for train operation in almost half an hour interval. The proposed DFC corridor will increase the frequency of train movement and will eventually lead to traffic snarls at the crossing. This will not only increase the environmental pollution but also stall the development of the town. 12. The drainage system of the town runs parallel to the existing track for about 1.6 km and then terminates across the railway line. The proposed project will affect the drainage system causing great inconvenience to the residents. Therefore, bypass (detour) must be considered for Ateli Mandi area. 				

State:	Haryana	District:	Mahendragarh	Village:	Bachod
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Community				
Abstract	<p>A man, village head has requested for the following:</p> <ol style="list-style-type: none"> 1. ROB at each rail-road crossings 2. Job for project affected family and compensation as per the market value of land at Gurgaon city instead of collector rate 3. Compensation against damaged/acquired utilities such as wells 4. Predicted increase in noise and vibration level, causing damage in residential structures. 				

State:	Haryana	District:	Mahendragarh	Village:	Chilro Ki Dhani
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Community				
Abstract					

Residents of Chitro Ki Dhani village has raised the following issues:	
Issues:	
1.	Every family in the village belongs to Scheduled Castes
2.	Every family own their residential houses
3.	The village was founded in 1963 as "lal dora" area (area where land deeds are not provided)
4.	The villagers don't own any other plot/land except the present residential plots
5.	All of villagers do not own any agricultural land and are not dependent on agrarian practices for their livelihood
6.	The villagers do not have any alternative residential plots/units.
Suggestions:	
1.	All of the villagers belong to same community and wish to stay together.
2.	Alternative land, monetary assistance for construction of houses and sufficient time for construction and shifting should be provided.
3.	Primary education facilities should be provided at the resettled colony.
4.	Health care facilities should be provided within a kilometer of the resettled colony.
5.	Link road to the colony from the main thoroughfares should be provided
6.	Drinking water facility should be ensured before setting up of the resettled colony
7.	Basic commodities should be made available within 1 km of the resettled colonies.

State:	Haryana	District:	Mahendragarh	Village:	Fatehpur
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Individual				
Abstract	A man, Ex Sarpanch of the village informed that an old Shiv Temple may get affected due to the project. It will hurt the religious sentiments of the locals. He requested project authorities to look for some alternative arrangements so that the temple remains undisturbed.				

State:	Haryana	District:	Mahendragarh	Village:	Fatehpur
Category of Comments	Natural Environment; Social Expect R&R Issues				
Type of Comments	Community				
Abstract	The village head of Fatehpur welcomed the project and expected that with completion of the DFC, our railway system will be at par with other developed nations. However, he anticipated the following impacts :				
1	Dust Pollution during construction period for increased vehicular movement. Water is a scarce resource in the area, so it will not be available for sprinkling.				
2	The houses are not earth quake resistant, so these structures may collapse due to increased vibration level during the construction phase				
3	Almost half of the village is affected by the project. The school, temples and other facilities have been built by the villagers by community contribution. Will the Government be generous to rebuild these facilities?				
4	The rehabilitation of the grazing lands and two ponds will be difficult as alternative land is not available in vicinity.				
5	The level crossing will remain closed due to increased rail movement, leading to disruption in traffic flow.				
6	The tree felling activity will only increase the pollution load till the time green belt gets developed. The area being water scarce, the early re-development of plantation is a remote possibility.				
7	Increased pollution during the operation phase due to use of old railway engines that emits huge quantum of smoke				

State:	Haryana	District:	Mahendragarh	Village:	Narnaul
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Community				
Abstract	The people of Narnaul, Mahendragarh District raised the following issues:				
a.	The area is near about 150-200 years old. Their forefathers have constructed houses, shops and lots of business institutions. If the DFC corridor passes through this area then near about 5,000 people will be affected.				
b.	The area of land to be acquired is not clearly mentioned in the booklet as well as during the PCMs. Please provide clarification.				
c.	It is requested to consider a detour and provide land and monetary compensation to the affected persons.				

*Draft Final Report
The SAPROF Study for Dedicated Freight Corridor Project*

State:	Haryana	District:	Mahendragarh	Village:	Tajpur
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Community				
Abstract					
The Tajpur residents commented as follows:					
a. The village is located on both sides of the railway track. Therefore, ROB/ RUB should be provided.					
b. The compensation rate for Narnaul should be same with Rewari and Gaurgaun.					
c. Proper compensation should be paid for the sensitive receptors like Temple, Gurudwara, Cremation area, Schools etc which are going to be affected for DFC project.					
d. Proper compensation should be paid for the Panchayat land to be acquired for the project.					
e. The increase in noise and vibration level should be taken care of.					

[Rajasthan State]

State:	Rajasthan	District:	Alwar	Village:	Kathoowas
Category of Comments	Land and R&R Issues				
Type of Comments	Community				
Abstract					
The village is sandwiched between Rewari and Mahendragarh Districts of Haryana. The compensation for land acquisition is reported to be higher in adjoining Haryana villages than this village as the government circle rates (land rates) in Rajasthan is lower than that of Haryana. Interestingly, the land conditions in the village is exactly same as of Haryana villages.					
The villagers have also requested for construction of ROB for smooth traffic flow.					

State:	Rajasthan	District:	Sikar	Village:	Jaitusar
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Community				
Abstract					
The village head has welcomed the project and expected that it will benefit the entire nation. However, he raised the following issues:					
1. Greenbelt to be developed on both sides of the track					
2. The railway engines/compartments should be fitted to anti-vibration/noise equipments.					
3. The PAPs should be rehabilitated and at least one member of the affected family should be project a job as per his/her qualification.					
4. The compensation should be paid as per the market rate after proper evaluation.					

State:	Rajasthan	District:	Jaipur	Village:	Badhal
Category of Comments	Social except Land and R&R Issues				
Type of Comments	Community				
Abstract					
The village head has raised the following issues:					
1. ROB should be provided at the rail-road crossing					
2. The passenger train movement should not be hampered during the construction period.					
3. Chetak Express should stop at the nearby station and a new train between Delhi and Jodhpur should be started.					
4. The rest house located close to the tracks may be affected by the project. It should be re-constructed.					

State:	Rajasthan	District:	Jaipur	Village:	Charanwas
Category of Comments	Land and R&R Issues				
Type of Comments	Community				
Abstract					
The village head has raised the following issues:					
1. The existing level crossing should remain open.					
2. The compensation for acquired land should be provided as per the DLC rate.					

*Draft Final Report
The SAPROF Study for Dedicated Freight Corridor Project*

State:	Rajasthan	District:	Jaipur	Village:	Dewa Ka Was
Category of Comments	Land and R&R Issues				
Type of Comments	Community				
Abstract					
The village head has raised the following issues:					
<ol style="list-style-type: none"> 1. ROB should be constructed over the only connecting road between the village and Jaipur-Sikar State Highway 2. Bitumen layer should be laid over the existing road on the east of the railway track, 3. Compensation for acquired agricultural land should be provided as per the present DLC rate while compensation acquired structures should be paid as per the present BSR rate. 					

State:	Rajasthan	District:	Jaipur	Village:	Sakhun
Category of Comments	Social except Land and R&R Issues; Natural Environment				
Type of Comments	Community				
Abstract					
The village head has raised the following issues:					
<ol style="list-style-type: none"> 1. The goods train and passenger train should halt in the station 2. Either compensation should be paid as per the BSR rates for acquired irrigation wells or these should be reconstructed. 3. ROB should be constructed over gate number 11, 13, 14 and 15. The level crossing number 14 should be manned for 24 hours till the time ROB is constructed. 4. The area being water scarce, drinking water can be bought from other areas through railway. Water tank/chambers should be constructed in the station premises to facilitate the storage of water. 5. Foot over bridge should be constructed in the railway station 6. Storm water drainage canal connecting various nallas should be considered. 7. Greenbelt should be developed on both sides of the Jaipur-Ajmer section of the track. 8. Provision for new level crossing on the east of the station should be considered. 9. Provision of electricity in the platforms should be considered for passenger amenities. 10. A new railway line from Sakun to Tonk via Dudu and Malpura should be considered for future requirements. 11. A retiring room for passengers on the southern side of the railway station should be constructed. 12. Mechanism should be developed to update the village heads regularly about the development activity. 					

State:	Rajasthan	District:	Jaipur	Village:	Itawa
Category of Comments	Land and R&R Issues				
Type of Comments	Community				
Abstract					
The village head has raised the following issues:					
<ol style="list-style-type: none"> 1. Connective roads for farmers (who own lands close to the DFC tracks) up to main thoroughfares should be provided 2. Provision for ROB/RUB should be considered for providing access across the DFC track. 3. Compensation for acquired agricultural land should be provided at par with Kishan Manpura and Asthi Kalan Villages. 4. Permanent solution for impacts due to increased noise and vibration level should be devised. 5. Compensation for acquired structures as per the market rate should be provided. 					

State:	Rajasthan	District:	Jaipur	Village:	Kabro Ka Was
Category of Comments	Land and R&R Issues				
Type of Comments	Community				
Abstract					
The village head has raised the following issues:					
<ol style="list-style-type: none"> 1. Provision of ROB at the level crossing as this is the only connecting road to the village. 2. Compensation for acquired agricultural land should be provided at par with Kishan Manpura and Asthi Kalan Villages. 3. Open wells and tube wells should be compensated as per the BSR rates. 4. Bitumen road should be constructed on the east of the DFC track so that villagers can get easy access to the Ringus-Phulera Road. 					

State:	Rajasthan	District:	Jaipur	Village:	Pachar Malikpura
Category of Comments	Land and R&R Issues				
Type of Comments	Individual				
Abstract					
A lady with a man owns about 3.5 ha land with a plantation of 550 trees, which will be acquired for the purpose of the project. 14 person of her family are dependent on the land for their livelihood. She has requested the project authorities to					

make full payment of the compensation amount before taking possession of the acquired land. Further, she has also suggested to develop a 4 lane road near the proposed corridor.

State:	Rajasthan	District:	Jaipur	Village:	Renwal
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Individual				
Abstract	A man, priest of Gumtiwale Balaji Temple at Renwal expressed the view that increased rail traffic movement due to the project will increase the noise and vibration level to the considerable extent. This will affect the peace and tranquility of the worshippers. The temple should be re-constructed at near places in government land with due diligence.				

State:	Rajasthan	District:	Ajmer	Village:	Madangunj-Kishangarh
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Individual				
Abstract	A man, resident of Kishangarh expressed the view that there are several residential, commercial and religious structures affected by the proposed project that will cause big economic loss to public as well railways. Some of stakeholders will loose their sources of income and the religious sentiments of different communities will be hurt due to demolition of temples and mosques. Noise and vibration level as well as environmental pollution will increase, which will affect general public badly. Therefore, detour may be considered for Kishangarh Town.				

State:	Rajasthan	District:	Ajmer	Village:	Madangunj-Kishangarh
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Individual				
Abstract	A man owns a shop near Balaji ki Bagiche area, expressed the view that there are several residential, commercial and religious structures affected by the proposed project that will cause big economic loss to public as well railways. Some of stakeholders will loose their sources of income and the religious sentiments of different communities will be hurt due to demolition of temples and mosques. Noise and vibration level as well as environmental pollution will increase, which will affect general public badly. Therefore, detour may be considered for Kishangarh Town.				

State:	Rajasthan	District:	Ajmer	Village:	Madangunj-Kishangarh
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Individual				
Abstract	A man, resident of Kishangarh expressed the view that there are several residential, commercial and religious structures affected by the proposed project that will cause big economic loss to public as well railways. Some of stakeholders will loose their sources of income and the religious sentiments of different communities will be hurt due to demolition of temples and mosques. Noise and vibration level as well as environmental pollution will increase, which will affect general public badly. Therefore, detour may be considered for Kishangarh Town.				

State:	Rajasthan	District:	Ajmer	Village:	Madangunj-Kishangarh
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Individual				
Abstract	A man owns a shop near Balaji ki Bagiche area, expressed the view that there are several residential, commercial and religious structures affected by the proposed project that will cause big economic loss to public as well railways. Some of stakeholders will loose their sources of income and the religious sentiments of different communities will be hurt due to demolition of temples and mosques. Noise and vibration level as well as environmental pollution will increase, which will affect general public badly. Therefore, detour may be considered for Kishangarh Town.				

*Draft Final Report
The SAPROF Study for Dedicated Freight Corridor Project*

State:	Rajasthan	District:	Ajmer	Village:	Madangunj-Kishangarh
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Individual				
Abstract	A man owns a shop near Balaji ki Bagiche area, expressed the view that there are several residential, commercial and religious structures affected by the proposed project that will cause big economic loss to public as well railways. Some of stakeholders will loose their sources of income and the religious sentiments of different communities will be hurt due to demolition of temples and mosques. Noise and vibration level as well as environmental pollution will increase, which will affect general public badly. Therefore, detour may be considered for Kishangarh Town.				

State:	Rajasthan	District:	Ajmer	Village:	Madangunj-Kishangarh
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Individual				
Abstract	A man owns a shop near Balaji ki Bagiche area, expressed the view that there are several residential, commercial and religious structures affected by the proposed project that will cause big economic loss to public as well railways. Some of stakeholders will loose their sources of income and the religious sentiments of different communities will be hurt due to demolition of temples and mosques. Noise and vibration level as well as environmental pollution will increase, which will affect general public badly. Therefore, detour may be considered for Kishangarh Town.				

State:	Rajasthan	District:	Ajmer	Village:	Madangunj-Kishangarh
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Individual				
Abstract	A man, resident of Kishangarh expressed the view that there are several residential, commercial and religious structures affected by the proposed project that will cause big economic loss to public as well railways. Some of stakeholders will loose their sources of income and the religious sentiments of different communities will be hurt due to demolition of temples and mosques. Noise and vibration level as well as environmental pollution will increase, which will affect general public badly. Therefore, detour may be considered for Kishangarh Town.				

State:	Rajasthan	District:	Ajmer	Village:	Madangunj-Kishangarh
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Individual				
Abstract	A man owns a shop near Balaji ki Bagiche area, expressed the view that there are several residential, commercial and religious structures affected by the proposed project that will cause big economic loss to public as well railways. Some of stakeholders will loose their sources of income and the religious sentiments of different communities will be hurt due to demolition of temples and mosques. Noise and vibration level as well as environmental pollution will increase, which will affect general public badly. Therefore, detour may be considered for Kishangarh Town.				

State:	Rajasthan	District:	Ajmer	Village:	Madangunj-Kishangarh
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Individual				
Abstract	A man, resident of Kishangarh expressed the view that there are several residential, commercial and religious structures affected by the proposed project that will cause big economic loss to public as well railways. Some of stakeholders will loose their sources of income and the religious sentiments of different communities will be hurt due to demolition of temples and mosques. Noise and vibration level as well as environmental pollution will increase, which will affect general public badly. Therefore, detour may be considered for Kishangarh Town.				

State:	Rajasthan	District:	Ajmer	Village:	Madangunj-Kishangarh
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Individual				
Abstract	A man, resident of Kishangarh expressed the view that there are several residential, commercial and religious structures affected by the proposed project that will cause big economic loss to public as well railways. Some of stakeholders will				

lose their sources of income and the religious sentiments of different communities will be hurt due to demolition of temples and mosques. Noise and vibration level as well as environmental pollution will increase, which will affect general public badly. Therefore, detour may be considered for Kishangarh Town.

State:	Rajasthan	District:	Ajmer	Village:	Madangunj-Kishangarh
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Individual				
Abstract	A man, resident of Kishangarh expressed the view that there are several residential, commercial and religious structures affected by the proposed project that will cause big economic loss to public as well railways. Some of stakeholders will lose their sources of income and the religious sentiments of different communities will be hurt due to demolition of temples and mosques. Noise and vibration level as well as environmental pollution will increase, which will affect general public badly. Therefore, detour may be considered for Kishangarh Town.				

State:	Rajasthan	District:	Ajmer	Village:	Madangunj-Kishangarh
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Individual				
Abstract	A man, resident of Kishangarh expressed the view that there are several residential, commercial and religious structures affected by the proposed project that will cause big economic loss to public as well railways. Some of stakeholders will lose their sources of income and the religious sentiments of different communities will be hurt due to demolition of temples and mosques. Noise and vibration level as well as environmental pollution will increase, which will affect general public badly. Therefore, detour may be considered for Kishangarh Town.				

State:	Rajasthan	District:	Ajmer	Village:	Madangunj-Kishangarh
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Individual				
Abstract	A man, priest of Sri Balaji Bagicha expressed the view that the temple complex is more than 250 years old and it also houses several other temples. Further, there are several residential, commercial and religious structures affected by the proposed project that will cause big economic loss to public as well railways. Some of stakeholders will lose their sources of income and the religious sentiments of different communities will be hurt due to demolition of temples and mosques. Noise and vibration level as well as environmental pollution will increase, which will affect general public badly. Therefore, detour may be considered for Kishangarh Town.				

State:	Rajasthan	District:	Ajmer	Village:	Madangunj-Kishangarh
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Individual				
Abstract	A man, resident of Kishangarh expressed the view that there are several residential, commercial and religious structures affected by the proposed project that will cause big economic loss to public as well railways. Some of stakeholders will lose their sources of income and the religious sentiments of different communities will be hurt due to demolition of temples and mosques. Noise and vibration level as well as environmental pollution will increase, which will affect general public badly. Therefore, detour may be considered for Kishangarh Town.				

State:	Rajasthan	District:	Ajmer	Village:	Madangunj-Kishangarh
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Community				
Abstract	The shopkeepers who own shops near Balaji ki Bagiche area, expressed the view that there are several residential, commercial and religious structures affected by the proposed project that will cause big economic loss to public as well railways. Some of stakeholders will lose their sources of income and the religious sentiments of different communities will be hurt due to demolition of temples and mosques. Noise and vibration level as well as environmental pollution will increase, which will affect general public badly. Therefore, detour may be considered for Kishangarh Town.				

State:	Rajasthan	District:	Ajmer	Village:	Madangunj-Kishangarh
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Individual				
Abstract	A man owns a shop near Balaji ki Bagiche area, expressed the view that there are several residential, commercial and religious structures affected by the proposed project that will cause big economic loss to public as well railways. Some of stakeholders will loose their sources of income and the religious sentiments of different communities will be hurt due to demolition of temples and mosques. Noise and vibration level as well as environmental pollution will increase, which will affect general public badly. Therefore, detour may be considered for Kishangarh Town.				

[Gujarat State]

State:	Gujarat	District:	Vadodara	Village:	Maretha
Category of Comments	Land and R&R Issues				
Type of Comments	Community				
Abstract	Project affected persons of Maretha Village has raised the following observations:				
<ol style="list-style-type: none"> 1. The DFC alignment affects 31 villages in the district, out of which 19 villages comes under VUDA [Vadodara Urban Development Authority] area. 2. The State government has planned to develop Vadodara as Mega City and sale/purchase of lands within the VUDA area is restricted. The alignment should either bypnss the VUDA area or should be accommodated within the reversed area for road/rail development. 640 m wide corridor has been earmarked for road development, where DFC tracks can be accommodated. 3. The compensation to be provided [circle rate + 60%] is inadequate and will cause huge economic losses. The farmers want to retain their status as farmers and do not wish to take any other profession for livelihood. Further, compensation should also be paid for bore well and trees in the acquired land. 4. The project will not benefit the farmers. Moreover, the fragmented pieces of land, which will not be acquired, will be of no use for agrarian purposes. Construction of embankment will cause water logging, which will further deteriorate the productivity of neighboring land. 5. The exiting norms prohibit any construction within 60 m on both sides of the track; construction of 1 storey houses and small roads are allowed in next 20m width. Therefore, implementation of the project will dampen the development prospects of the lands. 6. The compensation amount should 500% on the circle rate or market rate, whichever is higher and government/railway jobs should be ensured for at members of affected families for a few generations. 7. The farmers in this area will be badly affected due land acquisition by various authorities viz., VUDA, DFCCIL etc for developmental purposes. Therefore, the unutilized government lands should be distributed among the farmers. 8. Accessibility across the DFC will be major problem; therefore 12 m wide access roads should be provided on both sides of the track. 9. The affected farmers have taken agriculture loans from Nationalized Banks; the project authorities should repay the balance loan amount and provide certificate from the banks. 10. The project is designed to benefit industrial houses, not ordinary citizens of our country. Therefore, this project is not a public purpose project. Therefore, 500% of the highest circle rates among the affected 31 villages should be the basis of the compensation. 					

State:	Gujarat	District:	Vadodara	Village:	Bil
Category of Comments	Land and R&R Issues				
Type of Comments	Community				
Abstract	Project affected persons of Bil Village has raised the following observations:				
<ol style="list-style-type: none"> 1. The DFC alignment affects 31 villages in the district, out of which 19 villages comes under VUDA [Vadodara Urban Development Authority] area. 2. The State government has planned to develop Vadodara as Mega City and sale/purchase of lands within the VUDA area is restricted. The alignment should either bypass the VUDA area or should be accommodated within the reversed area for road/rail development. 640 m wide corridor has been earmarked for road development, where DFC tracks can be accommodated. 3. The compensation to be provided [circle rate + 60%] is inadequate and will cause huge economic losses. The farmers want to retain their status as farmers and do not wish to take any other profession for livelihood. Further, compensation should also be paid for bore well and trees in the acquired land. 4. The project will not benefit the farmers. Moreover, the fragmented pieces of land, which will not be acquired, will be of no use for agrarian purposes. Construction of embankment will cause water logging, which will further deteriorate the productivity of neighboring land. 5. The exiting norms prohibit any construction within 60 m on both sides of the track; construction of 1 storey houses and small roads are allowed in next 20m width. Therefore, implementation of the project will dampen the development prospects of the lands. 					

6. The compensation amount should 500% on the circle rate or market rate, whichever is higher and government/railway jobs should be ensured for at members of affected families for a few generations.
7. The farmers in this area will be badly affected due land acquisition by various authorities viz., VUDA, DFCCIL etc for developmental purposes. Therefore, the unutilized government lands should be distributed among the farmers.
8. Accessibility across the DFC will be major problem; therefore 12 m wide access roads should be provided on both sides of the track.
9. The affected farmers have taken agriculture loans from Nationalized Banks; the project authorities should repay the balance loan amount and provide certificate from the banks.
10. The project is designed to benefit industrial houses, not ordinary citizens of our country. Therefore, this project is not a public purpose project. Therefore, 500% of the highest circle rates among the affected 31 villages should be the basis of the compensation.

State:	Gujarat	District:	Vadodara	Village:	Samiyala
Category of Comments	Land and R&R Issues				
Type of Comments	Community				
Abstract	Project affected persons of Samiyala Village has raised the following observations:				
	<ol style="list-style-type: none"> 1. The DFC alignment affects 31 villages in the district, out of which 19 villages comes under VUDA [Vadodara Urban Development Authority] area. 2. The State government has planned to develop Vadodara as Mega City and sale/purchase of lands within the VUDA area is restricted. The alignment should either bypass the VUDA area or should be accommodated within the reversed area for road/rail development. 640 m wide corridor has been earmarked for road development, where DFC tracks can be accommodated. 3. The compensation to be provided [circle rate + 60%] is inadequate and will cause huge economic losses. The farmers want to retain their status as farmers and do not wish to take any other profession for livelihood. Further, compensation should also be paid for bore well and trees in the acquired land. 4. The project will not benefit the farmers. Moreover, the fragmented pieces of land, which will not be acquired, will be of no use for agrarian purposes. Construction of embankment will cause water logging, which will further deteriorate the productivity of neighboring land. 5. The exiting norms prohibit any construction within 60 m on both sides of the track; construction of 1 storey houses and small roads are allowed in next 20m width. Therefore, implementation of the project will dampen the development prospects of the lands. 6. The compensation amount should 500% on the circle rate or market rate, whichever is higher and government/railway jobs should be ensured for at members of affected families for a few generations. 7. The farmers in this area will be badly affected due land acquisition by various authorities viz., VUDA, DFCCIL etc for developmental purposes. Therefore, the unutilized government lands should be distributed among the farmers. 8. Accessibility across the DFC will be major problem; therefore 12 m wide access roads should be provided on both sides of the track. 9. The affected farmers have taken agriculture loans from Nationalized Banks; the project authorities should repay the balance loan amount and provide certificate from the banks. 10. The project is designed to benefit industrial houses, not ordinary citizens of our country. Therefore, this project is not a public purpose project. Therefore, 500% of the highest circle rates among the affected 31 villages should be the basis of the compensation. 				

State:	Gujarat	District:	Vadodara	Village:	Kambola
Category of Comments	Land and R&R Issues				
Type of Comments	Community				
Abstract	Project affected persons of Kambola Village has raised the following observations:				
	<ol style="list-style-type: none"> 1. The DFC alignment affects 31 villages in the district, out of which 19 villages comes under VUDA [Vadodara Urban Development Authority] area. 2. The State government has planned to develop Vadodara as Mega City and sale/purchase of lands within the VUDA area is restricted. The alignment should either bypass the VUDA area or should be accommodated within the reversed area for road/rail development. 640 m wide corridor has been earmarked for road development, where DFC tracks can be accommodated. 3. The compensation to be provided [circle rate + 60%] is inadequate and will cause huge economic losses. The farmers want to retain their status as farmers and do not wish to take any other profession for livelihood. Further, compensation should also be paid for bore well and trees in the acquired land. 4. The project will not benefit the farmers. Moreover, the fragmented pieces of land, which will not be acquired, will be of no use for agrarian purposes. Construction of embankment will cause water logging, which will further deteriorate the productivity of neighboring land. 5. The exiting norms prohibit any construction within 60 m on both sides of the track; construction of 1 storey houses and small roads are allowed in next 20m width. Therefore, implementation of the project will dampen the development prospects of the lands. 6. The compensation amount should 500% on the circle rate or market rate, whichever is higher and government/railway jobs should be ensured for at members of affected families for a few generations. 				

*Draft Final Report
The SAPROF Study for Dedicated Freight Corridor Project*

7. The farmers in this area will be badly affected due land acquisition by various authorities viz., VUDA, DFCCIL etc for developmental purposes. Therefore, the unutilized government lands should be distributed among the farmers.
8. Accessibility across the DFC will be major problem; therefore 12 m wide access roads should be provided on both sides of the track.
9. The affected farmers have taken agriculture loans from Nationalized Banks; the project authorities should repay the balance loan amount and provide certificate from the banks.
10. The project is designed to benefit industrial houses, not ordinary citizens of our country. Therefore, this project is not a public purpose project. Therefore, 500% of the highest circle rates among the affected 31 villages should be the basis of the compensation.

State:	Gujarat	District:	Vadodara	Village:	Chansad
Category of Comments	Land and R&R Issues				
Type of Comments	Community				
Abstract	Project affected persons of Chansad Village has raised the following observations:				
1.	The DFC alignment affects 31 villages in the district, out of which 19 villages comes under VUDA [Vadodara Urban Development Authority] area.				
2.	The State government has planned to develop Vadodara as Mega City and sale/purchase of lands within the VUDA area is restricted. The alignment should either bypass the VUDA area or should be accommodated within the reversed area for road/rail development. 640 m wide corridor has been earmarked for road development, where DFC tracks can be accommodated.				
3.	The compensation to be provided [circle rate + 60%] is inadequate and will cause huge economic losses. The farmers want to retain their status as farmers and do not wish to take any other profession for livelihood. Further, compensation should also be paid for bore well and trees in the acquired land.				
4.	The project will not benefit the farmers. Moreover, the fragmented pieces of land, which will not be acquired, will be of no use for agrarian purposes. Construction of embankment will cause water logging, which will further deteriorate the productivity of neighboring land.				
5.	The exiting norms prohibit any construction within 60 m on both sides of the track; construction of 1 storey houses and small roads are allowed in next 20m width. Therefore, implementation of the project will dampen the development prospects of the lands.				
6.	The compensation amount should 500% on the circle rate or market rate, whichever is higher and government/railway jobs should be ensured for at members of affected families for a few generations.				
7.	The farmers in this area will be badly affected due land acquisition by various authorities viz., VUDA, DFCCIL etc for developmental purposes. Therefore, the unutilized government lands should be distributed among the farmers.				
8.	Accessibility across the DFC will be major problem; therefore 12 m wide access roads should be provided on both sides of the track.				
9.	The affected farmers have taken agriculture loans from Nationalized Banks; the project authorities should repay the balance loan amount and provide certificate from the banks.				
10.	The project is designed to benefit industrial houses, not ordinary citizens of our country. Therefore, this project is not a public purpose project. Therefore, 500% of the highest circle rates among the affected 31 villages should be the basis of the compensation.				

State:	Gujarat	District:	Vadodara	Village:	Vernama
Category of Comments	Land and R&R Issues				
Type of Comments	Community				
Abstract	Project affected persons of Vernama Village has raised the following observations:				
1.	The DFC alignment affects 31 villages in the district, out of which 19 villages comes under VUDA [Vadodara Urban Development Authority] area.				
2.	The State government has planned to develop Vadodara as Mega City and sale/purchase of lands within the VUDA area is restricted. The alignment should either bypass the VUDA area or should be accommodated within the reversed area for road/rail development. 640 m wide corridor has been earmarked for road development, where DFC tracks can be accommodated.				
3.	The compensation to be provided [circle rate + 60%] is inadequate and will cause huge economic losses. The farmers want to retain their status as farmers and do not wish to take any other profession for livelihood. Further, compensation should also be paid for bore well and trees in the acquired land.				
4.	The project will not benefit the farmers. Moreover, the fragmented pieces of land, which will not be acquired, will be of no use for agrarian purposes. Construction of embankment will cause water logging, which will further deteriorate the productivity of neighboring land.				
5.	The exiting norms prohibit any construction within 60 m on both sides of the track; construction of 1 storey houses and small roads are allowed in next 20m width. Therefore, implementation of the project will dampen the development prospects of the lands.				
6.	The compensation amount should 500% on the circle rate or market rate, whichever is higher and government/railway jobs should be ensured for at members of affected families for a few generations.				
7.	The farmers in this area will be badly affected due land acquisition by various authorities viz., VUDA, DFCCIL etc for developmental purposes. Therefore, the unutilized government lands should be distributed among the farmers.				

*Draft Final Report
The SAPROF Study for Dedicated Freight Corridor Project*

8. Accessibility across the DFC will be major problem; therefore 12 m wide access roads should be provided on both sides of the track.
9. The affected farmers have taken agriculture loans from Nationalized Banks; the project authorities should repay the balance loan amount and provide certificate from the banks.
10. The project is designed to benefit industrial houses, not ordinary citizens of our country. Therefore, this project is not a public purpose project. Therefore, 500% of the highest circle rates among the affected 31 villages should be the basis of the compensation.

State:	Gujarat	District:	Vadodara	Village:	Mahapura
Category of Comments	Land and R&R Issues				
Type of Comments	Community				
Abstract	<p>Project affected persons of Mahapura Village has raised the following observations:</p> <ol style="list-style-type: none"> 1. The DFC alignment affects 31 villages in the district, out of which 19 villages comes under VUDA [Vadodara Urban Development Authority] area. 2. The State government has planned to develop Vadodara as Mega City and sale/purchase of lands within the VUDA area is restricted. The alignment should either bypass the VUDA area or should be accommodated within the reversed area for road/rail development. 640 m wide corridor has been earmarked for road development, where DFC tracks can be accommodated. 3. The compensation to be provided [circle rate + 60%] is inadequate and will cause huge economic losses. The farmers want to retain their status as farmers and do not wish to take any other profession for livelihood. Further, compensation should also be paid for bore well and trees in the acquired land. 4. The project will not benefit the farmers. Moreover, the fragmented pieces of land, which will not be acquired, will be of no use for agrarian purposes. Construction of embankment will cause water logging, which will further deteriorate the productivity of neighboring land. 5. The exiting norms prohibit any construction within 60 m on both sides of the track; construction of 1 storey houses and small roads are allowed in next 20m width. Therefore, implementation of the project will dampen the development prospects of the lands. 6. The compensation amount should 500% on the circle rate or market rate, whichever is higher and government/railway jobs should be ensured for at members of affected families for a few generations. 7. The farmers in this area will be badly affected due land acquisition by various authorities viz., VUDA, DFCCIL etc for developmental purposes. Therefore, the unutilized government lands should be distributed among the farmers. 8. Accessibility across the DFC will be major problem; therefore 12 m wide access roads should be provided on both sides of the track. 9. The affected farmers have taken agriculture loans from Nationalized Banks; the project authorities should repay the balance loan amount and provide certificate from the banks. 10. The project is designed to benefit industrial houses, not ordinary citizens of our country. Therefore, this project is not a public purpose project. Therefore, 500% of the highest circle rates among the affected 31 villages should be the basis of the compensation. 				

State:	Gujarat	District:	Vadodara	Village:	Borka
Category of Comments	Land and R&R Issues				
Type of Comments	Community				
Abstract	<p>Project affected persons of Borka Village has raised the following observations:</p> <ol style="list-style-type: none"> 1. The DFC alignment affects 31 villages in the district, out of which 19 villages comes under VUDA [Vadodara Urban Development Authority] area. 2. The State government has planned to develop Vadodara as Mega City and sale/purchase of lands within the VUDA area is restricted. The alignment should either bypass the VUDA area or should be accommodated within the reversed area for road/rail development. 640 m wide corridor has been earmarked for road development, where DFC tracks can be accommodated. 3. The compensation to be provided [circle rate + 60%] is inadequate and will cause huge economic losses. The farmers want to retain their status as farmers and do not wish to take any other profession for livelihood. Further, compensation should also be paid for bore well and trees in the acquired land. 4. The project will not benefit the farmers. Moreover, the fragmented pieces of land, which will not be acquired, will be of no use for agrarian purposes. Construction of embankment will cause water logging, which will further deteriorate the productivity of neighboring land. 5. The exiting norms prohibit any construction within 60 m on both sides of the track; construction of 1 storey houses and small roads are allowed in next 20m width. Therefore, implementation of the project will dampen the development prospects of the lands. 6. The compensation amount should 500% on the circle rate or market rate, whichever is higher and government/railway jobs should be ensured for at members of affected families for a few generations. 7. The farmers in this area will be badly affected due land acquisition by various authorities viz., VUDA, DFCCIL etc for developmental purposes. Therefore, the unutilized government lands should be distributed among the farmers. 8. Accessibility across the DFC will be major problem; therefore 12 m wide access roads should be provided on both sides of the track. 				

9. The affected farmers have taken agriculture loans from Nationalized Banks; the project authorities should repay the balance loan amount and provide certificate from the banks.
10. The project is designed to benefit industrial houses, not ordinary citizens of our country. Therefore, this project is not a public purpose project. Therefore, 500% of the highest circle rates among the affected 31 villages should be the basis of the compensation.

State:	Gujarat	District:	Vadodara	Village:	Handod
Category of Comments	Land and R&R Issues				
Type of Comments	Community				
Abstract	Project affected persons of Handod Village has raised the following observations:				
	<ol style="list-style-type: none"> 1. The DFC alignment affects 31 villages in the district, out of which 19 villages comes under VUDA [Vadodara Urban Development Authority] area. 2. The State government has planned to develop Vadodara as Mega City and sale/purchase of lands within the VUDA area is restricted. The alignment should either bypass the VUDA area or should be accommodated within the reversed area for road/rail development. 640 m wide corridor has been earmarked for road development, where DFC tracks can be accommodated. 3. The compensation to be provided [circle rate + 60%] is inadequate and will cause huge economic losses. The farmers want to retain their status as farmers and do not wish to take any other profession for livelihood. Further, compensation should also be paid for bore well and trees in the acquired land. 4. The project will not benefit the farmers. Moreover, the fragmented pieces of land, which will not be acquired, will be of no use for agrarian purposes. Construction of embankment will cause water logging, which will further deteriorate the productivity of neighboring land. 5. The exiting norms prohibit any construction within 60 m on both sides of the track; construction of 1 storey houses and small roads are allowed in next 20m width. Therefore, implementation of the project will dampen the development prospects of the lands. 6. The compensation amount should 500% on the circle rate or market rate, whichever is higher and government/railway jobs should be ensured for at members of affected families for a few generations. 7. The farmers in this area will be badly affected due land acquisition by various authorities viz., VUDA, DFCCIL etc for developmental purposes. Therefore, the unutilized government lands should be distributed among the farmers. 8. Accessibility across the DFC will be major problem; therefore 12 m wide access roads should be provided on both sides of the track. 9. The affected farmers have taken agriculture loans from Nationalized Banks; the project authorities should repay the balance loan amount and provide certificate from the banks. 10. The project is designed to benefit industrial houses, not ordinary citizens of our country. Therefore, this project is not a public purpose project. Therefore, 500% of the highest circle rates among the affected 31 villages should be the basis of the compensation. 				

State:	Gujarat	District:	Vadodara	Village:	Mangrol
Category of Comments	Land and R&R Issues				
Type of Comments	Community				
Abstract	Project affected persons of Mangrol Village has raised the following observations:				
	<ol style="list-style-type: none"> 1. The DFC alignment affects 31 villages in the district, out of which 19 villages comes under VUDA [Vadodara Urban Development Authority] area. 2. The State government has planned to develop Vadodara as Mega City and sale/purchase of lands within the VUDA area is restricted. The alignment should either bypass the VUDA area or should be accommodated within the reversed area for road/rail development. 640 m wide corridor has been earmarked for road development, where DFC tracks can be accommodated. 3. The compensation to be provided [circle rate + 60%] is inadequate and will cause huge economic losses. The farmers want to retain their status as farmers and do not wish to take any other profession for livelihood. Further, compensation should also be paid for bore well and trees in the acquired land. 4. The project will not benefit the farmers. Moreover, the fragmented pieces of land, which will not be acquired, will be of no use for agrarian purposes. Construction of embankment will cause water logging, which will further deteriorate the productivity of neighboring land. 5. The exiting norms prohibit any construction within 60 m on both sides of the track; construction of 1 storey houses and small roads are allowed in next 20m width. Therefore, implementation of the project will dampen the development prospects of the lands. 6. The compensation amount should 500% on the circle rate or market rate, whichever is higher and government/railway jobs should be ensured for at members of affected families for a few generations. 7. The farmers in this area will be badly affected due land acquisition by various authorities viz., VUDA, DFCCIL etc for developmental purposes. Therefore, the unutilized government lands should be distributed among the farmers. 8. Accessibility across the DFC will be major problem; therefore 12 m wide access roads should be provided on both sides of the track. 9. The affected farmers have taken agriculture loans from Nationalized Banks; the project authorities should repay the balance loan amount and provide certificate from the banks. 				

*Draft Final Report
The SAPROF Study for Dedicated Freight Corridor Project*

10. The project is designed to benefit industrial houses, not ordinary citizens of our country. Therefore, this project is not a public purpose project. Therefore, 500% of the highest circle rates among the affected 31 villages should be the basis of the compensation.

State:	Gujarat	District:	Anand	Village:	Bandhani
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Community				
Abstract					
The villagers have raised the following issues:					
<ol style="list-style-type: none"> 1. The villagers are totally dependent on their land for their livelihood. Along with the agricultural crops, the land also provided them the fodder required for animal husbandry. 2. Land has been acquired for a number of developmental and industrial projects in the area, especially the irrigation projects has consumed a vast quantum of productive lands. Acquisition of productive agricultural land will further add to the pressure on land resources, resulting shortage of food grains which will have long term impacts on National Level. 3. The existing Vadodara-Nadiad section of the railway tracks can be upgraded and utilized for goods carriage. This will not only save productive agricultural lands but minimize the environmental impacts. 					

State:	Gujarat	District:	Anand	Village:	Mahelav
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Community				
Abstract					
The villagers have raised the following issues:					
<ol style="list-style-type: none"> 1. The villagers are totally dependent on their land for their livelihood. Along with the agricultural crops, the land also provided them the fodder required for animal husbandry. 2. Land has been acquired for a number of developmental and industrial projects in the area, especially the irrigation projects has consumed a vast quantum of productive lands. Acquisition of productive agricultural land will further add to the pressure on land resources, resulting shortage of food grains which will have long term impacts on National Level. 3. The existing Vadodara-Nadiad section of the railway tracks can be upgraded and utilized for goods carriage. This will not only save productive agricultural lands but minimize the environmental impacts. 					

State:	Gujarat	District:	Anand	Village:	Khadol
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Community				
Abstract					
The villagers has raised the following issues:					
<ol style="list-style-type: none"> 1. The productive land of the area coupled with adequate water supply supports good harvest and vegetation. Construction of DFC tracks will lead to destruction of vegetation, which will damage the environment considerably. 2. Acquisition of productive agricultural land will further add to the pressure on land resources, resulting shortage of food grains which will have long term impacts on National Level. 3. All of the farmers in the region belong to small time farmers, having small pieces of agricultural land. Acquisition of land will make them completely landless. 4. Many of the farmers in the area have constructed permanent/semi permanent residential houses inside their agricultural field for better monitoring of agricultural production and are staying there with their family. Therefore, acquisition of agricultural land will also make a vast population homeless and jobless, who will be forced to take up begging. 5. Survey has been carried out a number of times without disseminating proper information about the quantum and date of land acquisition. This has created severe anxiety among farmers, causing death of a few. 6. The farmers being uneducated, can not take up other professionals to sustain themselves. The situation further worsens as this area lacks small scale industries or job opportunities. 7. The area being quite populated, noise and vibration generated from movement of multi axle goods train will damage buildings as well as human health. 8. The proposed DFC track can be shifted westwards (toward Bhalbandar – Dholka), where land is not agriculturally productive. Further, westward shifting of DFC will also serve the townships of Bhavnagar and Khambat. 					

State:	Gujarat	District:	Anand	Village:	Ravipura
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Community				
Abstract					
The villagers have raised the following issues:					
<ol style="list-style-type: none"> 1. The villagers are totally dependent on their land for their livelihood. Along with the agricultural crops, the land also provided them the fodder required for animal husbandry. 2. Land has been acquired for a number of developmental and industrial projects in the area, especially the irrigation projects has consumed a vast quantum of productive lands. Acquisition of productive agricultural land will further add to the pressure on land resources, resulting shortage of food grains which will have long term impacts on National Level. 					

3. The existing Vadodara-Nadiad section of the railway tracks can be upgraded and utilized for goods carriage. This will not only save productive agricultural lands but minimize the environmental impacts.

State	Gujarat	District	Mahesana	Village	Hedua Rajghar
Category of Comments	Land and R&R Issues				
Type of Comments	Community				
Abstract	The villagers have raised the following issues: <ol style="list-style-type: none"> 1. The village has population 1,500 people belonging to 200 families; land has already been acquired for various projects. After land acquisition of DFC, only marginal land (250 bigha) will be left for the huge population. [Note: 6.25 bigha = 1 Acre; 2.47 Acre = 1 Hactare] 2. Many of the villagers will be completely landless after acquisition of land by various project authorities including DFC. 3. Instead of productive agricultural land of this village, unutilized grazing and vacant land of neighboring Sametra and Vadosan village that belongs of State Government should be acquired. 4. Gujarat State Petroleum Limited has acquired land in same village at a handsome compensation rate of 53 lakh (5.3 million) per bigha. Compensation should be paid at the same rate. 5. The village will be come under Mahesana Municipal Area shortly. The market rate of the land is very high in the village, while it is low at neighboring villages. Therefore, the alignment should be changed. 6. The villagers have accused that the alignment has been shifted to this village under influence of neighboring villages; in the initial phases, the alignment was far away from this village. 7. The villagers have demanded to stop the project immediately and warned the project authorities that large scale agitation and protests including self immolation will be undertaken in line of the protests made by the farmers of Singur in West Bengal State, in case their demands are not met. 				

State	Gujarat	District	Patan	Village	Manuvada
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Community				
Abstract	The villagers has raised the following issues: <ol style="list-style-type: none"> 1. The villagers have raised some issues regarding land acquisition during recent Siddhpur PCM, which is still unanswered. Still the project authorities have issues land acquisition notices. This is an example of bad governance. 2. The entire LA plan should be made public before action land acquisition to avoid atrocities by the contractors. 3. Drainage problems should be addressed properly to avoid water logging. 4. The compensation amount should be distributed immediately; else interest should be paid @18% per annum. 5. Compensation should be paid for standing crops. 6. Special Task Force should be formed for distribution of compensation. 7. The villagers suggest that a tree of 50 years can bring economic benefit of 250 crores; this aspect of environmental economics has not been reflected in the EIA report. Therefore, eminent environmental activists like [some ladies name] should be involved in the environmental assessment. 8. If detailed assessment and mitigation measures regarding tree felling is not made public, the villagers will write to Government of Japan directly to stop funding in this project. Further, they will also inform the World Bank and UN Bodies regarding this environmental loss. 9. The height of the embankment to be constructed has not disclosed yet. The source of earth materials to used for construction of embankment (borrow areas) have also not been disclosed. It is very much possible that during the construction phase, the constructors will take the earth from nearby lands causing loss of top soil and water logging. Unless these issues are not addressed, we will not allow anybody to enter into our land, even for survey. 10. Industrial Corridor, SEZ etc will come up in later stages, when people may get better compensation at the cost of today's development. Therefore, circle rates should be increased. 11. The farmers should be provided with certificates so that they can retain their title. 12. Field level consultation should be carried out before finalizing the drainage planning and selection of underpasses. 13. Compensation for utilities should be provided 				

State	Gujarat	District	Banaskantha	Village	Iqbalgadh
Category of Comments	Land and R&R Issues				
Type of Comments	Individual				
Abstract	A man of Iqbalgadh has expressed concern over acquisition of his agricultural land as part of his land has already been acquired for electric substation and gas pipeline. He commented that due to this project, he will lose his source of income and will have no option expect homicide.				

State	Gujarat	District	Banaskantha	Village	Iqbalgarh
Category of Comments	Natural Environment; Land and R&R Issues				
Type of Comments	Individual				
Abstract	A man has expected the development of the Nation due to implementation of the project. However, he requested the project authorities to pay attention to the welfare of the farmers who will get affected due to the project. He has suggested the				

following remedies:

1. To provide compensation as per the market value.
2. To rehabilitate the farmers in near by areas
3. To rebuild the infrastructure
4. To compensate for the standing crops.
5. To employ in DFC project.
6. To build the ROB or RUB (Bridge) for animal and cattle passing

Summary Table of Comments

State	District	No. of Comments	Number of Letter	Location	Type of Letter	Natural	Pollution	Sensitive Receptor	Classification of Comments			Proposed	
									Social (except Land & Resettlement Issue)	Land & Resettlement	Others		
Haryana	Rewari	3	Letter 1	Gangachariya Alir	Group Appeal (Community)	Water Resource (Pond) getting affected				Demand High compensation for Land, Employment in Railway or other Govt. Offices, Life insurance for PAFs,	Construction of Railway Corridor 1 Km from existing railway line.		
			Letter 2	Rajpur Khalsa	Individual						Reconstruction of Irrigation PVC Pipeline length 2 km along Corridor.		
			Letter 3	Majra	Member of Panchayat						High Compensation for land according to present market rate to sustain life of villagers		
		Letter 1	Ateli Mandi	Business Community		Increase pollution in noise and vibration effects in water supply and pollution and drainage problem	Many Sensitive Receptors (like Temple, shrine, Crematorium ground)	Demolition of Affected houses, business structures, Un Employment, Transportation problem,	Type of payment of Compensation		By pass		
		Letter 2	Ateli Mandi	Municipal Committee		Increase pollution in noise and vibration effects in water supply and pollution and drainage problem	Many Sensitive Receptors (like Temple, shrine, Crematorium ground)	Demolition of Affected houses, business structures, Un Employment, Transportation problem,	Type of payment of Compensation		By pass		
		Letter 3	Ateli Mandi	Temple Committee		Increase pollution in noise and vibration effects in water supply and pollution and drainage problem	Many Sensitive Receptors (like Temple, shrine, Crematorium ground)	Demolition of Affected houses, business structures, Un Employment, Transportation problem,	Type of payment of Compensation		By pass		
	Mahendergarh	Chhitro Ki Dhani	4			Group Letter from SC				Demolition of Affected houses belongs to SC,	Land for land near by village, good compensation for R&R, assure give time for resettlement, Education for school children, providing health centre	Construction of link road to main road, drinking water facility and water facility for construction of houses, providing market place with in 1 km of resettled area	
				Letter 4	Fatchpur	Ex Village Head			Temple issue				
				Letter 5	Fatchpur	Group Appeal from	Tree cutting and plantation of water, no	Due to shortage of water, no				Establishment of School and Temple,	Traffic problem arises due to rail
		Fatehpur	6										
				Letter 6	Fatehpur	Group Appeal from	Tree cutting and plantation of water, no	Due to shortage of water, no					

State	District	No. of Comments	Number of Letter	Location	Type of Letter	Classification of Comments						Proposal
						Natural	Pollution	Sensitive Receptor	Social (except Land & Resettlement Issue)	Land & Resettlement	Others	
					Village	problem due to scarcity of water,	sprinkling of water during construction phase, Vibration problem, Air Pollution				Information regarding Rehabilitation and Resettlement policy, land for land and house for house and employment in Railway for affected shop owner.	gate close, otherwise welcome the project
			Letter 7	Near Narnaul	Group Appeal						Information regarding Rehabilitation and Resettlement policy, land for land and house for house and employment in Railway for affected shop owner.	
			Letter 8	Tajpur	Group Appeal from Village		Noise pollution and vibration problem				Compensation for Land and Assistance Packages must be similar to Assistance Package of Rewari and Gurgaon district, Compensation for affected sensitive receptors, compensation for Panchayat land.	Construction of RUB, and underpass
			Letter 9	Bachhod	Group Appeal from Village		Noise pollution and vibration problem				Employment, Compensation for land according to present market rate of Rewari and Gurgaon, Re construction of Open Well.	Construction of ROB
		12										
	Alwar	1	Letter 1	Kathoowas	Group Appeal						Compensation for Land and Assistance Packages must be similar to Assistance Package of Rewari and Mahendergarh district	Construction of ROB, RUB, and culverts
		1	Letter 1	Jaisur	Group Appeal	Green Belt Development	Noise and Vibration Control				Employment in Railway, Good compensation for Land and House and others. It must be based on present market value	Welcome project,
	Sikar	1	Letter 1	Badhal	Group Appeal							Construction of ROB, Rest house, Smooth passenger train movement during construction of and construction of new Railway station
		9	Letter 2	Village Charanwas	(Group) Appeal from all Villagers						Payment for acquiring land is based on present (District Level Committee) DLC rate.	Proper functioning of existing Rail Gate.
	Jalpur		Letter 3	Deepawas	(Group) Appeal from all Villagers						Payment for acquiring land/ structure is based on present (District Level Committee) DLC rate	Construction of ROB between Village and Japur -Sikar High Way, Construction of road along the corridor.
			Letter 4	Shankas,	(Group)	Tree-plantation.					Construction of Open Well.	Remaining Freight

State	District	No. of Comments	Number of Letter	Location	Type of Letter	Classification of Comments					Proposal
						Natural	Pollution	Sensitive Receptor	Social (except Land & Resettlement Issue)	Land & Resettlement	
				Jaipur	Appeal from all Villagers	Construction of Canal				compensation will be paid as per present government rate.	train and Express (passenger) train in same track, Construction of road and foot path along the corridor. Construct ROB above the present Rail Gates. Employment of man. Construction of water Reservoir near Railway Station. Construction of Sub Way. Providing electricity in whole Platform, Construction of New Railway Line (Duda-Malpara), Construction of Rest Room in Shikun Rail Station.
			Letter 5	Iswah, Jaipur	(Group) Appeal from all Villagers		Control Noise and Vibration			Compensation for houses as per market rate, Good compensation for land and it should be equal to land value for adjoining villages	Construction of road along the DF corridor, Providing no fencing along the corridor. Construction of ROB/RUB
			Letter 6	Kunwar pura	(Group) Appeal from all Villagers		Control Noise and Vibration			Compensation for houses as per market rate, Good compensation for land and it should be equal to land value for adjoining villages	Construction of road along the DF corridor, Construction of ROB/RUB
			Letter 7	Kabarno ka was, Jaipur	(Group) Appeal from all Villagers					Compensation for land and it should be equal to DLC rate of adjoining villages, Compensation for open well, tube well for agriculture purpose should be as per Basic schedule Rate	Construct ROB above the present Rail Gates. Construction of road along the DF Corridor
			Letter 8	Panchar Mailkpara, Jaipur	Individual					Willing to give land with full compensation	Construction of Road along the DF Corridor
			Letter 9	Renwal	Individual		Noise-Pollution	Affected Temple		Construction of New Temple near by	

State	District	No. of Comments	Number of Letter	Location	Type of Letter	Classification of Comments					Proposal								
						Natural	Pollution	Sensitive Receptor	Social (except Land & Resettlement Issue)	Land & Resettlement		Others							
Rajasthan	Ajmer	5	Letter 1	Kishangarh Railway Station	Individual (Shop Owner)	Jaipur	Noise Pollution	Affected Temple	Demolition of Affected houses, business structures, Un Employment	Economic burden may be arise for people and Railway to remove houses and business from Kishangarh station area		By Pass							
												Letter 2	Kishangarh Railway Station	Individual (House Owner)	Noise Pollution	Affected Temple	Demolition of Affected houses, business structures, Un Employment	Economic burden may be arise for people and Railway to remove houses and business from Kishangarh station area	By Pass
												Letter 3	Kishangarh Railway Station	Individual (House Owner)	Noise Pollution	Affected Temple	Demolition of Affected houses, business structures, Un Employment	Economic burden may be arise for people and Railway to remove houses and business from Kishangarh station area	By Pass
												Letter 4	Kishangarh Railway Station	Individual (House Owner)	Noise Pollution	Affected Temple	Demolition of Affected houses, business structures, Un Employment	Economic burden may be arise for people and Railway to remove houses and business from Kishangarh station area	By Pass
												Letter 5	Kishangarh Railway Station	Individual (Shop Owner)	Noise Pollution	Affected Temple	Demolition of Affected houses, business structures, Un Employment	Economic burden may be arise for people and Railway to remove houses and business from Kishangarh station area	By Pass
												Letter 6	Kishangarh Railway Station	Individual (House Owner)	Noise Pollution	Affected Temple	Demolition of Affected houses, business structures, Un Employment	Economic burden may be arise for people and Railway to remove houses and business from Kishangarh station area	By Pass
												Letter 7	Kishangarh Railway Station	Individual (House Owner)	Noise Pollution	Affected Temple	Demolition of Affected houses, business structures, Un Employment	Economic burden may be arise for people and Railway to remove houses and business from Kishangarh station area	By Pass
												Letter 8	Kishangarh Railway Station	Individual (Shop Owner)	Noise Pollution	Affected Temple	Demolition of Affected houses, business structures, Un Employment	Economic burden may be arise for people and Railway to remove houses and business from Kishangarh station area	By Pass
												Letter 9	Kishangarh Railway Station	Individual (Shop Owner)	Noise Pollution	Affected Temple	Demolition of Affected houses, business structures, Un Employment	Economic burden may be arise for people and Railway to remove houses and business from Kishangarh station area	By Pass
												Letter 10	Kishangarh Railway Station	Individual (House Owner)	Noise Pollution	Affected Temple	Demolition of Affected houses, business structures, Un Employment	Economic burden may be arise for people and Railway to remove houses and business from Kishangarh station area	By Pass
												Letter 11	Kishangarh Railway Station	Temple Society	Noise Pollution	Affected Temple	Demolition of Affected houses, business structures, Un Employment	Economic burden may be arise for people and Railway to remove houses and business from Kishangarh station area	By Pass
												Letter 12	Kishangarh Railway Station	Individual (Shop Owner)	Noise Pollution	Affected Temple	Demolition of Affected houses, business structures, Un Employment	Economic burden may be arise for people and Railway to remove houses and business from Kishangarh station area	By Pass

State	District	No. of Comments	Number of Letter	Location	Type of Letter	Classification of Comments						Proposal
						Natural	Pollution	Sensitive Receptor	Social (except Land & Resettlement Issue)	Land & Resettlement	Others	
			Letter 13	Kishangarh Railway Station	Individual (House Owner)		Noise Pollution	Affected Temple	Demolition of Affected houses, business structures, Un Employment	Economical burden may be arise for people and Railway to remove houses and business from Kishangarh station area		By Pass
			Letter 14	Kishangarh Railway Station	Individual (House Owner)		Noise Pollution	Affected Temple	Demolition of Affected houses, business structures, Un Employment	Economical burden may be arise for people and Railway to remove houses and business from Kishangarh station area		By Pass
			Letter 15	Kishangarh Railway Station	Individual (Shop Owner)		Noise Pollution	Affected Temple	Demolition of Affected houses, business structures, Un Employment	Economical burden may be arise for people and Railway to remove houses and business from Kishangarh station area		By Pass
			Letter 16	Kishangarh Railway Station	Individual (House Owner)		Noise Pollution	Affected Temple	Demolition of Affected houses, business structures, Un Employment	Economical burden may be arise for people and Railway to remove houses and business from Kishangarh station area		By Pass
			Letter 17	Kishangarh Railway Station	Individual (Shop Owner)		Noise Pollution	Affected Temple	Demolition of Affected houses, business structures, Un Employment	Economical burden may be arise for people and Railway to remove houses and business from Kishangarh station area		By Pass
			Letter 18	Village Faloda	(Group) Appeal from all villagers						Level crossing, of road along the corridor. Opening new level crossing in existing track	
			Letter 1	Amar pura	(Group) Appeal from all villagers					Land for land and house for house for poor villagers in near by villages (forest land available), good compensation for R&R, assure compensation before resettlement	Welcome project	
			Letter 2	Sendra	(Group) Appeal from all villagers					Land for land and house for house for poor villagers in near by villages (forest land available), good compensation for R&R, assure compensation before resettlement	Welcome project	
			Letter 3	Marwar Jn	Individual					Amount of Compensation, Time of starting construction		
			Letter 1	Abu Road, Pindwara	MLA, Abu Road, Pindwara						Re opening of Rail gate no. 106	
			Letter 2	Chawraii, Pindwara	Group Appeal from Village						Construction of ROB and RUB and Re opening of Rail gate no. 106	
			Letter 3	Morthala	Group Appeal from				Asking information regarding type of effect	Date of receiving compensation, Land for land and house for houses in near		

State	District	No. of Comments	Number of Letter	Location	Type of Letter	Classification of Comments				Land & Resettlement	Others	Proposal		
						Natural	Pollution	Sensitive Receptor	Social (except Land & Resettlement Issue)					
Gujarat	Sub-Total	36			Village				with Animal and Human being	by villages,				
				Letter 4	Khadat	Group Appeal from Village				Asking information regarding type of effect with Animal and Human being	Date of receiving compensation, Land for land and house for houses in near by villages,			
				Letter 5	Panchayat Santhi, Pundwara	From Panchayat Santhi								Re opening of Rail gate no. 106 and connecting with High Way 14
				Letter 6	Manpur, Abu Road	Group Appeal from Village				Asking information regarding type of effect with Animal and Human being				
				Letter 1	Iqbalgarh	Individual		Environment pollution during construction		Minimize loss of farmers	Compensation as per present market value, Land for land near by villages, compensation for infrastructure in terms of money, compensate crop value			Construction of ROB, RUB
				Letter 2	Iqbalgarh	Individual				Less of income	Less of total land			
		Letter 1	Mamuvada	(Group) Appeal from all villagers		Drainage Problem			Compensation for standing crops, Special arrangement for distribution of compensation, The compensation amount should be distributed immediately; else interest should be paid @18% per annum			Environmental economic should be provided for this project. Non availability of land plan		
		Letter 1	Hedua Rajghar	(Group) Appeal from all villagers					After land acquisition of DFC, only marginal land (250 bigha) will be left for the huge population. Villagers will be land less, High rate of compensation as per other project.			Suggestions for acquiring land for adjacent villages, Opposes for project		
		Letter 1	Bandhani	(Group) Appeal from all villagers					Livelihood depend upon agriculture production as well as land, Land had been already acquired for different project. Further land acquisition affects their livelihood			The existing Vadodara-Nadiad section of the railway tracks can be upgraded and utilized for goods carriage		
		Letter 2	Mahelav	(Group) Appeal from all villagers					Livelihood depend upon agriculture production as well as land, Land had been already acquired for different project. Further land acquisition affects their livelihood			The existing Vadodara-Nadiad section of the railway tracks can be upgraded and utilized for goods		

State	District	No. of Comments	Number of Letter	Location	Type of Letter	Classification of Comments		Sensitive Receptor	Social (except Land & Resettlement Issue)	Land & Resettlement	Others	Proposal
						Natural	Pollution					
			Letter 3	Khadol	(Group) Appeal from all villagers	Noise and Vibration related problem		Lack of small scale industries job opportunity is few.	Livelihood depend upon agriculture production as well as land, Land had been already acquired for different project. Further land acquisition affects their livelihood. Farmers becoming land less.	carriage Proper information dissemination required regarding land acquisition. DFC track shift towards west side of villages		
			Letter 4	Ravipura	(Group) Appeal from all villagers				Livelihood depend upon agriculture production as well as land, Land had been already acquired for different project. Further land acquisition affects their livelihood	The existing Vadodara-Nadiad section of the railway tracks can be upgraded and utilized for goods carriage		
		10	Letter 1	Maretha	(Group) Appeal from all villagers	Water logging			Sale and purchase of land under VUDA is restricted due to State government has planned to develop Vadodara as Mega City, compensation for land (circle rate + 60%) is inadequate, farmers want to retain their status as farmers and do not wish to take any other profession for livelihood. Compensation for bore well and trees, High compensation (500% above circle rate or market rate), employment, distribution of Government land, Repayment of Agricultural loan of affected farmers from Bank.	19 villages out of 31 villages in the district affected by DFC alignment, comes under VUDA (Vadodara Urban Development Authority) area, loss of land due to existing road construction.	Either By pass the railway track or date DFC track within designated area for railroad development	
	Vadodara		Letter 2	Bitl	(Group) Appeal from all villagers	Water logging			Sale and purchase of land under VUDA is restricted due to State government has planned to develop Vadodara as Mega City, compensation for land (circle rate + 60%) is inadequate, farmers want to retain their status as farmers and do not wish to take any other profession for livelihood. Compensation for bore well and trees, High compensation (500% above circle rate or market rate), employment, distribution of Government land, Repayment of Agricultural loan of affected farmers from Bank.	19 villages out of 31 villages in the district affected by DFC alignment, comes under VUDA (Vadodara Urban Development Authority) area, loss of land due to existing road construction.	Either By pass the railway track or date DFC track within designated area for railroad development	
			Letter 3	Santiyala	(Group) Appeal from all villagers	Water logging			Sale and purchase of land under VUDA is restricted due to State government has planned to develop Vadodara as Mega City, compensation for land (circle rate + 60%) is inadequate, farmers want to retain their status as farmers and do not wish to take any other profession for livelihood. Compensation for bore well and trees, High compensation (500% above circle rate or market rate), employment, distribution of Government land, Repayment of Agricultural loan of affected farmers from Bank.	19 villages out of 31 villages in the district affected by DFC alignment, comes under VUDA (Vadodara Urban Development Authority) area, loss of land due to existing road construction.	Either By pass the railway track or date DFC track within designated area for railroad development	

State	District	No. of Comments	Number of Letter	Location	Type of Letter	Classification of Comments				Land & Resettlement	Others	Proposal
						Natural	Pollution	Sensitive Receptor	Social (except Land & Resettlement Issue)			
			Letter 4	Kambola	(Group) Appeal from all villagers					and trees, High compensation (500% above circle rate or market rate), employment, distribution of Government land, Repayment of Agricultural loan of affected farmers from Bank. Sale and purchase of land under VUDA is restricted due to State government has planned to develop Vadodara as Mega City, compensation for land [circle rate + 60%] is inadequate, farmers want to retain their status as farmers and do not wish to take any other profession for livelihood, compensation for bore well and trees, High compensation (500% above circle rate or market rate), employment, distribution of Government land, Repayment of Agricultural loan of affected farmers from Bank.	Authority area loss of land due to existing norms, road construction. 19 villages out of 31 villages in the district affected by DFC alignment, comes under VUDA [Vadodara Urban Development Authority] area loss of land due to existing norms, road construction.	designated area for railroad development
			Letter 5	Chansad	(Group) Appeal from all villagers							Either By pass the railway track or accommodate DFC track within designated area for railroad development
			Letter 6	Vernama	(Group) Appeal from all villagers					Sale and purchase of land under VUDA is restricted due to State government has planned to develop Vadodara as Mega City, compensation for land [circle rate + 60%] is inadequate, farmers want to retain their status as farmers and do not wish to take any other profession for livelihood, compensation for bore well and trees, High compensation (500% above circle rate or market rate), employment, distribution of Government land, Repayment of Agricultural loan of affected farmers from Bank.	19 villages out of 31 villages in the district affected by DFC alignment, comes under VUDA [Vadodara Urban Development Authority] area loss of land due to existing norms, road construction.	Either By pass the railway track or accommodate DFC track within designated area for railroad development
			Letter 7	Mahapura	(Group) Appeal from all villagers					Sale and purchase of land under VUDA is restricted due to State government has planned to develop Vadodara as Mega City, compensation for land [circle rate + 60%] is inadequate, farmers want to retain their status as farmers and do not wish to take any other profession for livelihood, compensation for bore well and trees, High compensation (500% above circle rate or market rate), employment, distribution of Government land, Repayment of Agricultural loan of affected farmers from Bank.	19 villages out of 31 villages in the district affected by DFC alignment, comes under VUDA [Vadodara Urban Development Authority] area loss of land due to existing norms, road construction.	Either By pass the railway track or accommodate DFC track within designated area for railroad development
			Letter 8	Borka	(Group) Appeal from					Sale and purchase of land under VUDA is restricted due to State government has	19 villages out of 31 villages in the	Either By pass the

State	District	No. of Comments	Number of Letter	Location	Type of Letter	Classification of Comments				Land & Resettlement	Others	Proposal	
						Natural	Pollution	Sensitive Receptor	Social (except Land & Resettlement Issue)				
					all villagers					planned to develop Vadodara as Mega City, compensation for land [circle rate + 60%] is inadequate, farmers want to retain their status as farmers and do not wish to take any other profession for livelihood, compensation for bore well and trees, High compensation (500% above circle rate or market rate), employment, distribution of Government land, Repayment of Agricultural loan of affected farmers from Bank.	district affected by DFC alignment, comes under VUDA [Vadodara Urban Development Authority] area, loss of land due to existing norms, road construction.	railway track or accommodation track date DFC within designate d area for rail/road development ent	
			Letter 9	Handod	(Group) Appeal from all villagers	Water logging				Sale and purchase of land under VUDA is restricted due to State government has planned to develop Vadodara as Mega City, compensation for land [circle rate + 60%] is inadequate, farmers want to retain their status as farmers and do not wish to take any other profession for livelihood, compensation for bore well and trees, High compensation (500% above circle rate or market rate), employment, distribution of Government land, Repayment of Agricultural loan of affected farmers from Bank.	19 villages out of 31 villages in the district affected by DFC alignment, comes under VUDA [Vadodara Urban Development Authority] area, loss of land due to existing norms, road construction.	Either By pass the railway track or accommodation track date DFC within designate d area for rail/road development ent	
			Letter 10	Mangrol	(Group) Appeal from all villagers					Sale and purchase of land under VUDA is restricted due to State government has planned to develop Vadodara as Mega City, compensation for land [circle rate + 60%] is inadequate, farmers want to retain their status as farmers and do not wish to take any other profession for livelihood, compensation for bore well and trees, High compensation (500% above circle rate or market rate), employment, distribution of Government land, Repayment of Agricultural loan of affected farmers from Bank.	19 villages out of 31 villages in the district affected by DFC alignment, comes under VUDA [Vadodara Urban Development Authority] area, loss of land due to existing norms, road construction.	Either By pass the railway track or accommodation track date DFC within designate d area for rail/road development ent	
		Sub-Total											18
		Grand Total											68

Appendix 3-9 Summary of Final EIA Report



MINISTRY OF RAILWAYS
DFCC of India Ltd. (DFCCIL)

**Western Corridor of the DFC Project
between Vadodara and Rewari
Summary of the Environmental Impact Assessment**

August 2009



This summary explains outline of environmental and social considerations for Western Corridor of the Dedicated Freight Corridor (DFC) Project between Vadodara and Rewari as first priority section of the Dedicated Freight Corridor in India, as per the final Environmental Impact Assessment (EIA) report approved by Ministry of Railway (MOR) in August, 2009. This summary is distributed to the public as an information disclosure process under the project by responsible bodies; MOR as competent ministry and Dedicated Freight Corridor Corporation of India Limited (DFCCIL) as project executing agency.

Outline of the Project

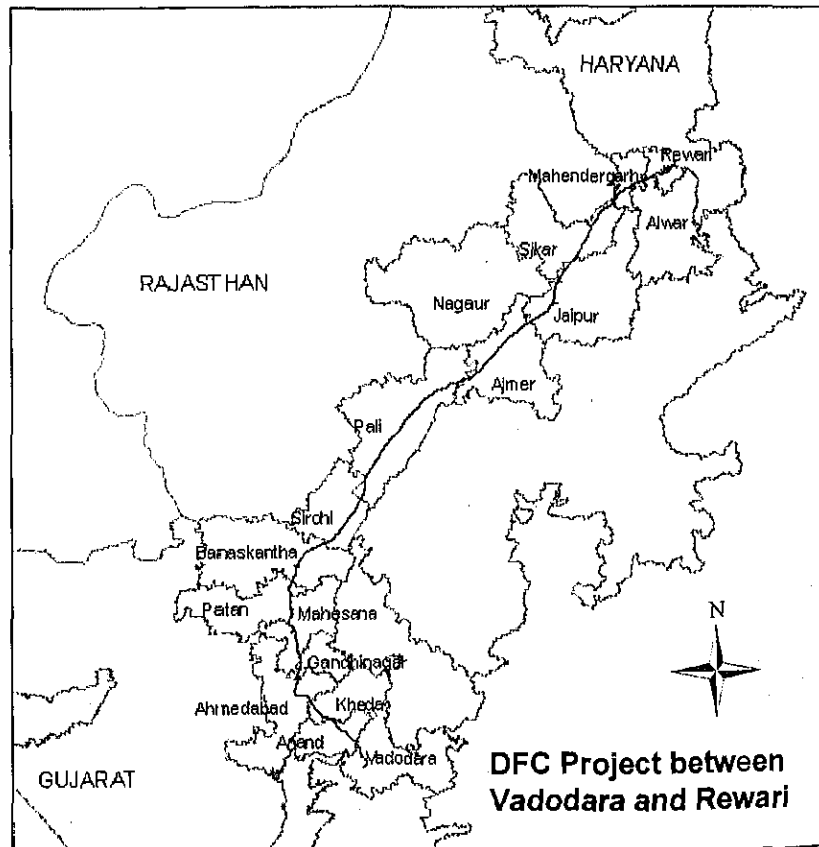
Ministry of Railway is implementing Computerized Multi Modal High Axle Load Dedicated Freight Corridor Project (DFC Project) to facilitate speedier and smooth transportation of bulk goods without any interruption between the two metropolises Delhi and Mumbai and their respective hinterlands at lesser transport cost and lesser time.

DFC Project aims to help boosting the present trends of growth of the economy in India. It is designed to carry a total freight line of 37.7 million tones in the fiscal year 2013-2014. At the same time, it is anticipated that the construction of DFC would induce economic development, generate employment and above all improve economic integration of regions in the country with improved links among major economic and trade centres.

Dedicated Freight Corridor Corporation of India Limited (DFCCIL) under Ministry of Railways, Government of India is an executing agency for the development of DFC. DFC Project in the Western Corridor between Vadodara and Rewari passes through approx. 447 villages in 17 districts of three states; Haryana, Rajasthan and Gujarat. Length of the proposed alignment is approximately 920 km.

The project is now under planning stage. Detailed design will start in the end of 2009 for about 2 years. Project implementation / construction work is scheduled after 2011 for 4-5 years.

State / District
Gujarat
Vadodara
Anand
Kheda
Ahmedabad
Gandhinagar
Mahesana
Patan
Banaskantha
Rajasthan
Sirohi
Pali
Ajmer
Jaipur
Nagaur
Sikar
Alwar
Haryana
Mahendragarh
Rewari



Proposed DFC Alignment and Facilities

Western Corridor of the DFC Project subject to implementation is traversing Vadodara – Ahmedabad – Palanpur – Rewari as double track. The proposed alignment passes through the states of Gujarat, Rajasthan and Haryana. In principle, the alignment for the DFC Project was designed as parallel to the existing railway within the land of Indian Railways. However, some sections where there is no enough land along the existing railway are designed as detour route to avoid resettlement as much as possible. Alignment for detour route of the DFC Project was designed, considering avoidance of local communities, wildlife sanctuary, city planning area, marble stone factories, residential area, large excavation, etc. to minimize environmental and social impacts as possible.

Environmental and Social Considerations Study for the Project

There is no provision of the Environmental Impact Assessment (EIA) for railway development under the Indian laws and regulations. However, since the DFC Project is the large-scale project which would cause large and various environmental and social impacts such as noise pollution and involuntary resettlement, comprehensive examinations on environmental and social considerations for the railway development have been carried out for the DFC Project from the planning stage of the development.

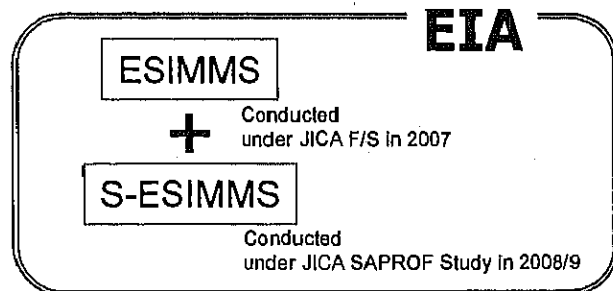
Under the situation, MOR/DFCCIL has prepared EIA for the Western Corridor of the DFC Project between Vadodara and Rewari under technical support by the Japan International Cooperation Agency (JICA), which are composed of ESIMMS¹

conducted under the JICA Feasibility Study in 2007 and S-ESIMMS² conducted under the JICA SAPROF³ Study in 2008/9. EIA report is composed of state-wise ESIMMS reports for 3 states and S-ESIMMS report covering whole project area.



Field survey on flora

Both ESIMMS and S-ESIMMS covered impacts potentially induced from nature of the project, physical and social conditions of the project sites for natural environment, pollution control, and social issues. In the S-ESIMMS, further detailed studies were conducted such

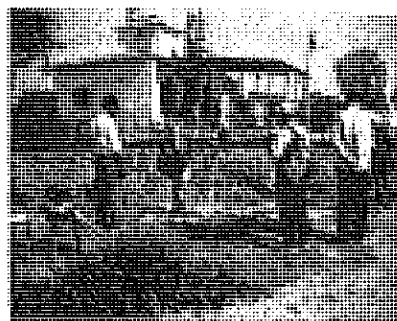


¹ ESIMMS: Environmental and Social Impact Mitigation Measures Study as EIA Level Study under the JICA Guideline for Environmental and Social Considerations, 2004.

² S-ESIMMS: Supplementary ESIMMS

³ SAPROF: Special Assistance for Project Formulation

as detailed prediction of the railway noise and vibration as well as sensitive receptor⁴ and land use surveys, detailed survey for the protected area nearby DFC alignment and major rivers to cover data for all seasons, and survey on structures to be relocated and further socio-economic survey, in addition to supplementary surveys for area which is newly affected due to change of alignment after the JICA F/S.



Noise measurement survey along the existing railway

Potential Impacts and Mitigation Measures

Various environmental and social impacts were identified through the series of the surveys. Mitigation measures are proposed to minimize the environmental and social impacts which are unavoidable as a result of examination. Mitigation measures for major items of the environmental and social impacts are shown below.

List of Potential Impacts and Mitigation Measures

Potential Impacts	Mitigation Measures
Air Quality	
< Construction Phase >	
Deterioration of air quality due to particulate matter such as dust, especially during dry condition, and gaseous emissions from construction equipment and vehicular traffic	<ul style="list-style-type: none"> ➤ Storage of construction materials in covered godowns or enclosed spaces ➤ Coverage of truck carrying soil, sand and stone to avoid spilling ➤ Adequate dust suppression measures such as regular water sprinkling on unpaved haul roads and vulnerable areas of the construction sites ➤ Use of low emission construction equipment, vehicles and generator sets
Noise and Vibration Levels	
< Construction phase >	
Noise and vibration due to movement of vehicles, and operation of light and heavy construction machineries	<ul style="list-style-type: none"> ➤ Use of low noise construction equipment . ➤ Construction activities carried out near residential area preferably in daytime ➤ Provision of protective gears such as ear plugs etc. to construction personnel exposed to high noise levels
< Operation Phase >	
Noise and vibration due to movement of trains and related facilities	<ul style="list-style-type: none"> ➤ New technologies incorporated to lower noise and vibration generation with respect to structures and rolling stocks ➤ Use of long welded rails ➤ Appropriate maintenance of locomotives, tracks and structures.
Water Quality	
< Construction phase >	
<ul style="list-style-type: none"> • Wastewater from construction activities with suspended impurities • Wastewater disposal from the workers camp and sludge generated from construction sites 	<ul style="list-style-type: none"> ➤ Provision of silt fencing near water bodies ➤ Control of quality of construction wastewater emanating from the construction site through suitable drainage system with sediment traps ➤ Provision of proper sanitation facilities at the construction site to prevent health related problems due to water contamination
< Operation Phase >	

⁴ Sensitive facility is public facility, which is sensitive to the noise and vibration impacts, such as hospital, school, and religious facilities.

Potential Impacts	Mitigation Measures
Wastewater generated from rail depot, train washing, heavy cleaning, workshops and maintenance activities	<ul style="list-style-type: none"> ➤ Reuse of treated water by removal of suspended solids, oil and grease, organic matter, toxic elements and neutralization of pH through waste water treatment plant
Topography and Geology	
< Construction stage >	
<ul style="list-style-type: none"> • Change in topography due to clearing of land, felling of trees, cutting and filling of land and construction of structures • Disfigurations of topography due to indiscriminate digging of borrow pits. 	<ul style="list-style-type: none"> ➤ Use of only identified borrow pits and quarry sites to avoid any disfiguration of topography ➤ Avoidance of uncontrolled digging of borrow pits to prevent water accumulation in abandoned pits resulting in breeding ground of vector disease ➤ Procurement of construction materials from existing approved and licensed quarries only
Soil	
< Construction stage >	
<ul style="list-style-type: none"> • Disruption and loss of productive top soil from agricultural fields due to creation of borrow pits and development of detour section • Loosening of top soil and loss of vegetative cover due to excavation and back filling • Deterioration of soil quality 	<ul style="list-style-type: none"> ➤ Utilization of fly ash, if technically suitable and available within 100 km distance of the DFC alignment for construction of embankment to save soil resource ➤ Adequate measures like adequate drainage, embankment consolidation and slope stabilization ➤ Conservation and restoration of top soils of the borrow pit sites ➤ Avoidance of accidental spills ➤ Proper disposal of used bentonite slurry
Hydrological Conditions	
< Construction stage >	
Increased incidence and duration of floods due to obstruction of natural drainage courses by the embankment	<ul style="list-style-type: none"> ➤ Provision of adequate drains along the track ➤ Augmentation of capacity of existing drainage works ➤ Provision of adequate drainage works for smooth passage of runoff to avoid flooding and formation of water pool.
< Operation stage >	
Impact to local drainage due to formation of railway embankment	<ul style="list-style-type: none"> ➤ Provision of longitudinal drains of sufficient capacity on both sides of the track to accommodate increased run-off.
Flora	
< Construction stage >	
Loss of flora due to felling of trees along the ROW	<ul style="list-style-type: none"> ➤ Appropriate compensatory plantation with about 2 times of the number of trees felled ➤ Compensation for forest land and trees to be felled in forest area and private land ➤ Mixed plantation consisting of flowering shrubs and evergreen ornamental trees
Deposition of fugitive dust on pubescent leaves of nearby vegetation	<ul style="list-style-type: none"> ➤ Strip plantation in available open spaces on both sides of the railway track ➤ Provision of cooking fuel to construction workers to avoid cutting/felling of trees for fuel wood
Diversion of Forest Land	
< Pre-construction stage >	
The alignment passes through several patches of Reserved Forest and open forest area	<ul style="list-style-type: none"> ➤ Compensation shall be provided to the forest department towards the cost of forest land to be diverted and cost of compensatory afforestation. ➤ Before start any activity within the Reserved Forest area, Forest clearance must be obtained.
Fauna	
< Pre-construction stage >	
Thol Wildlife (Bird) Sanctuary in the west of DFC alignment (detour section) in Mahesana District.	<ul style="list-style-type: none"> ➤ Construction activity within 3 km radius of sanctuary shall be carried out by taking special care so as to cause the least disturbance as per the provisions of the law
< Construction stage >	
Disturbance to avifauna in reserved forests and Thol Wildlife (Bird) Sanctuary due to noise generated from construction machinery	<ul style="list-style-type: none"> ➤ All the construction equipment and vehicles used shall be in good working condition, properly lubricated and maintained to keep noise within the permissible limits and engines turned off when not in use to reduce noise.

Potential Impacts	Mitigation Measures
Temporary loss of habitat of Indian Soft-shell Turtle and Mugger Crocodile during bridge construction over Mahi, Vishwamitri, and Vatrak Rivers	<ul style="list-style-type: none"> ➤ Construction of bridge shall be constructed during dry season but working may resorted in monsoon if it does not affect the habitat of endangered species. ➤ Provision of fencing along the boundary of construction site as per site requirement
<i>< Operation stage ></i>	
Disturbance of corridor of wildlife movement due to acquisition of Reserved Forest Land in Banaskantha District	➤ Initiation of appropriate compensatory plantation to compensate the habitat loss due to felling of trees for site clearing.
Effect on aquatic fauna in case of accidental oil spill and toxic chemical release into water bodies	➤ Contingent actions for speedy cleaning up of oil spills, fuel and toxic chemicals in the event of accidents
Restriction of the movement of wildlife on either side of the track	➤ Provision of animal underpasses for wildlife near forest areas
Collision of wildlife with train	➤ Provision of fencing, if feasible, along DFC in wildlife habitat concentration areas to avoid collision.
Land Acquisition and Resettlement	
<i>< Pre-construction stage ></i>	
Loss of livelihood and properties	➤ Compensation and assistance package will be planned in the Rehabilitation and Resettlement Plan (RRP), separately from the EIA.
<i>< Construction stage ></i>	
Disturbance of vehicle traffic and pedestrian (farmers) passage	➤ Provision of detour with adequate sign board and instruction
<i>< Operation stage ></i>	
Regional severance and disturbance of movement for local people and farmers due to embankment structure of the DFC	<ul style="list-style-type: none"> ➤ Provision of road-under-bridge (RUB) or road-over-bridge (ROB) at road crossing as per the policy and need. ➤ Existing road and proposed RUB/ROB/Level Crossing (LC) will cater for the movement of local people. ➤ Underpass or the level crossing shall be provided in the detour section as per the existing road network. ➤ Provision of footpath on side of the carriageway as per existing practice of the Indian Railway Code (IRC)

Note: Major impact items and mitigation measures are shown in the table. Further impact items and mitigation measures are shown in the EIA report.

Environmental Management Plan

Environmental Management Plan (EMP) is the key to ensure a safe and clean environment. The expected results from the environmental mitigation measures proposed in the project may not be obtained without a management plan to assure its proper implementation and function. The EMP envisages the plans for the proper implementation of mitigation measures to reduce the adverse impacts arising out of the project activities during pre-construction, construction and operation stages. EMP is prepared addressing the issues as follows.

- 1) The following Specific Environment Management Plans are proposed.
 - a) Greenbelt Development Plan
 - b) Solid Waste Management Plan
 - c) Management / Rehabilitation Plan for Quarry / Borrow Areas
 - d) Guidelines for Sanitation and House Keeping at the Construction Labour Camps
 - e) Procedures for Storage, Handling & Emergency Response for Hazardous Chemical
 - f) Land Acquisitions and Resettlement (Rehabilitation and Resettlement Plan for the project will cover this issue, separately from the EIA report.)
- 2) Stage-wise Environmental Management Measures are proposed for the following environmental and social issues.
 - a) Pre-construction stage
 - Land acquisition, diversion of reserved forest land, preservation of trees, borrow area, quarry area, site identification for disposal of unsuitable materials, construction camp, arrangement for temporary yard, orientation of implementation agency and contractors
 - b) Construction stage
 - Site clearance, procurement of construction materials, construction work (drainage, siltation, slope protection, etc.), water pollution, air pollution, noise, safety, labour camp management, contractor's demobilization (clean-up operation, restoration and rehabilitation)
 - c) Operation stage
 - Monitoring of operation performance of various mitigation measures, pollution monitoring

Environmental Monitoring

The purpose of the environmental monitoring plan is to ensure that the envisaged purpose of the project is achieved and results in desired benefits to the target population. To ensure the effective implementation of the EMP, it is essential that an effective monitoring plan be designed and carried out. The environmental monitoring plan consists of performance indicators and environmental monitoring programme.

Performance indicators

- 1) Pre-construction stage: land acquisition, dumping locations, construction camps, borrow areas;
- 2) Construction stage: air quality, noise & vibration levels, water quality, tree plantation, top soil, construction workers;
- 3) Operation stage: survival rate of trees, rehabilitation of borrow areas, utility of noise barriers for sensitive receptors

Environmental monitoring programme

For the following items of environmental items, a) parameters to be monitored, b) location of the monitoring sites, c) frequency and duration of monitoring, and d) institutional responsibilities for implementation and supervision.

- Air quality, water quality, noise and vibration level, soil erosion, plantation, flora and fauna

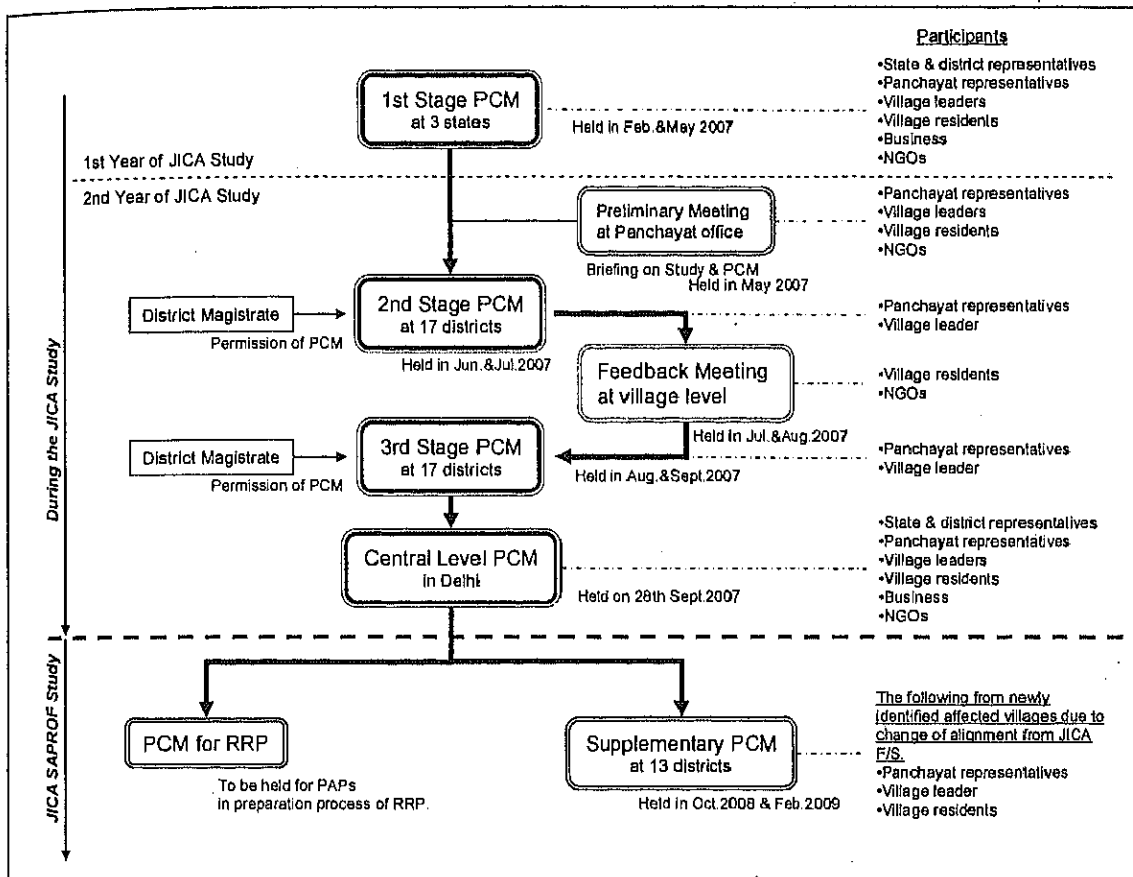
Public Consultation Meeting

Series of the Public Consultation Meetings (PCMs) were held during the ESIMMS under the JICA-funded Feasibility Study to disclose project information to as well as to get opinions and comments from the public. In addition, additional district-wise PCMs were held during the S-ESIMMS under the JICA funded SAPROF Study targeting for newly identified project-affected villages due to change of design of DFC alignment after the JICA F/S. Various comments and opinions were collected through the PCMs and incorporated into the project design such as provision of culvert to make vehicles, residents, and farmers access smoothly for both sides of the embankment section of the DFC.

On the other hand, PCMs for Rehabilitation and Resettlement Plan (RRP) are separately conducted in preparation process of the RRP to disclose to and obtain comments and opinions from project-affected peoples subject to the land acquisition and resettlement (PAPs).



Public Consultation Meeting



Information Disclosure in Preparation Process of EIA

As an information disclosure process in the preparation of the EIA report, sets of the EIA report for the project, which consists of the ESIMMS reports for three states and S-ESIMMS report, were disclosed to the public in the area along the proposed DFC alignment with its summary between the middle of March and middle of April in 2009.

During the disclosure process of the draft EIA reports, nearly 70 comments were collected from the public. Among these comments, there are no specific comments to be incorporated in the EIA report. These are mainly land acquisition, rehabilitation, and resettlement issues. However, these comments will be taken care of in further examination and implementation of mitigation measures and Environmental Management & Monitoring Plan in further stage of the project. In addition, L&A and R&R issues will be taken care of at the time of preparation and implementation of Rehabilitation and Resettlement Plan in further stage of the project as well.

Further Schedule

- Engineering Services for the further deliberation of the project design will be started in the end of 2009 for about 2 years. The unit working for environment and social considerations will prepare detailed planning of mitigations measures and Environment Management & Monitoring Plan. The comments above will be scrutinized in specified locations.
- Construction work will be started after 2011.
- Commercial operation will be started by 2015 / 2016.

Availability of Reports

- Full set of the Final approved EIA report, which is composed of the state-wise ESIMMS reports and Final S-ESIMMS report will be available for review by the public in the following locations where the draft EIA report was disclosed; respective Chief Project Manager (CPM) offices of DFCCIL, major stations along the proposed DFC alignment, and respective District Offices, in October and November, 2009, as well as summary of the finalized EIA report in all of the project-affected villages.

Address of the CPM offices of the DFCCIL

- CPM office in Jaipur
B-12, Hanuman Nagar, Opp. Metro Hospital, Sirsi Road, Jaipur, Tel: 0141-4028741, Fax: 0141-4028740
- CPM office in Ajmer
42A/3 Civil Line, Ajmer-305001, Tel/Fax: 0145-2625548
- CPM office in Ahmedabad
1st Floor, Old DRM Office Building, Kalupur, Ahmedabad-380002, Tel: 079-22175107, Fax: 079-22163101
- CPM office in Vadodara
13-14, 17-18, Panorama Complex, 3rd Floor, R.C. Dutt Road, Alkapuri, Vadodara-7, Tel: 0265-2326024, Fax: 0265-2326027

Major Stations where the Final EIA report is available

- Gujarat
Palanpur (Jn), Siddhapur, Unjha, Mahesana(Jn), Sabarmati (Jn), Ahmedabad (Jn), Nadiad (Jn), Anand(Jn), Vasad (Jn), Vadodara (Jn)
- Rajasthan
Alwar (Jn), Kund, Neem Ka Thana, Sri Madhopur, Ringus (Jn), Jaipur (Jn), Phulera (Jn), Kishangarh, Ajmer (Jn), Beawar, Sojat Road, Marwar Jn, Falna, Sirohi Road, Abu Road
- Haryana
Rewari (Jn), Narnaul, Dabla (Jn)

Thank you very much for your cooperation for the project.



रेल मंत्रालय
डी.एफ.सी.सी.आई.एल.

वडोदरा एवं रेवाड़ी के मध्य समर्पित मालभाड़ा कारीडोर परियोजना का
पश्चिमी कारीडोर
पर्यावरणीय प्रभावों का मुल्यांकन का संक्षेप
अगस्त 2009



यह भारत में समर्पित मालभाड़ा कारीडोर (डी.एफ.सी.) परियोजना के पश्चिमी कारीडोर के रेवाड़ी से वडोदरा के मध्य प्रथम प्राथमिकता अनुभाग का पर्यावरणीय एवं समाजिक विवेचन का संक्षेप है। जो कि रेल मंत्रालय द्वारा अगस्त 2009 में स्वीकृत अन्तिम पर्यावरणीय प्रभावों का मुल्यांकन रिपोर्ट पर आधारित है। यह संक्षेप परियोजना के सूचना प्रकटीकरण प्रक्रिया के तहत जन समुदाय में उत्तरदायी निकायों द्वारा वितरित होना है, जिसके लिए रेल मंत्रालय समुचित मंत्रालय एवं डी.एफ.सी.सी.आई.एल. परियोजना क्रियान्वयन एजेन्सी है।

परियोजना की मुख्यताएँ

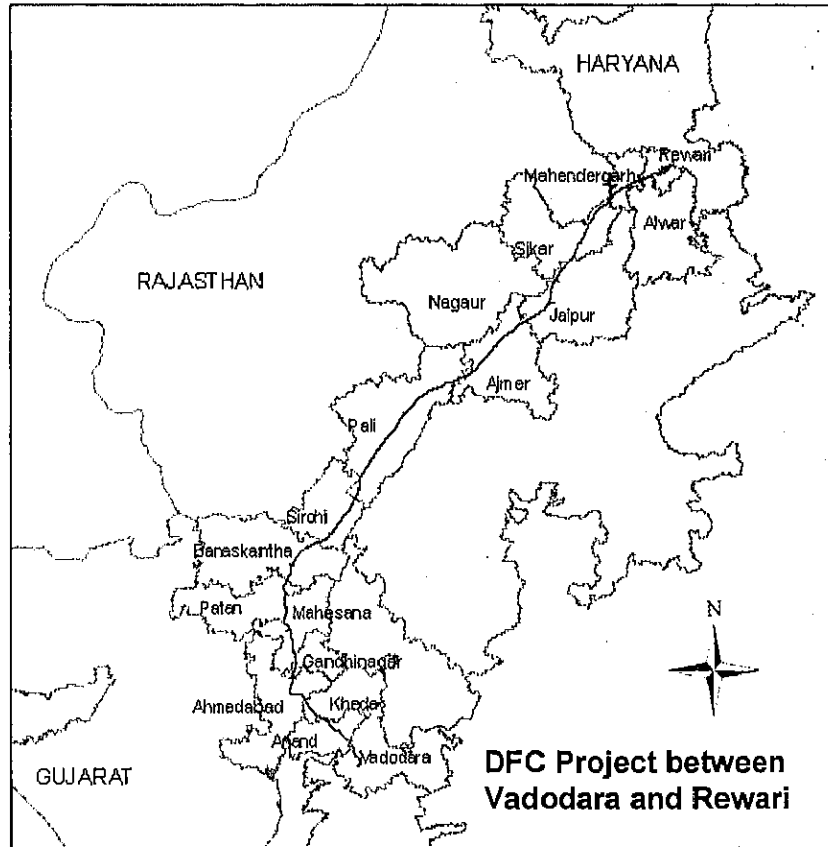
रेल मंत्रालय दिल्ली और मुम्बई महानगरों एवं इनके आसपास के स्थानों के मध्य माल के अतिशीघ्र एवं अबाधित आवागमन हेतु कम्प्यूटरिकृत समर्पित मालभाड़ा कारीडोर परियोजना को मूर्तरूप देने जा रहा है। जिससे माल बिना किसी बाधा के अपने गंतव्य स्थान तक कम समय एवं न्यूनतम परिवहन लागत में पहुँच सके।

डी.एफ.सी. परियोजना का उद्देश्य भारत की वर्तमान आर्थिक उन्नति के पथ को सुदृढ़ करना है। वर्ष 2013-2014 तक इस परियोजना द्वारा 37.7 मिलियन टन माल का परिवहन हो सकेगा। परियोजना के निर्माण से आर्थिक उन्नति एवं रोजगार के नये अवसर उत्पन्न होंगे। इन सबसे ऊपर, राष्ट्र में प्रान्तों के मध्य आर्थिक विनिमय एवं प्रमुख व्यापार केन्द्रों में परस्पर सुधार होगा।

भारत सरकार के रेल मंत्रालय के अधीन डी.एफ.सी.सी.आई.एल. इस परियोजना के विकास की क्रियान्वयन संस्था है। डी.एफ.सी. परियोजना का पश्चिमी कारीडोर का वडोदरा से रेवाड़ी के मध्य का भाग हरियाणा, राजस्थान एवं गुजरात राज्य के 17 जिलों के 447 गाँवों से होकर गुजरता है। जिसकी लम्बाई करीब 920 कि.मी. है।

परियोजना अभी नियोजन अवस्था में है। वर्ष 2009 के अन्त से लगभग 2 वर्ष तक परियोजना का विस्तृत प्रारूप कार्य किया जायेगा। परियोजना का निर्माण कार्य वर्ष 2011 से आरम्भ होगा एवं 4-5 वर्ष में पूर्ण होगा।

राज्य/जिले
गुजरात
वडोदरा
आनंद
खेड़ा
अहमदाबाद
गाँधीनगर
महेसाणा
पाटन
बनासकांठा
राजस्थान
सिरोही
पाली
अजमेर
नागौर
जयपुर
सीकर
अलवर
हरियाणा
महेन्द्रगढ़
रेवाड़ी



प्रस्तावित DFC रेलमार्ग एवं संलग्न सुविधाएँ

समर्पित मालभाड़ा कारीडोर परियोजना का पश्चिमी कारीडोर वडोदरा-अहमदाबाद-पालनपुर-रेवाड़ी से गुजरता हुआ दो तरफा रेलमार्ग होगा। यह प्रस्तावित मार्ग गुजरात, राजस्थान एवं हरियाणा राज्य से होकर गुजरता है। परियोजना का मार्ग मुख्यतः भारतीय रेल विभाग की भूमि पर वर्तमान रेल मार्ग के समान्तर नियोजित किया गया है। जबकि कुछ स्थानों पर वर्तमान रेल लाईन के समान्तर पर्याप्त भूमि उपलब्ध न होने के कारण तथा जहाँ तक सम्भव हो पुनर्वास से बचाने हेतु बाईपास का प्रावधान रखा गया है। बाईपास मार्ग की योजना बनाते समय स्थानीय समुदाय, जीव अभ्यारण, शहरी योजना क्षेत्र, मार्बल उद्योग, आबादी क्षेत्रों, खदान आदि को बचाने का ध्यान रखा गया, ताकि प्रतिकूल पर्यावरणीय एवं सामाजिक प्रभावों को यथा सम्भव कम किया जा सके।

परियोजना हेतु पर्यावरण एवं सामाजिक अध्ययन

भारतीय कानून व नियमों में रेल परियोजनाओं हेतु पर्यावरणीय प्रभावों के मुल्यांकन करने का कोई प्रावधान नहीं है। चूंकि डी.एफ.सी. परियोजना वृहत परियोजना है जिससे विपरीत पर्यावरणीय एवं सामाजिक प्रभावों की सम्भावना है, जैसे ध्वनि प्रदुषण तथा अनैच्छिक पुनर्वास। अतः परियोजना की योजना अवधि से ही पर्यावरणीय एवं सामाजिक मुद्दों का विस्तृत अध्ययन किया गया है।

इस संदर्भ में रेल मंत्रालय / डी.एफ.सी.सी.आई.एल ने जापान इन्टरनेशनल

कार्पोरेशन एजेन्सी (जे.आई.सी.ए.) के तकनीकी सहयोग से डी.एफ.सी. परियोजना के पश्चिमी कारीडोर की ड्राफ्ट पर्यावरणीय प्रभावों का मुल्यांकन (ई.आई.ए.) रिपोर्ट तैयार किया है, जो कि जे.आई.सी.ए. (JICA) अध्ययन रिपोर्ट 2007 (ESIMMS¹) एवं जे.आई.सी.ए.-सेप्रोफ (SAPROF³) अध्ययन रिपोर्ट 2008-09 (S-ESIMMS²) का सम्मिलित रूप है।



पेड़ पौधों का सर्वेक्षण

कम्पन का प्रभाव, भूमि उपयोग सर्वेक्षण, प्रस्तावित रेल मार्ग के निकट संरक्षित क्षेत्रों एवं प्रमुख नदियों के प्रत्येक मौसम के आंकड़ों का संकलन तथा विस्तृत विश्लेषण, स्थानान्तरित होने वाले ढांचों का सर्वेक्षण एवं तदोपरान्त सामाजिक-आर्थिक सर्वेक्षण आदि विषय सम्मिलित हैं। इसके अतिरिक्त जे.आई.सी.ए. (JICA) अध्ययन के बाद स्थानान्तरित हुए रेलमार्ग से नवप्रभावित क्षेत्रों का पूरक सर्वेक्षण भी सम्मिलित है।



रेल द्वारा उत्पन्न ध्वनि एवं कम्पन मात्रा का सर्वेक्षण

पर्यावरणीय प्रभावों का मुल्यांकन (ई.आई.ए.) रिपोर्ट तीनों प्रदेशों की ESIMMS रिपोर्ट एवं S-ESIMMS रिपोर्ट का मिश्रित रूप है, जो पूरे परियोजना प्रभावित क्षेत्र का वर्णन करता है।

दोनों ESIMMS एवं S-ESIMMS रिपोर्ट, परियोजना से उत्पन्न प्रभावों, परियोजना क्षेत्र की सामाजिक एवं भौतिक अवस्थाएँ, प्रदुषण नियंत्रण एवं सामाजिक विषयों पर आधारित है। S-ESIMMS रिपोर्ट में अध्ययन किए गये प्रमुख विषयों में रेल द्वारा उत्पन्न ध्वनि एवं कम्पन का पूर्वानुमान तथा संवेदनशील अभिग्राहकों पर ध्वनि एवं

ESIMMS

+

S-ESIMMS

पर्यावरणीय प्रभावों का मुल्यांकन रिपोर्ट

वर्ष 2007 में जे.आई.सी.ए. मार्गदर्शिका के अनुरूप बनायी गयी रिपोर्ट

वर्ष 2008/9 में जे.आई.सी.ए. सेप्रोफ अध्ययन के अनुरूप बनायी गयी रिपोर्ट

¹ ESIMMS: जे.आई.सी.ए. की 'पर्यावरणीय एवं सामाजिक निमित्त 2004 मार्गदर्शिका' के अनुसार बनाये गये पर्यावरणीय एवं सामाजिक प्रभावों का मुल्यांकन रिपोर्ट
² S-ESIMMS: जे.आई.सी.ए. की 'पर्यावरणीय एवं सामाजिक निमित्त 2004 मार्गदर्शिका' के अनुसार बनाये गये पर्यावरणीय एवं सामाजिक प्रभावों का मुल्यांकन की पूरक रिपोर्ट
³ SAPROF स्पेशल असिस्टेन्स फॉर प्रोजेक्ट फॉरमेशन

संभावित प्रभाव एवं निराकरण के उपाय

सर्वेक्षणों में अनेक प्रतिकूल पर्यावरणीय एवं सामाजिक प्रभावों का पता चला है। इन विपरीत प्रभावों को न्यूनतम करने के सुझाव प्रस्तावित किये गये हैं। प्रमुख पर्यावरणीय व सामाजिक प्रभावों के निराकरण के सुझाव नीचे दिये गये हैं।

प्रभावों एवं निराकरण के उपायों की तालिका

संभावित प्रभाव	निराकरण के उपाय
वायु गुणवत्ता	
निर्माणावधि धूल के सूक्ष्म कणों, निर्माण कार्य में प्रयुक्त उपकरणों एवं वाहनो द्वारा वायु प्रदुषण	→ निर्माण कार्य में प्रयुक्त माल को बन्द स्थानों अथवा ढके गोदामों में रखने की व्यवस्था → ढुलाई वाले वाहनो से मिट्टी, पत्थर आदि छलकने से बचाव → निर्माण क्षेत्र की कच्ची सड़कों एवं अन्य स्थानों पर धूल उड़ने से बचाव के लिए पानी के छिड़काव की व्यवस्था → कम धुआँ उत्पन्न करने वाले उपकरणों, जनरेटरों एवं परिवहन के साधनो का प्रयोग
ध्वनि एवं कम्पन स्तर	
निर्माणावधि निर्माण कार्य में प्रयुक्त हल्की तथा भारी मशीनों व वाहनो द्वारा ध्वनि एवं कम्पन	→ न्यूनतम ध्वनि उत्पन्न करने वाले उपकरणों का प्रयोग → आवासीय क्षेत्रों में निर्माण कार्य दिन के समय ही करने का प्रयास होगा → अतिध्वनित स्थानों पर श्रमिकों को ध्वनि बचाव उपकरण उपलब्ध कराने की व्यवस्था
संचालन अवधि ट्रेनों तथा अन्य सम्बन्धित वाहनो के आवागमन से उत्पन्न ध्वनि एवं कम्पन	→ न्यूनतम ध्वनि एवं कम्पन पैदा करने वाली तकनीक का प्रयोग → जुड़ी हुई लम्बी पटरीयों का प्रयोग → रेलगाड़ी, पटरी एवं ईमारतों का सही रखरखाव
जल गुणवत्ता	
निर्माणावधि • निर्माण कार्य के दौरान घुली गंदगी युक्त दूषित जल • श्रमिक शिविरों से उत्पन्न दूषित जल एवं निर्माण क्षेत्रों से उत्पन्न कीचड़ इत्यादि	→ जल क्षेत्रों के निकट गाद निरोधक आड़ का प्रावधान → अवसाद अलग कर गुणवत्ता नियंत्रित करने के पश्चात निर्माण क्षेत्र से उत्पन्न दूषित जल का निकास का प्रावधान → दूषित जल से होने वाली स्वास्थ्य समस्याओं की रोकथाम हेतू पर्याप्त आरोग्यकर सुविधाओं का प्रावधान
संचालन अवधि रेल डिपो, रेलगाड़ियों की धुलाई एवं कारखाने की रखरखाव क्रियाओं द्वारा उत्पन्न दूषित जल	→ जल शोधन संयंत्र द्वारा दूषित जल से घुलनशील पदार्थ, तेल एवं चिकनाई, कार्बनिक पदार्थ एवं जहरीले तत्व दूर कर एवं अम्लता उदासीन कर उपचारित जल का पुनः उपयोग
स्थलाकृति एवं भूगर्भ विज्ञान	
निर्माणावधि • पेड़ों की कटाई, जमीन की खुदाई, जमीन का भराव एवं निर्माण कार्य द्वारा स्थलाकृति बदलाव • गर्त खुदाई से स्थलाकृति का विकृत होना	→ स्थलाकृति के विकृत होने से बचाव के लिए प्रयोजित गर्त एवं खदान का उपयोग → अनियंत्रित गर्त खुदाई से बचाव, ताकि त्यागे गये गर्तों में एकत्रित जल संक्रामक रोग कारकों के प्रजनन का स्थान ना बन सके → निर्माण सामग्री का केवल स्वीकृत एवं अनुमोदित खाईयों से दोहन
मृदा	
निर्माणावधि • मिट्टी दोहन गर्तों एवं बाईपास अनुभाग के विकास के कारण उपरी उपजाऊ मृदा की हानि	→ तटबन्धों के निर्माण में मृदा श्रोतों को बचाने हेतू तापीय संयंत्रों से निकली राख का प्रयोग (यदि तकनीकी रूप से अनुकूल एवं 100 किमी मे उपलब्ध हो) → पर्याप्त जल निकास व्यवस्था, तटबन्ध दृढीकरण एवं ढलान स्थिरीकरण जैसे

संभावित प्रभाव	निराकरण के उपाय
<ul style="list-style-type: none"> खुदाई के कारण उपरी मृदा का ढीला होना एवं वनस्पतिय आच्छादन की हानि मृदा गुणवत्ता की अवनति 	<p>उपाय</p> <ul style="list-style-type: none"> → मृदा दोहन गतों वाले स्थानों की उपरी मृदा का बचाव तथा पुनर्विकरण → दुर्घटनाओं से होने वाले रिसाव से बचाव → निर्माण कार्य से उत्पन्न कीचड़ का पर्याप्त निपटान
जल विज्ञान सम्बन्धि दशाएँ	
<p>निर्माणावधि</p> <ul style="list-style-type: none"> • तटबन्ध निर्माण से प्राकृतिक जल निकास में बाधा के कारण बाढ़ के संयोग एवं उसकी अवधि में वृद्धि 	<ul style="list-style-type: none"> → रेल मार्ग के साथ-साथ पर्याप्त नालियों का प्रावधान → वर्तमान जल निकास नालियों की क्षमता में वृद्धि → बाढ़ एवं जल भराव से बचाव हेतु पर्याप्त जल निकास का प्रावधान
<p>संचालन अवधि</p> <ul style="list-style-type: none"> • तटबन्ध निर्माण के कारण स्थानीय जल निकास पर प्रभाव 	<ul style="list-style-type: none"> → वर्धित अपवाह के समायोजन हेतु रेल मार्ग के दोनों ओर पर्याप्त क्षमता की रेल मार्ग के समान्तर नालियों का प्रावधान
वनस्पति	
<p>निर्माणावधि</p> <ul style="list-style-type: none"> • परियोजना के लिए अधिग्रहित भूमि पर पेड़ों के कटान से वनस्पति का नुकसान • निकटस्थ वृक्षादि की पत्तियों पर धूल का जमाव 	<ul style="list-style-type: none"> → काटे गये पेड़ों की दुगनी संख्या में क्षतिपूरक वृक्षारोपण → वन क्षेत्रों एवं निजी भूमि स्थित काटे गये वृक्षों की क्षति पूर्ति एवं अधिग्रहित वन्य भूमि हेतु क्षति पूर्ति → फूल वाली झाड़ियों एवं सदाबहार वृक्षों युक्त मिश्रित पौधारोपण → प्रस्तावित रेल मार्ग के दोनों ओर उपलब्ध स्थानों पर पट्टीदार वृक्षारोपण → ईंधन के लिए श्रमिकों द्वारा वृक्षों की कटाई की रोकथाम हेतु ईंधन का प्रावधान
वन भूमि परिवर्तन	
<p>पूर्व निर्माणावधि</p> <ul style="list-style-type: none"> • प्रस्तावित रेल मार्ग का कुछ स्थानों पर आरक्षित वन क्षेत्रों से गुजरना 	<ul style="list-style-type: none"> → क्षतिपूरक वृक्षारोपण की लागत एवं वन भूमि के परिवर्तन की वन विभाग को क्षतिपूर्ति → आरक्षित वन क्षेत्र में किसी क्रिया कलाप से पूर्व वन विभाग की अनापत्ति प्राप्त की जायेगी
जीव-जन्तु	
<p>पूर्व निर्माणावधि</p> <ul style="list-style-type: none"> • महेसाणा जिले में डी.एफ.सी. रेल मार्ग (बाईपास अनुभाग) के पश्चिम में थोल वन्य जीव (पक्षी) अभ्यारण 	<ul style="list-style-type: none"> → अभ्यारण की 3 कि.मी. परिधि में निर्माण कार्य विशेष सावधानी पूर्वक एवं कानून अनुसार किया जायेगा ताकि अभ्यारण में न्यूनतम विघ्न हो
<p>निर्माणावधि</p> <ul style="list-style-type: none"> • निर्माण कार्य में प्रयुक्त यंत्रों से उत्पन्न ध्वनि द्वारा आरक्षित वनों एवं थोल वन्यजीव अभ्यारण के पक्षियों का प्रभावित होना • मही, विश्वामित्री एवं वन्नक नदियों पर पुल निर्माण के समय मृदुकाय कछुआ एवं मुग्गर मगरमच्छ के आवास की अल्पकालिक क्षति 	<ul style="list-style-type: none"> → निर्माण कार्य में प्रयुक्त उपकरण एवं वाहनों का पर्याप्त रखरखाव एवं व्यर्थ उपयोग से बचाव, ताकि स्वीकृत मात्रा में ही ध्वनि उत्पन्न हो → पुलों का निर्माण कार्य शुष्क मौसम में किया जायेगा, यदि लुप्तप्राय प्रजातियों के आवास पर प्रभाव ना पड़े तो वर्षाकाल में भी कार्य किया जा सकता है → निर्माण क्षेत्र की आवश्यकता अनुसार सीमाओं पर आड़ लगाने का प्रावधान
<p>संचालन अवधि</p> <ul style="list-style-type: none"> • बनासकांठा जिले में आरक्षित वन्य भूमि के अधिग्रहण से वन्यजीवों का आवागमन प्रभावित होना 	<ul style="list-style-type: none"> → वृक्षों के कटान से नष्ट हुए वन्य जीव आवासों की क्षतिपूर्ति हेतु पौधारोपण
<ul style="list-style-type: none"> • जल क्षेत्रों में तेल एवं जहरीले रसायनों के रिसाव से जलीय जीवों पर प्रभाव • रेल मार्ग के आरपार वन्य जीवों के 	<ul style="list-style-type: none"> → तेल, ईंधन एवं जहरीले तत्वों का दुर्घटना से हुए रिसाव के समय तत्काल सफाई की व्यवस्था → वन्य क्षेत्रों के पास रेल मार्ग के नीचे से पशुओं के आवागमन की व्यवस्था का

संभावित प्रभाव	निराकरण के उपाय
आवागमन में बाधा • वन्य जीवों की रेलगाड़ियों द्वारा दुर्घटनाग्रस्त होने की सम्भावना	प्रावधान → दुर्घटनाओं को टालने के लिए वन्यजीवों की अधिकता वाले स्थानों पर आवश्यकतानुसार आड़ लगाने का प्रावधान
भूमि अधिग्रहण एवं पुनर्वास	
पूर्व निर्माणावधि सम्पत्ति एवं जीविका की हानि	→ पर्यावरणीय प्रभावों के मुल्यांकन के अलावा पुनर्वास एवं पुनर्स्थापन योजना के अन्तर्गत क्षतिपूर्ति एवं सहायता की योजना बनाई जाएगी
निर्माणावधि पैदल यात्रियों एवं वाहन के आवागमन में बाधा	→ बाईपास का प्रावधान एवं उपयुक्त जगहों पर सूचना एवं दिशा निर्देशक बोर्ड
संचालन अवधि डी.एफ.सी. के तटबन्ध निर्माण के कारण स्थानीय लोगों एवं किसानों के आवागमन में बाधा	→ नीति एवं आवश्यकतानुसार रेल-सड़क क्रॉसिंग पर या तो रेल के निचे से (RUB) अथवा रेल के ऊपर (ROB) से सड़क का प्रावधान → वर्तमान सड़क एवं प्रस्तावित RUB/ ROB/रेल-सड़क क्रॉसिंग स्थानीय लोगों की आवश्यकताएँ पूरी करेंगे → बाईपास अनुभाग में रेलमार्ग के निचे से सड़क एवं रेल-सड़क क्रॉसिंग वर्तमान सड़क नेटवर्क के अनुसार होगा → भारतीय रेल के वर्तमान चलन के अनुसार RUB तथा ROB में सड़क के दोनो ओर पैदलपथ (फुटपाथ) का प्रावधान

नोट : प्रमुख प्रभाव एवं निराकरण के उपाय तालिका में दिये गये हैं। अन्य प्रभाव एवं उपाय पर्यावरण के प्रभावों का मुल्यांकन रिपोर्ट में दिए गये हैं।

पर्यावरणीय प्रबन्ध योजना

पर्यावरणीय प्रबन्ध योजना स्वच्छ एवं सुरक्षित पर्यावरण की कुंजी है। पर्यावरण प्रबन्ध योजना एवं इसके पर्याप्त क्रियान्वयन को सुनिश्चित किए बिना सुझाए गये निराकरण के उपायों का वाञ्छित नतीजा मिलना सम्भव नहीं है।

पर्यावरण प्रबन्ध योजना, निर्माण पूर्व अवस्था, निर्माण अवस्था एवं क्रियान्वयन अवस्था के समय परियोजना क्रियाकलापों द्वारा उत्पन्न विपरीत प्रभावों को कम करने के लिए सुझाए गये उपायों के क्रियान्वयन की योजना बताता है। पर्यावरण प्रबन्ध योजना निम्न बिन्दुओं पर आधारित होती है।

1) निम्नलिखित विशिष्ट पर्यावरणीय प्रबन्ध योजनाएँ प्रस्तावित हैं -

- क) हरित पट्टी विकास योजना
- ख) अपशिष्ट प्रबन्ध योजना
- ग) खाईयों एवं मृदा आपूर्ति वाले क्षेत्रों के प्रबन्ध/पुनर्वास योजना
- घ) श्रमिक शिविरों की स्वच्छता एवं रखरखाव की निर्देशिका
- ङ) हानिकारक रसायनों के भण्डारण, रखरखाव एवं आपातकालीन उपायों के नियम
- च) भू-अधिग्रहण एवं पुनर्वास (यह परियोजना के पुनर्वास एवं पुनर्स्थापना योजना का विषय है)

2) निम्न पर्यावरण एवं सामाजिक बिन्दुओं के लिए आवश्यकतानुसार पर्यावरण प्रबन्ध उपाय प्रस्तावित हैं -

- क) पूर्व निर्माण अवस्था
 - भू-अधिग्रहण, वन भूमि के परिवर्तन, वृक्षों का संरक्षण, मृदा दोहन गतों, खाईयों का बचाव, अवाञ्छित सामग्री के निपटान के लिए एवं श्रमिक शिविरों के लिए जगह का चुनाव, अल्पकालीन रेल यार्ड की व्यवस्था, क्रियान्वयन एजेन्सी एवं ठेकेदारों का अभिविन्यास
- ख) निर्माण अवस्था
 - कार्य क्षेत्र की सफाई, निर्माण सामग्री का उपार्जन, निर्माण कार्य (जल निकास, ढलान स्थिरकरण आदि) जल प्रदूषण, वायु प्रदूषण, ध्वनि, श्रमिक शिविरों का प्रबन्धन, ठेकेदारों की कार्य समाप्ती
- ग) क्रियान्वयन अवस्था
 - विभिन्न निराकरण के उपायों के सम्पादन की समीक्षा, प्रदूषण समीक्षा

पर्यावरण प्रबोधन

पर्यावरण प्रबोधन का उद्देश्य यह सुनिश्चित करना है कि परियोजना के निर्धारित उद्देश्य एवं इच्छित परिणाम पा लिया गया है। पर्यावरण प्रबोधन योजना के क्रियान्वयन को सुनिश्चित करने के लिए प्रभावशाली पर्यावरण प्रबोधन योजना तैयार करना जरूरी है। पर्यावरण प्रबोधन योजना दो तत्वों, कार्य सम्पादन सूचक एवं पर्यावरण प्रबोधन कार्यक्रम से मिलकर बना है।

कार्य सम्पादन सूचक

- क) पूर्वनिर्माण अवस्था : भूमि अधिग्रहण, निस्तारण स्थान, निर्माण शिविर, मृदा दोहन गर्त
- ख) निर्माण अवस्था : वायु गुणवत्ता, ध्वनि एवं कम्पन्न स्तर, जल गुणवत्ता, पौधारोपण, उपरी मृदा, श्रमिक
- ग) क्रियान्वयन अवस्था : पौधों के जीवित रहने का अनुपात, मृदा दोहन गर्तों का पुनरोद्धार, संवेदनशील स्थानों पर ध्वनिरोधकों की उपयोगिता

पर्यावरणीय प्रबोधन कार्यक्रम

पर्यावरणीय प्रबोधन कार्यक्रम में निम्नलिखित विषयों पर ध्यान दिया जायेगा :-

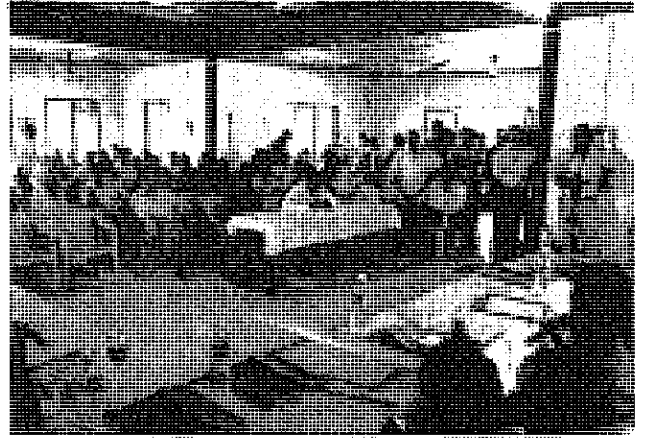
- क) प्रबोधन योग्य मद
- ख) प्रबोधन का स्थान
- ग) प्रबोधन की अवधि एवं तीव्रता
- घ) क्रियान्वयन एवं निरीक्षण की संस्थानिक जिम्मेदारी

उपरोक्त विषयों के आधार पर पर्यावरणीय प्रबोधन कार्यक्रम में निम्न मदों का प्रबोधन किया जायेगा :-

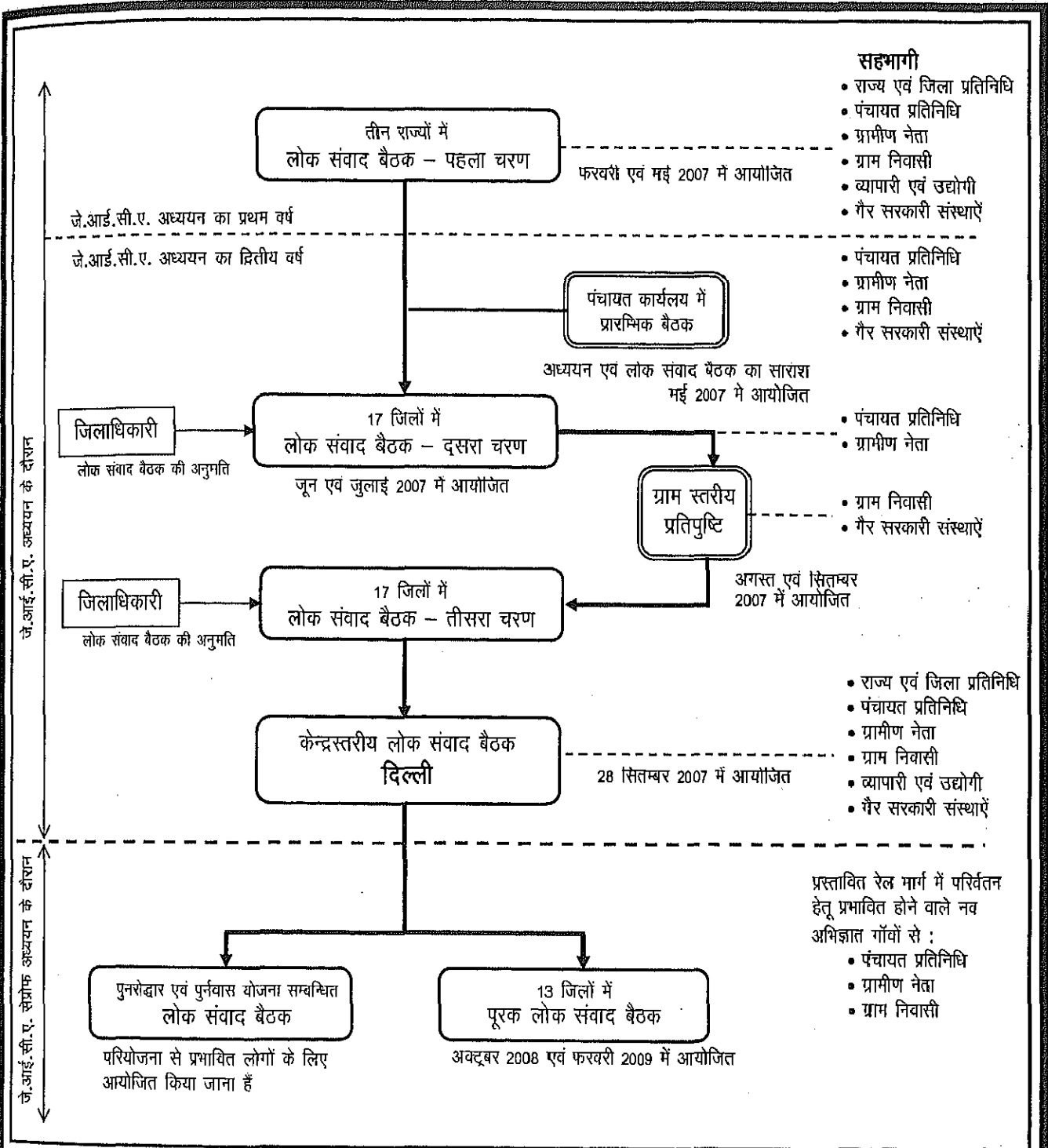
- | | | |
|------------------|----------------|---------------------------|
| क) वायु गुणवत्ता | ख) जल गुणवत्ता | ग) ध्वनि एवं कम्पन्न स्तर |
| घ) भूमि कटाव | ड) पौधारोपण | च) वनस्पति एवं जीवजन्तु |

लोक संवाद बैठक

जन समुदाय तक परियोजना की जानकारी पहुँचाने एवं उनके विचार जानने के लिए जे.आइ.सी.ए. की आर्थिक सहायता से किए गये पर्यावरण एवं सामाजिक प्रभावों एवं उपायों के अध्ययन के समय लोक संवाद बैठक का आयोजन किया गया था। इसके अलावा जे.आइ.सी.ए. की आर्थिक सहायता से किए गये सेप्रोफ अध्ययन के समय डी.एफ.सी. रेलमार्ग में परिवर्तन के कारण नये प्रभावित गाँवों को ध्यान में रखते हुए जिलानुसार लोक संवाद बैठकों का आयोजन किया गया था। इन लोक संवाद बैठकों से विभिन्न सुझाव प्राप्त हुए जिन्हें परियोजना प्रारूप में सम्मिलित किया गया है जैसे वाहनों, किसानों एवं स्थानीय लोगों के आवागमन हेतु तटबन्ध अनुभाग में पुलिया का प्रावधान। दूसरी तरफ पुनर्वास एवं पुनर्स्थापन योजना का प्रकटीकरण एवं परियोजना प्रभावित लोगों के भू-अधिग्रहण एवं पुनर्वास सम्बन्धित विचार जानने के लिए अलग से लोक संवाद बैठक का आयोजन किया जायेगा।



लोक संवाद बैठक



पर्यावरणीय प्रभावों का मुल्यांकन प्रक्रिया में सूचना प्रकटन

परियोजना पर बनी पर्यावरणीय प्रभावों का मुल्यांकन रिपोर्ट के सूचना प्रकटीकरण प्रक्रिया के तहत तीनों राज्यों की ESIMMS रिपोर्ट एवं S-ESIMMS रिपोर्ट का जोड़ा एवं उनके सारांश का प्रस्तावित परियोजना क्षेत्र में मार्च 2009 के मध्य से अप्रैल 2009 के मध्य तक जन प्रकटीकरण किया गया था।

इस सूचना प्रकटीकरण प्रक्रिया के दौरान जनता से लगभग 70 टिप्पणियाँ प्राप्त हुईं। इन टिप्पणियों में से किसी भी विशिष्ट टिप्पणी को रिपोर्ट में शामिल नहीं किया गया। ये टिप्पणियाँ मुख्यतया: भूमि अधिग्रहण, पुनर्वास एवं पुनर्स्थापन विषयों से सम्बन्धित हैं। हालाँकि इन टिप्पणियों का ध्यान आगे के परिक्षणों में रखा जाएगा एवं परियोजना के आगे की अवस्था में निराकरण के उपाय एवं पर्यावरणीय प्रबन्ध एवं प्रबोधन योजनाओं के क्रियान्वयन में रखा जाएगा। इसके अलावा भूमि अधिग्रहण, पुनर्वास एवं पुनर्स्थापन विषयों का ध्यान परियोजना के आगे की अवस्था में पुनर्वास एवं पुनर्स्थापन योजना बनाते एवं इसके क्रियान्वयन के समय रखा जाएगा।

कार्यक्रम अनुसूची

- परियोजना परिरूप का आगे का अभियान्त्रिकी सम्बन्धित विचार विमर्श 2009 के अन्त से शुरु होकर लगभग 2 वर्ष तक चलेगा। पर्यावरण एवं सामाजिक विषयों पर कार्य कर रहा दल निराकरण के उपाय एवं पर्यावरणीय प्रबन्ध एवं प्रबोधन की विस्तृत योजना तैयार करेगा। उपर्युक्त विषयों पर जनता से प्राप्त हुई टिप्पणियों की जांच उन्ही विशिष्ट स्थानों पर होगी।
- निर्माण कार्य वर्ष 2011 के बाद शुरु होगा।
- वाणिज्यिक परिचालन 2015/2016 तक शुरु होगा।

रिपोर्ट की उपलब्धता

राज्यानुसार ESIMMS रिपोर्ट एवं अन्तिम S-ESIMMS रिपोर्ट का जोड़ा जन साधारण की समीक्षा के लिए उन स्थानों पर उपलब्ध होगी जहाँ पर ड्राफ्ट रिपोर्ट उपलब्ध कराई गयी थी। रिपोर्ट, सम्बन्धित डी.एफ.सी.सी.आई.एल. के मुख्य परियोजना प्रबन्धक, प्रस्तावित डी.एफ.सी रेल मार्ग के साथ प्रमुख रेल स्टेशन एवं सम्बन्धित जिला कार्यालय में अक्टूबर और नवम्बर 2009 में उपलब्ध होगी। अन्तिम रिपोर्ट का सारांश सभी परियोजना प्रभावित गाँवों में उपलब्ध होगा।

मुख्य परियोजना प्रबन्धक (डी.एफ.सी.सी.आई.एल.) कार्यालय का पता

- मुख्य परियोजना प्रबन्धक कार्यालय – जयपुर
बी 12, हनुमान नगर, मेट्रो हॉस्पिटल के सामने, सिरसी रोड़ , जयपुर
दूरभाष : 0141-4028741 फ़ैक्स : 0141-4028740
- मुख्य परियोजना प्रबन्धक कार्यालय – अजमेर
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- मुख्य परियोजना प्रबन्धक कार्यालय – अहमदाबाद
पुरानी डी आर एम भवन, पहली मंजिल
कालूपुर, अहमदाबाद -380002
दूरभाष : 079-22175107 फ़ैक्स-079-22163101
- मुख्य परियोजना प्रबन्धक कार्यालय – वडोदरा
13-14, 17-18, पैनोरामा कॉम्प्लेक्स, तीसरी मंजिल
आर सी दत्त रोड़, अल्कापुरी बडोदरा -7
दूरभाष : 0265-2326024, फ़ैक्स-0265-2326027

प्रमुख स्टेशन जहाँ पर अन्तिम रिपोर्ट उपलब्ध है

- गुजरात
पालनपुर (जंक्शन), सिद्धपुर, ऊंझा, महेसाणा (जंक्शन), साबरमती (जंक्शन), अहमदाबाद (जंक्शन), नडियाद (जंक्शन), आन्नद (जंक्शन), वासड (जंक्शन) एवं वडोदरा (जंक्शन)
- राजस्थान
अलवर (जंक्शन), कुण्ड, नीम का थाना, श्री माधोपुरा, रिगस (जंक्शन), जयपुर (जंक्शन), फुलेरा (जंक्शन), किशनगढ़, अजमेर (जंक्शन), ब्यावर, सोजत रोड़, मारवाड़ (जंक्शन), फालना, सिरौही रोड़ एवं आबू रोड़
- हरियाणा
रेवाड़ी (जंक्शन), नारनौल एवं डाबला (जंक्शन)

॥ परियोजना में आपके सहयोग के लिए धन्यवाद ॥



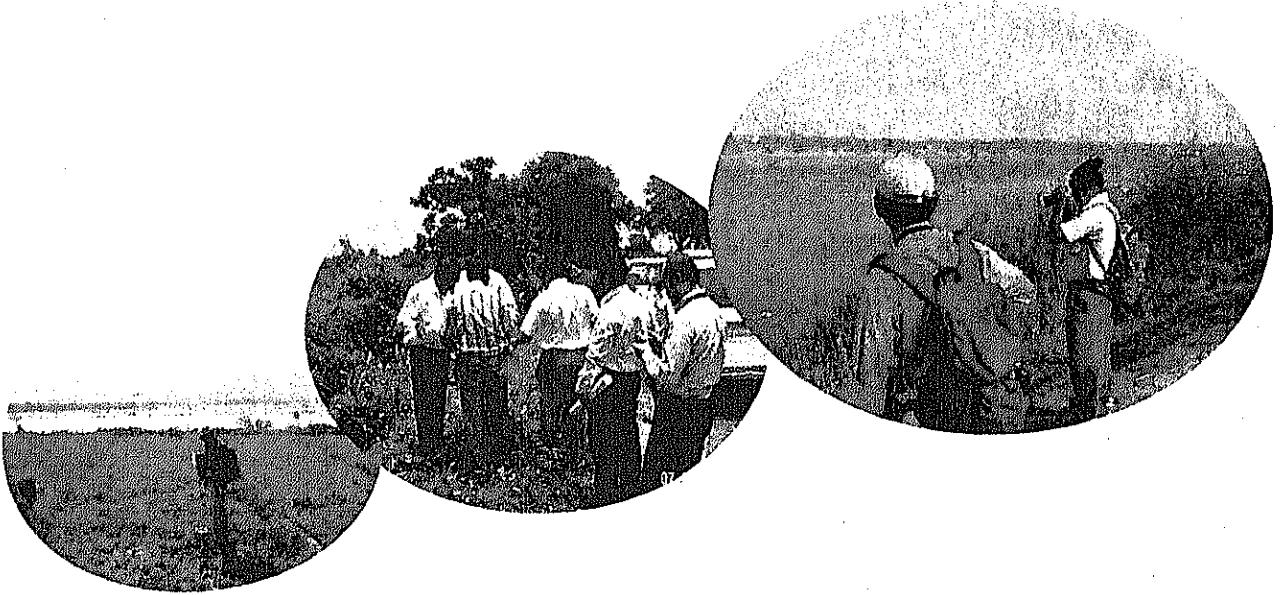
डेडीकेटेड फेड कोरीडोर कॉर्पोरेशन

रेल मंत्रालय
डी.एफ.सी.सी.आर्.एल.

वडोदरा अने रेवाडी वर्ये समर्पित मालभाडा डोरिडोर परियोजनांना
पश्चिमी डोरिडोर (विभाग)

पर्यावरणिय असरोना मुल्यांकनो संक्षेप

ओगस्ट २००८



आ भारतामां समर्पित मालभाडा डोरिडोर (डी.एफ.सी) परियोजनाअे पश्चिमी विभाग ना रेवाडी थी वडोदरा वर्ये प्रथम अग्रता अनुभाग नां पर्यावरणिय तेमज सामाजिक विवेचन नो संक्षेप थे. जे रेल मंत्रालय द्वारा ओगस्ट २००८ मां स्विकृति पापेल पर्यावरणीय असरो ना मुल्यांकन ना आभरी रीपोर्ट पर आधारित थे. आ संक्षेप परियोजना नां सुचना प्रसिध्दिनी प्रक्रिया द्वारा जन-समुदाय सुधी पक्षोयाडवा मां आवशे. जेना माटे रेलवे मंत्रालय अधिकारी मंत्रालय तथा डी.एफ.सी.सी.आर्.एल. कार्यकारी संस्था थे.

પરિયોજના ની વિશેષતાઓ

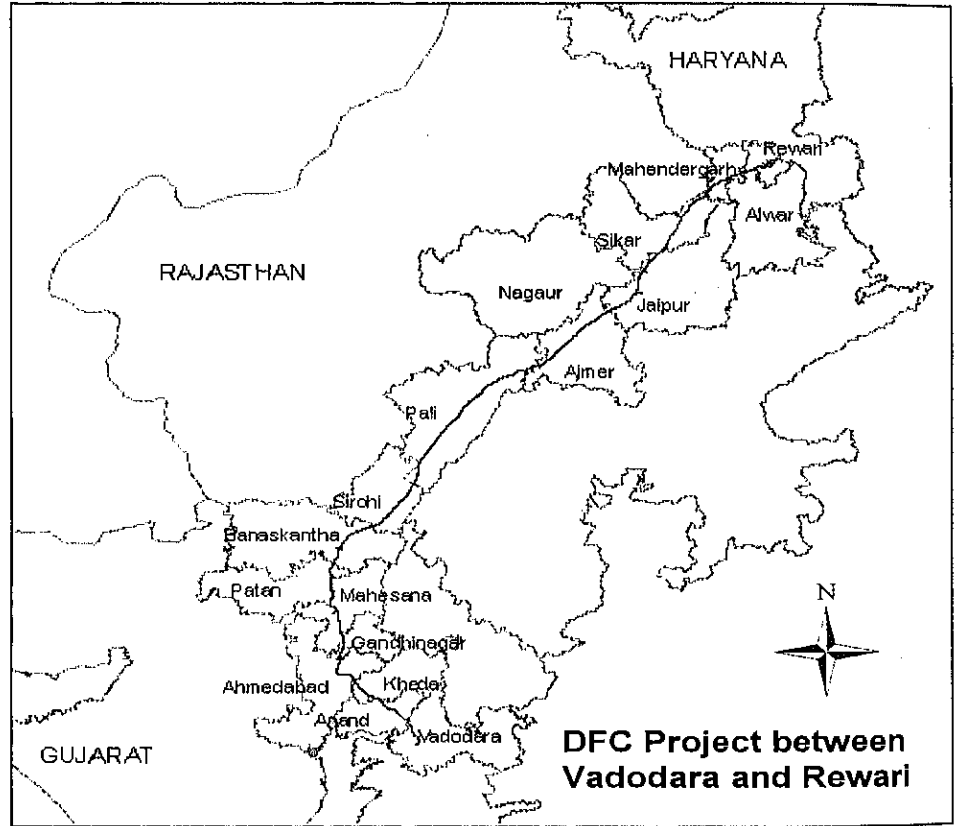
રેલવે મંત્રાલય દિલ્હી અને મુંબઈ મહાનગર સુધી તેમજ આસ-પાસના સ્થાનો પરથી માલ-સામાનની ઝડપી હેરફેર હેતુથી કમ્પ્યુટર સંચાલિત સમર્પિત માલવાહક પરિયોજના નું આયોજન કરી રહેલ છે. જેના કારણે માલ-સામાનને યોગ્ય સ્થાને ઝડપી અને ઓછા ખર્ચમાં પહોંચાડી શકાય.

ડી.એફ.સી. પરિયોજનાનો મુખ્ય ઉદ્દેશ્ય ભારતના વર્તમાન વિકાસ દરને બળ પૂર પાડવાનો છે. વર્ષ:2013-2014 સુધી આ યોજના દ્વારા 37.7 મિલિયન ટન માલ-સામાનની હેરફેર થશે. આ યોજના નાં નિર્માણથી આર્થિક ઉન્નતિ અને રોજગારની નવી તકો ઊભી થશે. સાથે-સાથે રાષ્ટ્રના આંતરીક પ્રાંતો વચ્ચે આર્થિક વિનિમય ઉપરાંત મુખ્ય વ્યાપાર કેન્દ્રોમાં પરસ્પર સુધારો થશે.

ભારત સરકારના રેલવે મંત્રાલય અધિન ડી.એફ.સી.સી.આઈ.એલ. આ પરિયોજના ની વિકાસમાટે કાર્યાલયન સંસ્થા છે. ડી.એફ.સી. પરિયોજના નાં 'પશ્ચિમ કોરિડોર માં' વડોદરાથી રેવાડીના મધ્ય ભાગમાં હરિયાણા, રાજસ્થાન તેમજ ગુજરાત રાજ્યના 17 જિલ્લાઓ ના 447 ગામડાંઓ માંથી પસાર થાય છે. જેની લંબાઈ લગભગ 920 કી.મી. છે.

પરિયોજના અત્યારે આયોજનના તબક્કે છે, આ પરિયોજના વર્ષ 2009 ના અંત થી લગભગ 2 વર્ષ સુધી માં પરિયોજના નું વિસ્તૃત કાર્ય કરવામા આવશે. પરિયોજના નું નિર્માણ કાર્ય વર્ષ 2011 થી આરંભ કરવામા આવશે તેમજ 4 થી 5 વર્ષ માં પુર્ણ કરવાનું લક્ષ્ય છે.

રાજ્ય/ જિલ્લા
ગુજરાત
વડોદરા
ખેડા
અમદાવાદ
ગાંધીનગર
મહેસાણા
પાટણ
બનાસકાંઠા
રાજસ્થાન
સિરોહી
પાલી
અજમેર
જયપુર
સીકર
અલવર
હરિયાણા
મહેન્દ્રગઢ
રેવાડી



પ્રસ્તાવિત ડી.એફ.સી. રેલવે માર્ગ અને સંલગ્ન સુવિધાઓ

સમર્પિત માલવાહક કોરિડોર પરિયોજનાનાં પશ્ચિમી વિભાગ વડોદરા, અમદાવાદ, પાલનપુર, રેવાડી દ્વિમાર્ગીય રેલવેમાર્ગ છે. આ પ્રસ્તાવિત માર્ગ ગુજરાત, રાજસ્થાન અને હરિયાણા રાજ્યથી પસાર થાય છે. પરિયોજનાનો મુખ્ય માર્ગ ભારતીય રેલ વિભાગની જમીન પર વર્તમાન રેલ માર્ગની સમાંતર આયોજન કરી રહેલ છે. જોકે કોઈ સ્થાનો પર વર્તમાન રેલવે લાઈનની સમાંતર પુરતી જમીન ઉપલબ્ધ ન હોવાને કારણે તેમજ મોટા ભાગની વસાહતોને બચાવવા હેતુ બાઈપાસ આપવામા આવ્યો છે, બાઈપાસ આપતી વખતે જીવઅભયારણીય, શહેરી યોજનાક્ષેત્ર, માર્બલ ઉદ્યોગ, વસ્તિ ક્ષેત્રો, વગેરેને ધ્યાનમાં રાખવામાં આવ્યા છે. જેથી પર્યાવરણ તેમજ સમાજનાં અર્થતંત્ર પર થનારી અસરોને બને તેટલી ઓછી કરી શકાય.

પરિયોજના માટે પર્યાવરણ અને સામાજિક અધ્યયન

ભારત સરકારના પર્યાવરણિય અસરોના અભ્યાસ કરવાના ધારધોરણો અને કાયદાઓ અનુસાર રેલ્વે પરિયોજનાઓ માટે પર્યાવરણીય અસરો નો અભ્યાસ કરવાની આવશ્યકતા નથી. તેમ છતાં ડી.એફ.સી.એ ઘણી મોટી પરિયોજના છે, જે વિપરીત પર્યાવરણીય તેમજ સામાજિક અસરોને ધ્યાનમાં રાખીને યોજના નાં કાર્ય સમયમાં પર્યાવરણિય તેમજ સામાજિક મુદ્દાઓ ઉપર વિસ્તૃત અભ્યાસ કરવામાં આવ્યો છે.

આ સંદર્ભ માં રેલ્વે મંત્રાલય, ડી.એફ.સી.સી.આઈ.એલ. એ જાપાન ઈન્ટરનેશનલ કોઓપરેશન એજન્સી(જે.આઈ.સી.એ.) ના ટેકનીકલ સહયોગથી ડી.એફ.સી. પરિયોજનાનાં પશ્ચિમી કોરિડોરના પર્યાવરણિય અસરો(ઈ,આઈ,એ)નો ડ્રાફ્ટ રિપોર્ટ તૈયાર કરી દેવામા આવ્યો છે, જ્યારે જે.આઈ.સી.એ. (JICA) અધ્યયન રિપોર્ટ 2007 (ESIMMS¹) તેમજ જે.આઈ.સી.એ.-સેપ્રોફ (SAPROF³) અધ્યયન રિપોર્ટ 2008/2009 (S-ESIMMS²) નું



વૃક્ષોનો સર્વે

પ્રસ્તાવિત રેલ્વેમાર્ગની પાસેના સંરક્ષિત વિસ્તારો તેમજ મુખ્ય નદીઓના પ્રત્યેક મોસમ માં મળેલ આંકડાઓના સંકલન તથા વિસ્તૃત વિશ્લેષણ, સ્થાનાન્તરીત કરવામા આવનાર માળખાઓ નું સર્વેક્ષણ, તેમજ સામાજિક આર્થિક સર્વેક્ષણ, એનાથી વધારે જે.આઈ.સી.એ.(JICA) ના અભ્યાસ પછી સ્થાનાન્તરીત થયેલ રેલ્વે માર્ગથી નવા અસર પામનાર ક્ષેત્રોનાં પૂરક સર્વેક્ષણ વગેરે વિષયો સામેલ છે.

¹ ESIMMS જે.આઈ.સી.એ. ની 'પર્યાવરણ તેમજ સામાજિક નિયમો 2004 માર્ગદર્શિકા' અનુસાર બનાવવા માં આવેલ પર્યાવરણીય તેમજ સામાજિક અસરોનો મુલ્યાંક રિપોર્ટ.

² S-ESIMMS જે.આઈ.સી.એ. ની 'પર્યાવરણિય તેમજ સામાજિક નિયમો' 2004 માર્ગદર્શિકા' અનુસાર બનાવવામાં આવેલ પર્યાવરણિય તેમજ સામાજિક અસરોનાં મુલ્યાંક રિપોર્ટની પહેલાનો રિપોર્ટ

³ SAPAROF સ્પેશલ આસિસ્ટેન્સ ફોર પ્રોજેક્ટ ફોરમ્યુલેશન

પર્યાવરણિય અસરોનાં મુલ્યાંકન રિપોર્ટ

ESIMMS

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વર્ષ 2007 માં જે.આઈ.સી.એ. ના માર્ગદર્શન દ્વારા બનાવવામાં આવેલ રિપોર્ટ

S-ESIMMS

વર્ષ 2008/09 માં જે.આઈ.સી.એ. ના સેપ્રોફ અધ્યયન દ્વારા બનાવવામાં આવેલ રિપોર્ટ

સમાવિષ્ટ રૂપ છે. પર્યાવરણીય અસરોનાં મુલ્યાંકન(ઈ.આઈ.એ)નાં ડ્રાફ્ટ રિપોર્ટને ત્રણ પ્રદેશોના ESIMMS રિપોર્ટ તેમજ S-ESIMMS તે રિપોર્ટનું સમાવિષ્ટ રૂપ છે, જે પરિયોજનાથી અસર પામનાર ક્ષેત્રોનું વર્ણન કરે છે.

બંને ESIMMS તેમજ S-ESIMMS રિપોર્ટ પરિયોજનાથી થનારી અસરો, પરિયોજના ક્ષેત્રની સામાજિક તેમજ ભૌતિક અવસ્થાઓ, પ્રદૂષણનિયંત્રણ તેમજ સામાજિક વિષયો પર આધારિત છે. S-ESIMMS રિપોર્ટના અભ્યાસ કરવામાં આવેલ મુખ્ય વિષયોમા રેલ્વે દ્વારા ઉત્પન્ન ધ્વનિ અને કમ્પનનાં પહેલાના અનુમાન તથા સંવેદનશીલ અભિગ્રાહકો પર ધ્વનિ તેમજ કમ્પનની અસર, જમીન ઉપયોગી સર્વેક્ષણ,



રેલ્વે કાર્યકરો દ્વારા પર્યાવરણ તેમજ સામાજિક અસરોનો સર્વેક્ષણ

સંભવિત અસરો તેમજ નિરાકરણના ઉપાયો

સર્વેક્ષણમાં અનેક પર્યાવરણિય તથા સામાજિક અસરો વિશે જાણવા મળેલ છે, પરિક્ષણથી જાણવા મળેલ પર્યાવરણિય અસરોને ઓછી કરવાના સુચનો મળ્યા છે, જેનો નીચે ઉલ્લેખ કરવામાં આવ્યો છે.

અસરો તેમજ તેના નિરાકરણ માટેની યાદી:

સંભવિત અસરો	નિરાકરણના ઉપાયો
વાયુની ગુણવત્તા	
નિર્માણ સમયે <ul style="list-style-type: none"> નિર્માણ કરતી વખતે બાંધકામના સમય દરમિયાન વાહનો તથા મશિનરીઓની હેરાફેરીને કારણે ધુળના સુક્ષ્મકણો દ્વારા વાયુ પ્રદૂષણ 	<ul style="list-style-type: none"> નિર્માણ કાર્યમાં ઉપયોગમાં આવનાર માલ-સામાનને ગોડાઉનમાં તેમજ ઢાંકીને રાખવાની વ્યવસ્થા ભરેલા વાહનોથી માટી તથા પથ્થર છલકે નહીં તેની કાળાજી નિર્માણ વિસ્તારમાં કાચા રસ્તાઓ તેમજ અન્ય સ્થાનો પર ધુળને ઊડતી રોકવા માટે પાણીનો છંટકાવ કરાવવાની વ્યવસ્થા ઓછો ધૂમાડો ઉત્પન્ન કરે તેવા સાધનો તેમજ વાહનોનો ઉપયોગ
ધ્વનિ અને કમ્પન માત્રા	
નિર્માણ સમયે <ul style="list-style-type: none"> નિર્માણ કાર્ય સમયે ઉપયોગમાં આવનાર હલકા તેમજ ભારે વાહનો દ્વારા ધ્વનિ તેમજ કમ્પન 	<ul style="list-style-type: none"> ઓછો અવાજ ઉત્પન્ન કરે તેવા ઉપકરણોનો પ્રયોગ રહેણાંકવાળી જગ્યાએ કામ-કાજ ફક્ત દિવસે જ થવું જોઈએ. ખુબ અવાજ ઉત્પન્ન થતો હોય તેવા કામના સ્થાનો પર કામ કરનાર વ્યક્તિઓને અવાજથી બચાવ કરે તેવા ઉપકરણોની વ્યવસ્થા કરાવવી
સંચાલન સમયે <ul style="list-style-type: none"> રેલગાડી તેમજ અન્ય વાહનોના આવાગમનથી ઉત્પન્ન થતો અવાજ અને કમ્પન 	<ul style="list-style-type: none"> ઓછો અવાજ તથા કમ્પન ઉત્પન્ન કરે તેવી ટેકનોલોજીનો ઉપયોગ લાંબી તેમજ જોઈન્ટ પાટા નો પ્રયોગ કરવો રેલ્વેગાડી, પાટા, તેમજ મકાનોની સમય-સમય પર મરામત
પાણીની ગુણવત્તા	
નિર્માણ સમયે <ul style="list-style-type: none"> નિર્માણ સમય દરમિયાન ધૂળ તથા ગંદકીથી દૂષિત પાણી. કામગારોના રહેઠાણથી ઉત્પન્ન દૂષિત પાણી તેમજ નિર્માણના વિસ્તારથી ઉત્પન્ન કીચડ વગેરે 	<ul style="list-style-type: none"> પાણીવાળા ક્ષેત્રોથી કીચડ ન ફેલાય તેવી આડનું નિર્માણ ઉપયોગ થયેલ પાણીને અલગ કરી તેમજ ગુણવત્તા નિયંત્રણ કર્યા પછી તેના નિકાસની વ્યવસ્થા દૂષિત પાણીથી થનાર સ્વાસ્થ્ય સમસ્યાઓને રોકવા માટે સ્વાસ્થ્ય સુવિધાઓની પ્રાથમિકતા.
સંચાલન સમયે <ul style="list-style-type: none"> રેલ્વે ગોડાઉન, રેલ ગાડીઓની ધોવાણથી તેમજ કારખાનાઓની સાફ-સફાઈ દ્વારા ઉત્પન્ન દૂષિત પાણી 	<ul style="list-style-type: none"> જળ સંશોધન યંત્રો દ્વારા પાણીમાં દૂષિત રહેલ દૂષિત પદાર્થો, તૈલીય ચિકણાય, કાર્બનિક પદાર્થ તેમજ ઝેરીલા તત્ત્વોને દૂર કરી પાણી ઉપયોગમાં આવે તેવા ઉપાય કરવા જોઈએ
સ્થળ આકૃતિ તેમજ ભુગર્ભ વિજ્ઞાન	
નિર્માણ સમયે <ul style="list-style-type: none"> વૃક્ષો કાપવા, જમીન સાફ કરવી, માટી લેવાની જગ્યાએ થતા ખોદકામ જેવા કામોને લીધે, બાંધકામના કારણે થતા ભુમિગત ભૌગોલિક ફેર-ફાર. ઊંડા ખોદકામથી સ્થળોમાં થતા વિકૃત ફેર-ફાર. 	<ul style="list-style-type: none"> સ્થળ આકૃતિઓને વિકૃત થતી બચાવવા માટે વર્તમાન ખાઈઓ તેમજ ખાડાઓનો ઉપયોગ કરવો અનિયંત્રિત ખોદકામ ન કરવું કારણ કે પછી ખોદાયેલ ખાડાઓ તેમજ ખાઈઓમાં પાણી ભરાય ન રહે તેમજ રોગ ફેલાવનારા જીવ જંતુઓનું જન્મ સ્થળ બની ન રહે. બાંધકામ માટે ફક્ત સ્વિકૃતી તેમજ અનુમતી મળેલ ખાઈઓથી જ ખોદકામ કરવું.

સંબંધિત અસરો	નિરાકરણના ઉપાયો
જમીન(માટી)	
નિર્માણ સમય <ul style="list-style-type: none"> બાય-પાસ વિભાગ ખેતીની ફળદ્રુપ જમીનમાંથી પસાર થશે. જેના કારણે જમીનની ઉપરી ફળદ્રુપતાનો નાશ થવો સંભવ છે ખોદકામના કારણે ઉપરની જમીનનું ધોવણ થશે તેમજ વનસ્પતિનો નાશ માટીની ગુણવત્તામાં બગાડ 	<ul style="list-style-type: none"> એમ્બેકમેન્ટના નિર્માણમાં માટીના સ્ત્રોતને બચાવવા માટે સ્થાપિત યંત્રોથી નીકળેલ રાખનો પ્રયોગ કરવો (જો યંત્રો ૧૦૦ કિ.મી.માં સ્થાપિત હોય તો) પાણીના નિકાલ, એમ્બેકમેન્ટની મજબુતાઈ તેમજ ઢોળાવના સ્થિતિકરણ જેવા ઉપાયો માટી ખોદાયેલ સ્થાનોપર ઉપરના સ્તરની માટીને બચાવવા નવીનીકરણ કરવું દૂર્ઘટના થી થતા બગાડ સામે બચાવ નિર્માણ કામથી ઉત્પન્ન થતી કીચડ નો નિકાલ
જળ વિજ્ઞાન સંબંધિત બાબત	
નિર્માણ સમય <ul style="list-style-type: none"> એમ્બેકમેન્ટના નિર્માણથી પાણી નિકાસના કુદરતી માર્ગમાં અવરોધ પેદા થશે, જેના કારણે પૂર તેમજ પૂરના પાણીમાં વધારો થશે 	<ul style="list-style-type: none"> રેલ્વે માર્ગની સાથે-સાથે જરૂરીયાત મુજબ નાળાઓનું નિર્માણ વર્તમાન પાણી ના નિકાલ માટેના નાળાઓની ક્ષમતામાં વધારો કરવો પૂર તેમજ પાણી નાં ભરાવાથી બચવા માટે તેમજ વધારાના પાણીના નિકાલ માટેના ઉપાયો
સંચાલન સમય <ul style="list-style-type: none"> રેલ્વે માર્ગના એમ્બેકમેન્ટ નિર્માણથી સ્થાનિક જળ નિકાસ પર અસર. 	<ul style="list-style-type: none"> વરસાદ તેમજ વ્યર્થ વહી જતા પાણીના નિકાલ માટે રેલ્વે માર્ગની બંને બાજુ ક્ષમતાવાળી નાળીઓનું આયોજન
વનસ્પતિ	
નિર્માણ સમય <ul style="list-style-type: none"> પરિયોજના માટે સંપાદિત ભૂમિપર વૃક્ષોની કાપણીથી વનસ્પતિનો નાશ. 	<ul style="list-style-type: none"> કપાયેલ વૃક્ષોની ડબલ સંખ્યામાં ખામીમુક્ત વૃક્ષા રોપણ થવું જોઈએ વન્ય ભૂમિ તેમજ વ્યક્તિગત ભૂમિ પરથી કપાયેલ વૃક્ષો તેમજ વન્ય ભૂમિની ક્ષતિ(નુકસાની)પૂર્ણ કરવી જોઈએ. ફૂલોવાળી ઝાડીઓ તેમજ સદાબહાર વૃક્ષો ચુક્ત મિશ્રિત વૃક્ષારોપણ થવું જોઈએ
<ul style="list-style-type: none"> પરિયોજનાની આસ-પાસના વૃક્ષોની ડાળીઓ તેમજ પાંદડા પર ધૂળની જમાવટ 	<ul style="list-style-type: none"> રેલ્વે પાટા ની બંને બાજુ રહેલ જગ્યા પર પટ્ટીદાર વૃક્ષારોપણ કરવું બળતણ માટે કામદારો દ્વારા વૃક્ષોની કાપણી પર રોકથામ માટે તેઓને બળતણ પુરું પાડવું
વનભૂમિ નું પરિવર્તન	
નિર્માણ સમય પહેલા <ul style="list-style-type: none"> રેલ્વે માર્ગ ઘણા બધાં અભ્યારણ્ય (રિઝર્વોરેસ્ટ) માંથી પસાર થાય છે 	<ul style="list-style-type: none"> કપાયેલ વૃક્ષોની કિંમત તેમજ વન ભૂમિ નાં પરિવર્તન ની ક્ષતિપૂર્તિ વનવિભાગને કરવી અભ્યારણ્ય ક્ષેત્રમાં કોઈપણ કાર્ય કરતા પહેલાં વનવિભાગની મંજૂરી પ્રાપ્ત કરવી
જીવ-જંતુ	
નિર્માણ સમય પહેલા <ul style="list-style-type: none"> ડી.એફ.સી. રેલ્વે માર્ગ (બાઈ-પાસ વિભાગ) માં મહેસાણા જિલ્લાનાં પશ્ચિમમાં થોલનું વન્યજીવ(પક્ષી) અભ્યારણ્ય 	<ul style="list-style-type: none"> અભ્યારણ્ય ની ૩ કિ.મી.પરિઘમા કોઈ નિર્માણ કાર્ય સાવધાનીપૂર્વક તેમજ નિયમાનુસાર કરવામા આવે જેનાથી અભ્યારણ્યમા નુકસાન ઓછું થાય

સંભવિત અસરો	નિરાકરણના ઉપાયો
નિર્માણ સમયે <ul style="list-style-type: none"> નિર્માણ કાર્યમાં ઉપયોગી મશીનો દ્વારા ઉત્પન્ન ધ્વનિ દ્વારા રિઝર્વ તેમજ થોલ વન્યજીવીય અભ્યારણ નાં પક્ષીઓ પર થનાર અસર મહી, વિશ્વામિત્રી, તેમજ વાત્રક નદીઓ પર પુલોના નિર્માણ સમયે મોટીકાયબ તેમજ મગ્ગરમચ્છનાં રહેણાંક સ્થાનો થોડા સમય માટે નાશ પામશે. 	<ul style="list-style-type: none"> નિર્માણ કાર્યમાં ઉપયોગી ઉપકરણો ઉપરાંત વાહનોની ચોકક્સ ટેબલના તેમજ ખોટા ઉપયોગથી બચાવ, જેથી સ્વિકૃતિ મુજબ ધ્વનિ ઉત્પન્ન થાય પુલાનું નિર્માણ કાર્ય શુષ્કમોસમમાં કરવામાં આવે, (પરંતુ જો કાર્યની ગુણવત્તામાં કોઈ અસર ન પડે તો ચોમાસામાં પણ કામ કરી શકાય) કામ-કાજના ક્ષેત્રમાં આવશ્યકતા અનુસાર આડ બનાવવામાં આવે
સંચાલન સમયે <ul style="list-style-type: none"> બનાસકાંઠા જિલ્લાના વન્યજીવ અભ્યારણ વિસ્તારની જમીન લેવાથી વન્યજીવોના આવાગમન પર થનારી અસર પાણીવાળા ક્ષેત્રો માં તૈલીય તેમજ ઝેરીલા રસાયણોનાં બહાવથી જલીય જીવ-જંતુ પર અસર વન્ય જીવોને રેલ્વેની બીજી બાજુ જતા રોકવા નું આયોજન વન્ય જીવોની રેલ્વેગાડીઓ દ્વારા દુર્ઘટના થવી 	<ul style="list-style-type: none"> વૃક્ષોની કાપણીથી નષ્ટ થયેલ વન્ય જીવોના આવાસોની ક્ષતિ પૂર્ણ કરવા માટે વૃક્ષારોપણ કરવું તેલ, ઈંધણ તેમજ ઝેરીલા તત્વોના ફેલાવ સમયે તાત્કાલિક સફાઈની વ્યવસ્થા કરવી જંગલ વિસ્તારમાં રેલ્વે માર્ગ નીચેથી પશુઓની આવાગમન માટેની વ્યવસ્થા દુર્ઘટના રોકવા માટે વન્ય જીવોની વધુ માત્રાવાળા વિસ્તારોમાં આવશ્યકતા મુજબ વાડ કરવી
જમીન સંપાદન તેમજ પુનઃ સ્થાપન	
નિર્માણ સમય પહેલા <ul style="list-style-type: none"> સંપતિ તેમજ જીવન વ્યવહારની હાની 	<ul style="list-style-type: none"> પર્યાવરણીય અસરો ના મુલ્યાંકન પછી પુનરોદ્ધાર તેમજ પુનઃવસન યોજના દ્વારા ક્ષતિપૂર્તિ તેમજ સહાયતાનું આયોજન
નિર્માણ સમયે <ul style="list-style-type: none"> પગપાળા મુસાફરો તેમજ વાહનો ની અવરજવર માં મુશ્કેલી 	<ul style="list-style-type: none"> બાઈપાસ વિસ્તારમાં સુચનો તેમજ નિર્દેશ બોર્ડ લગાવવામાં આવે
સંચાલન સમયે <ul style="list-style-type: none"> ડી.એફ.સી. એપ્લોકમેન્ટના નિર્માણથી સ્થાનીય લોકો તેમજ કિસાનો ની અવરજવર માં મુશ્કેલી 	<ul style="list-style-type: none"> નિયમ તેમજ આવશ્યકતા મુજબ દરેક રેલ્વે/ રસ્તા ક્રોસિંગ પર ચાતો રેલ્વેની નીચેથી (RUB) અથવા રેલ્વેની ઉપર(ROB) થી રસ્તાનું આયોજન હાલમાં સ્થિત રસ્તા તેમજ RUB/ ROB/ રેલ્વે-રસ્તા ક્રોસિંગ નું સ્થાનિય જન સમુદય ની આવશ્યકતા અનુશાર આયોજન કરવું બાઈપાસ વિભાગમાં રેલ્વે નીચેથી તેમજ રેલ્વે-રસ્તા ક્રોસિંગ પ્લાનિંગ મુજબ હોવા જોઈએ ભારતીય રેલ્વેની વર્તમાન કાર્ય પ્રણાલી અનુસાર બાઈપાસ વિભાગમાં પ્રત્યેક RUB તથા ROB માં બંને તરફ રસ્તાની બાજુમાં ફૂટપાથ નું આયોજન

નોંધ- મુખ્ય અસરો તેમજ નિવારવાના ઉપાયો ઉપરોક્ત સૂચીમાં બતાવવામાં આવ્યા છે. અન્ય અસરો તેમજ ઉપાયો પર્યાવરણનાં અસરો ના મુલ્યાંકનને રિપોર્ટમાં આપવામાં આવ્યા છે.

પર્યાવરણીય પ્રબંધ યોજના

પર્યાવરણીય પ્રબંધ યોજના સ્વચ્છ તેમજ સુરક્ષિત પર્યાવરણની ચાવી છે. પર્યાવરણીય પ્રબંધ યોજના તેમજ તેના કાર્યને સુનિશ્ચિત કર્યા વગર નિરાકરણના ઈચ્છિત કારણો મળવા સંભવ નથી.

પર્યાવરણ પ્રબંધ યોજના, નિર્માણ પહેલાની સ્થિતિ, નિર્માણ સમયની સ્થિતિ, તેમજ કામની સ્થિતિના સમયે પરિયોજના નાં ક્રિયા કાર્યો દ્વારા ઉત્પન્ન થયેલ વિપરીત અસરોને ઓછી કરવા માટે બતાવવામા આવેલ ઉપાયોને કાર્ય કાળની યોજના બતાવવામાં આવે છે. પર્યાવરણીય પ્રબંધ યોજના નીચેનાં બિંદુઓ પર આધારિત છે.

૧) પ્રસ્તાવિત પ્રબંધ યોજના આ મુજબ છે.

ક) હરિતપટ્ટી વિકાસ યોજના

ખ) અવશિષ્ટ પ્રબંધ યોજના

ગ) ખાઈઓ તેમજ માટીની અપૂર્તિવાળા વિસ્તારોનો પ્રબંધ/ પુનરોદ્ધાર યોજના

ઘ) કામદાર શિબિરોની સ્વચ્છતા તેમજ રખ-રખાવ માટે નિર્દેશનો

ચ) હાનીકારક રસાયણોના ભંડારોના રખ-રખાવ માટે નિર્દેશ તેમજ સંકટ સમયના ઉપાયોના નિયમો.

છ) જમીન સંપાદન તેમજ પુનઃવાસ (આ પરિયોજના નાં પુનરોદ્ધાર તેમજ પુનઃવસન નો વિષય છે.)

૨) નીચે મુજબ પર્યાવરણ તેમજ સામાજિક બિંદુઓ માટે આવશ્યકતા અનુસાર પર્યાવરણ પ્રબંધ ઉપાય પ્રસ્તાવિત છે.

ક) નિર્માણ પહેલાની સ્થિતિ.

- જમીન સંપાદન, વન ભૂમિના પરિવર્તન, વૃક્ષોનું સંરક્ષણ, જમિનની ખોદાઈ, ખાઈઓનો બચાવ, ત્યાગી દિધેલ સામગ્રીના નિકાલ તેમજ કામદાર શિબિરો માટે જગ્યાની પસંદગી, થોડા સમય માટે રેલ્વેચાર્જની વ્યવસ્થા, નિર્માણ એજન્ડિસઓ તેમજ કોન્ટ્રાક્ટરોની પસંદગી

ખ) નિર્માણ સમયની સ્થિતિ.

- કાર્યના ક્ષેત્રની સફાઈ, નિર્માણ સામગ્રીના સ્થાન, નિર્માણકાર્યમાં(પાણીના નિકાલ, ઢોળાવ, સ્થળીકરણ વગેરે) જલ પ્રદૂષણ, વાયુ પ્રદૂષણ, ધ્વનિ, કામદાર શિબિરોના પ્રબંધ, કોન્ટ્રાક્ટરોના કામની સમાપ્તી

ગ) કાર્ય કાળની સ્થિતિ

- દરેક પ્રકારના નિરાકરણના ઉપાયોના કાર્યક્ષમતાની સમીક્ષા, પ્રદૂષણ સમીક્ષા

પર્યાવરણ પ્રબોધન

પર્યાવરણ પ્રબોધનનો ઉદ્દેશ્ય એ સુનિશ્ચિત કરે છે કે, પરિયોજનાનાં નિર્ધારણના ઉદ્દેશ્ય તેમજ ઈચ્છિત પરિણામ મળી ગયેલ છે. પર્યાવરણ પ્રબંધ યોજનાનાં ક્રિયાકાળને સુનિશ્ચિત કરવા માટે પ્રભાવશાળી પર્યાવરણ પ્રબંધ યોજના તૈયાર કરવાની જરૂર છે. પર્યાવરણ પ્રબંધ યોજના બે તત્વો, કાર્યસંપાદન સુચક અને પર્યાવરણ પ્રબોધન કાર્યક્રમથી મળીને બને છે.

કાર્ય સંપાદન ના સૂચન:

ક) નિર્માણ પહેલાની સ્થિતિ: જમીન સંપાદન, નિસ્તારણ સ્થાન, નિર્માણ શિબિરો, માટી ખોદવા માટેના ખાડાઓ

ખ) નિર્માણ સમયની સ્થિતિ: વાયુની ગુણવત્તા, ધ્વનિ અને કમ્પન્ન સ્તર, પાણીની ગુણવત્તા, વૃક્ષારોપણ, ઉપરની માટી, કામદારો

ગ) વૃક્ષોના જીવીત રહેવાનો અનુપાત, માટી ખોદાયેલા ખાડાઓનો પુનરોદ્ધાર, સંવેદનશીલ સ્થાનો પર ધ્વનિરોધકોની ઉપયોગીતા

પર્યાવરણીય પ્રબોધન કાર્યક્રમ

પર્યાવરણીય પ્રબોધન કાર્યક્રમમાં નીચે આપવામાં આવેલ વિષયોને ધ્યાનમાં રાખવામા આવ્યા છે.

ક) પ્રબોધન યોગ્ય મદદ ખ) પ્રબોધનનું સ્થાન ગ) પ્રબોધનમાં વધારો તેમજ તિવ્રતા

ઘ) કામ-કાજ તેમજ નિરીક્ષણની સ્થાનિક જવાબદારી

ઉપરોક્ત વિષયો આધારે પર્યાવરણીય પ્રબોધન કાર્યક્રમમાં નીચેના મુદ્દાઓનું પ્રબોધન કરવામાં આવશે

ક) ક્વાની ગુણવત્તા ખ) પાણીની ગુણવત્તા ગ) ધ્વનિ તેમજ કમ્પન્ન સ્તર

ઘ) જમીનની ખોદાય ચ) વૃક્ષારોપણ છ) વનસ્પતિ તેમજ જીવ જન્તુ

લોકસંવાદ બેઠક

સામાન્ય જનતા સુધી પરિયોજનાની જાણકારી પહોંચે તેમજ તેમના વિચારોને જાણવા માટે જે.આઈ.સી.એ. ની આર્થિક સહાયથી કરવામાં આવેલ પર્યાવરણ તેમજ સમાજ પર યત્નર અસરો તેમજ તેના ઉપાયો માટે અભ્યાસ સમયે લોકસંવાદ બેઠકનું આયોજન કરવામાં આવ્યું હતું. તેનાથી જે.આઈ.સી.એ ની આર્થિક સહાયથી કરવામાં આવેલ સેપ્રોફ અભ્યાસ સમયે ડી.એફ.સી. રેલ્વેમાર્ગમાં અનેક ફેરફાર કરવામાં આવ્યા છે જેના કારણે અનેક નવા ગામોને સીધી અસર થશે. આથી આ બધા ગામડાઓને ધ્યાનમાં રાખીને જિલ્લા વાર લોકસંવાદ બેઠકનું આયોજન કરવામાં આવ્યું હતું. આ લોક સંવાદ બેઠકથી વિવિધ સુચનો (પ્રતિભાવો/સુઝાવો) જાણવા મળ્યા છે, જેને પરિયોજનામાં સામેલ કરવામાં આવ્યા છે. જેવા કે, વાહનો, ખેડૂતો તેમજ સ્થાનિક લોકોની અવરજવર માટે યોગ્ય જગ્યાએ અને જરૂરીયાત વાળી જગ્યાઓએ પુલોનું નિર્માણ. બીજી તરફ પુનરોદ્ધાર તેમજ પુનઃવાસ યોજનાનાં પ્રક્ટીકરણ તેમજ પરિયોજનાથી અસર પામેલ લોકોને જમીન આપી પુનઃવાસ સમ્બન્ધિત મંતવ્યો જાણવા માટે અલગથી લોકસંવાદ બેઠકનું આયોજન કરવામાં આવશે.



લોકસંવાદ બેઠક

પર્યાવરણિય અસરો ની મુલ્યાંકન પ્રક્રિયા માં સુચનાઓ નું પ્રકટન

પરિયોજના પર તૈયાર કરવા માં આવેલ પર્યાવરણિય અસરોનાં મુલ્યાંકનનાં રિપોર્ટ ને સૂચના પ્રક્ટીકરણ નાં માધ્યમ થી ત્રણ રાજ્યોની ESIMMS રિપોર્ટ તેમજ S-ESIMMS રિપોર્ટ નો સારાંશ પરિયોજના ક્ષેત્ર માં માર્ચ 2009 ના મધ્યથી એપ્રિલ 2009 ના મધ્ય સુધી જન સમુદાય માં પહોંચડવા માં આવ્યો હતો.

આ સૂચના પ્રક્ટીકરણ નાં માધ્યમ થી લોકોમાં થી લગભગ 70 જેટલા સુચનો/મંતવ્યો પ્રાપ્ત થયા છે. આ સુચનાઓ માં કોઈ સુચનો ને રિપોર્ટ માં સામેલ કરવા માં આવ્યા નથી. આ સુચનો મુખ્યતઃ જમીન અધિગ્રહણ, પુનરોદ્ધાર તેમજ પુનઃવસન વિષયો સમ્બન્ધિત છે. જો કે, આ સુચનો ને આગળના પરિક્ષણ તેમજ પરિયોજના ની આગળની સ્થિતિ મા નિરાકરણ ના ઉપાય તેમજ પર્યાવરણિય પ્રબંધન અને પ્રબોધન યોજનાઓ નાં કાર્યકાળ માં રખવામાં આવશે. તેનાથી વિશેષ જમીન અધિગ્રહણ, પુનરોદ્ધાર તેમજ પુનઃવસન વિષયો નું ધ્યાન પરિયોજના ના આગળ ના તબ્બકા માં પુનરોદ્ધાર તેમજ પુનઃવસન યોજના નાં ઘડતર સમયે ધ્યાનમાં રાખવામાં આવશે.

પર્યાવરણિય અસરોના મુલ્યાંકન પ્રક્રિયા માં સુચના પ્રસિધ્ધિ

પરિયોજના પર બનાવવા માં આવેલ પર્યાવરણિય અસરો ના મુલ્યાંકન ની સુચના પ્રસિધ્ધિની પક્રિયા દ્વારા ત્રણ રાજ્યોની ESIMMS રિપોર્ટ તેમજ S-ESIMMS રિપોર્ટ ની જોડી તેમજ તેનો સારાંશ પરિયોજના ક્ષેત્ર માં માર્ચ 2008 ના મધ્યથી એપ્રિલ 2008 ના મધ્ય સુધી લોક પ્રસિધ્ધિ કરવામાં આવ્યા હતા.

આ સુચના પ્રસિધ્ધિની પ્રક્રિયા દરમીયાન જનસમુદાય માંથી લગભગ 90 જેટલા સુચનો મળેલ છે. આ સુચનો માંથી કોઈપણ વિશિષ્ટ સુચનો ને રિપોર્ટ માં સામેલ કરવામાં આવેલ નથી. આ સુચનો મુખ્યતઃ જમીન સંપાદન, પુનર્વાસ તેમજ પુનર્સ્થાપન વિષયો સમ્બન્ધિત છે. પરંતુ આ સુચનો નું ધ્યાન આગળના પરિક્ષણો માં રાખવામાં આવશે તેમજ પરિયોજના ની આગળની અવસ્થા માં નિરાકરણ ના ઉપાય તથા પર્યાવરણિય પ્રબંધ તેમજ પ્રબોધન યોજનાઓ ના કાર્યકાળ માં રાખવામાં આવશે. તેના વગર જમીન સંપાદન, પુનર્વાસ તેમજ પુનર્સ્થાપન વિષયો નું ધ્યાન પરિયોજના ની આગળની અવસ્થામાં પુનર્વાસ અને પુનર્સ્થાપન યોજના ના આયોજન તેમજ તેના કાર્યનવચન સમયમાં રાખવામાં આવશે.

ભાગીદારો

- રાજ્ય તેમજ જિલ્લાના પ્રતિનિધિ
- પંચાયત ના પ્રતિનિધિ
- ગ્રામિણ નેતા
- ગ્રામ નિવાસી
- વ્યાપારીઓ તેમજ ઉદ્યોગપતિ
- સ્વૈચ્છિક સંસ્થાઓ

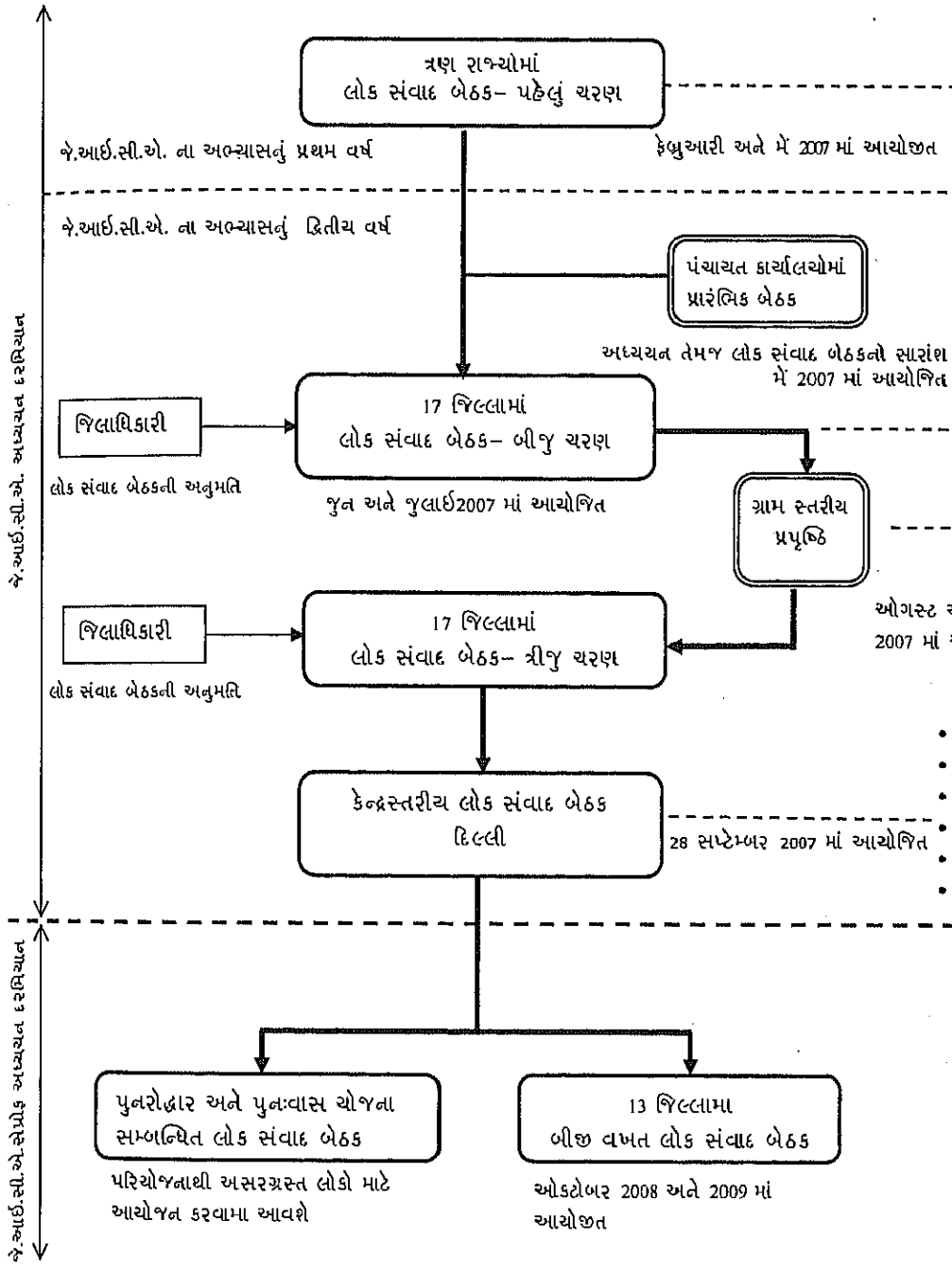
- પંચાયત ના પ્રતિનિધિ
- ગ્રામિણ નેતા
- ગ્રામજનો
- સ્વૈચ્છિક સંસ્થાઓ

- પંચાયત ના પ્રતિનિધિ
- ગ્રામિણ નેતા

- ગ્રામજનો
- સ્વૈચ્છિક સંસ્થાઓ

- રાજ્ય તેમજ જિલ્લાના પ્રતિનિધિ
- પંચાયત ના પ્રતિનિધિ
- ગ્રામિણ નેતા
- ગ્રામ નિવાસી
- વ્યાપારીઓ તેમજ ઉદ્યોગપતિ
- સ્વૈચ્છિક સંસ્થાઓ

- પ્રસ્તાવિત રેલ્વે માર્ગના પરિવર્તનથી અસરગ્રસ્ત થનારા નવા ગામડાઓ માંથી:
- પંચાયત ના પ્રતિનિધિ
 - ગ્રામિણ નેતા
 - ગ્રામજનો



કાર્યક્રમ અનુસૂચી

- * પરિયોજના મુસદ્દાના આગળના અભિયાંત્રિકી સંબંધિત વિચાર વિમર્શ 2009 ના અંતથી શરૂ કરી લગભગ 2 વર્ષ સુધી ચાલશે. પર્યાવરણ તેમજ સામાજિક વિષયો પર કાર્યરત કમ્પની નિરાકરણ નાં ઉપાય તેમજ પર્યાવરણિય પ્રબંધ તેમજ પ્રબોધન ની વિસ્તૃત યોજના તૈયાર કરશે. ઉપયુક્ત વિષયો પર લોકોથી પ્રાપ્ત થયેલ સુચનો ની તપાસ વિશિષ્ટ સ્થાનો પર કરવામાં આવશે.
- * નિર્માણ કાર્ય વર્ષ 2011 પછી શુરુ કરવામાં આવશે.
- * વાણિજ્યિક પરિવહન 2015/2016 સુધી શુરુ કરવામાં આવશે.

રિપોર્ટ મળવા પાત્ર સ્થળ

- રાજ્યો અનુશાર ESIMMS રિપોર્ટ તેમજ S-ESIMMS ફાઈનલ રિપોર્ટ ની જોડીને જન સમુદાયની સમીક્ષા માટે એ સ્થાને ઉપલબ્ધ કરાવામાં આવશે કે જ્યાં ડ્રાફ્ટ રિપોર્ટ ઉપલબ્ધ કરાવામાં આવ્યો હતો. રિપોર્ટ, સંબંધીત ડી.એફ.સી.સી.આઈ.એલ. નાં મુખ્ય પરિયોજના પ્રબંધક, પ્રસ્તાવિત ડી.એફ.સી. રેલ્વે માર્ગની સાથે મુખ્ય રેલ્વે સ્ટેશન તેમજ સમ્બંધિત જિલ્લા કાર્યાલયોમાં ઓક્ટોબર-નવેમ્બર 2009 માં ઉપલબ્ધ કરાવવામાં આવશે. ફાઈનલ રિપોર્ટનો સારાંશ પરિયોજના પ્રભાવિત બધાજ ગામડાંઓમાં ઉપલબ્ધ કરાવામાં આવશે.

મુખ્ય પરિયોજના અધિકારી (ડી.એફ.સી.સી.આઈ.એલ.) કાર્યાલયોનાં સરનામા

- મુખ્ય પરિયોજના અધિકારી કાર્યાલય- જયપુર
બી ૧૨, હનુમાન નગર, મેટ્રો હોસ્પિટલની સામે, સિરસી રોડ, જયપુર
ફોન નં: 0141-4028741 ફેક્સ: 0141-4028740
- મુખ્ય પરિયોજના અધિકારી કાર્યાલય- અજમેર
42A/3 સિવિલ લાઈન, અજમેર-305001
ફોન નં: 0145-2625548 ફેક્સ: 0145-2625548
- મુખ્ય પરિયોજના અધિકારી કાર્યાલય- અમદાવાદ
જુના ડી.આર.એમ.ભવન, પહેલો માળ, અમદાવાદ રેલ્વે સ્ટેશન, અમદાવાદ-380002
ફોન નં: 079-22165107 ફેક્સ: 079-22163101
- મુખ્ય પરિયોજના અધિકારી કાર્યાલય- વડોદરા
13-14, 17-18, પનોરમા કોમ્પ્લેક્સ, ત્રીજો માળ, આર સી દત્ત રોડ, અલકાપુરી વડોદરા-7
ફોન નં: 0265-2326024 ફેક્સ: 0265-2326027

મુખ્ય સ્ટેશનો કે જ્યાં ફાઈનલ રિપોર્ટ મળવા પાત્ર છે.

- ગુજરાત
પાલનપુર(જંકશન), સિધ્ધપુર, ઉંઝા, મહેસાણા(જંકશન), સાબરમતી(જંકશન), અમદાવાદ(જંકશન), નડિયાદ(જંકશન), આણંદ(જંકશન), વાસદ(જંકશન) તેમજ વડોદરા(જંકશન)
- રાજસ્થાન
અલવર(જંકશન), કુન્ડ(જંકશન), નીમ કા થાના, શ્રી માધોપુરા, રિંગસ(જંકશન), જયપુર(જંકશન), ફૂલેરા(જંકશન), કિશનગઢ, અજમેર(જંકશન), બ્યાવર, સોજત રોડ, મારવાડ(જંકશન), ફાલના, સિરોહિ રોડ તેમજ આબુ રોડ
- હરિયાણા
રેવાડી(જંકશન), નારનોલ તેમજ ડાબલા(જંકશન)

॥ પરિયોજના માં આપના સહયોગ બદલ આભાર ॥

Appendix 3-10 Public Notice for Disclosure of Final EIA Report



PUBLIC NOTICE

Ministry of Railway hereby inform that disclosure of Final EIA (ESIMMS + S-ESIMMS) reports of DFC (Dedicated Freight Corridor) Project between Vadodara and Rewari will start from October, 2009.

Summary of EIA reports in vernacular language and in English version will be distributed to all the affected village offices between Rewari and Vadodara. A full set of Final EIA report will be available in the CPM offices of DFCCIL (Dedicated Freight Corridor Corporation of India), major stations along the DFC alignment and districts offices as mentioned below.

Final EIA report is available at the following offices

CPM offices of DFCCIL

Address of the CPM offices of the DFCCIL

- CPM office in Jaipur
B-12, Hanuman Nagar, Opp. Metro Hospital, Sirsi Road, Jaipur, Tel: 0141-4028741, Fax: 0141-4028740
- CPM office in Ajmer
42A/3 Civil Line, Ajmer-305001, Tel/Fax: 0145-2625548
- CPM office in Ahmedabad
1st Floor, Old DRM Office Building, Kalupur, Ahmedabad-380002, Tel: 079-22175107, Fax: 079-22163101
- CPM office in Vadodara
13-14, 17-18, Panorama Complex, 3rd Floor, R.C. Dutt Road, Alkapuri, Vadodara-7, Tel: 0265-2326024, Fax: 0265-2326027

Major Stations

Haryana

Rewari (Jn), Narnaul, Dabla (Jn)

Rajasthan

Alwar (Jn), Kund, Neem Ka Thana, Sri Madhopur, Ringus (Jn), Jaipur (Jn), Phulera (Jn), Kishangarh, Ajmer (Jn), Beawar, Sojat Road, Marwar Jn, Falna, Sirohi Road, Abu Road

Gujarat

Palanpur (Jn), Siddhapur, Unjha, Mahesana (Jn), Sabarmati (Jn), Ahmedabad (Jn), Nadiad (Jn), Anand (Jn), Vasad (Jn), Vadodara (Jn)

District Collectorate Offices

Haryana

Rewari, Mahendergarh

Rajasthan

Sikar, Alwar, Jaipur, Nagaur, Ajmer, Pali, Sirohi

Gujarat

Banaskantha, Patan, Mahesana, Gandhinagar, Ahmedabad, Kheda, Anand, Vadodara


(Jeetendra Singh)

Director Planning (Special)

Room # 143, Rail Bhawan

Telefax: 23383525

email: dplgspl@rb.railnet.gov.in

विज्ञापित

रेल मंत्रालय सूचित करता है कि वडोदरा एवं रेवाड़ी के मध्य समर्पित मालभाड़ा कारीडोर (डी.एफ.सी.) परियोजना के पश्चिमी कारीडोर की पर्यावरणीय एवं सामाजिक प्रभावों का मुल्यांकन (ई.आई.ए.) की अन्तिम रिपोर्ट (ESIMMS¹ + S-ESIMMS²) की प्रकटीकरण प्रक्रिया जुलाई 2009 में आरम्भ होगी।

पर्यावरणीय एवं सामाजिक प्रभावों का मुल्यांकन (ई.आई.ए.) रिपोर्ट का संक्षेप स्थानीय एवं अंग्रेजी भाषा में वडोदरा एवं रेवाड़ी के मध्य सभी प्रभावित गांवों के दफ्तरों में वितरित किया जाएगा। पर्यावरणीय प्रभावों का मुल्यांकन की अन्तिम रिपोर्ट डी.एफ.सी.सी.आई.एल. के प्रमुख परियोजना अधिकारी कार्यालय, डी.एफ.सी. रेलमार्ग के समीप प्रमुख स्टेशनों एवं निम्नलिखित जिला कार्यालयों में उपलब्ध होगी।

पर्यावरणीय प्रभावों का मुल्यांकन (ई.आई.ए.) की अन्तिम रिपोर्ट उपलब्ध हैं

डी.एफ.सी.सी.आई.एल. के निम्नलिखित प्रमुख परियोजना प्रबन्धक कार्यालयों में

प्रमुख परियोजना प्रबन्धक (डी.एफ.सी.सी.आई.एल.) कार्यालय का पता

- प्रमुख परियोजना प्रबन्धक कार्यालय - जयपुर
बी 12, हनुमान नगर, मेट्रो हॉस्पिटल के सामने, सिरसी रोड, जयपुर दूरभाष : 0141-4028741 फैक्स : 0141-4028740
- प्रमुख परियोजना प्रबन्धक कार्यालय - अजमेर
42A/3 सीविल लाईन, अजमेर-305001 दूरभाष / फैक्स : 0145-2625548
- प्रमुख परियोजना प्रबन्धक कार्यालय - अहमदाबाद
पुरानी डी आर एम भवन, पहली मंजिल, कालूपुर, अहमदाबाद-380002 दूरभाष : 079-22175107 फैक्स : 079-22163101
- प्रमुख परियोजना प्रबन्धक कार्यालय - वडोदरा
13-14, 17-18, पैनोरामा कॉम्प्लेक्स, तीसरी मंजिल, आर सी दत्त रोड, अल्कापूरी वडोदरा-7
दूरभाष : 0265-2326024 फैक्स-0265-2326027

निम्नलिखित प्रमुख स्टेशनों पर

हरियाणा: रेवाड़ी (जंक्शन), नारनौल एवं डाबला (जंक्शन)

राजस्थान: अलवर (जंक्शन), कुण्ड, नीम का थाना, श्रीमधोपुर, रिगस (जंक्शन), जयपुर (जंक्शन), फुलेरा (जंक्शन), किशनगढ़, अजमेर (जंक्शन), ब्यावर, सोजत रोड, मारवाड़ (जंक्शन), फालना, सिरौही रोड एवं आबू रोड

गुजरात: पालनपुर (जंक्शन), सिद्धपुर, ऊंझा, महेसाणा (जंक्शन), साबरमती (जंक्शन), अहमदाबाद (जंक्शन), नडियाद (जंक्शन), आनंद (जंक्शन), वासड (जंक्शन) एवं वडोदरा (जंक्शन)

निम्नलिखित जिलाधिकारी कार्यालयों में

हरियाणा: रेवाड़ी एवं महेंद्रगढ़

राजस्थान: सीकर, अलवर, जयपुर, नागौर, अजमेर, पाली एवं सिरौही

गुजरात: बनासकांठा, पाटन, महेसाणा, गोंधीनगर, अहमदाबाद, खेड़ा, आनंद एवं वडोदरा

¹ ESIMMS: जे.आई.सी.ए. की 'पर्यावरणीय एवं सामाजिक निमित्त 2004 मार्गदर्शिका' के अनुसार बनाये गये पर्यावरणीय एवं सामाजिक प्रभावों का मुल्यांकन रिपोर्ट।

² S-ESIMMS: जे.आई.सी.ए. की 'पर्यावरणीय एवं सामाजिक निमित्त 2004 मार्गदर्शिका' के अनुसार बनाये गये पर्यावरणीय एवं सामाजिक प्रभावों का मुल्यांकन की पूरक रिपोर्ट।

रेल मंत्रालय

જાહેર નોટીસ

રેલ્વે મંત્રાલય દ્વારા જાહેર કરવામાં આવે છે કે વડોદરાથી રેવાડી વચ્ચે માલભાડા સમર્પિત રેલ્વે માર્ગ (ડી.એફ.સી.) પરિચોજનાનાં પશ્ચિમી વિભાગના પર્યાવરણિય તેમજ સામાજિક અસરોના મુલ્યાંકન (ઈ.આઈ.એ.) અંતિમ રિપોર્ટ (ESIMMS¹ + S-ESIMMS²) ની પ્રક્ટીકરણ પ્રક્રિયા જુલાઈ ૨૦૦૯ થી આરંભ કરવામાં આવશે.

પર્યાવરણિય તેમજ સામાજિક અસરોના મુલ્યાંકન (ઈ.આઈ.એ.) રિપોર્ટના સંક્ષેપ ને સ્થાનિય તેમજ અંગ્રેજી ભાષામાં વડોદરાથી રેવાડી વચ્ચેનાં બધાજ પ્રભાવિત ગામોની પંચાયત કાર્યાલયોમાં વિતરીત કરવામાં આવશે. ડ્રાફ્ટ પર્યાવરણિય અસરોના મુલ્યાંકન રિપોર્ટ મુખ્ય પરિચોજના પ્રબંધક કાર્યાલય ડી.એફ.સી.સી.આઈ.એલ. તેમજ ડી.એફ.સી. રેલ્વે માર્ગની સાથેના મુખ્ય સ્ટેશનો તથા નીચે જણાવેલ જિલ્લા કાર્યાલયો માં ઉપલબ્ધ છે.

પર્યાવરણિય તેમજ સામાજિક અસરોના મુલ્યાંકન (ઈ.આઈ.એ.)ના અંતિમ રિપોર્ટ આ જગ્યાએ મળવા પાત્ર છે.

ડી.એફ.સી.સી.આઈ.એલ. ના નીચે જણાવેલ મુખ્ય પરિચોજના પ્રબંધક કાર્યાલયોમાં

મુખ્ય પરિચોજના પ્રબંધક(ડી.એફ.સી.સી.આઈ.એલ.) કાર્યાલયોનાં સરનામાં

- ◆ મુખ્ય પરિચોજના પ્રબંધક કાર્યાલય-જયપુર
બી ૧૨, કનુમાન નગર, મેટ્રો હોસ્પિટલની સામે, સિરસી રોડ, જયપુર ફોન નં : ૦૧૪૧-૪૦૨૮૭૪૧ ફેક્સ : ૦૧૪૧-૪૦૨૮૭૪૦
- ◆ મુખ્ય પરિચોજના પ્રબંધક કાર્યાલય-અજમેર
૪૨એ/૩ સીવિલ લાઈન, અજમેર-૩૦૫૦૦૧ ફોન નં : ૦૧૪૫-૨૬૨૫૫૪૮ ફેક્સ:૦૧૪૫-૨૬૨૫૫૪૮
- ◆ મુખ્ય પરિચોજના પ્રબંધક કાર્યાલય-અમદાવાદ
જુની ડી.આર.એમ.ભવન, પહેલો માળ, અમદાવાદ રેલ્વે સ્ટેશન, અમદાવાદ-૩૮૦૦૦૨
ફોન નં : ૦૭૯-૨૨૧૭૫૧૦૭ ફેક્સ : ૦૭૯-૨૨૧૬૩૧૦૧
- ◆ મુખ્ય પરિચોજના પ્રબંધક કાર્યાલય-વડોદરા
૧૩-૧૪, ૧૭-૧૮, પનોરમા કોમ્પ્લેક્સ, ત્રીજો માળ, આર.સી. દત્ત રોડ, અલકાપુરી, વડોદરા-૭
ફોન નં : ૦૨૬૫-૨૩૨૬૦૨૪ ફેક્સ : ૦૨૬૫-૨૩૨૬૦૨૭

નીચે જણાવેલ પ્રમુખ સ્ટેશનો પર

ઠરિયાણા: રેવાડી(જંકશન), નારનોલ, અને ડાબલા(જંકશન)

રાજસ્થાન: અલવર(જંકશન), કુન્ડ(જંકશન), નીમ કા થાના, શ્રી માધોપુરા, રિંગસ(જંકશન), જયપુર(જંકશન), ફૂલેરા(જંકશન), કિશનગઢ, અજમેર(જંકશન), બ્યાવર, સોજત રોડ, મારવાડ(જંકશન), ફાલના, સિરોહિ રોડ અને આબુ રોડ.

ગુજરાત: પાલનપુર(જંકશન), સિધપુર, ઉંઝા, મહેસાણા(જંકશન), સાબરમતી(જંકશન), અમદાવાદ(જંકશન), નડિયાદ(જંકશન), આણંદ(જંકશન), વાસદ(જંકશન) અને વડોદરા(જંકશન).

નીચે જણાવેલ જિલ્લા કાર્યાલયો માં

ઠરિયાણા: રેવાડી, મેન્દ્રગઢ

રાજસ્થાન: સીકર, અલવર, જયપુર, નાગૌર, અજમેર, પાલી, સિરોહી

ગુજરાત: બનાસકાંઠા, પાટણ, મહેસાણા, ગાંધીનગર, અમદાવાદ, ખેડા, આણંદ, વડોદરા

¹ ESIMMS: જે.આઈ.સી.એ. ની 'પર્યાવરણ તેમજ સામાજિક નિયમો ૨૦૦૪ માર્ગદર્શિકા' અનુસાર બનાવવા માં આવેલ પર્યાવરણિય તેમજ સામાજિક અસરો નો મુલ્યાંક રિપોર્ટ

² S-ESIMMS જે.આઈ.સી.એ. ની 'પર્યાવરણ તેમજ સામાજિક નિયમો ૨૦૦૪ માર્ગદર્શિકા' અનુસાર બનાવવા માં આવેલ પર્યાવરણિય તેમજ સામાજિક અસરોનાં મુલ્યાંક રિપોર્ટની પહેલાનો રિપોર્ટ

રેલ્વે મંત્રાલય

Appendix 3-11 Distribution List of the Final EIA Report

Appendix 3-11 Distribution List of the Final EIA Report

1. Distribution of Full Set of the Final EIA Report

- A set of final EIA report (ESIMMS + draft S-ESIMMS Reports) was distributed to each of the following.

Distribution of EIA report (ESIMMS + S-ESIMMS Reports)

ESIMMS and Final S-ESIMMS Report	Major Sta.	District Office
ESIMMS (Haryana), Final S-ESIMMS Report	1) Rewari (Jn) 2) Narnaul 3) Dabla (Jn)	1) Mahendragarh 2) Rewari
ESIMMS (Rajasthan), Final S-ESIMMS Report	1) Alwar (Jn) 2) Kund 3) Necm Ka Thana 4) Sri Madhopur 5) Ringus (Jn) 6) Jaipur (Jn) 7) Phulera (Jn) 8) Kishangarh 9) Ajmer (Jn) 10) Beawar 11) Sojat Road 12) Marwar Jn 13) Falna 14) Sirohi Road 15) Abu Road	1) Jaipur 2) Nagaur 3) Sikar 4) Alwar 5) Sirohi 6) Pali 7) Ajmer
ESIMMS (Gujarat), Final S-ESIMMS Report	1) Palanpur (Jn) 2) Siddhapur 3) Unjha 4) Mahesana (Jn) 5) Sabarnati (Jn) 6) Ahmedabad (Jn) 7) Nadiad (Jn) 8) Anand (Jn) 9) Vasad (Jn) 10) Vadodara (Jn)	1) Vadodara 2) Anand 3) Kheda 4) Ahmedabad 5) Gandhinagar 6) Mahesana 7) Patan 8) Banaskantha

CPM Office	Distribution of Full Set of Final EIA report
1) CPM Jaipur	Hard Binding Reports
2) CPM Ajmer	Hard Binding Reports
3) CPM Ahmedabad	Hard Binding Reports
4) CPM Vadodara	Hard Binding Reports

**List of Villages where the Summary of the Final EIA Reports were Distributed
< Haryana >**

District	Sub-district	S. No	Total Affected Villages
Rewari	Rewari	1	Chillar
		2	Bhatal Tetihar
		3	Bhatal Jat
		4	Gangaachariya ahir
		5	Sekhpur sikar Pur
		6	Rajpur Khalsa
		7	Gindokhar
		8	Lakhnor
		9	Jadura
		10	Mahakharja
		11	Dhanlawas
		12	Sundrod
		13	Mailawas
		14	Dhanisundrod
		15	Pitherawas
		16	Gumina
		17	Rajpura Istamrar
		18	Khori
		19	Teent
		20	Govind Puri
		21	Mamariatethar
		22	Gothara Thappa Khori
		23	Pali
		24	Majra Mutsal Bhalaki
		25	Bhalaki
		26	Manethi
		27	Padla/Kund Station Area
		28	Laudhana
		29	Sahuwas
		30	Tothawal
		31	Jatuswas
		32	Narayanpur
		33	Lalpur
		34	Dalia ki
		35	Salhawas
		36	Kasaula
		37	Gajjiwas
		38	Kamalpur
		39	Dhamlaka
		40	Bithawana
		41	Deblawas
		42	Majra
Sub-total		42	
Total District		42	
Mahendragarh	Narnaul	1	Sujapur
		2	Hasanpur
		3	Gokal Pur
		4	Beghpur
		5	Uninda
		6	Dhanunda
		7	Ateli
		8	Khor Part
		9	Tobra
		10	Fathepur
		11	Tajpur
		12	Bhilwara
		13	Bachhod
		14	Sarai Bahadurmangar
		15	Sheonath Pura
		16	Bhusan Khurd
		Mahendragarh	Narnaul
18	Patikara		
19	Faizlipur		
20	Narnaul Urban		
21	Narnaul Rural		
22	Nuni Awal		
23	Mukand Pur		
24	Tajpur		

District	Sub-district	S. No	Total Affected Villages
		25	Amarpur Jorasi
		26	Kaloli
		27	Bhasir pur
		28	Ghatasar
		29	Pavera
		30	Chhilro ki Dhani
		31	Napla
		32	Bamanwasnau
		33	Bamanwas
		34	Narehri
		35	Azmabad Mokhuta
		36	Neejampur
		37	Bejhad
		38	Chandpura and Ganiyar
		39	Nangal
		40	Talot
	Sub-total	40	
Total District		40	
Total State		82	

**List of Villages where the Summary of the Final EIA Report were Distributed
< Rajasthan >**

District	Sub-district	S. No	Affected Villages	
Alwar	Behror	1	Kathoowas	
		2	Hudiya Khurd	
	Sub-total	2		
Total District		2		
SIKAR	Sri Madhopur	1	Nalot	
		2	Kanchrapur @ kanchanpur	
		3	Jorawar nagar	
		4	Jawswant Pura	
		5	Derawali Dhani	
		6	Chak Jaswant pura	
		7	Hanspura	
		8	Sri Madhopur	
		9	Bhami	
		10	Maharoli	
		11	Gurba	
		12	Sirsa	
		13	Ringus	
		14	Jugalpura	
		15	Madhopura	
		16	Madho Ka Was	
		17	Kanwat	
		18	Bhadwari	
		19	Kalyanpura	
		20	Patwari Ki Bass	
		21	Malakali	
		22	Jaitusar	
		23	Kaliyawas	
	Sub-total	23		
		Neem Ka Thana	1	Kanwar Ki Nagal
			2	Dabla
			3	Bihar
			4	Beharipur
			5	Jeelo
			6	Kunwara @ Ramnagar
			7	Rajputon Ki Dhani
			8	Mawanda
			9	Nawanda Railway Station
			10	Shyama Wali
			11	Makri
	12		Mandoli	
	13		Godawas	
	14		Ranasar	
	15		Neem Ka thana	
	16	Agawari		
	17	Sirohi		
	18	Govindpura		

District	Sub-district	S. No	Affected Villages
		19	Jassi Ka Bas
		20	Harjanpura
		21	Bhagot
		22	Bhagega
		23	Kurbada
		24	Chak Charvas
		25	Shyam Nagar
		26	Natha Ka Nangal
		27	Jhalara
		28	Bagwada
		29	Simli
		30	Ratan Nagar
		31	Jatala
	Sub-total	31	
Total : District		54	
NAGAUR	Nava	1	Naya Bas
		2	Thikariya Khurd
		3	Minda
		4	Baori
		Sub-total	4
Total: District		4	
JAIPUR	Phulera and Dadu	1	Kanawar Pura
		2	Badhal
		3	Itawa
		4	Kabron Ka Bas
		5	Charanwas
		6	Bajiyon Ka Bs
		7	Malik Pura
		8	Kishanpura @ Nathi Ka Bas
		9	Renwal
		10	Meendi
		11	Bhookhron Ki Dhani
		12	Bhainslana
		13	Paharpura
JAIPUR	Phulera and Dadu	14	Kathowari Khurd
		15	Sinodiya
		16	Dodwadiyon Ka Bas
		17	Prithvi Pura
		18	Khandel
		19	Jaitpura
		20	Peepli Ka Bas
		21	Itawa
		22	Rojri
		23	Hironmda
		24	Kanchroda(Subhash Colony)
		25	Phulera
		26	Samalpura/Sawalpura
		27	Haripura
		28	Narayana
		29	Kothera
		30	Jhakolar
		31	Beggolao
		32	Bokrawas
		33	Deopura
		34	Sali
		35	Gahlota
		36	Shakun
		37	Hatupura
		38	Mandha
		39	Nadri
		40	Deva Ka Bas
		41	Prempura
		42	Kandeoli
		43	Samota Ka Baas
		44	Shyam nagar
	Sub-total	44	
	Chomu	1	Bagri
		2	Nangal Govind
		3	Kishan Manpura
		4	Asti Kalan

District	Sub-district	S. No	Affected Villages	
		5	Sirsi	
		6	Ranjeet pura	
	<u>Sub-total</u>	6		
Total: District		50		
AJMER	Beawar	1	Rempur	
		2	Theekrana Goojran	
		3	Sarmaliya	
		4	Mediya (Naya Nagar)	
		5	Beawar	
		6	Kalali Ka Badai	
		7	Bedia Gena	
		8	Ratanpura Sardara	
		9	Fatchpuria Doyam	
		10	Chhawani Pared	
		11	Narsinghpura	
		12	Daulatgarh Singha	
		13	Rampura Mevatiyan	
		14	Daulatpura Balaiyan	
		15	Bhawani Kheda	
		<u>Sub-total</u>	15	
		Masuda	1	Kharva (Rani Sagar)
			2	Peepalaj
			3	Bhawani pura
			4	Rampura
		<u>Sub-total</u>	4	
		Ajmer & Nasirabad	1	Jatli
			2	Akhri
			3	Gegal
			4	Mulhami (Mohami)
			5	Bhoodol
			6	Ladpura
			7	Gudha
			8	Guwardi
			9	Nareli
			10	Maclar/ Madarpura
			11	Ajmer
			12	Doomra
			13	Rasool pura
			14	Kiranipura
		<u>Sub-total</u>	14	
		Kishangarh	1	Kakniyawas
			2	Buharoo
			3	Tiloniya
			4	Bhojiyawas
			5	Phaloda
			6	Mandawariya
			7	Kishangarh city
		Kishangarh	8	Swantsar
	9		Madanganj	
	10		Farshia	
	<u>Sub-total</u>	10		
	Peesangan	1	Saradhana	
		2	Shivpura	
		3	Keshav pura	
		4	Makera	
	Peesangan	5	Arjunpura Khalsa	
		6	Mangaliyawas	
		7	Lamana	
		8	Daulat Khera	
		9	Jeethana	
		10	Somalpur	
		11	Daurai (Rural)	
		12	Tabeeji (Rural)	
		13	Thok Maliyan	
	<u>Sub Total</u>	13		
Total: District		56		
PALI	Sumerpur	1	Koliwara	
		2	Balwana	

District	Sub-district	S. No	Affected Villages	
	Sub-total	3	Jawali Bandh	
		3		
	Bali		1	Sarkhejra
			2	Mokhampura
			3	Kheemal
			4	Phalna (Rural)
			5	Phalna Stn
			6	Jadri
			7	Beral
			8	Beeroliya
			9	Beesalpur
			10	Doodni
			11	Kothar
			12	Bhandar
			13	Malnoo
			14	Moribeda Station
			15	Nana
			16	Perva
			17	Khudala
			18	Virampur
			19	Chamunderi Ranawatan
			20	Rughnathpura
	21	Saila		
	Sub-total	21		
	Pali (Sojat) Marwar JN.		1	Dadiya
			2	Dhundhala
			3	Reesaniya
			4	Jor Dudor
			5	Dudor
			6	Hemliyawas Kalan
			7	Hemliyawas Khurd (Rural)
8			Marwar Junction	
9			Auwa	
10			Surya Nagar	
11			Bithora Khurd/Kalan	
12			Borsa	
13			Bhagwanpura	
14			Karari	
15			Dhamli	
16			Banta	
17			Bhimadia	
18			Narsingh Pura	
19			Karchi	
20			Sawrad	
Sub-total	20			
Sojat		1	Karnawas	
		2	Udeshi Kua	
		3	Chandawal	
		4	Murdawa	
		5	Pachudo Kalan	
		6	Sojat Road	
		7	Bagri Nagar (I,II)	
		8	Bhesana	
		9	Guda Bachhraj	
Sub-total	9			
PALI	Raipur / Pali (Jaitran)	1	Rampura Mewatiyan (Rural)	
		2	Amarpura	
		3	Saradhana	
		4	Shergarh	
PALI	Raipur / Pali (Jaitran)	5	Manpura	
		6	Sabalpura	
		7	Kurantiya	
		8	Sendara/Jharti	
		9	Jhala Ki Chauki	
		10	Kaya Bheela	
		11	Phata Khera	
		12	Malni	
		13	Megarda	
		14	Deepawas	
		15	Haripur	

District	Sub-district	S. No	Affected Villages	
		16	Aasan	
		17	Laka Ji Ki Dhani	
		18	Dholiya	
		19	Jhoontha	
		20	Guriya	
		21	Raipur-II	
		22	Lavacha	
		23	Lalpura	
		Sub-total	23	
	Desuri		1	Indarwara
			2	Bhadarlau
			3	Somesar
			4	Jawali
			5	Salariya
			6	Ajaneshwar
			7	Bhagwanpura Station
			8	Beejowa
			9	Rani Khurd
			10	Dhuteriya
			11	Etandra Meditan
	12	Nandha Jodhan		
		Sub-total	12	
	Total District		89	
SIROHI	Abu Road	1	Kiwarti	
		2	Or	
		3	Derna	
		4	Khadat	
		5	Sangna	
		6	Kui	
		7	Abu Road	
		8	Chandrawati	
		9	Amba	
		10	Khara	
		11	Maval	
		12	Wasda	
		13	Morthala	
		14	Tartoli	
		15	Sant pur	
		Sub-total	15	
	Pindwara		1	Sadalwa
			2	Pindwara Jn
			3	Ajari
			4	Chawarli
			5	Ghodiyaawas
			6	Banas
			7	Peshua
			8	Kodarla
			9	Swaroop Gunj
			10	Bhavri
			11	Vatera
			12	Udavariya
			13	Bhimana
			14	Bharja
			15	Wara
			16	Keshavganj
			17	Bilar
	18	Pindwara II		
	19	Golya		
	20	Nai Dhaneri		
	21	Rampura		
		Sub-total	21	
	Total District		36	
	Total State		291	

**List of Villages where the Summary of the Final EIA Report were Distributed
< Gujarat >**

District	Sub-district	S. No	Affected Villages
Banaskantha	Amirgadh	1	Awal Gomti
		2	Dungarpura

District	Sub-district	S. No	Affected Villages		
		3	Amirgadh		
		4	Kitodar		
		5	Dholia		
		6	Iqbalgarh		
		7	Bantawada		
		8	Deri		
		9	Mahadevia		
		10	Dhanpura		
		11	Umarkot		
		12	Karja		
		13	Kalimati		
		14	Jorpura		
		15	Bantawada		
		16	Laxmipura		
		17	Juni Sarothi		
		18	Rampur Karza		
		19	Jethi		
		20	Raipuriya		
		21	Malna		
		22	Sangla		
		23	Rajpur Pakhwana		
		24	Pakhanwa		
		25	Lunwa		
		26	Moriya		
			Sub-total	26	
			Palanpur	1	Antroli
2	Pirjopura (Tankani)				
3	Lunawa				
4	Parpapada				
5	Kholda				
6	Chodotar				
7	Akasan				
8	Gathamam				
9	Bhagal (Jagana)				
10	Sagrosana				
11	Vasna (Jagana)				
12	Badarpura (Kalusana)				
13	Pakhanwa				
14	Moriya				
15	Sangla				
16	Uttampura				
17	Tokariya				
	Sub-total	17			
	Vadgan	1	Changwada		
		2	Changa		
		3	Basu		
		4	Meta		
		5	Mumuwada		
	Sub-total	5			
	Total District	48			
Patan	Sidhpur	1	Kakoshi		
		2	Rasulpur		
		3	Metrana		
		4	Vaghana		
		5	Thakrasan		
		6	Dethali		
		7	Dindrol		
		8	Karan		
		9	Nedra		
		10	Chandravati		
		11	Chandanswar		
		12	Nandotri		
		13	Momvada		
		14	Kunvara		
	Sub-total	14			
Patan	Patan	1	Derasana		
		2	Kani		
Patan	Patan	3	Visal Vasna		
		4	Manund		
		5	Ruvavi		

District	Sub-district	S. No	Affected Villages	
	<u>Sub-total</u>	5		
<u>Total District</u>		19		
Mahesana	Unjha	1	Lindi	
		2	Amudh	
		3	Sunoka	
		4	Sujerupura (Dabi)	
Mahesana	Unjha	5	Chandravati	
		6	Pali	
		7	Dabhi	
	Mahesana	<u>Sub-total</u>	7	
		Mahesana	1	Allora
			2	Hardesan
			3	Bodla
			4	Nugar
			5	Maguna
			6	Karshanpura
			7	Sametra
			8	Heduva-Rajgar
			9	Vadosan
			10	Boriavi
			11	Linch
			12	Ambasan
			13	Baliyasan
			14	Bhasariya
			15	Tundali
			16	Matpur
			17	Padi
			18	Kanthravi
			19	Gorad
			20	Gilosan
			21	Chatiyarda
			22	Mareda
			23	Sabkheda
			24	Veerta
			25	Surpura
26	Revavi			
27	Dabri			
28	Mandali			
29	Jagudan			
	<u>Sub-total</u>	29		
Mahesana	Kadi	1	Ganeshpura	
		2	Mathasur	
		3	Nandasan	
		4	Kherpur	
		5	Rajpur	
		6	Irana	
		7	Indrad	
		8	Narain Pura	
		9	Lakshmi pura	
		10	Ankhol	
		11	Vamaj	
		12	Lunasan	
	<u>Sub-total</u>	12		
<u>Total District</u>		48		
Gandhinagar	Kalol	1	Dhanot	
		2	Chhatral	
		3	Piyaj	
		4	Ramnagar	
		5	Vansajeda	
		6	Bhoyan Moti	
		7	Khatraj	
		8	Sanavad	
		9	Nasmed	
		10	Rancharada	
		11	Karoli	
		12	Boriyavi	
		13	Jethlaj	
		14	Dabla	
		15	Vasol	
		16	Vansjeda Dhedia	

District	Sub-district	S. No	Affected Villages
		17	Unali
		18	Hajipur
		Sub-total	18
Total District		18	
Ahmedabad	Sanand	1	Garodiya
		2	Godhavi
		3	Kaneti
		4	Nidhard
		5	Sanand
		6	Pipan
		7	Moti Devti
		8	Nani Devti
		9	Palwada
		10	Soila
		11	Sari
Ahmedabad	Sanand	12	Matoda
		13	Vasna Chacharavadi
		14	Kolat
		15	Tajpur
	Sub-total	15	
	Bhavla	1	Rajoda
		2	Kavitha
		3	Modasar
	Sub-total	3	
	Daskroi	1	Miroli
		2	Mahijda
		3	Rampura
		4	Timba
		5	Kashindra
		6	Bhat
7		Changodar	
8		Moriya	
Sub-total	8		
Total District		26	
Kheda	Kheda	1	Adasar
		2	Kathwada
		3	Chalindra
		4	TOI Vasna
		5	Naika Navi Vasad (Not Revenue village)
		6	Naika Chalendra (Not Revenue village)
		7	Navagam
		8	Shetra
		9	Vasna Bujarg
		10	Dharampura
		11	Govindpura
		12	Dharoda
	Sub-total	12	
	Matar	1	Pimpara
		2	Koshiyal
		3	Kasbe Matar
		4	Traj
		5	Garmala
		6	Machhiel
		7	Hernaj
		8	Khandhli
		9	Laval
10		Maliataj	
Sub-total	10		
Total District		22	
Anand	Sojitra	1	Deva Vanta
		2	Roon
		3	Deva Talpad
	Sub-total	3	
	Petlad	1	Demol
		2	Changa
		3	Mahelav
		4	Ravipura
		5	Morad
		6	Boriya

District	Sub-district	S. No	Affected Villages	
		7	Thaladi	
		8	Padgol	
		9	Radupura	
		10	Kaisy Kua	
		11	Navagam	
		12	Vishnoli	
		13	Podra	
		14	Bandhni	
		<u>Sub-total</u>	14	
	Anand		1	Sandesar
			2	Gana
			3	Meghva Gana
			4	Vans Khiliya
			5	Khandhafi
6			Napad Vanto	
7			Napad Talpad	
	<u>Sub-total</u>	7		
	Borsad	1	Napa Vanto	
Anand	Borsad	2	Kasumbad	
		3	Napa Talpad	
		<u>Sub-total</u>	3	
	Anklav		1	Khadol (Haldari)
			2	Haldari
			3	Bhetasi (Talpad)
			4	Laxmi Pura*
			5	Lalpara*
			6	Ambali*
			7	Khanvadi
			8	Bhetasi (Ba Bhag)
9			Aasodar	
10	Kanthariya			
12	Aamrol			
	<u>Sub-total</u>	11		
<u>Total District</u>		38		
Vadodara	Vadodara	1	Bil	
		2	Kotna	
		3	Sherkhi	
		4	Sonarkoi	
		5	Trikanpura	
		6	Krisna nagar	
		7	Mahapura	
		8	Bhayali	
		9	Gokul Pura	
		10	Samiyala	
		11	Jeevari	
		12	Chapad	
		13	Khalipur	
		14	Vadasata	
		15	Karali	
		16	Itola	
		17	Maneja	
		18	Sevasi	
		19	Jambua (Vadodara City)	
		20	Anagarh	
		21	Raypura	
		22	Maretha	
		23	Vernama	
	<u>Sub-total</u>	23		
<u>Total District</u>		23		
<u>Total State</u>		242		

**Appendix 3-12 Presentation Material on 20th January, 2009
(Discussion on Draft EIA and Draft RRP)**



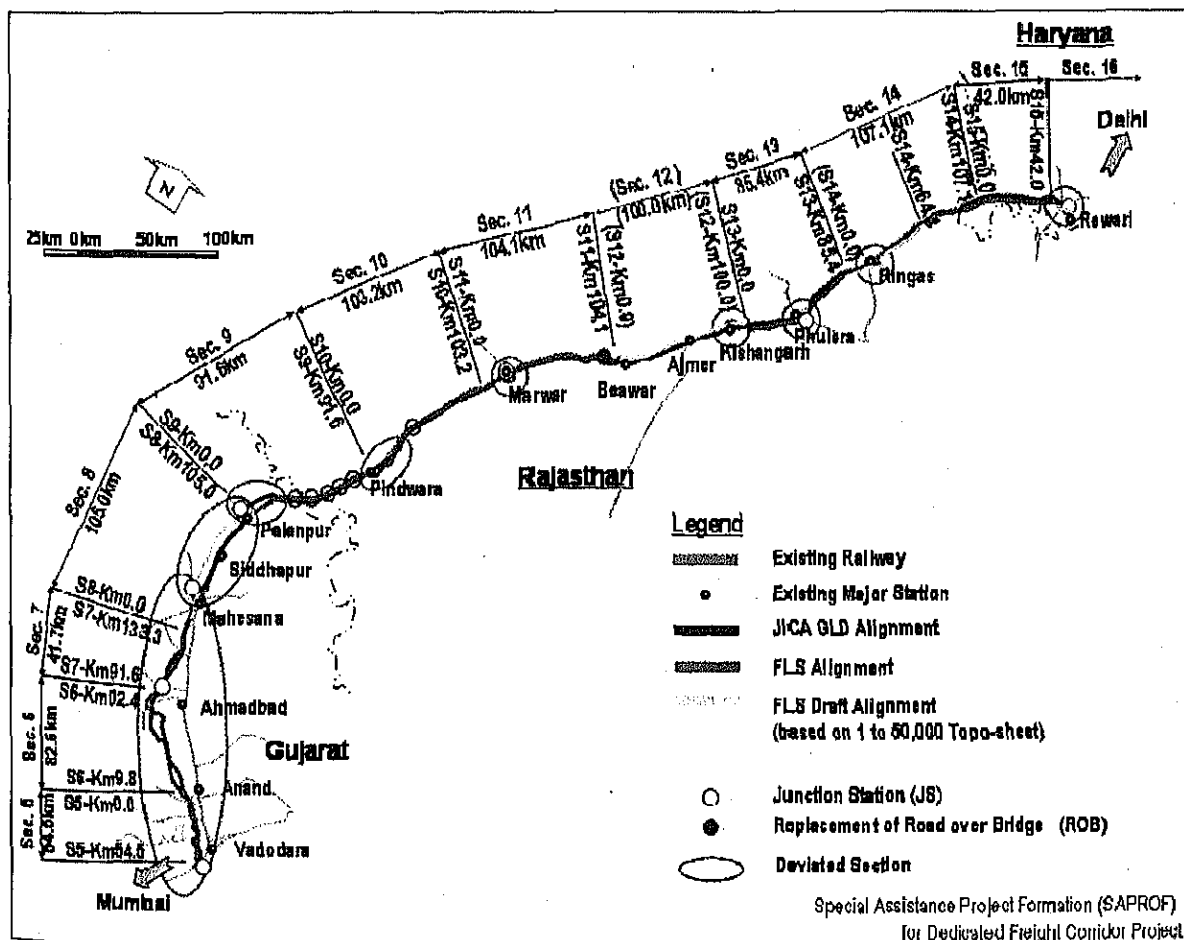
Special Assistance for Project Formation (SAPROF) For Dedicated Freight Corridor (DFC) Project

Discussion on Draft EIA and Draft RRP

20th January 2009

JICA SAPROF Study Team
- Nippon Koei Co., Ltd.,
- Japan Railway Technical Service

Western Route of DFC between Vadodara and Rewari



Topics

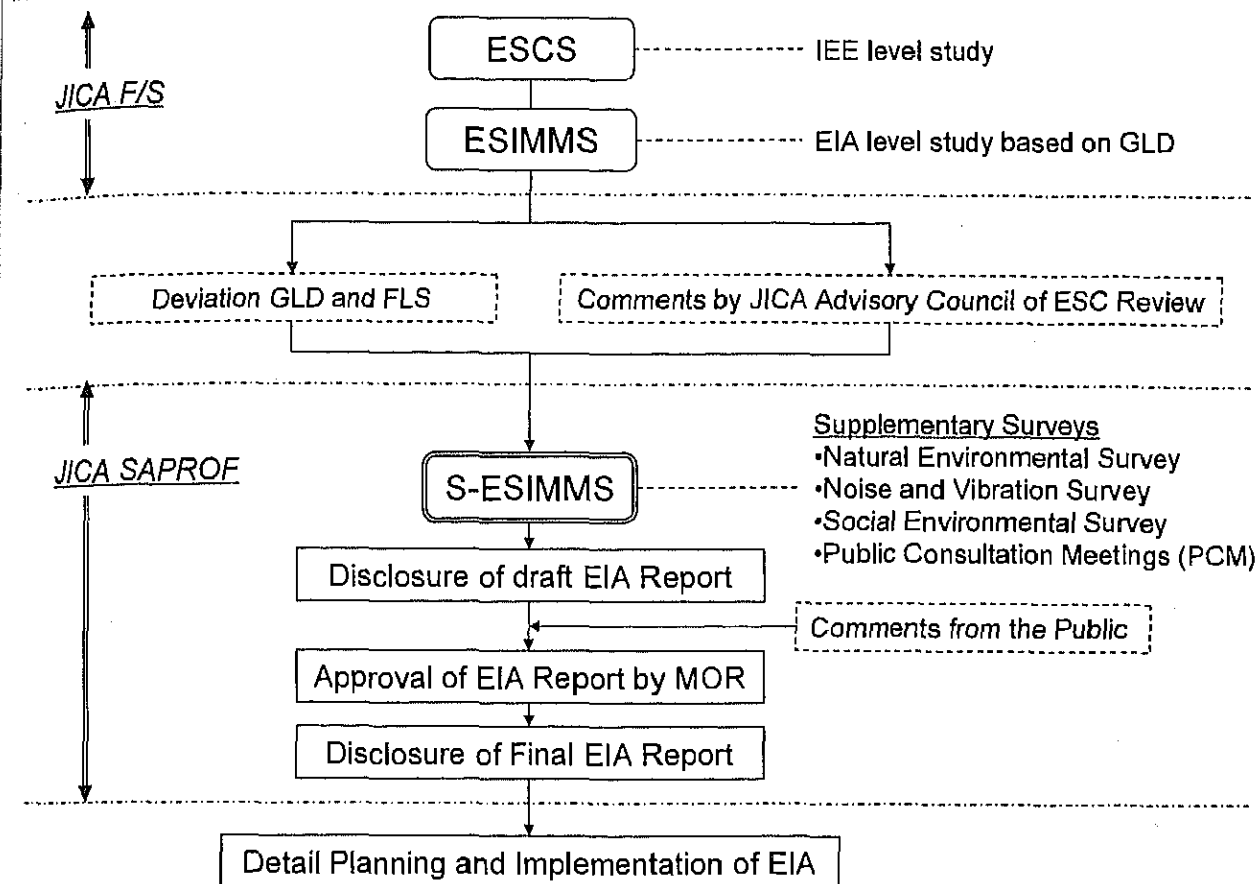
1. Outline of Draft EIA (ESIMMS+draft S-ESIMMS)
 - Confirmation on major contents for disclosure of the draft EIA reports to the public
2. Outline of Draft RRP
 - Introduction of major points to meet JICA guidelines in addition to the RAA 2008 and NRRP 2007
3. Further ESC activities
 - Disclosure of draft EIA
 - Approval of finalized EIA and disclosure of final EIA
 - Public Consultation Meeting (PCM)

3

1. Outline of Draft EIA (ESIMMS + draft S-ESIMMS)

4

1. Draft EIA (ESIMMS + draft S-ESIMMS)



ESCS: Environmental and Social Considerations Study, ESIMMS: Environmental and Social Impact Mitigation Measures Study
GLD: Guideline Design for DFC alignment, S-ESIMMS: Supplementary Survey for ESIMMS
Draft EIA: ESIMMS + draft S-ESIMMS, Final EIA: ESIMMS + S-ESIMMS

5

1. Draft EIA (ESIMMS + draft S-ESIMMS)

Environmental Items Mainly Covered by EIA

1. Natural environment

- Fauna and Flora
- Protected area

2. Social environment

- Land acquisition and resettlement
- Socio-economic impacts such as employment

3. Pollution control measures

- Noise and vibration level
- Water quality

6

Contents of ESIMMS

1. Introduction
2. Applicable Guidelines and Laws
3. Project Description
4. Current Environment
5. Potential Environmental Impact Evaluation and Mitigation Measures
6. Pollution Control Measures
7. Stakeholder/Public Consultation Meetings
8. Environmental Management Plan
9. Preliminary Framework of Resettlement and Rehabilitation Plan
10. Environmental Monitoring Plan

7

Main Comments of the JICA Advisory Council of ESC Review

Comments of the Advisory Council
(1) Sufficiency of the Study
1) Accuracy of counting PAFs number Accurate number of the Project-Affected Families (PAFs) including the illegal occupants is required, but only estimation by visual observation in the field has been conducted.
2) Identification of PAPs and socio-economic survey Project Affected People (PAPs) need to be relocated should be identified and socio-economic surveys for such PAPs should be conducted.
(2) Natural environment study
1) Seasonal information Seasonal information has not been collected satisfactorily under the limited study period.
2) Corridor for migratory animals Corridor should be examined for the migratory animals due to construction of embankment structure for the DFC project.
(3) Pollution control
1) Land use Current land use should be surveyed to be utilized for further impact analysis of noise and vibration.
2) Number of measurement sites for noise and vibration and coverage of impact analysis Although the impact analysis on noise and vibration has been conducted only for the sensitive receptors by conducting noise and vibration measurements for only 60 sites, impacts for house and other structure should also be examined.
3) Target level on noise and vibration In evaluating impacts of the noise and vibration, quantitative target levels on noise and vibration should be examined.
4) Water quality measurement The water quality measurement related to the bridge construction should be conducted in further stage of the project.
5) Mitigation measures with local conditions Mitigating measures should be proposed further by considering regional conditions.
(4) Environmental management plan
1) More detailed EMP Environmental management plan should be more concrete as well as monitoring plan in further stage of the project.
2) Role of NGOs in implementation of the resettlement plan Concrete proposal on employing the NGO should be required in implementing the resettlement plan.
(5) Project implementation plan
1) Further deliberations of implementation schedule for land acquisition and resettlement Detailed implementation schedule on land acquisition and resettlement should be prepared with more detailed information on process and surveys.

8

Components of S-ESIMMS

(1) Natural Environmental Survey

- Additional information collection for latest alignment and facilities
- Supplementary survey for Wildlife Sanctuaries
- Supplementary field survey on Indian Soft-shell Turtle
- Water quality survey

(2) Noise and Vibration Survey

- Survey for noise and vibration unit levels
- Survey for existing noise and vibration levels along the parallel sections of the DFC
- Inventory survey of SRs
- Land use survey

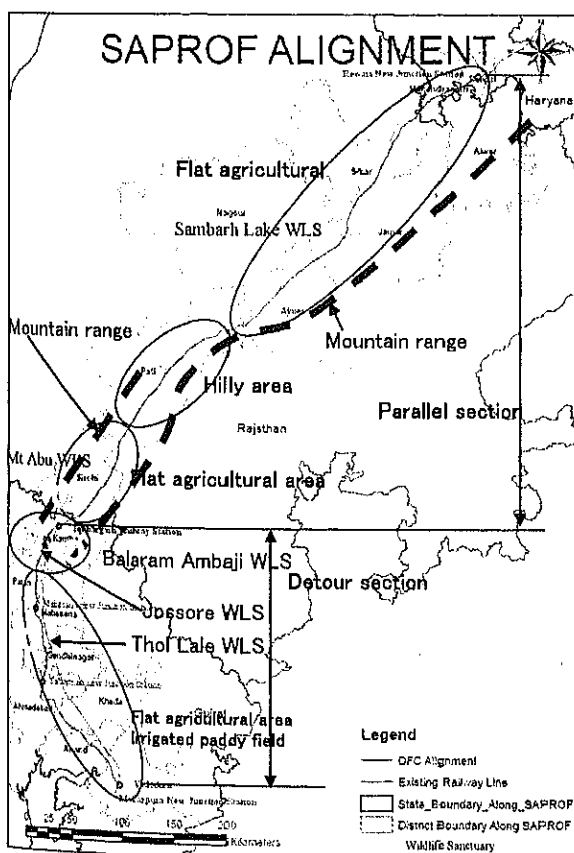
(3) Social Environmental Survey

- Project-affected structure survey
- Socio-economic survey

(4) Updated Mitigation Measures and EMMP

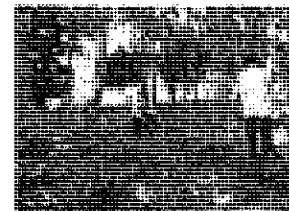
EMMP: Environmental Management and Monitoring Plan

(1) Natural Environment



- Field survey
 - Wildlife sanctuary along DFC
 - Major rivers
- Secondary data collection

- Quadrate survey: tree species composition
- Line survey: estimate affected number of trees



Natural Environmental Feature along DFC

A large Indian Soft-shell Turtle in Mahi River

(1) Natural Environment

District-wise Approximate Number of Trees to be felled in Gujarat (part of the list)

District	Village Name	No. of trees	Major Species
Vadodara	Itola to Shamiyala	275	<i>Azadirachta indica</i> , <i>Terminalia arjuna</i> , <i>Acacia catechu</i> , <i>Mangifera indica</i> ,
	Shamiyala to Kotna	315	<i>Eucalyptus sp</i> , <i>Ficus benghalensis</i> , <i>Acacia nilotica</i> , <i>Acacia catechu</i> , <i>Tectona grandis</i> , <i>Embllica officinalis</i>
Sub-total		590	
Anand	Kotna to Laxmi Pura	136	<i>Azadirachta indica</i> , <i>Terminalia alata</i> , <i>Tectona grandis</i> , <i>Derris indica</i> , <i>Ficus religiosa</i> ,
	Laxmi Pura to Gana	265	<i>Mangifera indica</i> , <i>Ziziphus mauritiana</i> , <i>Eucalyptus sp</i> , <i>Dalbergia sisoo</i> , <i>Ficus benghalensis</i> , <i>Madhuca indica</i> , <i>Syzygium cumini</i>
	Gana to Vishnoli	155	<i>Terminalia arjuna</i> , <i>Acacia tortlis</i> , <i>Acacia nilotica</i> , <i>Acacia catechu</i> , <i>Mangifera indica</i>
	Vishnoli to Changa	120	<i>Azadirachta indica</i> , <i>Mangifera indica</i> , <i>Terminalia alata</i> , <i>Ficus religiosa</i>
	Changa to Deva Vanta	138	<i>Eucalyptus sp</i> , <i>Acacia tortlis</i> , <i>Acacia nilotica</i> , <i>Acacia catechu</i> , <i>Madhuca indica</i> , <i>Syzygium cumini</i>
Sub-total		814	

(1) Natural Environment

Forest Land to be diverted by DFC in Gujarat

Name of the Forest	District	Land to be acquired (ha)
Jethi Reserved Forest	Banaskantha	11.1
Bantwada Un-classed Forest	Banaskantha	7.5
Malana Reserved Forest	Banaskantha	2.7
Total		21.3

Forest Land to be diverted by DFC in Rajasthan

Name of the Forest	District	Land to be acquired (ha)
Murdawa Jor Reserved Forest	Pali	1.7
Binjowa Jor Reserved Forest	Pali	2.7
Jawaleswer Mahadev Un-classed Forest	Pali	0.1
Kivarli Ka Jor Reserved Forest	Sirohi	0.8
Total		5.3

(2) Noise and Vibration Study

• Objectives

- To obtain unit levels of noise and vibration of freight trains to use for the prediction of the impacts along the alignments of the Dedicated Multimodal High Axle Load Freight Corridor (DFC);
- To grasp current noise and vibration levels at the existing tracks to use for the prediction of the impacts along the parallel sections of the DFC
- To assess impact of noise and vibration generated by the DFC to establish adequate mitigation measure for the impacts.

13

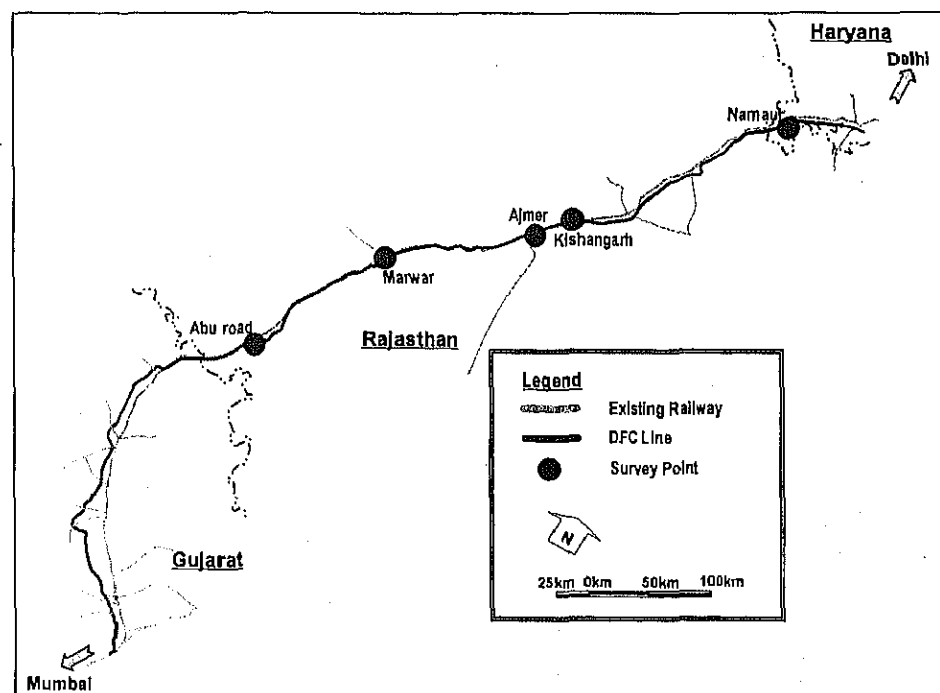
Noise and Vibration Measurement Sites

Noise and vibration unit level measurement:

- Aligarh-Dadri section

Noise and Vibration measurement of existing railway (parallel section):

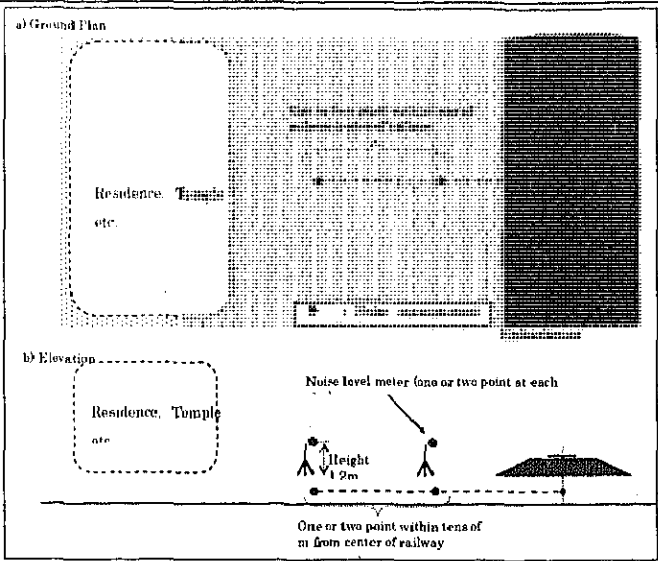
- Narnaul
- Kishangarh
- Ajmer
- Marwar
- Abu Road



Applied standard for the measurements

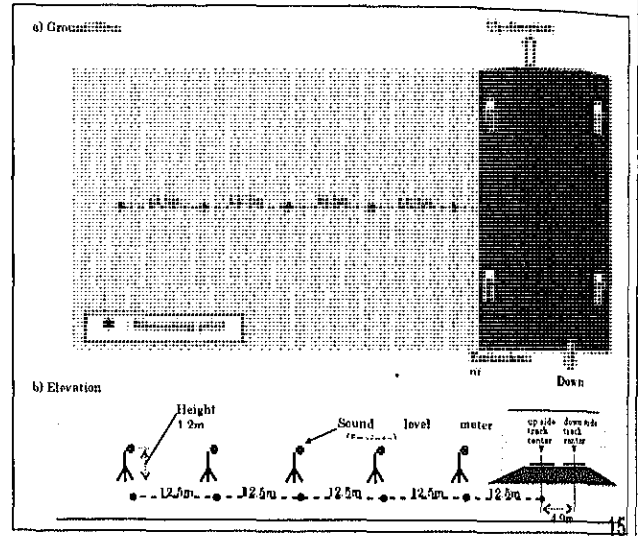
- Japanese standard of noise measurement, JIS Z 8731 (Method of Measurement of Noise Level) = ISO standard
- Japanese standard of vibration measurement, JIS Z 8735 (Method of Measurement of Noise Vibration Level)

14



Schematic Plan of Railway and Background Noise Levels Measurement in Parallel Section

Schematic Plan of Railway Noise Unit Level Measurement



1. Draft EIA (ESIMMS + draft S-ESIMMS)

Impact Prediction and Evaluation

Target of prediction

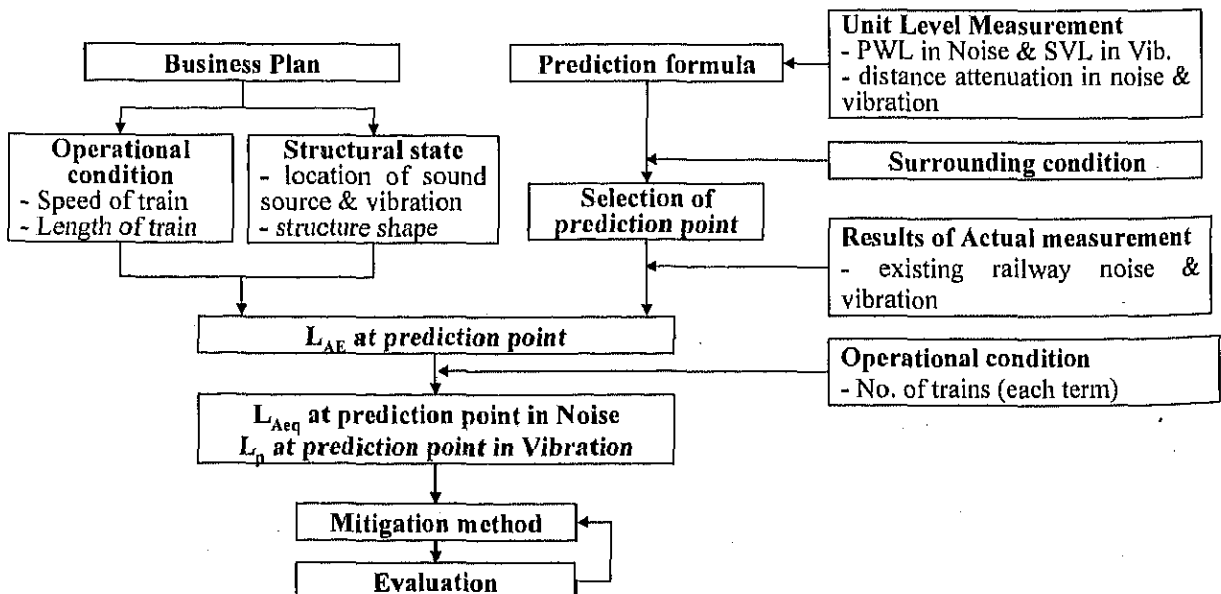
- railway noise (L_{Aeq}) after DFC would be placed in service

Term of Prediction

- the time when the railway would be operated steadily after placed in service

Prediction location

- 12 prediction locations were selected in parallel section
- 5 locations in detour section, in where there are residential area and commercial area



Procedure for Prediction of Noise Level and Vibration Level

Evaluation of the Results (Noise)

1. Comparison with the Recommended Standard Level of Railway Noise

- the Guidelines for Countermeasures for Railway Noise in Case of New Constructions and Large-scale Improvement of Existing Railways, Environmental Agency of Japan
 - Daytime (7:00 - 22:00): 60 dB (L_{Aeq}) or less
 - Night time (22:00 - 7:00): 55 dB (L_{Aeq}) or less
- Parallel section
 - Predicted noise levels (L_{Aeq}) at 30m and 50m distances from the center of DFC alignment exceed the recommended standard level of railway noise at both day and night times, except for Ajmer No.2.
 - Railway noise levels from the existing railway track already exceed the recommended standard level for the most sites.
 - Some mitigation measures are recommended to be taken especially along the residential areas and near the SRs.
- Detour section
 - Not exceed the recommended standards levels even at 30 m distance from the center of DFC alignment.
 - Measures may be considered only near SRs

Result of Noise Prediction in Parallel Section (unit: dB)

Prediction location	Time	Guideline value	① Background Noise	② Existing railway		③ DFC railway		④ ②+③	
				30m	50m	30m	50m	30m	50m
Abu road	East	daytime	60	61	58	68	63	69	64
		nighttime	55	43	62	59	67	62	68
	West	daytime	60	61	58	63	61	65	63
		nighttime	55	41	62	59	62	60	65
Fadwara	East	daytime	60	61	58	68	63	69	64
		nighttime	55	43	62	58	67	62	68
	West	daytime	60	61	58	63	61	65	63
		nighttime	55	43	62	58	62	60	65
Rari	East	daytime	60	66	63	68	63	70	66
		nighttime	55	45	66	63	67	62	70
	West	daytime	60	66	63	63	61	68	65
		nighttime	55	45	66	63	62	60	68
Marwar	East	daytime	60	62	60	63	60	65	63
		nighttime	55	45	62	60	62	59	65
	West	daytime	60	65	62	58	57	66	63
		nighttime	55	45	65	62	57	56	65
Deonar	East	daytime	60	61	58	68	63	69	64
		nighttime	55	49	61	58	67	62	68
	West	daytime	60	61	58	63	61	65	63
		nighttime	55	49	61	58	62	60	65
Ajmer (St 1)	East	daytime	60	62	59	68	63	69	65
		nighttime	55	49	61	58	67	62	68
	West	daytime	60	62	59	63	61	66	63
		nighttime	55	49	61	58	62	60	65
Ajmer (St 2)	East	daytime	60	53	—	58	56	58	56
		nighttime	55	30	—	57	56	57	56
	West	daytime	60	51	—	55	53	55	53
		nighttime	55	30	—	54	53	54	53
Kishangruh	East	daytime	60	65	62	68	63	70	66
		nighttime	55	50	64	61	67	62	69
	West	daytime	60	65	62	63	61	67	64
		nighttime	55	50	64	61	62	60	66
Rungas	East	daytime	60	60	60	63	63	65	65
		nighttime	55	50	59	59	62	62	64
	West	daytime	60	65	62	63	61	67	64
		nighttime	55	50	65	62	62	60	67
Shri Madhopur	East	daytime	60	60	60	63	63	65	65
		nighttime	55	50	59	59	62	62	64
	West	daytime	60	65	62	63	61	67	64
		nighttime	55	50	65	62	62	60	67
Nim ka thana	East	daytime	60	60	60	63	63	65	65
		nighttime	55	50	59	59	62	62	64
	West	daytime	60	65	62	63	61	67	64
		nighttime	55	50	65	62	62	60	67
Narnaul	East	daytime	60	64	60	68	63	69	65
		nighttime	55	53	59	67	62	68	64
	West	daytime	60	64	60	63	61	66	63
		nighttime	55	53	59	62	60	65	63
Ateli	East	daytime	60	64	60	68	63	69	65
		nighttime	55	53	59	67	62	68	64
	West	daytime	60	65	62	63	61	67	64
		nighttime	55	53	65	62	62	60	67

Note: daytime (7:00-22:00), nighttime (22:00-7:00)
 Shaded sections indicate that the noise levels exceed the recommended standard level of railway noise which is proposed in the Guidelines for Countermeasures for Railway Noise in Case of New Constructions and Large-scale Improvement of Existing Railways, Environmental Agency of Japan, December 1995

Result of Noise Prediction in Detour Section (Unit: dB)

Prediction location	Time	Guideline value	① Background noise	② DFC	
				33m	50m
Vadodara	East	daytime	60	60	55
		nighttime	55	43	53
	West	daytime	60	60	55
		nighttime	55	43	53
Ahmadabad	East	daytime	60	60	55
		nighttime	55	43	53
	West	daytime	60	60	55
		nighttime	55	43	53
Kalol	East	daytime	60	60	55
		nighttime	55	43	53
	West	daytime	60	60	55
		nighttime	55	43	53
Phulera	East	daytime	60	60	55
		nighttime	55	43	53
	West	daytime	60	60	55
		nighttime	55	43	53
Rowari	East	daytime	60	60	55
		nighttime	55	43	53
	West	daytime	60	60	55
		nighttime	55	43	53

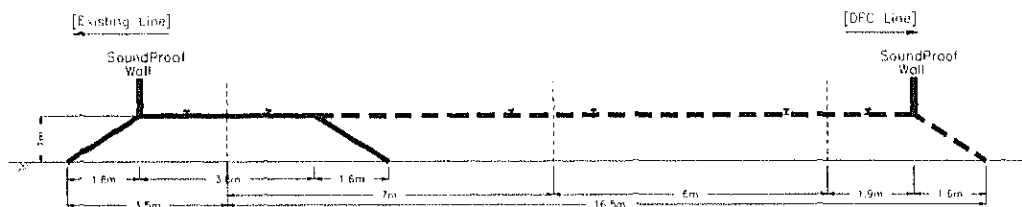
Consideration of Environmental Mitigation Measures

1. Case Studies on Establishment of Soundproof Wall

- 30 m-ROW: 0.5 – 4.0 m height soundproof wall
- 50 m-ROW: 0.5 – 2.5 m height soundproof wall

ex. Abu Road (parallel section)

Prediction location		Time	Recomend ed Standard Level	Without measure		Height of soundproof		With measure	
				30m	50m	30m	50m	30m	50m
Abu road	East	daytime	60	69	64	3.0m	1.5m	55	55
		nighttime	55	68	64			54	54
	West	daytime	60	65	63	1.5m	1.0m	56	55
		nighttime	55	65	62			55	54



2. Case Studies on Shifting Train Operation Number from Night to Day Times

19

Evaluation of the Results (Vibration)

- Parallel section
 - the predicted vibration level (L_p) including vibrations from both existing and DFC railway at 30 m and 50 m from center of DFC alignment
=> less than the guideline value (70 dB)
- Detour section
 - less than the guideline value (70 dB)
 - careful attentions should be paid on SRs, if any

20

(3) Sensitive Receptor and Land Use Survey

- Inventory survey of SRs

- Identification of SRs located within approximately 100m from the center of outer track, considering noise impact by trains

- 50-100m for east side (DFC side) for the parallel section
- 0-100m for west side (existing railway side) for the parallel section
- 35-100m (both sides) in the detour section

- : 20 in Haryana, 87 in Rajasthan, 4 in Gujarat

- Land use survey

Distribution of Residential Area along the DFC Alignment in Parallel Section

State	Total length in the settlement area at Western side of DFC (km)	Total length in the settlement area at Eastern side of DFC (km)	Total (km)
Haryana	6.2	5.8	12.0
Rajasthan	51.4	52.4	103.6
Total	57.6	58.2	115.6

Distribution of Residential Area along the DFC Alignment in Detour Section

State	Total length in the settlement areas (km)
Gujarat	1.1

21

(4) Social Environmental Survey: Project-affected structure survey

Number of Project-Affected Structures to be Relocated

	Residential	Commercial	Residential -cum- commercial	Community	Religious	Government	Others	Total
Gujarat	88	2	2	0	4	0	7	103
Rajasthan	528	158	67	15	80	218	132	1,198
Haryana	194	91	27	17	17	25	30	401
Total	810	251	96	32	101	243	169	1,702

Note: The above figures are related to both fully and partially affected structures.

Number of Project-Affected Families

	PAF			Total
	Residential	Commercial	Residential -cum- Commercial	
Gujarat	97	2	3	102
Rajasthan	541	163	76	780
Haryana	278	100	36	414
Total	916	265	115	1,296

=> Approx. 8,500 PAPs

Note: The above figures are related to both fully and partially affected structures.

Affected squatters:

- 10 squatters in Haryana with Kiosk having semi-permanent structures
- No squatters in Gujarat and Rajasthan

22

(4) Social Environmental Survey : Socio-economic survey

- Socio-economic survey for PAPs to be relocated
 - Sampling survey for 20% of PAPs
- Socio-economic survey for Agricultural PAPs whose land will be acquired
 - Sampling survey for 25 agri-PAPs per district

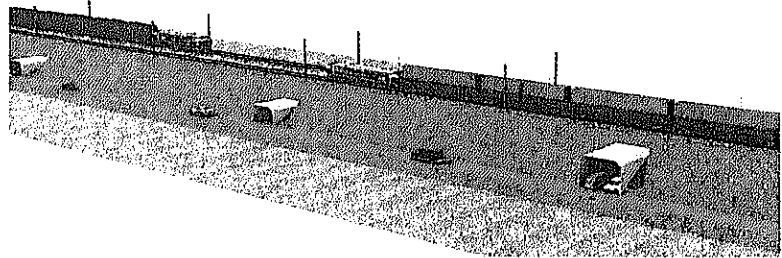
(5) Updated Mitigation Measures and EMMP

Main Items that mitigation measures be taken in pre-construction, construction, and/or operation stages

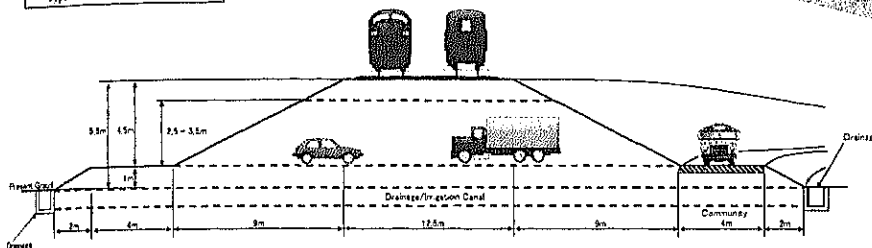
- Pollution control
 - Noise
 - Vibration
 - Water pollution
- Natural environment
 - Topography and Geology
 - Soil
 - Land use
 - Drainage
 - Water use
 - Flora
 - Fauna
- Social considerations
 - Accessibility
 - Land acquisition and resettlement

Suggested Typical Cross Section of Detour Route

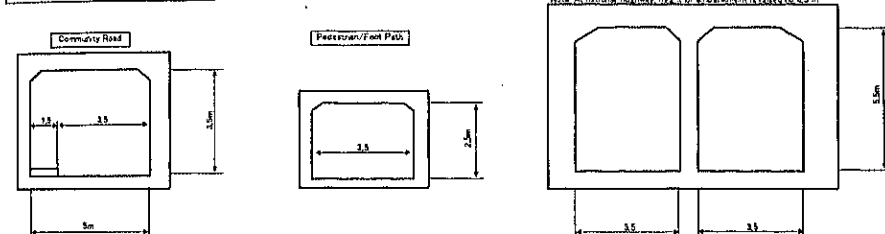
Based on the comments made during the stakeholder/public consultation meeting, provision of 4 m wide community road, RUB at every rural road, pedestrian RUB every 1 km, drainage are suggested to construct with the embankment of detour sections.



Typical Section of Detour Route



Typical Section of Road-under Bridge (RUB)



Environmental Management Plan

Stage-wise Environmental Management Measures

– Pre-construction stage

- land acquisition, diversion of reserved forest land, preservation of trees, borrow area, quarry area, site identification for disposal of unsuitable materials, construction camp, arrangement for temporary yard, orientation of implementation agency and contractors

– Construction stage

- Site clearance, procurement of construction materials, construction work (drainage, siltation, slope protection, etc.), water pollution, air pollution, noise, safety, labour camp management, contractor's demobilization (clean-up operation, restoration and rehabilitation)

– Operation stage

- Monitoring of operation performance of various mitigation measures, pollution monitoring (pls. see monitoring plan.)

Environmental Management Plan

ex. Preservation of trees

Sl. No.	Environmental Issues	Management Measures	Responsibility	
			Planning and Execution	Supervision/ Monitoring
P 3.	Preservation of Trees	<ul style="list-style-type: none"> All efforts shall be made to preserve trees including evaluation of minor design adjustments / alternatives (as applicable) to save trees. Specific attention shall be given for protecting giant trees and green tunnels. Tree cutting is to proceed only after all the legal requirements including attaining of In-principle and Formal Clearances from the State Forest Department are completed and subsequently a written order is issued to the Contractor. Stacking, transport and storage of the wood shall be done as per the relevant norms. Systematic corridor level documentation for the trees cut and those saved shall be maintained by the EMU. 	EMU, State Forest Department	DFCCIL

27

Environmental Monitoring Plan

Environmental items for the monitoring

- air quality, water quality, noise and vibration level, sediment, soil erosion, plantation, etc.

ex. Noise and vibration level

Environment	Project stage	Environmental Monitoring Programme			Institutional Responsibility	
Noise & vibration Level	Construction	Noise level & vibration in dB(A)	At equipment yard	4 times a year (preferably in each season)	Contractor through approved monitoring agency	EMU/ Supervision Consultants
		Noise level in dB(A)	All major settlement areas located near the DFC alignment. However, final decision shall be taken in consultation with SPCB .	4 times a year (preferably in each season)	Contractor through approved monitoring agency	EMU/ Supervision Consultants
	Operation	Noise & vibration level in dB(A)	Shall be decided by SPCB	Once in every three years.	EMU	DFCCIL

28

2. Outline of Draft RRP

29

2. Draft RRP (Updated RRP Framework)

Contents of 1st draft RRP (Updated Framework of RRP)

1. Outline of the DFC project
2. Scope of Land Acquisition and Resettlement
3. Measures to minimize Land Acquisition and Losses
4. Socio-Economic Feature of the Project-Affected People
5. Resettlement Policy and Entitlement
6. Resettlement Site
7. Income Restoration Program
8. Implementation Arrangement
9. Implementation Schedule
10. Participation and Consultation
11. Monitoring and Supervision
12. Grievance Redress
13. Cost Estimate

30

General Principles for the Rehabilitation and Resettlement for the Project

- 1) Affected persons/families will be categorized as titleholders, non-titleholders; wage earners, kiosk, vendors, etc.
- 2) The compensation and assistance will be as per the "Entitlement Matrix" for different categories of PAPs.
- 3) PAPs will be assisted in improving or regaining their standard of living at project cost.
- 4) Vulnerable PAP will be eligible for additional resettlement and rehabilitation assistance as provided in entitlement matrix.
- 5) The PAPs will receive compensation for lost assets at replacement cost.
- 6) PAPs not enumerated during the census shall be included in the list of PAPs based on documentary evidence.
- 7) However, anyone moving into the project area after the cut-off date will not be entitled to assistance.

General Principles for the Rehabilitation and Resettlement for the Project

- 8) The project will have separate resettlement budget.
- 9) All information related to resettlement and rehabilitation policy, mitigation measures, resettlement plan preparation and implementation will be disclosed to all stakeholders including likely PAPs.
- 10) Meaningful participation of stakeholder's would be ensured at various stages of the project.
- 11) Appropriate grievance redress mechanism will be established to ensure speedy resolution of disputes.
- 12) Consultations carried out with stakeholders and PAPs will be documented. It will be ensured that meaningful consultations continue during the implementation of Rehabilitation and Resettlement Plan.
- 13) Any change in the status of title-holding/tenancy after the cut-off dates shall not be considered.




Eligibility for Compensation, Assistance, and Rehabilitation

- 1) The cut-off date for entitlement is the date (i) on which notification is issued as per the notification prescribed under the Section 20A of the Railways (Amendment) Act, 2008 for legal owners and (ii) the census date for non-titleholders in affected zone.
- 2) Eligibility of different categories of EPs will be as per the Entitlement Matrix as shown in the subsequent section below..
- 3) The unit of entitlement will be family.
- 4) Titleholder EPs will be eligible for compensation as well as assistance.
- 5) Non-titleholder EPs will not be eligible for compensation of the land occupied by them but they will receive compensation for the investment made by them on the land such as replacement value of structures and other assets. They will also be eligible for R&R assistance as per Resettlement Policy and Entitlement Matrix.

Eligibility for Compensation, Assistance, and Rehabilitation

- 6) In case a PAP could not be enumerated during census but has reliable evidence to prove his/her presence before the cut-off date in the affected zone shall be included in the list of PAPs after proper verification by the grievance redress committee.
- 7) EPs from vulnerable group will be entitled for additional assistance as specified in the Entitlement Matrix.
- 8) EPs will be entitled to take away or salvage the dismantled materials free of cost without delaying the project activities.
- 9) If a notice for eviction has been served on a person/family before the cut-off date and the case is pending in a court of law, then the eligibility of EP will be considered in accordance with the legal status determined by the court and the EP will be eligible for compensation/assistance in accordance with this policy provisions.

Land Compensation as per RAA 2008

- Deviations between RAA 2008 and market price
<Unit cost> Agri. area: 1.3 – 10.2, Residential area: 1.1 – 10.3
<Total cost> 3.4 times *(Based on costs collected in the SAPROF Study)*

- Land compensation rate under the RAA, 2008 may be lower than that of replacement cost in some cases.

- Land-for-land (house-for-house) compensation or additional cash compensation and/or assistance would be required as per the JICA Guidelines as well as WB Policy.

- Experts on asset valuation is recommended to be hired by the Project to secure minimum adequate compensation.

NRRP 2007 and JICA Guidelines

- RRP preparation
 - NRRP 2007 => After notification
 - JICA => basic RAP in planning stage
- Various assistances
 - Assistances in NRRP 2007 are basically acceptable for the DFC project as per JBIC guidelines.
 - < Difference >
 - NRRP2007 => Minimum costs for some assistances are prescribed.
 - JBIC => Actual cost provision should be adopted from viewpoint of livelihood recovery, at least.
 - Some deviations will be required, but not critical.
 - Livelihood assistance in transition period
 - Assistance of squatters
 - Compensation for structure, relocation assistance, rehabilitation assistance, etc.

Potential Issues and Recommendations

- Gap between compensation under RAA 2008 and actual market rates
 - Hiring experts on land valuation
- Capacity deficit in DFCCIL for implementation of RRP
 - Establishing RRP Cell in DFC

3. Further ESC Activities

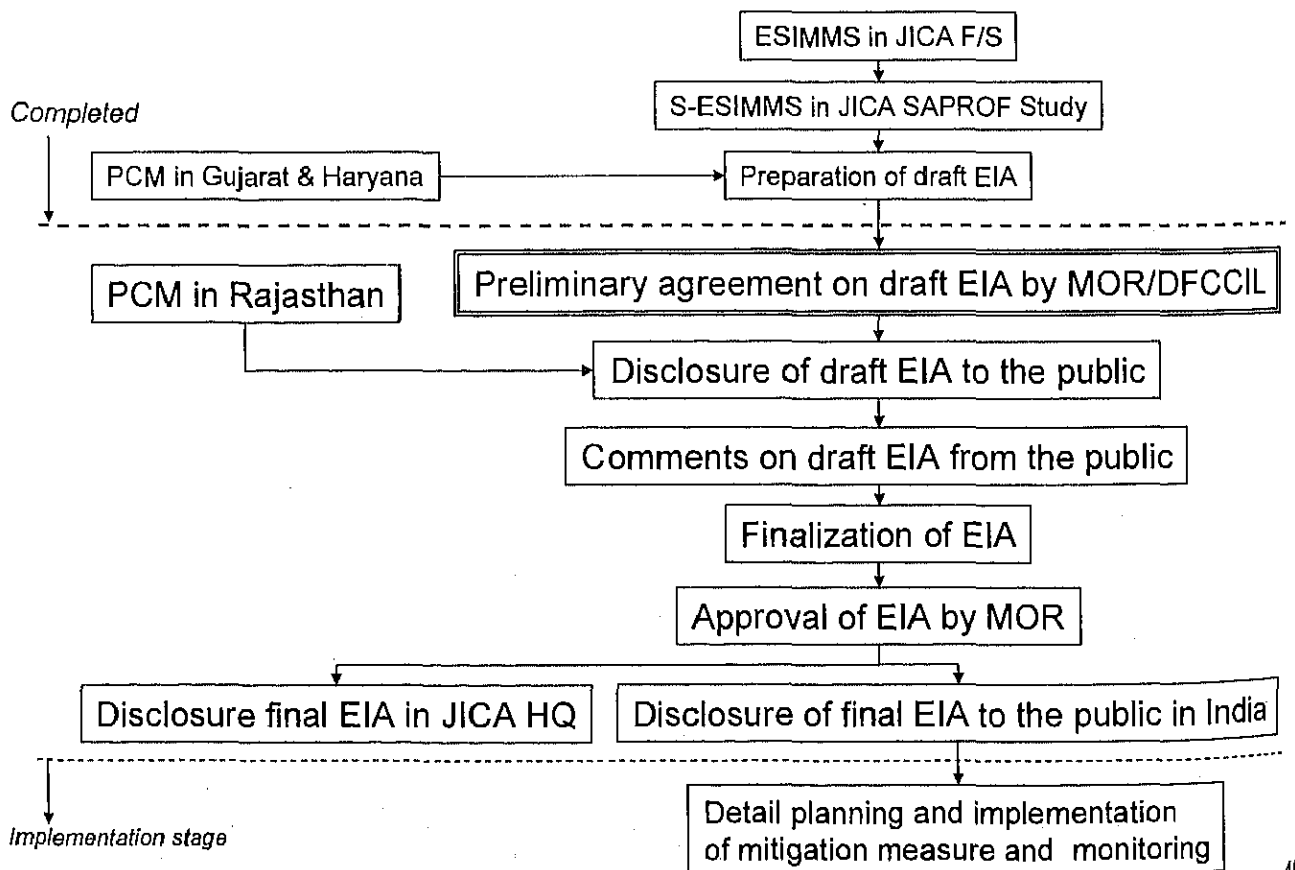
Schedule of Preparation of ESIMMS/S-ESIMMS and RRP

	Required Period	2008						2009										
		Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.		
I. Preparation of EIA (ESIMMS+S-ESIMMS)																		
(1) Completion of ESIMMSs	2.5 months	[Bar chart: Jul to Oct 2008]																
(2) Implementation of Supplemental Surveys	2.5 months	[Bar chart: Aug to Oct 2008]																
(3) Preparation of 1st draft S-ESIMMS	2.8 months	[Bar chart: Sept to Dec 2008]																
(4) PCM for EIA (Haryana, Gujarat)	3 weeks	[Bar chart: Oct 2008]																
(5) Review of 1st draft S-ESIMMS by JICA	15 days							[Bar chart: Dec 2008]										
(6) Comments on 1st draft S-ESIMMS by JICA	-							[Bar chart: Dec 2008]										
(7) Preparation of 2nd draft S-ESIMMS	10 days							[Bar chart: Dec 2008]										
(8) Presentation of ESIMMS & 2nd draft S-ESIMMS by SAPROF Team for MOR/DFCCIL's review	2 times							[Bar chart: Jan 2009]										
(9) Preparation of ESIMMS & draft S-ESIMMS	23 days							[Bar chart: Jan 2009]										
(10) PCM for EIA/RRP (Rajasthan)	2 weeks							[Bar chart: Jan 2009]										
(11) Disclosure of ESIMMS & draft S-ESIMMS in India	21 days							[Bar chart: Jan 2009]										
(12) Collection of comments/opinions on ESIMMS & S-ESIMMS	21 days							[Bar chart: Jan 2009]										
(13) Preparation of ESIMMS & Final S-ESIMMS	21 days							[Bar chart: Jan 2009]										
(14) Approval procedures of ESIMMS & S-ESIMMS	1.3 months							[Bar chart: Jan 2009]										
(15) Approval of ESIMMS & S-ESIMMS	-													[Bar chart: May 2009]				
(16) Disclosure of ESIMMS & S-ESIMMS in Japan/India	-													[Bar chart: May 2009]				
2. Preparation of RRP																		
(1) Preparation of 1st draft RRP (framework)	2.5 months	[Bar chart: Sept to Dec 2008]																
(2) Review of 1st draft RRP by JICA	1 week							[Bar chart: Dec 2008]										
(3) Comments on 1st draft RRP by JICA	-							[Bar chart: Dec 2008]										
(4) Preparation of revised 1st draft RRP	10 days							[Bar chart: Dec 2008]										
(5) Presentation of 1st draft RRP by SAPROF Team for MOR/DFCCIL's review	2 times							[Bar chart: Jan 2009]										
(6) 1st stage PCM for 1st draft RRP	2.5 months							[Bar chart: Jan 2009]										
(7) Preparation of (2nd draft) RRP	15 days							[Bar chart: Jan 2009]										
(8) Submission of (2nd draft) RRP to JICA	-							[Bar chart: Jan 2009]										
(9) Disclosure of RRP in Japan/India and further PCMs	1 month +							[Bar chart: Jan 2009]						[Bar chart: May 2009]				
(10) Publication of Notification 20A	-							[Bar chart: Jan 2009]						[Bar chart: May 2009]				

ESIMMS: Environmental and Social Impact Mitigation Measures Study (The EIA Level Study conducted under the JICA F/S)
 S-ESIMMS: Supplemental Survey for ESIMMS (Supplemental survey conducted under the JICA SAPROF)
 RRP: Rehabilitation and Resettlement Plan

3. Further ESC Activities

Further Activities on EIA



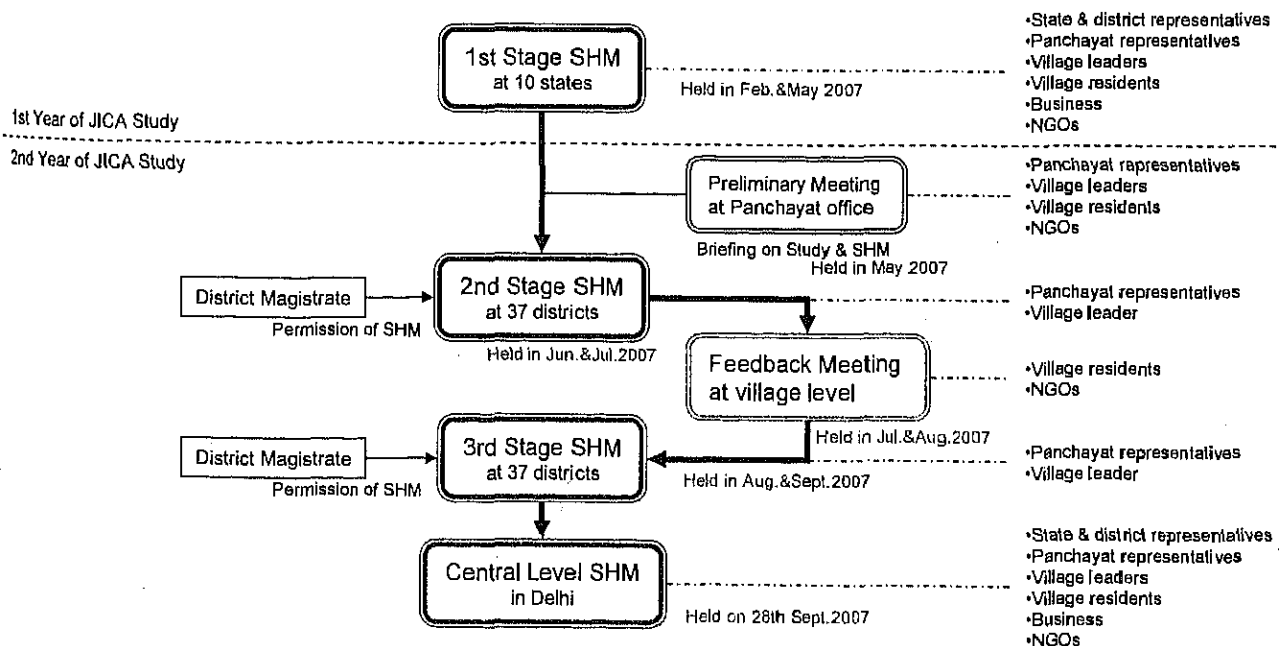
Disclosure of EIA Report

- Disclosure of Draft EIA Report
 - Disclosure at each DFCCIL office, major existing railway stations, and district authorities: total 50 sets
 - Disclosure of summary of draft EIA
 - Distributed to all project-affected villages : approx. 470 villages
 - 5 – 10 pages in vernacular languages: total 10,000 sets
 - Collection of comments/opinions
 - delivered to DFCCIL office and stations, or mailing
- Disclosure of Final EIA Report
 - Disclosure at each DFCCIL office, major existing railway stations, and district authorities: total 50 sets
 - Disclosure of summary of final EIA
 - Disclosure in JICA Headquarters (120 days before L/A)

41

PCMs for EIA and RRP

PCM for EIA in JICA F/S



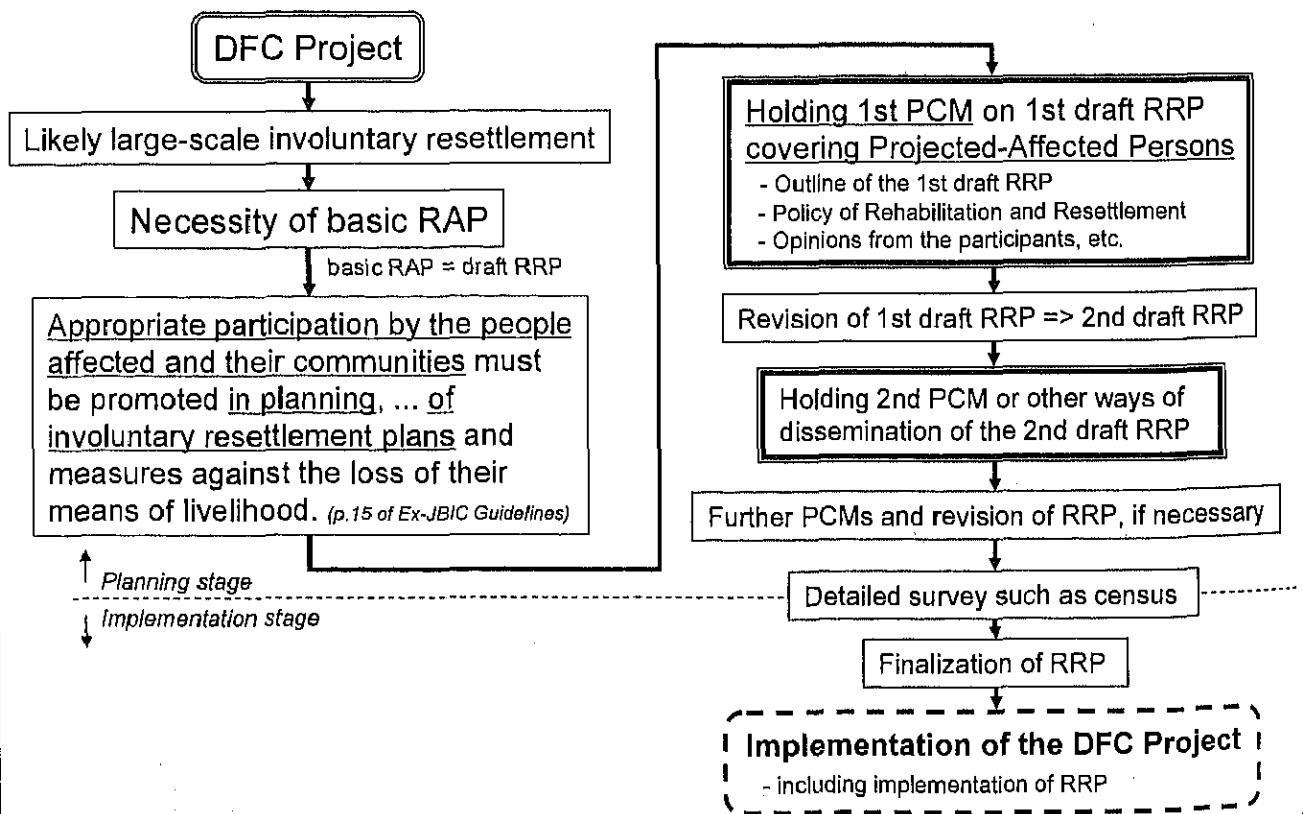
42

PCMs for EIA and RRP

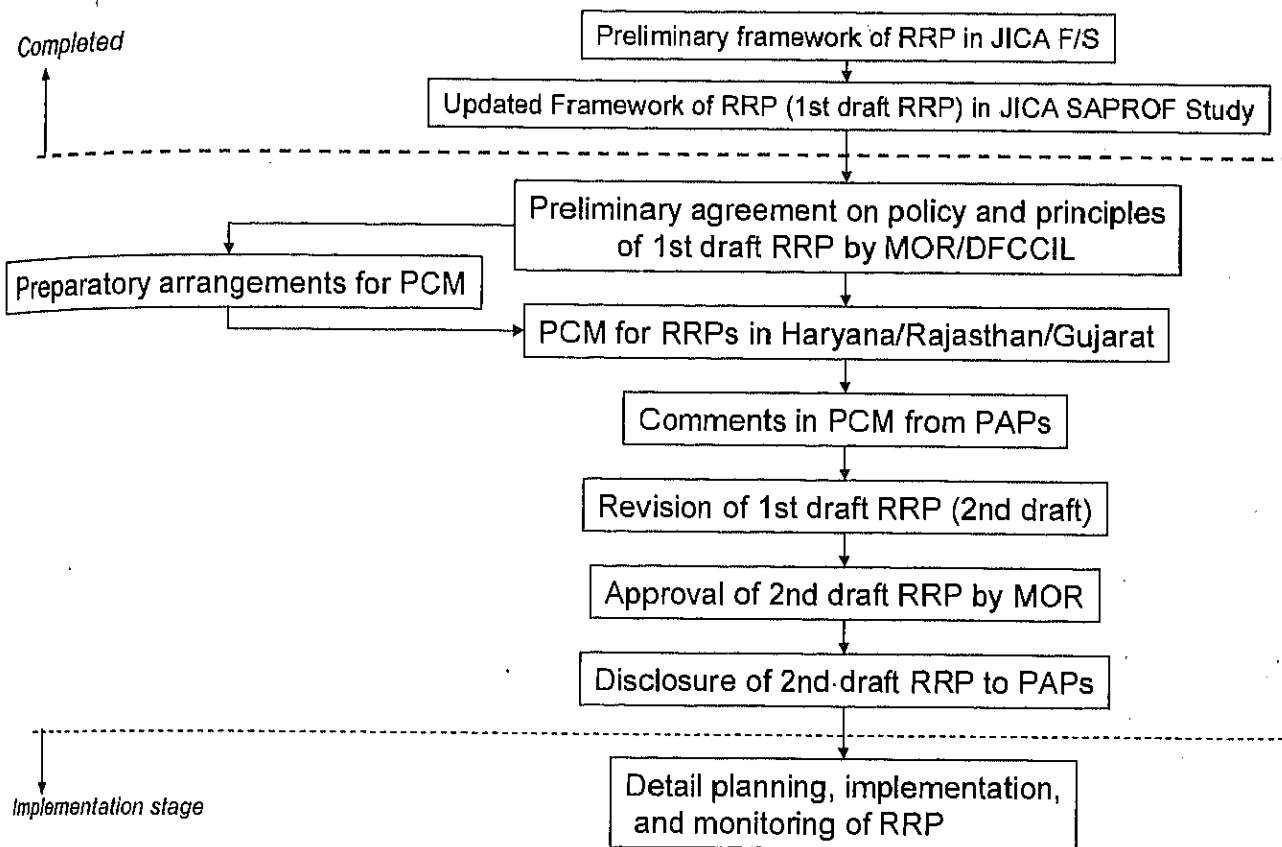
- PCM for EIA
 - New villages not covered in PCM of JICA F/S
 - District-wise PCM in 13 districts
 - Haryana and Gujarat: completed
 - Rajasthan: postponed till after the election and issuance of Notification 20A
- PCM for RRP
 - PAPs in all villages subject to land acquisition and resettlement: approx. 470 villages
 - Approx. 43 PCMs under competent authority

3. Further ESC Activities

PCM as a Preparation Process of the RRP



Further Activities on RRP



45

PCM as a Preparation Process of the RRP

- Ownership: MOR / DFCCIL
 - Participants: PAPs
 - Objectives:
 - Disseminate R&R policy to potential PAPs
 - Obtain opinion from the participants
 - Main topics in 1st PCM
 - Compensation and assistance policies under RAA 2008 and NRRP 2007 to be applied for the DFC project
 - General Principles for the Rehabilitation and Resettlement for the Project (=> pls. refer previous slides)
 - Eligibility for Compensation, Assistance, and Rehabilitation (=> pls. refer previous slides)
 - Schedule of the DFC project incl. land acquisition and R&R
- => NOT present detailed information such as name of PAPs and amount of compensation & assistance for each PAP at this stage.

46

- Responsibility of MOR/DFCCIL/Competent authority
 - Preparation of venue for PCM
 - Attendance of representatives of MOR/DFCCIL/Competent authority
 - Explanation of draft RRP to the PAPs

- Support provided by the SAPROF Study Team
 1. Preparatory works
 - (a) Preliminary arrangement for organizing schedule of PCMs
 - (b) Distribution of invitation letter to PAPs
 - (c) Preparation leaflet
 2. The day of PCM
 - (a) Assistance of preparation of venue
 - (b) Reception
 - (c) Minutes recording
 - (d) Miscellaneous work
 3. Post-PCM
 - (a) Preparation of PCM reports incl. summary of each PCM, full minutes, and participants list.

47

3. Further ESC Activities

Recommendations

- Establishing ESC Cells (EMU) in DFC to implement EMMP
- Establishing RRP Cells in DFC to implement RRP

48

Appendix 3-13 Final Draft RRP

MOR/DFCCIL

**Rehabilitation and Resettlement Plan
of the Dedicated Freight Corridor Project
for Vadodara - Rewari**

(RRP)

December 2009

**Rehabilitation and Resettlement Plan
of the Dedicated Freight Corridor Project
for Vadodara - Rewari
(RRP)**

S.No.	Chapters	Contents	Page Nos.
1.	Chapter – 1	Introduction	1-7
2.	Chapter – 2	Scope of Land Acquisition and Resettlement	1-8
3.	Chapter – 3	Measures to Minimize Land Acquisition and losses	1-27
4.	Chapter – 4	Socio-Economic Features of the Project-Affected persons	1-20
5.	Chapter – 5	Resettlement Policy and Entitlements	1-11
6.	Chapter – 6	Resettlement Site	1
7.	Chapter – 7	Income Restoration	1-4
8.	Chapter – 8	Institutional Arrangements	1-3
9.	Chapter – 9	Implementation Schedule	1-3
10.	Chapter – 10	Participation and Consultation	1-10
11.	Chapter – 11	Monitoring and Supervision	1-5
12.	Chapter – 12	Grievance Redress Mechanism	1-4
13.	Chapter – 13	Cost Estimate	1-4
14.	Chapter – 14	Further Activities	1

ABBREVIATIONS

BPL	- Below Poverty Line
BSR	- Basic Schedule of Rates
COI	- Corridor of Impact
CPR	- Common Property Resources
CSO	- Civil Society Organisation
CSR	- Common Schedule of Rates
DC	- District Collector
DDP	- Desert Development Programme
DFC	- Dedicated Freight Corridor
DFCCIL	- Dedicated Freight Corridor Company India Limited
GOI	- Government of India
GRC	- Grievance Redress Committee
JBIC	- Japan Bank for International Cooperation
JICA	- Japan International Cooperation Agency
LA	- Land Acquisition
M&E	- Monitoring and Evaluation
MLA	- Member of Legislative Assembly
MOR	- Ministry of Railways
NGO	- Non Governmental Organization
NRPP	- National Rehabilitation and Resettlement Policy
OBC	- Other Backward Class
ODA	- Official Development Assistance
PAF	- Project Affected Family
PAH	- Project Affected Household
PAP	- Project Affected Person
PVAC	- Property Valuation Assessment Committee
R&R	- Rehabilitation and Resettlement
RAA	- Railways (Amendment) Act
ROB	- Road over Bridge
ROW	- Right-of-Way
RRO	- Resettlement and Rehabilitation Officer
RRP	- Rehabilitation and Resettlement Plan
RRS	- Resettlement and Rehabilitation Specialist
RUB	- Road under Bridge
SACS	- State AIDS Prevention and Control Society
SC	- Scheduled Caste
SIA	- Social Impact Assessment
ST	- Scheduled Tribe
ToR	- Terms of Reference

Definition of Terms

Following definitions will be applicable for this draft RRP unless otherwise stated specifically.

"Administrator for Rehabilitation and Resettlement" means an officer not below the rank of District Collector in a State appointed for the purpose of rehabilitation and resettlement of affected persons (NRRP 2007);

"agricultural labourer" means a person primarily resident in the affected area who does not hold any land in the affected area but who earns his livelihood principally by manual labour on agricultural land therein immediately before such declaration and who has been deprived of his livelihood;

"agricultural land" includes lands being used for the purpose of-

- i) agriculture or horticulture;
- ii) dairy farming, poultry farming, pisciculture, breeding of livestock or nursery growing medicinal herbs;
- iii) raising of crops, grass or garden produce; and
- iv) land used by an agriculturist for the grazing of cattle, but does not include land used for cutting of wood only (NRRP 2007)

"appropriate Government" means,-

- i) in relation to the acquisition of land for the purposes of the Union, the Central Government;
- ii) in relation to a project which is executed by the Central Government agency or undertaking or by any other agency on the orders or directions of the Central Government, the Central Government;
- iii) in relation to the acquisition of land for purposes other than (i) and (ii) above, the State Government; and
- iv) in relation to the rehabilitation and resettlement of persons involuntarily displaced due to any other reason, the State Government (NRRP 2007);

"BPL family": The below poverty line (BPL) families shall be those as defined by the Planning Commission of India from time to time and included in a BPL list for the time being in force (NRRP 2007);

"Census": is a data collection technique of completing enumeration of all PAPs and their assets through household questionnaire. Census's objectives are (i) to prepare a complete inventory of PAPs and their assets as a basis for compensation, (ii) to identify non-entitled persons, and (iii) to minimize impact of later influx of "outsiders" to project area.

"Commissioner for Rehabilitation and Resettlement": means the Commissioner for Rehabilitation and Resettlement appointed by the State Government not below the rank of Commissioner or of equivalent rank of that Government (NRRP 2007);

"Compensation": means payment in cash or in kind to replace losses of land, housing, income, and other assets caused by a project.

"Cut-off date": This refers to the date prior to which the project affected family was in possession of the immovable or movable property within the affected zone. For non-titleholders the cut-off date will be the date on which the census is carried out in the affected zone. The cut-off date for land acquisition purpose is the date on which the Notification is issued as per Section 20A of the Railways (Amendment) Act, 2008 to the titleholder.

"DDP block" means a block identified under the Desert Development Programme of the Government of India (NRRP 2007);

"Entitlement": is defined as the right of project affected persons (PAPs) to receive various types of compensation, relocation assistance, support for income restoration in accordance with the nature of their loss.

"Entitlement Matrix" is a table to define different nature of PAPs' losses and compensation packages and other relocation assistance that PAPs can receive.

"family" includes a person, his or her spouse, minor sons, unmarried daughters, minor brothers, unmarried sisters, father, mother and other relatives residing with him or her and dependent on him or her for their livelihood; and includes *"nuclear family"* consisting of a person, his or her spouse and minor children (NRRP 2007);

"Grievance Redress procedures": set out the time frame and mechanisms for resolutions of complaints about resettlement from PAPs. Grievance redress can be provided through informally-constituted local committees with representation from key stakeholder groups. Grievances can also be addressed through formal channels, with unresolved grievances being dealt with at progressively higher levels.

"holding" means the total land held by a person as an occupant or tenant or as both (NRRP 2007);

"khatedar" means a person whose name is included in the revenue records of the parcel of land under reference (NRRP 2007);

"land acquisition" or **"acquisition of land"** means acquisition of land under the Land Acquisition Act, 1894 (1 of 1894), as amended from time to time, or any other law of the Union or a State for the time being in force (NRRP 2007) (Although the definition in NRRP 2007 is the above, the Land Acquisition Act, 1894 is not be applied for the DFC project, but Railways (Amendment) Act, 2008 as per its prescription as the special railway project.);

"marginal farmer" means a cultivator with an un-irrigated land holding up to one hectare or irrigated land holding up to half hectare (NRRP 2007);

"non-agricultural labourer" means a person who is not an agricultural labourer but is primarily residing in the affected area who does not hold any land under the affected area but who earns his livelihood principally by manual labour or as a rural artisan immediately before such declaration and who has been deprived of earning his livelihood principally by manual labour or as such artisan in the affected area;

"Non-titleholder": Affected persons/families with no legal title to the land, structures and other assets adversely affected by the project. Non-titleholders include encroachers, squatters, etc.

"notification" means a notification published in the Gazette of India or, as the case may be the Gazette of a State (NRRP 2007);

"occupiers" means members of the Scheduled Tribes in possession of forest land prior to the 13th day of December, 2005 (NRRP 2007);

"Ombudsman" means the person appointed under paragraph 8.3 of the RRP for redressal of grievances (NRRP 2007);

"prescribed" means unless otherwise specified, prescribed by guidelines or orders issued by the Central Government under the RRP (NRRP 2007);

"Project": Refers to the Dedicated Freight Corridor project (DFC project).

"Project Affected Persons (PAPs)": indicates any person being as it may an individual, a household, a firm or a private or public who, on account of the execution of the project, or any of its components or sub-projects or parts thereof would have their right, title or interest in any house, land or any other asset acquired or possessed, in full or in part; or business, occupation, work, place of residence or habitat adversely affected; or standard of living adversely affected, including the follows.

- i) a family whose primary place of residence or other property or source of livelihood is adversely affected by the acquisition of land for a project or involuntary displacement for any other reason; or
- ii) any tenure holder, tenant, lessee or owner of other property, who on account of acquisition of land (including plot in the *abadi* or other property) in the affected area or otherwise, has been involuntarily displaced from such land or other property; or
- iii) any agricultural or non-agricultural labourer, landless person (not having homestead land, agricultural land, or either homestead or agricultural land), rural artisan, small trader or self-employed person; who has been residing or engaged in any trade, business, occupation or vocation, and who has been deprived of earning his livelihood or alienated wholly or substantially from the main source of his trade, business, occupation or vocation because of the acquisition of land in the affected area or being involuntarily displaced for any other reason;

Rehabilitation (Income restoration/Livelihood restoration): means the process to restore income earning capacity, production levels and living standards in a longer term.

Replacement cost/value: Replacement cost is the cost of purchasing comparable assets elsewhere by the affected person in lieu of the acquired land, buildings, structures, and other immovable assets, etc. The compensation awarded for the acquired land and other amenities, buildings, etc. should be adequate to enable purchase of comparable assets elsewhere by the affected person. Wherever compensation is not adequate enough to buy replacement lands/buildings, the DFCCIL and Competent Authority shall provide other assistance to overcome the shortfall.

- (i) For agricultural land, it is the pre-project or pre-displacement, whichever is higher, market value of land of equal productive potential or use located in the vicinity of the affected land, plus the cost of preparing the land to levels similar to those of the affected land, plus the cost of any registration and transfer taxes.
- (ii) For land in urban areas, it is the pre-displacement market value of land of equal size and use, with similar or improved public infrastructure facilities and services and located in the vicinity of the affected land, plus the cost of any registration and transfer taxes.
- (iii) For houses and other structures, it is the market cost of the materials to build a replacement structure with an area and quality similar to or better than those of the affected structure, or to repair a partially affected structure, plus the cost of transporting building materials to the construction site, plus the cost of any labour and contractors' fees, plus the cost of any registration and transfer taxes.

In determining the replacement cost, depreciation of the asset and the value of salvage materials are not taken into account, nor is the value of benefits to be derived from the project deducted from the valuation of an affected asset.

"small farmer" means a cultivator with an un-irrigated land holding up to two hectares or with an irrigated land holding up to one hectare, but more than the holding of a marginal farmer (NRRP 2007).

Socio-economic survey: is carried out in order to prepare profile of PAPs and to prepare for Basic Resettlement Plan. About 20 percent sample of PAPs population was surveyed through household questionnaire under the JICA SAPROF Study in 2008 and 2009. The survey result is used (i) to assess incomes, identify productive activities, and plan for income restoration, (ii) to develop relocation options, and (iii) to develop social preparation phase for vulnerable groups.

"Tenant": A person who holds land under another person and is or (but for a special contract) would be liable to pay rent for that land to other person and includes the predecessor and successor-in-interest of such person but does not include mortgage of the rights of a landowner or a person to whom holding has been transferred or an estate or holding has been let in farm for the recovery of an arrear of land revenue or of a sum recoverable as such an arrear or a person who takes from Government a lease of unoccupied land for the purpose of subletting it.

"Titleholder": A PAP/PAF who has legal title to land, structures and other assets in the affected zone.

"Vulnerable Group": This includes Scheduled Caste families, Scheduled Tribe families, small and marginal farmers; families headed by women/female, disabled, handicapped, orphans, destitute, below BPL, etc. Vulnerable groups would also include those farmers who (after acquisition of land) become small/marginal farmers. For such cases, total land holding of the landowner in the particular revenue village will be considered.

"Wage Earner": Wage earners are those whose livelihood would be affected due to the displacement of the employer.

CHAPTER 1 INTRODUCTION

1.1 PROJECT SCOPE

1.1.1 Project Background¹

(1) Railway's Role in Transport System of India

The Indian Government sanctioned the 11th Five-Year Plan (2007 - 2012) and issued in December, 2006. The Working Group Paper for the railway sector indicates enhancing of the transport capacity by construction of the Dedicated Freight Corridor (DFC), and plan to reinforce the rolling stock fleet by procurement of locomotives amounting to 1,800 units within a five year period. The development of logistic centres and management of freight terminal operation by public-private-partnership (PPP) is also recommended as areas of development in the freight transport business.

The railway traffic volume continues to increase year by year, while its share in transport of passenger and freight transport is decreasing. This is due to the improvements of the road network, and the growth in vehicle ownership, and the fact that the railway traffic volume is now approaching the capacity limit of rail network facilities. The railway transport capabilities need to be reinforced to increase its share within the transport sector. The enhancement of customer oriented transport services is also required for the railway sector to survive the competition with the road transport.

(2) Social and Economic Situations in DFC Traversing Regions

The proposed new east-west freight line runs between the east coast state of Maharashtra (capital Mumbai) to the east coast state of West Bengal (capital Kolkata), and passes through a total of 10 states. These 10 states contain a total population of 620 million people. The west coast region, centred on the city of Mumbai (Maharashtra and Gujarat states) is served by several deep-sea ports, and is a thriving centre of industry and commerce. The region centred on the capital city of Delhi is densely populated, and is a developing centre of industry, commerce, and agriculture. The northern region includes the state of Punjab, blessed with fertile soils and known as the "bread basket" of India, and the district of Ludhiana, a fast industrializing hub of manufacturing and information technology. The east coast region (West Bengal State), centred on the city of Kolkata, has achieved remarkable economic growth over recent years. Adjoining West Bengal on its inland border is the state of Jharkhand, which is developing as a centre for heavy industries such as steel mills, which rely on the state's rich coal and iron ore resources.

(3) Present Issues in Railway Freight Transport

Except for block train transport for bulk freight, the transport service provided by railways alone cannot complete the whole transport service. The rail transport requires connectivity to ports, freight collection facilities, inland container depots (ICDs), and connection to road transport. The containerisation of freight transport is presumed to be a global trend, making it a large business target of the Project. The container transport is based on intermodal transport and it realises the smooth transfer of freight. However for realisation of the enhancement of railway transport services of the container transport, it is imperative that the freight handling facility and collaboration with other modes of transport are well established. It shall be noted that improvement of the intermodal system is to secure the competitiveness of the railways against road transport.

Many sections of the Indian Railways network deploy an Absolute Block System (ABS) which allows only a single train to operate between two consecutive stations. This is a major factor hindering the

¹ The section referred to the "Volume 1, Executive Summary of the Final Report for the Feasibility Study on the Development of Dedicated Freight Corridor for Delhi-Mumbai and Ludhiana - Sonnagar in India, IICA, October 2007"

increase in number of trains that can operate on the network (line capacity). Transport capacities of the network need to be upgraded by introducing automatic signalling and railway traffic control systems. In addition, the operation of freight train services is not based on scheduled timetables. In order to improve the quality of freight train services, it is imperative to introduce a modernised train operation management system that would facilitate transport services by scheduled freight trains.

1.1.2 Project Objectives

Dedicated Freight Corridor Corporation India Limited (DFCCIL) under Ministry of Railways, Government of India is an executive agency for the development of DFC. Regarding the western corridor of the DFC between Delhi and Mumbai, state boundaries through which the DFC traverses include Delhi, Haryana, Rajasthan, Gujarat and Maharashtra. The prime objective of the DFC project is to facilitate speedier and smooth transportation of bulk goods without any interruption between the two metropolises Delhi and Mumbai and their respective hinterlands at lesser transport cost and lesser time. The project includes construction of railway track both parallel to the existing railway track as well as bypasses, ROB, RUB, etc. It is anticipated that the construction of DFC would induce economic development, generate employment and above all improve economic integration of regions in the country with improved links among major economic and trade centres.

1.1.3 Project Scope

As phased implementation of the DFC project, DFC section between Vadodara and Rewari was determined as first priority section under the Feasibility Study on the Development of Dedicated Freight Corridor for Delhi-Mumbai and Ludhiana - Sonnagar in India, supported by JICA in 2007.

Location map of the project area is shown in Figure 1-1. Total length of the Section between Vadodara and Rewari is approximately 920 km. It covers from Section 5 to Section 15 in the western corridor of the DFC. Total number of section is 11. The area consists of three states like Gujarat, Rajasthan, and Haryana with 17 districts in total. Location Map of whole sections is presented in Figure 1-2.

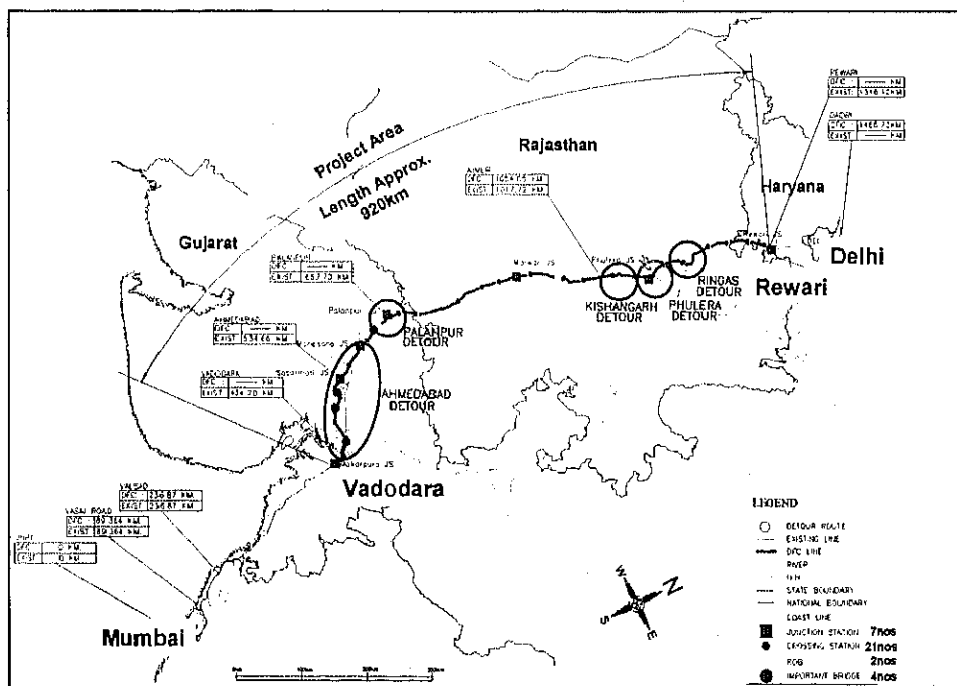


Figure 1-1 Project Location Map

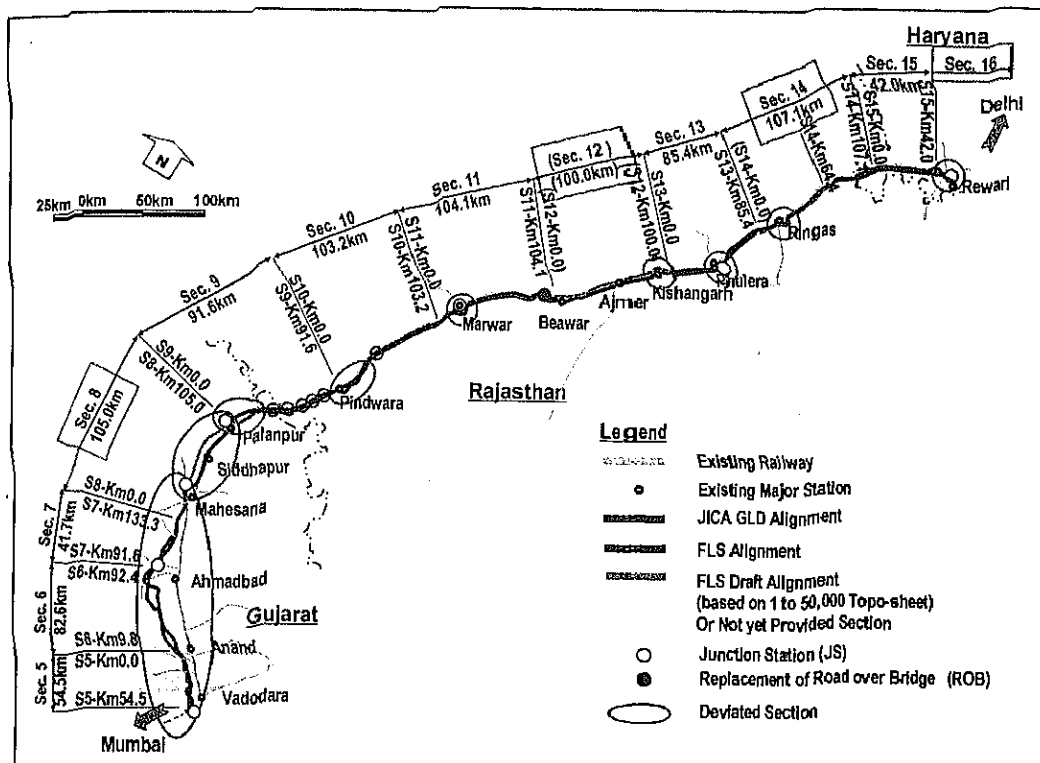


Figure 1-2 Location Map of Whole Sections

1.2 OBJECTIVES OF REHABILITATION AND RESETTLEMENT PLAN

At the same time the implementation of the project, adverse social impacts would occur, especially for land owners whose land would be acquired and those who would lose sources of livelihood. Obviously the land requirement in the parallel sections (i.e., along the existing railway track) would be much less than the land requirement for detour section. Contrarily, the number of structures affected would be more along the parallel section than that in the detour section. The broad adverse impacts envisaged due to the implementation of the project are as follows:

- Large scale land acquisition;
- Impacts on structures used for residential, commercial, and other purposes;
- Impacts on livelihood of land owners, those dependent on land owners, and businessmen whose land and business establishments would be affected by the DFC;
- Common property resources such as religious places, graveyard, cremation places, water resources, etc;
- Severance of social network due to difficulty in accessibility etc.

The draft Rehabilitation and Resettlement Plan (RRP) has been formulated for a priority stretch of the western corridor of DFC between the Rewari (Haryana) to Vadodara (Gujarat). It outlines the objectives, policy principles and procedures for land acquisition, compensation and resettlement and rehabilitation assistances for project affected persons (PAPs). The RRP including entitlements are based on The Railways (Amendment) Act, 2008, and the National Rehabilitation and Resettlement Policy, 2007 (NRRP 2007) and Japan Bank for International Cooperation (Ex-JBIC) Guidelines for Confirmation of Environmental and Social Considerations, April 2002 (Ex-JBIC Environmental

Guideline). This draft RRP will govern all cases of rehabilitation and resettlement due to DFC project from Rewari to Makarpura near Vadodara. The draft RRP may also be adopted as it is, for the remaining sections of the DFC project and any other projects whatsoever as it is or with modifications by the executive agency.

1.3 LEGAL FRAMEWORK

Applicable laws on land acquisition and resettlement for the DFC project are mainly the Railways (Amendment) Act, 2008 and National Rehabilitation and Resettlement Policy, 2007. In addition, the JBIC Guidelines for Confirmation of Environmental and Social Considerations, 2002 (Ex-JBIC guidelines) is adopted since the Japanese ODA loan will be utilized for the implementation of the project. In this section, provisions and requirements under these laws and guidelines are summarised as well as examining the gap between Indian laws and Ex-JBIC guidelines to be filled in preparation of the RRP policy for the project.

1.3.1 Railways (Amendment) Act, 2008

The Railways Act, 1989, an Act to consolidate and amend the law relating to Railways was amended in 2008. This Act is may be called the Railways (Amendment) Act, 2008 (RAA 2008). The RAA 2008 has been prepared for the execution of a special railway project, which means a project, notified as such by the Central Government from time to time, for providing national infrastructure for a public purpose in a specified time-frame, covering one or more states or the Union territories.

The RAA 2008 provides land acquisition process and procedures for the special railway project such as DFC project, including valuation method of land compensation. The amendments include insertion of following clauses:

- 7A (competent authority) - means any person authorized by the central Government by notification, to perform the functions of the competent authority for such area as may be specified in the notification;
- 29A (person interested) – (i) all persons claiming an interest in compensation to be made on account of the acquisition of land under this Act; (ii) tribals and other traditional forest dwellers, who have lost any traditional rights recognized under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006; (iii) a person interested in an easement affecting the land; and (iv) persons having tenancy rights under the relevant State laws;
- 37A (special railway project) – means a project, notified as such by the Central Government from time to time, for providing national infrastructure for a public purpose in a specified time-frame, covering one or more States or the Union territories;
- Chapter IVA – Land Acquisition for a Special Railway Project.

The main elements of Chapter IVA are shown in the following table:

Section	Description
20A Power to acquire land, etc	Declaration of intention to acquire land required for execution of a special railway project. This is the first notification and empowers the competent authority to cause the substance of the notification.
20D Hearing of objections, etc	Objections must be made by interested persons within 30 days from the date of publication of the notification under sub-section (1) of section 20A.
20E Declaration of acquisition	On publication of the declaration under sub-section (1), the land shall vest absolutely in the Central Government free from all encumbrances.

20F	Determination of amount payable as compensation	Amount to be paid as compensation shall be determined by an order of the competent authority. The competent authority shall make an award under this section within a period of one year from the date of publication of the declaration.
20G	Criterion for determination of market value of land	-
20I	Power to take possession	To surrender or deliver possession thereof to the competent authority or any person duly authorized by it in this behalf within a period of 60 days of the service of the notice.
20N	Land Acquisition Act 1 of 1894 not to apply	Nothing in the LA Act, 1894 shall apply to an acquisition under this Act.
20O	Application of the National Rehabilitation and Resettlement Policy (NRRP), 2007 to persons affected due to land acquisition	The Provisions Of The NRRP, 2007 For The Project Affected Families, Notified By The Government Of India In The Ministry Of Rural Development vide number F.26011/4/2007-LRD, dated the 31 st October, 2007, shall apply in respect of acquisition of land by the Central Government under this Act.

A flowchart of the land acquisition process is shown below.

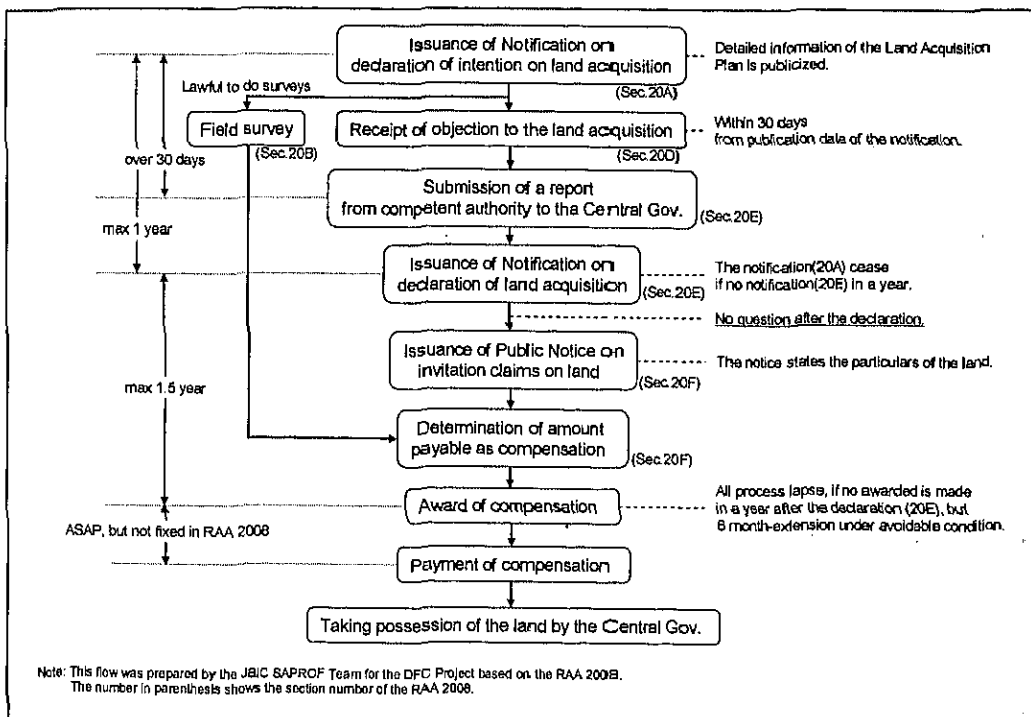


Figure 1-3 Flowchart of the Land Acquisition Process under Railways (Amendment) Act, 2008

1.3.2 National Rehabilitation and Resettlement Policy, 2007

As per Section 20O of the Railways (Amendment) Act, 2008, the National Rehabilitation and Resettlement Policy, 2007 (NRRP 2007) is adopted for the DFC Project.

The National Rehabilitation & Resettlement Policy, 2007 for Project Affected Families (PAFs) have been prepared by the Department of Land Resources, Ministry of Rural Development, and

Government of India. The policy stipulates the minimum benefits to be ensured for persons displaced due to acquisition of land for public purposes. The objectives of the Policy are:

- (a) to minimize displacement and to identify the non-displacing or least-displacing alternatives;
- (b) to plan the Resettlement and Rehabilitation of project affected families (PAFs), or project affected households (PAHs), including tribal and vulnerable households;
- (c) to provide improved standard of living to PAFs or PAHs; and
- (d) to facilitate a harmonious relationship between DFCCIL/CA and PAFs.

The Policy is applicable to projects displacing 400 or more families *en masse* in plain areas, or 200 or more families *en masse* in tribal or hilly areas, Desert Development Programme (DDP) blocks, areas mentioned in Schedule V and Schedule VI of the Constitution of India. However, the basic principles of policy can be applied to rehabilitation and resettlement of PAFs regardless of the number of PAFs. The policy provides specific measures for vulnerable and poor groups. As of now there is no law on rehabilitation and resettlement in the country. The Rehabilitation and Resettlement Bill 2007 (Bill No. 98 of 2007) has been introduced in Lok Sabha (parliament of Indian government).

1.3.3 JBIC Guidelines for Confirmation of Environmental and Social Considerations

The JBIC Guidelines for Confirmation of Environmental and Social Considerations, April 2002 (Ex-JBIC Guidelines) apply commonly to Ex-JBIC's International Financial Operations and Overseas Economic Cooperation Operations. The environmental and social considerations refer not only to the natural environment, but also to social issues such as involuntary resettlement and respect for the human rights of indigenous peoples.

The objective of the Guidelines is to encourage project proponents seeking funding from JICA to implement appropriate environmental and social considerations in accordance with the Guidelines. In doing so, it endeavours to ensure transparency, predictability and accountability in its confirmation of environmental and social considerations.

One of the basic principles of Guidelines regarding confirmation of environmental and social considerations is that the responsibility for environmental and social considerations for the project shall be that of the project proponent. JICA confirms environmental and social considerations by undertaking screening, environmental review, and monitoring and follow-up.

Environmental and social considerations required for funded projects cover underlying principles, examination of measures, scope of impact to be examined, compliance with laws, standards and plans, social acceptability and social impacts, involuntary resettlement, indigenous peoples and monitoring.

The following are summary of requirements under the Guidelines.

1) Social acceptability and social impacts

- Projects must be adequately coordinated so that they are accepted in a manner that is socially appropriate to the country and locality in which the project is planned. For projects with a potentially large environment impact, sufficient consultations with stakeholders, such as local residents, must be conducted via disclosure of information from an early stage where alternative proposals for the project plans may be examined. The outcome of such consultations must be incorporated into the contents of the project plan; and
- Appropriate consideration must be given to vulnerable social groups, such as women, children, the elderly, the poor, and ethnic minorities who are susceptible to environmental and social impact and who may have little access to the decision-making process within society.

2) Involuntary resettlement

- Involuntary resettlement and loss of means of livelihood are to be avoided where feasible, exploring all viable alternatives. When, after such examination, it is proved unfeasible, effective measures to minimize impact and to compensate for losses must be agreed upon with the people who will be affected;
- People to be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported by project proponents, etc., in a timely manner. The project proponents, etc must make efforts to enable people affected by project, to improve their standard of living, income opportunities and production levels, or at least to restore them to pre-project levels. Measures to achieve this may include: providing land and monetary compensation for losses (to cover land and property losses), supporting the means for an alternative sustainable livelihood, and providing expenses necessary for relocation and re-establishment of community at relocation sites; and
- Appropriate participation by the people affected and their communities must be promoted in the planning, implementation and monitoring of involuntary resettlement plans and measures against the loss of their means of livelihood.

3) Indigenous peoples

- When a project may have adverse impact on indigenous peoples, all of their rights in relation to land and resources must be respected in accordance with the spirit of the relevant international declarations and treaties. Efforts must be made to obtain the consent of indigenous peoples after they have fully informed.

1.3.4 Gaps between RAA 2008/NRRP 2007 and Ex-JBIC Guidelines

Gaps between RAA 2008/ NRRP 2007 as national laws in India to be applied for the DFC project and Ex-JBIC Guidelines are examined by comparing the clauses in these documents as shown in **Error! Reference source not found.** In order to bridge some gaps found here, compensation and rehabilitation/resettlement policy for the DFC project are examined and determined in the subsequent chapters.

CHAPTER 2 SCOPE OF LAND ACQUISITION AND RESETTLEMENT

2.1 LAND ACQUISITION

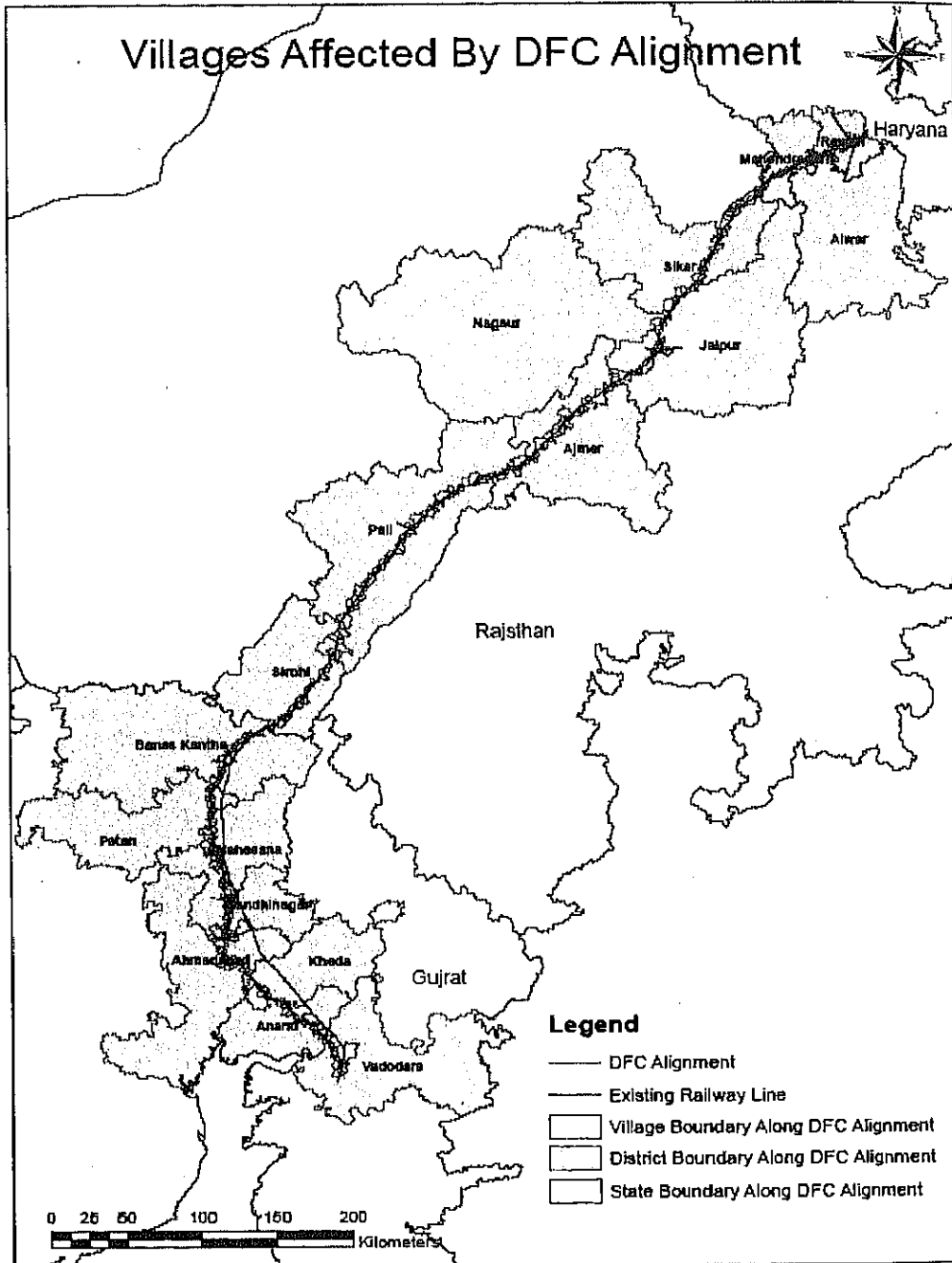
Alignment for the Western Corridor of DFC Project between Vadodara and Rewari has been narrowed down 3 states and 17 districts with 470 villages. The land acquisition is required for construction of the Project in full stretch of length which is approximately 920 km. Broadly, two kinds of land will be required for this project, one within ROW and two, in detour area. Detailed Land Acquisition Plan for this area is under preparation. Therefore, total land area to be required for the Project has been calculated based on approximate boundaries of ROW based on the available FLS drawing overlaying on the GIS. Total land to be required for the Project is around 4,880 ha. Since the total land area calculated includes both private and public lands, total land to be acquired for the Project which is mainly private land will be less land area than that of total land area to be required. The land area to be acquired for the Project will be known, when the detailed Land Acquisition Plans become available. District-wise land acquisition details are given in Table 2-1 and villages affected by the Project is shown in Figure 2-1.

Table 2-1 District-wise Land Details for the Project

	Villages alignment through	DFC passes	Length of the Parallel Section (km)	Length of the Detour Section (km)	Total Length (km)	Total Land Area (ha)*
GUJARAT						
Vadodara		16	0.0	28.3	28.3	190
Anand		29	0.0	45.5	45.5	277
Kheda		18	0.0	26.4	26.4	135
Ahmedabad		20	0.0	43.7	43.7	221
Gandhinagar		16	0.0	27.0	27.0	116
Mahesana		43	0.0	54.5	54.5	374
Patan		13	0.0	34.1	34.1	244
Banaskantha		34	16.0	44.0	60.0	379
Sub-total		189	16.0	303.5	319.5	1,936
RAJASTHAN						
Sirohi		27	65.5	0.0	65.5	305
Pali		73	195.8	0.0	195.8	954
Ajmer		42	95.3	3.9	99.2	380
Jaipur		39	86.8	4.7	91.5	468
Nagaur		2	3.3	0.0	3.3	10
Sikar		35	78.9	0.0	78.9	461
Alwar		2	2.5	0.0	2.5	9
Sub-total		220	528.1	8.6	536.7	2,587
HARYANA						
Mahendragarh		34	46.4	0.0	46.4	175
Rewari		27	17.6	19.5	37.1	180
Sub-total		61	64.0	19.5	83.5	355
Total		470	608.1	331.6	939.7	4,877

Note: * - within ROW

** - It includes existing Ministry of Railway's Land within ROW.



Source: JICA SAPROF Study, 2008

Figure 2-1 Villages Affected By DFC Alignment

2.2 PROJECT-AFFECTED STRUCTURE SURVEY

A Project-Affected Structure Survey was carried out between July and September 2008 to identify structures to be relocated as well as identify the Project-Affected Families to be resettled

in the land acquisition for the Project, based on design of the alignment prepared by DFCCIL. A structured questionnaire as shown in Attachment 2-1 was used to collect basic information on project-affected structure and families for adequate understanding of impacts in order to develop mitigation measures and basic resettlement action plan for the PAPs. The objective of the survey was to generate an inventory of project-affected structures and families with basic socio-economic information such as type of affected structure, type of ownership, market value of land and/or structure, social profile of the affected people, and poverty status. The major findings and magnitude of impacts are shown in the following.

2.2.1 Survey Method

The survey method of the Project-Affected Structure Survey is explained as follows:

(1) Identification of administrative units

As a first step, all administrative units such as districts, sub-districts and villages through which proposed alignment of the DFC project traverses were identified.

(2) Identification of Structures

During the survey, some sections of the DFC alignment were still under examination and boundaries of the right-of way (ROW) have not been fixed. Therefore, the following rule was applied to identify the project-affected structures.

1) Parallel Section

Broadly, sections between Khori station in Haryana (Section 15) and Iqbalgarh in Gujarat (Section 9) are parallel section. In these sections, land will be acquired on eastern side of the existing track. Therefore, in the parallel sections, all structures which are located on the 50 m-width stretch from centerline of existing last track to eastern side were identified as project-affected structures.

2) Detour section

In detour sections, width of ROW was considered at 70 m for survey with 35 m-width from centre of both sides of the alignment.

2.3 CATEGORIES OF PROPERTIES AFFECTED WITHIN ROW

Based on results of the survey, number of residential and commercial structures as well as affected community and religious properties and squatters structures built within the ROW of FLS drawing for both parallel and detour sections are identified as more actual project-affected structures. On the other, in some sections where the FLS drawings are not available as Section 15 (910 km to 939.4 km) and Section 9 (278.2 km to 302.2 km) and Section 8 (230.2 km to 278.2 km), 70 m for the detour section and 50 m for parallel section were applied for width of the ROW. Due to change in the alignment near Madar area in Ajmer district, and as well as Patan district, additional survey has been carried out in the month of March 2009 and the survey results are also included in the following subsections.

District-wise of impacted properties under various categories are shown in Table 2-2.

Table 2-2 Number of Project-Affected Structures to be Relocated

	Residential	Commercial	Residential -cum- commercial	Community	Religious	Government	Others	Total
Gujarat								
Vadodara	0	0	0	0	0	0	1	1
Anand	23	0	1	0	2	0	4	30
Kheda	8	1	0	0	0	0	0	9
Ahmedabad	0	0	0	0	0	0	0	0
Gandhinagar	2	1	0	0	0	0	1	4
Mahesana	3	0	0	0	0	0	0	3
Patan	23	0	0	0	1	0	4	28
Banaskantha	52	0	1	0	2	0	1	56
Sub-total	111	2	2	0	5	0	11	131
Rajasthan								
Sirohi	9	0	0	0	2	24	6	41
Pali	92	18	4	1	23	114	30	282
Ajmer	281	51	17	7	24	58	44	482
Jaipur	55	33	16	2	9	7	23	145
Nagaur	0	0	0	0	0	0	0	0
Sikar	113	56	30	5	22	15	32	273
Alwar	7	0	0	0	0	0	0	7
Sub-total	557	158	67	15	80	218	135	1,230
Haryana								
Mahendragarh	178	69	19	12	14	22	26	340
Rewari	16	22	8	5	3	3	4	61
Sub-total	194	91	27	17	17	25	30	401
Total	862	251	96	32	102	243	176	1,762

Note: The above figures are related to both fully and partially affected structures.

Residential cum commercial structures means that some people have their residential structures close to the road and use the front part for business purpose.

Source: Project-Affected Structure Survey, 2008 and 2009

Various types of structures are being affected due to the DFC project. Out of total 1,762 structures, 862 (48.9%) are of residential type followed by 251 (14.2%) are commercial type such as shops Kiosks, and hotels and 96 (5.4%) are of residential cum commercial structures¹. Some people have their residential structures close to the road and use the front part for business purpose. Other than these, 32 community property resources and 102 religious structures will be affected.

Project affected Families (PAFs) are calculated from the residential, commercial and residential cum commercial structures which are getting affected by the project. In Gujarat, the proportion of structures getting affected based on their present use as residential, commercial, and residential cum commercial is 96.5%, 1.7%, and 1.7%, respectively. For Rajasthan the proportion is 71.2%, 20.2%, and 8.6%, and in Haryana is 62.2%, 29.2%, and 8.6%, respectively.

2.4 PERCENTAGE OF TYPE OF AFFECTED RESIDENTIAL STRUCTURES AND CONSTRUCTION TYPE

Due to the implementation of Project, the residential structures getting affected are comprised of 97 % houses and 3% huts. State-wise distribution shows that in Gujarat 97 % affected residential structures are houses and 3% are huts. In Rajasthan, 93 % affected residential structures are houses and 7% are huts. In Haryana, 98 % affected residential structures are houses and 2 % are huts.

Similarly, due to the Project, permanent at 81% and semi-permanent structures at 19 % will be affected. Likewise, 31% and 69%, respectively in Gujarat, 88% and 12%, respectively in Rajasthan, and 90.9% and 9%, respectively in Haryana.

District-wise house types to be affected are given in Table 2-3.

¹ Residential cum commercial structures means that some people have their residential structures close to the road and use the front part for business purpose.

Table 2-3 District-wise House Type to be Affected

	House Appearance (%)		Construction Type (%)	
	House	Hut	Permanent	Semi-permanent
Gujarat				
Vadodara	0%	0%	0%	0%
Anand	21%	0%	5%	15%
Kheda	7%	0%	0%	7%
Ahmedabad	0%	0%	0%	0%
Gandhinagar	2%	3%	0%	2%
Mahesana	0%	0%	0%	3%
Patan	21%	0%	3%	18%
Banaskantha	47%	0%	23%	24%
Sub-total	97%	3%	31%	69%
Rajasthan				
Sirohi	2%	0%	1%	1%
Pali	16%	0%	14%	3%
Ajmer	46%	4%	46%	6%
Jaipur	8%	2%	8%	1%
Nagaur	0%	0%	0%	0%
Sikar	20%	0%	19%	1%
Alwar	1%	0%	1%	1%
Sub-total	93%	7%	88%	12%
Haryana				
Mahendragarh	89%	2%	84%	7%
Rewari	9%	0%	7%	2%
Sub-total	98%	2%	91%	9%
Total	95%	5%	81%	19%

Note: The above figures are related to both fully and partially affected structures.
Source: Project-Affected Structure Survey, 2008 and 2009

2.5 NUMBER OF AFFECTED PERSONS

Based on the Project-Affected Structure Survey, 1,351 families with 8,820 persons are likely to be affected, out of which 4,632 (52.5%) are male and 4,188 (47.5%) are female, due to the land acquisition of the Project. The average household size is 6 persons/household. The details of project-affected persons are summarized in the Table 2-4 and Table 2-5.

In Gujarat, 120 families with 793 persons are likely to be affected, out of which 421(53%) are male and 372 (47%) are female. The average household size is 6 persons / household. In Gujarat, 771 residential, 9 commercial and 13 residential-cum-commercial PAPs will be affected. In Vadodara and Ahmedabad Districts, no structures will be affected.

In Rajasthan, 812 families with 5,625 persons are likely to be affected, out of which 2,970 (52.8%) are male and 2,655 (47.2%) are female. The average household size is 7 persons/household. In Rajasthan, 3,960 residential, 997 commercial and 668 residential-cum-commercial PAPs will be affected. In Nagaur District, no structures will be affected.

In Haryana, 414 families and 2,402 persons are likely to be affected, out of which 1,241 (52%) are male and 1,161 (48%) are female. The average household size is 6 persons/household. In Haryana, 1,436 residential, 744 commercial, and 222 residential-cum-commercial structures will be affected.

Since the above figures are based on the number of structures to be affected. Therefore, other kinds of PAPs such as agricultural land owner and user are not included. Those other kinds of PAPs will be known after the Baseline Survey and Census is conducted as per the NRRP 2007.

Table 2-4 Number of Project-Affected Families

	Number of PAF			Total
	Residential (1)	Commercial (2)	Residential -cum- Commercial (3)	
Gujarat				
Vadodara	0	0	0	0
Anand	28	0	1	29
Kheda	8	1	0	9
Ahmedabad	0	0	0	0
Gandhinagar	2	1	0	3
Mahesana	3	0	0	3
Patan	23	0	0	23
Banaskantha	56	0	2	58
Sub-total	120	2	3	125
Rajasthan				
Sirohi	9	0	0	9
Pali	94	18	4	116
Ajmer	286	51	18	355
Jaipur	56	33	16	105
Nagaur	0	0	0	0
Sikar	121	61	38	220
Alwar	7	0	0	7
Sub-total	573	163	76	812
Haryana				
Mahendragarh	262	73	28	363
Rewari	16	27	8	51
Sub-total	278	100	36	414
Total	971	265	115	1,351

Note: The above figures are related to both fully and partially affected structures.
Source: Project-Affected Structure Survey, 2008 and 2009

Table 2-5 Number of Project-Affected Persons

	Number of PAF				Male				Female			
	Residential (1)	Commercial (2)	Residential -cum- Commercial (3)	Total	(1)	(2)	(3)	Total	(1)	(2)	(3)	Total
Gujarat												
Vadodara	0	0	0	0	0	0	0	0	0	0	0	0
Anand	153	0	6	159	74	0	3	77	79	0	3	82
Kheda	43	5	0	48	26	3	0	29	17	2	0	19
Ahmedabad	0	0	0	0	0	0	0	0	0	0	0	0
Gandhinagar	11	4	0	15	8	2	0	10	3	2	0	5
Mahesana	15	0	0	15	8	0	0	8	7	0	0	7
Patan	147	0	0	147	82	0	0	82	65	0	0	65
Banaskantha	402	0	7	409	211	0	4	215	191	0	3	194
Sub-total	771	9	13	793	409	5	7	421	362	4	6	372
Rajasthan												
Sirohi	69	0	0	69	39	0	0	39	30	0	0	30
Pali	615	112	26	753	342	62	12	416	273	50	14	337
Ajmer	1,708	248	103	2,059	890	129	50	1,069	818	119	53	990
Jaipur	525	255	197	977	288	118	109	515	237	137	88	462
Nagaur	0	0	0	0	0	0	0	0	0	0	0	0
Sikar	999	382	342	1,723	526	212	169	907	473	170	173	816
Alwar	44	0	0	44	24	0	0	24	20	0	0	20
Sub-total	3,960	997	668	5,625	2,109	521	340	2,970	1,851	476	328	2,655
Haryana												
Mahendragarh	1,332	567	169	2,068	704	281	86	1,071	628	286	83	997
Rewari	104	177	53	334	54	89	27	170	50	88	26	164
Sub-total	1,436	744	222	2,402	758	370	113	1,241	678	374	109	1,161
Total	6,167	1,750	903	8,820	3,276	896	460	4,632	2,891	854	443	4,188

Note: The above figures are related to both fully and partially affected structures.
Source: Project-Affected Structure Survey, 2008 and 2009

2.6 LAND PLOT OWNERS AS PER 20A NOTIFICATION.

The total length of the Western Corridor between Rewari and Vadodara is approximately 920 kms. It covers from section 5 to section 15 in the Western Corridor of the DFC. Total number of section is 11 (Eleven). The areas consist of three states like Haryana, Rajasthan and Gujarat with 17 districts in total. As per 20A Notification, the total number of land plot owners of this stretch is approximately 14030. However, the details of the PAPs (Title holder/Non Title holder, lessee etc.) will be provided in the final RRP after conducting Baseline census survey as per NRRP 2007 from April 2010 to November 2010. The details of the Land owners of this area is presented in the Table No: 2-6

Table 2-6 Status of Land Acquisition of DFC Project between Rewari – Vadodara (Phase 1 Section)

S.No.	State	District	Area to be Acquired (Ha)	Length (Km)	Affected Villages under one district as per notification of 20A	Number of Land Plots to be Affected as per 20A Notifications
1.	Gujarat	Vadodara*	214.9	28.3	19	940
		Anand	278.7	43.4	31	1,433
		Kheda	186.2	28.7	16	667
		Ahmedabad	347.5	44.1	15	***
		Gandhinagar	138.9	23.1	12	334
		Mahesana	437.3	64.2	31	1,273
		Patan	186.2	29.1	16	444
		Banaskantha	401.9	61.3	33	625
		Sub-total	2,191.6	322.2	173	5,716
2	Rajasthan	Sirohi	161.9	65.0	28	711
		Pali	607.8	195.0	69	1,769
		Ajmer	360.2	100.8	45	2,157
		Jaipur	461.1	95.8	42	1,162
		Nagaur	6.0	4.6	2	30
		Sikar	328.4	79.1	39	1,224
		Alwar	6.1	2.3	1	53
		Sub-total	1,931.4	542.7	226	7,106
3	Haryana	Mahendragarh	92.7	46.1	29	987
		Rewari**	19.5	7.9	4	221
		Sub-total	112.2	54.0	33	1,208
		Total	4,235.1	918.9	432	14,030

Note : As per information from DFCCIL on 30th October, 2009

* Vadodara Area under DFC Phase – I Study.

**Rewari Area before Rewari Junction under DFC Phase – I Study.

*** Due to Alignment changes in Ahmedabad Area, New 20 A notification has been issued later.

2.7 NUMBER OF AFFECTED SQUATTERS

Due to the land acquisition for the Project, 186 squatters will be affected in Rajasthan & Gujarat; they are mainly Kiosks having semi permanent structures. In Haryana there is no squatter to be affected. District wise position of Squatters is as under:-

Table 2-7 Number of Squatters

S.No.	District	Tehsil	Village	Detail of PAPs (No persons)	Area in Sq meter	Encroachment since (Year)
1.	Banaskantha	Amirgadh	Amirgadh	4	72.76	4
				7	48.92	20
				1	166.34	15
				13	219.09	15
2.	Sirohi	Aburoad	Tartoli	10	92.48	20
		Desuri	Rani Khurd	15	347.91	>20
		Desuri	Rani Khurd	6	39.18	>20
		Desuri	Rani Khurd	7	78.18	>20
		Desuri	Rani Khurd	11	221.87	>20
		Desuri	Rani Khurd	0	69.39	20
		Desuri	Rani Khurd	1	112.42	20
		Desuri	Rani Khurd	17	68.05	15
		Desuri	Rani Khurd	5	79.58	>20
		Desuri	Rani Khurd	7	93.01	>20
3.	Pali	Desuri	Rani Khurd		75.37	>20
		Desuri	Rani Khurd	2	106.35	>20
		Desuri	Rani Khurd	21	487.26	>20
		Marwar Jn.	Marwar Jn.	4	4.21	>20
		Marwar Jn.	Marwar Jn.	11	45.66	>20
		Marwar Jn.	Marwar Jn.	5	10.72	>20
		Marwar Jn.	Marwar Jn.	10	14.25	>20
		Marwar Jn.	Marwar Jn.	6	11.12	>20
		Marwar Jn.	Marwar Jn.	3	4.38	>20
		Marwar Jn.	Marwar Jn.	5	5.69	12
4.	Ajmer	Ajmer	Dauraj	15	17	10
			Total	186	2491.19	

CHAPTER 3 MEASURES TO MINIMIZE LAND ACQUISITION AND LOSSES

3.1 INTRODUCTION

Linear pattern of land acquisition and resettlement will be required for railway project design. To avoid or minimize the demolition of permanent structures in a densely populated urban area along the project right-of-way, the alignment was examined as follows.

3.2 ALTERNATIVE MEASURES

3.2.1 Guideline Design under the JICA F/S

(1) Alignment

Western route of DFC subject to implement with a priority is traversing Vadodara – Ahmedabad – Palanpur – Rewari as double track as shown in Figure 3-1. Although Final Location Survey (FLS) of the DFC alignment consists of eleven sections from Section 5 to Section 15 has been carried out by DFCCIL, it was not available at the time of the JICA F/S. Therefore the conceptual alignment was made available as a Guideline Design (GLD) in the JICA F/S. The engineering design for the structures and facilities were also made available as General Arrangement Drawing (GAD). GLD has been drawn taking into the following issues:

- 1) The plan is made such that the social/natural environmental impacts are as minimum as possible.
- 2) The plan is made based on the technical principle of the railway alignment parameters such as the minimum curve radius is about 700 m, with the maximum gradient of 5%, considered compensation due to the affect of vertieal curve, etc.
- 3) Existing ROBs in parallel section are basically to be replaced. For considerably difficulty in ROBs replacement and a large scale/size of ROBs and/or for the ones located in congested area, detour of DFC is considered.
- 4) The route is considered on the presumption that the level crossings in parallel section are to be grade separated, and all crossing roads along DFC detour section are to be RUBs.

In the case of sections that comprise of many level crossings which have to be grade separated such as for $TVU \geq 900,000$, and the total number of level crossing are more than one in every 2 km in between DFC stations, it will be an objective decision to consider elevating DFC. It will be decided whether or not to do so, by considering the surrounding topographical features, soil conditions and locations, etc.

- 5) When crossing a river, a highway, etc. (Important Bridges), it should cross at right-angle as far as possible. Even when it is unavoidable, in order to prevent designing a structure with an extreme angle of skew, the crossing angle shall be maintained at least 60 degrees or more, in principle.
- 6) Each Crossing Station of DFC is constructed on ground level in principle, however in case of detour section, it may have to be constructed on embankment or viaduct.

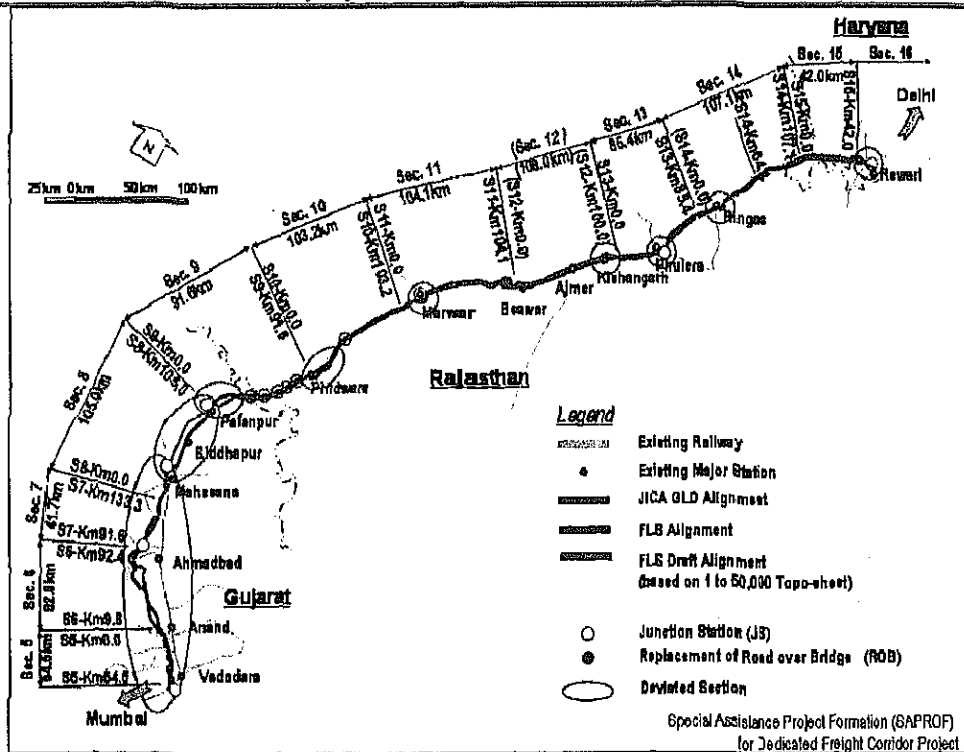


Figure 3-1 Western Route of DFC between Vadodara and Rewari

The conceptual alignments of GLD which have been considered in the JICA F/S are presented below:

a) Vadodara - Ahmedabad Detour (Figure 3-2 and Figure 3-3)

This section was modified into a lengthy detour, because the city areas are fully developed, with many built-up areas and also due to the existence of 20 ROBs along the existing line. The detour route has been proposed bypasses the city area of Vadodara, and runs parallel for about 10 km with the existing line near Vasad, and further takes a large detour route which avoids the city areas of Anand, Nadiad, Ahmedabad, Kalol, and Mahesana.

There is an existing ROB in this parallel section near Vasad, local communities exist, and the line also crosses the Mahi River by an acute angle. The length of the proposed detour line is about 211.4 km, while the existing line length of this section is about 189.5 km.

b) Palanpur Detour (Figure 3-4)

The detour route with about 18.1 km which avoids the existing city area and reverts back is made to the parallel section with existing line, since a wildlife sanctuary exists between Chitrasani-Jethi of the existing line. As shown in the figure, although the existing line is running through the wildlife sanctuary for only about 2.5 km, there is no other option except for taking a detour route through the northern side of the Ghats because the area is blocked by the Ghats and Dry Valleys. Therefore the length of the detour route became 34.6 km, while the length of the existing line of this section is about 29.1 km.

c) Kishanganh Detour (Figure 3-5)

The higher resolution satellite images to examine the on ground situation of this area, and it became clear that the 13.3 km detour route proposed runs through a marble stone processing

facility, and on different sections the alignment passes through mountain area requiring deep excavation along the existing line.

d) Phulera Detour (Figure 3-6)

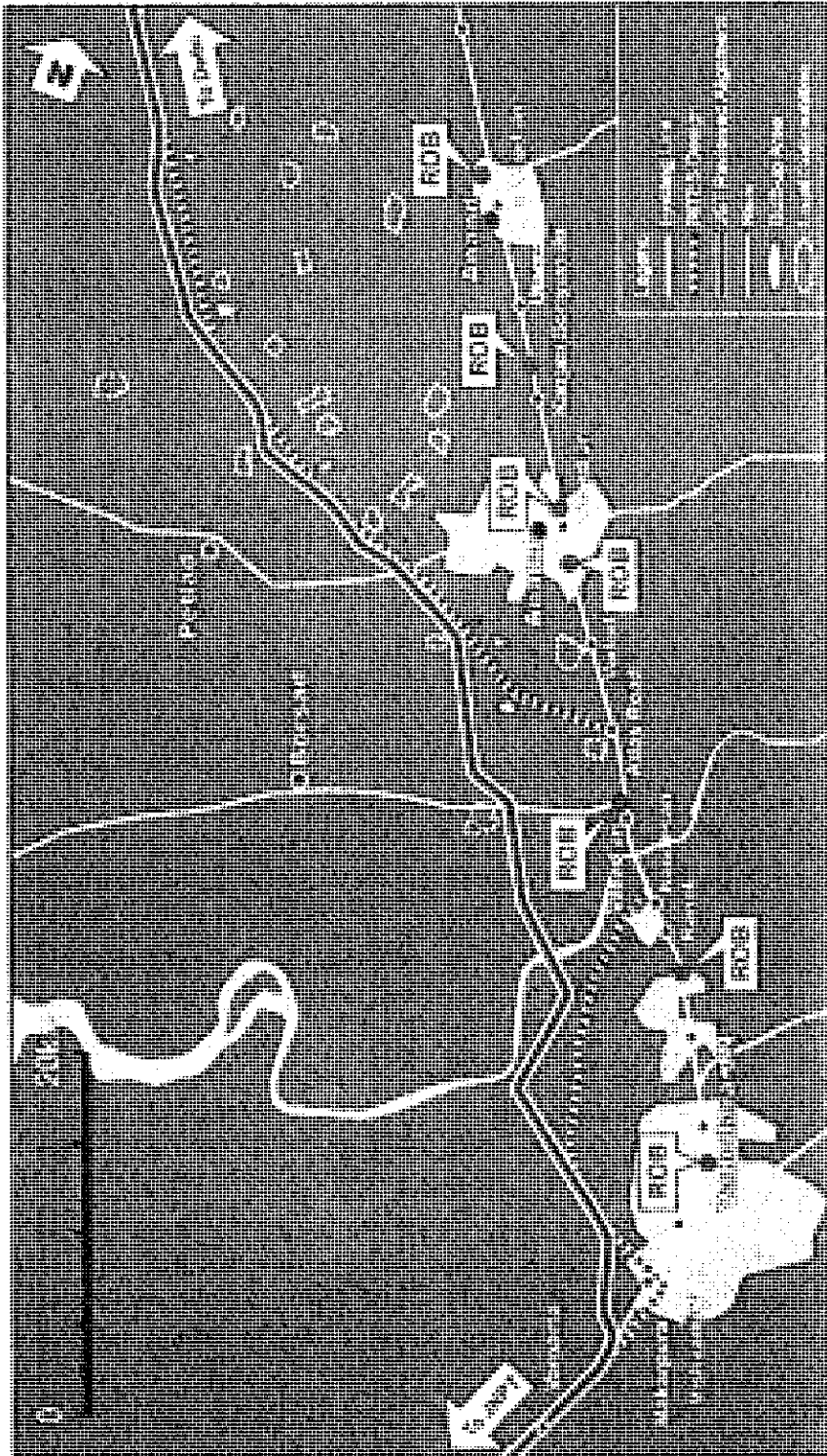
The 23.6 km detour route proposed passes through a few built-up areas. A route which avoids this was proposed. The length of the detour route is approximately 19.4 km while the existing line length of this section is about 16.3 km.

e) Ringas Detour (Figure 3-7)

36.7 km detour route proposed crosses a 'Wadi' (Dry Valley) which turns into a river during the rainy season at three places, which results as a requirement of a bridge having a total length of more than 3 km. The construction costs for this bridge is likely to become prohibitive, which would make the parallel route alternative an optimal alternative which requires replacement of the existing ROB. A shorter detour is proposed since the parallel route requires an extensive rail flyover, having an embankment height over 20 m, to cross over the existing branch line and the adjacent existing ROB. The length of the detour is about 11.4 km, while the length of the existing line of this section is about 10.4 km.

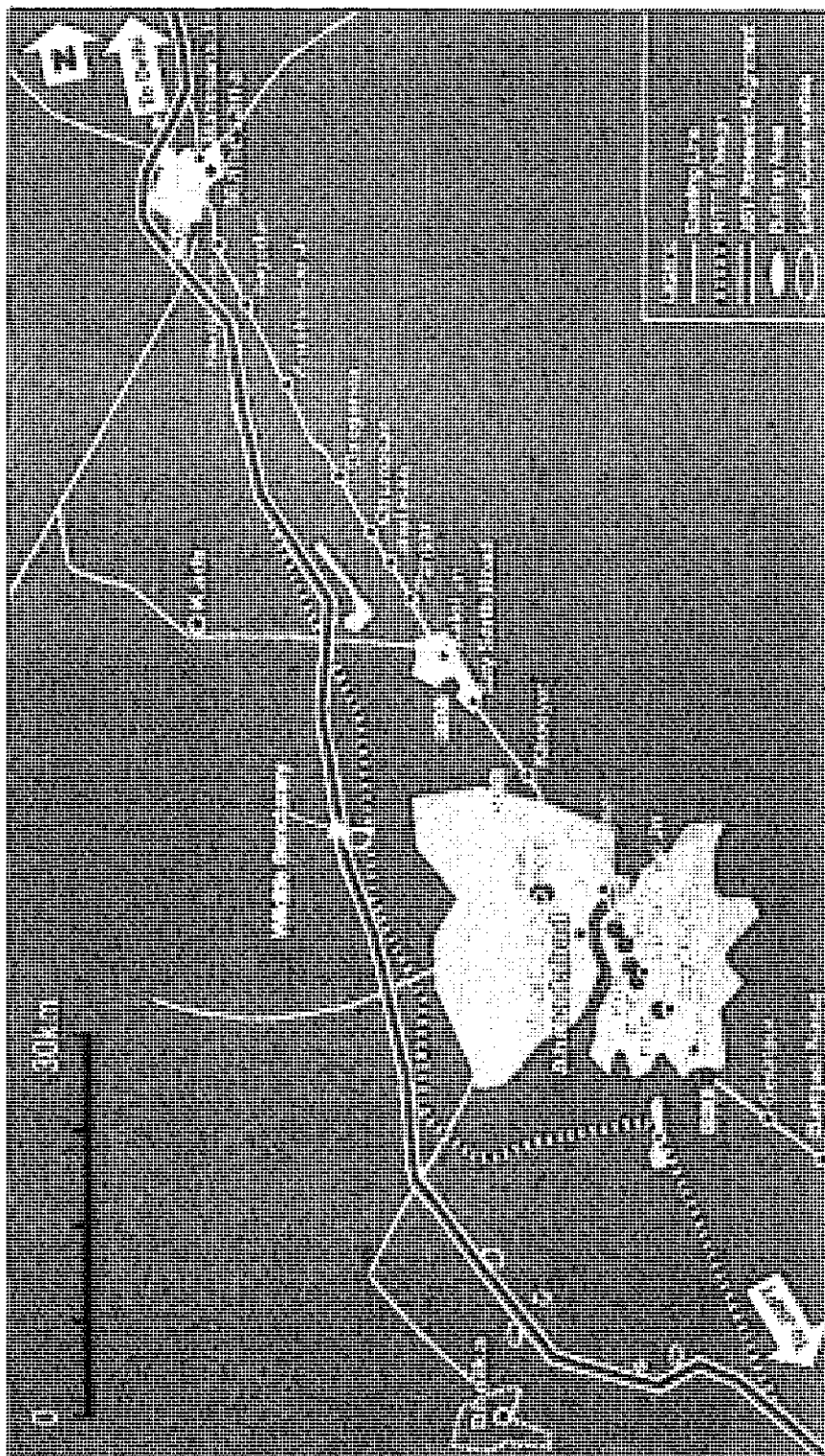
f) Rewari Alignment (Figure 3-8)

Since the connection of container traffic to Delhi Metropolitan Area is an important component of the DFC project, it is necessary to provide transportation route from Rewari towards Gurgaon, in the direction of Delhi. For this reason, a connecting line linking Rewari Junction Station and the existing line towards Gurgaon is proposed. This line avoids planned facilities indicated on the Rewari City Master Plan, and over-passes three existing lines, and also to the existing track towards Hisar.



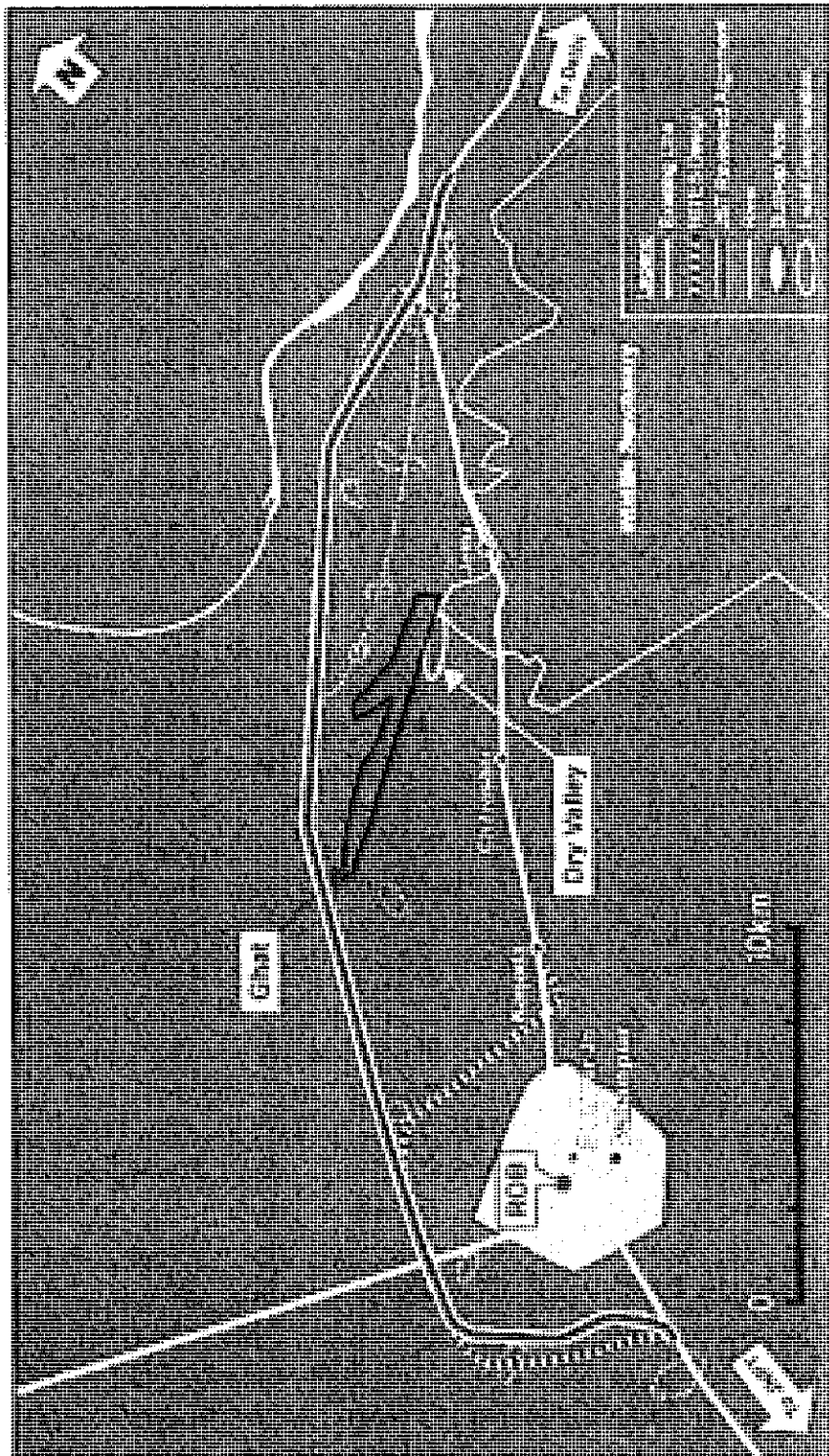
Source: Figure contained in the JICA Feasibility Study Report redrawn by the SAPROF Study Team

Figure 3-2 Vadodara-Ahmedabad Detour (South) of GLD



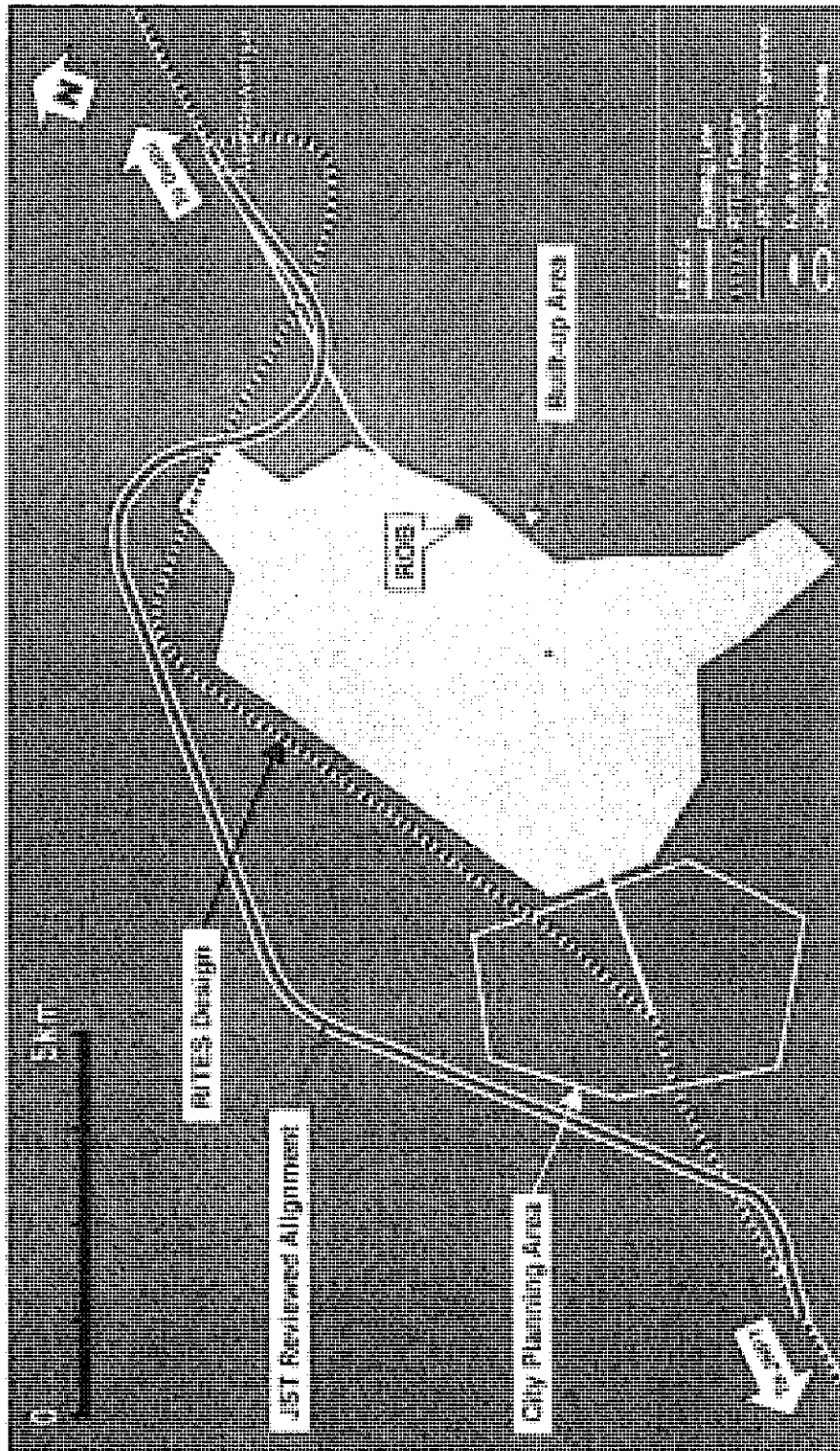
Source: Figure contained in the JICA Feasibility Study Report redrawn by the SAPROF Study Team

Figure 3-3 Vadodara-Ahmedabad Detour (North) of GLD



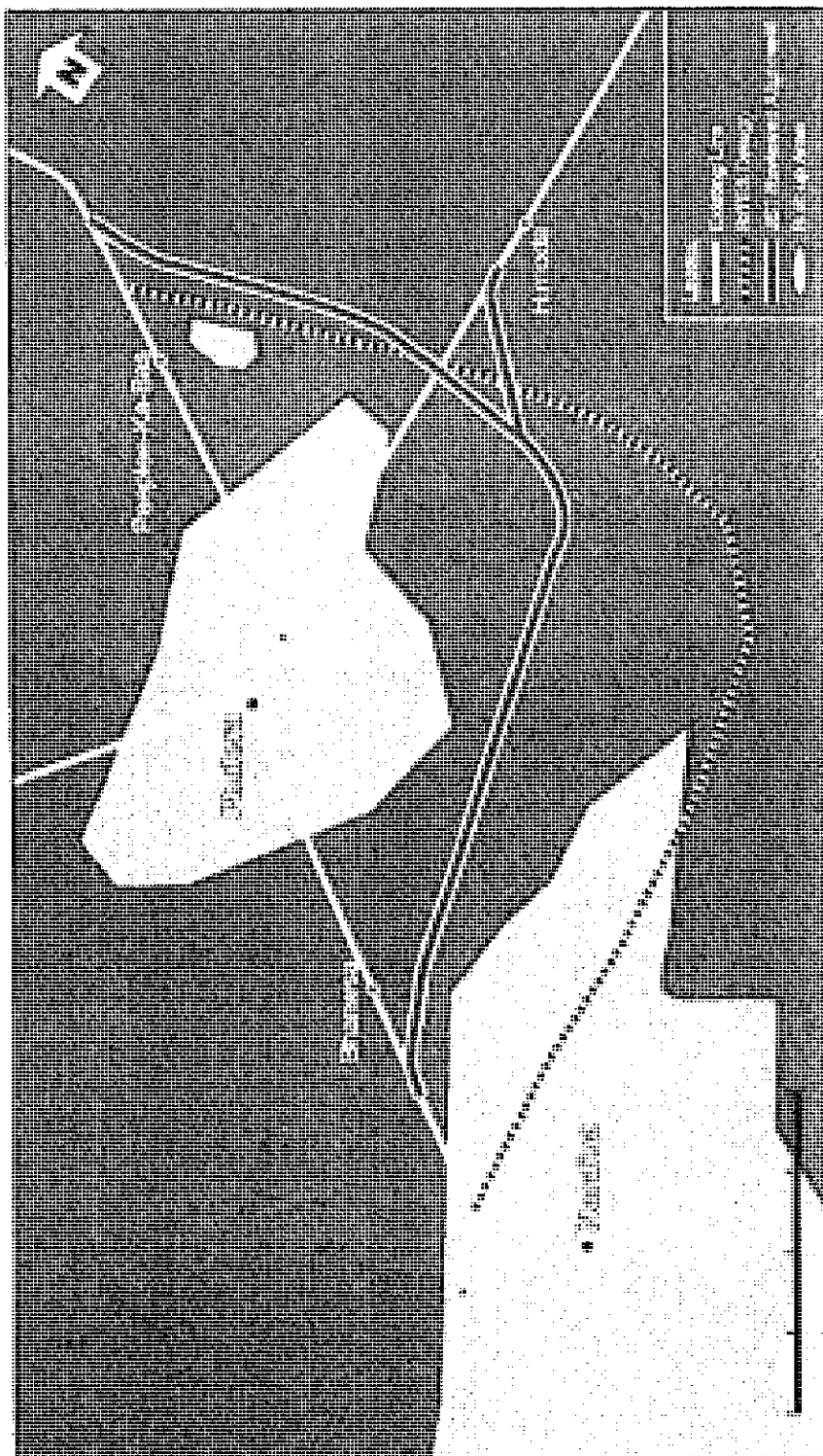
Source: Figure contained in the JICA Feasibility Study Report redrawn by the SAPROF Study Team

Figure 3-4 Palanpur Detour of GLD



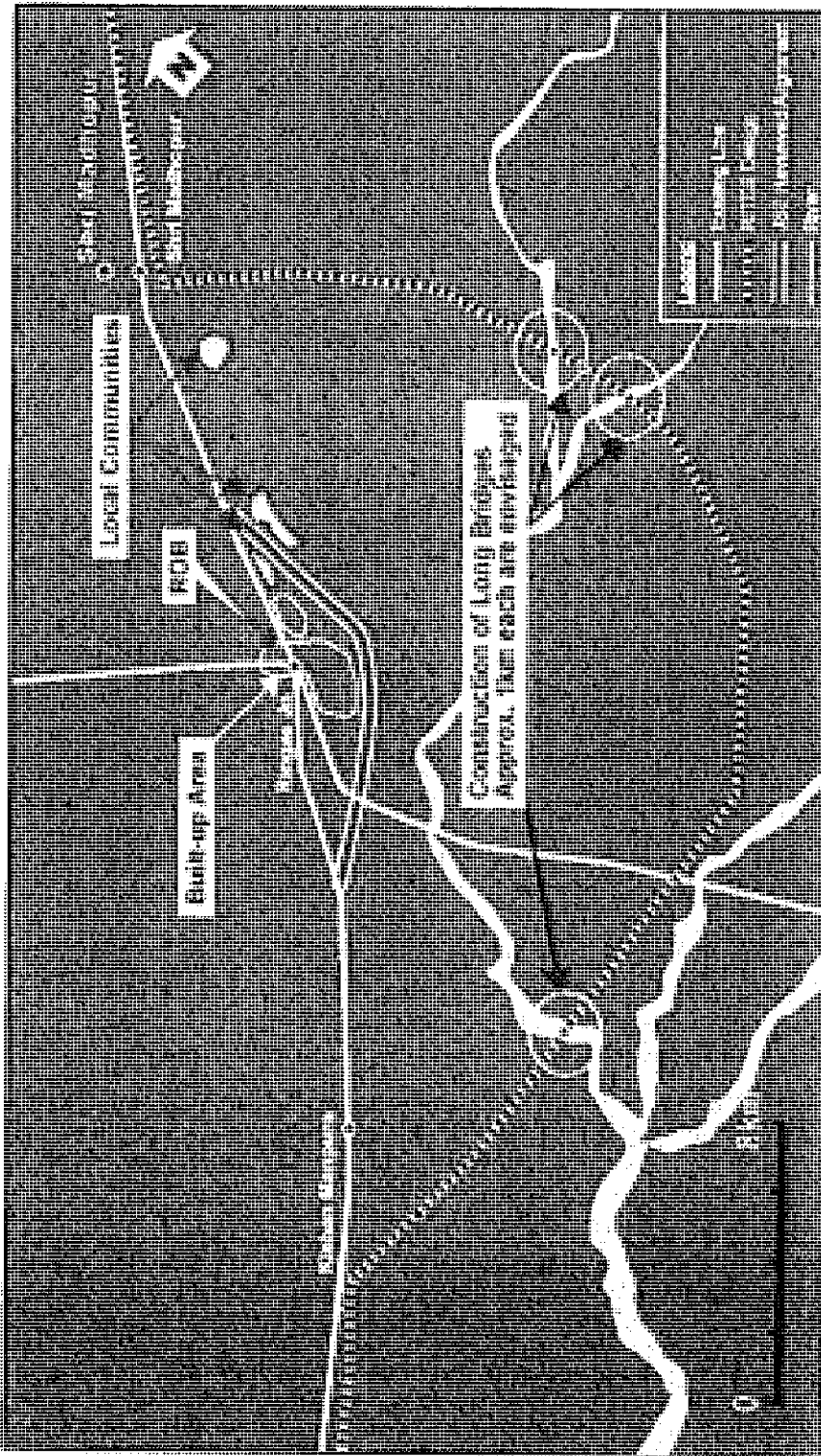
Source: Figure contained in the JICA Feasibility Study Report redrawn by the SAPROF Study Team

Figure 3-5 Kishangarh Detour of GLD



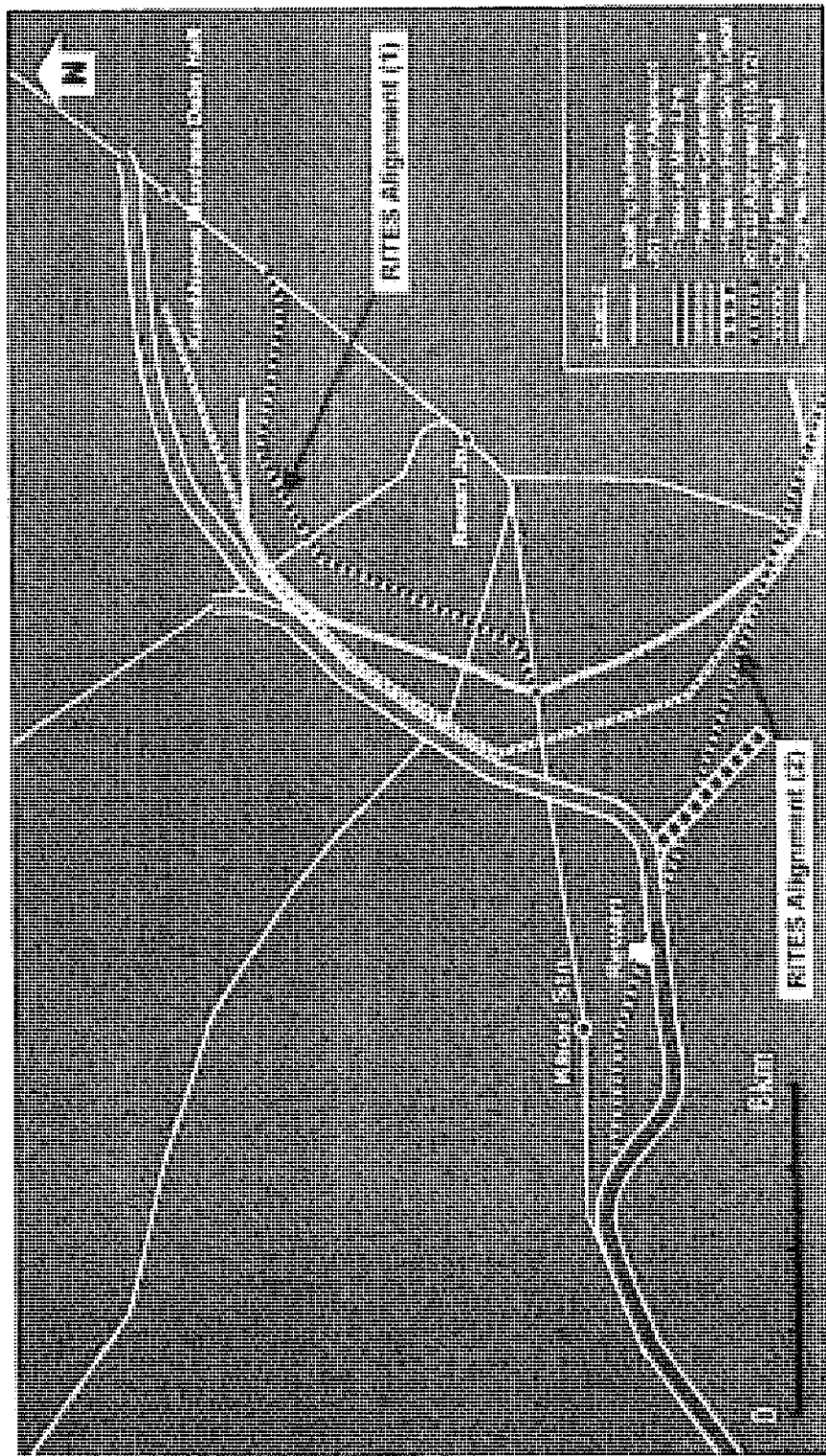
Source: Figure contained in the JICA Feasibility Study Report redrawn by the SAPROF Study Team

Figure 3-6 Phulera Detour of JICA GLD



Source: Figure contained in the JICA Feasibility Study Report redrawn by the SAPROF Study Team

Figure 3-7 Ringas Detour of JICA GLD



Source: Figure contained in the JICA Feasibility Study Report redrawn by the SAPROF Study Team

Figure 3-8 Rewari Alignment of JICA GLD

Alignment of the project is summarized in the Table 3-1.

Table 3-1 Summary of DFC Alignment Considered in the JICA F/S

Route Description	Total Length	Detour Length	Remarks
Vadodara – Ahmedabad	136.0	136.0	Ahmedabad Detour
Ahmedabad - Mahesana – Palanpur	123.6	71.5	Ahmedabad Detour
Palanpur – Ajmer	366.0	36.2	Palanpur Detour
Ajmer – Rewari	290.3	48.8	Kishangarh Detour, Phulera Detour, Ringas Detour
Total Length	915.9	292.5	

(2) Junction Station

The basic policy of planning Junction Station is described as follows:

- 1) Layout of station yards are planned based on the forecasted number of trains in 2031 for through traffic and entry/exit by direction as calculated in the demand forecast.
- 2) At-grade crossing is planned in case the number of trains entering and leaving the station is low (less than 10 trains per day crossing the main tracks). In this case departure/arrival tracks between both main tracks are provided.
- 3) In case that the number of trains entering/leaving is less than 6 trains per day for the total of switch-back operation, switch-back operation is adopted and an engine turn-around track is provided. If the number of train is assumed to be very few, the main line can be used for engine turn-round.
- 4) In order that the trains entering and leaving do not interfere with the smooth operation on the main tracks as they wait for clearing of the forward route, a departure/arrival track is provided for each direction. In addition, at least one refuge track is provided to accommodate malfunctioning trains.
- 5) At junction stations where the crew of almost all trains change, necessary stopping times are considered in calculating the required number of loops. (In such stations the main tracks can be used for trains to stop for crew change, since almost all trains stop at this station.)
- 6) In case that a part from the main yard area turnouts are installed for entry /exit between the DFC line and a crossing feeder line, a waiting track at the entry side is provided (A signal station under the junction station).
- 7) Effective track length is considered to be 1,500 m. At stations where at-grade crossing is planned, a loop for uncoupling is provided out of the DFC main yard so that two uncoupled trains will not cross the main track.
- 8) Track layout for grade separation at the station yards is to be planned to minimise outstanding. For this purpose the crossing axes angle is to be minimized. If both tracks are to be newly constructed, the angle should be 15 degrees using reinforced concrete tunnel-like structures seen from the track below. If the track is constructed over operating tracks, the angle should be 30 degrees using through-type steel girders/trusses. For both cases the structures of upper tracks to be designed should be as low as possible.
- 9) In order to prevent lengthening of approach banks due to curve compensation for maximum gradient and exclusion of coexistence of a vertical curve with a transition curve, curves are to be applied to the tracks on the ground as far as possible to make the alignment of the tracks on the flyover suitable for steeper gradient. Vertical curves are to be located on the over bridge in order to shorten approach banks, although this will make the highest point even higher.
- 10) Prevention of degradation of road traffic situation is considered.

- 11) Width of formation of yard is considered as 100 m for space for various works and for locating buildings. At some junction stations located on detour route and elevated, buildings are to be constructed on the existing ground if suitable based on their purpose.
- 12) The planning is to be carried out with due consideration to future grade separation of the at-grade crossings with roads of existing lines.
- 13) Possibility of future construction of crossing roads in long sections is considered.
- 14) Even though station yards are planned following the above principles, station yard require vast acquisition of land, and therefore selection of the sites for junction stations requires serious examination. Locations which will result in resettlement of the whole community or dividing a village is to be avoided.

3.2.2 Finalized Project Plan

(1) Alignment

In the SAPROF Study, the DFC alignment has been checked for considerations such as avoiding resettlement of local communities, wildlife sanctuary, city planning area, marble stone factories, residential area, large excavation etc. The DFC alignment has been also reviewed with considerations to design conditions (Gradient, Minimum Curve Radius, Maximum Gradient etc) and location gaps between GLD and FLS. The finalized alignment is summarized in the Table 3-2.

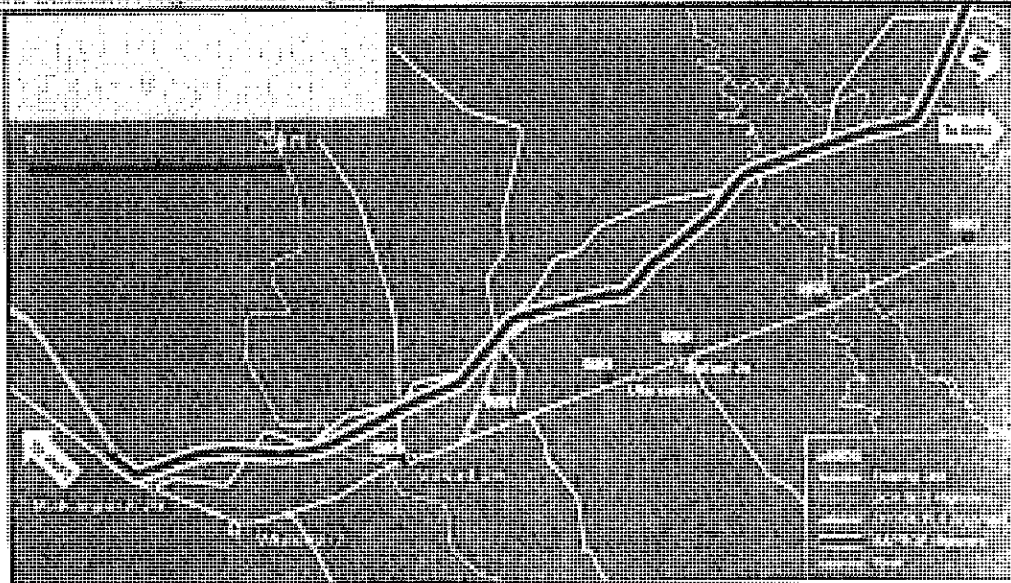
Table 3-2 Summary of Alignment for Yen Loan Parts (SAPROF Study)

Sec No.	Section Length	Detour Length	Total Length	Detour Total
Sec5 (Makarapura – Anand)	59.4 km	59.4 km	922.6 km	338.5 km
Sec6 (Anand – Sabarmati)	82.7 km	82.7 km		
Sec7 (Sabarmati – Mahesana)	39.6 km	39.6 km		
Sec8 (Mahesana – Palanpur)	95.0 km	95.0 km		
Sec9 (Palanpur – Shirohi Rd)	98.9 km	36.9 km		
Sec10 (Shirohi Rd – Bhinwaliya)	101.4 km	2.7 km		
Sec11 (Bhinwaliya – Amarpura)	102.2 km	0 km		
Sec12 (Amarapura – Gehlota)	98.4 km	11.8 km		
Sec13 (Gehlota – Badhal)	85.4 km	7.2 km		
Sec14 (Badhal – Amarpur)	106.8 km	0 km		
Sec15 (Amarpur – Rewari)	52.8 km	3.2 km		

Major changes from GLD are that section between Mahesana and Palanpur which was parallel in GLD has been made detour. Therefore, the section between Vadodara to Palanpur has totally become detour section. Deviations between GLD and FLS and the finalized alignment are further detailed in Table 3-3.

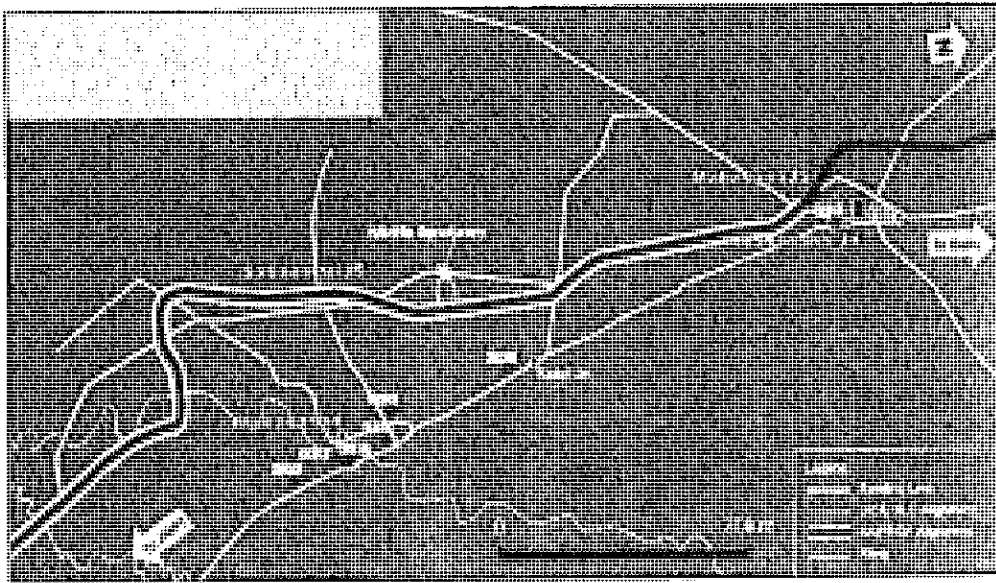
Table 3-3 Deviations Identified in the FLS and Alignment Determined

Sec.	Chainage (km)		Character of Alignment	Final Alignment	Remarks
	FLS	GLD			
5-9	-	Ex. 420 - 675	-	-	Vadodara – Iqbal Gadh (Perspective)
5-6	-	420 – 520	Extensive Detour	FLS	Figure 3-9 Vadodara-Mahesana (1/2)
6-7	-	515 – 615	Extensive Detour	FLS	Figure 3-10 Vadodara- Mahesana (2/2)
8	-	590 – 675	Extensive Detour	Pre-FLS	Figure 3-11 Mahesana-Palanpur
9	-	595 – 675	Extensive Detour	GLD	Figure 3-12 Palanpur-Iqbal Gadh
9	40.2 - 42.4	712 – 714	Small Detour	FLS	Figure 3-13 Near Maval St.
9	45.9 - 47.7	717 – 720	Small Detour	FLS	Figure 3-14 Near Abu Road St.
9	50.6 - 53.5	722 – 725	Small Detour	FLS	Figure 3-15 Near Morihala St.
9	58.0 - 59.5	730 – 732	Small Detour	FLS	Figure 3-16 Near Kivarli St.
9	78.8 - 83.0	750 – 755	Parallel	GLD	Figure 3-17 Banas St.
10	0.20- 14.6	762 – 775	Parallel	GLD	Figure 3-18 Sirohi Rd. & Keshavganj St.
10	38.4 - 41.1	798 – 802	Small Detour	FLS	Figure 3-19 Jawai Bandh St.
11	17.0 - 25.5	879 – 888	Parallel	GLD	Figure 3-20 Marwar Stn.
12	10.4-14.4	976 – 980	Parallel	FLS	Figure 3-21 Bangurgram Stn.
12	-	1041 – 1056		Parallel	Figure 3-22 Kishangarh Stn.
12	39.4 - 40.9	1005 – 1007	Parallel	FLS	Figure 3-23 Near Makrera Stn.
12	61.7 - 65.0	1027 – 1030	Parallel	FLS	Figure 3-24 Madar Stn.
13	32.8 - 40.0	1097 – 1104	Detour	FLS	Phulera JS
14	6.9 - 8.8	1156 – 1158	Parallel	FLS	Kishan Manpura Stn.
14	12.6 - 18.0	1161 – 1173	Parallel	Parallel	Figure 3-25 Ringas Stn.
15	-	-	Parallel	FLS	Figure 3-26 Rewari JS



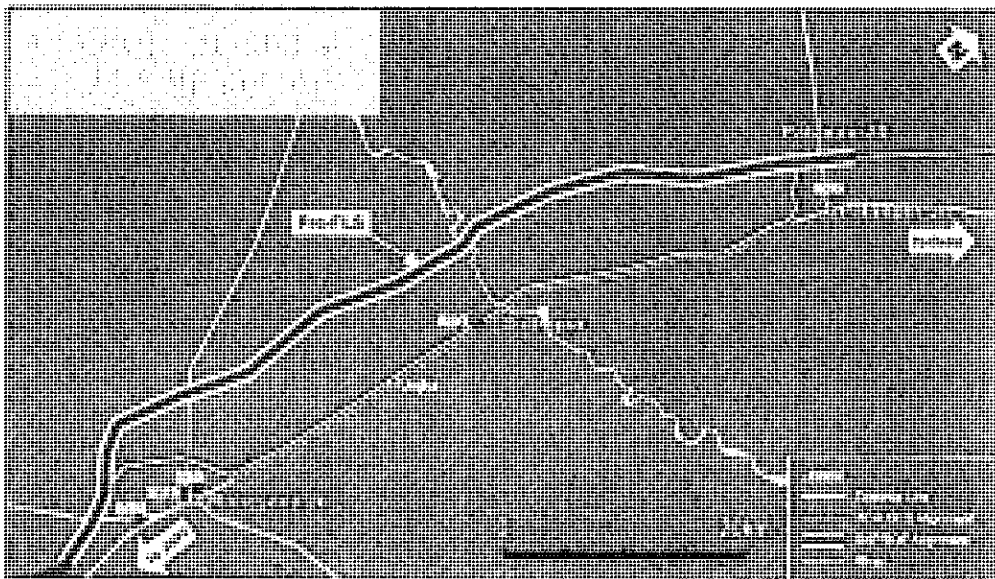
Source: JICA SAPROF Study

Figure 3-9 Extensive Detour in Vadodra-Mahesana (1/2)



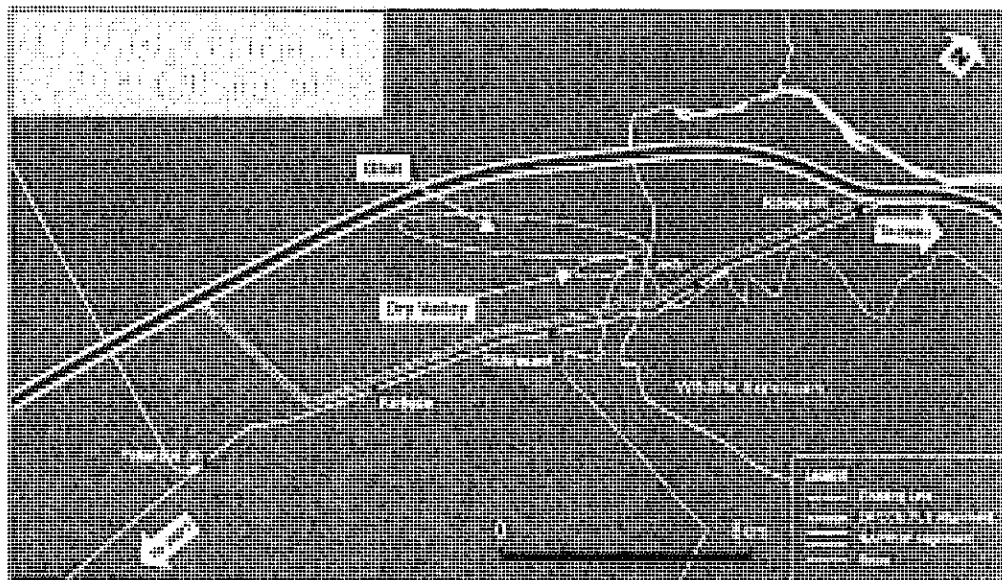
Source: JICA SAPROF Study

Figure 3-10 Extensive Detour in Vadodra-Mahesana (2/2)



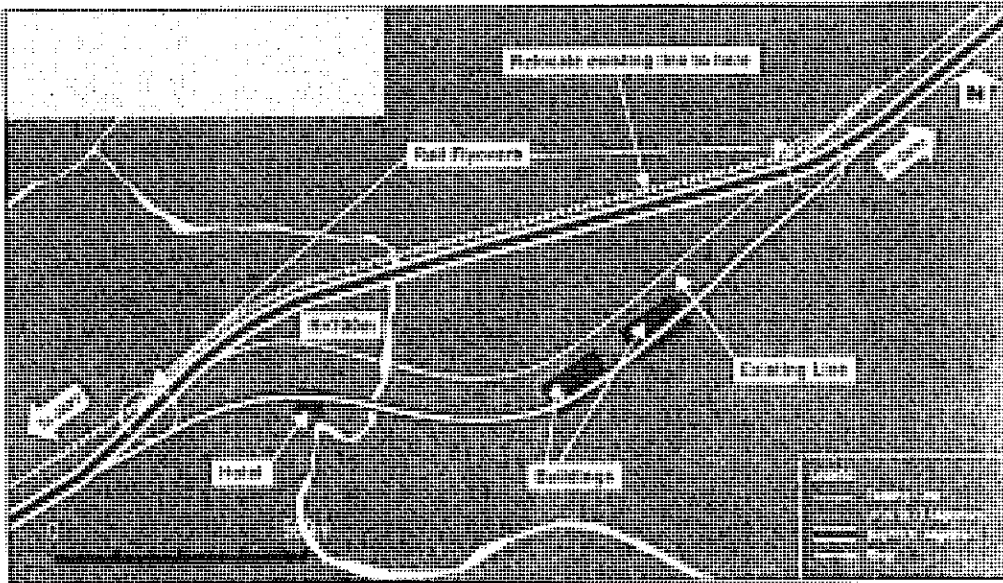
Source: JICA SAPROF Study

Figure 3-11 Detour in Mahesana-Palanpur



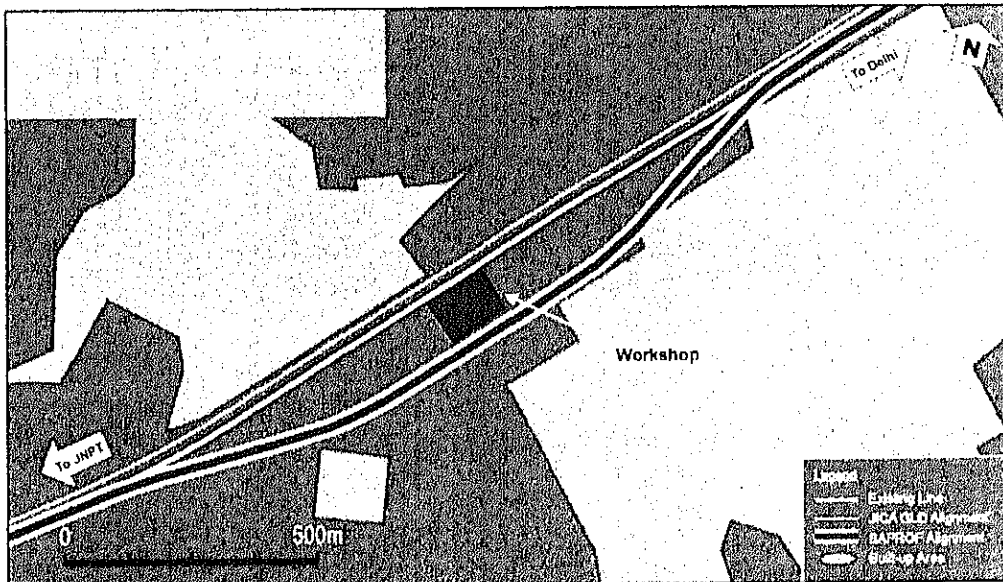
Source: JICA SAPROF Study

Figure 3-12 Detour in Palanpur-Iqbal Gadh



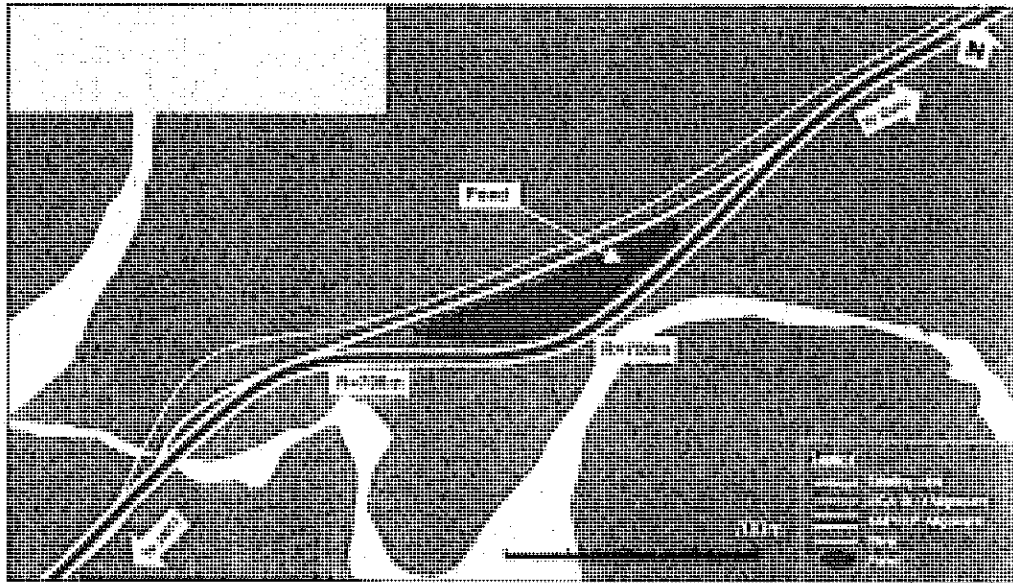
Source: JICA SAPROF Study

Figure 3-13 Small Detour in Maval Station



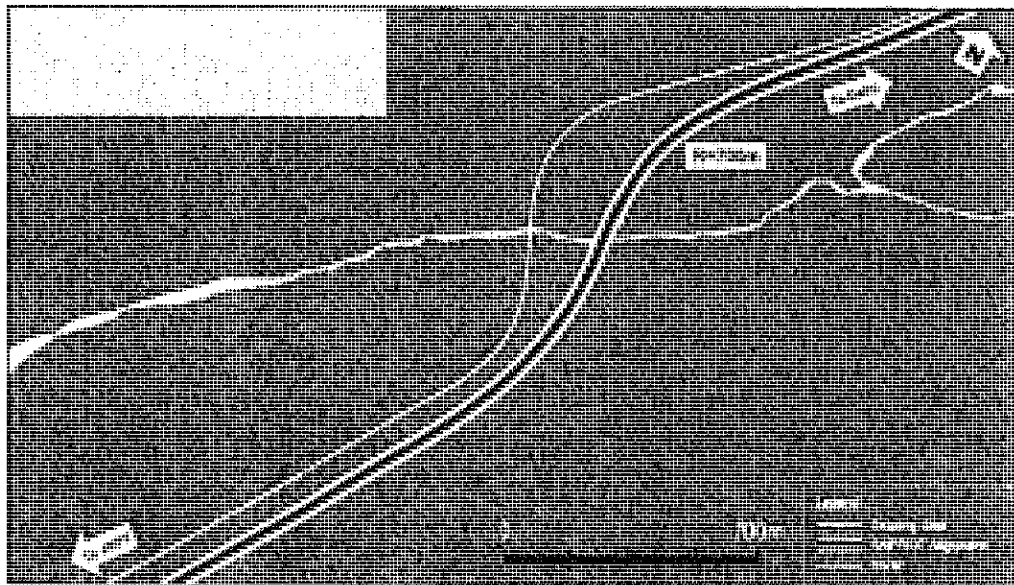
Source: JICA SAPROF Study

Figure 3-14 Small Detour in Abu Road Station



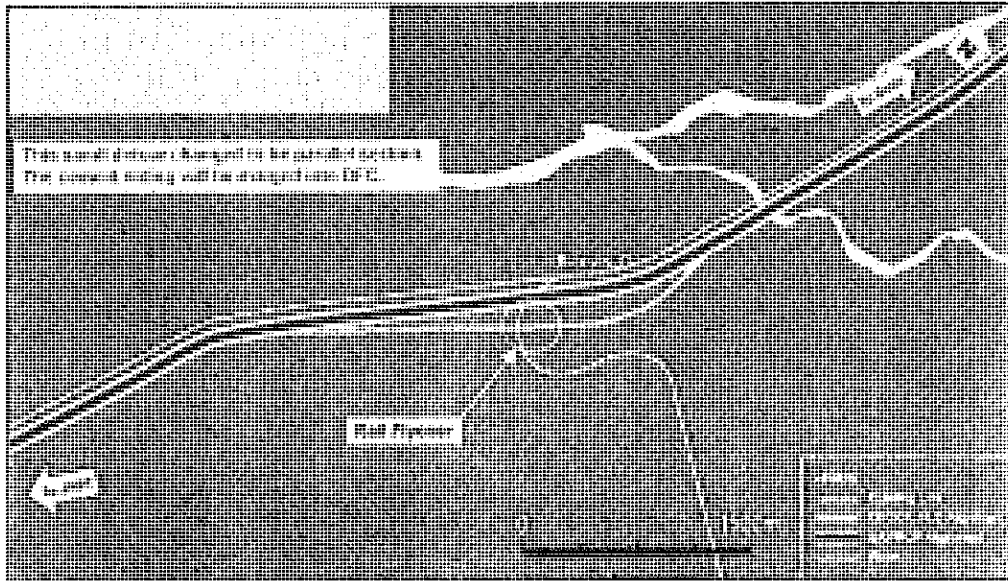
Source: JICA SAPROF Study

Figure 3-15 Small Detour in Morthala Station



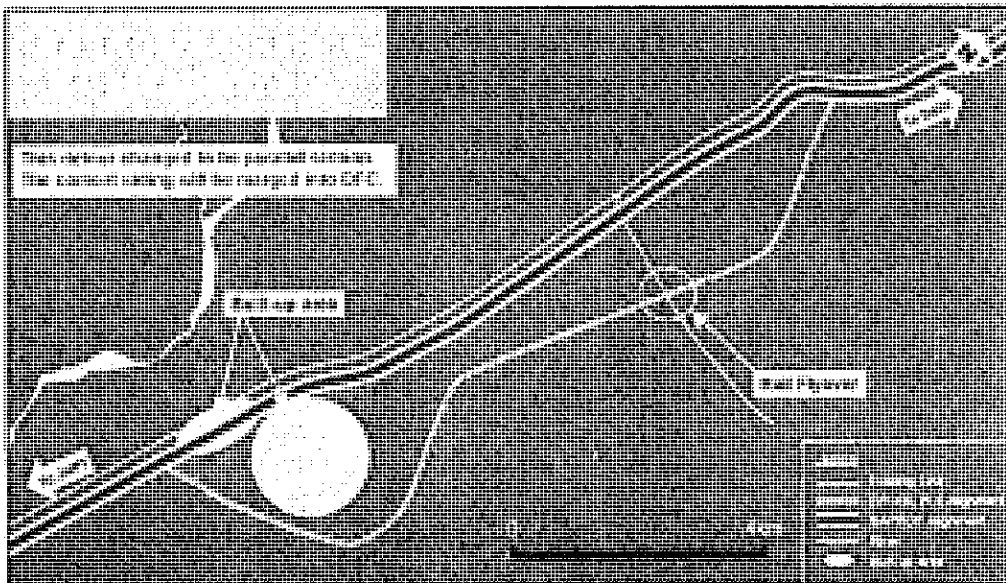
Source: JICA SAPROF Study

Figure 3-16 Small Detour in Kivarli Station



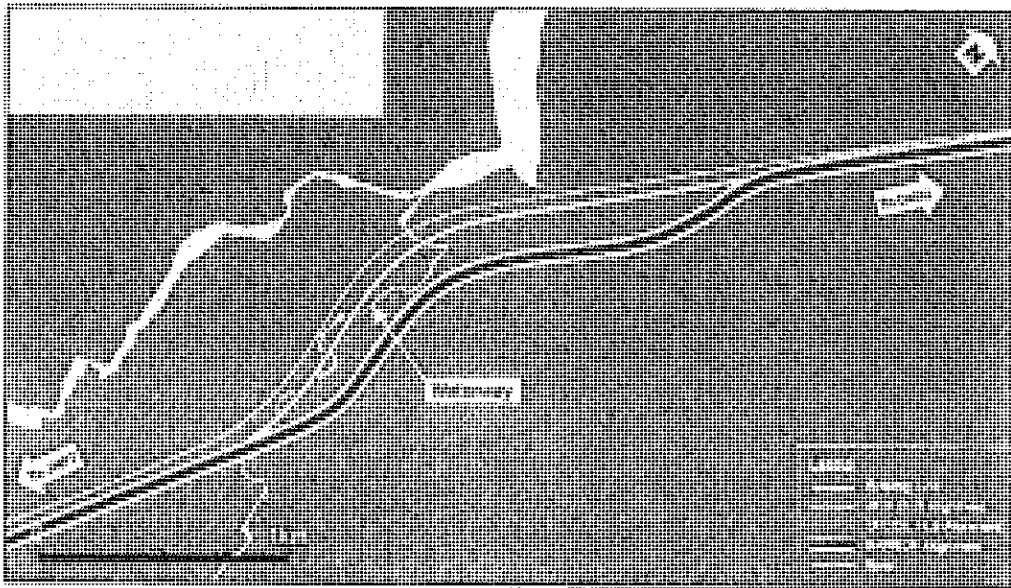
Source: JICA SAPROF Study

Figure 3-17 Small Detour in Banas Station



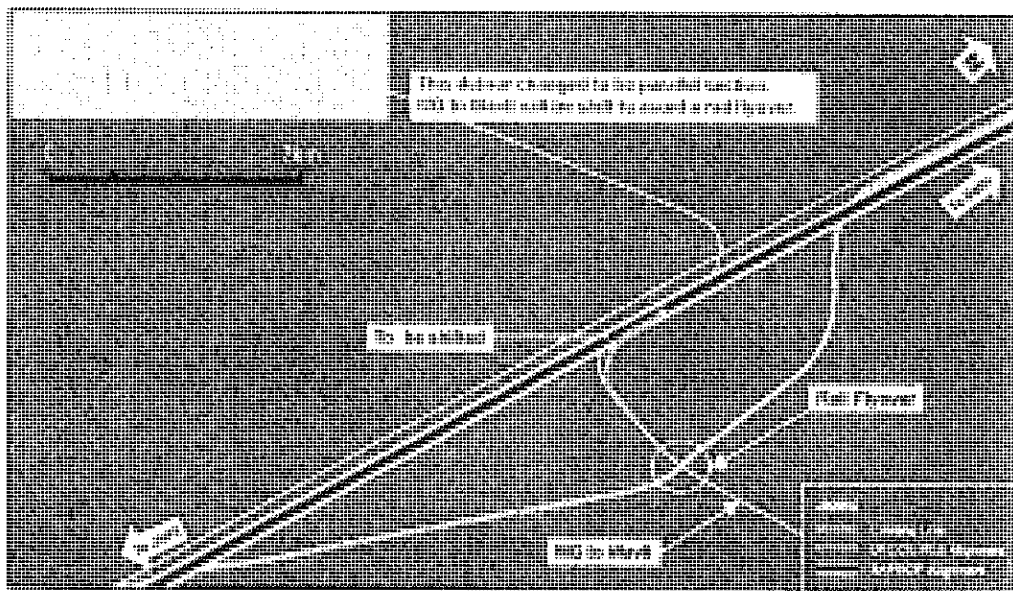
Source: JICA SAPROF Study

Figure 3-18 Detour in Sirohi Road Station



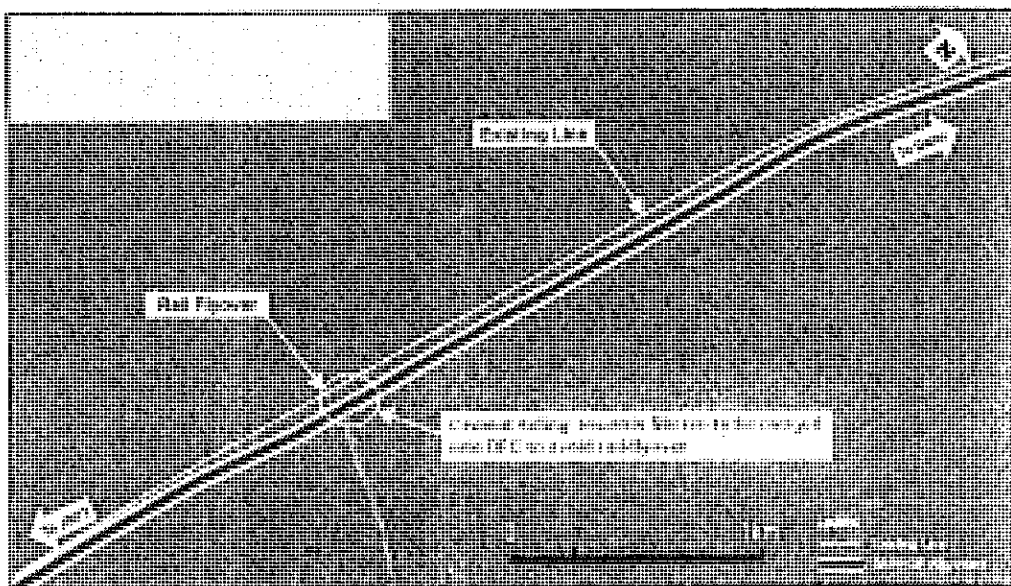
Source: JICA SAPROF Study

Figure 3-19 Small Detour in Jawai Bandh Station



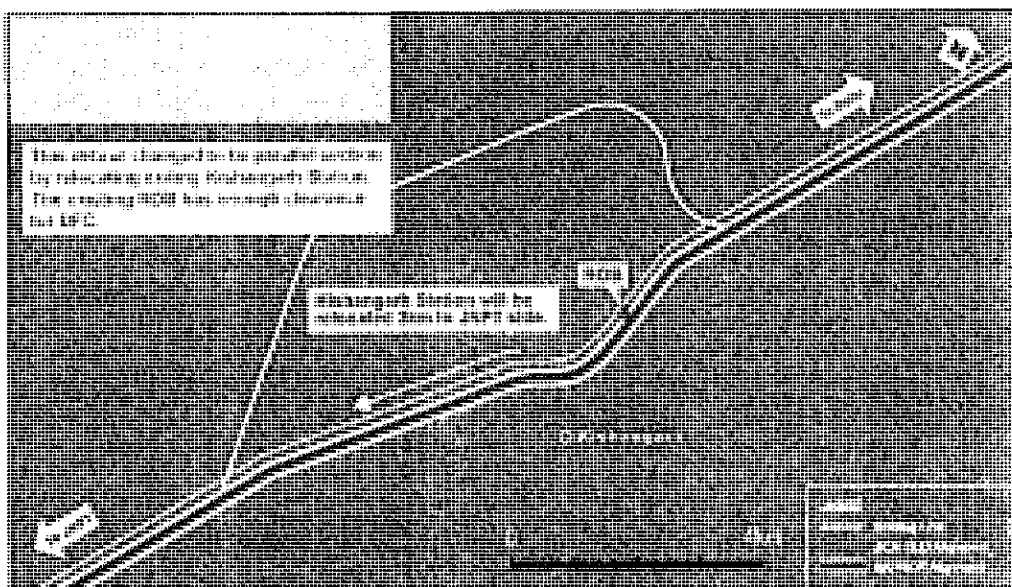
Source: JICA SAPROF Study

Figure 3-20 Marwar Station



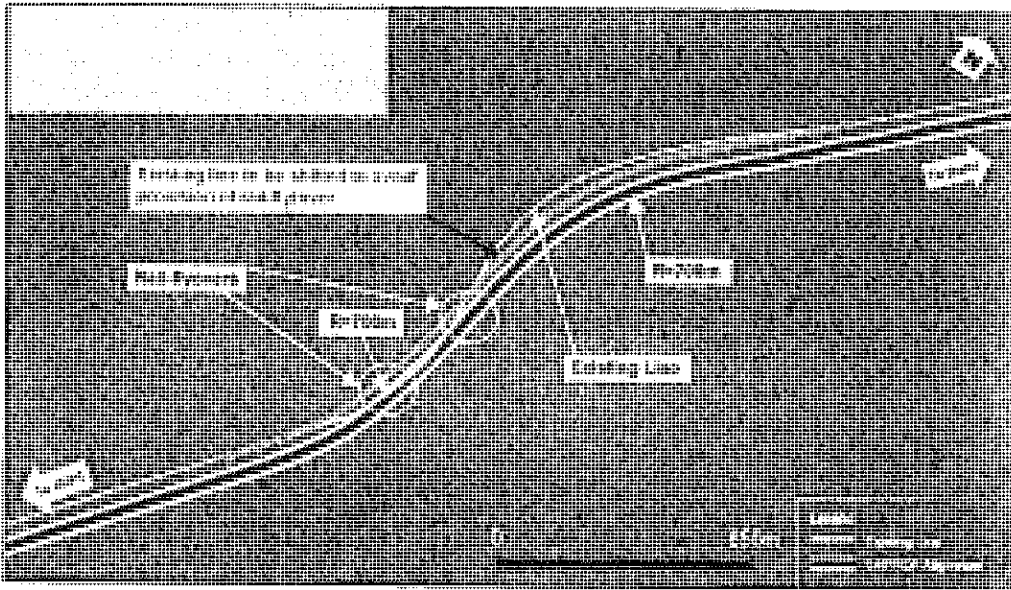
Source: JICA SAPROF Study

Figure 3-21 Bangurgram Station



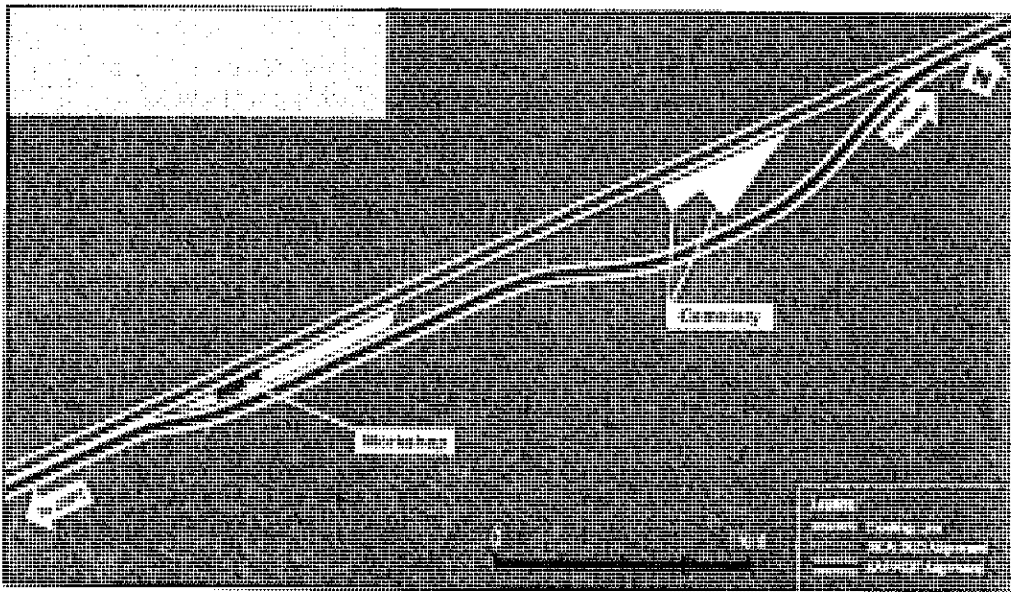
Source: JICA SAPROF Study

Figure 3-22 Detour in Kishangarh Station



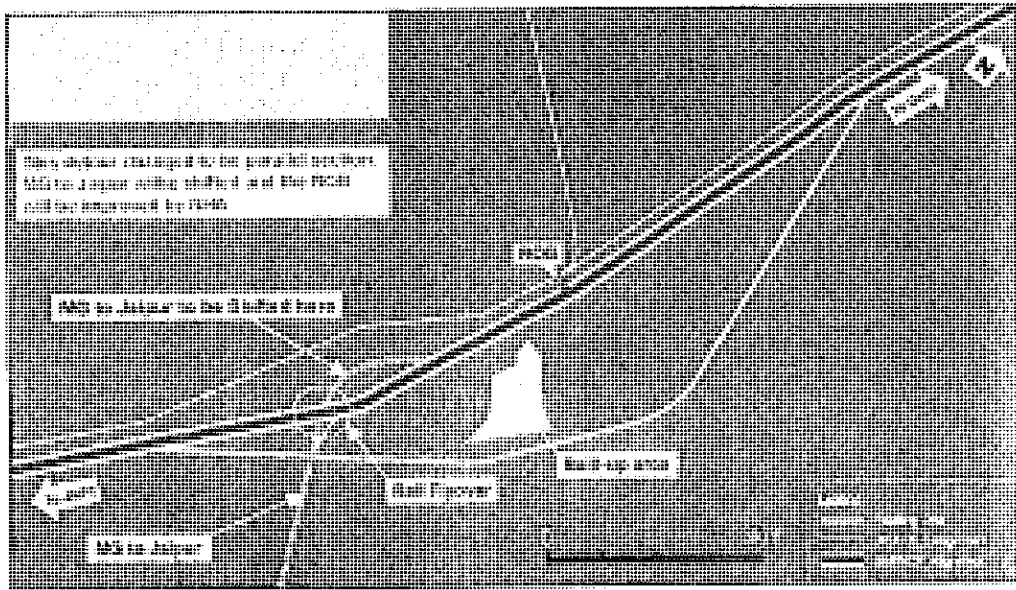
Source: JICA SAPROF Study

Figure 3-23 Near Makrera Station



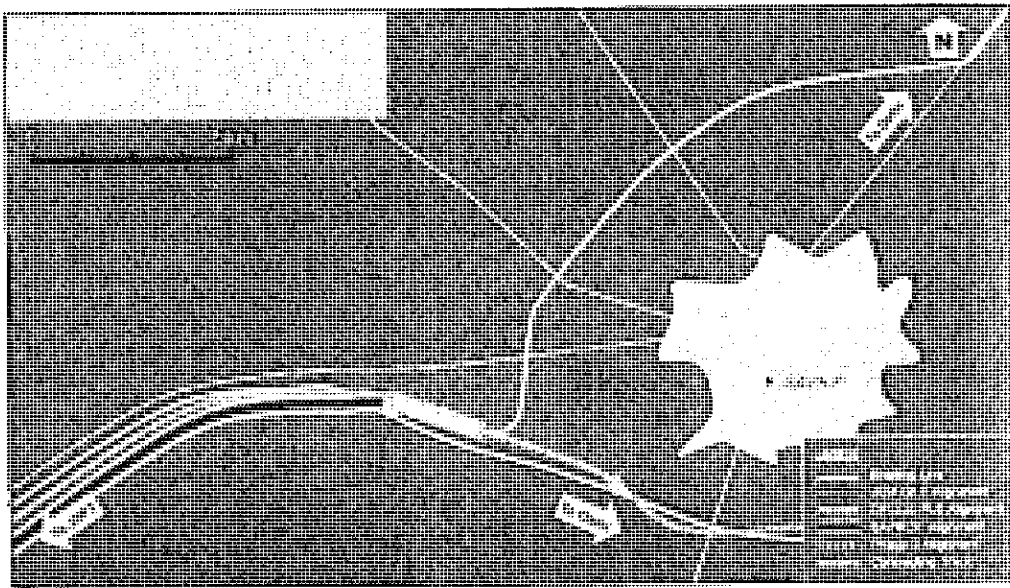
Source: JICA SAPROF Study

Figure 3-24 Small Detour in Madar Station



Source: JICA SAPROF Study

Figure 3-25 Ringas Stn.



Source: JICA SAPROF Study

Figure 3-26 Rewari JS

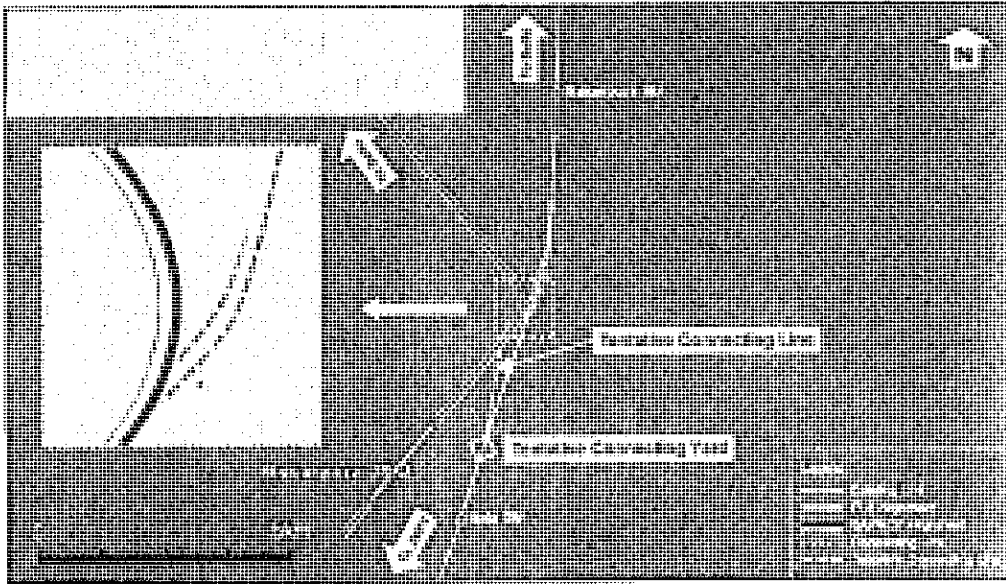
(2) Junction Station

The location of the junction stations and its connectivity to existing IR lines depend on the existing operation of the IR lines, natural and social environmental constraints on site, as well as topographical conditions on site. The finalised junction station plans are shown in Table 3-4.

Table 3-4 Conceptual Design of Junction Station Determined

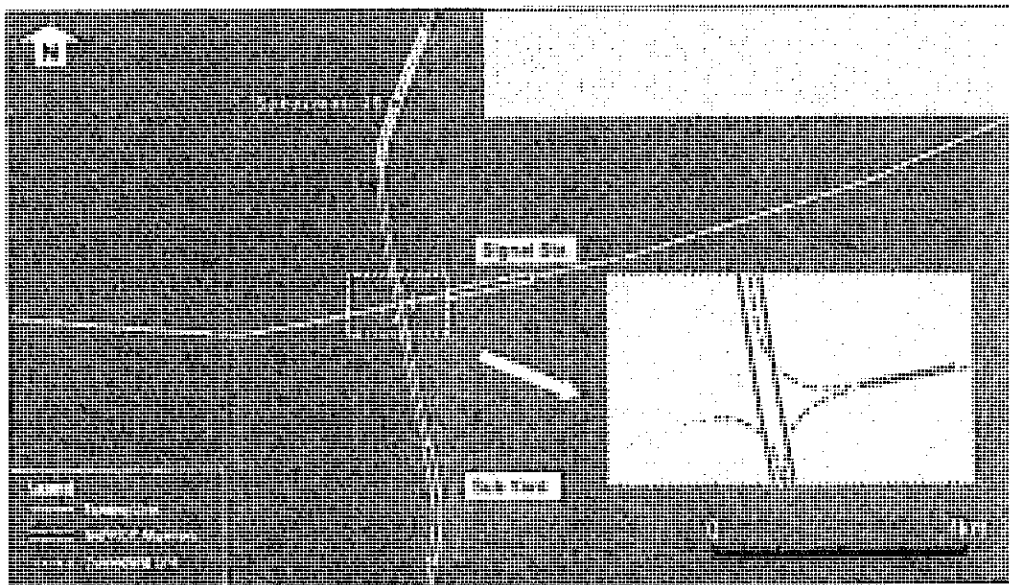
Figure No. /Junction Station	FLS Sec.	GLD Chainage (km)	Remark
Figure 3-27 Makarpura	5	420	<ul style="list-style-type: none"> - Connection point of JS at JNPT side to follow the FLS alignment. - DFCCIL will provide connectivity to the existing IR line. - Information on profile of Makarpura JS will be provided by DFCCIL – i.e. whether it is at Grade or not. - Function = GLD; Location = FLS Alignment
Figure 3-28 Sabarmati	6&7	560	<ul style="list-style-type: none"> - Route is shifted towards west. - Clover-type layout is rationalised into compact scale preserving the connectivity and function of the JS enclosed by track, as well as minimising land enclosed by track. - Provision of connecting line from JNPT to Virangam is made. - Function = GLD; Location = Finalized Alignment
Figure 3-29 Mahesana	7&8	611	<ul style="list-style-type: none"> - Provision of waiting track is made as a buffer for at-grade crossing. - Function = GLD; Location = Finalized Alignment
Figure 3-30 Palanpur	8	673	<ul style="list-style-type: none"> - Provision of waiting track is made as a buffer for at-grade crossing. - Southbound connection is provided. - Function = GLD; Location = Finalized Alignment
Figure 3-31 Marwar	11	881	<ul style="list-style-type: none"> - MG line is shifted to accommodate the waiting track and DFC line. - Function = GLD; Location = Finalized Alignment
Figure 3-32 Phulera	13	1,100	<ul style="list-style-type: none"> - Layout improved to avoid enclosing broad area and reflect the principle of GLD - Function = GLD; Location = Finalized Alignment
Figure 3-33 Rewari	15&16	1,310	<ul style="list-style-type: none"> - Logistic park needs to be planned separately along the existing line. - Function = GLD; Location = Finalized Alignment

Finalised Conceptual Design of Junction Station



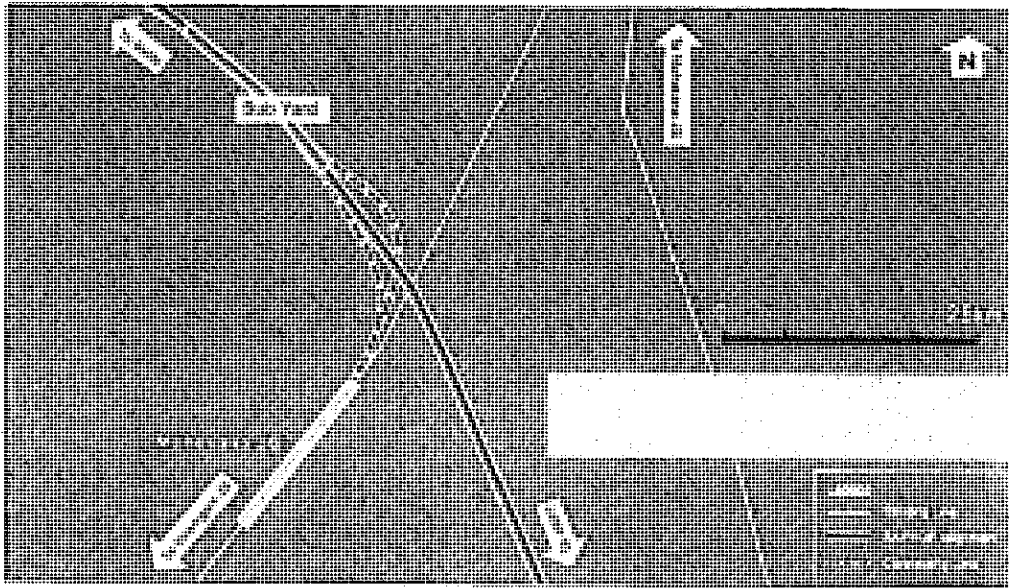
Source: JICA SAPROF Study

Figure 3-27 Makarpura JS



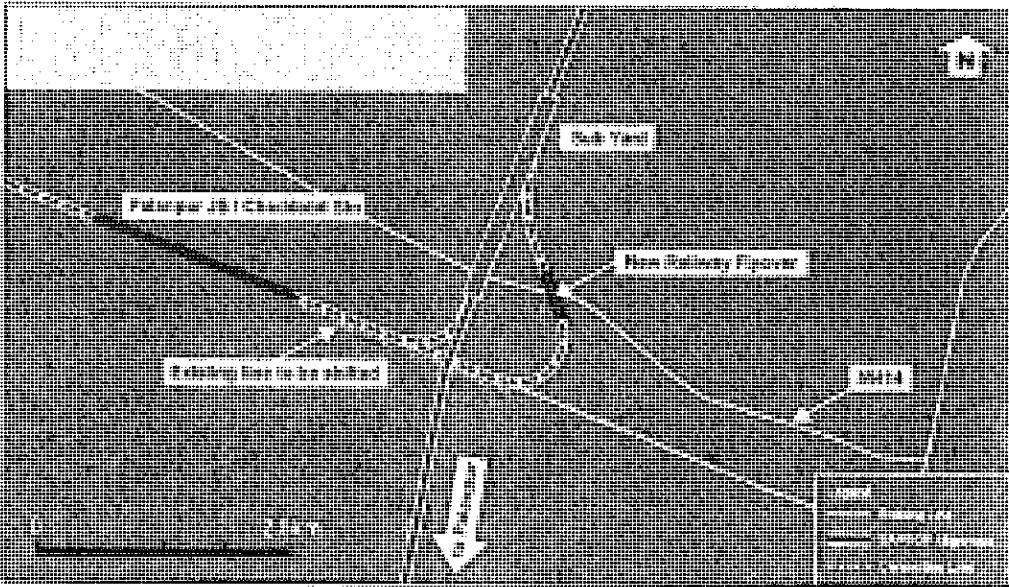
Source: JICA SAPROF Study

Figure 3-28 Sabarmati JS



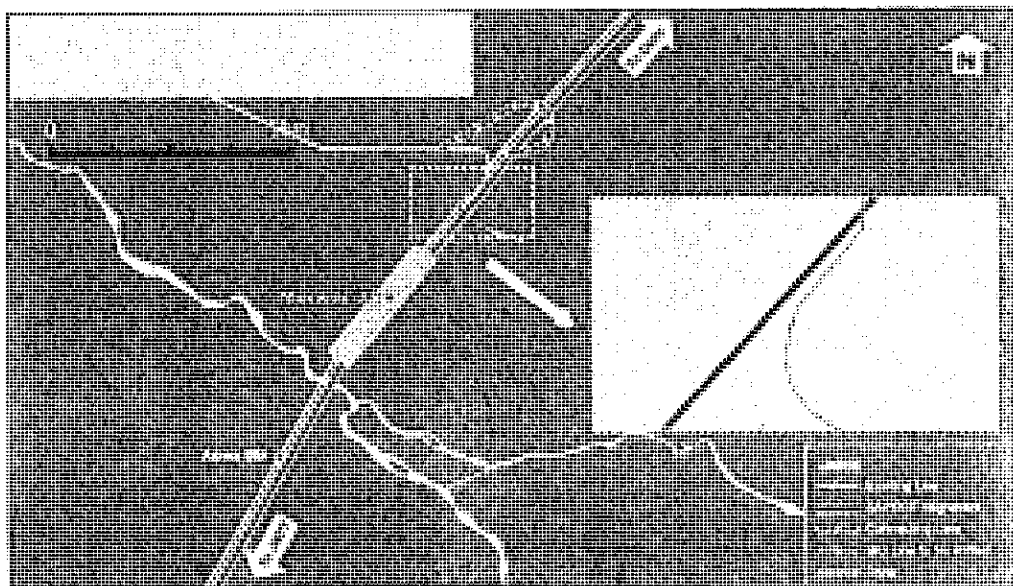
Source: JICA SAPROF Study

Figure 3-29 Mahesana JS



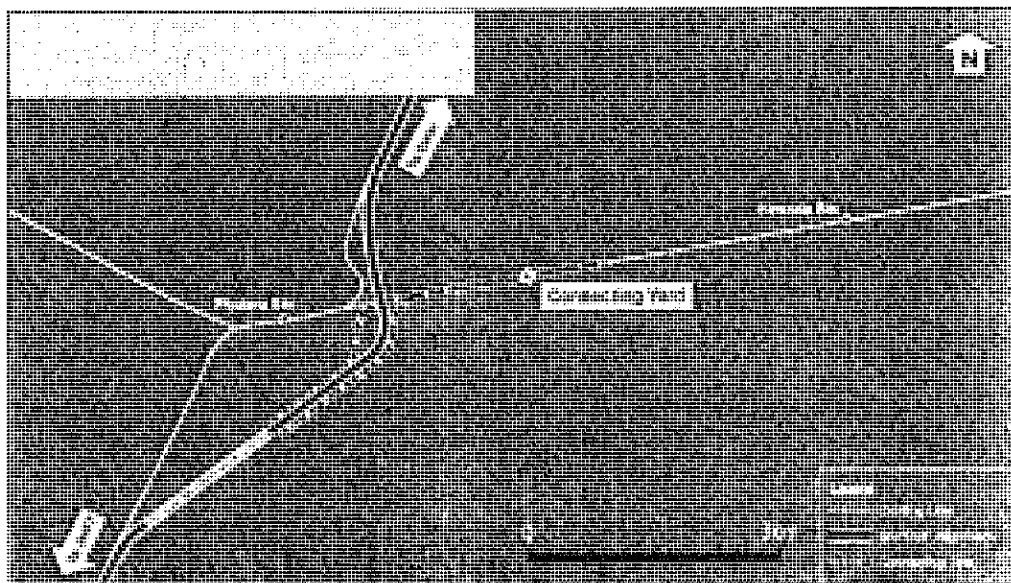
Source: JICA SAPROF Study

Figure 3-30 Palanpur JS



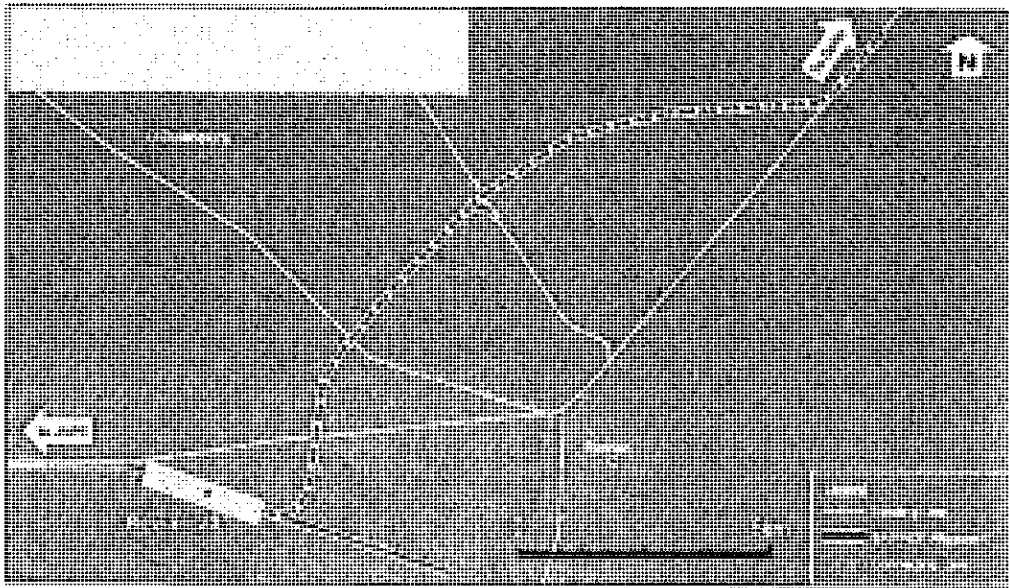
Source: JICA SAPROF Study

Figure 3-31 Marwar JS



Source: JICA SAPROF Study

Figure 3-32 Phulera JS



Source: JICA SAPROF Study

Figure 3-33 Rewari JS

(3) Reviewing of Critical Affected Structure Area

Near the existing Kishangarh Station, large number of structures is getting affected by the proposed alignment. The alignment has been reviews including shifting of the existing line to reduce number of affected structures.

CHAPTER 4 SOCIO-ECONOMIC FEATURE OF THE PROJECT-AFFECTED PERSONS

4.1 SOCIO-ECONOMIC SURVEY OF PAPS

In addition to the demographic and social data collected through structure identification survey additional socio-economic information was collected from PAFs through a structured socioeconomic questionnaire. This socio-economic questionnaire as shown in Attachment 4-1 was administered in the project area covering 20% of the Project Affected Families (PAFs). This chapter presents the socio-economic profile of PAFs in two separate sections based on two different surveys, i.e. structure and socio-economic survey.

4.1.1 Components of the Socio-economic Questionnaire

Major questions of socio-economic survey questionnaire are as follows:

- 1) Occupation, household members, education level, religion, social categories of the PAF;
- 2) House type and land ownership of PAFs;
- 3) Income source, assets including livestock, agricultural equipment, household goods, savings and loans;
- 4) Employment type if farmers;
- 5) Problems on livelihoods;
- 6) Access to public facilities, markets, farmland, and religious buildings;
- 7) Access to basic infrastructures; and
- 8) Comments on the expected social impacts on residents, resettlement and compensation of the DFC Project

4.2 SOCIAL PROFILE OF PAFS

Based on findings of the Project-Affected Structure Identification Survey, the social profile of the affected persons such as religion, social stratification and socio-economic characteristics etc. are presented in the following sections.

4.2.1 Social Category of PAFs

The social stratification of the whole project area shows that the dominance of other backward caste (OBC) family with 38.4%. The second stratum of the social grouping in the area is of General Caste family (38.1%) followed by Scheduled Caste (18.7%). The presence of Schedule Tribe (ST) family in the project area is 4.7% as there are 64 household from the ST community is enumerated by the Survey. The detail of social grouping in the project area is presented in the Table 4-1.

In Rajasthan and Haryana, percentages of OBC are predominant which are 39.7% and 42.3%, respectively. In Haryana, there is no ST population which will be affected.

Table 4-1 Social Features of Project-Affected Families

	Social Category			
	General	SC	ST	OBC
GUJARAT				
Vadodara	0	0	0	0
Anand	15	14	0	0
Kheda	0	0	0	9
Ahmedabad	0	0	0	0
Gandhinagar	1	0	0	2
Mahesana	0	0	0	3
Patan	21	0	0	2
Banaskantha	38	1	13	6
Sub-total	75	15	13	22
RAJASTHIAN				
Sirohi	2	0	5	2
Pali	41	25	8	42
Ajmer	120	96	26	113
Jaipur	21	28	7	49
Nagaur	0	0	0	0
Sikar	78	23	5	114
Alwar	5	0	0	2
Sub-total	267	172	51	322
HARYANA				
Mahendragarh	170	66	0	127
Rewari	3	0	0	48
Sub-total	173	66	0	175
Total	515	253	64	519
			1,351	

Note: The above figures are related to both fully and partially affected structures
Source: Project-Affected Structure Survey, 2008 and 2009

4.2.2 Religious Categories of the PAFs

The project area is dominated by Hindu community as they form 94.9% (1,282) of the PAFs. Among others, 3.5% (46) are Muslim community. The religious categories of PAFs are presented in the Table 4-2.

Table 4-2 Religious Categories of the PAFs

	Hindu	Muslim	Christian	Jain	Sikh	Buddhist
GUJARAT						
Vadodara	0	0	0	0	0	0
Anand	23	6	0	0	0	0
Kheda	9	0	0	0	0	0
Ahmedabad	0	0	0	0	0	0
Gandhinagar	3	0	0	0	0	0
Mahesana	3	0	0	0	0	0
Patan	21	2	0	0	0	0
Banaskantha	53	5	0	0	0	0
Sub-total	112	13	0	0	0	0
RAJASTHIAN						
Sirohi	7	2	0	0	0	0
Pali	89	21	0	6	0	0
Ajmer	330	8	8	7	2	0
Jaipur	103	2	0	0	0	0
Nagaur	0	0	0	0	0	0
Sikar	220	0	0	0	0	0
Alwar	7	0	0	0	0	0
Sub-total	756	33	8	13	2	0
HARYANA						
Mahendragarh	363	0	0	0	0	0
Rewari	51	0	0	0	0	0
Sub-total	414	0	0	0	0	0
Total	1,282	46	8	13	2	0
			1,351			

Note: The above figures are related to both fully and partially affected structures.
Source: Project-Affected Structure Survey, 2008 and 2009

4.2.3 Vulnerable Families

In the project area there are many families falling below poverty line (BPL).

Woman headed families and disabled families are also considered vulnerable. Some of the women headed families and disabled families belong to the Scheduled Castes (SC) and therefore either way they are vulnerable.

According to the Project-Affected Structure Identification Survey, a total of 50 families have been identified as socially and economically vulnerable in Gujarat. In vulnerable category, there are 89% (45) such families falling under BPL category and vulnerable group. There are 9 % (4) women headed families and 2% (1) family headed by physically handicapped people being affected.

In Rajasthan, a total of 308 families have been identified as socially and economically vulnerable. 92.5% (285) of the total vulnerable families belong to BPL family. It is observed that most of BPL families are found in Ajmer District. There are 6.5% (20) women headed family and 1% (3) family headed by physically handicapped people being affected.

In Haryana, vulnerable families likely to be affected have been identified a total of 85 families have been identified as socially and economically vulnerable. It is observed that about 68% (58) of the total vulnerable families belong to BPL family followed by BPL with woman-headed household at 14.1% (12) and only women-headed house hold 12.9% (11) has been observed during time of survey.

4.2.4 Distribution of Family Income

In Gujarat, 77% of the families are having income level less than or equal to Rs. 5,000/month and most of the families whose monthly income are less than equal to Rs. 5,000/month are concentrated at Banaskantha and Mahesana District. 7.5% of total families surveyed are having income level at Rs. 10,000/month.

In Rajasthan, 70.6% of the families are found whose income level is less than and equal to Rs. 5,000/month and 12.4% of the total families surveyed whose income level is Rs. 10,000/month. Most of the families whose monthly income are less than and equal to Rs. 5,000/month are concentrated at Ajmer, Pali and Sikar Districts.

In Haryana, 59% of the families are having income level less than and equal to Rs. 5,000/month and 16% of the total families surveyed whose income level is Rs. 10,000/month.

4.3 SOCIO-ECONOMIC FINDINGS BASED ON SAMPLE SURVEY

In addition to the social profile of PAFs based on the findings of the Project-Affected Structure Identification Survey, the socioeconomic profile of the PAFs is presented based on the Socio-economic Survey with 20% sample of the total PAFs in the following sections.

4.3.1 Occupation of Surveyed PAPs

In the overall project area, there percentage of business people, daily wage labour, is dominant.

In Gujarat, Major income source is agriculture and daily wage labour. 69% people directly or indirectly depends upon agriculture and daily wage labour.

In Rajasthan, major income source is private service and wage employee. 41.2% people do business. Other than this 18.5% people directly or indirectly depends upon agriculture, daily wage labour and other occupations.

In Mahendragarh District of Haryana, business is the dominant occupation. In Rewari, since the total number of structures surveyed is only 16, no dominant occupation type emerges.

Table 4-3 Occupational Status of Surveyed PAPs

	Occupation (20% of PAFs)*							Total
	Agriculture	Business	Daily Wage Labour	Govt. Service	Others	Pvt. Service	Wage Employee	
GUJARAT								
Vadodara	0	0	0	0	0	0	0	0
Anand	6	0	7	0	0	1	0	14
Kheda	0	0	1	1	0	0	0	2
Ahmedabad	0	0	0	0	0	0	0	0
Gandhinagar	0	0	0	0	0	0	0	0
Mahesana	6	0	3	5	1	0	0	15
Patan	8	0	0	0	0	0	1	9
Banaskantha	1	1	4	2	0	4	0	12
Sub Total	21	1	15	8	1	5	1	52
Percentage	40%	2%	29%	15%	2%	10%	2%	100%
RAJASTHAN								
Sirohi	0	0	0	0	0	0	3	3
Pali	0	4	1	0	1	16	14	36
Ajmer	9	12	8	5	10	42	23	109
Jaipur	6	3	1	0	3	11	4	28
Nagaur	0	0	0	0	0	0	0	0
Sikar	4	19	2	3	0	16	11	55
Alwar	1	1	0	0	0	0	0	2
Sub-total	20	39	12	8	14	85	55	233
Percentage	9%	17%	5%	3%	6%	36%	24%	100%
HARYANA								
Mahendragarh	5	28	12	7	8	5	6	71
Rewari	3	5	3	0	4	0	1	16
Sub-total	8	33	15	7	12	5	7	87
Percentage	9%	38%	17%	8%	14%	6%	8%	100%
Average	19%	19%	17%	9%	7%	17%	11%	100%

Source: Socio-economic Survey of PAFs, 2008 and 2009

4.3.2 Educational Status of PAPs

Education level of Project affected districts are presented in Table 4-4.

In Gujarat, there is only 8.0% people are illiterate. Most of the people are literate among them 10.0% people are graduate. In Rajasthan, there is only 6.0% people are illiterate. Most of the people are literate among them. 34% people are graduate.

In Mahendragarh of Haryana, maximum people surveyed are high school standard/completed education up to 12th standard, meaning moderately educated. 30% of the people surveyed are illiterate. This indicates that in case these people are affected, they would need appropriate training for their restoration of livelihood as most of them are either illiterate or education level is low.

Table 4-4 Educational Status of PAPs

	Educational Status (20%)							Total
	Can Read	Can Write	Graduate	High School (12th Std)	Illiterate	ITI	Primary (5th Std)	
GUJARAT								
Vadodara	0	0	0	0	0	0	0	0
Anand	0	10	1	1	2	0	0	14
Kheda	0	0	1	0	0	0	1	2
Ahmedabad	0	0	0	0	0	0	0	0
Gandhinagar	0	0	0	0	0	0	0	0
Mahesana	0	4	1	7	1	1	1	15
Patan	1	4	0	3	1	0	0	9
Banaskantha	0	3	2	6	0	1	0	12
Sub Total	1	21	5	17	4	2	2	52
Percentage	2%	40%	10%	33%	8%	4%	4%	100%
RAJASTHAN								
Sirohi	0	2	0	0	0	0	1	3
Pali	0	21	15	0	0	0	0	36
Ajmer	6	51	32	8	7	0	5	109
Jaipur	0	9	11	4	4	0	0	28
Nagaur	0	0	0	0	0	0	0	0
Sikar	3	10	21	12	4	0	5	55
Alwar	0	0	0	2	0	0	0	2
Sub-total	9	93	79	26	15	0	11	233
Percentage	4%	40%	34%	11%	6%	0%	5%	100%
HARYANA								
Mahendragarh	1	3	10	29	17	0	11	71
Rewari	0	2	0	5	9	0	0	16
Sub-total	1	5	10	34	26	0	11	87
Percentage	1%	6%	11%	39%	30%	0%	13%	100%
Average	2%	23%	11%	36%	19%	2%	8%	100%

Source: Socio-economic Survey of PAFs, 2008 and 2009

4.3.3 Distribution of Assets

Distribution of assets is presented in Table 4-5. Assets are indicators of the socio-economic conditions of people. Livestock are mostly cow, buffalo, sheep, ox, goat etc. Agricultural equipments are mainly tractor, power triller, thresher, harvester, Consumer durables are TV, fridge, mixer etc.

In Gujarat, Banaskantha District the number of livestock and number of two wheelers are maximum which indicating the better economic condition of majority of families likely to be affected by the project. In Rajasthan, Ajmer District the number of livestock and consumer durables are maximum which indicating the better economic condition of majority of families likely to be affected by the project. In Haryana, consumer durables and livestock are proportionately more in Mahendragarh than that in Rewari.

Table 4-5 Distribution of Assets

	Distribution of Assets				
	Livestock	Agricultural Equipments	Consumer durables	2 Wheelers	4 wheelers
GUJARAT					
Vadodara	0	0	0	0	0
Anand	41	1	4	47	1
Khedda	3	0	0	7	0
Ahmedabad	0	0	0	0	0
Gandhinagar	0	0	0	0	0
Mahesana	14	2	0	51	0
Patan	26	6	9	10	0
Banaskantha	51	0	3	52	0
Sub-total	135	9	16	167	1
RAJASTHAN					
Sirohi	0	0	8	0	0
Pali	4	0	134	11	0
Ajmer	116	4	358	29	4
Jaipur	54	10	127	8	1
Nagaur	0	0	0	0	0
Sikar	53	12	295	27	11
Alwar	6	12	9	1	0
Sub-total	233	38	931	76	16
HARYANA					
Mahendragarh	131	8	349	65	13
Rewari	35	7	62	19	0
Sub-total	166	15	411	84	13
Total	534	62	1,358	327	30

Source: Socio-economic Survey of PAFs, 2008 and 2009

4.3.4 Drinking Water Source

Drinking water source are presented in Table 4-6. Most of the population in overall area depends from private pump well for drinking water source. In Gujarat, most of the population depends from public supply for drinking water source. In Rajasthan, most of the families have their private pump well. 47% of populations depend upon private pump well. In Haryana, private pumps dominate in Mahendragarh while in Rewari dug wells too are important with private pumps.

Table 4-6 Drinking Water Source of the Area

	Drinking Water Source					Total
	Common Dig well	Common Pump well	Private Dig well	Private Pump well	Public Supply	
GUJARAT						
Vadodara	0	0	0	0	0	0
Anand	2	3	6	2	1	14
Kheda	0	0	0	1	1	2
Ahmedabad	0	0	0	0	0	0
Gandhinagar	0	0	0	0	0	0
Mahesana	0	0	0	1	14	15
Patan	0	6	0	2	1	9
Banaskantha	4	2	0	2	4	12
Sub Total	6	11	6	8	21	52
Percentage	12%	21%	12%	15%	40%	100%
RAJASTHAN						
Sirohi	0	2	0	1	0	3
Pali	2	21	0	5	8	36
Ajmer	3	11	4	57	34	109
Jaipur	0	5	0	21	2	28
Nagaur	0	0	0	0	0	0
Sikar	4	18	1	24	8	55
Alwar	0	0	0	2	0	2
Sub-total	9	57	5	110	52	233
Percentage	4%	24%	2%	47%	22%	100%
HARYANA						
Mahendragarh	1	6	3	57	4	71
Rewari	0	0	5	9	2	16
Sub-total	1	6	8	66	6	87
Percentage	1%	7%	9%	76%	7%	100%
Total	16	74	19	184	79	372

Source: Socio-economic Survey of PAFs, 2008 and 2009

4.3.5 Toilet Facility

Toilet facilities are presented in Table 4-7. Maximum PAFs have their own toilet facilities at their own house. In Gujarat, 79% of the PAFs have their own toilet facilities at their own house. There are some few villages where there is no toilet facility. In Rajasthan, maximum PAFs have their toilet facilities at their own house (75%). In Haryana, 50.6% of PAFs have not their toilet facilities at their own house and 43.7% of the families have toilet facilities.

Table 4-7 Toilet Facility of the Project Area

	Toilet Facilities				Total
	Indoor	Pvt Outdoor	Common Outdoor	Not Available	
GUJARAT					
Vadodara	0	0	0	0	0
Anand	10	0	1	3	14
Khedda	1	0	0	1	2
Ahmedabad	0	0	0	0	0
Gandhinagar	0	0	0	0	0
Mahesara	13	0	0	2	15
Patan	6	1	0	2	9
Banaskantha	11	1	0	0	12
Sub-total	41	2	1	8	52
Percentage	79%	4%	2%	15%	100%
RAJASTHAN					
Sirohi	2	0	0	1	3
Pali	27	2	5	2	36
Ajmer	82	2	18	7	109
Jaipur	25	1	1	1	28
Nagaur	0	0	0	0	0
Sikar	38	0	12	5	55
Alwar	1	0	0	1	2
Sub-total	175	5	36	17	233
Percentage	75%	2%	15%	7%	100%
HARYANA					
Mahendragarh	31	5	0	35	71
Rewari	7	0	0	9	16
Sub-total	38	5	0	44	87
Percentage	44%	6%	0%	51%	100%
Total	254	12	37	69	372

Source: Socio-economic Survey of PAFs, 2008 and 2009

4.3.6 Power Supply

Power supply facilities are presented in Table 4-8. In Gujarat, 96% villages have electric connections. Some peoples have their private generator set. In Rajasthan, 96.5% project affected villages have electric connections. Only 3.5% of the respondents reported that power supply is not available. Considering power supply, toilet facilities and access to drinking water as development index, the villages in Rajasthan may be considered as moderately developed. In Haryana, 86.2% villages have electric connections.

Table 4-8 Power Supply of Study Area

	Power Supply			Total
	Not available	Power line	Pvt Generator	
GUJARAT				
Vadodara	0	0	0	0
Anand	1	12	1	14
Kheda	0	2	0	2
Ahmedabad	0	0	0	0
Gandhinagar	0	0	0	0
Mahesana	0	15	0	15
Patan	2	7	0	9
Banaskantha	0	12	0	12
Sub-total	3	48	1	52
Percentage	6%	92%	2%	100%
RAJASTHAN				
Sirohi	0	3	0	3
Pali	1	35	0	36
Ajmer	4	105	0	109
Jaipur	0	28	0	28
Nagaur	0	0	0	0
Sikar	7	48	0	55
Alwar	0	2	0	2
Sub-total	12	221	0	233
Percentage	5%	95%	0%	100%
HARYANA				
Mahendragarh	8	63	0	71
Rewari	4	12	0	16
Sub-total	12	75	0	87
Percentage	14%	86%	0%	100%
Total	27	344	1	372

Source: Socio-economic Survey of PAFs, 2008 and 2009

4.3.7 Women in Economic Activities

Women members of the affected household in the project area are engaged in various economic and non-economic (household) activities. As result of the Socio economic Survey, it shows that the numbers of female member engaged in economic activities in Banaskantha District of Gujarat are more than that in the others project affected districts. In Rajasthan, the numbers of female member engaged in economic activities in Sikar District are more than that in the others project affected districts. Ajmer takes second position in this matter. In Haryana, the number of female member engaged in economic activities in Rewari District are more than that in the others project affected districts.

4.3.8 Awareness and Envisaged Benefits about DFC project

The awareness of DFC Project is presented in Table 4-9. People are conscious about the DFC Project at 87% in Gujarat, 72% in Rajasthan, and 98% in Haryana. People have got the basic information about the Project mainly from newspaper and TV. Most of the people of the project area at 80% are conscious about the Project and they agree that this project will bring the economic benefit in their areas. People at Mahendragarh District accept as true that this project will bring business opportunity while people at Rewari agreed with industry development.

Table 4-9 Awareness about DFC Project

	Awareness about DFC Project		
	Yes	No	Total
GUJARAT			
Vadodara	0	0	0
Anand	14	0	14
Kheda	2	0	2
Ahmedabad	0	0	0
Gandhinagar	0	0	0
Mahesana	14	1	15
Patan	3	6	9
Banaskantha	12	0	12
Sub Total	45	7	52
Percentage	87%	13%	100%
RAJASTHAN			
Sirohi	2	1	3
Pali	29	7	36
Ajmer	71	38	109
Jaipur	22	6	28
Nagaur	0	0	0
Sikar	41	14	55
ALWAR	2	0	2
Sub Total	167	66	233
Percentage	72%	28%	100%
HARYANA			
Mahendragarh	70	1	71
Rewari	15	1	16
Sub Total	85	2	87
Percentage	98%	2%	100%
Total	297	75	372

Source: Socio-economic Survey of PAFs, 2008 and 2009

4.3.9 Choice of Place for Relocation and Resettlement

While asked about relocation options if required, it is noted that majority of the people preferred to be relocated in the same village.

Table 4-10 Choice of Place for Relocation and Resettlement

	Compensation	Doesn't matter	Same State	Same district	Same sub-district	Same village	No answer	Total
GUJARAT								
Vadodara	0	0	0	0	0	0	0	0
Anand	1	0	0	0	2	9	0	12
Kheda	0	0	0	0	1	1	0	2
Ahmedabad	0	0	0	0	0	0	0	0
Gandhinagar	0	0	0	0	0	0	0	0
Mahesana	0	0	0	0	0	15	0	15
Patan	0	2	0	0	0	6	0	8
Banaskantha	0	0	0	2	1	9	0	12
Sub Total	1	2	0	2	4	40	0	49
Percentage	2%	4%	0%	4%	8%	82%	0%	100%
RAJASTHAN								
Sirohi	0	0	0	0	1	2	0	3
Pali	0	0	0	0	1	35	0	36
Ajmer	0	12	1	0	5	91	0	109
Jaipur	0	0	0	0	1	27	0	28
Nagaur	0	0	0	0	0	0	0	0
Sikar	0	0	0	0	7	48	0	55
ALWAR	0	0	0	0	0	2	0	2
Sub Total	0	12	1	0	15	205	0	233
Percentage	0%	5%	0%	0%	6%	88%	0%	100%
HARYANA								
Mahendragarh	0	3	0	1	0	62	5	71
Rewari	0	1	0	1	0	14	0	16
Sub Total	0	4	0	2	0	76	5	87
Percentage	0%	5%	0%	2%	0%	87%	6%	100%

Source: Socio-economic Survey of PAFs, 2008 and 2009

4.3.10 Anticipated Loss of Income

Anticipation of difficulty during resettlement is presented in Table 4-11. Most of the respondents have anticipated the major difficulty in finding a new house and finding new income source.

Table 4-11 Anticipated Loss of Income

	Acclimatization	Finding Income Source	Finding new farmland	Finding new house	Security issues	Finding New School	Total
GUJARAT							
Vadodara	0	0	0	0	0	0	0
Anand	0	6	2	6	0	0	14
Kheda	0	0	1	1	0	0	2
Ahmedabad	0	0	0	0	0	0	0
Gandhinagar	0	0	0	0	0	0	0
Mahesana	0	8	0	7	0	0	15
Patan	0	0	2	1	0	0	3
Banaskantha	2	3	1	5	1	0	12
Sub-total	2	17	6	20	1	0	46
Percentage	4%	37%	13%	43%	2%	0%	100%
RAJASTHAN							
Sirohi	0	0	0	3	0	0	3
Pali	0	10	0	26	0	0	36
Ajmer	2	7	0	100	0	0	109
Jaipur	1	4	0	23	0	0	28
Nagaur	0	0	0	0	0	0	0
Sikar	1	23	1	29	0	1	55
Alwar	0	0	0	2	0	0	2
Sub-total	4	44	1	183	0	1	233
Percentage	2%	19%	0%	79%	0%	0%	100%
HARYANA							
Mahendragarh	2	14		52	3	0	71
Rewari	0	4	1	10	1	0	16
Sub-total	2	18	1	62	4	0	87
Percentage	2%	21%	1%	71%	5%	0%	100%

Source: Socio-economic Survey of PAFs, 2008 and 2009

4.3.11 Preference for Type of R&R Assistance

In Gujarat, 54.3% of the respondents have requested for newly constructed house. 17.4% of the respondents have requested for self relocation. In Rajasthan, 17.6% of the respondents has requested for newly constructed house. While 63% of the respondents agreed for self relocation. Only a few the respondents has requested for replaceable value of their structures. In Haryana, 49.4% of the respondents has requested for newly constructed house. Only a few respondents has requested for replaceable value of their structures.

4.3.12 Requesting to Implementing Authority about R&R

In Gujarat and Rajasthan, the respondents have requested for provision and disbursement of proper compensation to the project proponent 98% and 52.3%, respectively. In Haryana, 51.4% of the respondents have requested for compensation and R&R.

4.4 ANALYSIS OF SOCIO-ECONOMIC SURVEY RESULTS OF AGRICULTURAL PAFs

To identify socio-economic situation of Agricultural PAFs (Agri-PAFs) whose agricultural land are likely to be affected by the land acquisition for the Project, the socio-economic

survey of 25 Agri-PAFs of each district has been conducted throughout 17 districts of 3 states. The survey results of each district are presented below.

4.4.1 Possession of Legal Documents

It is observed in Table 4-12 the surveyed Agri-PAFs have legal documents at 96.5% in Gujarat, 64.8% in Rajasthan, and 84% in Haryana. In Rajasthan, it was found that a large number of PAFs are traditional owners of the land, however, have either not obtained the legal papers from the government or lost those papers over the years. The legal documents mainly comprises of registration certificates (Pattas) issued by local government. Other legal documents include the sale deed, lease agreements, etc.

Table 4-12 Possession of Legal Documents of Agri PAFs

	Yes	No	Total
GUJARAT			
Vadodara	24	1	25
Anand	22	3	25
Kheda	25	0	25
Ahmedabad	22	3	25
Gandhinagar	25	0	25
Mahesana	25	0	25
Patan	25	0	25
Banaskantha	25	0	25
Sub-total	193	7	200
Percentage	96.5%	3.5%	100%
RAJASTHAN			
Sirohi	25	0	25
Pali	28	7	35
Ajmer	38	2	40
Jaipur	10	21	31
Nagaur	0	13	13
Sikar	11	19	30
Alwar	2	0	2
Sub-total	114	62	176
Percentage	64.8%	35.2%	100%
HARYANA			
Mahendragarh	19	6	25
Rewari	23	2	25
Sub-total	42	8	50
Percentage	84.0	16.0	100
Average Percentage	81.8%	18.2%	100%

Source: Socio-economic Survey of Agri-PAFs, 2008 and 2009

4.4.2 Religion-wise Distribution of Agri-PAFs

Religious distribution of Agri-PAFs of project affected districts is presented in Table 4-13. It shows that overall area dominant religion is Hinduism. In Gujarat, majority of the population (91%) are Hindu. Maximum number of PAFs from religious minority community is reported from Patan, Banaskantha, Mahesana, and Vadodara Districts.

In Rajasthan, 97.7% of Agri-PAFs are Hindu. Only 3 PAFs in Ajmer District belong to Muslim community, while 1 PAF in Pali District practices Jainism.

In Haryana, majority of the Agri-PAFs (98.0%) are Hindu. No religious minority community is found to be affected in Rewari and Mahendragarh Districts.

Table 4-13 Religion-wise Distribution of PAFs

	Hindu	Muslim	Christian	Boudh	Jain	Total
GUJARAT						
Vadodara	23	2	0	0	0	25
Anand	24	1	0	0	0	25
Kheda	22	3	0	0	0	25
Ahmedabad	25	0	0	0	0	25
Gandhinagar	25	0	0	0	0	25
Mahasana	21	4	0	0	0	25
Patan	21	4	0	0	0	25
Banaskantha	21	4	0	0	0	25
Sub Total	182	18	0	0	0	200
Percentage	91.0	9.0%	0.0%	0.0%	0.0%	100%
RAJASTHAN						
Sirohi	25	0	0	0	0	25
Pali	34	0	0	0	1	35
Ajmer	37	3	0	0	0	40
Jaipur	31	0	0	0	0	31
Nagaur	13	0	0	0	0	13
Sikar	30	0	0	0	0	30
Alwar	2	0	0	0	0	2
Sub Total	172	3	0	0	1	176
Percentage	97.7%	1.7%	0.0%	0.0%	0.6%	100%
HARYANA						
Mahendragarh	24	0	0	0	1	25
Rewari	25	0	0	0	0	25
Sub Total	49	0	0	0	1	50
Percentage	98.0%	0.0%	0.0%	0.0%	2.0%	100%
Average Percentage	95.6%	3.6%	0.0%	0.0%	0.9%	100%

Source: Socio-economic Survey of Agri-PAFs, 2008 and 2009

4.4.3 Social Category

In Gujarat, 56.5% of the Agri-PAFs belong to General Castes while 13.5% and 29.0% belong to the Scheduled Caste (SC) and Scheduled Tribe (ST), respectively. Mehasana has maximum number of Agri-PAFs belonging to ST, while Ahmedabad has maximum PAFs from SC Community. In Rajasthan, 65.3% of the Agri-PAFs belong to OBC, while 18.8% belong to ST. Population of Scheduled Tribes among the surveyed agricultural PAFs is found to very low. In Haryana, 60% of the Agri-PAFs belongs to OBC, while remaining 40% belongs to General Category.

Table 4-14 Social Category distribution of Agri PAFs

	General	OBC	SC	ST	Total
GUJARAT					
Vadodara	21	0	1	3	25
Anand	23	0	1	1	25
Kheda	13	0	3	9	25
Ahmedabad	2	0	20	3	25
Gandhinagar	11	0	0	14	25
Mahesana	7	0	0	18	25
Patan	15	1	2	7	25
Banaskantha	21	1	0	3	25
Sub-total	113	2	27	58	200
Percentage	56.5%	1.0%	13.5%	29%	100%
RAJASTHAN					
Sirohi	1	14	7	3	25
Pali	6	14	14	1	35
Ajmer	4	30	6	0	40
Jaipur	1	27	1	2	31
Nagaur	0	13	0	0	13
Sikar	9	16	5	0	30
Alwar	1	1	0	0	2
Sub-total	22	115	33	6	176
Percentage	12.5%	65.3%	18.8%	3.4%	100%
HARYANA					
Mahendragarh	8	17	0	0	25
Rewari	12	13	0	0	25
Sub-total	20	30	0	0	50
Percentage	40.0%	60.0%	0.0%	0.0%	100%
Average Percentage	36.3%	42.1%	10.8%	10.8%	100%

Source: Socio-economic Survey of Agri-PAFs, 2008 and 2009

4.4.4 Distribution of Assets

Assets are indicators of the socio-economic conditions of people. Livestock are mostly cow, buffalo, sheep, ox, goat etc. Agricultural equipments are mainly tractor, thresher, harvester. Consumer durables are TV, fridge, mixer etc. In Banaskantha District, the number of livestock and consumer durables are maximum which indicating the better economic condition of majority of families likely to be affected by the Project.

Table 4-15 shows that Agri-PAFs belong to all of the districts of Rajasthan have a good number of livestock and consumer durables but only a few numbers of vehicles. In Haryana, both Rewari and Mahendragarh Districts have a number of livestock and consumer durables which indicating the better economic condition of majority of families likely to be affected by the Project.

Table 4-15 Distribution of Assets of Agri PAFs

	Livestock	Agri Equipments	Consumer Durables	2-Wheelers	4-Wheelers
GUJARAT					
Vadodara	98	21	97	19	0
Anand	69	14	105	6	2
Kheda	144	7	71	5	0
Ahmedabad	72	53	135	7	0
Gandhinagar	154	12	65	13	1
Mahesana	110	48	128	8	1
Patan	81	19	92	11	0
Banaskantha	174	62	164	17	5
Sub-total	902	236	857	86	9
RAJASTHAN					
Sirohi	114	20	50	6	0
Pali	132	30	164	15	2
Ajmer	235	14	105	10	7
Jaipur	354	17	87	10	2
Nagaur	78	12	28	8	0
Sikar	191	24	88	11	2
Alwar	9	0	6	0	0
Sub-total	1,113	117	528	60	13
HARYANA					
Mahendragarh	73	17	115	10	2
Rewari	58	47	127	22	6
Sub-total	131	64	242	32	8
Grand Total	2,146	417	1627	178	30

Source: Socio-economic Survey of Agri-PAFs, 2008 and 2009

4.4.5 Average Landholding Size

Table 4-16 shows that average land holding capacity of overall project area is maximum in Ahmedabad and minimum in Sirohi of Rajasthan. In Gujarat, the average land holding size is maximum at 4.6 ha in Ahmedabad District, while in Anand it is only 1.0 ha. In Rajasthan, the average land holding size is highest in Pali District at 5.1 ha and lowest is Sirohi District at 0.9 ha. In Haryana, the average land holding size is maximum at 3.5 ha in Mahendragarh District, while it is 3.3 ha in Rewari.

Table 4-16 Average Size of Landholding of Agri PAFs

	Average of Land holding (ha)
GUJARAT	
Vadodara	1.3
Anand	1
Kheda	1.9
Ahmedabad	4.6
Gandhinagar	2.8
Mahesana	2.1
Patan	1.2
Banaskantha	1.9
RAJASTHAN	
Sirohi	0.9
Pali	5.1
Ajmer	2.7
Jaipur	1.6
Nagaur	1.9
Sikar	1.4
Alwar	2.6
HARYANA	
Mahendragarh	3.5
Rewari	3.3

Source: Socio-economic Survey of Agri-PAFs, 2008 and 2009

4.4.6 Requirement of Accessibility Envisaged

It may be noted that all of the Agri-PAFs of three states have demand for a provision of RUB to ensure easy accessibility to their agricultural fields because in parallel section land may be get bifurcated due to the proposed alignment. In Rajasthan, 2.3% of PAFs have demand for service road also.

4.4.7 Drinking Water Sources

Table 4-17 shows that PAFs of all over project area depend upon public water supply.

In Gujarat, only 40% of the Agri-PAFs depend on public water supply for drinking water. Almost equal number of people depends on their own pump well for water while 36% depends on common pump well.

In Rajasthan, only 32.4% of the Agri-PAFs depend on public water supply for drinking water. 19.3% have on their own pump well for water while another 22.2% of Agri-PAFs own dig well. About 24.4% depend on common pump well for drinking water.

In Haryana, only 62% of the Agri-PAFs depend on public water supply for drinking water. 24% depend on their own pump well for water while 10% depends on common pump well.

Table 4-17 Drinking Water Sources of Agri PAFs

	Brought from Water Vendors	Dig Well (Common)	Dig Well (Private)	Public Water Supply	Pump Well (Common)	Pump Well (Private)	Total
GUJARAT							
Vadodara	0	2	2	6	10	5	25
Anand	0	0	0	8	15	2	25
Kheda	0	0	1	11	8	5	25
Ahmedabad	0	0	0	19	1	5	25
Gandhinagar	0	0	0	9	2	14	25
Mahesana	0	0	0	9	0	16	25
Patan	0	0	0	13	0	12	25
Banaskantha	0	0	0	5	0	20	25
Sub-total	0	2	3	80	36	79	200
Percentage	0.0%	1.0%	1.5%	40.0%	18.0%	39.5%	100%
RAJASTHAN							
Sirohi	0	0	3	7	11	4	25
Pali	3	0	11	9	6	6	35
Ajmer	0	0	15	16	9	0	40
Jaipur	0	0	2	2	11	16	31
Nagaur	0	0	0	4	3	6	13
Sikar	0	0	8	17	3	2	30
Alwar	0	0	0	2	0	0	2
Sub-total	3	0	39	57	43	34	176
Percentage	1.7%	0.0%	22.2%	32.4%	24.4%	19.3%	100%
HARYANA							
Mahendragarh	0	0	1	19	2	3	25
Rewari	1	0	0	12	3	9	25
Sub-total	1	0	1	31	5	12	50
Percentage	2.0%	0.0%	2.0%	62.0%	10.0%	24.0%	100%
Average Percentage	1.9%	0.3%	8.6%	44.8%	17.5%	27.6%	100%

Source: Socio-economic Survey of Agri-PAFs, 2008 and 2009

4.4.8 Toilet Facility

Table 4-18 shows that, 76.5% of Agri-PAFs have indoor facilities for toilet in Gujarat, while 22.5% of them have toilets outside of their house. It is common practice throughout rural India that people construct toilets separately from their residential building but within their

own courtyard. In Rajasthan, majority of the Agri-PAFs at 89.2% have their own toilet as indoor facility, while 4% have outdoor toilets. Only 1.1% of them do not have any toilets. In Haryana, 62% of Agri-PAFs have no toilet facility. Only 36% of them have toilets inside their house.

Table 4-18 Toilet Facility of Agri-PAFs

	In-door Toilet	Out-door Toilet(Common)	Out-door Toilet (Private)	Not Available	Total
GUJARAT					
Vadodara	9	1	15	0	25
Anand	25	0	0	0	25
Kheda	11	0	14	0	25
Ahmedabad	25	0	0	0	25
Gandhinagar	20	0	5	0	25
Mahesana	20	0	5	0	25
Patli	21	0	4	0	25
Banaskantha	22	1	2	0	25
Sub-total	153	2	45	0	200
Percentage	76.5%	1.0%	22.5%	0.0%	100%
RAJASTHAN					
Sirohi	22	0	2	1	25
Pali	30	4	1	0	35
Ajmer	38	1	1	0	40
Jaipur	28	1	2	0	31
Nagaur	11	2	0	0	13
Sikar	27	2	1	0	30
Alwar	1	0	0	1	2
Sub-total	157	10	7	2	176
Percentage	89.2%	5.7%	4.0%	1.1%	100%
HARYANA					
Mahendragarh	9	0	1	15	25
Rewari	9	0	0	16	25
Sub-total	18	0	1	31	50
Percentage	36.0%	0.0%	2.0%	62.0%	100%
Average Percentage	67.2%	2.2%	9.5%	21.0%	100%

Source: Socio-economic Survey of Agri-PAFs, 2008 and 2009

4.4.9 Power Supply

In Gujarat at 99.9%, Rajasthan at 94.3% and Haryana at 98% of Agri-PAFs have power supply but in Rajasthan and Haryana, 5.7% and 2% have no electric connections, respectively.

4.4.10 Women Involved in Economic Activity

In Gujarat, Rajasthan, Haryana, about 4.5%, 30.1%, and 2% of families belonging to Agri-PAFs who have women economic active, respectively. In Gujarat, 6 families in Anand District, 24 families of Jaipur District, Rajasthan and 1 family from Rewari in Haryana have reported that women members are engaged in economic activities.

4.4.11 Awareness about DFC Project

In Gujarat at 94 %, Rajasthan at 90.3% and Haryana at 92%, people are conscious about the DFC project. People have got the basic information about the Project mainly from newspaper and TV. In Rajasthan, majority of the Agri-PAFs (who are aware about DFC) acknowledged Television as the prime source of information. 29.6% of the respondents have obtained the information from newspapers while only 3.8% of PAFs learnt about the Project by word of mouth.

4.4.12 Intension to Change of Occupation

Table 4-19 shows that overall 40% of Agri-PAFs want to change their occupation. In Gujarat, only 12.5% of Agri-PAFs wished to change their occupation while 87.5% wanted to remain farmers. In Rajasthan, 86.4% of the Agri-PAFs expressed their desire to continue farming in future. Only 13.6% of the Agri-PAFs wished to change their present occupation to business. In Haryana, Only 94.0% of Agri-PAFs wished to change their occupation, while 6.0% wanted to remain farmers.

Table 4-19 Intension to Change of Occupation of Agri PAFs

	Change of occupation	Work as farmer
GUJARAT		
Vadodara	1	24
Anand	4	21
Kheda	3	22
Ahmedabad	1	24
Gandhinagar	3	22
Mahesana	2	23
Patan	6	19
Banaskantha	5	20
Sub-total	25	175
Percentage	12.5%	87.5%
RAJASTHAN		
Sirohi	11	14
Pali	8	27
Ajmer	1	39
Jaipur	1	30
Nagaur	0	13
Sikar	3	27
Alwar	0	2
Sub-total	24	152
Percentage	13.6%	86.4%
HARYANA		
Mahendragarh	24	1
Rewari	23	2
Sub-total	47	3
Percentage	94.0%	6.0%
Average Percentage	40.0%	60.0%

Source: Socio-economic Survey of Agri-PAFs, 2008 and 2009

4.4.13 Preferences for Future Occupation

Table 4-20 shows preferences for future occupations of PAFs Overall project area 39.4% Agri-PAFs have preferences of rice cultivation followed by vegetable production which is 29.2%. In Gujarat, rice is the most favored crop of the farmers who wanted to continue the farming occupation i.e (48%). In Rajasthan, 42.1% of the surveyed PAFs, who wished to retain their status as farmers chose to cultivate vegetables, while 34.2% preferred rice cultivation. Higher rate of return of the investment amount in case of vegetable farming have influenced the choice of the people. In Haryana, 36% Agri-PAFs wanted to continue the rice cultivation farming occupation. 20% and 12% of the Agri-PAFs are interested vegetable and livestock raising farming, respectively. Almost all over project area of the agricultural PAFs did not express any choice for alternative farming land.

Table 4-20 Preferences for Future Occupation of Agri PAFs

	Livestock raising	Orchard	Rice cultivation	Vegetable	No Answer	Total
GUJARAT						
Vadodara	2	2	15	5	1	25
Anand	3	1	10	7	4	25
Kheda	3	0	13	6	3	25
Ahmedabad	0	1	17	6	1	25
Gandhinagar	1	0	16	5	3	25
MAHESANA	0	3	12	8	2	25
Patan	3	1	4	11	6	25
Banaskantha	8	0	9	3	5	25
Sub-total	20	8	96	51	25	200
Percentage	10.0%	4.0%	48.0%	25.5%	12.5%	100%
RAJASTHAN						
Sirohi	2	0	6	6	0	14
Pali	6	0	12	9	0	27
Ajmer	8	0	14	17	0	39
Jaipur	6	0	11	13	0	30
Nagaur	6	0	1	6	0	13
Sikar	8	0	8	11	0	27
Alwar	0	0	0	2	0	2
Sub-total	36	0	52	64	0	152
Percentage	23.7%	0.0%	34.2%	42.1%	0.0%	100%
HARYANA						
Mahendragarh	2	3	13	2	5	25
Rewari	4	0	5	8	8	25
Sub-total	6	3	18	10	13	50
Percentage	12.0%	6.0%	36.0%	20.0%	26.0%	100%
Average Percentage	15.2%	3.3%	39.4%	29.2%	12.8%	100%

Source: Socio-economic Survey of Agri-PAFs, 2008 and 2009

4.4.14 Request to Implementing Authority about R&R

Table 4-21 shows that all of the Agri-PAFs wanted proper distribution of compensation against acquisition of their agricultural land in Gujarat. In Rajasthan, almost all of the Agri-PAFs requested for disbursement of compensation (at market price of their land). Only 1 person in Alwar District has requested for both compensation and assistance in R&R. In Haryana, all of the PAFs wanted proper distribution of compensation and assistance for R&R against acquisition of their agricultural land.

Table 4-21 Request to Implementing Authority about R&R of Agri PAFs

	Both compensation & assistance for R&R	Compensation	Total
GUJARAT			
Vadodara	-	25	25
Anand	-	25	25
Kheda	-	25	25
Ahmedabad	-	25	25
Gandhinagar	-	25	25
Mahesana	-	25	25
Patan	-	25	25
Banaskantha	-	25	25
Sub-total	-	200	200
Percentage	-	100%	100%
RAJASTHAN			
Sirohi	0	25	25
Pali	0	35	35
Ajmer	0	40	40
Jatpur	0	31	31
Nagaur	0	13	13
Sikar	0	30	30
Alwar	1	1	2
Sub-total	1	175	176
Percentage	0.6%	99.4%	100%
HARYANA			
Mahendragarh	21	4	25
Rewari	24	1	25
Sub Total	45	5	50
Percentage	90.0%	10.0%	100%

Source: Socio-economic Survey of Agri-PAFs, 2008 and 2009

CHAPTER 5 RESETTLEMENT POLICY AND ENTITLEMENTS

5.1 OBJECTIVES OF REHABILITATION AND RESETTLEMENT

Recognising the adverse impacts of the project and the need to address the involuntary displacement and other related adverse social impacts, MOR and DFCCIL have formulated the Resettlement and Rehabilitation Policy including entitlements keeping in view the national laws and international guidelines: The Railways (Amendment) Act, 2008 (RAA 2008), the National Rehabilitation and Resettlement Policy, 2007 (NRRP 2007), and Japan Bank for International Cooperation (Ex-JBIC) Guidelines for Confirmation of Environmental and Social Considerations, April 2002. The RRP will govern all cases of rehabilitation and resettlement due to the DFC project. Based on these, the following core involuntary resettlement principles applicable are:

- Avoid or minimize land acquisition and involuntary resettlement impacts by exploring all viable alternative designs;
- Where displacement is unavoidable, prepare time-bound RRP for PAPs so that they are not worse off than the present socio-economic condition after the implementation of the project. In other words, assist affected persons in improving their former living standards and income earning capacity with additional assistance to vulnerable groups;
- Ensure wide range of meaningful consultations with stakeholders including likely PAPs on compensation, disclosure of resettlement information, participation of PAPs in planning and implementation of the resettlement program in order to suitably accommodate their inputs and make rehabilitation and resettlement plan more participatory and broad-based;
- Facilitate harmonious relationship between the Executing Authority and PAPs through mutual co-operation and interaction;
- Ensure payment of compensation and assistance to PAPs including non-title holders for lost assets at replacement value;
- Ensure payment of compensation and resettlement assistance prior to taking over the possession of land and commencement of any construction activities;
- Provision of rehabilitation assistance for loss of livelihood/income;
- Establishment of institutional arrangements such as grievance redress mechanism, NGO (optional) etc.
- In case of linear acquisitions, in projects relating to railway lines, highways, transmission lines, laying of pipelines and other such projects wherein only a narrow stretch of land is acquired for the purpose of the project or is utilised for right of way, each khatedar in the affected family shall be offered by the requiring body an ex-gratia payment of such amount as the appropriate Government may decide but not less than twenty thousand rupees, in addition to the compensation or any other benefits due under the Act or programme or scheme under which the land, house or other property is acquired:

5.2 REHABILITATION AND RESETTLEMENT POLICY

The Resettlement and Rehabilitation policy is based on the principles that the project affected persons would not be worse-off on account of the project than they were before.

5.2.1 General Principles

General principles for the rehabilitation and resettlement for the Project are shown below.

Table 5-1 General Principles for the Rehabilitation and Resettlement for the Project

1) Project-affected persons/families (PAPs/PAFs) will be categorized as titleholders, non-titleholders; wage earners, kiosk, vendors, etc.
2) The compensation and assistance will be provided as per the "Entitlement Matrix" for different categories of PAPs.
3) PAPs will be assisted in improving or regaining their standard of living at project cost.
4) Vulnerable PAP will be eligible for additional resettlement and rehabilitation assistance as provided in entitlement matrix.
5) PAPs will receive compensation for lost assets at replacement cost.
6) PAPs not enumerated during the census shall be included in the list of PAPs based on documentary evidence.
7) However, anyone moving into the project area after the cut-off date will not be entitled to assistance.
8) The project will have separate resettlement budget.
9) All information related to rehabilitation and resettlement policy, mitigation measures, resettlement plan preparation and implementation will be disclosed to all stakeholders including likely PAPs.
10) Meaningful participation of stakeholders would be ensured at various stages of the project.
11) Appropriate grievance redress mechanism will be established to ensure speedy resolution of disputes.
12) Consultations carried out with stakeholders and PAPs will be documented. It will be ensured that meaningful consultations continue during the implementation of the Rehabilitation and Resettlement Plan.
13) Any change in the status of title-holding/tenancy after the cut-off dates shall not be considered.

5.2.2 Minimization of Adverse Impacts

Efforts are made to minimize land acquisition and involuntary resettlement impacts as far as possible by exploring all viable alternative designs throughout the implementation of the project as explained in Chapter 3.

5.2.3 Prevention of Influx of New Encroachers and Squatters

The following measures are undertaken to prevent influx of new encroachers and squatters within the proposed ROW after the cut-off date:

- PAPs will be identified and recorded as early as possible through census which serves as a cut-off date.
- One of the DFCCIL officers of the rank of Executive Engineer shall be made responsible for the identification, reporting and initiation of action for eviction of encroachers and squatters that occur after the cut-off date as per the existing law. DFCCIL carry out monitoring of the entire section under his/her jurisdiction with the help of other support staff. Monthly monitoring will be reported to senior officer in DFCCIL for further information and guidance.
- Fencing or construction of wall in the urban sections and other potential locations to prevent entry of illegal occupants in future within the proposed ROW during the project implementation period.
- After the cut-off date, if any person enters into the proposed ROW and DFCCIL fails to evict these people as per the existing law within six (6) months, then the new illegal occupant will be treated at par with other illegal occupants as available under the RRP framework.

5.3 ELIGIBILITY FOR COMPENSATION/ASSISTANCE/REHABILITATION

Eligibility for compensation, assistance, and rehabilitation is shown below.

Table 5-2 Eligibility for Compensation, Assistance, and Rehabilitation

- 1) The cut-off date for entitlement is the date (i) on which notification is issued as per the notification prescribed under the Section 20A of the RAA 2008 for legal owners and (ii) the census date for non-titleholders in affected zone.
- 2) Eligibility of different categories of PAPs will be as per the Entitlement Matrix as shown in the subsequent section below.
- 3) The unit of entitlement will be family.
- 4) Titleholder PAPs will be eligible for compensation as well as assistance.
- 5) Non-titleholder PAPs will not be eligible for compensation of the land occupied by them. However, they will receive compensation for the investment made by them on the land such as replacement value of structures and other assets. They will also be eligible for R&R assistance as per Resettlement Policy and Entitlement Matrix.
- 6) In case a PAP could not be enumerated during census, but has reliable evidence to prove his/her presence before the cut-off date in the affected zone shall be included in the list of PAPs after proper verification by the grievance redress committee.
- 7) PAPs from vulnerable group will be entitled for additional assistance as specified in the Entitlement Matrix.
- 8) PAPs will be entitled to take away or salvage the dismantled materials free of cost without delaying the project activities.
- 9) If a notice for eviction has been served on a person/family before the cut-off date and the case is pending in a court of law, then the eligibility of PAP will be considered in accordance with the legal status determined by the court and the PAP will be eligible for compensation/assistance in accordance with the RRP provisions.

5.4 COMPENSATION AND ASSISTANCE

Main policy on the compensation of land acquisition for the Project is shown below.

Table 5-3 Main Policy on the Compensation of Land Acquisition for the Project

- 1) Land acquisition will be the responsibility of the MOR as project proponent and DFCCIL as project implementation agency from the Central Government, and Competent Authority from State government authorized by the Central Government.
- 2) Additional land required for the project shall be acquired as per the RAA 2008 therein from time to time.
- 3) Land will not be acquired for the project by invoking emergency clause of the RAA 2008.
- 4) The compensation amount for land will be paid to the land losers as per the RAA 2008.
- 5) The completion of land acquisition will be considered complete in completion of the procedure prescribed under the Section 20(I) of RAA 2008.
- 6) If the land losers decide to surrender residual land plot to the Project in such case DFCCIL will be bound to acquire the residual plot and pay compensation and R&R assistances as per provisions of the policy.
- 7) All land measurements shall be based on the latest revenue map of the concerned village.
- 8) If compensation money is not claimed by the interested persons for one year after the notice for collection of compensation amount then in such cases the compensation amount will be kept with DFCCIL/CA in a separate account till the currency of the project. Interested parties either directly or through their legal heirs as the case may be can claim their compensation after satisfactory documentary verification. After project completion however, the money will be kept in the Govt. treasury as "unclaimed money".

Main items for the compensation and assistance for the Project are shown below.

Table 5-4 Main Items for the Compensation and Assistance for the Project

- 1) Independent valuator authorized by DFCCIL will determine the replacement value of land, structures, trees and crops and other assets.
- 2) The difference between the replacement cost as determined by the independent valuator and the amount paid as compensation shall be paid as assistance by DFCCIL/Competent Authority (CA). Thus the replacement cost is the total of compensation and assistance.
- 3) Replacement cost of structures and other assets affected shall be paid without depreciation
- 4) In case the structure is partly acquired, then cost to maintain the viability and safety of the remaining part of structure shall be taken into consideration while estimating the replacement cost.
- 5) Absentee titleholder PAPs will be eligible for compensation only.
- 6) PAPs losing source of livelihood shall be eligible for transitional allowance as specified in the Entitlement Matrix. Loss of livelihood will be verified by the DFCCIL/CA for providing transitional assistance.
- 7) PAPs losing their place of residence/business or both (displaced) shall be eligible for shifting allowance for carrying household items and transport allowance for transporting salvaged materials from dismantled structure.
- 8) PAPs losing sources of livelihood shall be eligible for training to upgrade their skills (one person per affected family) at project cost.
- 9) Compensation and assistance will be paid before taking possession of the acquired land and properties.
- 10) Non-title holders shall be paid compensation for structure and other assets before taking over the land for civil construction work.
- 11) Civil works will start only after the compensation and/or assistance has been paid to the PAPs.
- 12) Advance notice with appropriate period such as 4 months shall be given by DFCCIL/CA for harvesting of standing crops.
- 13) Assistance on account of damage to standing crops shall be based on the estimate provided by the Agriculture Department. Market rate of crops will be determined by DFCCIL/CA in consultation with agricultural department or procurement rate announced by the concerned government, whichever is higher.
- 14) Advance notice with appropriate period such as 2 months will be served by DFCCIL/CA to vacate encroached homestead or vacant land.

5.5 RESETTLEMENT AND REHABILITATION

The compensation for rehabilitation and resettlement shall be paid as per the Entitlement Matrix.

5.6 ENTITLEMENT MATRIX

A detailed description of compensation and assistance is given in the Entitlement Matrix as shown in Table 5-5. PAPs will be eligible for a combination of compensation and assistance measures depending upon the nature of ownership rights of lost assets, type of impact and socio-economic status of PAPs.

Table 5-5 Entitlement Matrix for DFC Project Based on RAA 2008 and NRRP 2007

S.No	Application	Definition of Affected Persons	Entitlement	Details
A. Loss of Private Agricultural, Homestead & Commercial Land				
1	Land on the Project Right of Way	Legal Title holders and Affected Parties with traditional land rights	1.Compensation at replacement cost 2.Resettlement and Rehabilitation	<p>(i) Cash compensation for the land at market value, which will be determined as mentioned in note (A) (section 20 G of RAA 2008)</p> <p>(ii) 60% solatium on the compensation determined in (i) above (section 20 F(9) of RAA 2008)</p> <p>(iii) Additional ex-gratia amount of Rs 20,000/- (NRRP para 7.19)</p> <p>(iv) If as a result of land acquisition, the land holder becomes landless or is reduced to the status of a "small" or "marginal" farmer, rehabilitation assistance equivalent to 750 days of minimum agricultural wages would also be given</p> <p>(v) The Competent Authority may in case of doubt/conflicting claims of compensation of market value may take inputs from an independent evaluator also before deciding the award. Detailed procedure in this regard is in note B</p> <p>(vi) Policy for acquisition/compensation for residual land will be as per note C</p> <p>(vii) Refund of stamp duty and registration charges incurred for replacement land to be paid by the project; (1) replacement land must be bought within a year from the date of payment of compensation to affected party as defined in section 20(H) of RAA 2008</p>

2		Registered tenants, contract cultivators & leaseholders	Compensation for standing crops at market rate	Registered tenants, contract cultivators & leaseholders are not eligible for compensation for land. They will only be eligible for compensation for standing crops at market rate if 4 month advance notice is not served by EA.
3		Un-registered tenants, contract cultivators, leaseholders, sharecroppers	Compensation for standing crops at market rate	Un-registered tenants, contract cultivators, leaseholders & sharecroppers are not eligible for compensation for land. They will only be eligible for compensation for standing crops at market rate if 4 month advance notice is not served by EA. In case of share croppers, compensation shall be in the ratio as mutually agreed by the share croppers and land owners.
B. Loss of Private Structures (Residential/Commercial)				
4	Structure on the Project Right of Way	Title Holder/Owner	Compensation at replacement rate Resettlement & Rehabilitation Assistance	<p>(i) Cash compensation for the structure at replacement cost which would be determined as per note D.</p> <p>(ii) Right to salvage material from the demolished structures.</p> <p>(iii) Three month notice to vacate structures.</p> <p>(iv) Refund of stamp duty and registration charges for purchase of new alternative houses/shops at prevailing rates on the market value as determined in (i) above. Alternative houses/shops must be bought within a year from the date of payment of compensation to affected party as defined in section 20(H) of RAA 2008.</p> <p>(v) Resettlement & Rehabilitation Assistance as applicable as under:</p> <p>(a) Transition Allowance of Rs 4,000/- per household.</p>

				<p>(b) Each affected getting displaced shall get a one-time financial assistance of Rs 10,000 as shifting allowance (para 7.10 NRRP 2007).</p> <p>(c) Each affected family that is displaced and has cattle, shall get financial assistance of Rs 15,000/- for construction of cattle shed (para 7.10 NRRP 2007).</p> <p>(d) Each affected person who is a rural artisan, small trader or self employed person and who has been displaced shall get a one-time financial assistance of Rs 25,000/- for construction of working shed or shop (para 7.12 NRRP 2007).</p>
5	Structure on the Project Right of Way	Tenants/Lease Holders	Resettlement & Rehabilitation Assistance	<p>(i). Registered lessees will be entitled to an apportionment of the compensation payable to structure owner as per applicable local laws.</p> <p>(ii) In case of tenants, three months written notice will be provided along with Rs 10,000 towards shifting allowance (NRRP 7.11).</p> <p>(iii) Three month notice to vacate structures. In case notice is not provided, then three months rental allowance will be provided in lieu of notice.</p>
C. Loss of Trees & Crops				
5	Standing Trees, Crops on Project Right of Way	Owners & beneficiaries of land	Compensation at market value	<p>(i) 4 month advance notice to affected parties to harvest fruits, standing crops and remove trees</p> <p>(ii) Compensation to be paid at the rate estimated by:</p> <p>(a) the Forest Department for timber trees</p> <p>(b) State Agriculture Extension Department for crops</p> <p>(c) Horticulture Department for perennial trees</p> <p>(d) Cash assistance to title holders and non title holders</p>

				including informal settlers/squatters for loss of trees, crops and perennials at market value
D. Loss of Residential/Commercial Structures by Non Title Holders				
6	Structures on the Project ROW	Owners of structures identified as on date of notification (20A).	Compensation at replacement cost Resettlement & Rehabilitation Assistance	<p>(i) Encroachers (as defined in Note F) shall be given three months notice to vacate occupied land or compensation for loss of crops or structures if notice is not given</p> <p>(ii) Cash assistance to squatters (as defined in Note F) for their structures at replacement costs which will be determined as mentioned in Note D</p> <p>(iii) Resettlement & Rehabilitation assistance as under:</p> <p>(a) Transition Allowance of Rs 4,000/- per household.</p> <p>(b) Shifting allowance of Rs 10,000 per household (para 7.11 NRRP 2007).</p> <p>(c) Assistance of Rs 15,000/- for loss of cattle shed (para 7.10 NRRP 2007).</p> <p>(d) If the affected party getting displaced is a rural artisan, small trader or self employed person assistance of Rs 25,000/- for construction of working shed or shop (para 7.12 NRRP 2007)</p>
E. Loss of Livelihood				
7	Households living on Right of way	Title Holders/ Non-Title holders/share-croppers, agricultural labourers and employees	Rehabilitation Assistance	<p>(i) Rehabilitation grant equivalent to 750 days of minimum agricultural wages to those families losing livelihood (NRRP para 7.14)</p> <p>(ii) Training Assistance of Rs 4,000/- for income generation per household</p> <p>(iii) Temporary employment in the project construction work to Affected Persons with particular attention to APs Below Poverty Line (BPL) by the project contractor during</p>

				construction, to the extent possible
E1 Additional support to Vulnerable Group (as defined in Note E) & those Below Poverty Line				
8	Households affected by ROW	Households affected by ROW	Resettlement & Rehabilitation Assistance	One time additional financial assistance equivalent to 300 days of minimum wages
E2 Additional assistance to Scheduled Tribe affected families				
9	Affected Scheduled Tribes	Households affected by ROW	Rehabilitation Assistance	(i) Each ST affected family shall get an additional one time financial assistance equivalent to five hundred days minimum agricultural wages for loss of customary right or usage of forest produce (para 7.21.5 NRRP 2007) (ii) In case of land acquisition from each ST affected family, at least one third of the compensation amount due shall be paid to the affected families at the outset as first instalment and the rest at the time of taking over the possession of the land (para 7.21.4 NRRP 2007)
F. Loss of Community Infrastructure/Common Property Resources				
	Structures & other resources (eg land, water, access to social services etc) on ROW	Affected communities and groups	Reconstruction of community structure and common property resources	Reconstruction of community structures and replacement of common property resources in consultation with the community as appropriate
G. Temporary impact during Construction				
	Land & assets temporarily impacted during construction	Owners of land & assets	Compensation for temporary impact during construction like disruption of normal traffic, damage to adjacent parcel of land/ assets due to movement of heavy machinery and plant site.	The contractor shall bear the compensation cost of any impact on structure or land due to movement of machinery during construction or establishment of construction plant. All temporary use of lands outside proposed ROW to be through written approval of the landowner and contractor. Location of construction camps by contractors in consultation with DFCCIL

Note A

1. Compensation would be determined by Competent Authority as per provisions in RAA 2008, section 20 (G) which specifies the following criterion for assessing and determining market value of the land:

(i) the minimum land value, if any, specified in the Indian Stamp Act, 1899 for the registration of sale deeds in the area, where the land is situated; or

(ii) the average of the sale price for similar type of land situated in the village or vicinity, ascertained from not less than 50% of the sale deeds registered during three years, where higher price has been paid, whichever is higher.

2. Wherever the above provisions are not applicable, the concerned State Government shall specify the floor price per unit area of the said land based on the average higher prices paid for similar type of land situated in the adjoining areas or vicinity, ascertained from not less than 50% of sale deeds registered during the preceding 3 years where higher price has been paid, and the competent authority may calculate the value of the land accordingly (section 20(G) of RAA 2008 to be followed).

3. While determining the compensation amount, competent authority or arbitrator shall also take into account the following, as per provisions in section 20 F (8) of RAA 2008 :

(i) damage, if any sustained by the person interested at the time of taking possession of the land, by reason of the severing of such land from other land.

(ii) damage, if any, sustained by the persons interested at the time of taking possession of the land, by reason of the acquisition injuriously affecting his other immovable property in any manner, or his earnings

(iii) if, in consequence of the acquisition of the land, the person interested is compelled to change his residence or place of business, the reasonable expenses, if any, incidental to such change.

4. Before assessing and determining the market value of the land being acquired, competent authority shall:

(i) ascertain the intended land use category of such land; and

(ii) take into account the value of the land of the intended category in the adjoining areas or vicinity.

5. In case where the right of the user or any right in the nature of an easement on, any land is acquired, an amount calculated at ten percent of the compensation amount determined under section 20 F(1) of RAA 2008, shall be paid by the EA to the owner and any other person whose right in enjoyment of the land has been affected.

Note B

DFCCIL would also hire an Independent Evaluator registered with Government, who can assist to assess the replacement cost of land as follows and provide inputs to the competent authority:

(i) Appraise recent sales and transfer of title deeds and registration certificates for similar type of land in the village or urban area and vicinity

(ii) Appraise circle rate in urban and rural areas of the district

(iii) Appraise agricultural productivity rate for land – 20 years yield.

The Competent Authority may take inputs from the independent evaluator before deciding the compensation for the land.

Note C

If the residual plot(s) is (are) not economically viable, the EA will follow the rules and regulations applicable in the state and compensate accordingly; if there are no state specific rules and regulations available regarding residual land is less than average land holding of the district after EA purchase, the EA in agreement with the Affected Party, will follow one of the following:

The EA will buy the residual land for the project following the entitlements listed in the entitlement matrix; or

The EA will pay the Affected Party 25% of the land hardship compensation for that portion of land without its purchase.

Note D

The compensation for houses, buildings and other immovable properties will be determined on the basis of

replacement cost by referring to relevant Basic Schedule of Rates (B.S.R) as on date without depreciation. While considering the B.S.R, the independent evaluator registered with the Government will use the latest B.S.R for the residential and commercial structures in the urban and rural areas of the region, and in consultation with the owners

Note E

NRRP 2007 defines Vulnerable Persons as disabled, destitute, orphans, widows, unmarried girls, abandoned women or persons above 50 years of age; who are not provided or cannot immediately be provided with alternative livelihood, and who are not otherwise covered as part of a family(para 6.4 (v) NRRP 2007)

Note F

Definitions:

Marginal farmer - A cultivator with an un-irrigated land holding up to 1 hectare or with an irrigated land holding up to half hectare.

Small farmer – A cultivator with an un-irrigated land holding up to 2 hectares or with an irrigated land holding up to 1 hectare, but more than a marginal farmer.

Encroacher- A person/family, who transgresses into the public land (prior to the cut of date0, adjacent to his/her own land or other immovable assets and derives his/her additional source of shelter/livelihood.

Squatter – A person/family that has settled on the public land without permission or has been occupying public building without authority prior to the cut-off date and is depending for his or her shelter or livelihood and has no other source of shelter or livelihood.



CHAPTER 6 RESETTLEMENT SITE

Due to nature of the linear project, there is no resettlement where most of village members are subject to the relocation, but small proportion of village members under one village. Therefore, PAPs to be relocated tend to prefer to move to within or nearby their original village in general according to the result of socio-economic survey and public consultation meetings for RRP. Under such situation, the Project will not plan to prepare the resettlement site.

On the other, 54.3% of the respondents of the Socio-economic Survey in Gujarat have requested for newly constructed house, 17.6% in Rajasthan and 49.4% in Haryana, respectively. Provision of alternative house/land will not be considered as an option to the PAPs as they will be compensated with cash compensation as per replacement cost and other benefits also.

CHAPTER 7 INCOME RESTORATION

7.1 BACKGROUND

Development Project may have an adverse impact on the income of project-affected persons. They also have a negative impact on the socio-cultural systems of affected communities. Restoration of pre project-levels of income is an important part of rehabilitating socioeconomic and cultural system in affected communities.

To achieve this goal, preparation of income restoration programme under RRP should be proceed exactly as it would have for any other economic development programme. IR scheme should be designed in consultation with affected persons and they should explicitly approve the programme.

Table 7-1 shows due to DFC project, livelihood of 265 families will be affected due to loss of commercial structures and 114 families will be affected due to loss of residential cum commercial structures.

Table 7-1 Distribution of Families Losing Commercial Properties

	Project-Affected Structures			Project-Affected Families		
	Commercial	Residential -cum- commercial	Total	Commercial	Residential -cum- commercial	Total
Gujarat						
Vadodara	0	0	1	0	0	0
Anand	0	1	1	0	1	1
Kheda	1	0	9	1	0	1
Ahmedabad	0	0	0	0	0	0
Gandhinagar	1	0	1	1	0	1
Mahesana	0	0	0	0	0	0
Patan	0	0	0	0	0	0
Bunaskantha	0	1	1	0	2	2
Sub-total	2	2	4	2	3	5
Rajasthan						
Sirohi	0	0	0	0	0	0
Pali	18	4	22	18	4	22
Ajmer	51	17	68	51	18	69
Jaipur	33	15	48	33	15	48
Nagaur	0	0	0	0	0	0
Sikar	56	30	86	61	38	99
Alwar	0	0	0	0	0	0
Sub-total	158	66	224	163	75	238
Haryana						
Mahendragarh	69	19	88	73	28	101
Rewari	22	8	30	27	8	35
Sub-total	91	27	118	100	36	136
Total	251	95	346	265	114	379

Note: The above figures are related to both fully and partially affected structures.
Source: Project-Affected Structure Survey, 2008

Majority of the eligible families for income restoration earn their livelihood through small business, trading or cultivation and therefore it is imperative to ensure that the PAPs are able to reconstruct their livelihood. The NGO may be engaged for R&R implementation if required otherwise, the work shall be done by a team of CPMs representatives and Social Consultants attached with Social Environmental Management Unit. They will ensure and provide all assistance to PAPs to restore their livelihood. Detail of the benefits for income restoration is being given in Entitlement Matrix.

7.2 ADDITIONAL SUPPORT FROM ONGOING POVERTY REDUCTION PROGRAMS

CPMs and their unit, Social Scientist of Social and Environmental Management unit and consultants working will play a pro active role to mobilize PAPs to get benefits from various Central /State Government schemes and ensure accessibilities to PAPs by disclosing the same at various level i.e. Gram Panchyat, village, district and CPMs offices also.

The NGO may be engaged if required, for R&R implementation will assist PAPs in finding capital from various sources such as by forming self help group, from bank, from various government schemes or utilizing project assistance.

7.3 STEPS IN INCOME RESTORATION

7.3.1 Information on Economic Activity of PAPs

Basic information on IR activity PAPs will be available from the census and socio economic survey. Information from baseline surveys will be available on features of economic activities of PAPs under two categories, viz,

- Land Based Economic activity
- Non Land Based Economic activities
- Total Income of PAPs from various sources

Based on this information IR activities can be planned. IR activities are of two types: short-term and long-term.

(1) Short Term IR activities

Short term IR activities means restoring PAPs income during periods of immediately before and after relocation. Such activities will focus on the following;

- Ensure that adequate compensation is paid before relocation,
- Relocation and transit allowance,
- Provide short term welfare grant

(2) Long Term IR Activities

PAPs should participate in developing a range of feasible long term IR options. Long term options are affected by the scale of resettlement which may affect the feasibility of various non land based and land based IR options .The long term options are either project financed or government financed. Therefore DFCCIL officials will coordinate with government department to assure PAPS access to all schemes for improving IR services. Project financed programmes should be include a specific time frame.

7.3.2 Categories of Impacts

Project induced displacement may lead to loss or diminished income for project affected persons.

The main categories of impacts are as follows:

- Loss of agricultural land, partly or fully
- Loss of commercial establishment
- Loss of temporary commercial structure or mobile vendor (Squatters)

- Loss of livelihood (Commercial tenants, agricultural labours).

Project like Railway construction involve acquiring strip of lands, as such as impact are not expected to be significant in many cases. However, mitigation measures need to be planned or implemented however insignificant the impacts may be.

The best way to tackle loss of farmland in part or full is to help the concerned PAP to buy equivalent farmland in a nearby area using land compensation received. Land for land is best way for income restoration. Since, this is not applicable for DFCC project, the land compensation will be paid at market value and will be sufficient for buying replacement land.

(1) Loss of Permanent Commercial structure

It is more complicated problem since the complementary issues of retaining the present customer base is to be simultaneously tackled. There is also the problem of tenants and owners. The required mitigation would involve reconstructing commercial area in nearby area so that present customer base is retained. Otherwise, PAPs will handle their own replacement structures under guidance and support of DFCCIL. Since the construction involve different activities, the money can be released into two instalments through scheduled bank.

(2) Loss of commercial spaces

For temporary structures and mobile vendors should be given utmost importance since these involves vulnerable section of PAPs. They also need to be given alternative space in an adjacent area for carrying on their trade or business. The temporary structure can be shifted in to new location and mobile vendor get station there.

7.4 ALTERNATIVE INDIVIDUAL INCOME RESTORATION SCHEME

Following Measures for income restoration will be taken to recover PAPs livelihood as per approved Entitlement Matrix based on RAA 2008 & NRRP 2007.

1. If the affected party getting displaces is a rural artisan, small trader or self employed person assistance of Rs.25,000/- for construction of working shed for shop (para 7.12. NRRP 2007).
2. Rehabilitation grant equivalent to 750 days of minimum agricultural wages to those families losing livelihood (NRRP para7.14)
3. Training Assistance of Rs.4, 000/- for income generation per household.
4. Temporary employment in the project construction work to affected persons with particular attention to APs below Poverty Line (PL) by the project contractor during construction, to the extent possible.
5. One time additional financial assistance equivalent to 300 days of minimum wages will be paid as a additional support for Vulnerable Groups to restore their Income.

7.5 MONITORING INDIVIDUAL INCOME RESTORATION SCHEME

The monitoring for IR schemes will be carried out along with the monitoring of other components of RRP principle by CPMs and their units, Social Scientist of Social and Environmental Management unit and consultants under the supervision of GM/SEMU.

CHAPTER 8 INSTITUTIONAL ARRANGEMENTS

8.1 INTRODUCTION

DFCCIL is responsible for the overall technical aspects and execution of the Project. Chief Project Manager's Offices (CPM office) as field office have been already established at Vadodara, Ahmedabad, Ajmer, and Jaipur and are headed by an officer of the rank of General Manager. At the Head Office, an Environmental and Social Unit has already been created headed by an officer of the rank of General Manager (SEMU) to look after Land Acquisition and Rehabilitation and Resettlement process. DFCCIL as project implementation agency is responsible for monitoring the use of loan funds and overall implementation process. DFCCIL, headed by Managing Director, will have overall responsibility for policy guidance, coordination and planning, internal monitoring and overall reporting of the Project. DFCCIL will set up a Project Management Unit (PMU) in its different divisional level for fully dedicated for the Project. The PMU will be functional for the whole Project duration.

8.2 R&R INSTITUTIONAL LEVEL AT THE HEADQUARTER LEVEL:

a) **Managing Director**, DFCCIL is over all responsible for successful implementation of the project. In respect of Social Management, the specific responsibilities include the following:

- Interact regularly with SEMU and other DFCCIL engineers,
- Participate in the policy related meetings in Railway Board on LA and R&R,
- Ensure timely release of money to Competent Authority offices for activities included in RAP.

b) **Director, (Project and Planning)**, DFCCIL, is the Chief Executive of the project and is responsible for successful implementation of the various project components including RAP. In respect of RAP, specific responsibilities include the following

- Coordinate with the relevant state government authorities on land acquisition, R&R entitlements and other social components.
- Report the progress in RAP implementation to MD, DFCCIL
- Report to Railway Board(ED,LA) about progress in LA and R&R,
- Interact regularly with SEMU staff,
- Monitor progress of R&R with SEMU Staff and field CPMs.
- Ensure timely release of money to CA offices required for RAP implementation and
- Take up issues with MD for issues to be resolved at the Railway Board (MoR).

c) **Social and Environmental Management Unit (SEMU)**, Presently, the SEMU has a General Manager, Additional General Manager & Joint General Manager (LA). This Unit is responsible for smooth implementation of RAP. During the course of the project implementation, the SEMU will be responsible for the following

- Report to MD and Dir. (PP) about the progress in LA and R&R,
- Coordinate with the CPM offices, on the implementation of RAP,
- Prepare formats and agree on criteria for the verification of PAFs,
- Review individual micro plan (including R&R entitlements) prepared by the CPM offices,
- Develop training modules for project staff and other functionaries on managing social aspects of the project.
- Guide CPM officers in matters related to resettlement and rehabilitation.

- Ensure budgetary provision for resettlement and rehabilitation of PAPs and relocation, rehabilitation and reconstruction of common property resources (CPRs).
- Ensure timely release of budget for implementation of RRP.
- Any other work that may be assigned from time to time by the higher authority

8.3 R&R INSTITUTIONS AT THE FIELD LEVEL

The Chief Project Manager Assisted by Deputy Project Managers, Project Manager, Assistant Project Managers (Social and Environment) & Consultants who are working in the field for performing the following duties.

- Co-ordinate with the District Administration, on Land Acquisition and R&R activities.
- To have a regular interaction with the Local Communities to develop good working relationship.
- Disclosure of information in field offices.
- Supervise implementation of RRP.
- Ensure meetings on resettlement and rehabilitation policy and RRP and intensive information dissemination.
- Ensure inclusion PAPs who could not be enumerated during census but have documentary evidence to be included in the list of PAPs.
- Develop and maintain a PAP level database including aspects related to losses, compensation, R&R entitlement, release of funds and utilization.
- Ensure that the R&R assistance is used for the purpose it is meant for;
- Ensure preparation of identity cards and distribution of the same to PAPs.
- Ensure disbursement of resettlement and rehabilitation assistance in a transparent manner.
- Participate in meetings related to resettlement and rehabilitation issues.
- Facilitate in opening of joint account of PAPs.
- Monitor physical and financial progress on LA, R&R.
- Prepare monthly progress report related to physical and financial progress of implementation of RRP.
- Ensure release of compensation and assistance before taking over the possession of land for start of construction work.
- Ensure relocation, rehabilitation and reconstruction of CPRs before dismantling through proper mechanism.
- Liaison with government and other agencies for inclusion of PAPs in employment and income generation programme/scheme.
- Organize fortnightly meetings with the their staffs and Competent Authority to review the progress of R&R
- Sending progress report of Land Acquisition and R&R to Head quarter.

- Attend meetings and participate in Grievance Redress Committee meetings for redress of grievances of PAPs.

8.4 GRIEVANCE REDRESS COMMITTEE (GRC)

In the RRP implementation, there is a need for an efficient grievance redress mechanism that will assist the PAPs in resolving queries and complaints. Therefore, formation of Grievance Redress Committee (GRC) will be most important for grievance redress and it is anticipated that most, if not all grievances, would be settled by the GRC. Chief Project Manager shall head the Grievance Redressal in his respective jurisdiction. GM/SEMU shall head the Grievance Redressal in the head quarter office. A detail has been discussed in Chapter 12.

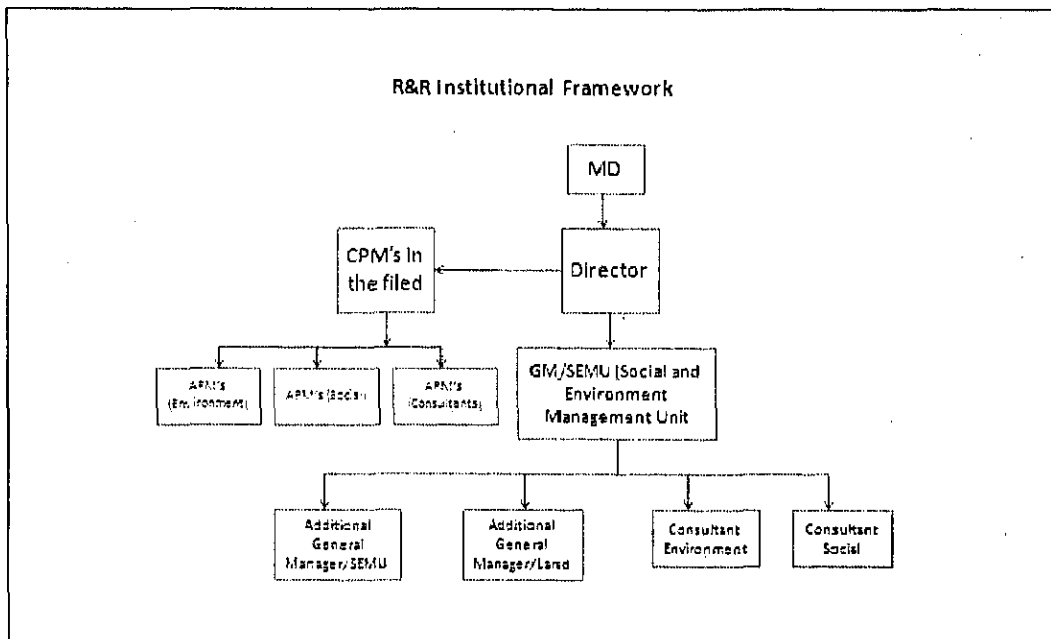


Figure 8-1 Overall Organizational Frame work of R&R Institutions

CHAPTER 9 IMPLEMENTATION SCHEDULE

9.1 INTRODUCTION

Implementation of RRP mainly consists of compensation to be paid for affected structures; Rehabilitation and Resettlement activities. It is likely that the overall project will be implemented over a 5 years period and civil works likely to commence six months or so after loan approval. The civil works contract for each subproject will only be awarded after all compensation and relocation has been completed for subproject and rehabilitation measures are in place.

It is further cautioned that specific situation may require an increase in time, allotted to a task. Such situations include, but not limited to local opposition, seasonal factors, social and economic concerns, training of support staff and financial constraints. Complementation schedule will require detailed coordination between project authorities and various line departments.

The R&R officers in the PMU and CPM offices will receive training and orientation for implementation of RRP. The NGO will be trained to upgrade their skills to deliver the R&R components more effectively over time. This training and orientation will be conducted by the consultant who prepared the RRP. The following components will be covered in the training:

- Understanding of the JICA policy guidelines and requirements;
- Understanding of the policy and procedure adopted for the Project;
- Understanding of the Implementation Schedule activities step-by-step;
- Understanding of the Monitoring and reporting mechanism; and
- Understanding of the economic rehabilitation schemes

9.2 IMPLEMENTATION PROCEDURE

The proposed R&R activities are divided in to three broad categories based on the stages of work and process of implementation. The details of activities involved in these three phases, i.e. Project Preparation Phase, RRP Implementation phase, Monitoring and Evaluation period are discussed in the following paragraphs.

9.2.1 Project Preparation Phase

The major activities to be performed in this period include establishment of PMU and CPM office at project and subproject level respectively; submission of detailed RRP for JICA approval; appointment of consultants and establishment of GRC etc. The information campaign & community consultation will be a process initiated from this stage and will go on till the end of the project.

9.2.2 RRP Implementation Phase

After the project preparation phase the next stage is implementation of RRP which includes

- Identification of Cut-off date and notification for land acquisition as per Railway amendment act, 2008 regarding land acquisition;
- Verification of Properties of affected persons and estimation of their type and level of losses;
- Issues regarding compensation of award by DFCCIL; payment of all eligible assistance;

- Preparations of affected persons for relocation and rehabilitation of affected persons,
- Initiation of economic rehabilitation measures and Relocation and rehabilitation of the affected persons;
- Site preparation for delivering the site to contractors for construction and finally starting civil work

9.2.3 Monitoring and Evaluation Phase

The internal monitoring will be the responsibility of PMU, CPM office and implementing NGO (if required) and will start early during the project when implementation of RRP starts and will continue till the completion of the subproject. The independent monitoring and evaluation will be the responsibility of Construction Supervision Consultant (CSC) to be hired for the project.

9.3 R&R IMPLEMENTATION SCHEDULE

A composite implementation schedule for R&R activities in the subproject including various sub tasks and time line matching with civil work schedule shall be prepared in further design stage of the project. However, the sequence may change or delays may occur due to circumstances beyond the control of the Project and accordingly the time can be adjusted for the implementation of the plan.

	Actions	2009		2010				2011				2012				2013			
		3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
1	Preparation of Land Plan	completed																	
2	Identification of Plot owner	completed																	
3	Notification Under Section 20A of RAA - 2008	completed																	
4	Hearing of objections	completed																	
5	Joint Verifications																		
6	Notification under section 20E of RAA-2008																		
7	Preparation of RRP																		
8	Disclosure of RRP																		
9	PCM's for RRP	completed																	
10	Finalization of Entitlement Matrix																		
11	Base Line Survey																		
12	Preparation of Final RRP																		
13	Disclosure of Final RRP																		
14	Preparation of Compensation																		
15	Award of Compensation as per section 20F of RAA 2008																		
16	Deposit of Money not CA																		
17	Disbursement of Payment to PAPs.																		
18	Taking possession of Land																		
19	Execution of Work																		
20	Monitoring of Resettlement Impact																		
21	RAP performance Monitoring																		
22	Grievance Redressal																		

Figure 9-1 Resettlement Timetable

CHAPTER 10 PARTICIPATION AND CONSULTATION

10.1 INTRODUCTION

Public Consultation Meeting for RRP (PCM for RRP) was planned to be held in the all villages to be affected due to land acquisition and resettlement for the DFC Project. Therefore, participants of the PCM were basically limited to the project-affected persons (PAPs). Approximately 450 villages were subject to the PCM. Methodology of the PCM for RRP and meeting results are shown below.

10.2 METHODOLOGY

10.2.1 Criteria on Selection of Venues

Since it is infeasible to conduct the PCM in each village under the limited time and resources, several villages were clubbed efficiently, considering various conditions such as physical locations and area under jurisdiction of one competent authority. Main criteria for particular venue selection for conducting PCMs are described below:

- 1) Several villages were clubbed efficiently under one venue, considering maximum distance from far-away villages was 10-12 km, so that people from distant villages also can attend these meetings.
- 2) Since 25 Competent Authority are working for land acquisition process for DFC Project in the section between Rewari and Vadodara, selection of venue under jurisdiction of only one CA.
- 3) Area where more structures are going to be affected also considered selecting one venue.
- 4) These are remote villages. Therefore, availability of meeting hall and other logistic facility were also considered.

10.2.2 Participation from the Project Side

Participation of representatives from the CPM office of DFCCIL, who can appropriately explain about the project and RRP issues and answer to question, was secured to keep adequate initiative of the project proponent for implementation of the PCM for RRP.

In addition, all of the Chief Secretaries of the states of Gujarat, Rajasthan and Haryana along the Competent Authority of the concerned districts were informed about the schedule of the meeting with a request for their honoured presence in the meeting. All the dignitaries were invited 7 to 15 days before the meeting.

The concerned railway division heads, general managers and stations superintendents were intimated about the schedule of the meeting with a request for their presence.

10.2.3 Distribution of Invitation Letters and Notice

Invitation letters and notice in English from Ministry of Railways (MOR) and translated Hindi and Gujarati versions were distributed among the village heads and targeted PAPs. Though all of the PAPs to be affected due to the land acquisition and resettlement are targeted for the PCM for RRP, it was almost impossible to identify all of the PAPs based on the information under the Notification 20A only, since the Census and Baseline Survey under the NRRP 2007 has not been conducted yet. Therefore, invitation letter was distributed to the village head/panchayat offices and it was also put on the notice board in the respective village administrative offices. However, another effort was made to invite persons whose structures are going to be affected in each affected villages by distributing invitation letters personally. The notice contained the date, venue and time of the meetings. The participants were invited for the meeting at least one week before the meeting.

10.2.4 Registration of the Participants

General information of the participants such as name, name of the village, and affected survey number were recorded at the entrance of the PCM.

10.2.5 Contents of Disclosed Information

In principle, current policies in India on land acquisition and resettlement were disclosed and explained in the PCM, which are the Railways Amendment Act 2008 (RAA 2008) and National Rehabilitation and Resettlement Policy.

The presentation material is shown in **Attachment 10-1**. Handout was prepared and distributed in the PCM as shown in **Attachment 10-2**. Both materials were prepared in English, in Gujarati for the PCM in Gujarat, and in Hindi for the PCM in Haryana and Rajasthan.

10.2.6 Program Schedule and Agenda

The program schedule and agenda of the PCM is shown below:

- 1) Registration of the participants
- 2) Distribution of handouts, survey questionnaire and writing pad and pen to the participants
- 3) Distribution of soft drinks in the waiting time
- 4) Welcome address to the participants on behalf of MOR & DFCCIL
- 5) Introduction of the DFCCIL and Railway officials present in the PCM to the participants
- 6) Introduction of Competent Authority, wherever present to the participants
- 7) PowerPoint presentation on Draft RRP using laptop and projector.
- 8) Tea Break
- 9) Question-Answer Session where the questions raised by the participants were answered directly by the DFCCIL officials and the Competent Authority
- 10) Assistance in filling up of the questionnaire upon request by the participants and Collection of distributed questionnaire
- 11) Vote of Thanks

10.2.7 Discussions, Questions and Answers

A session for question and answer was prepared after completion of the major information dissemination on the Project in the PCM. A session for discussion of taking questions from the participants and answering to the questions where correct information was available, was appropriately held in order to disseminate full information of the Project at the time of holding the PCM.

10.2.8 Record of the Meeting

(1) Record the Participants:

Name, gender, occupation, age, name of the village the participants belong to and other appropriate features was recorded at the entrance of PCM and reproduced in the report.

(2) Record of the Contents of Meeting

The contents of the discussion of the PCM were recorded by electronically recordable device and reproduced by transcribing the contents in the report.

(3) Questionnaire Survey

Elaborate questionnaire survey was conducted but not limited to the questionnaire as follows in order to illustrate representation of the participants of each meeting. The results were analyzed statistically and reproduced in the report. A questionnaire is less than one sheet of A4 size paper with major points of concern as follows:

- a) Origin of the participant (native/ not native to the state, majority/minority of native tribe)
- b) Name of the village
- c) Age
- d) Occupation
- e) Level of education
- f) Household income
- g) Whether the property of the participant is affected as per Notification 20A
- h) Type of the affected property (land and/or structure)
- i) Percentage of the property affected
- j) Nature of the property (Own/rented)
- k) Whether livelihood will be affected due to acquisition of the said property.

10.3 RESULTS OF THE PCM FOR RRP

10.3.1 Actual Schedule of the PCM for RRP

The schedule of the PCM for RRP along with the venue and time of the meeting is presented in the following table. Although the duration of the PCM was planned for 2 hours, some of the PCMs extended for more than 2 hours due to many questions and discussions.

Table 10-1 Schedule of the PCMs for RRP

	Venue	District	Date of PCM	Starting Time	Venue	CPM
1	Kund Station	Rewari	10.08.09	10:00	Sansad Hall	Jaipur
2	Ateli Station Area	Mahendergarh	11.08.09	10:00	Radha Krishna Temple	Jaipur
3	Kathoowas ¹	Alwar	11.08.09	15:00	Panchayat Bhawan-Kathoowas	Jaipur
4	Pithrawas	Rewari	21.10.09	11:00	Navjyoti Vidyalaya, Pithrawas	Delhi
5	Narnaul	Mahendergarh	13.08.09	10:00	Jain Hall	Jaipur
6	Neejampur	Mahendergarh	13.08.09	16:00	Senior Secondary School-Neejampur	Jaipur
7	Bihar	Sikar	17.08.09	10:00	Govt Secondary School	Jaipur
8	Neem Kathana	Sikar	17.08.09	16:00	Hotel Gangees Garden	Jaipur
9	Sri Madhopur	Sikar	19.08.09	10:00	Annapurna Hall	Jaipur
10	Ringus	Sikar	19.08.09	16:00	Shri Shyam Bhawan Mandir	Jaipur
11	Kishan manpura	Jaipur	20.08.09	12:00	Senior Secondary School-Kishan Manpura	Jaipur
12	Renwal	Jaipur	24.08.09	16:00	Agarwal Seva Sadan	Jaipur
13	Bhainslana	Jaipur	24.08.09	10:00	Panchayat Bhaban	Jaipur
14	Minda	Nagaur	25.08.09	16:00	Govt Secondary School	Jaipur
15	Narayana	Jaipur	27.08.09	10:00	Dadu Sampraday Hall, Narayana	Jaipur
16	Tilonia	Ajmer	27.08.09	16:00	Senior Secondary School	Jaipur
17	Madar	Ajmer	29.08.09	9:00	Daya Sukh Bhawan	Ajmer
18	Mangaliyawas	Ajmer	29.08.09	16:00	Chummalisa Jat Samaj	Ajmer
19	Peeplaj	Ajmer	31.08.09	10:00	Senior Secondary School, Peeplaj	Ajmer
20	Sarmaliya	Ajmer	31.08.09	16:00	Panchayat Bhaban Sarmaliya	Ajmer
21	Sendra/Jharli	Pali	01.09.09	16:00	Senior Secondary school	Ajmer
22	Bagri Nagar	Pali	03.09.09	11:00	Ashapura Marriage Hall	Ajmer

	Venue	District	Date of PCM	Starting Time	Venue	CPM
23	Banta	Pali	04.09.09	11:00	Panchayat Baban - Banta	Ajmer
24	Bhagawanpura Station	Pali	07.09.09	16:00	Upper Primary School, Bhagwanpura Village	Ajmer
25	Falna Station	Pali	08.09.09	16:00	Shri Naminath Jain SitambarTirth, Ambuja Nagar	Ajmer
26	Balwana	Pali	08.09.09	10:00	Community Hall, Balwana	Ajmer
27	Pindwara Jn	Sirohi	10.09.09	11:00	Banarshi Mohan Seva Sadan	Ajmer
28	Abu Road	Sirohi	11.09.09	10:00	Agrawal Vishnu Dharamsala	Ajmer
29	Iqbal garh	Banaskantha	18.09.09	10:00	Agrasen Dharamsala	Ajmer
30	Palanpur	Banaskantha	18.09.09	16:00	Hotel Cappal, Ahmedabad Palanpur Highway, Palanpur	Ahmedabad
31	Nandotri	Patan	17.09.09	11:00	Reliance Community Hall, Nandotri village	Ahmedabad
32	Linch	Mahesana	15.09.09	16:00	Jain wadi hall	Ahmedabad
33	Nandasan	Mahesana	15.09.09	10:00	M P Patel School	Ahmedabad
34	Dhanot	Gandhi Nagar	14.09.09	16:00	Gujarati Primary School	Ahmedabad
35	Hajipur	Gandhi Nagar	14.09.09	10:00	Maha Kali Mandir Hall	Ahmedabad
36	Sanand	Ahmedabad	22.09.09	10:00	Saurashtra Sthanakwasi Jain Wadi	Ahmedabad
37	Bhat	Ahmedabad	22.09.09	16:00	Bhat Dharamsala	Ahmedabad
38	Vasna Bujarg	Kheda	23.09.09	10:00	Swami Narayan Temple-Vasna Bujaarg	Ahmedabad
39	Pimpara	Kheda	23.09.09	16:00	Pimpara Primary School	Ahmedabad
40	Changa	Anand	07.10.09	12:00	Patelwadi Hall, near Ambe Mata temple	Vadodara
41	Khandhali	Anand	06.10.09	16:00	Community Hall, Panchayat Office	Vadodara
42	Khadol	Anand	06.10.09	11:00	Sri Madhovanand Ashram, Behind Ranchod Rai Temple	Vadodara
43	Chnpad	Vadodara	05.10.09	11:00	Satkeival Temple, Patelwadi Hall	Vadodara
44	Samiyala	Vadodara	05.10.09	16:00	Kshtriya Samaj, Rajput Panchniwadi	Vadodara

Source: SAPROF Study

10.3.2 Attendance of the PCM for RRP

Summary Results of Attendances for RRP-PCM are shown in Table 10-2. Out of total 453 villages to be affected as per information in the Notification 20A, 307 villages (67.8%) attended the PCMs in total. In addition, out of total 14,030 landowners as per information in the Notification 20A, 4,386 persons attended the PCMs. However, the attendants are not only landowner, but also non-landowner such as leaseholder and non-titleholder. More detailed results of the PCM for RRP are shown in Table 10-3, Table 10-4, Table 10-5, and Table 10-6.

Table 10-2 Summary Results of Attendances for RRP-PCM

	Total PCMs	Total Villages Affected	Number of Village Attended	(%)	Total Landowners	Number of Participants	(%)
		(a)	(b)	=(b)/(a)	(c)	(d)	=(d)/(c)
CPM Jaipur	16	146	110	75.3%	3,875	1993	51.4%
CPM Ajmer	13	154	97	63.0%	4,707	918	19.5%
CPM Ahmedabad	11	110	77	70.0%	3,480	1185	34.1%
CPM Vadodara	4	43	20	46.5%	1,968	290	14.7%
Total	44	453	304	67.1%	14,030	4386	31.3%

Source: SAPROF Study

Table 10-3 Results of the RRP-PCM under Jurisdiction of CPM Jaipur

	Venue	Date of PCM	District	Number of Affected Village	Number of Attended Village	Land to be Acquired		Affected Private structures #	Number of Participants	Attendance of MOR/DFCCIL	Attendance of CA
						Area (ha)	Number of Land Owner***				
1	Kund Station ¹⁾	10.08.09	Rewari	4	4	19.5	221	2	100	3	0
2	Ateji Station Area ¹⁾	11.08.09	Mahendergarh	9	9	28.3	316	91	360	4	0
3	Kailhoowas ²⁾	11.08.09	Ajwar	1	1	6.1	53	7	18	3	0
4	Pitharawas	21.10.09	Rewari	21	15				130	2	1
5	Narnaul ¹⁾	13.08.09	Mahendergarh	12	10	39.2	382	151	238	3	0
6	Neejampur	13.08.09	Mahendergarh	8	8	25.2	289	50	80	3	0
7	Bihar	17.08.09	Sikar	10	5	102.2	352	0	26	2	0
8	Neem Kathana ¹⁾	17.08.09	Sikar	13	13	110.5	282	57	250	2	0
9	Sri Madhopur ¹⁾	19.08.09	Sikar	9	6	56.1	346	51	90	2	0
10	Ringus ¹⁾	19.08.09	Sikar	7	4	59.6	244	57	11	2	0
11	Kishan manpura ¹⁾	20.08.09	Jaipur	4	4	21.8	121	11	100	3	0
12	Renwal	24.08.09	Jaipur	10	9	91.1	236	71	210	2	0
13	Bhainsiana ¹⁾	24.08.09	Jaipur	11	10	100.3	278	13	80	3	0
14	Minda ¹⁾	25.08.09	Nagaur	2	2	6.0	30	0	15	2	0
15	Narayana ¹⁾	27.08.09	Jaipur	17	5	247.9	527	21	85	2	1
16	Tilonia	27.08.09	Ajmer	8	5	68.2	198	9	200	4	0
Total				146	110	982.0	3,875	591	1,193	-	-

1) denotes villages under 20A Notification
2) denotes villages under SAPROF Study and 20A not Notified
* As per information from DFCCIL upto 25.08.2009
*** As per survey number of 20A Notification
As per SAPROF Survey
Source: SAPROF Study

Table 10-4 Results of the RRP-PCM under Jurisdiction of CPM Ajmer

	Venue	Date of PCM	District	Number of Affected Village	Number of Attended Village	Land to be Acquired		Affected Private structures #	Number of Participants	Attendance of MOR/DFCCIL	Attendance of CA
						Area (ha)	Number of Land Owner**				
1	Madar ¹⁾	29.08.09	Ajmer	11	10	125.1	838	0	50	11	0
2	Mangaliya was ¹⁾	29.08.09	Ajmer	12	8	92.1	672	5	80	7	2
3	Peepalay ¹⁾	31.08.09	Ajmer	4	2	35.7	135	25	45	3	0
4	Sarmaliya ¹⁾	31.08.09	Ajmer	10	6	39.1	314	0	130	5	3
5	Sendra/Jharli ¹⁾	01.09.09	Pali (Jaitra)	17	17	191.7	675	39	140	5	3
6	Bagri Nagar ¹⁾	03.09.09	Pali (Sojat)	9	7	63.8	229	11	50	5	0
7	Banta ¹⁾	04.09.09	Pali (Sojat)	14	5	140.0	293	7	55	4	0
8	Bhagawanpura Station ¹⁾	07.09.09	Pali (Desuri)	11	7	45.4	177	22	60	4	1
9	Falna Station ¹⁾	08.09.09	Pali (Bali)	17	7	155.9	362	4	50	4	1
10	Balwana ¹⁾	08.09.09	Pali (Sumerpur)	1	1	10.9	33	0	20	4	1
11	Pindwara Jn ¹⁾	10.09.09	Sirohi	18	9	94.5	387	13	50	2	1
12	Abu Road ¹⁾	11.09.09	Sirohi	10	8	67.4	324	2	48	4	1
13	Iqbalgarh ¹⁾	18.09.09	Banskantha	20	10	188.3	268	0	140	4	2
Total				154	97	1,250.0	4,707	128	918	-	-

1) denotes villages under 20A Notification
2) denotes villages under SAPROF Study and 20A not Notified
* As per information from DFCCIL upto 25.08.09
*** As per survey number of 20A Notification
As per SAPROF Survey
Source: SAPROF Study

Table 10-5 Results of the RRP-PCM under Jurisdiction of CPM Ahmedabad

	Venue	Date of PCM	District	Number of Affected Village	Number of Attended Village	Land to be Acquired		Affected Private structures #	Number of Participants	Attendance of MOR/DFCCIL	Attendance of CA
						Area (ha)	Number of Land Owner **				
1	Hajipur ¹⁾	14.09.09	Gandhi Nagar	6	3	70.0	164	0	70	4	1
2	Dhanot ¹⁾	14.09.09	Gandhi Nagar	6	5	68.9	170	2	50	4	1
3	Nandasan ¹⁾	15.09.09	Mahesana	15	9	195.3	526	0	60	4	1
4	Linch ¹⁾	15.09.09	Mahesana	16	9	242.0	747	3	140	4	3
5	Nandotri ¹⁾	17.09.09	Patan	16	11	186.2	444	0	160	3	1
6	Palanpur ¹⁾	18.09.09	Banaskantha	13	13	210.6	357	12	240	3	2
7	Sanand ¹⁾	22.09.09	Ahmedabad	8	5				140	3	1
8	Bhat ¹⁾	22.09.09	Ahmedabad	7	7	347.5			120	4	1
9	Vasna Bujarg ¹⁾	23.09.09	Kheda	8	4	83.7	275	9	50	3	2
10	Pimpasa ¹⁾	23.09.09	Kheda	8	6	102.5	392	0	80	7	1
11	Khandali ¹⁾	06.10.09	Anand	7	5	49.7	405	9	75	7	1
Total				110	77	1,556.3	3,480	30	1,185	-	-

1) denotes villages under 20A Notification

2) denotes villages under SAPROF Study and 20A not Notified

* As per information from DFCCIL upto 25.08.2009

*** As per survey number of 20A Notification

As per SAPROF Survey

Source: SAPROF Study

Table 10-6 Results of the RRP-PCM under Jurisdiction of CPM Vadodara

	Venue	Date of PCM	District	Number of Affected Village	Number of Attended Village	Land to be Acquired		Affected Private structures #	Number of Participants	Attendance of MOR/DFCCIL	Attendance of CA
						Area (ha)	Number of Land Owner ***				
1	Changa ¹⁾	07.10.09	Anand	12	5	121.1	613	7	75	6	1
2	Khadol ¹⁾	06.10.09	Anand	12	6	107.9	415	12	90	6	1
3	Chapad ¹⁾	05.10.09	Vadodara	12	5	410.0	634	0	65	7	2
4	Samiyala ¹⁾	05.10.09	Vadodara	7	4		306	1	65	8	2
Total				43	20	639.0	1,968	20	295		

1) denotes villages under 20A Notification

* As per information from DFCCIL upto 25.08.09

*** As per survey number of 20A Notification

As per SAPROF Survey

Source: SAPROF Study

10.3.3 Analysis of Participants

Notification 20A has been published for 453 villages, and all the villages have been covered during the invitation process. Out of the total of 453 villages, PAPs from 304 villages attended the meeting. As mentioned in the preceding chapters, many of the participants avoided registration and questionnaire survey due to the following prime reasons:

- 1) Protest against the land acquisition
- 2) Protest against the compensation policy
- 3) Fear factor, that DFCCIL may forcibly acquire land without paying compensation by using the signature from the registration list, etc.

The summary of participants in the 44 PCMs is shown in the following table.

Table 10-7 Summary of Participants In the PCMs for RRP

Number of 20A notified villages	453
Invited villages for PCM	453
20A notified villages attended (as per estimation)	304
Total number of participants (as counted in the PCMs)	4,386

Source: SAPROF Study

10.3.4 Key Issues discussed in the PCM for RRP

Key issues discussed in the PCM for the RRP are summarized below.

- The participants, irrespective of their location across various districts and type of proposed alignment (detour or parallel) expressed the view that the offered compensation is inadequate for maintaining their livelihood after the proposed land acquisition. The participants were unanimous that the gap between the market price of the land and the compensation to be given as per RAA 2008 and NRRP 2007 is too wide to accept; the DLC rate has not been revised for many areas for years and in places where it has been revised recently, the rate is far from actual market prices of land.
- The participants worried that they cannot purchase similar type of agricultural land in same area from the offered compensation amount and asked the officials for replacement costs.
- The participants raised objection over conversion of agricultural land for commercial purposes by DFCCIL while the compensation is being paid on the basis of agricultural rates. They demanded that the compensation should be provided at commercial rate.
- Reacting sharply on the compensation for only the acquired portion of the land, the participants said in case the piece of land becomes unusable due to small size, compensation must be provided for the entire portion of the land, keeping in view of the involuntary nature of the acquisition.
- Many of the participants expressed that one-time payment of compensation is not sufficient for maintaining their livelihood for those families who will be rendered landless due to the project. Jobs must be provided to at least one member of such families as per the qualification of the candidates.
- In the state of Gujarat, participants said the present alignment being close to major cities and highways have higher land costs; therefore the alignment should be considered on further west of the present alignment, where lower land can be attributed to inaccessibility and infertility (also increased salinity in South Gujarat) of the soil.
- The non-availability of information regarding the Notification 20A readily has affected the villagers badly in the state of Rajasthan while compensation for disputed property and unregistered land plots remained the 'most frequently asked questions' across all the 3 states.
- Participants of Kishangarh-Tilonia area protested heavily against the proposed parallel section and demanded to detour the area to avoid large scale demolition of residential structures and Tilonia Railway Station, which according to the local is historical and worth preserving.
- Compensation for standing crops, utilities and private trees rocked the meetings time to time.

Those comments and opinions were reflected in the relevant policies and Entitlement Matrix as assistances in addition to the provisions as per RAA 2008 and NRRP 2007 as shown in Chapter 5.

10.3.5 Key Analysis Results from Questionnaire Survey to the Participants

The key findings from the analysis of questionnaire survey to the participants of the PCMs are presented in this section. The word 'respondents' used in this section refers to those participants who choose to participate in the questionnaire survey.

- 100% of the respondents are native in origin.
- The affected household are mostly headed by male members of the family; only 5% of the respondent belongs to women headed households and are vulnerable.
- The family size of the respondents varies widely. Majority of the respondents (49%) belong to mid-sized family (6-10 members), followed by small (27%) family having 1 to 5 members. Only 4% of the respondents belong to large families having more than 20 members.
- Majority of the respondents (43%) belong to general caste, followed by respondents from other backward castes (42%). The respondents from SC and ST community are 11% and 3%, respectively.
- 95% of the respondents are Hindu and 4% are Muslims. Rest of the 1% participants belong to

Jain and Sikh religion.

- Educational Status of the respondents shows 80% of the participants are literate.
- Occupational Profile: 65% respondents are farmers while 16% of them are daily wage labours. 6% of the respondents belong to each businessman and self employed category and 7% respondents belong to service class (Government & Private jobs).
- Monthly income of the 81% of respondents is less than 5,000 rupees per month.
- 96% of the respondents are getting affected as per the Notification 20A. This implies that the intended participants attended the PCM.
- 59% of the respondents are losing their agricultural land, while 18% respondents are losing their structure due to land acquisition. 17% of the respondents are getting affected in terms of both land and structures.
- 86% of the respondents said that the land or structure, which is getting affected due to land acquisition for the project, is owned by them.
- 66% of the respondents said that their livelihood will be affected due to the project. The livelihood of the rest of the respondents is not linked with the proposed land acquisition.

10.4 FURTHER ACTIVITIES IN PUBLIC DISCLOSURE

Base line Survey as per NRRP, 2007

In subsequent stage of the Project, further activities and arrangements have to be done based on the RRP, especially preparation of the RRP by conducting detailed survey for all the PAPs, which is called as "Baseline Survey and Census" under the NRRP 2007, as basis for the compensation and assistance for the land acquisition and resettlement for the Project. Main items required for the further activities and arrangements are explained below.

As per the NRRP 2007, a Rehabilitation and Resettlement Plan (RRP) has to be prepared before the project-affected area is declared for transferring the title, which means that the timing before the notification under the Section 20E of the Railways (Amendment) Act, 2008 is issued as declaration of transferring the title for the Project. The RRP has to be prepared based on the draft RRP. In the preparation of the RRP, a Baseline Survey and Census has to be conducted as per the NRRP 2007. Purposes of the Baseline Survey and Census are to prepare the list of likely PAPs within the proposed ROW and also make an inventory of properties and other assets affected. It shall cover all (100%) of PAPs.

The Baseline Survey and Census will be conducted using questionnaire by the consultant appointed by the DFCCIL. Broad information to be collected would include demography of family members, religion, caste, sources of income, occupation, land holdings, ownership and type of structures, other property and assets owned, livestock size, details of losses of assets to the project, etc. The extent of impact on Common Property Resources shall also be covered during census. In addition, individuals and group consultations would be carried out to understand the needs and concerns of PAPs with regard to various issues such as alternatives, compensation, assistance, resettlement options, etc. Based on results of the survey, PAPs will be suitably categorized as titleholders, encroachers, squatters, tenants, vulnerable, etc. The disclosure of RRP will be done to the PAPs.

Disclosure of RRP Report

The RRP will be disclosed all over the Project affected area.

Objectives

The objectives of disclosures are as follows:

1. Disseminate information on the draft rehabilitation and resettlement policy including Entitlement Matrix of Project Affected families in the Project Affected Area.
2. Collection of comments and opinions from Project Affected people on the RRP which will be reflected in the final RRP report.

Methodology of Information disclosure of RRP.

The process of information disclosure will be arranged in a systematic time bound and transparent manner ensuring widest possible public participation of the project. Methodology of the process is given below:

- The distribution of the RRP will be started from February 2010 and it will be kept for one month for Public comments.
- RRP report will be distributed for CPMs offices of DFCCIL, 17 District Collectorate offices, 28 Major Stations including junction stations along with the proposed DFCC alignment as shown in Table 10.8. These reports will be available there for public viewing.
- Summary of RRP especially Entitlement Matrix in vernacular languages in Hindi and Gujarati will be distributed to all the project affected villages including gram panchyat office, 17 district collector atc offices and all stations and CPMs offices.
- In order to facilitate proper information dissemination of availability of RRP, the public notice in vernacular languages Hindi and Gujarati will be put in the notice board of Gram Panchyat offices, 17 District Collectorate offices and all stations and CPMs offices.
- Comments and opinion will be collected within one month.
- Comments and opinion will be accepted on RRP report only in writing through direct delivery, fax, post and emails to the respective CPMs offices. After collection of all comments from the CPMs offices it will be sorted out and summarized then final RRP report will be finalized by reflecting comments and opinions.

Disclosure of the RRP Report

Table 10- 8 Distribution of RRP report

CPM offices	Major Sta.	District Office
CPM/Jaipur CPM/Ajmer CPM/Ahemdabad & CPM/Vadodara	1) Rewari (Jn)	1) Mahendragarh
	2) Narnaul	2) Rewari
	3) Dabla (Jn)	
	1) Alwar (Jn)	1) Jaipur
	2) Kund	2) Nagaur
	3) Neem Ka Thana	3) Sikar
	4) Sri Madhopur	4) Alwar
	5) Ringus (Jn)	5) Sirohi
	6) Jaipur (Jn)	6) Pali
	7) Phulera (Jn)	7) Ajmer
	8) Kishangarh	
	9) Ajmer (Jn)	
	10) Beawar	
	11) Sojat Road	
12) Marwar Jn		
13) Falna		
14) Sirohi Road		

	15) Abu Road	
	1) Palanpur (Jn)	1) Vadodara
	2) Siddhapur	2) Anand
	3) Unjha	3) Kheda
	4) Mahesana(Jn)	4) Ahmedabad
	5) Sabarmati (Jn)	5) Gandhinagar
	6) Ahmedabad (Jn)	6) Mahesana
	7) Nadiad (Jn)	7) Patan
	8) Anand(Jn)	8) Banaskantha
	9) Vasad (Jn)	
	10) Vadodara (Jn)	

Disclosure of the RRP Report

Final RRP will be disclosed after incorporating of census survey data and the comments from Public from December 2010. Methodology for disclosure will be same as per discloser of RRP report as well as the final RRP will be disclosed in website of DFCCIL for Public viewing.

CHAPTER 11 MONITORING AND SUPERVISION

11.1 INTRODUCTION

Monitoring and evaluation are critical activities toward the finalization of the process of resettlement and rehabilitation. Monitoring involves periodic checking to ascertain whether the resettlement and rehabilitation activities are in progress in helping PAPs taking roots into the new resettlement areas. Evaluation is essentially a summing up of the progress of resettlement and rehabilitation at the end of the Project assessing the actual achievement in comparison to those aimed at during the implementation period.

The resettlement and rehabilitation plan includes indicators and bench marks for achievement of the objectives, which includes as follows:

(1) Process indicators

Process of the resettlement and rehabilitation which includes project inputs, expenditures, staff deployments, etc will be monitored by DFCCIL and its project office. DFCCIL should collect the information from the project site and assimilate in the form of monthly progress report to assess the progress and results of the implementation of resettlement and rehabilitation plan. In case there was a delay or any obstacles on the implementation works, adjust the work programme. The following is major items of monitoring for process indicators;

- Information campaign and consultation with PAPs;
- Status of land acquisition and payments on land compensation;
- Resettlement of PAPs;

(2) Output indicators

Output indicators are as follows:

- The results in terms of numbers of affected persons compensated and resettled;
and
- Incomes restored; and
- Additional assistance provides

(3) Impact indicators

Impact indicators are the factors related to the long-term effect of the project not only on PAPs but also on those people in the project affected area as a whole. Field level monitoring will be carried out as follows:

- Review of census information for all PAPs;
- Consultation and informal interviews with PAPs on the up-to-date feeling of them on their life in the resettlement areas;
- In-depth case studies if there were any particular case worth paying special attention;
- Informal sample survey of PAPs;
- Key informant interviews and

A Performa data sheet will be developed and used in order to carry out monitoring works at the field level.

11.2 INTERNAL MONITORING

11.2.1 Objective of the Internal Monitoring

The objective of the internal monitoring are:

- Daily operation Planning
- Management and Implementation
- Operational Trouble shooting and feed back

11.2.2 Information Required for Internal Monitoring

For internal monitoring following information will be required:

- (i) **Administrative Monitoring:** daily planning, implementation, feed back and trouble shooting, individual PAP's database maintenance, and progress reports;
- (ii) **Socio-economic Monitoring:** case studies, using baseline information for comparing PAP's socio-economic conditions, evacuation, demolition, salvaging materials, morbidity and mortality, community relationships, dates for consultations, and number of appeals placed; and
- (iii) **Impact Monitoring:** Income standards restored/improved, and socioeconomic conditions of the affected persons. Monitoring and evaluation reports documenting progress on resettlement implementation and RRP completion reports will be provided by the CPM offices to DFCCIL Headquarter for review and approval from funding agency.

11.2.3 Reporting System

DFCCIL Headquarter will be responsible for internal monitoring through CPM offices. It should prepare monthly reports on the progress of the implementation of resettlement and rehabilitation plan and adjust work program where necessary, in case of delays or any implementation problems as identified, monitoring reports will be submitted at regular intervals as specified. This monitoring will form parts of regular activity and reporting on this will be extremely important in order to undertake mid-way corrective steps.

11.3 EXTERNAL MONITORING

Independent monitoring agency or a local consulting firm will carry out an external monitoring of the implementation of resettlement and rehabilitation plan. It will report on quarterly yearly basis to DFCCIL and funding agency. DFCCIL should select and hire this consulting firm within one month of loan approval.

The monitoring will be carried out every year during the RRP implementation.

11.3.1 Objective of External Monitoring

The key tasks during external monitoring will include:

- Review and verify the internal monitoring reports prepared by DFCCIL;
- Review of socio-economic baseline census information of pre-displaced persons;
- Identification and selection of impact indicators;
- Impact assessment through formal and informal surveys with the affected persons;
- Consultation with PAPs, officials, community leaders for preparing review report; and

- Assess the resettlement efficiency, effectiveness, impact and sustainability, drawing lessons for future resettlement policy formulation and planning.

11.3.2 The Information Required for External Monitoring

The following should be considered as the basis for indicators in monitoring and evaluation of the project:

- a) Socio-economic conditions of the PAPs in the post-resettlement period;
- b) Communication and reactions from PAPs on entitlements, compensation, options, alternative developments and relocation timetables etc.;
- c) Changes in housing and income levels;
- d) Rehabilitation of informal settlers;
- e) Valuation of property;
- f) Grievance procedures;
- g) Disbursement of compensation; and
- h) Level of satisfaction of PAPs in the post resettlement period.

11.3.3 Reporting System

Observing and appraising various specific parameters and processes as objectively as possible will be carried out. Periodic evaluation of these would indicate where and when policy changes could occur or where deficiency of implementation method and style are apparent. The boundaries of assessment will need the agencies to examine multiplier effect and linkage outside of affected people and areas.

The impact evaluation will be carried out after implementation RRP is over. Financial consideration often requires an impact evaluation shortly before or after the project concludes. However, project continues to evolve overtime. Therefore, it is suggested that second impact evaluation will be carried out three to five years of project conclusion.

Impact evaluation will look at all the affected populations; self-relocatee, assisted resettled population, host population. Further, this larger population will be further divided into vulnerable segment. Impact evaluation will be carried out on randomly selected segment of population.

The external agency will report on quarterly yearly basis to DFCCIL and funding agency.

11.4 STAGES OF MONITORING

Considering the importance of the various stage of project cycle, the DFCCIL will handle the monitoring at each stage as stated below:

11.4.1 Preparatory Stage

During the pre-relocation phase of resettlement operation, monitoring is concerned with administrative issues such as, establishment of resettlement unit, budget, land acquisition, consultation with AP's in the preparation of budget for Land Acquisition and Resettlement.

The key issue for monitoring will be shown below:

- Conduct of baseline survey;
- Consultations;
- Identification of PAP and the numbers;
- Identification of different categories of PAPs and their entitlements;
- Collection of gender disaggregated data;
- Inventory & losses survey;
- Asset inventory;
- Entitlements;
- Valuation of different assets;
- Budgeting;
- Information dissemination;
- Institutional arrangements; and
- Implementation schedule review, budgets and line items expenditure.

11.4.2 Relocation Stage

Since land vs land is not provided as per the Entitlement Matrix still PAPs will be resettled somewhere. Monitoring during relocation phase shall cover aspects such as adjustment of PAPs in the new surroundings, attitude of the host population towards the new comers and development of community livelihood are also considered at this stage. The key issue for monitoring will be:

- Payment of compensation;
- Delivery of entitlement;
- Grievance handling;
- Preparation of resettlement site, including civic amenities (water, sanitation, drainage, paved streets, electricity);
- Consultations;
- Relocation;
- Payment of compensation; and
- Livelihood restoration assistance and measures.

11.4.3 Rehabilitation Stage

Once PAFs have settled down, the focus of monitoring will shift to issues of economic recovery programs including income restoration measures, acceptance of these schemes by PAFs, impact of income restoration measures on living standards, and the sustainability of the new livelihood patterns. The key issue for monitoring will be the following:

- Initiation of income generation activities;
- Provision of basic civic amenities and essential facilities in the relocated area;
- Consultations; and
- Assistance to enhance livelihood and quality of life.

11.5 INDICATORS FOR MONITORING

The monitoring indicators can be divided in to four primary categories, which would provide insight to three types of benchmarks viz, process output and impact. The indicators are shown in the following table.

Table 11-1 Monitoring Indicators

(1) Physical Indicators
1) Extent of land acquired
2) No. of structures demolished
3) Number of land owner's and users and private structure owner paid compensation
4) Number of families affected
5) Number of families approaching Land Purchase committee for purchase of agricultural land
6) Number of affected person's receiving assistance or compensation
7) Number of affected persons provides transport facilities/shifting allowance/transition allowance.
(2) Social Indicators
1) Area and type of house and facility
2) Morbidity and mortality rate
3) Communal harmony
4) Taken care of displacement of SC, ST, Women and Vulnerable people.
5) Date and number of times of district level committee meet
6) Number of appeals placed before DFCCIL and grievance redress cell
(3) Economic Indicators
1) Entitlement of PAP's land/cash
2) Number of business re-established
3) Utilization of Compensation
4) Extent of agricultural land/ house sites/business sites purchased
(4) Grievance
1) Cases of LA referred to court pending and settled
2) Number of the Grievance Cell meting
3) Number of village level meeting
4) Number of field visit of Rehabilitation Resettlement Officer
5) Number of cases disposed by district level and state level committee to the satisfaction of PAP's
(5) Financial Indicators
1) Amount of compensation paid for land/structure
2) Cash grant for shifting outsets
3) Cash grant for shifting cattle shed or work shed.
4) Amount paid for one time financial assistance
5) Amount paid for community structure development
6) Consultancy fee paid to consultant
7) Establishment cost
8) Staff Salary
9) Vehicle Maintenance

11.6 MONITORING PROJECT INPUT AND OUTPUT

Project monitoring will be the responsibility of the R&R coordinator of DFCCIL who will prepare the monthly progress reports. The report will compare the progress of the project to targets setup at the commencement of the project. The list of impact performance indicators will be used to monitor project objectives. The socioeconomic survey conducted will provide the benchmarks for comparison.

Sample forms of the monitoring report at different stages are shown in Attachment 11-1, 11-2 & 11-3

CHAPTER 12 GRIEVANCE REDRESS MECHANISM

12.1 NEED FOR GRIEVANCE REDRESS MECHANISM

There is a provision for redress of grievances of PAFs in all aspects relating to Land Acquisition and payment of compensation in Rehabilitation Action Plan. There is a field level grievance committee that caters to complaint made by local residents on various aspects of grievances on DFC project. Similar grievance redresses system at Central level also exists. This committee will take care any grievances addresses to DFC Project. This committee should hold a meeting a fixed date of every month to hear the grievance and quick disposal of cases of affected persons. Chief Project Manager shall head the Grievance Redressal in his respective jurisdiction. GM/SEMUR shall head the Grievance Redressal in the head quarter office.

The grievance redress mechanism will be a three tier system comprising of a (i) Field Level Cell (FLC) headed by CPMs Offices, and (ii) Headquarter Level Cell (HLC) headed by GM/SEMUR and (iii) Central Level Cell (CLC) headed by Director/Project and Planning.

12.1.1 Members of Committees

(1) Field Level Cell (FLC)

The FLC shall address grievances pertaining to eligibility and entitlement filed by affected individuals or families as the case may be. The FLC consist of Chief Project Manager, Deputy Project Manager, Project Manager, Assistant Project Manager (Environment & Social) and Consultants.

(2) Headquarter Level Cell (HLC)

The Headquarter Level cell will comprise of GM/SEMUR and assisted by AGM/SEMUR, AGM/Land and Consultant (Environment & Social).

(3) Central Level Cell (CLC)

Director/ Project and Planning will head the committee.

12.1.2 Meeting and Decision Making Process of the Committee

If the representation pertains to compensation for agricultural land and homestead land, property the representation shall be escalated to the FLC for forwarding the same to HLC for resolution. If the representation pertains to family level allowances and benefits, the FLC will verify the submitted documents and conduct a field check and after validating the information provided will decide on the representation. If the representation is found to be genuine, then the FLC level will try to resolve the case with support by Competent Authority. If it will not be solved by FLC level, then it would be escalated to HLC for resolution. If the representation is incorrect or found to be lacking in documentary evidence, the case would be rejected and the decision would be conveyed to the HLC and CLC.

It is suggested that Grievance Cell at Field Level Cell and Competent Authority from State Government shall meet regularly (at least once in a month) on a prefixed date (preferably on first 7th day of the month). The committee will fix responsibilities to implement the decisions of the committee. This will not only help proper assessment of the situation but also in suggestive corrective measures at the field level itself. The committee shall deliver its decision within 30 days of the case registration. District Magistrate or Competent Authority of the area shall hear appeal against the decision of the grievance redress committee.

12.2 RESPONSIBILITY OF THE FIELD LEVEL CELL AT CPM LEVEL

After finalization of RRP, Field Level Committee will conduct the Programme of Information dissemination in the Project Area in respect of Rehabilitation and Resettlement Plan. It is a part of social environment monitoring plan of the resettlement and rehabilitation of PAFs. The following tasks will be done by the Field Level Committee.

- a) Prepare information materials in local language explaining resettlement and rehabilitation plan such as project brochures and pamphlets to be used for disclosure of information regarding the project objectives, entitlement, compensation principles and procedures, and implementation schedules;
- b) Work in close cooperation with relevant state and central government departments and district administration involved in the valuation of assets acquired and payment of compensation;
- c) Ensure that the PAFs are paid their full entitlements due to them;
- d) Assist the PAFs in redressing of their grievances through the grievance redress mechanism set up for the Project, if required.
- e) Disseminate information for all the PAFs about the functional aspects of the various level committees set up for the Project and assist the PAFs in benefiting from such institutional mechanism;
- f) Participate in monitoring system and prepare progress reports.

12.3 FUNCTION OF THE COMMITTEE

The function of the grievance committee shall be as follows;

- To provide support for the PAFs on problems arising out LA/property acquisition.
- To record the grievance of the affected families, categories and prioritize and solve them within a month.
- To inform DFCCIL and Bank for serious cases within appropriate time frame.
- To report to PAF about developments regarding their grievance and decision of DFCCIL.
- To prioritize the cases based on following criteria:
 - i. Cases pertaining to the land and structure of displaced persons
 - ii. Cases pertaining to the land and structure of adversely affected families.
 - iii. Cases pertaining to the land and structures of partially affected families.

It is important that any grievance address to DFC project is solved basically at Field level with Competent Authority. Otherwise, it will be escalated to Headquarter Level Cell (HLC) or Central Level Cell (CLC). District Magistrate of the area will have the final decision and the decision will not be contested in any other forum except in the Courts of Law.

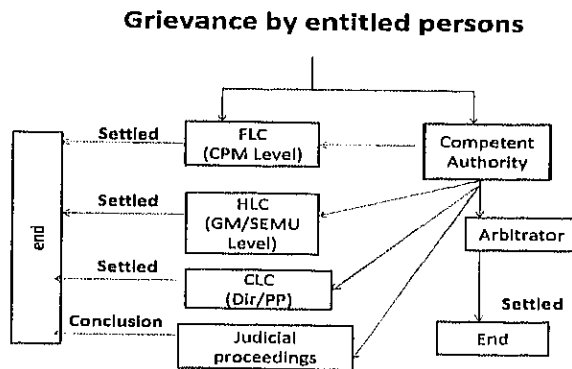


Figure 12-1 Flow Chart of Grievance Redress Mechanism

12.4 Complaint Handling System in DFC Corporate Level

1. A centralized complaint handling system, which includes maintaining a project log and filing to monitor status of follow up of each received complaints and grievances, will be established by the DFCCIL. As a first step, complaint handling system has been established in terms of MOR & CVC guidelines. Complaint registers have been opened at each regional office and with each GGM/GM at Corporate office. All complaints received by the concerned office shall be entered into this register. Complaints having vigilance angle shall be marked to CVO by the concerned officer. GM/IT has been nominated as the Chief Complaint Handling officer to monitor the disposal of complaints received and put up the status to the Board of Directors on monthly basis.
2. Recording and appropriate referral of all incoming grievances or complaints will be undertaken by the DFCCIL with each case generating an automatic, standard format report. DFC will respond to all complaints, received from any source, normally within fifteen days of receipt.
3. A Comments, Suggestions and Grievances Handling component will be included on the web site (<http://www.dfccil.org>). This will be updated on a monthly basis. The site will also enable online tracking of complaints by the complainants.
4. Tracking of the status of investigations and measures taken will be reported in monthly reports to management.
5. For the complaint mechanism to function efficiently, the information concerning the alternative conduits for complaint shall be widely publicized on the website and on information boards at work sites and regional offices.

12.5 Strengthening preventive vigilance to deter fraud and corruption.

- (i) As the first step, CVO (Chief Vigilance Officer) has already been appointed for DFCC. Contact details of CVO shall be publicized widely through the DFCC website and also on bulletin boards at appropriate locations in the corporate and regional offices.

(ii) An exclusive vigilance cell shall be set up by 2010, which, under the direction of CVO, shall act as a watchdog to handle fraud and corruption complaints/cases in coordination with Vigilance Directorate, Ministry of Railways, CVC (Central Vigilance Commission) and CBI (Central Bureau of Investigation). In this context, two posts have already been created-(i) Dy. Chief Vigilance Officer, (ii) Asst. Vigilance officer. Vacancy notices have been circulated to fill up these posts.

(iii) It would take some time to man the Vigilance cell, therefore as a temporary Measures, one AM/Engg. & one AM/Fin. have also been deployed to assist CVO in conducting preventive check & complaint investigation in addition to their current duties.

CHAPTER 13 COST ESTIMATE

13.1 STATEMENT OF FINANCIAL RESPONSIBILITY AND AUTHORITY AND SOURCE OF FUNDS AND THE FLOW OF FUNDS

- The money for the compensation shall be kept in joint account in the name of the competent authority and Assistant Manager/Manager (Finance) to take the personal approval of CPM in each case. All the payments of the compensation shall be released out of such account.
- Any amount, if likely undisturbed for more than a year from the date of last transaction in the Joint Bank Account of Competent Authority (Land Acquisition) and Assistant Manager/Manager(Finance), DFCCIL along with any amount of interest lying in the said account, shall be remitted back to account of DFCC after closing the joint account. The claims of compensation and arbitration award if any, after closing of joint account shall be recommended by competent authority to concerned CPMs who shall in turn refer it to the head quarter for release of payment.
- CPMs however, will ensure that payment, in all cases released to the genuine claimant, proper records are maintained and records including books of accounts are proper reconciled on a periodical basis. Assistant Manager/Manager (Finance) will advise and assist CPMs in discharging these functions.
- Disbursement of compensation will be done by cheques jointly signed by the account holders, DFCC will prepare all the documents required for taking possession of the land. The possession of the land will be taken by Railway official immediately and handed over to DFCCIL official and land handing over documents will be signed by Railways as well as DFCCIL officials subsequently lease agreement would be signed based on these documents.
- Once the compensation money has been disbursed DFCC will start submitting monthly account of the money released by the Railways as compensation with the various joint account and those actually disbursed as compensation.
- The estimate/award furnished by the Competent Authority as determined may be got approved by an in house committee in the chairmanship of GGM/Finance at the Corporate Office. Whenever the award for Competent Authority is not found to be reasonable/acceptable, DFCCIL may while depositing the amount in the joint account, refer the matter for arbitration.

13.2 ESTIMATED BUDGET, BY COST AND BY ITEM, FOR ALL RESETTLEMENT COST

Estimated budget, by cost and by item, for all Land including resettlement costs as per NRRP 2007 & RAA 2008 including planning and implementation, management and administration, monitoring and evaluation and contingencies is approximately IRS.11952 million. Contingency provisions are also available to take into account variations from this estimate. The budget will be indicative of outlays for the different expenditure categories.

These costs will be updated and adjusted to the inflation rate as the project continues and in respect of more specific information such as extra number of PAPs during implementation, and unit costs will also be updated when necessary. The budgetary allocation for the rehabilitation component of the project has been determined based on the anticipated impacts, entitlement options as defined in the approved entitlement matrix and the requirements to be fulfilled as per the directives under the NRRP 2007, RAA, 2008 and guidelines prescribed by JICA.

Below mentioned cost component will be taken care for estimated budget for R&R including land cost after conducting Baseline social survey and shall be provided in final RRP.

Component of Cost Estimation

Sl No.	Items	Rs. In Million
A. Land Acquisition Cost		
1.	Compensation for Acquisition of Private Land	
2.	Compensation for Acquisition of Govt. Land	
3.	Compensation for Acquisition of Forest Land	
B. Compensation for Structures and other Assets		
4	Replacement cost of Structures	
5	Replacement cost of other assets like temporary structures (wells, cattle sheds, work shed) etc.	
C. Assistance to PAPs		
6	Assistance to Land Less ,Small and Marginal Farmers	
7	Transition Allowance	
8	Shifting Allowance	
9	Training Assistance	
10	Special Support for Vulnerable People	
11	Rehabilitation Assistance for ST	
D. Compensation for Trees and Crops		
12	Compensation for Trees	
13	Compensation for Crops	
E. Compensation for Common Property Resources		
14	Relocation of CPR	
15	Construction and Damage Charges of Public Utilities	
F	Supporting Cost for Implementation of RRP and Monitoring	
G	Public Consultation Cost	
H	Others	
Sub Total (A+B+C+D+E+F+G+H)		
17	Contingency (10% of R&R Cost)	
Total		
Sl No.	Items	Rs. In Million
A. Land Acquisition Cost		
1.	Compensation for Acquisition of Private Land	
2.	Compensation for Acquisition of Govt. Land	
3.	Compensation for Acquisition of Forest Land	
B. Compensation for Structures and other Assets		
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15	Construction and Damage Charges of Public Utilities	
F	Supporting Cost for Implementation of RRP and Monitoring	
G	Public Consultation Cost	
H	Others	
Sub Total (A+B+C+D+E+F+G+H)		
17	Contingency (10% of R&R Cost)	
Total		

Sources of Funding

As agreed upon the project financing proposal and provision made in the RRP , all R&R cost will be borne by the MOR. MOR will ensure allocation of funds and availability of resources for smooth implementation of the project R&R activities.

CHAPTER 14 FURTHER ACTIVITIES

In subsequent stage of the Project, further activities and arrangements have to be done based on the RRP, especially preparation of the RRP by conducting detailed survey for all the PAPs, which is called as "Baseline Survey and Census" under the NRRP 2007, as basis for the compensation and assistance for the land acquisition and resettlement for the Project. Main items required for the further activities and arrangements are explained below.

The final RRP has to be prepared based on the RRP. In the preparation of the final RRP, a Baseline Survey and Census has to be conducted as per the NRRP 2007. Purposes of the Baseline Survey and Census are to prepare the list of likely PAPs within the proposed ROW and also make an inventory of properties and other assets affected. It shall cover all (100%) of PAPs.

The Baseline Survey and Census will be conducted using questionnaire by the consultant appointed by the DFCCIL. Broad information to be collected would include demography of family members, religion, caste, sources of income, occupation, land holdings, ownership and type of structures, other property and assets owned, livestock size, details of losses of assets to the project, etc. The extent of impact on Common Property Resources shall also be covered during census. In addition, individuals and group consultations would be carried out to understand the needs and concerns of PAPs with regard to various issues such as alternatives, compensation, assistance, resettlement options, etc. Based on results of the survey, PAPs will be suitably categorized as titleholders, encroachers, squatters, tenants, vulnerable, etc. The disclosure of RRP will be done to the PAPs.

After the base line census survey and approval of Entitlement Matrix, village-wise compensation award has been prepared and the following procedures shall be followed for distribution of compensation.

- The competent Authority shall make a village wise award. The award shall have a Performa annexed to it which will have the item wise details of compensation to be paid for the village "Annexure I".
- After the declaration of the award the compensation for each and every beneficiary shall be worked out and shall be complied as per "Annexure- II"
- All the affected PAPs shall be sent a notice as per "Annexure-III" for collecting the compensation award by the Competent Authority.
- The compensation shall be distributed as per the Performa "Annexure-IV".
- The compensation shall be disbursed when the Khatedars delivers the possession on land as per "Annexure-V".
- The Competent Authority after making a payment to the PAPs shall compile the details of the acquired land as per "Annexure-VI" and submit a report to the District Collector for his approval for mutation in the Revenue records, in the name of the acquiring agency.
- Once the District Collector approves the mutation the Competent Authority shall send a report as per "Annexure-VII" to the Tehsildar of the concerned sub-division for incorporating the mutation in the revenue records.

(These are the Performa's which has been collected from the State of Uttar Pradesh (U.P) and are being used their similar Performa's are in vogue in other states i.e. Haryana, Rajasthan and Gujarat in their vernacular language these Performa's are for guidance; State-wise Perform shall be used.)

प्रस्तावित अभिनिर्णय

1	वाद संख्या	1/1/2006									
2	भाग का नाम	आरक्षण									
3	परमना व तारकीय	आरक्षण व गाजियाबाद 1									
4	जनपद	गाजियाबाद (उ०प्र०)									
5	अभिग्रहण हेतु प्रस्तावित क्षेत्रफल	470008.00 वर्ग मीटर									
6	भूमि अधिग्रहण का परिचय	भारतीय राष्ट्रीय राजमार्ग (इंटरनें परिवहन एवं परिवहन) के निर्माण हेतु									
7	अध्यापित विभाग का नाम	सड़क परिवहन एवं राजमार्ग मंत्रालय (भारत सरकार) द्वारा प्रबंधक(एन-1) भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, जी-6 एच 6 संकर-10 हरियाणा दिल्ली 1									
8	क्या जमींदारी विनाश क्षेत्र है	है									
9	राष्ट्रीय राजमार्ग 1956 के अन्तर्गत धारा-3ए की अधिसूचना प्रकाशन का दिनांक	अधिसूचना संख्या-का.आ.1247(अ) भारत का राजपत्र असाधारण भाग-11 खण्ड-3 उप खण्ड-(11) दिनांक 02.08.2006									
10	धारा-3ए की उपधारा-(3) के प्राविधानानुसार स्थानीय समाचार पत्रों में प्रकाशन की तिथि	<table border="1"> <tr> <td>अमर उजाला</td> <td>दैनिक जागरण</td> </tr> <tr> <td>23.08.06</td> <td>24.08.06</td> </tr> </table>	अमर उजाला	दैनिक जागरण	23.08.06	24.08.06					
अमर उजाला	दैनिक जागरण										
23.08.06	24.08.06										
11	उक्त अधिनियम की धारा-3डी की उप धारा-(1) के अन्तर्गत अधिसूचना के प्रकाशन की तिथि	अधिसूचना संख्या का.आ. 2050 भारत का राजपत्र असाधारण भाग-11 खण्ड-3, उप खण्ड-11 दिनांक 30.11.2006									
12	उक्त अधिनियम की धारा 3डी की उप धारा-3 के अन्तर्गत स्थानीय समाचार पत्रों में प्रकाशन की तिथि एवं दूर विद्यार्ण हेतु सार्वजनिक सूचना की विज्ञापित प्रकाशन तिथि	<table border="1"> <tr> <td>अमर उजाला</td> <td>राष्ट्रीय सप्ताह</td> <td>दैनिक जागरण</td> </tr> <tr> <td>07.06.07</td> <td>07.06.07</td> <td>---</td> </tr> <tr> <td>---</td> <td>07.09.07</td> <td>08.09.07</td> </tr> </table>	अमर उजाला	राष्ट्रीय सप्ताह	दैनिक जागरण	07.06.07	07.06.07	---	---	07.09.07	08.09.07
अमर उजाला	राष्ट्रीय सप्ताह	दैनिक जागरण									
07.06.07	07.06.07	---									
---	07.09.07	08.09.07									
13	अभिनिर्णय की तिथि	---									
14	अधिकार की तिथि	---									
15	अभिनिर्णय की धनराशि	<p>भूमि के प्रतिफल की धनराशि ₹0 37,72,34,546.46</p> <p>भण्डों के प्रतिफल की धनराशि ₹0 0,64,958.53</p> <p>पूवों के प्रतिफल की धनराशि ₹0 20,623.00</p> <p>परिवहन पूवों की धनराशि ₹0 5,031.00</p> <p>ट्यूबवेल एवं वोरिंग के प्रतिफल की धनराशि ₹0 27,163.00</p> <p>योग ₹0 37,81,59,339.46</p> <p>10 प्रतिशत अतिरिक्त धनराशि ₹0 3,78,15,933.95</p> <p>सम्पूर्ण योग ₹0 41,59,75,335.35</p>									
16	कुल प्रस्तावित अभिनिर्णित धनराशि पर 10 प्रतिशत भूमि अर्जन व्यय	₹0 4,15,97,533.95									
17	पूँजीकृत भूखंड की धनराशि (103141X15000)	₹0 2,44,711.53									

70

अभिनिर्णय का औचित्य

भारत सरकार द्वारा घोषित राष्ट्रीय राजमार्ग विकास योजना के अन्तर्गत राष्ट्रीय राजमार्ग (ईस्टर्न पैरिफेरल एक्सप्रेस वे) के निर्माण हेतु जिला गाजियाबाद के ग्राम खसना, परगना खसना, तहसील गाजियाबाद में भूमि अधिग्रहण हेतु भू अर्जन का प्रस्ताव भारत सरकार के राबक परिवहन एवं राजमार्ग मंत्रालय (अधिसूची निदेशक, रमन कंसलटेन्ट्स प्राईवेट लिमिटेड, 92 सी गुरुद्वारा मार्ग, गदनागिर नई दिल्ली 110062 कार्यालय के पत्र संख्या-एस.सी.पी.एल/सी 676/जी/94 दिनांक 23.05.06 द्वारा सहाय परिशिष्टी/अपर जिलाधिकारी(गुआओ), गाजियाबाद को प्राप्त करवाया गया इस प्रकरण में राष्ट्रीय राजमार्ग अधिनियम 1956 की धारा 3(ए)(1) के अन्तर्गत भारत सरकार को असाधारण राजपत्र गजट में अधिसूचना दिनांक 02.08.06 तथा रणनीति समाचार पत्र "अपर उजाला" व "दैनिक जागरण" में क्रमशः दिनांक 23.08.06 व 24.08.06 को प्रकाशित कराया गया। इस भूमि अर्जन प्रस्ताव के संदर्भ में भू-स्वागियों द्वारा उक्त अधिनियम की धारा 31 के अन्तर्गत प्राप्त 11 आपत्तियों के निस्तारण तत्परान्त धारा-3डी की कार्यवाही हेतु प्रयत्नकर्ता(एन-1) भारतीय राष्ट्रीय राजमार्ग प्राधिकरण जी-5 एवं 6 सेक्टर-10 द्वारका नई दिल्ली को इस कार्यालय के पत्र संख्या-815 दिनांक 30.10.06 द्वारा सन्दर्भित किया गया।

भारतीय राष्ट्रीय राजमार्ग अधिनियम की धारा-3डी के अन्तर्गत ग्राम खसना में क्षेत्रफल 470008.00 वर्ग मीटर भूमि अधिग्रहण की सूचना भारत को असाधारण राजपत्र गजट में दिनांक 30.11.06 को प्रकाशित किया गया है जिसका प्रकाशन समाचार पत्र "राष्ट्रीय सहारा" एवं "अपर उजाला" में दिनांक 07.06.07 को अधिसूचना प्रकाशित कराई जा चुकी है। जिससे से ग्राम समाज क्षेत्रफल 56767.00 वर्ग मीटर भूमि एवं अधिक गजट क्षेत्रफल 11389.00 वर्ग मीटर बहिष्कृत कर कृषिक भूमि क्षेत्रफल 401852.00 वर्ग मीटर भूमि को अभिनिर्णय घोषित करने हेतु तैयार किया गया है। भारतीय राष्ट्रीय राजमार्ग अधिनियम 1956 की धारा-3डी के अन्तर्गत प्रतिकर से सम्बन्धित दायों के प्रस्तुतिकरण हेतु समाचार पत्र "राष्ट्रीय सहारा" एवं "दैनिक जागरण" में दायों के निर्धारण हेतु क्रमशः दिनांक 07.09.07 व 08.09.07 को सर्वसाधारण की जानकारी हेतु सार्वजनिक सूचना प्रकाशित की गई। उक्त अधिनियम की धारा-3डी के अन्तर्गत ग्राम के भू-स्वागी एवं हितवद्ध आपत्तियों के निराकरण निम्नवत् है:-

उक्त अधिनियम की धारा-3डी के अन्तर्गत समयवद्ध दिनांक 11.09.07 को श्री मंगरेज पुत्र हवीच खां निवासी खसना, परगना खसना, तहसील व जिला गाजियाबाद द्वारा आपत्ति प्रस्तुत की गयी थी। इस आपत्ति के निस्तारण हेतु कार्यालय के पत्र संख्या-517/आठ अ0जि0अ0/गु0अ0/सं0सं0/गाजियाबाद दिनांक 24.09.07 द्वारा आपत्ति रून्वाई हेतु नियत दिनांक 29.09.07 भिश्चित करते हुए नोटिस जारी की गयी नियत तिथि पर हितवद्ध भूस्वागी श्री मंगरेज पुत्र हवीच खां उपस्थित हुए तथा उनके द्वारा खसना नम्बर 564 रकबा 4-13-4 बीघा भूमि का मासिक व कापिज बताया गया। साक्ष के रूप में प्रस्तुत जीत चकबन्दी आकषर पत्र 41 के खसना नम्बर 1564 से 1570 तक भू क्षेत्र की छाया प्रति प्रस्तुत करते हुए 18 लाख रूपया प्रति कच्चा बीघा अथवा वर्तमान स्टाप दर के आधार पर प्रतिकर की मांग की गयी है। दिनांक 29.09.07 को उनकी आपत्ति को सुना गया प्रतिकर की दरों के निर्धारण के सम्बन्ध में जिलाधिकारी गाजियाबाद के आदेश दिनांक 28.09.07 द्वारा नामित संयुक्त समिति द्वारा नियमानुसार विचार किया जावेगा।

उक्त अधिनियम के अन्तर्गत श्री लजी कंवर अयुव प्रती एडवोकेट द्वारा दिनांक 28.09.07 को आर्गुमेंट प्रस्तुत की गयी कि जनपद गाजियाबाद में किसानों की जमीनों में से ईस्टर्न पैसिफेरल एक्सप्रेस के बनना प्रस्तावित है जिसके लिये अल्पवार में गजद गी लो चुका है तथा गीक पर निर्माण करने वाली संख्या में निशान भी लगा दिये हैं, अरफना तथा आस-पास तेजी से विकसित हो रही कारखानों व बदती आवादी के कारण बाजार भाव काफी ऊंचे हैं एन.सी.आर का गजद होने तथा गीक पर निशान लगने की वजह से किसानों को जल्द से जल्द बाजारी भाव का मुआवजा मिलना आवश्यक है। जमीन का मुआवजा बाजारी भाव से जल्द से जल्द दिलाये जाने की मांग की गयी है, परन्तु यह प्रार्थना पत्र समाचार पत्र "साम्प्रीय सहारा" व "दैनिक जागरण" में प्रकाशित सार्वजनिक सूचना क्रमशः दिनांक 07/09/07 व 08/09/07 के प्रकाशन की तिथि से सात दिन की अवधि के बाद प्रार्थना-पत्र दिनांक 28.09.07 को प्रस्तुत करने तथा कोई साक्ष्य न प्रस्तुत करने के अभाव में निक्षेपित किया जाता है।

ग्राम डारना, परगना डारना तहसील न जिला गाजियाबाद में भारतीय साम्प्रीय राजमार्ग(ईस्टर्न पैसिफेरल एक्सप्रेस-वे) के निर्माण हेतु अधिग्रहित कृषि भूमि क्षेत्रफल 401852.00 वर्ग मीटर के अधिनिर्णय हेतु प्रतिवक्त्र दर निर्धारण के लिये जिलाधिकारी द्वारा नाभित कम्पटी दिनांक 28.09.07 द्वारा स्थलीय एवं अभिलेखीय जाँच की गयी।

ग्राम डारना की अर्जित भूमि के सम्बन्ध में बाजार दर के निर्धारण हेतु उप निम्नवाक, गाजियाबाद के कार्यालय से भारतीय साम्प्रीय राजमार्ग अधिनियम 1956 की धारा-3ए की अधिसूचना के प्रकाशन की तिथि 02.08.06 से एक वर्ष पूर्व अवधि के विक्रय पत्रों का संकलन किया गया। इस अवधि में निष्पादित कुल 507 विक्रय पत्र प्राप्त हुए जिन्हें अनुसूची-2 में सूचीबद्ध किया गया है।

अनुसूची-2 के क्रमांक 119, 259, 341 एवं 452 अर्जित क्षेत्रफल के अन्दर के विक्रय पत्र हैं। यह विक्रय पत्र क्रमशः दिनांक 25.09.05, 28.11.05, 12.12.05 एवं 22.03.06 को निष्पादित किये हैं, जिनकी दर प्रति वर्ग मीटर क्रमशः रु० 375.00, 142.25, 472.22, 363.64 आती है। यह विक्रय पत्र समान उपयोगिता एवं उपादेयता की दृष्टि में उचित नहीं है, क्योंकि वर्तमान समय जनपद गाजियाबाद एन.सी.आर. सिटी होने के कारण एवं कृषक गण द्वारा दर निर्धारण के सम्बन्ध में वर्तमान स्टाम्प दर के आधार पर प्रतिवक्त्र की मांग की जा रही है, इसके अतिरिक्त इन विक्रय पत्रों की दर बहुत कम है। ऐसी स्थिति में इन विक्रय पत्रों में से किसी विक्रय पत्र को प्रतिवक्त्र निर्धारण हेतु प्रतिनिधि विक्रय पत्र के रूप में चयन किया जाना उचित प्रतीत नहीं होता है।

अनुसूची-2 के विक्रय पत्र संख्या-1 से 13 तक, 15, 16, 18 से 22 तक, 25 से 55 तक, 57 से 60 तक, 64, 69 से 75 तक, 78, 79, 81 से 95 तक, 98 से 107 तक, 109, 111 से 118 तक, 120 से 122 तक, 124 से 145 तक, 148 से 152 तक, 156 से 168 तक, 171 से 176 तक, 178 से 185 तक, 187 से 197 तक, 199 से 201 तक, 204, 207, 209 से 217 तक, 220, 222, 223, 225 से 232 तक, 234, 236, 237, 239 से 245 तक, 247, 249 से 253 तक, 257, 258, 262, 264, 265, 272, 275, 277, 280, 282 से 284 तक, 286 से 294 तक, 297 से 300 तक, 302 से 310 तक, 312 से 319 तक, 321, 322, 324, 325, 327 से 330 तक, 332 से 335 तक, 337 से 340 तक, 344 से 357 तक, 359 से 361 तक, 364, 366, 368 से 370 तक, 374 से 377 तक, 382, 383, 386 से 388 तक, 390 से 402 तक, 404 से 425 तक, 427 से 437 तक, 439, 441 से 451 तक, 453 से 485 तक, 487, 488, 490 से 507 तक आवासीय विक्रय पत्र हैं। इनका क्षेत्रफल भी

बहुत ही कम है तथा यह विक्रय पर अधिक मूल्य देकर कम किने गये हैं, जो समान उपयोगिता एवं उपादेयता की दृष्टि से वर्तमान बाजार दर स्पष्ट रूप से प्रदर्शित नहीं करते हैं। ऐसी स्थिति में इन विक्रय पत्रों में से किसी को भी प्रतिनिधि विक्रय पत्र के रूप में प्रतिकर निर्धारण हेतु गणन करना उपयुक्त नहीं है।

विक्रय पत्र संख्या 14, 17, 23, 24, 56, 61 से 63 तक, 65 से 68 तक, 76, 77, 80, 96, 97, 108, 110, 123, 146, 147, 153, 155, 169, 170, 177, 186, 198, 202, 203, 205, 206, 208, 218, 219, 221, 224, 233, 235, 238, 246, 248, 254, 255, 256, 260, 261, 263, 266 से 271 तक, 273 से 274 तक, 276, 278, 279, 281, 285, 285, 296, 301, 311, 320, 323, 326, 331, 336, 342, 343, 358, 362, 363, 365, 367, 371 से 373 तक, 378 से 381 तक, 384, 385, 389, 403, 426, 438, 440, 486 एवं 489 पर अंकित विक्रय पत्र कृषिक भूमि के विक्रय पत्र हैं। इन विक्रय पत्रों की भूमि अर्जित क्षेत्रफल से काफी दूर स्थित हैं तथा समान उपयोगिता तथा उपादेयता की दृष्टि से इनकी भौगोलिक स्थिति समरूप नहीं है। व्यक्तिगत लाभ हेतु भूमि का कम विक्रय किया गया है जो वर्तमान बाजार भाव को स्पष्ट रूप से प्रदर्शित नहीं करते हैं और अधिनगणन इन विक्रय पत्रों की भूमि समान स्थिति में न होने एवं अर्जित क्षेत्रफल से दूर स्थित होने के कारण इन विक्रय पत्रों में से किसी को भी प्रतिकर निर्धारण हेतु प्रतिनिधि विक्रय पत्र के रूप में गणन किया जाना न्यायोचित नहीं है।

अनुसूची-2 में अंकित विक्रय पत्रों का विक्रय मूल्य अर्जित भूमि के वर्तमान बाजार दर के लिये उपयुक्त न पाये जाने के कारण कार्यालय उप निष्पक्ष-प्रथम, माजियावादा, जनपद माजियावादा के क्षेत्राधिकार के अन्तर्गत आने वाले क्षेत्रों के लिये पुनर्स्थापित न्यूनतम सर्फिस रेट सूची जो जिलाधिकारी के आदेश दिनांक 16.06.06 से प्रभावी है प्राप्त की गयी, जो भूमि अर्जन पत्रावली पर उपलब्ध है। ग्राम के सर्फिस रेट के अवलोकन एवं स्थलीय निरीक्षण के समग्र प्रभावित भूस्वामियों एवं अन्य ग्रामवासियों से पूछताछ करने पर ज्ञात हुआ कि प्रस्तुत ग्राम में भूमि का क्रय विक्रय जिलाधिकारी द्वारा स्टाफ ड्यूटी अदायगी हेतु निर्धारित न्यूनतम बाजार दर के अनुसार ही हो रहा है। ग्राम ज़ासना की भूमि राणी सुखाधिवगर से परिपूर्ण होने के कारण जिलाधिकारी द्वारा स्टाफ ड्यूटी अदायगी हेतु निर्धारित बाजार दर को अर्जित भूमि प्रतिकर निर्धारण हेतु लागू करना उचित होगा जिसके आधार पर विवरण निम्नवत है:-

भूमि की श्रेणी	क्षेत्रफल वर्ग मीटर में	स्टाफ ड्यूटी प्रति वर्गमी० मुख्य मार्ग पर निर्धारित दर	कुल निर्धारित प्रतिकर की धनराशि
कृषिक भूमि	401852.00	938.74	37,72,34,546.40

अतः ग्राम ज़ासना में अर्जित की जा रही भूमि कृषिक भूमि 401852.00 वर्ग मीटर के लिये क्रमशः रू० 938.74 की दरों को स्वीकृत कर प्रतिकर निर्धारण एवं अभिनिर्णय घोषित करने हेतु संस्तुति की जाती है।

अतएव उपरोक्त के आधार पर कमेटी द्वारा संस्तुत उक्त दरों को स्वीकार करते हुए ग्राम ज़ासना में अर्जित की जा रही सम्पूर्ण कृषिक भूमि 401852.00 वर्ग मीटर के प्रतिकर जैसा कि अनुसूची-3 में अंकित है, नियमानुसार निर्धारित किया गया है। उपरोक्त के अतिरिक्त अध्यापित इकाई द्वारा अर्जित भूमि पर स्थित वृक्षों का प्रतिकर वन क्षेत्राधिकारी

गाजियाबाद एवं फलदार वृक्षों का मूल्यांकन जिला उद्यान अधिकारी गाजियाबाद, गवनों के निर्माण का प्रतिकर अग्निशाली अभियन्ता सार्वजनिक निर्माण विभाग निर्माण अण्डा द्वितीय गाजियाबाद, द्यूबेल एवं बोरिंग का मूल्यांकन अग्निशाली अभियन्ता लघु सिंचाई गाजियाबाद द्वारा कराया गया है। उक्त सम्बन्धित विभागों द्वारा मूल्यांकन आख्या प्राप्त हो गयी है, जो भूमि अर्जन पत्रावली में उपलब्ध है। जिसके आधार पर अर्जित भूमि एवं उस पर स्थित परिसम्पत्तियों का प्रतिकर निम्न प्रकार निर्धारित किया जाता है:-

1	भूमि के प्रतिकर की धनराशि:-	₹0 37,72,34,546.48
2	गवनों के प्रतिकर की धनराशि:-	₹0 8,64,038.00
3	वृक्षों के प्रतिकर की धनराशि:-	₹0 28,620.00
4	फलदार वृक्षों की धनराशि:-	₹0 5,031.00
5	द्यूबेल एवं बोरिंग के प्रतिकर की धनराशि:-	₹0 27,163.00
	योग :-	₹0 37,81,59,398.48
	10 प्रतिशत अतिरिक्त धनराशि:-	₹0 3,78,15,939.85
	सम्पूर्ण योग:-	₹0 41,59,75,338.33

उक्त एवं उपरोक्त निर्धारित दर के अनुसार अर्जित कृषिक भूमि क्षेत्रफल 401852.00 वर्ग मीटर का प्रतिकर ₹0 37,72,34,546.48 और इस पर स्थित वृक्षों का प्रतिकर ₹0 28,620.00, फलदार वृक्षों का प्रतिकर ₹0 5,031.00, गवनों का प्रतिकर ₹0 8,64,038.00 तथा बोरिंग एवं द्यूबेल का प्रतिकर ₹0 27,163.00, इस प्रकार कुल निर्धारित धनराशि पर भारतीय राष्ट्रीय राजमार्ग अधिनियम 1956 की धारा-3जी(2) के अनुसार 10 प्रतिशत की दर से ₹0 3,78,15,939.85 अतिरिक्त प्रतिफल देय होगा। इस प्रकार कुल अर्जित भूमि तथा इस पर स्थित परिसम्पत्तियों का प्रतिकर ₹0 37,81,59,398.48 निर्धारित किया जाता है।

अध्यापित व्यय:- कुल प्रस्तावित अग्निनिर्णत धनराशि ₹0 41,59,75,338.33 पर 10 प्रतिशत की दर से ₹0 4,15,97,533.83 अध्यापित निकाय से वसूल करके राज्य सरकार के राजस्व विभाग के सम्बन्धित लेखाशीर्षक में जमा किया जायेगा।

पूँजिकृत मूल्य:- अर्जित भूमि के भू-राजस्व ₹0 1636.41 मा 150 गुना ₹0 2,44,711.50, अध्यापित निकाय से वसूल करके राज्य सरकार के राजस्व विभाग के सम्बन्धित लेखाशीर्षक भू-राजस्व 0029 में जमा किया जायेगा।

अतः मैं सक्षम प्राधिकारी/अपर जिलाधिकारी(भू0310) संयुक्त संगठन, गाजियाबाद ग्राम ज़ासना की कृषिक भूमि क्षेत्रफल 401852.00 वर्ग मीटर एवं उस पर स्थित परिसम्पत्तियों की मूल्यांकित धनराशि एवं 10 प्रतिशत अतिरिक्त प्रतिफल सहित प्रस्तावित ग्राम का प्रस्तावित अग्निनिर्णय ₹0 41,59,75,338.33 सन्दर्भित किया जा रहा है। प्रस्तावित अग्निनिर्णय की धनराशि राजस्व अगिलेख ग्राम ज़ासना परगना ज़ासना, तहसील व जिला गाजियाबाद के खलीली के अगिलेखानुरागर भू-अर्जन से प्रभावित भू-स्वामियों के नाम भूमि अर्जन प्रपत्र-11 में अंकित की जायेगी।

दिनांक:-

(अं० अग्नि-पुस्तिका)
सक्षम प्राधिकारी/अपर जिलाधिकारी(भू0310)
संयुक्त संगठन, गाजियाबाद।

परिशिष्ट-3

संयुक्त राजस्थान अधिनियम 1956 की धारा-32 अधिनियम संख्या-का.अ. 1247(3) भारत का राजपत्र असाधारण भाग-1 खण्ड 3
असाधारण-1 दिनांक 02.08.2008 में अन्तर्गत आम तान्त्रिक क्षेत्रों के लिये पुनर्वासित व्यक्तियों सहित रेल की वृत्ती की विहायिकारी,
जिनके नामों के आदेश क्रमांक 100600 से प्रस्तावित क्षेत्रों के अधीन पर प्रत्येक विहायिकारी की प्रत्येक निम्नवत की जमाही है
प्रकार का नाम : आसना परतना- आसना तहसील- गाजियाबाद जिला- गाजियाबाद

संयुक्त राजस्थान अधिनियम 1956 की धारा-32 अधिनियम संख्या-का.अ. 1247(3) भारत का राजपत्र असाधारण भाग-1 खण्ड 3 असाधारण-1 दिनांक 02.08.2008 में अन्तर्गत आम तान्त्रिक क्षेत्रों के लिये पुनर्वासित व्यक्तियों सहित रेल की वृत्ती की विहायिकारी, जिनके नामों के आदेश क्रमांक 100600 से प्रस्तावित क्षेत्रों के अधीन पर प्रत्येक विहायिकारी की प्रत्येक निम्नवत की जमाही है	परतना- आसना	तहसील- गाजियाबाद	जिला- गाजियाबाद
351657.5	938.74	निर्धारित प्रकार	कान्ति
		1 भूमि का प्राधिकार	37,72,34,656.48
		2 कान्ति का प्राधिकार	8,64,030.33
		3 वृत्ती का प्राधिकार	28,680.00
		4 कालदास वृत्ती का प्राधिकार	5,031.60
		5 संयुक्त रेल वृत्ती का प्राधिकार	27,103.00
		योग-	37,81,59,398.48
		10 प्राथमिक प्रविष्टि का प्राधिकार	3,78,15,939.46
		कुल योग	41,59,75,338.33
		(A) कुल प्रस्तावित प्रतिनिधित्व प्रस्तावित पर 10 प्रतिशत भूमि अर्जन योग्य	4,15,97,533.63
		(B) प्रतिनिधित्व वृत्ती (1031.41X150)	2,44,791.50
		योग (अ+B)-	4,18,42,245.33
		संपूर्ण योग-	46,78,17,583.66

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संयुक्त राजस्थान अधिनियम 1956 की धारा-32 अधिनियम संख्या-का.अ. 1247(3) भारत का राजपत्र असाधारण भाग-1 खण्ड 3 असाधारण-1 दिनांक 02.08.2008 में अन्तर्गत आम तान्त्रिक क्षेत्रों के लिये पुनर्वासित व्यक्तियों सहित रेल की वृत्ती की विहायिकारी, जिनके नामों के आदेश क्रमांक 100600 से प्रस्तावित क्षेत्रों के अधीन पर प्रत्येक विहायिकारी की प्रत्येक निम्नवत की जमाही है

FORM :

FORM NO. : 43712/01

Rev. 26/03/2009 (34/09/01) F1

Annexure - V

कार्यालय, सभ्य प्राधिकारी / अपर जिलाधिकारी (D030) सं०स०, गाजियाबाद।

अधिकार-पत्र (कब्जा परिवर्तन)

शेखर ग्राम	संख्या/प्लान नं०
1.
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6.

प्रस्तावित ग्राम के अर्जन से प्रभावित निम्न संलग्न अनुसूची के आसपास ...
... का कब्जा अर्थात् भारतीय राष्ट्रीय राजमार्ग ...
... द्वारा निर्मित होने पर इन पर निम्न सभ्यतियों का कब्जा हस्तान्तरण उपयुक्त अर्जन निकाय ...
... के समित प्रतिनिधि का किया गया।

क्र.सं.	प्लान नं०	संख्या/प्लान नं०	संख्या/प्लान नं०	प्लान नं०	अधिकार के हस्तांतरण का आशु विरागी
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TRC NO. : 4271244

Rev. 20 2003 01:03:01 12

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Annexure - VII

रूप पत्र-2

29

तहसीलदार

तहसील
जिला गाजियाबाद।

चूंकि अपर जिलाधिकारी(गू0अ0) संयुक्त संगठन, गाजियाबाद की रिपोर्ट दिनांक
के अनुसार भूमि अध्याप्ति वाद संख्या सन में
विभाग 6(1) की विज्ञप्ति संख्या दिनांक के अनुसार
निम्नलिखित कृषक की भूमि पर दिनांक को उत्तर प्रदेश भारत सरकार
(.....) विभाग को कब्जा दिया जा चुका है। अब भू-अभिलेख आदि में उपरोक्त राजकीय
सम्पत्ति का अमलदस्तावेज होना आवश्यक है।

जिला	तहसील	परगना	तप्पा	भाग-		
कृषक का नाम विलेखक के माध्यम	कृषक याता सूची	संख्या नंबर	अध्याप्ति भूमि का क्षेत्रफल	फलसूचक ओ नाम की जायगी	पं.सं. व स.नं. जब उत्तर प्रदेश लगा गया	अन्य विवरण
1	2	3	4	5	6	7

स्तम्भ 1 में उल्लिखित व्यक्ति/व्यक्तियों (क/के) नाम स्तम्भ 2,3 व 4 में उल्लिखित भूमि
के खर्च करके उत्तर प्रदेश भारत सरकार(..... विभाग)
के नाम सूची में दर्ज की जाये बाद अमलदस्तावेज एक प्रति मध्य तामील रिपोर्ट के तीन
सप्ताह में सम्मिलित करने हेतु सम्बन्धित अपर जिलाधिकारी (गू0अ0) संयुक्त संगठन,
गाजियाबाद को वापस भेजा जाये।

कलेक्टर,
भूमि अध्याप्ति प्रयोजनाभ्ये,
गाजियाबाद।

**Attachment 2-1
Questionnaire for Project-Affected Structure Survey**

LOCATION	States	District	Village/Town:		Panchayat / Ward No:				
	Section No.:	Type of the Village:			Location				
	Nearest Station	A. Revenue	B. Settlement	C. SC Village	D. ST Village	A. Rural	B. Urban	C. Semi urban	D. Forest
	1)	2)	Station Location:		A. Immediate	B. In between			
GPS	Serial No. of Affected Structures								
	GPS Value								
TYPE OF AFFECTED STRUCTURES	Residential Structure								
	A. House B. Hut C. Multi storied Building (apartment) D. Other								
	Commercial Structure								
	A. Shops B. Hotel C. Restaurant D. Kiosk E. Petrol Pump F. Clinic G. STD Booth H. Work Shop I. Vendors J. Commercial complex K. Industry L. Other								
	Mixed Structure (Residential cum Commercial)								
	Community Structure								
	A. Club B. Trust C. Memorial D. Grave Yard E. Crematorium F. Community Pond G. Panchayat Ohar H. Cooperative Society I. Seed/ fertilizer storage J. Health Centre K. Community centre L. School/College (Private) M. Training Institute N. Others (Specify)								
	Religious Structure								
	A. Temple B. Church C. Mosque D. Gurudwara F. Shrines G. Religious platform H. Others								
	Government Structures								
A. Government Offices B. Hospital C. School D. College E. Railway Staff House F. Railway yard G. Post Office H. Others									
Others									
A. Boundary Wall B. Cattle shed C. Oil extraction field D. Historical Monuments (Specify) E. Others									
STATUS OF THE AFFECTED STRUCTURE	Type of Construction of the Structure								
	A. Temporary B. Semi Permanent C. Permanent								
	No of Floors								
	Area of the affected structure (m x m) EYE ESTIMATION								
	Distance of Structure (m)								
	Category: A. From last track of parallel line (m) B. From centre of detour line (m)								
	Status of the Structure								
	A. Legal Titleholder B. Lease Holder C. Encroacher D. License from local Government E. Squatters								
	People associated with the structure								
	A. No of Tenant B. No of Employee/Wage earner								
Number of project affected family (PAF)									
Number of family members (PAPs) (Male + Female)									
Scale of Impact A. 25% B. 50% C. 75% D. 100%									
VALUATION	Market Value of structure (in Rs)								
	A. Government B. Private								
	Current Land Price A. Circle rate/Government Rate (Rs) B. Private Rate (Rs)								
SOCIAL STATUS	Name of Owner /Father's Name								
	Religion: A. Hindu B. Muslim C. Jain D. Boudh E. Christian F. Sikh G. Other								
	Social Status: A. General B. SC C. ST D. OBC								
	Monthly Income of Family (in Rs.):								
	Vulnerability: A. BPL Family B. Woman Headed Family C. Disabled Head of Family D. Schedule Caste E. Schedule Tribe								
Photograph number of Affected Structure									

**Attachment 4-1
Questionnaire for Socio-Economic Survey**

101 SURVEY QUESTIONNAIRE IDENTIFICATION	
1	ROW - 1; ROB-2; Squatter-3
102 BASIC PROFILE OF PAP	
2	A. Name of Interviewee (only adult members):
	B. Address of the Interviewee (only adult members)
3	I State:
4	II District
5	III Panchayat :
6	IV Village:
7	C. Location (choose one) 1: Rural 2: Semi Urban 3: Urban
8	D. Type of Location (choose one) 1: Parallel to railways, 2: Near Diversion, 3: Near ROB (for ROB only) 4: Others
9	E. Specific Location: If parallel or diversion, specify the given section No. and GPS data If ROB, specify nearest station name(s) where ROB are located FOR ROB ONLY (1: Right-hand side from Mumbai, 2: Left-hand side from Mumbai)
10	F. Relation to Head of Family 1: Myself, 2: Wife, 3. Child, 4. Parent, 5: Other (specify)
11	G. How many years have you been living here?
12	H. Is there any tenant in this house? If Yes, number of tenants?
13	I. How many years has (have) the tenant(s) resided?
14	J. What is the market value of this structure in current condition?
15	K. Do you have any legal documents for structures? If yes, please mention the document is.
16	L. Do you have any legal documents? If yes, 1: ration card, 2: Voter I.D card, 3: others (specify)
17	M. How long are you planning to live here (in years)? (for Squatters only)
Profile of Head of Family:	
18	N. Head of Family (Name)
19	O. Sex 1: Male, 2: Female
20	P. Age
21	Q. Marital Status 1: Married, 2: Unmarried
22	R. Occupation (choose all that apply) 1: Govt. Service 2: Private Service 3: Business 4: Wage Employee 5: Agriculture 6: Daily wage labour 7: Unemployed 8: Others (specify)
23	S. Attainment Level of Education (choose one) 1: Illiterate 2: Can Read only 3: Can read and write both 4: Upto Class 5 5: Upto Class 12 6: Graduate & above 7: ITI, Diploma/Degree, CA, ICWA, MBA, etc.; 8: Others (specify)
24	T. Religion (choose one) 1: Hindu 2: Muslim 3: Christian 4: Jain 5: Sikh 6: Buddhist 7: Other (specify)
25	U. Social Category (choose one) 1: General 2: SC 3: ST 4: OBC
26	V. Total number of family members (including infants and children)
103 TYPE OF IMPACT	
27	A. Type of Social Impact Related to the Land Acquisition under the Project (choose all that apply) 1: loss of housing 2: loss of agricultural plots 3: Losses of crops, trees, and fixed assets 4: loss of businesses or enterprises 5: loss of incomes and livelihoods 6: Loose access to facilities, services or natural resources

104 STRUCTURES LIKELY TO BE LOST	
28	A. Type of Structure (chose all that apply) 3: Residential + Commercial 4: Office 5: Health Facility 6: Cattle Shed 7: Farm House 8: Boundary Wall/Fencing 9: Shrine 10: Well 11: Hand Pump 12: School, 13: Graveyard/Crematorium ground 14: Others (specify)
29	F. Ownership of the structure: (chose one) 2: State-owned structure for rental 3: Private-owned house for rental or borrow 4: Group- or Community-owned 5: Uncertain ownership, 6: Illegal Occupants
	G. What is (are) the market value of the structure(s) in current condition?
	H. If rented, how much do you pay per month?
105 HOUSING LIKELY TO BE LOST	
30	A. What is the type of house likely to be affected? 1: Single detached one-storey 2: Single detached two-storey 3: Single detached three-storey or more 4: Apartment/Row house duplex 5: Shanties connected to each other 6: Tents or tentative simple hut
31	B. Please write the description of the house appearance/housing. (Take photo)
32	C. Roof (chose one) 1: G.I. sheets 2: Tiles 3: Nipa or other natural materials 4: Concrete 5: Others (specify)
33	D. Walls (chose one) 1: All concrete 2: Concrete and wood 3: All wood 4: Nipa or other natural materials 5: Others (specify)
34	E. Housing Ownership (chose one) 1: Self-owned 2: State-owned house for rental 3: Private-owned house for rental or borrow 4: Group- or Community-owned 5: Uncertain ownership 6: Illegal Occupants
35	F. What is the market value of the house in current condition?
36	G. If rented, how much do you pay per month?
37	H. Living Area / Floor Area (m ²)
38	I. Number of bedrooms

39	106 HOUSEHOLD BUDGET	INCOME			
		Avg Income (INR)→	Daily	Monthly	Yearly
	a. Agriculture				
	b. Wage Labour				
	c. Business/Trading				
	d. Service				
	e. Livestock & Animal Husbandry				
	f. Fishing & Aquaculture				
	g. Collage Craft				
	h. Forestry				
	i. Other (specify)				
	Total Income				

B. Livestock holding of the family (unit in nos.)	No.
1. Cow	
2. Ox	
3. Buffalo	
4. Sheep	
5. Goat	
6. Camel	
7. Donkey	
8. Horse	
9. Pig	
10. Chicken	
11. Duck	
12. Others livestock (specify)	

C. Agricultural implements owned by the family		No.
1. Tractor		
2. Power Traller		
3. Thresher		
4. Harvester		
5. Genset Sprayer		
6. Pump Set		
7. Electric Pump		
8. Others (specify)		

D. Household items owned by the family		No.
1. TV		
2. Fridge		
3. Mixer		
4. Electric Cooker		
5. Geyser		
6. Electric Fan		
7. OTG		
8. Toaster		
9. Microwave		
10. Radio		
11. Others (specify)		

E. Other assets owned by the family		No.
1. Scooter/Motorcycle		
2. Jeep/Car		
3. Truck		
4. Bus		
5. Bullock/Camel Cart		
6. Others (specify:)		

F. Total Annual Saving (Rs.)	
G. Have you taken any loan?	1: Yes, 2: No, 3: Don't Know
H: If yes, then please tell us the following:	

Name of the loan provider	Amount (In Rs.)	Re-paid (In Rs.)	Balance (In Rs.)
1. Bank			
2. Relative/Friend			
3. Mahajan			
4. Other (specify -----)			

107 COVERAGE UNDER GOVERNMENT DEVELOPMENT SCHEMES	
40	A. Have you availed any benefit under any govt. scheme? 1: Yes, 2: No
41	B. If 'Yes', please specify name of the scheme 1. National Rural Employment Guarantee scheme 2. Jawar Rojgar Yojna 3. PM Rojgar Yojna 4. Integrated Rural Development Programme 5. Indira Awas Yojana 6. Others
42	C. If 'Yes', when did you receive the help?
43	D. If 'Yes', please tell kind of help. 1: Loan, 2: Training, 3: Employment
44	E. If '1', kindly indicate the amount. (Rs.)
45	F. If '2', kindly indicate the type of training.
46	G. After availing this scheme did your annual income increase? 1: Yes 2: No
47	H. If 'Yes', how much? (Rs)
48	I. If 'No', Why? Please specify

108 HEALTH STATUS				
49	A. Was any member of your family affected by any illness in last one year?		1: Yes, 2: No	
50	B. If 'Yes', please specify type of diseases.			
51	C. If 'Yes', please specify treatment taken			
109 LAND HOLDING AND LIVELIHOOD				
52	A. Land Ownership 1: Self-owned 2: State-owned land for rental 3: Private-owned land for rental or borrow 4: Group- or Community-owned 5: Uncertain ownership 6: Illegal land occupation			
53	B. What is the market value of the land in current condition?			
54	C. Do you have agricultural land?		1: Yes 2: No	
55	D. If Yes, please tell us the total land owned by you (in local unit).			
	Type of Land	Sq m.	Bigha	Biswa
	1. Agricultural land			
	2. Orchard			
	3. Others (specify -----)			
Total Area				
56	E. In case of farmers, list names of your 3 major products			
57	F. In case of other occupations, specify main income source?			
58	G. Select the observed type of squatters (only for Squatters) (chose one) 1: Illegal residents with station-related occupation 2: Shops of illegal occupancy 3: Seasonal labour (Agriculture) 4: Seasonal labour (Factory/Construction) 5: Gangmen's colony 6: Migrant Tribe			
59	I. What is the most serious problem on your livelihood at present?			
110 ACCESSIBILITIES (DFC Related Issues)				
60	A. If Land is divided in two parts, what kind of accessibilities is required? i) ROB ii) RUB iii) Road Crossings iv) Service Road v) Others			
61	B. What is distance? (in km)			
62	C. If schools, colleges, market, religious centre, hospital, office, factory, tube well is separated from your near area due to DFC project, then what kind of arrangements should be made for your transportation? Pls. specify with alternatives.			
63	D. How often do you cross ROBs? Specify the number.		(Only for ROBs)	
64	E. How often do you cross ROBs with Non-motorized Vehicles (NMVs)? (Only for ROBs)			
111 ACCESS TO UTILITIES				
65	A. Potable Water 1: Dig Well (Private) 2: Dig Well (Common) 3: Pump Well (Private) 4: Pump Well (Common) 5: Piped Public Water Supply 6: Bought from Water Vendors 7: Other Facilities (specify) 8: Others (specify)			
66	B. Toilet Facilities 1: In-door Toilet 2: Out-door Toilet (Private) 3: Out-door Toilet (Common) 4: Not Available			
67	C. Electricity 1: Power line 2: Generator (Private) 3: Generator (Common) 4: Car Battery 5: Not Available			
112 WOMEN STATUS				
68	A. No of female family members engaged in economic/ non-economic activities			
69	B. If, engaged in economic activities total income of the year: (Rs.)			
70	C. Do your female member have any say, in decision making of household matters? If 'Yes, give the details?			

113 SURVEY FOR COMMERCIAL STRUCTURE	
71	A. How old is the Structure?
72	B. Is your business self owned? 1: Yes 2: No
73	C. If no, how many partners are there?
74	D. Usage of Structure? 1: Shop 2: Godown 3: Workshop 4: Factory 5: Office 6: Others (specify)
75	E. What type of business you are doing? Please specify.
76	F. Do you have license of the business?
77	G. How many workers are there?
78	H. What is the market value of the structure as per Govt. registration?
114 PERCEPTION OF THE PROJECT	
79	A. Are you aware of the DFC Project? 1: Yes 2: No (If No, go to C.)
80	B. If Yes, what has been your source of information for DFC Project? 1: TV 2: Radio 3: News Paper 4: Word of Mouth 5: Friend/Relative 6: Others (specify)
81	C. Will the project bring economic benefit in the area? 1: Yes 2: No 3: No comment
82	D. What kind of economic benefit would take place? 1: Wage employment 2: Business opportunity 3: Industry establishment 4: Others (specify)
115 INTENTION ON REHABILITATION AND RESETTLEMENT	
83	A. Anticipation of loss of income source by PAPS. 1: Income source will not be lost 2: Loss of all or large part of the farmland 3: Becoming too far to commute working place after the resettlement 4: Loss of working place such as loss of market 5: Others (specify)
84	B. Anticipation of difficulty during resettlement? 1: Find new income source 2: Find new house 3: Find new suitable farmland in the resettlement site 4: Find suitable school for child (children) 5: Acclimatizing in the resettlement site, 6: Security in the resettlement site 7: Access to utilities, 8: Others (specify)
85	C. Choice of House affected People 1: Self relocation 2: Project assisted resettlement 3: Protest displacement 4: Conditional 5: Can't say now 6: only replaceable value 7: Shifting Expenses 8: Constructed Houses 9: House site, 10: In another city/town/village/ or same city/town/village 11: Others (specify)
86	D. Where would you like to resettle? (chose one) 1: In the same village 2: In the same sub-district 3: In the same district, 4: In the same state 5: Does not matter the resettlement location
87	E. Please specify reason of the above answer.
88	F. If already secured resettlement place, please specify name of place.
89	G. Which way do you prefer to resettle? 1: Resettling with village members 2: Resettling individually
90	H. Choice of Livelihood affected People. 1: Provision of new shop 2: Employment during construction 3: Training for self employment 4: Cash grant 5: Provision of land 6: Others(specify)
91	I. Intention of future occupation of farmers. 1: Wish to continue to work as a farmer 2: Wish to change the occupation
92	J. If 2 is selected in the above answer, please specify kind of occupation (if any).
93	K. Choice for types of farming in the future. 1: Rice cultivation 2: Vegetable 3: livestock raising 4: Orchard 5: Flower garden, 6: Others (specify)
94	L. Choice for alternative farming land: 1: Yes 2: No
95	M. If yes, preferred alternative land 1: Newly established farmland 2: Already established farmland 3: Wish to look for farmland by yourself
96	N. Request to the Project Implementing Authority regarding R&R? 1: Compensation 2: Assistance for resettlement and rehabilitation 3: Both compensation & assistance for R&R 4: Other (specify)

Attachment 11-1 Sample Forms of Monitoring Form

Monitoring Form 1: Preparation and Implementation Period

Name of village:	
Date:	
Monitoring period:	
Name of person in charge of filling this form (name of agency):	
1. Consultation with PAP	
Planned period:	Implemented period:
a) Describe the consultation activities conducted during the monitoring period: b) Result of the consultation (reactions, opinions, objections, etc.): c) Main reason(s) for delay of progress (if delayed):	
2. Agreement from PAP	
Planned period:	Implemented period:
a) Number of households who agreed to be resettled: households b) Main reason(s) for delay of the negotiations (if delayed):	
3. Compensation payment	
Planned period:	Implemented period:
a) Number of households who received compensation: households b) Main reason(s) for delay (if delayed):	
4. Relocation of PAP	
Planned period:	Implemented period:
a) Number of households already relocated: households b) Main reason(s) for delay (if delayed):	

Note: Monitoring for these items should be implemented from the start of the resettlement procedure to the end of all procedures of the physical resettlement with frequency of monthly base. This monitoring form should be prepared for each village.

Attachment 11-2

Monitoring Form for Land Acquisition and Resettlement For DFC Project (Rewari-Vadodara)

Preparation and Implementation Period

Jurisdiction	Date	Land to be acquired (Ha)	No of affected Household /Commercial Structures/Common Property	Land already acquired (Ha)	Household/Commercial Structures/ CP already relocated	Land remaining to be acquired (Ha)	Household/Commercial Structures/ CP to be relocated	Payment Status	Expected date of completion
CPM Jaipur									
CPM Ajmer									
CPM Ahmedabad									
CPM Vadodara									

1. Land acquisition	
Planned completion date:	Actual completion date:
Main reason(s) for delay (if delayed):	
2. Relocation Status of Common Property Resources	
Planned period:	Actual completion date
a) Water facilities b) School c) Health centre d) Social hall e) Access road f) Cultural Centre g) Main reason(s) for delay (if delayed)	
3. Compensation payment	
Planned completion date:	Actual completion date:
Main reason(s) for delay (if delayed):	
4. Relocation of PAPs	
Planned completion date:	Actual completion date:
Main reason(s) for delay (if delayed):	

Monitoring Form 3: Post-Resettlement Period

Name of village:				
Date:				
Monitoring period:				
Name of person in charge of filling this form (name of agency):				
1. Status of livelihood				
1) Income restoration				
a) Average income: (Before resettlement:) (Previous data:)				
b) Number/Rate of households whose income are reduced: household(s)/% (Previous data: household(s)/%)				
c) Reason and proposed countermeasures (if b) increased):				
d) Prospects in near future:				
2) Occupation				
a) Number/Rate of households who changed their occupation or work place due to the resettlement: household(s)/% (Previous data: household(s)/%)				
b) Reason and proposed countermeasures (if a) increased):				
d) Average income of those who changed their occupation or work place due to the resettlement: (Previous data:)				
c) Prospects in near future:				
2. Living condition				
1) Perceptions of change in well-being				
a) Overall living conditions as compared to original one:				
- Better: % (Previous data: %)				
- Worse: % (Previous data: %)				
- No change: % (Previous data: %)				
b) Feeling toward public services and social infrastructure (with previous data):				
	Better (%)	Worse (%)	No change (%)	Remarks
Housing				
Water				
Electricity				
Transport services				
Schools				
Health center				
Religious worship				
Purchasing basic goods				
Peace and security				
Others (specify)				
b) Other remarkable changes in living conditions:				
c) Reason and proposed countermeasures (if high rate of dissatisfaction is observed):				
d) Prospects in near future:				

Note: The above monitoring should be implemented from the end of the relocation activity to the time when minimization of negative impact by the Project is confirmed in terms of situation of the employment and income restoration with frequency of semi-quarterly base in principle. This monitoring form should be prepared for each village.

Appendix 3-14 Presentation Material for RRP-PCM

Dedicated Freight Corridor Corporation of India Limited (DFCCIL)
under
Ministry of Railways

Welcomes

the participants for
Public Consultation Meeting
on
Draft Rehabilitation and Resettlement Plan

For
Western Corridor of the Dedicated Freight Corridor Project (DFC)
between Rewari and Vadodara

August – September, 2009

1

Objectives of the RRP-PCM

1. Disseminate information about the project to the project-affected persons
2. Explanations on draft Rehabilitation and Resettlement Plan (RRP) and entitlement framework as per present laws
3. Collection of opinions/suggestions from participants
4. Incorporate opinions and suggestions into the RRP and further deliberation of project design

2

Main Topic's of Today's Presentation

1. Outline of DFC Project
2. Provisions under Basic Legislation and Policy on Land Acquisition and Rehabilitation & Resettlement

3

1. Outline of DFC Project

4

Project Description

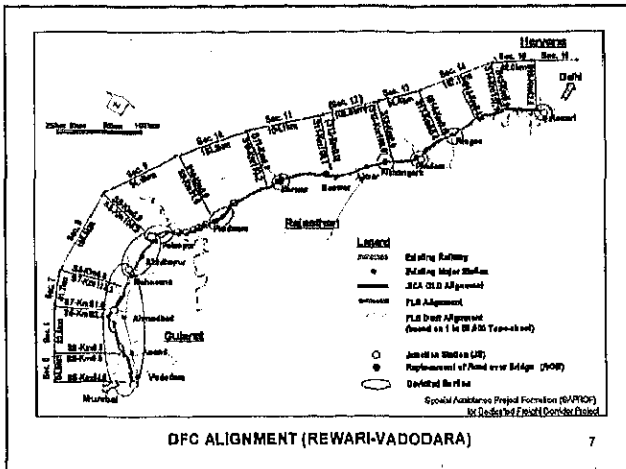
- MOR is implementing Computerized Multi Modal High Axle Load DFC Project to facilitate speedier and smooth transportation of bulk goods without any interruption between the two metropolises Delhi and Mumbai and their respective hinterlands at lesser transport cost and lesser time.
- It is designed to carry a total freight line of 37.7 million tones in the fiscal year 2015-2016, which would increase to 140.4 million tones in 10 years.
- Dedicated Freight Corridor Corporation India Limited (DFCCIL) under MOR, Government of India is an executing agency for the development of DFC.
- DFC Alignment passes through Vadodara-Ahmedabad-Palanpur-Ajmer-Rewari.

5

Salient Features of Project

- Total length of corridor: 920 km
 - Length in Detour Section: 338.5 km
- Alignment passes through Gujarat, Rajasthan, and Haryana States
 - 17 districts and 447 villages involved
- Area to be acquired for each PAFs on average:
 - Detour section: 0.43 ha, Parallel section: 0.25 ha
- Width of ROW
 - approx. 50 m in parallel section, 70 m in detour section
- 7 Junction Stations
 - Makarpura, Sabarmati, Mahesana, Palanpur, Marwar, Phulera, and Rewari

6



Benefits of the Project

- DFC Project aims to help boosting the present trends of growth of the economy in India as well as improve the environment:
 1. Acceleration of nationwide economic development by improvement of freight transportation system in India.
 2. Increase of industrial development along the DFC will bring about increase of employment opportunity in the region.
 3. Improvement of transport of agricultural produce in terms of distance and speed will bring about expansion and improvement of the market for farmers in the region as well as that of forestry and fisheries.
 4. Less energy use for transport of goods compared to transportation by truck.
 5. No gaseous emission to local community along the DFC alignment (= Reduction of gaseous emission from truck along the road).
- 8

Project Schedule

- Project Planning Work: 2006-2009
 - Engineering Services for the further deliberation of the project design: from end of 2009 for 2 years
 - Project Implementation and Construction Work: 2011-2015
 - Commercial Operation: After 2015
- 9

Special Care Taken for Alignment to Minimize Displacement

- In principle, the alignment for the DFC Project was designed as parallel to the existing railway within the land of Indian Railways.
 - In Haryana and Rajasthan, the alignment runs parallel to eastern side of existing railway line.
 - Detour route was designed to avoid local communities, city planning area, marble stone factories, residential area, large excavation, wildlife sanctuary, etc.
 - In Gujarat, it takes detour to the west of the existing railway line to avoid large settlement.
- 10

2. Provisions under Basic Legislation and Policy on Land Acquisition and Rehabilitation & Resettlement

Objectives of RRP as per Policy

- Avoid or minimize land acquisition and involuntary resettlement impacts by exploring all viable alternatives.
 - To ensure adequate rehabilitation package and expeditious implementation of rehabilitation process with the active participation of project-affected persons (PAPs).
 - Special care for weaker sections like SC/ST/vulnerable groups.
 - Facilitate harmonious relationship between the requiring body and PAPs through mutual cooperation.
 - Ensure payment of compensation and resettlement assistance prior to taking over land and commencement of any construction activity.
- 12

Basic Legislation & Policy of Land Acquisition and Rehabilitation & Resettlement for DFC Project

- **Railways (Amendment) Act, 2008**
 - The Act under which the land acquisition is being done by the DFC Project (declared as Special Railway Project).
 - Land Acquisition Act 1894 is not applied to the land acquisition under this Act.
- **National Rehabilitation & Resettlement Policy, 2007**
 - In DFC project a narrow stretch of Land is to be acquired. Para 7.19 of NRRP2007 is basically applicable to DFC project

13

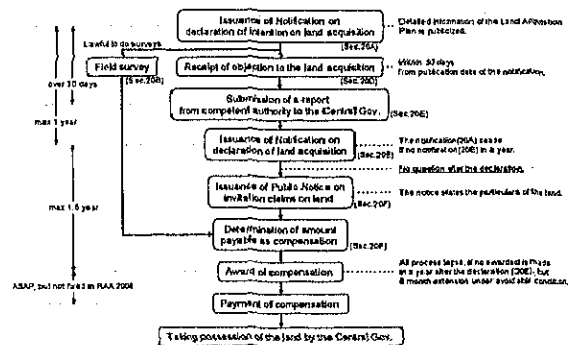
Railway Amendment Act, 2008 (RAA, 2008)

14

Main Clauses in RAA, 2008

- **Competent Authority** - means any person authorized by the Central Government by notification, to perform the functions of the competent authority for such area as may be specified in the notification (Section 7A)
- **Person interested** –
 - All persons claiming an interest in compensation to be made on account of the acquisition of land under this Act
 - tribals and other traditional forest dwellers, who have lost any traditional rights recognized under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006
 - a person interested in an easement affecting the land
 - persons having tenancy rights under the relevant State laws (Section 29A)

15



Flowchart of the Land Acquisition Process under Railways (Amendment) Act, 2008

16

Brief Discussions About Each Sections of Law

Power to Acquire Land (Section 20A)

- Declaration of intention to acquire land required for execution of a special railway project by notification.
- Brief description of land and special railway project
- Notification to be published in two local news papers, one of which shall be in vernacular language.

Power to Enter for Survey (Section 20B)

- Person, authorised by competent authority can enter for inspection, survey, measurement, valuation etc for this special project.

17

Evaluation of Damages during Survey Measurement (Section 20C)

- The damages caused while carrying out works on land which may cause damages which is excluded from acquisition proceeding, shall be evaluated and compensation shall be paid to the persons having interest in that land, within six months from the completion of the said works.

Hearing of Objections (Section 20D)

- Objections must be made by interested persons to Competent Authority within 30 days from the date of publication of the notification under sub-section (1) of section 20A.
- Every objection will be judged by CA.
- Final order made by CA.

18

Declaration of Acquisition of Land (Section 20E)

- On publication of the declaration under sub-section (1) of 20E, the land shall vest absolutely in the Central Government free from all encumbrances.
- This declaration to come within 12 months of notification under 20A. The period, however, excludes time wasted due to stay, on disputed property etc by court.
- Above Declaration not questionable by any Court / Authority.

Determination of amount payable as compensation (Section 20F)

- Amount to be paid as compensation shall be determined by an order of the competent authority.
- The competent authority shall make an award under this section within a period of one year from the date of publication of the declaration.
- All process lapse, if no award is made in a year after the declaration (20E), but 6 month-extension under avoidable condition.
- In case of delay, additional (not less than) 5% interest should be paid for each month delay.

19

Calculation of Compensation Amount

- The market value of the land on the date of publication of the notification under Section 20A [8(a), Section 20F]
- Damage to land PAP due to severance of land from other land [8(b), Section 20F]
- Damage of PAP due to the acquisition affecting other immovable property in any manner or his earnings [8(c), Section 20F]
- Expenses incurred by PAP changing his residence or place of business as a result of land acquisition [8(d), Section 20F]
- In addition to the market value of land as above provided, the competent authority or the arbitrator, as the case may be, shall in every case award a solatium of 60% on such market-value, in consideration of the compulsory nature of the acquisition.

20

Criterion for determination of market value of land (Section 20G)

- The minimum land value, if any, specified in the Indian Stamp Act, 1899, for registration of sale deeds in the area, where the land is situated;
 ↑↓ whichever is higher
- The average of the sale price for similar type of land situated in the village or vicinity, ascertained from not less than fifty percent of the sale deeds registered during the preceding three years, where higher price has been paid.

21

Determination of Market Value of Building & Other Immovable Property and Assets

- Market value of building and other immovable property or assets will be assessed by Service Engineer nominated by CA.
- Market value of trees /plants/standing crops will be assessed by relevant field specialist nominated by CA.

22

Section 20 F

- 10% of award to all those whose right of enjoyment affected adversely.
- Before proceeding to award, notice to be published to invite claims from interested parties in that land.
- Above notice to indicate particulars of land & ask persons to state nature of claims, at a given date, time & place.
- Any party, not accepting the award, can apply for arbitration

23

Deposit and Payment of Amount (Section 20H)

- Central Govt. to deposit amount with CA before taking possession of land.
- Amount to be disbursed to persons by CA.
- Entitlement to be decided by CA.
- Disputes to be referred to Principal Civil Court.

Power to take possession of Land (Section 20I)

- After deposition of amount by Central Govt., owners as well as any other persons or who may be possession of such land can be asked by CA to surrender land within 80 days notice.
- In case of refusal by owners, CA shall apply to 1) Police Commissioner, and 2) Collector to vacate the land.

24

Cut-off Date for entitlement

The cut-off date for entitlement as per RAA 2008 / NRRP 2007 is :

- i. for title holders , the date on which notification is issued as per the notification prescribed under the Section 20A.
- ii. for non-title holders who have been residing or engaged in any trade, business, occupation or vocation continuously for not less than 3 years prior to the date of census.

25

National Rehabilitation & Resettlement Policy, 2007

26

Provision for Linear Acquisition (Section 7.19)

- In case of linear acquisitions, like railway lines, wherein only a narrow stretch of land is acquired for the purpose of the project or is utilised for right of way, each khatedar in the affected family shall be offered by the requiring body an ex-gratia payment of such amount as the appropriate Government may decide but not less than 20,000 rupees.
- In addition to the compensation or any other benefits due under the Act or Programme or Scheme under which the land, house or other property is acquired: Provided that, if as a result of such land acquisition, the land-holder becomes landless or is reduced to the status of a "small" or "marginal" farmer, other rehabilitation and resettlement benefits available under this policy shall also be extended to such affected family.

[para.7.19, NRRP, 2007]

27

Definition of Small and Marginal Farmers

• *Small farmer*

A cultivator with an un-irrigated land holding up to two hectares or with an irrigated land holding up to one hectare, but more than the holding of a marginal farmer.

• *Marginal farmer*

Cultivator with an un-irrigated land holding up to one hectare or irrigated land holding up to half hectare.

28

Compensation to PAPs

In case of PAPs who are rendered landless or reduced to the status of small or marginal farmer due to land acquisition, they shall be entitled to rehabilitation grant equivalent to 750 days minimum agricultural wages

29

Compensation for Non-title Holder/ Squatters and Encroachers

- In case of squatters and encroachers, cost of the affected structures shall be compensated.

30

Common Property Resources

Due care shall be taken to re-establish affected Common Property Resources

31

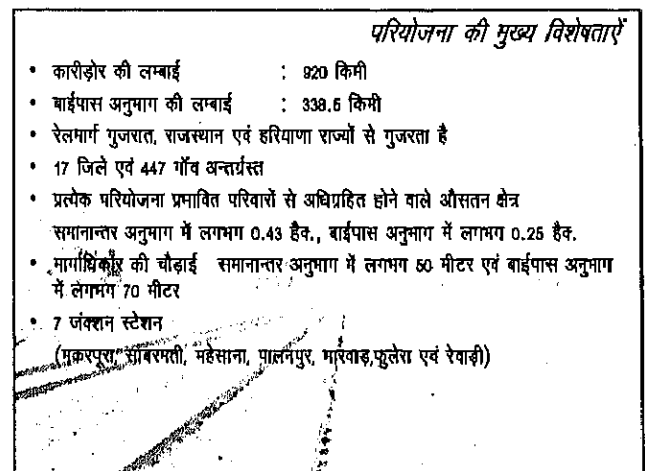
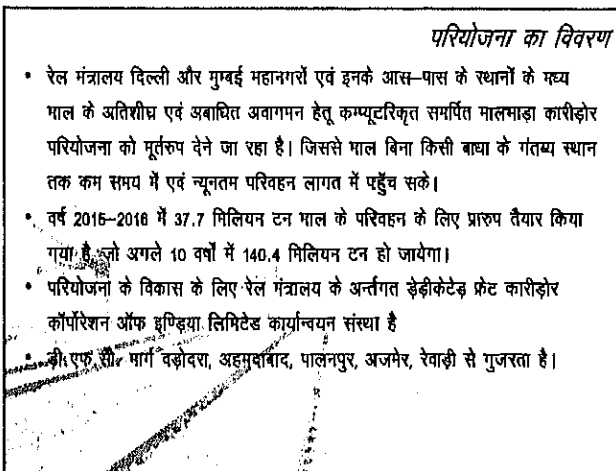
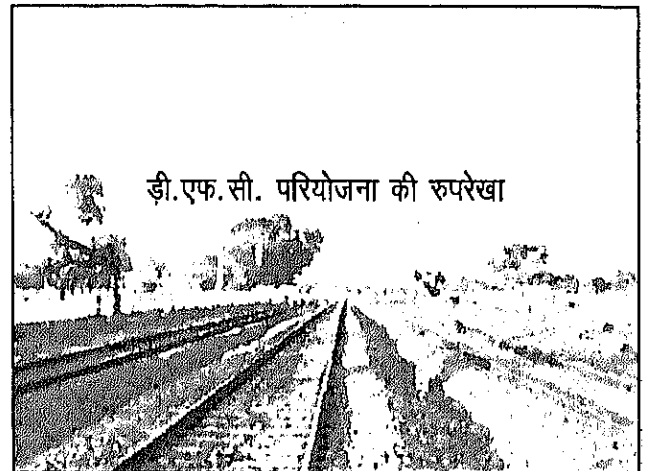
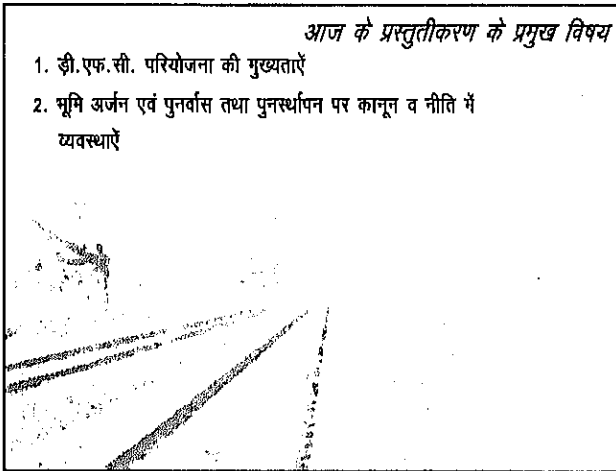
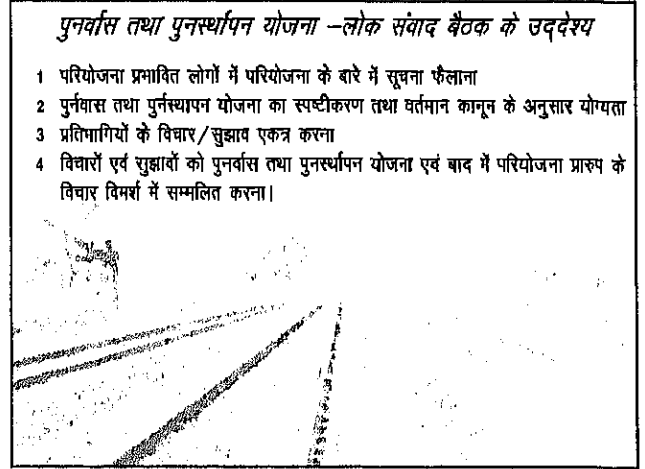
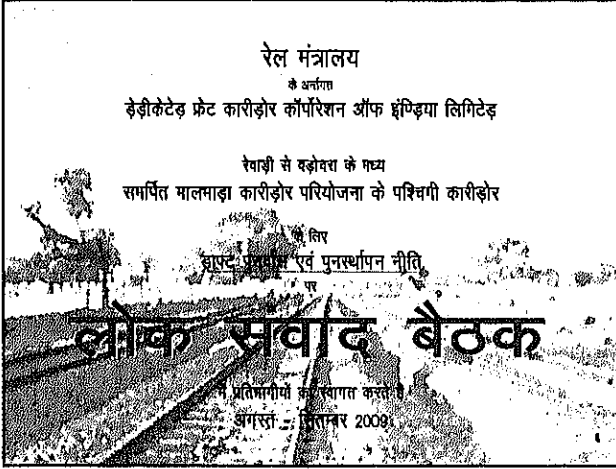
Grievance Redressal

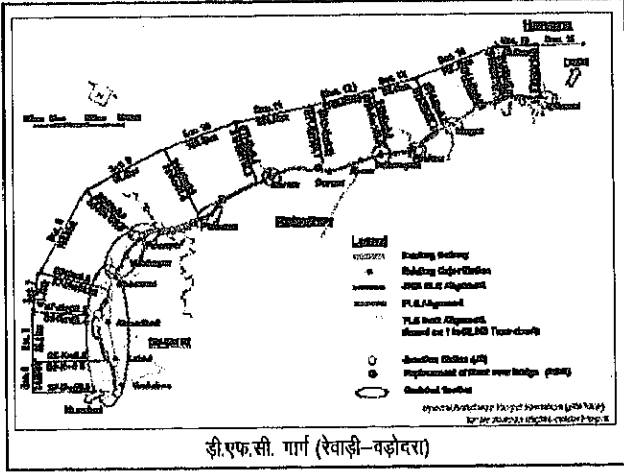
- Chief Project Manager will be the head the Grievances Redressal in respective jurisdiction.
 - CPM office in Jaipur
 - In charge of land to be acquired in Rewari, Mahendragarh, Alwar, Sikar, Jaipur, Ajmer, and Nagaur Districts
 - CPM office in Ajmer
 - In charge of land to be acquired in Pali and Sirchi Districts
 - CPM office in Ahmedabad
 - In charge of land to be acquired in Banaskantha, Patan, Mahesana, Ahmedabad, Gandhinagar, Kheda, and Anand Districts
 - CPM office in Vadodara
 - In charge of land to be acquired in Anand, Kheda, and Vadodara Districts

32

THANK YOU

33





परियोजना के लाभ

- डी.एफ.सी. परियोजना का उद्देश्य भारत की वर्तमान आर्थिक उन्नति की प्रवृत्ति को तीव्र करना साथ ही साथ पर्यावरण में सुधार लाना है
- 1 भारत में माल परिवहन प्रणाली में सुधार कर राष्ट्रीय आर्थिक उन्नति को बढ़ाना
- 2 डी.एफ.सी. के समान्तर औद्योगिक विकास में वृद्धि से क्षेत्र में रोजगार की सम्भावनाओं में वृद्धि
- 3 कृषि उत्पादों के परिवहन में दूरी एवं गति से सम्बन्धित सुधार से क्षेत्र के किसानों के साथ-साथ वानिकी एवं मछली पालन बाजार में विस्तार एवं सुधार
- 4 ट्रक द्वारा परिवहन की अपेक्षा कम उर्जा की आवश्यकता
- 5 डी.एफ.सी. मार्ग के साथ-साथ स्थानीय निवासीयों के लिए किसी गैसीय उत्सर्जन का न होना (सड़क पर ट्रकों द्वारा गैसीय उत्सर्जन में कमी)

परियोजना अनुसूचि

- परियोजना नियोजन कार्य : 2008-2009
- परियोजना प्रारूप का आगे का अभियान्त्रिकी सम्बन्धित विचार विमर्श : वर्ष 2009 के अन्त से 2 वर्ष तक चलेगा।
- कार्यान्वयन एवं निर्माण कार्य : वर्ष 2011-2015
- प्राथमिक परिचालन : 2015 के बाद शुरू होगा

न्यूनतम विस्थापन के लिए मार्ग निर्धारण करने में विशेष ध्यान

- परियोजना का मार्ग मुख्यतया भारतीय रेल विभाग की भूमि पर वर्तमान रेल मार्ग के समान्तर नियोजित किया गया है।

परियोजना एवं राजस्थान में यह प्रस्तावित मार्ग वर्तमान रेलमार्ग के पूर्व दिशा में समान्तर अनुभाग है।

- चक्करदार मार्ग के प्रारूप में स्थानीय समुदाय, जीव अम्यारण, शहरी योजना क्षेत्र, मार्बल उद्योग, आबादी क्षेत्रों, खदान आदि को बचाने का ध्यान रखा गया।

बड़े आवासीय क्षेत्रों को बचाने हेतु यह प्रस्तावित मार्ग गुजरात में वर्तमान रेलमार्ग के परिवर्तन दिशा में चक्करदार मार्ग है।

भू-अधिग्रहण एवं पुनर्वास तथा पुनर्स्थापन की आधारभूत नीति एवं विधान में प्रबंध

नीति अनुसार पुनर्वास तथा पुनर्स्थापन योजना के उद्देश्य

- न्यूनतम विस्थापन करने, विस्थापन न करने अथवा कम से कम विस्थापन करने के विकल्पों को बढ़ावा देना।
- प्रभावित व्यक्तियों कि सक्रिय भागेदारी के साथ प्रयाप्त पुनर्वास पैकेज सुनिश्चित करना तथा पुनर्वास प्रक्रिया का तेजी से कार्यान्वयन सुनिश्चित करना।
- समाज के कमजोर वर्गों विशेषरूप से अनुसूचित जातियों, अनुसूचित जन जातियों तथा निम्न आर्थिकों का विशेष ध्यान।
- अर्जनकारी निकाय तथा प्रभावित परिवारों के बीच आपसी सहयोग के जरिये सौहार्दपूर्ण सम्बन्ध स्थापित करना।
- भूमि लेने तथा किसी भी निर्माण प्रक्रिया से पूर्व गुआवजा राशि एवं पुनर्वास सहायता का भुगतान सुनिश्चित करना।

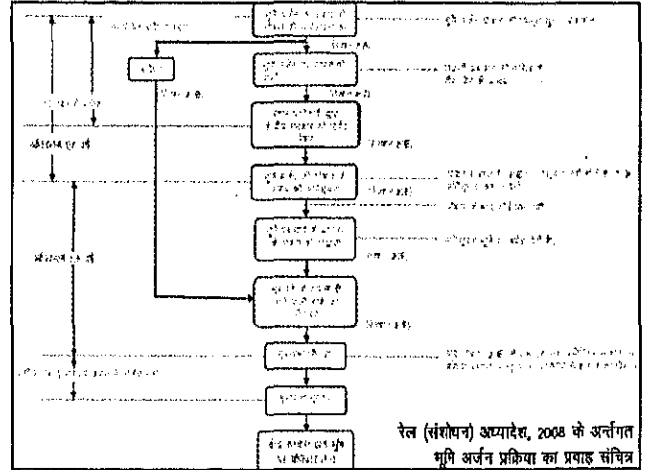
डी. एफ. सी. परियोजना के लिए भू-अधिग्रहण एवं पुनर्वास तथा पुनर्स्थापन की आधारभूत नीति एवं विधान

- रेल (संशोधन) अध्यादेश, 2008
 - जिस कानून के तहत डी. एफ. सी. परियोजना में भू-अधिग्रहण किया जा रहा है। (विशेष रेलवे परियोजना घोषित)
 - इस कानून में भूमि अधिग्रहण के लिए भू-अधिग्रहण कानून 1894 लागू नहीं होता है।
- राष्ट्रीय पुनर्वास एवं पुनर्स्थापन नीति 2007
 - डी. एफ. सी. परियोजना के सम्बन्ध में भूमि का संकीर्ण भाग का अधिग्रहण होता है।
 - डी. एफ. सी. परियोजना में रेलवे परियोजनाओं के लिए एन.आर.आर.पी. 2007 के पैरा 7.19 में उल्लेखित अनुरेखीय भूमि अर्जन नियम मूलतः लागू होता है।



आर.ए.ए. 2008 की प्रमुख धारारें

- सक्षम प्राधिकारी से ऐसा व्यक्ति अभिप्रेत है, जिसे केन्द्रीय सरकार द्वारा उन क्षेत्रों के सम्बन्ध में सक्षम प्राधिकारी के कृत्यों का पालन करने के लिए प्राधिकृत किया गया है, जो अधिसूचना में विनिर्दिष्ट किए जाएं (सेक्शन 7A)
- हितबद्ध व्यक्ति
 - इस अधिनियम के अधिन भूमि के अर्जन के सम्बन्ध में दिए जाने वाले प्रतिकर में किसी हित का दावा करने वाले सभी व्यक्ति
 - सभी जनजातीय और परंपरागत वन निवासी, जिन्होंने अनुपूचित जनजाति और अन्य परंपरागत वन निवासी (वन अधिकारों की मान्यता) अधिनियम, 2008 के अधिन मान्यताप्राप्त कोई परंपरागत अधिकार खो दिए हैं
 - भूमि को प्रभावित करने वाले किसी सुझावार में हितबद्ध कोई व्यक्ति सुसंगत राज्य विधियों के अधिन अधिधारण अधिकार रखने वाले व्यक्ति (सेक्शन 29A)



कानून की प्रत्येक धाराओं का संक्षिप्त विवरण

- भूमि अर्जन की शक्ति (सेक्शन 20A)
- अधिसूचना द्वारा विशेष रेलवे परियोजना बावत भूमि अर्जन के आशय की आवश्यकता की घोषणा
 - उस भूमि एवं विशेष रेलवे परियोजना का संक्षिप्त विवरण
 - अधिसूचना दो स्थानीय समाचार पत्रों जिसमें से एक देशी भाषा का हो, में प्रकाशित की जायेगी
- सर्वेक्षण के लिए प्रवेश की शक्ति (सेक्शन 20B)
- सक्षम प्राधिकारी से प्राधिकृत व्यक्ति इस परियोजना के लिए निरीक्षण, सर्वेक्षण, नाप-जोख एवं मूल्यांकन आदि के लिए प्रवेश कर सकता है

सर्वेक्षण, नाप-जोख के दौरान नुकसानी का मूल्यांकन (सेक्शन 20C)

- ऐसी भूमि जिसे अर्जन कार्यवाही से अपवर्जित किया गया है, में कार्य करते समय कोई नुकसानी कार्य होती है तो कारित नुकसानी का मूल्यांकन किया जाएगा और उक्त संकर्म के पूरा होने से 6 माह के भीतर उस भूमि में हित रखने वाले व्यक्तियों को प्रतिकर का संदाय किया जायेगा।

आक्षेपों की सुनवाई (सेक्शन 20D)

- भूमि में हितबद्ध व्यक्ति धारा 20A की उपधारा (1) के अधीन अधिसूचना के प्रकाशन की तारीख से 30 दिन की अवधि के भीतर, भूमि के अर्जन के सम्बन्ध में आक्षेप कर सकते हैं करणा होगा।
- सभी आक्षेपों की सुनवाई सक्षम प्राधिकारी द्वारा की जाएगी।
- अन्तिम आदेश सक्षम प्राधिकारी करेगा।

अर्जन की घोषणा (सेक्शन 20E)

- 20 E की उपधारा (1) के अधीन घोषणा के प्रकारान पर भूमि सभी वित्त्वंगामों से मुक्त रूप में पूर्णतया केन्द्रीय सरकार में स्थित होगी।
- इस धारा की उपधारा (1) के अधीन घोषणा उस अधिसूचना के प्रकाशन की तारीख से 12 माह की अवधि के अन्दर प्रकाशित नहीं की गयी है, वहां उक्त अधिसूचना प्रभावहीन हो जाएगी।
- उक्त घोषणा को किसी न्यायालय में या किसी अन्य प्राधिकारी द्वारा प्ररनगत नहीं किया जाएगा।

प्रतिकर के रूप में संदेय राशि का अन्वयण (सेक्शन 20F)

- प्रतिकर के रूप में संदेय राशि सक्षम प्राधिकारी के किसी आदेश द्वारा अन्वयित की जाएगी।
- सक्षम प्राधिकारी घोषणा के प्रकाशन की तारीख से एक मास की अवधि के भीतर इस धारा के अधीन कोई अधिनिर्णय करेगा।
- यदि उक्त अवधि के भीतर कोई अधिनिर्णय नहीं किया जाता है तो सम्पूर्ण कार्यवाहियां व्ययगत हो जाएंगी।
- विलम्ब की स्थिति में विज्ञापन के प्रत्येक मास के लिए अधिनिर्णय के मूल्य के पांच प्रतिशत से अत्युच्च की दर से अतिरिक्त प्रतिकर का संदाय किया जायेगा।

मुआवजा राशि की गणना

- सेक्शन 20 [8 (a), सेक्शन 20 F] के अधिन अधिसूचना के प्रकाशन की तारीख को भूमि का बाजार मूल्य
- भूमि का कब्जा लेने के समय, अन्य भूमि से उस भूमि को अलग करने के कारण, हितबद्ध व्यक्ति द्वारा उठाई गई नुकसानी (8(b), सेक्शन 20F)
- भूमि का कब्जा लेने के समय, हितबद्ध व्यक्ति द्वारा किसी रीति में उसकी अन्य स्थावर सम्पत्ति या उसके उपार्जन को हानिकर रूप से प्रभावित करने वाले अर्जन के कारण उठाई गई नुकसानी (8C), सेक्शन 20 F]
- यदि भूमि के अर्जन के परिणामस्वरूप, हितबद्ध व्यक्ति अपने निवास अथवा कारोबार के स्थान को परिवर्तित करने के लिए बाध्य होता है तो ऐसे परिवर्तन से अनुसंधानिक युक्तियुक्त व्यय [8(d), सेक्शन 20 F]

बाजार मूल्य के अन्वयण के लिए मापदंड (धारा 20G)

- उस क्षेत्र में, जहाँ पर भूमि स्थित है विक्रय विलेखों के पंजीकरण के लिए भारतीय स्टॉप अधिनियम, 1999 में विनिर्दिष्ट निम्नतम भूमि मूल्य जो भी अधिक है ↑ ↓
- उस ग्राम या आस-पास, जहाँ उच्चतर कीमतें संदत्त की गई है, स्थित उसी प्रकार की भूमि के लिए पूर्ववर्ती तीन वर्षों के दौरान पंजीकृत विक्रय विलेखों के 50 प्रतिशत से अत्युच्च से अभिनिश्चित, विक्रय कीमत का औसत

ईमारतों एवं अन्य अचल सम्पत्ति का बाजार मूल्य का निर्धारण

- ईमारतों एवं अन्य अचल सम्पत्ति का बाजार मूल्य का निर्धारण सक्षम प्राधिकारी द्वारा नामित अभियन्ता द्वारा किया जायेगा
- वृक्षों/पीधों/खड़ी फसलों के बाजार मूल्य का निर्धारण सम्बन्धित विषय के विशेषज्ञ द्वारा किया जायेगा

सेक्शन 20F

- अधिनिर्णय का 10 प्रतिशत उनकों जिनके आन्द के अधिकार प्रभावित होते हैं।
- अधिनिर्णय से पूर्व हितबद्ध पक्षों से दावों प्राप्त करने की विज्ञापित।
- उपरोक्त विज्ञापित में भूमि का विवरण होगा एवं व्यक्तियों से दिए गये तारीख, समय एवं स्थान पर दावों की प्रकृति के बारे में पूछा जायेगा
- कोई भी पक्ष मुआवजा ना लेने की स्थिति में मध्यस्ता के लिये आवेदन कर सकता है।

राशि का निक्षेप और संदाय सेक्शन (20H)

- भूमि पर कब्जों से पूर्व केन्द्र सरकार राशि को सक्षम प्राधिकारी के पास जमा करेगी
- सक्षम प्राधिकारी राशि का संदाय उसके लिए हकदार व्यक्ति को करेगा
- पात्रता सक्षम प्राधिकारी द्वारा निर्धारित की जायेगी
- विवाद प्रधान सिविल न्यायालय में भेजे जायेंगे

भूमि पर कब्जों की शक्ति सेक्शन (20 I)

- केन्द्रीय सरकार द्वारा सक्षम प्राधिकारी के पास राशि केन्द्र सरकार द्वारा जमा कर दिए जाने के बाद, स्वामी और ऐसे किसी अन्य व्यक्ति को, जिसके कब्जे में वह भूमि हो, सूचना की तारीख से 60 दिन की अवधि के भीतर सक्षम प्राधिकारी को सूचना कब्जा अर्पित करना होगा।
- मालिक द्वारा अस्वीकार किए जाने पर आयुक्त अथवा कलेक्टर सक्षम प्राधिकारी को भूमि का अन्वयण करायेगा।

निर्दिष्ट तारीख

नामित व्यक्तियों के लिए पात्रता की निर्दिष्ट तारीख वह तारीख है

- जब आर.ए.ए., 2008 के सेक्शन 20A के अन्तर्गत अधिसूचना जारी होती है।
- अवैध नामित व्यक्ति जो जनगणना से पहले लगातार कम से कम तीन वर्ष से रह रहा है अथवा किसी लेन-देन, व्यवसाय, व्यापार या रोजगार से जुड़ा है।

राष्ट्रीय पुनर्वास तथा पुनर्स्थापन नीति 2007

अनुरेखी भूमि अर्जन का प्रावधान सेक्शन (7.19)

- अनुरेखी भूमि का अर्जन के मामले जैसे रेलवे लाईन, में केवल कम चौड़ाई की पट्टियों में भूमि का अर्जन किया जाता है, प्रभावित परिवारों में प्रत्येक खातेदार को अर्जनकारी निकाय द्वारा उतनी राशि का अनुग्रह अनुदान मुहैया कराया जायेगा जैसा कि समुचित सरकार द्वारा निर्धारित किया जाए, यह अनुग्रह अनुदान बीस हजार रुपये से कम नहीं होगा।
- कॉर्नर कार्यक्रम अथवा योजनाओं जिन्हें अन्तर्गत भूमि, भवन अथवा अन्य सम्पत्ति का अर्जन हुआ है के अन्तर्गत देय मुआवजा व अन्य लाभ के अलावा: यदि ऐसे अर्जन के परिणामस्वरूप भूमिधारी भूमिहीन हो जाता है अथवा छोटे या सीमान्त किसान की श्रेणी में आ जाता है, तो इस नीति के अन्तर्गत अन्य पुनर्वास तथा पुनर्स्थापन लाभ भी प्रभावित परिवारों को दिए जायेंगे।

सीमान्त किसान एवं छोटा किसान की परिभाषा

- छोटा किसान
छोटा किसान से एक ऐसा खेतिहर-किसान अभिप्रेत है जिसके पास दो हेक्टेयर तक असिंचित भूमि हो या एक हेक्टेयर तक सिंचित भूमि हो परन्तु सीमान्त किसान से अधिक भूमि हो
- सीमान्त किसान
सीमान्त किसान से एक ऐसा खेतिहर-किसान अभिप्रेत है जिसके पास एक हेक्टेयर तक असिंचित भूमि हो या आधे हेक्टेयर तक सिंचित भूमि हो

परियोजना प्रभावित परिवारों का मुआवजा

- प्रभावित परिवार जिन्हें कृषि भूमि या रोजगार मुहैया नहीं कराया गया है, सात सौ पचास दिनों की न्यूनतम कृषि मजदूरी अथवा अन्य ऐसी अधिक राशि, जिसे समुचित सरकार द्वारा निर्धारित किया जाए, के बराबर पुनर्वास अनुदान प्राप्त करने के हकदार होंगे

अवैध नामितों एवं अतिक्रमणकर्ताओं का मुआवजा

- अतिक्रमणकर्ताओं को प्रभावित ढाचें के मूल्य के रूप में मुआवजा दिया जायेगा।

सामूहिक सम्पत्ति संसाधनों का मुआवजा

प्रभावित सामूहिक सम्पत्ति संसाधनों को पुनः स्थापित करने के लिए प्रयाप्त ध्यान रखा जायेगा

शिकायत निवारण

प्रमुख परियोजना प्रबन्धक अपने क्षेत्र की शिकायत देखेगा

- प्रमुख परियोजना प्रबन्धक कार्यालय जयपुर
रेवाड़ी, महेन्द्रगढ़, अलवर, सीकर, जयपुर और नागौर जिलों में भूमि अर्जन का प्रभारी
- प्रमुख परियोजना प्रबन्धक कार्यालय अजमेर
पाली और सिरोही जिलों में भूमि अर्जन का प्रभारी
- प्रमुख परियोजना प्रबन्धक कार्यालय अहमदाबाद
बनारसकाठा, पाटन, महेसाना, अहमदाबाद, गोंधीनगर, खेड़ा एवं आन्वद जिलों में भूमि अर्जन का प्रभारी
- प्रमुख परियोजना प्रबन्धक कार्यालय वड़ोदरा
आन्वद, खेड़ा एवं वड़ोदरा जिलों में भूमि अर्जन का प्रभारी

धन्यवाद




रेल मंत्रालय
अहमदनगर

डेडीग्रेड डेट डोरिडोर डोपरेशन ओफ इन्डिया लिमिटेड

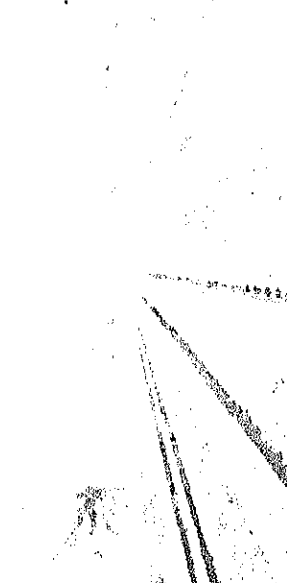
रेवडी वी वडोडरा वडो
माडलमाड, समणित परिचोयना नवी पडिम विभाग नां
ड्राफ्ट पुनर्वसि अले पुनरुपान नीति पर

छोड संवाह अडक



ओय नवी मुजय विषय

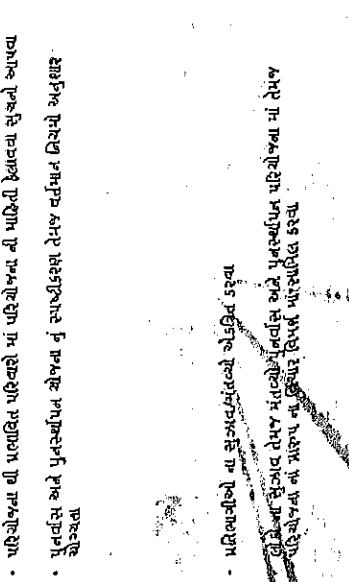
१. डी.अ.क.सी. परिचोयना वी विसेयना
२. नवीन संपादन अले पुनर्वसि तथा पुनरुपान माटे अबादा तेमय वीति नी व्यवस्था




पुनर्वसि अले पुनरुपान ओयना - वीड संवाह ना उडे प्यो

- परिचोयना वी प्रणवित परिवारो मा परिचोयना वी माडिती देवावना सुअरो आपवा
- पुनर्वसि अले पुनरुपान ओयना नुं सपडीकण तेमय वरुमान नियुओ अनुषार ओरुवत
- प्रतिपायीओ ना सुअवडितव्यो अडकित डरवा

वीडना सुअव तेमय मातव्यो पुनर्वसि अले पुनरुपान परिचोयना मा तेमय परिचोयना ना अडकित विपरी परिचोयना कराव



डी.अ.क.सी. परिचोयना नी सपरेषा

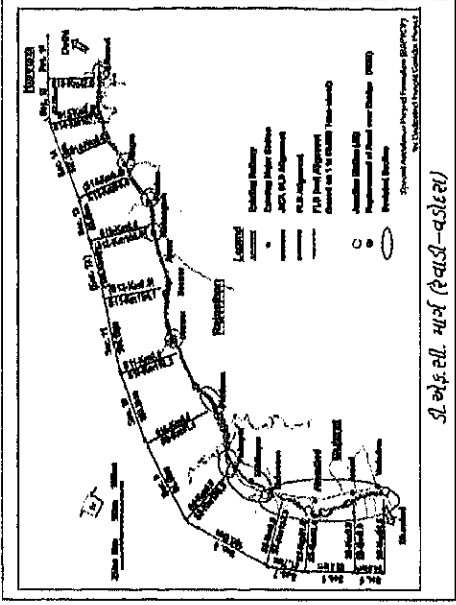


પરિયોજના નું વિવરણ

- રેલ્વે મંથલમાં ડિલ્હી અને મુંબઈ મહાનગર સુધી રેમલ આસ-પાસના સ્થળો પરથી માલ-સામાનની ઝડપી રેફરેર કોન્ટેનર ડ્રમ્સ સુધારે સંચાલિત સમાપિત માલવાહક પરિયોજનાનું આયોજન કરી રહેલ છે. જેના કારણે માલ-સામાનને યોગ્ય સ્થળોએ ઝડપી અને અણખરીમાં પહોંચાડી શકાય.
- વર્ષ-2015-2016 સુધી આ યોજના હારા 37.7 મિલિયન ટન માલ-સામાનની રેફરેર માટે આયોજન કરવામાં આવી રહેલ છે. જે અગળા ના 10 વર્ષો માં 140.4 મિલિયન ટન થઈ શકે.
- પરિયોજના નાં વિકાસ માટે રેલ્વે મંથલમાં હારા 35 કિલોમીટર લંબાઈનો કોન્ટેનર ડ્રમ્સ ડેપો અને 17 કિલોમીટર લંબાઈનો કોન્ટેનર ડ્રમ્સ ડેપો બાંધવામાં આવેલ છે. આ યોજનાના અંતર્ગત પાલનપુર, અમરેશ્વર, રેવાડી થી પસાર થાય છે.

પરિયોજના ની મુખ્ય લિસ્ટ થતાઓ

- કોન્ટેનરની લંબાઈ - 920
 - વાઈપાસ લિફ્ટની લંબાઈ - 330.5 ડીમી
 - આ પરિયોજના ગુજરાત, રાજસ્થાન અને કર્ણાટકમાં માંથી પ્રસાર થાય છે.
 - 17 સિલ્લા અને 447 ગ્રામડાંઓ પ્રાપ્તિ.
- પરિયોજના પ્રાપ્તિ સમાપ્તિ થઈ સંપૂર્ણ કરવામાં આવનાર જાન ના ફેલ થયે માંથી સમગ્ર રાજ્યમાં લંબાઈ 45 ફેટ અને વાઈપાસ લિફ્ટમાં લંબાઈ 330.5 ફેટની પહોળાઈ સમાપ્તિ કરવામાં લંબાઈ 50 મીટર અને વાઈ-પાસ લિફ્ટમાં લંબાઈ 70 મીટર.
 - 7 જાનના રેફરેર (પાલનપુર, અમરેશ્વર, રેવાડી, મહેસાના, પાલનપુર, મારવાડ, કુલશ અને રેવાડી)

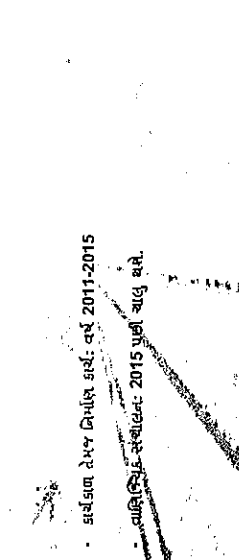


પરિયોજના થી થવાર લાભ

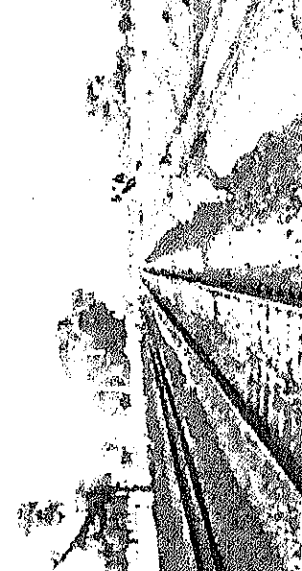
- સી.એફ.સી. પરિયોજના નો મુખ્ય ઉદ્દેશ્ય ભારતના વર્તમાન વિકાસ દરને બળ પૂર પાડવાનાં રેમલ પલાયનમાં સુધારો કરવાનો છે.
- ભારત ની માલ પરિવહન પ્રણાલી માં સુધારો કરી રાષ્ટ્રની આર્થિક ઉન્નતિ ને વધારવાનો છે.
- સી.એફ.સી. માઈની સુધારો ઔદ્યોગિક વિકાસ માં વૃદ્ધિને કારણે આસ-પાસ ના ક્ષેત્રમાં રોજગારની ની સંભવતાઓ માં વધારો.
- કુલિ ઉત્પાદનો ના પરિવહન માં ફરી રેમલ ચલિ સંભળી સુધારાઓ કરી કોઈના કિસ્મનો કોઈના વચ્ચે ઉત્પાદો રેમલ-પસવાળામાં બંધારમાં વિસ્તાર રેમલ સુધાર.
- આ યોજનાના અંતર્ગત ની વૃદ્ધિમાં મુંબઈ ઉત્પાદો જરૂર.
- સી.એફ.સી. માઈની સુધારો રેમલ-પાસ લિફ્ટની માં કોન્ટેનર પ્રકારે વાહી પ્રકારે થશે નહીં (આ માટે ની સાથે-સાથે ટૂંકી ડારા ઉત્પાદો થતા પ્રકારે થી બંધાય)

પરિયોજના ની સૂચી

- પરિયોજના નિયોજન કાર્ય: 2006-2009
- પરિયોજના પરિરૂપ ના અમલના કાર્ય મટે હિ ચારા હિમત: વર્ષ 2009 ના અંતથી 2 વર્ષ સુધી ચાલશે.
- કાર્યક્રમ તેમજ નિર્માણ કાર્ય: વર્ષ 2011-2015
- વાણિજ્યિક સંચાલન: 2015 પછી ચાલુ રહેશે.

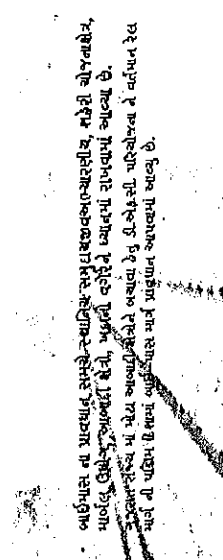


જમીન સંપાદન અને પુનર્વાસ તેમજ પુનર્સ્થાપન ની આધારભૂત નીતિ તેમજ વિધાનો નું આયોજન



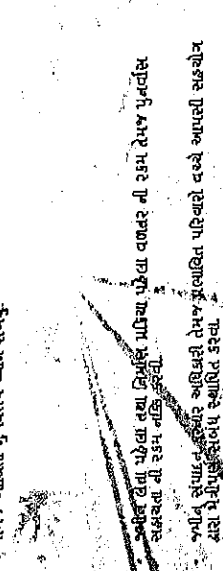
ઓછામાં ઓછું વિસ્થાપન થાય તે માટે વિશેષ ધ્યાન

- પરિયોજનાનો મુખ્ય માર્ગ ભારતીય રેલ લિભાકની જમીન પર વર્તમાન રેલ માર્ગની સમપાર્શ્વ નિયોજિત કરવામાં આવેલ છે.
- ફરિયાદો તથા રજતવાન કાચો પે આ કસવાલિન માર્ગ વર્તમાન રેલ માર્ગ ની પુર્વ દિશા માં સમાવવા અનુભવ છે.
- બાઈપાસ ના પ્રાવધાન સમયે સ્થાનિક સમુદાયકલવ્યાયરણીય, તાકેરી ચોખનાકેર, માર્ગદેવ ઉચ્ચેર આબરોઈ જે.એ. મુકલી વગેરે ને ધ્યાનમાં રાખવામાં આવ્યા છે.
- સમાવવા ના પેરા અભ્યાસકેરે બચાવે કે જે ડી.એફ.સી. પરિયોજના ને વર્તમાન રેલ માર્ગ ની પશ્ચિમ દિશામાં બાઈપાસ માર્ગ પ્રવુધાન આપવામાં આવશે છે.



નીતિ અનુસાર પુનર્વાસ તથા પુનર્સ્થાપન યોજના નાં ઊંચે સ્તર

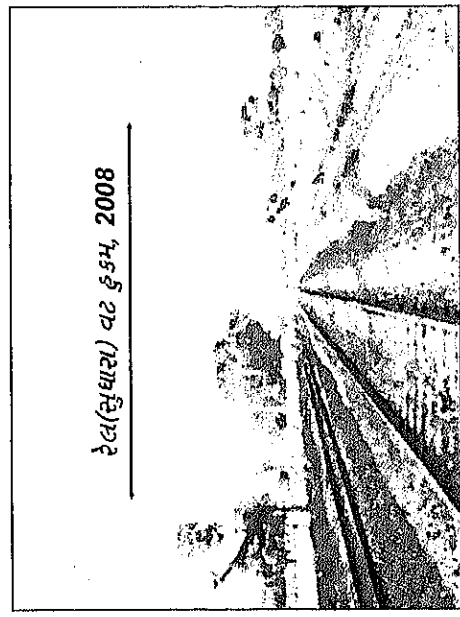
- ઓછા માં ઓછું હિસ્થાપન થાય, હિસ્થાપન ન થાય તેમજ ઓછું હિસ્થાપન થાય તેવા વિદલોને મદદ આપવું.
- પ્રભાવિત વ્યક્તિઓ ની સહાય ભરખીદારી સારે પુનર્વાસ પેરિય સમપુર્ણ સુનિશ્ચિત કરી, સાથે સાથે પુનર્વાસ પ્રક્રિયા નું કાર્ય ઝડપથી કલેસુનિશ્ચિત કરવું.
- સમાવવા નબળા વર્ગો વિશેષ રૂપ થી અનુસુચિત ખાદિ, અનુસુચિત જન ખાદિ તેમજ આકિતી નું વિશેષ ધ્યાન રાખવું.
- અધિકારી પહેલા તથા કિમિસ પ્રક્રિયા પહેલા વળાંકર ની રકમ તેમજ પુનર્વાસ સહાયતા ની રકમ નક્કિ કરવી.
- જમીન સંપાદનકેરેર અધિકારી તેમજ પ્રભાવિત પરિવારો વચ્ચે આપસી સહયોગ સારા પ્રકારે સંચાલિત સ્થાપિત કરવા.



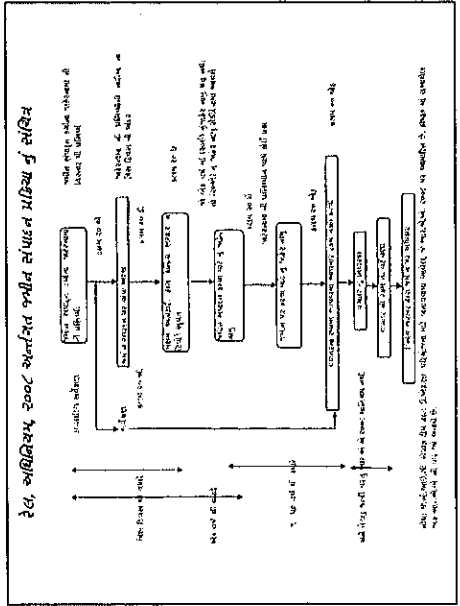
પરિયોજના ની જમીન સંપાદન અને પુનર્વસી તેમજ પુનર્સ્થાપન ની આયત્નરૂપ નીતિ અને વિધાન

- રેલ અભિનિયમ, 2008
- અ અભિનિયમ બી ડીએફસી પરિયોજના માટે જમીન સંપાદન કરવામાં આવી રહ્યું છે. (વિશેષ રેલ પરિયોજના ઘોષિત)
- અ અભિનિયમ માં જમીન સંપાદન અભિનિયમ 1894 લાગુ પડતું નથી.
- રાજ્યીય પુનર્વસી અને પુનર્સ્થાપન નીતિ, 2007
- ડીએફસી અભિનિયમ માટે જમીનની ઓછી પહોળાઈ અને લાંબી પહોળાઈ માં સંપાદન કરવામાં આવેલું છે. ડીએફસી પરિયોજના ની રેલ પરિયોજના માટે એનઆરઆરપી, 2007 માં ખંડ 7.19 માં ઉલ્લેખિત અનુલેખિત જમીન આઉટરજાઉ ડિયામ મૂલ્ય: લાગુ પડે છે.

- આર.એ.એ. 2007 ની પ્રમુખ ધારણા
- સક્ષમ પ્રાથિયતરી એવી વ્યક્તિ નિયુક્ત છે, કે જેને કૃત્રિય સરકાર દ્વારા એ શેરના સંકલ્પ માં સક્ષમ પ્રાથિયતરી નાં કાર્યોનું પાલન કરવા માટે પ્રાથિયત કરવામાં આવ્યા છે. જેના નામ ખરેખરામાં માં લિમિટેડ કરવામાં આવશે. (સેક્શન 7A)
 - લિમિટેડ વ્યક્તિ
 - અ નિયમ નાં અધીન જમીન આપવા નાં સંભાવમાં આપવામાં આવેલ પ્રક્રિયા માં કોઈ કિસ્મત યા ઠાવો કરવા યાગી વ્યક્તિઓ
 - રેલેડે જમ અધિકારી અને પરંપરાગત વન ડિવાસી, જેઓ રેલ અનુસંધિત જમ અધિકારી અને અન્ય પરંપરાગત વન ડિવાસી (વન અધિકારી ની માન્યતા) અભિનિયમ, 2006 ના અધીન માન્યતા પ્રાપ્ત-ગૌરી-પરંપરાગત અધિકાર ગુમાવી ચુક્યા હોય.
 - રેલ જમીન પ્રભાવિત રવાસી સુધીમાં જાતિ પ્રભાવિત વ્યક્તિ
 - રાજ્ય ના વિધાયકસભાએ જાણેલ અધિકાર રાખવા યાગી વ્યક્તિ (સેક્શન 29A)



રેલ (સુધારા) વટ ફંડમ, 2008



अभिलेख नं. प्र.व्येड थारव्ये नु संक्षिप्त विवरण

जमीन संयुक्त थारव्ये संक्षिप्त 20 A)

- अधरे नामा द्वारा स्पष्टित रेल्वे ग्राउंड ना अमलीकरण मते जमीन संपादन करवावी अडिग.
- जमीन संपादन करवावां आवांनार के ते तेमय रेल परिचोजना नु संक्षिप्त विवरण
- अधरेनामा ते जे स्वामिय संपाव्यार पत्रीमा (ले माडी अेड स्वामिय व्याचामा) महिस्य करवावां आवरे

संयुक्त मते प्रवेग्या ना अडिगर थारव्ये (संक्षिप्त 20B)

सकम अडिगरी द्वारा नियुक्त करवावां आवेल व्यक्ति आ परिचोजना मते माप-मोड, तेमय मुल्यमांन करवावां मते प्रवेस करी अडि.

संयुक्त मय-तपास करियान थारव्ये वड्यानी नु मुल्यांन (संक्षिप्त 20C)

- अदी जमीन तेजे, संरचना अडिगरीओ द्वारा संपादित करवावां आवंनार के, ते जमीन मते सर्वकार करती वमते वडिसान पडीके ती ते 45रुमी नु मुल्यांन करी करी पुर ध्याव्य 6 महिनानी अंर ते जमीन मां हक थारव्यार व्यक्तिने मुकदानी नु मुल्य आपवा मां आवरे.

वड्याव्येना नी सुनवणी (संक्षिप्त 20 D)

जमीन मां हिन प्रवेनार व्यक्ति अधिनियम नी 50म 20 नी पेदा-50म(1) मुय अडिगरीना नी प्रक्षिपीनी वडीम वी जीस विवस नी अंर जमीन संपादन आवांनारो अधरे करी मते

- व्यां न वांघा/विरथ नी सुनवणी सकम अडिगरी द्वारा करवावां आवरे.
- अंरिम निर्णय सकम अडिगरी द्वारा लेवां आवरे.

व्यवहारी राशिनी अडव्य

- संक्षिप्त 20 I (8 (A), संक्षिप्त 20 F) ना अथरे अधरे नामानी प्रक्षिपीनी नी वडीमे जमीन नी अंर डिमंत
- जमीन पर अडिगर लेवांन सकमे अथ जमीननी आ जमीनने अंरन करती वमते हिन जंम व्यक्ति द्वारा लेवांनवी पडेल मुकदानी (8(F), संक्षिप्त 20 F)

जमीन पर कर लेवांनो संयुक्त विवसांन व्यक्ति द्वारा जोर पुर प्रकर तेमनी अथरे सुविचारित करती जे जमीन नी प्रवेनार करवां वाणा जमीन अधिग्रहण ना करी करवांनवी आवेल मुकदानी (8(G), संक्षिप्त 20 F)

- जमीन अधिग्रहण करवांनो जोरपस व्यक्तिने वेवांन विवस तेमय व्यवसाय ना स्वावो अंरनवांन वांघा करतीने तेमना परिचरंन मते आनुवंशिक युक्ति युक्त व्यय (8(D), संक्षिप्त 20 F)

अधिग्रहण नी अधरेवत (संक्षिप्त 20E)

- 20E नी पेदा-50म(1) मुय अडिगरीना नी प्रक्षिपीनी पडी जमीन संपूर्ण इस मुक्त पुरंतव्या युक्ति सरकर करतकन करवावां आवरे.
- आ 50म नी पेदा-50म(1) मुय ते अधिग्रहणानी प्रक्षिपीनी वडीम वी 12 महिना ना सकम सुधीमा प्रकृतित करवावां न अथ ते, त्या ठंका अधिग्रहण अमल मां करी नही.
- ठंका अधिग्रहण ते जोरपस थ्याव्यार मां तेमय जोर अन्य अडिगरी द्वारा प्रवेनार करवावां आवांनारो

બંખર મુલ્ય નક્કી કરવા માટે નાં માપદંડ(ધારા 20G)

- એ હિસ્સાર ની જમીનોના વેચાણ ના દસ્તાવેજો માટે ભારતીય સ્ટેમ્પ અધિનિયમ 1899 માં જે ન્યૂનતમ જમીન કિંમત છે તે

જે વધારે હોય તે.

જો જમીની ધાર-પાસ નાં ઊંચક કિંમત નીકલ કરવામાં આવી છે, તે જગ્યા ની જમીનો માટે પહેલાંના ત્રણ વર્ષો સુધીના દસ્તાવેજો કિરાલ ઊંચકો ના 50(%) પ્રતિક્રમ ઘી પ્રિસ્થિત વેચાણ કિંમતો ની આધારે

મકાનો તેમજ અન્ય અચલ સંપત્તિ ના મુલ્ય નું નિરધારણ

- મકાનો તેમજ અન્ય અચલ સંપત્તિ ના બંખર મુલ્ય નું નિરધારણ સક્ષમ પ્રાધિકારી દ્વારા ત્રિયુક્ત કરવામાં આવેલ અધિકારી દ્વારા કરવામાં આવશે.
- ત્રણ(૩) અડીઓ/ ઊંચા પાડુ ના બંખર મુલ્ય નું નિરધારણ સંબંધિત વિષય ના હિસાબ દ્વારા કરવામાં આવશે.

10 અધિકાર તેઓને કે જેઓ આડકતરી રીતે પ્રભવીત થયા છે.

પ્રક્રિયા પહેલા સંબંધિત પત્રો માટે સુચના પ્રસિધ્ધ કરવામાં આવશે.

સેકશન 20 F

- 10 પ્રતિક્રમ તેઓને કે જેઓ ની સુખ સાંદિ આડકતરી રીતે પ્રભવીત થયા છે.
- પ્રક્રિયા પહેલા કિરાબયા પત્રો ના દાવા માટે સુચના પ્રસિધ્ધ કરવી.

ઉપરોક્ત અધિકારિયા માં જમીન હોલિવરણ કરી તેમજ વ્યક્તિઓ ને આપવા માં આવેલ જમીનો, સમગ્ર તેમજ સ્થાનિયો પર દાવા બાબતે મુકવામાં આવશે.
કોઈપણ પક્ષ સુધારે ન ઊંચકની પ્રિસ્થિતિમાં માર્યાદિય માટે આવેકન કરી શકે છે.


- રકમ ની વહેંચણી તેમજ ગામવાની વ્યાવસ્થા સેકસન(20 H) કે જે સરકાર જમીન પર 5000 મેટરવા પહેલા લેવી રકમ સક્ષમ પ્રાધિકારી યાસે જમા કરાવશે.
- સક્ષમ પ્રાધિકારી રકમ ની વહેંચણી તેને માટે 55દાર વ્યક્તિઓ ને કરશે
- ચોગ્યતા સક્ષમ પ્રાધિકારી દ્વારા કરવામાં આવશે.
- બધાજ વાધ/સરોધ ને સિદિલ વ્યાગાલચી માં મોકલવા માં આવશે.

જમીન પર અધિકાર મેળવવા માટે સેકસન (20 F) કે જે સરકાર દ્વારા સક્ષમ પ્રાધિકારી યાસે જમા કરાવવા બદ માલિકો તેમજ અન્ય હોલ વ્યક્તિ કે જેઓ અધિકારમાં આ જમીન હોય, સુચના મારવા બદ 50 દિવસ ના સમયમાં સરકાર સક્ષમ પ્રાધિકારી કે 5000 સો પેલી પડશે.
પ્રાધિકાર દ્વારા જમીન એ 5000 સો પેલ માં ન આવેતો સ્વામિય અધિકારી તે જમીન ની અધિકાર ત્રિયુક્ત પ્રાધિકારીને અપાવશે.


નિર્દેશિત તરીખ

નામિત વ્યક્તિઓ માટે ની પાતલની નિર્દેશિત તરીખ એ તરીખ છે કે

- આર.એ.એ. 2008 નાં સેક્શન 20A અન્વયેત અભિસુચના બહાર કરવામાં આવશે.
- એવી વ્યક્તિ કે જે જન ગણના પહેલા થી લગભગ ત્રણ વર્ષો થી રહે છે અથવા લેવડ-રેવડ, વ્યવસાય, વ્યાપાર તેમજ કોઈ રોજગારી થી ખોડાયેલ છે.

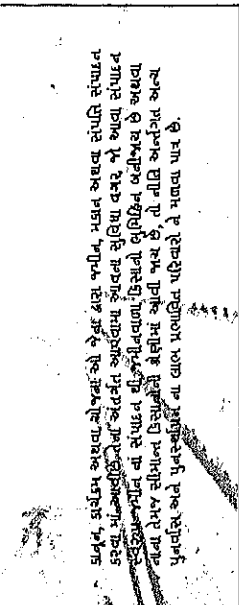


રાષ્ટ્રીય પુનર્વાસ અને પુનરસ્થાપન નીતિ ૨૦૦૭



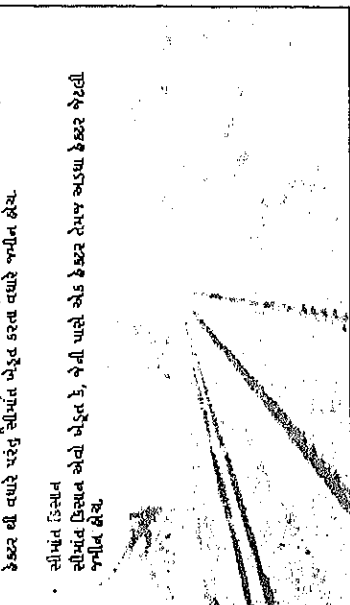
અનુરોધીય જમીન નાં સંપાદન બાબત સેકસન(7.19)

- અનુરોધીય જમીન નાં સંપાદન બાબતે એમડે રેલ્વે ડાઈન માં ફક્ત ઓછી પડોળાય વાળી પટ્ટીઓ માં જમીન સંપાદન કરવામાં આવે છે, પ્રચલિત પરિવારો નાં પ્રાચેડ ખાતેદારો ને ભૂમિ અભિપ્રયોક્તિ કરવાદ સંસ્થા દ્વારા એટલી રકમ આપવા માં આવશે કે જે સરકાર દ્વારા નિર્ધારિત કરવાં આવશે, આ નિર્ધારિત રકમ 20,000 થી ઓછી કરી શકે નહીં.
- ફક્ત, ફરજીયાત અથવા એ જગ્યાંઓ જેમકે દ્વારા જમીન, મલાન અથવા સંપત્તિ સંપાદન કરવા માં અભિપ્રયોક્તિ અંતર્ગત આવવામાં આવેલા સુવિધા વગર ખો આવા સંપાદન કરવા માટે જમીન નાં સંપાદન થી જમીનવાળા, વિસ્તારો ભૂમિલિન બંધીયત છે અથવા નવા તેમજ સીમાન વિસ્તારો કોઈમાં ઓવી ખાય છે, તે નીતિ અન્વયેત અન્ય પુનર્વાસ અને પુનરસ્થાપન ના લાભ પ્રચલિત પરિવારો ને મળવા પાત છે.



સીમાંત તેમજ નાના વિસ્તારો ની મરીબાથ

- નાલો વિસ્તાર નાની વિસ્તાર એવો ખેડૂત કે જેની ખાસે એ હેક્ટર જેટલી જમીન હોય અથવા તે એક હેક્ટર થી વધારે પરંતુ સીમાંત ખેડૂત કરતા વધારે જમીન હોય.
- સીમાંત વિસ્તાર એવો ખેડૂત કે, જેની ખાસે એક હેક્ટર તેમજ અડધા હેક્ટર જેટલી સીમાંત વિસ્તાર એવો ખેડૂત જે, જેની ખાસે એક હેક્ટર તેમજ અડધા હેક્ટર જેટલી જમીન હોય.



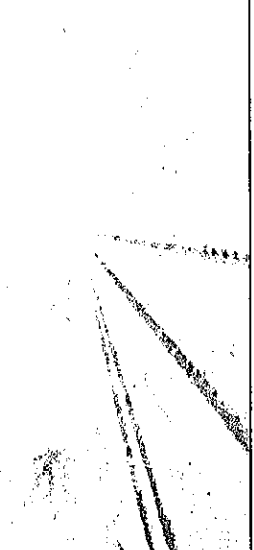
પરિયોજના પ્રભાવિત પરિવારો માટે વળતર

- પ્રભાવિત પરિવારો કે ખેતી લાચક જમીન તેમજ રોજગારી આપવામાં આવી નથી. તેઓ કે 750 ટ્રિલર ની સુવ્યવસ્થા મુજબ પ્રાચીન તેમજ અન્ય વર્ગોને રૂ.૬૫, જે સરકાર દ્વારા વિચારીત કરવામાં આવે, તેની વહીવટી મુજબની અનુદાન મેળવવાનો ફકલો છે.



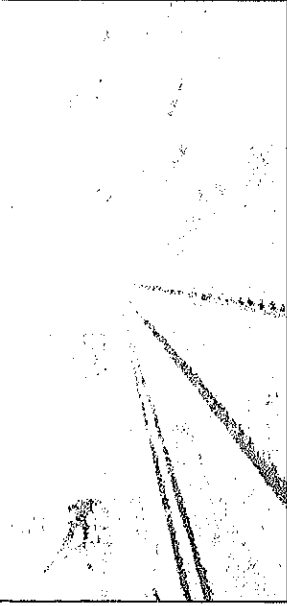
અનઅધિકૃત તેમજ વ્યાજકતિઓ માટે વળતર

- અનઅધિકારીઓ કે પ્રભાવિત હાંચના મુલ્ય ના રાખમાં વળતર આપવામાં આવશે.



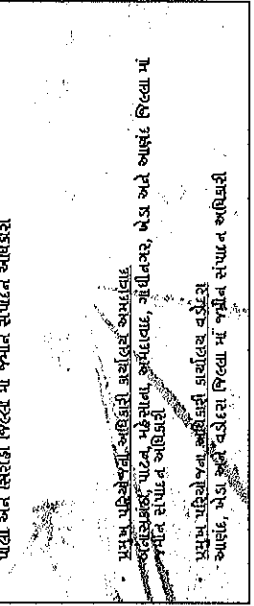
સ્વમુદ્ધિક સંપત્તિ સંસ્થાપનો નું વળતર

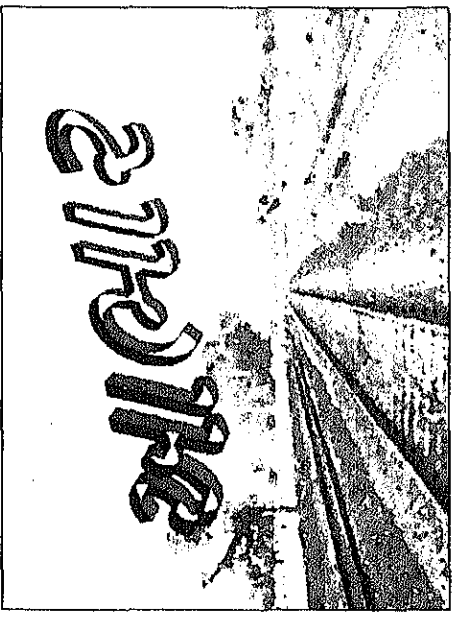
- પ્રભાવિત સ્વમુદ્ધિક સંપત્તિ સંસ્થાપનો કે મુદત: સ્થાપિત કરવા માટે ખાસ ધ્યાન રાખવામાં આવશે.



ફરિયાદ નીવારણ

- મુખ્ય પરિયોજના અધિકારી પોતાના ક્ષેત્ર ની ફરિયાદ સોંભાળશે
- પ્રમુખ પરિયોજના અધિકારી કાચીબલ્લ જલપુર રેવાડી, મહેન્ડાવાડ, અલવર, સીનર, જલપુર અને નાગોર જિલ્લા માં જમીન સંપાદન અધિકારી
- પ્રમુખ પરિયોજના અધિકારી કાચીબલ્લ અજમેર પાલી અને સિરોહી જિલ્લા માં જમીન સંપાદન અધિકારી
- પ્રમુખ પરિયોજના અધિકારી કાચીબલ્લ અમદાવાદ સિરોહી, પાટન, પહેરાવા, અમદાવાદ, મોંઘીતલર, ખેડા અને આણંદ જિલ્લા માં જમીન સંપાદન અધિકારી
- પ્રમુખ પરિયોજના અધિકારી કાચીબલ્લ વડોદરા આણંદ, ખેડા અને વડોદરા જિલ્લા માં જમીન સંપાદન અધિકારી





Appendix 3-15 Handout for RRP-PCM

Project at a Glance

Ministry of Railway is implementing Computerized Multi Modal High Axle Load Dedicated Freight Corridor Project (DFC Project) to facilitate speedier and smooth transportation of bulk goods without any interruption between the two metropolises Delhi and Mumbai and their respective hinterlands at lesser transport cost and lesser time. It is designed to carry a total freight line of 37.7 million tones in fiscal year 2013-2014, which would increase to 140.4 million tones in 10 years. The project is now under planning stage, it had been started from 2006. Engineering Services for the further deliberation of the project design will be started in the end of 2009 for 2 years followed by the 4 - 5 years of construction works which should begin by the end of 2011. Commercial operation will be started from 2015.

Public Consultation Meeting on Draft Rehabilitation and Resettlement Policy

Dedicated Freight Corridor Project Between Rewari and Vadodara

General Features

- Length of Corridor: 920 km
- Length in Detour Section: 338.5 km
- Junction Stations: 7
- Alignment Passes through: Gujarat, Rajasthan, Haryana
 - District involved: 17
 - Villages covered: 447
- Width of ROW: approx. 50 m in parallel section, 70 m in detour section
- Maximum Speed: 100 km/hr

August - September, 2009

Ministry of Railways
Rail Bhawan, New Delhi

Benefit of the Project

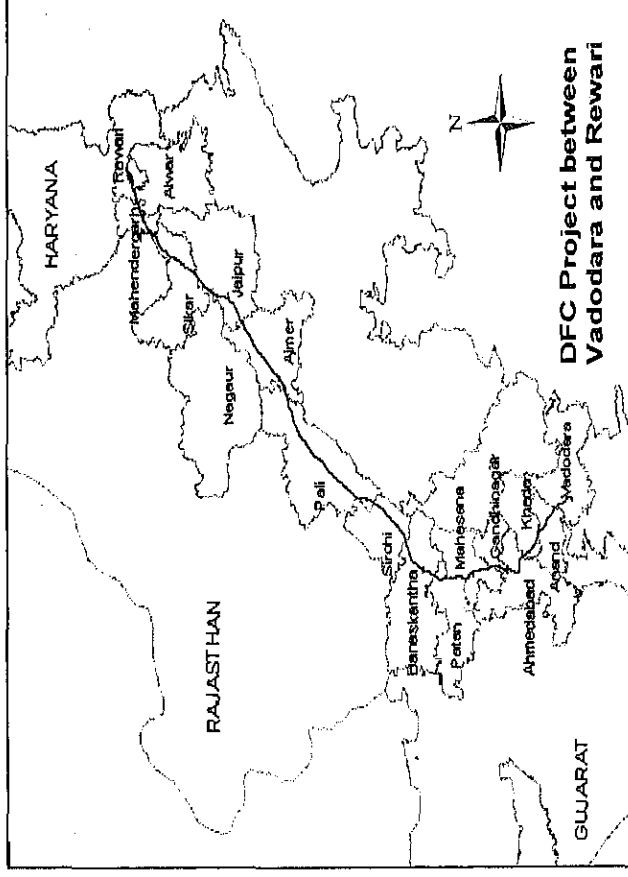
DFC Project aims to help boosting the present trends of growth of the economy in India as well as improve the environment.

- Acceleration of nationwide economic development due to improvement of freight transportation system in India.
- Increase of industrial development along the DFC will bring about increase of employment opportunity in the region.
- Improvement of transportation of agricultural produce by DFC in terms of distance and speed will bring about expansion and improvement of the market for farmers in the region as well as forestry and fisheries.
- Less energy use for transport of goods compared to transportation by truck.
- No gaseous emission to local community along the DFC alignment (= Reduction of gaseous emission from truck along the road).

Land Acquisition Pattern of DFC Project

DFC Alignment passes through Vadodara-Ahmedabad-Palanpur-Ajmer-Rewari. Linear pattern of land acquisition and resettlement will be required for project design. To avoid or minimize the demolition of permanent structures, local communities, city planning area, marble stone factories, residential areas, large excavations, wildlife sanctuary in a densely populated urban area along the project right-of-way, detour has been considered. In Haryana and Rajasthan, the alignment runs parallel to eastern side of existing railway line while in Gujarat it takes detour to

the west of the existing railway line. However, some land acquisition will be required in both parallel and detour sections.



Executing Agency

Dedicated Freight Corridor Corporation of India Limited (DFCCIL)

Basic Legislation & Policy of Land Acquisition and Rehabilitation & Resettlement for DFC Project

Railways (Amendment) Act, 2008

The Act under which the land acquisition is being done by the DFC

Project (declared as Special Railway Project). Land Acquisition Act 1894 is not applied to the land acquisition under this Act.

National Rehabilitation & Resettlement Policy, 2007

In case of DFC project a narrow stretch of Land is to be acquired. Para 7.19 of NRRP 2007 on linear land acquisition for railway projects is basically applicable to DFC project

Competent Authority

Person authorized by the Central Government by notification, to perform the functions of the competent authority for such area as may be specified in the notification.

Person Interested as per RAA 2008

- (i) all persons claiming an interest in compensation to be made on account of the acquisition of land under this Act
- (ii) tribals and other traditional forest dwellers, who have lost any traditional rights recognized under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006
- (iii) a person interested in an easement affecting the land
- (iv) persons having tenancy rights under the relevant State laws

Cut-off Date

The cut-off date for entitlement as per RAA 2008 / NRRP 2007 is :

- i) For title holders, the date on which notification is issued as per the notification prescribed under the Section 20A of the. RAA, 2008

- ii) For non-title holders who have been residing or engaged in any trade, business, occupation or vocation continuously for not less than 3 years prior to the date of census

Objective of RRP as per Policy

- Avoid or minimize land acquisition and involuntary resettlement impacts by exploring all viable alternatives.
- To ensure adequate rehabilitation package and expeditious implementation of rehabilitation process with the active participation of affected families.
- Special care for weaker sections like SC/ST/Vulnerable groups.
- To provide better standard of living and providing sustainable income to PAPs.
- Facilitate harmonious relationship between the requiring body and affected families through mutual cooperation.
- Ensure payment of compensation and resettlement assistance prior to taken over land and commencement of any construction activity.

Basic Compensation Policy

- Land acquisition will be the responsibility of the Competent Authority nominated by Ministry of Railway.
- The compensation amount for land will be paid to the land losers as per the RAA 2008. Market Value will be determined as per the RAA 2008 and in addition to the market value of land, in every case award a sum of sixty percent on such market-value will be paid in

separate account till the end of the project. Interested parties either directly or through their legal heirs as the case may be can claim their compensation after satisfactory documentary verification.

➤ Nothing in Land Acquisition Act, 1894 shall apply to acquisition under this Act

➤ In case of linear acquisitions, like railway lines, wherein only a narrow stretch of land is acquired for the purpose of the project or is utilised for right of way, each khatedar in the affected family shall be offered by the requiring body an ex-gratia payment of such amount as the appropriate Government may decide but not less than 20,000 rupees. In addition to the compensation or any other benefits due under the Act or Programme or Scheme under which the land, house or other property is acquired:

In case of PAPs who are rendered landless or reduced to the status of small or marginal farmer due to land acquisition, they shall be entitled to rehabilitation grant equivalent to 750 days minimum agricultural wages.

consideration of the compulsory nature of the acquisition (Section 20F(9), RAA 2008).

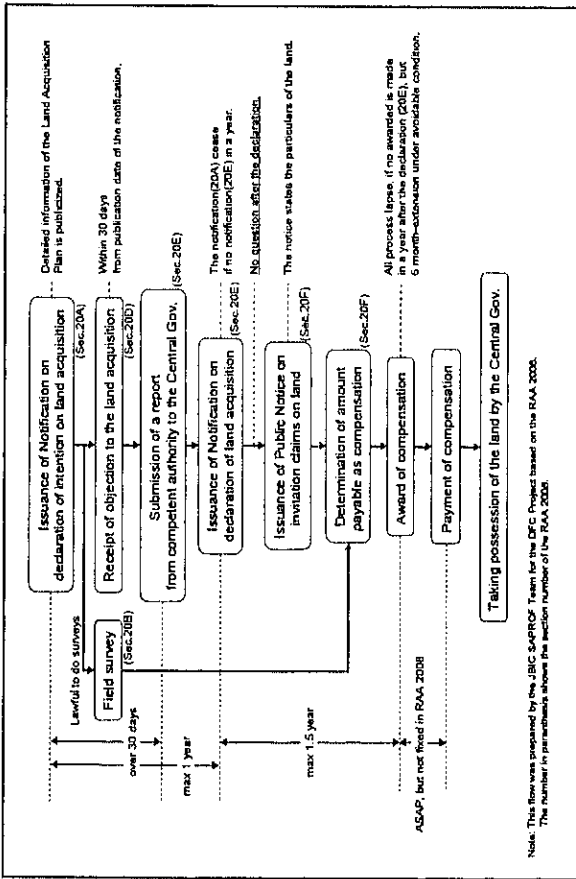
➤ Any person interested in the land may, within the period of 30 days from the date of publication of the notification for declaration of intention of land acquisition, can object to the acquisition of land (Section 20D(1), RAA 2008).

➤ Market value of the building and other immovable property or assets, trees, plants and standing crops attached to the land or building which are to be acquired will be determined by specialist persons with their respective fields (Section 20G (4,5,6), RAA 2008).

➤ The land acquisition will be considered complete when the title of land is transferred in favour of appropriate acquiring government by the competent authority and suitable mechanism will be placed to ensure payment as per existing rules.

➤ Compensation amount will be paid normally within one year after the notification of the declaration of land acquisition. In case of unavoidable circumstances it can be extended by 6 months. Provided further that where an award is made within extended period, the entitled persons shall be paid an additional compensation for the delay in making of the award, every month for the period so extended, at the rate of not less than 5% of the value of the award, for each month of such delay (Section 20F(1,2), RAA 2008).

➤ If compensation money is not claimed by the interested persons for one year after the notice for collection of compensation amount then in such cases the compensation amount will be kept with the EA in a



Flowchart of the Land Acquisition Process under RAA 2008

- Calculation of Compensation Amount
 - The market value of the land on the date of publication of the notification under Section 20A (8(a), Section 20F)
 - Damage to Land PAP due to severance of land from other land (8(b), Section 20F)
 - Damage of PAP due to the acquisition affecting other immovable property in any manner or his earnings (8(c), Section 20F)
 - Expenses incurred by PAP changing his residence or place of business as a result of land acquisition (8(d), Section 20F)
- In addition to the market value of land as above provided, the competent

authority or the arbitrator, as the case may be, shall in every case award a sum of 60% on such market-value, in consideration of the compulsory nature of the acquisition.

Special R&R Benefit for Indigenous people and SC/ST

- Compensation would be provided as per NRRP 2007
- The district Administration shall be requested to facilitate the proposed compensation and assistance.

Compensation for Non-title Holder/ Squatters and Encroachers

For Squatters and encroachers, the cost of the affected structures shall be compensated.

Compensation for Common Property Resources

If relocation takes place existing settlement area, same amenities and infrastructural facilities to be provided to the host community by the project executing agency as per (para 7.22.3 of NRRP 2007)

Grievance Redress

Chief Project Managers shall head the Grievances redressal in their respective jurisdiction.

Address of the CPM offices of the DFCCIL

CPM office in Jaipur
B-12, Hanuman Nagar, Opp. Metro Hospital, Sirsi Road, Jaipur

CPM office in Ajmer
42A/3 Civil Line, Ajmer-305001

CPM office in Ahmedabad
1st Floor, Old DRM Office Building, Kalupur, Ahmedabad- 380002

CPM office in Vadodara
13-14, 17-18, Panorama Complex, 3rd Floor, R.C.Dutt Road,
Alkapuri, Vadodara-7

ड्राफ्ट पुनर्वास तथा पुनर्स्थापन नीति
पर
लोक संवाद बैठक

परियोजना पर एक नजर

रेल मंत्रालय दिल्ली और मुम्बई महानगरों एवं इनके आस-पास के स्थानों के मध्य माल के अतिशीघ्र एवं अबाधित अवागमन हेतु कम्प्यूटरिकृत समर्पित मालभाड़ा कारीडोर परियोजना को मूर्तरूप देने जा रहा है। जिससे माल बिना किसी बाधा के गंतव्य स्थान तक कम समय में एवं न्यूनतम परिवहन लागत में पहुँच सके। वर्ष 2013-2014 में 37.7 मिलियन टन माल के परिवहन के लिए प्रारूप तैयार किया गया है, जो कि वर्ष 2006 से 2 वर्ष तक चलेगा, हो जायेगा। परियोजना अभी नियोजन अवस्था में है, जो कि वर्ष 2006 से शुरू हुई थी। परियोजना प्रारूप के लिए आभियान्त्रिकी विचार विमर्श वर्ष 2009 से 2 वर्ष तक चलेगा, उसके उपरान्त 4 से 5 वर्ष तक निर्माण कार्य चलेगा जो वर्ष 2011 तक शुरू होना चाहिए। वाणिज्यिक क्रियारें वर्ष 2015 से शुरू होंगी।

सामान्य विशेषताएँ

- कारीडोर की लम्बाई : 920 किमी
- बाईपास अनुभाग की लम्बाई : 338.5 किमी
- जंक्शन स्टेशन : 7
- रेलमार्ग गुजरता है : गुजरात, राजस्थान, हरियाणा
- अन्तर्गस्त जिले : 17
- प्रभावित गाँव : 447
- मार्गधिकार की चौड़ाई : समानान्तर अनुभाग में लगभग 50 मीटर एवं बाईपास अनुभाग में लगभग 70 मीटर
- अधिकतम गति : 100 किमी/घण्टा

परियोजना के लाभ

डी.एफ.सी परियोजना का उद्देश्य भारत की वर्तमान आर्थिक उन्नति की प्रवृत्ति को तीव्र करना साथ ही साथ पर्यावरण में सुधार लाना है

- 1 भारत में माल परिवहन प्रणाली में सुधार कर राष्ट्रीय आर्थिक उन्नति को बढ़ाना।
- 2 डी.एफ.सी के समान्तर औद्योगिक विकास में वृद्धि से क्षेत्र में रोजगार की सम्भावनाओं में वृद्धि।
- 3 कृषि उत्पादों के परिवहन में दूरी एवं गति से सम्बन्धित सुधार से क्षेत्र के किसानों के साथ-साथ वानिकी एवं मछली पालन बाजार में विस्तार एवं सुधार
- 4 ट्रक द्वारा परिवहन की अपेक्षा कम उर्जा की आवश्यकता
- 5 डी.एफ.सी मार्ग के साथ-साथ स्थित स्थानीय निवासीयों के लिए किसी गैसीय उत्सर्जन का न होना (ट्रकों द्वारा सड़क के साथ गैसीय उत्सर्जन में कमी)

मालभाड़ा कारीडोर परियोजना
रेवाड़ी एवं वड़ोदरा के मध्य

अगस्त-सितम्बर, 2009

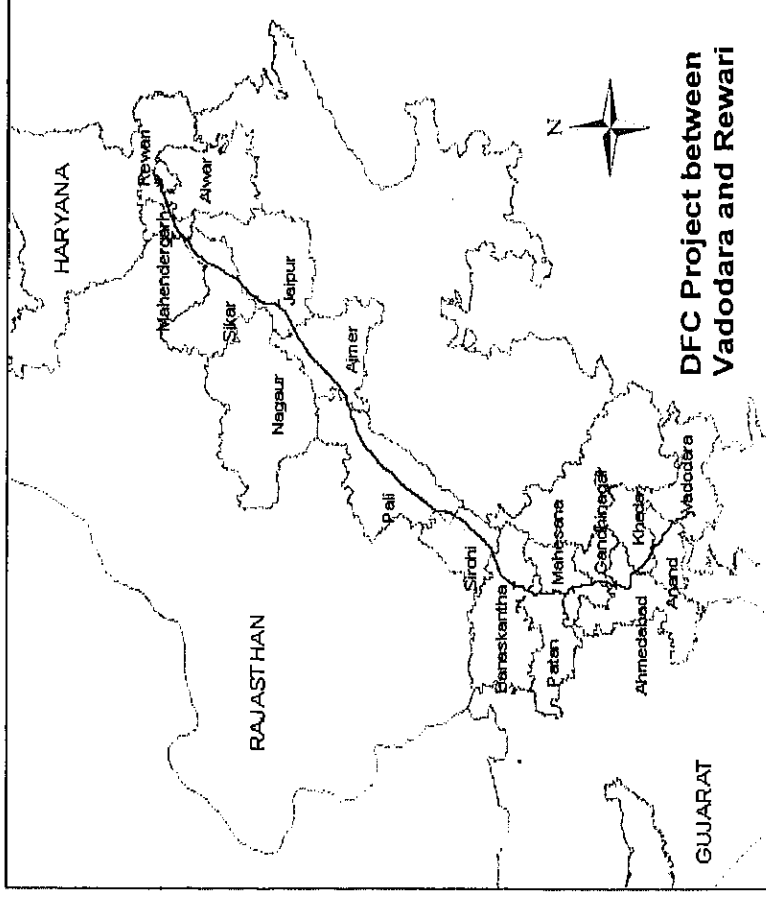
रेल मंत्रालय
रेल भवन, नई दिल्ली

डी.एफ.सी परियोजना का भूमि अधिग्रहण स्वरूप

डी.एफ.सी मार्ग वड़ोदरा, अहमदाबाद, पालनपुर, अजमेर, रेवाड़ी से गुजरता है। परियोजना नियोजन के लिए अनुरेखीय भूमि अधिग्रहण एवं पुनर्वास की आवश्यकता पड़ेगी।

परियोजना मार्गाधिकार में भवनों, स्थानीय समुदाय, जीव अस्थारण, शहरी योजना क्षेत्र, मार्बल उद्योग, आबादी क्षेत्रों, खदानों आदि को तोड़-फोड़ से बचाने या कम से कम करने के लिए चक्करदार मार्ग का प्रावधान किया गया है।

हरियाणा एवं राजस्थान में इसका मार्ग वर्तमान रेललाईन के समान्तर एवं पूर्व दिशा में है जबकि गुजरात में वर्तमान रेललाईन के पश्चिम दिशा में चक्करदार मार्ग हैं। हालांकि दोनों ही अनुभागों, समान्तर एवं चक्करदार मार्ग में कुछ भूमि अधिग्रहण की आवश्यकता पड़ेगी।



कार्यान्वयन संस्था
फ्रेट कारीडोर कॉर्पोरेशन ऑफ इण्डिया लिमिटेड (डी.एफ.सी.सी.आइ.एल)

परियोजना की भू-अधिग्रहण एवं पुनर्वास तथा पुनर्स्थापन की आधारभूत नीति एवं विधान

रेल (संशोधन) अध्यादेश, 2008

जिस कानून के तहत डी.एफ.सी परियोजना (विशेष रेलवे परियोजना घोषित) में भू-अधिग्रहण किया जा रहा है। इस कानून में भूमि अधिग्रहण के लिए भू-अधिग्रहण कानून 1994 लागू नहीं होता है।

राष्ट्रीय पुनर्वास तथा पुनर्स्थापन नीति 2007

डी.एफ.सी परियोजना के सम्बन्ध में भूमि का कम चौड़ाई की पट्टियों में अधिग्रहण होना है। डी.एफ.सी परियोजना में रेलवे परियोजनाओं के लिए एन.आर.आर.पी 2007 के पैरा 7.19 में उल्लेखित अनुरेखीय भूमि अर्जन नियम मूलतः लागू होता है।

सक्षम प्राधिकारी

सक्षम प्राधिकारी से ऐसा व्यक्ति अभिप्रेत है, जिसे केन्द्रीय सरकार द्वारा उन क्षेत्रों के सम्बन्ध में सक्षम प्राधिकारी के कृत्यों का पालन करने के लिए प्राधिकृत किया गया है, जो अधिसूचना में विनिर्दिष्ट किए जाएं।

रेल (संशोधन) अध्यादेश, 2008 के अनुसार हितबद्ध व्यक्ति

- 1 इस अधिनियम के अधीन भूमि के अर्जन के संबन्ध में दिए जाने वाले प्रतिकर में किसी हित का दावा करने वाले सभी व्यक्तिय।
- 2 सभी जनजातीय और परंपरागत वन निवासी, जिन्होंने अनुसूचित जनजाति और अन्य परंपरागत वन निवासी (वन अधिकारों की मान्यता) अधिनियम, 2006 के अधीन मान्यताप्राप्त कोई परंपरागत अधिकार खो दिए हैं।
- 3 भूमि को प्रभावित करने वाले किसी सुखाचार में हितबद्ध कोई व्यक्ति।
- 4 सुसंगत राज्य विधियों के अधीन अभिधारण अधिकार रखने वाले व्यक्ति।

निर्दिष्ट तारीख

आर.ए.ए. 2008/एन.आर.आर.पी. 2007 के अनुसार पात्रता के लिए निर्दिष्ट तारीख:

- 1 नामित व्यक्तियों के लिए वह तारीख है जब आर.ए.ए. 2008 के सेक्शन 20 ए के अन्तर्गत अधिसूचना जारी होती है।
- 2 अवैध नामित व्यक्तियों के लिए जो जनगणना से पहले लगातार कम से कम तीन वर्ष से रह रहा है अथवा किसी लेन-देन, व्यवसाय, व्यापार या रोजगार से जुड़ा है।

नीति अनुसार पुनर्वास तथा पुनर्स्थापन योजना के उद्देश्य

- न्यूनतम विस्थापन करने, विस्थापन न करने अथवा कम से कम विस्थापन करने के विकल्पों को बढ़ावा देना।
- प्रभावित व्यक्तियों कि सक्रिय भागीदारी के साथ पर्याप्त पुनर्वास पैकेज सुनिश्चित करना तथा पुनर्वास प्रक्रिया का तेजी से कार्यान्वयन सुनिश्चित करना।
- समाज के कमजोर वर्गों विशेष रूप अनुसूचित जातियों, अनुसूचित जन जातियों तथा निम्न आश्रितों का विशेष ध्यान।
- प्रभावित परिवारों को बेहतर जीवन स्तर उपलब्ध कराना तथा सत्त रूप से आय मुहैया कराना।
- अर्जनकारी निकाय तथा प्रभावित परिवारों के बीच आपसी सहयोग के जरिये सौहार्दपूर्ण सम्बन्ध स्थापित करना।
- भूमि लेने एवं कोई भी निर्माण कार्य करने से पूर्व मुआवजा एवं पुनर्स्थापन सहायता का भुगतान सुनिश्चित करना।

मूल मुआवजा नीति

- भूमि अधिग्रहण की जिम्मेदारी रेल मंत्रालय द्वारा नामित सक्षम प्राधिकारी की होगी।
- भूमि देने वालों को मुआवजा राशि आर.ए.ए 2008 के अनुसार दी जाएगी। बाजार मूल्य आर.ए.ए 2008 के अनुरूप निर्धारित किया जायेगा। भूमि अधिग्रहण की अनिवार्यता को ध्यान में रखते हुए प्रत्येक मामले में भूमि के बाजार मूल्य के अलावा इस मूल्य का 60 प्रतिशत अतिरिक्त भुगतान किया जायेगा। (सेक्शन 20 F(9) आर.ए.ए 2008)
- भूमि में हितबद्ध कोई व्यक्ति, भूमि अधिग्रहण के आशय की अधिसूचना के प्रकाशन की तारीख से तीस दिन के अविधि के भीतर भूमि के अर्जन के सम्बन्ध में आक्षेप कर सकता है। (सेक्शन 20 D(1), आर.ए.ए 2008)
- उस भूमि या भवन से, जिसको अर्जित किया जाना है, संलग्न भवन और अन्य जंगम सम्पत्ति या आस्तियों, वृक्षों, पौधों, उस भूमि पर खड़ी फसलों का बाजार मूल्य सुसंगत क्षेत्र में किसी विशेषज्ञ द्वारा किया जायेगा। (सेक्शन 20 G(4,5,6), आर.ए.ए 2008)
- भूमि अधिग्रहण तब पूर्ण समझा जायेगा जब भूमि का अधिकार पत्र समुचित अर्जनकर्ता सरकार के पक्ष में सक्षम प्राधिकारी द्वारा कर दिया जायेगा एवं वर्तमान नियमों के अनुसार भुगतान सुनिश्चित कर दिया जायेगा।
- मुआवजा राशि का भुगतान भूमि अर्जन की घोषणा की अधिसूचना जारी होने के एक वर्ष के अन्दर होगा। अत्याज्य परिस्थितियों में यह छः महिने तक बढ़ाया जा सकता है। परन्तु यह और की जहाँ अधिनिर्णय विस्तारित अवधि के भीतर किया जाता है, वहाँ हकदार व्यक्ति को, न्याय के हित में, इस प्रकार विस्तारित अवधि के लिए प्रत्येक मास, अधिनिर्णय करने में विलंब के लिए, ऐसे विलंब के प्रत्येक मास के लिए

अधिनिर्णय के मूल्य के पांच प्रतिशत से अन्यून की दर से अतिरिक्त प्रतिकर का संदाय किया जायेगा। (सेक्शन 20 F(1,2), आर.ए.ए 2008)

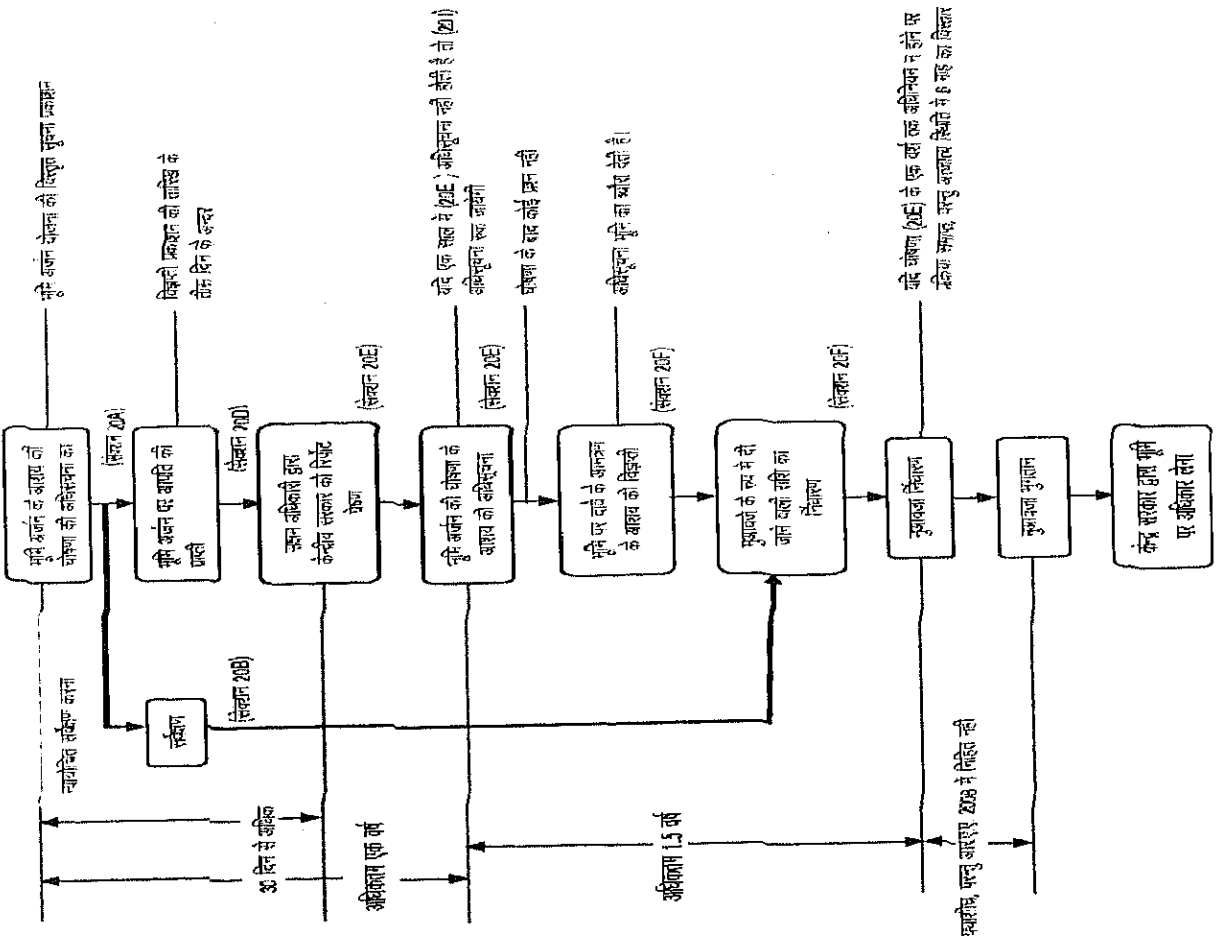
यदि हितबद्ध व्यक्ति द्वारा मुआवजा राशि का दावा मुआवजा प्राप्त करने की सूचना के एक वर्ष तक नहीं किया जाता है तो यह राशि कार्यान्वयन संस्था के पास अलग खाते में परियोजना समाप्त होने तक रखी जायेगी। सम्बन्धित पक्ष संतोषजनक दस्तीवेजी जांच के बाद सीधे अथवा विधिक उत्तराधिकारी द्वारा अपने मुआवजे का दावा कर सकता है।

- इस कानून के तहत भूमि अर्जन प्रक्रिया में भूमि अर्जन अध्यादेश, 1894 लागू नहीं होगा।
- अनुरेखी भूमि का अर्जन के मामले जैसे रेलवे लाईन में केवल कम चौड़ाई की पट्टियों में भूमि का अर्जन किया जाता है, प्रभावित परिवार में प्रत्येक खातेदार को अर्जनकारी निकाय द्वारा उतनी राशि का अनुग्रह अनुदान मुहैया कराया जायेगा जैसा कि समुचित सरकार द्वारा विनिर्धारित किया जाए, यह अनुग्रह अनुदान बीस हजार रुपये से कम नहीं होगा। भूमि मकान एवं अन्य सम्पत्ति का अधिग्रहण जिस नीति के तहत किया गया है मुआवजा राशि के अलावा उस नीति के अन्य फायदे भी दिये जायेंगे।
- परन्तु यह कि यदि ऐसी भूमि के अर्जन के परिणाम स्वरूप भूमिधारी भूमिहीन हो जाता है अथवा छोटे या सीमान्त किसान की श्रेणी में आ जाता है, तो वो पुनर्स्थापन सहायता के रूप में 750 दिवस की न्यूनतम कृषि मजदूरी पाने के पात्र होंगे।

मुआवजा राशि की गणना

- सेक्शन 20A(8(a), सेक्शन 20F) के अधीन अधिसूचना के प्रकाशन की तारीख को भूमि का बाजार मूल्य
- भूमि का कब्जा लेने के समय, अन्य भूमि से उस भूमि को अलग करने के कारण, हितबद्ध व्यक्ति द्वारा उठाई गई नुकसानी (8(b), सेक्शन 20F)
- भूमि का कब्जा लेने के समय, हितबद्ध व्यक्ति द्वारा किसी रीति में उसकी अन्य स्थावर सम्पत्ति या उसके उपार्जन को हानिकर रूप से प्रभावित करने वाले अर्जन के कारण उठाई गई नुकसानी (8(c), सेक्शन 20F)
- यदि भूमि के अर्जन के परिणामस्वरूप, हितबद्ध व्यक्ति अपने निवास अथवा कारोबार के स्थान को परिवर्तित करने के लिए बाध्य होता है तो ऐसे परिवर्तन से आनुशंगिक युक्तियुक्त व्यय (8(d), सेक्शन 20F)
- ऊपर उपबोधित किए गये अनुसार भूमि के बाजार मूल्य के अतिरिक्त यथास्थिति, सक्षम प्राधिकारी या मध्यस्थ, प्रत्येक मामले में अर्जन की अनिवार्य प्रकृति के प्रतिफल में, ऐसे बाजार मूल्य पर साठ प्रतिशत की राशि प्रदान करेगा।

रेल (संशोधन) अध्यादेश, 2008 के अन्तर्गत भूमि अर्जन प्रक्रिया का प्रवाह संचित्र



स्वदेशीय व्यक्तियों एवं अनुसूचित जाति/अनुसूचित जनजाति के लिए विशेष पुनर्वास तथा पुनर्स्थापन सुविधा

- मुआवजा राष्ट्रीय पुनर्वास तथा पुनर्स्थापन नीति 2007 के अनुसार दिया जायेगा।
- जिला प्रशासन से प्रस्तावित मुआवजा एवं सहायता प्रक्रिया को सुगम बनाने का अनुरोध किया जाएगा।

अवैध नामितों एवं अतिक्रमणकर्ताओं का मुआवजा
अतिक्रमणकर्ताओं को प्रभावित दायों के मूल्य के रूप में मुआवजा दिया जायेगा।

सामूहिक सम्पत्ति संसाधनों का मुआवजा

यदि पुनर्स्थापन मौजूदा अवस्थापन क्षेत्र में किया जाता है तो ऐसी ही अवसरचनात्मक सुविधाएं मेजबान समुदाय को भी परियोजना क्रियान्वयन सस्था द्वारा उपलब्ध कराई जायेंगी (पैरा 7.22.3 एन.आर.आर.पी. 2008)

शिकायत निवारण

प्रमुख परियोजना प्रबन्धक अपने क्षेत्र की शिकायत देखेगा

डी.एफ.सी.सी.आइ.एल. के प्रमुख परियोजना प्रबन्धक कार्यालय का पता

प्रमुख परियोजना प्रबन्धक कार्यालय जयपुर
बी-12, हनुमान नगर, मेट्रो हास्पिटल के सामने, सिरसी रोड़, जयपुर

प्रमुख परियोजना प्रबन्धक कार्यालय अजमेर
42 A/3 सिविल लाईन, अजमेर-305001

प्रमुख परियोजना प्रबन्धक कार्यालय अहमदाबाद
प्रथम मजिल, ओल्ड डी.आर.एम. कार्यालय बिल्डिंग, कालूपुर
अहमदाबाद-380002

प्रमुख परियोजना प्रबन्धक कार्यालय वडोदरा
13-14, 17-18, पनोरमा कॉम्प्लेक्स, तीसरी मजिल, आर.सी. दत्त रोड़,
अलकापुरी, वडोदरा-7

ડ્રાફ્ટ પુનર્વાસ તેમજ પુનર્સ્થાપન નીતિ

પર

લોક સંવાદ બેઠક

પરિયોજનાં પર એક નજર

રેલ્વે મંત્રાલય દિલ્હી અને મુંબઈ મહાનગર સુધી તેમજ આસ-પાસના સ્થાનો પરથી માલ-સામાનની ઝંડપી હેરફેર હેતુથી કમ્પ્યુટર સંચાલિત સમર્પિત માલવાહક પરિયોજનાનું આયોજન કરી રહેલ છે. જેના કારણે માલ-સામાનને યોગ્ય સ્થાને ઝંડપી અને ઓછા ખર્ચમાં પહોંચાડી શકાય. જેનાથી માલ-સામાન કોઈપણ સ્કાવટ વગર નિક્ષિત સ્થળો પર થોડા સમય માં અને ઓછા ભાડા માં પહોંચાડી શકાય. વર્ષ 2013-2014 માં 37.7 મિલિયન ટન માલ પરિવહન માટે ડિઝાઈન તૈયાર કરવામાં આવેલ છે, જે આગળ નાં 10 વર્ષોમાં 140.4 મિલિયન ટન થઈ જશે. પરિયોજના અત્યારે આયોજનના તબક્કે છે, જ્યારે તે 2006 થી શરૂઆત કરવામાં આવેલ છે. પરિયોજના માટે એન્જિનિયરીંગ વિચાર લિમિટ્સ વર્ષ 2009 થી 2 વર્ષ સુધી ચાલશે. ઉપરાંત 4 થી 5 વર્ષ સુધી નિર્માણ કાર્ય ચાલશે, જે વર્ષ 2011 સુધી કાર્યરત થવું જોઈએ. વ્યાપારિક ક્રિયાઓ વર્ષ 2015 થી ચાલુ થશે.

સામાન્ય વિશેષતાઓ

- કોરિડોરની લંબાઈ :- 920 કિમી
- બાઈપાસ અનુભાગની લંબાઈ :- 338.5 કિમી
- જન્કશન સ્ટેશન :- 7
- પ્રસારિત રેલ માર્ગ :- ગુજરાત, રાજસ્થાન, હરયાના
- આસરગ્રસ્ત જિલ્લા :- 17
- આસરગ્રસ્ત ગ્રામ :- 447
- પહોળાઈ :- સમાન્તર અનુભાગ માં લગભગ 50 મીટર અને બાઈપાસ વિભાગ માં 70 મીટર
- અધિક્તમ ગતિ મર્યાદા :- 100 કિમી/પ્રતી કલાક

પરિયોજના થી થનાર લાભ

1. ડી.એફ.સી. પરિયોજનાનો મુખ્ય ઉદ્દેશ્ય ભારતના વર્તમાન વિકાસ દરને ને ઝંડપી બનાવવાનો અને પર્થાવરણ માં સુધારો લાવવાનો છે.
2. ભારત માં માલ-સામાન પરિવહન પ્રણાલીમાં સુધારો કરી દેશની આર્થિક ઉન્નતિમાં વધારો કરવો.
3. ડી.એફ.સી. નાં સમાન્તર ઔદ્યોગિક વિકાસ ની યોજનાનાં નિર્માણથી આર્થિક ઉન્નતિ અને રોજગારની નવી તકો ઊભી થશે.
4. કૃષિ ઉત્પાદનો ના પરિવહન પ્રણાલી માં ગતિ સમ્બધિત સુધારો કરી ક્ષેત્ર ના કિસાનો તેમજ વન્ય ઉત્પાદો તેમજ મત્સ્ય પાલન નાં બજારમાં વિસ્તાર તેમજ સુધારો કરી આર્થિક ઉન્નતિમાં વધારો કરવો.
5. ટૂંક શ્રાણ પરિવહન કરતા નાના વાહનો ના પ્રમાણ મા ઓછી ઊર્જા

રેવાડી અને વડોદરા વચ્ચે

માલ ભાડા કોરિડોર પરિયોજના

ઓગસ્ટ- સપ્ટેમ્બર ૨૦૦૯

રેલ મંત્રાલય,

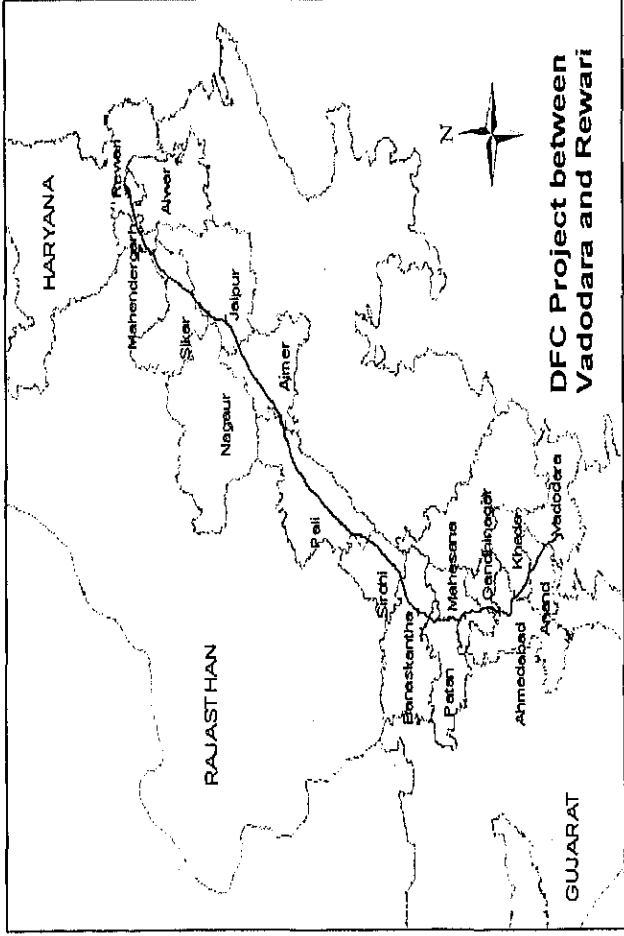
રેલ ભવન નવી દિલ્હી

પ. ડી.એફ.સી. માર્ગથી આનુ-બાનુ સ્થિત સ્થાનીય નિવાસીઓ ને કોઈપણ પ્રકારે વાયુ પ્રદૂષણ થશે નહીં. (આ માર્ગ ની સાથે-સાથે ટૂંકો કારા ઉત્પન્ન થતા પ્રદૂષણ થી બચાવ)

ડી.એફ.સી. પરિયોજના માટે જમીન સંપાદન સ્વરૂપ

ડી.એફ.સી. માર્ગ વડોદરા, અમદાવાદ, પાલનપુર, અજમેર, રેવાડી થી પ્રસાર થાય છે. પરિયોજનાં ના અમલીકરણ, વ્યાવસ્થા અને સંચાલન માટે જમીન સંપાદન તેમજ પુનર્વાસ જેવા મહત્વનાં પરિબળોની આવશ્યકતા પડશે. સ્થાનીય મકાનો ની તોડ-ફોડ, શહેરી સ્થાનીય સમુદાય, છવઅભ્યારણીય, શહેરી યોજનાક્ષેત્ર, માર્બલ ઉદ્યોગ, આબાદી ક્ષેત્રો, ખાણો વગેરેની તોડ-ફોડ ને બચાવા તેમજ ઓછા માં ઓછી થાય તે હેતુ બાઈપાસ આપવામા આવ્યો છે.

હરિયાણા તેમજ રાજસ્થાન માં આ માર્ગ વર્તમાન રેલ્વેમાર્ગ ની સમાન્તર તેમજ પૂર્વ દિશામાં છે, જ્યારે ગુજરાત માં આ માર્ગ વર્તમાન રેલ્વે લાઈનની પશ્ચિમ દિશામાં બાઈપાસ માર્ગ છે. છતાં પણ બંને અનુભાગો સમાંતર અને બાઈ-પાસ વિભાગ માં જમીન સંપાદન કરવાની આવશ્યકતા પડશે.



કાર્યરત સંસ્થા

ડેડિકેટેડ ફેટ કોરિડોર કોર્પોરેશન ઓફ ઈન્ડીયા લિમિટેડ (ડી.એફ.સી.સી.આઈ.એલ.)

પરિયોજના ની જમીન સંપાદન અને પુનર્વાસ તેમજ પુનર્સ્થાપન ની આધારભૂત નીતિ અને વિધાન

રેલ અધિનિયમ, 2008

આ અધિનિયમ થી ડી.એફ.સી. પરિયોજના(વિશેષ રેલ પરિયોજના ઘોષિત) માટે જમીન સંપાદન કરવામાં આવી રહ્યું છે. આ અધિનિયમ માં જમીન સંપાદન અધિનિયમ 1994 લાગુ પડતો નથી.

રાષ્ટ્રીય પુનર્વાસ અને પુનર્સ્થાપન નીતિ, 2007

ડી.એફ.સી. પરિયોજના માટે જમીન નું ઓછી પહોળાઈ અને લાંબી પટ્ટીઓમાં સંપાદન કરવામાં આવનાર છે. ડી.એફ.સી. પરિયોજના ની રેલ પરિયોજના માટે એન.આર.આર.પી. 2007 નાં ખંડ 7.19 માં ઉલ્લેખિત અનુરેખીય જમીન અધિગ્રાહ નિયમ મૂલત: લાગુ પડે છે.

સક્ષમ અધિકારી

સક્ષમ પ્રાધિકારી એવી વ્યક્તિ નિયુક્ત છે, કે જેને કેન્દ્રિય સરકાર દ્વારા એ ક્ષેત્રનાં સંદર્ભ માં સક્ષમ પ્રાધિકારી નાં કાર્યોનું ચાલન કરવા માટે પ્રાધિકૃત કરવામાં આવ્યા છે. જેના નામ જહેર નામ માં વિનિર્દિષ્ટ કરવામાં આવશે.

રેલ (સંસ્પોધન) અધિનિયમ, 2008 અનુશાર હિતબંધ વ્યક્તિ

૧. આ નિયમ નાં અધિન જમીન આપવા નાં સંબંધમાં આપવામાં આવેલ પ્રતિકર માં કોઈ હિત યા ધાવો કરવા વાળી વ્યક્તિઓ.

૨. દરેક જન જરિઓ અને પરંપરાગત વન નિવાસી, જેઓ ને અનુસુચિત જન જાતિ અને અન્ય પરંપરાગત વન નિવાસી (વન અધિકારો ની માન્યતા) અધિનિયમ, 2006 અધિન માન્યતા પ્રાપ્ત કોઈ પરંપરાગત અધિકાર ગુમાવી ચુક્યા હોય.

૩. રાહત લેવામાટે ઈચ્છુક એ વ્યક્તિ કે જે જમીન સંપાદિત થવાથી પ્રભાવિત થાય છે.

૪. રાજ્ય ના કાયદાઓ અધિન ગણોત અધિકાર રાખવા વાળી વ્યક્તિ.

નિર્દેશિત તારીખ

આર.આર.એ ૨૦૦૮/ એન.આર.આર.પી ૨૦૦૭ ના આધારિત યોગ્ય તારીખ

૧. નામિત વ્યક્તિઓ ની માટે પાત્રતાની એ તારીખ છે જ્યારે આર.એ.એ. 2008 નાં સેક્શન 20A નાં અર્ન્તગત જહેરનામુ જહેર થાય છે.

૨. એવી વ્યક્તિ કે જે જન ગણના પહેલા થી લગભગ ત્રણ વર્ષો થી રહે છે અથવા લેવડ-દેવડ વ્યવસાય, વ્યાપાર તેમજ કોઈ રોજગારી થી જોડાયેલ છે.

નીતિ અનુશાર પુનર્વાસ અને પુનર્સ્થાપન યોજના નાં ઉદ્દેશ્ય

- ઓછુ વિસ્થાપન, વિસ્થાપન ન થાય તેમજ ઓછામાં ઓછુ વિસ્થાપન થાય તેવા વિકલ્પો ની પસંદગી.

- પ્રભાવિત વ્યક્તિઓ ની સક્રિય ભાગીદારી ની સાથે પર્યાપ્ત પુનર્વાસ પેકેજ સુનિશ્ચિત કરી તેમજ પુનર્વાસ પ્રક્રિયાનું કાર્ય ઝડપથી પૂર્ણ કરવું.
- સમાજનાં નબળા વર્ગો વિશેષ રુપથી અનુસુચિત જાતિઓ, અનુસુચિત જન જાતિઓ તેમજ આશ્રિતો નું વિશેષ ધ્યાન રખવું
- પ્રભાવિત પરિવારો ને સુવ્યવસ્થિત જીવન ધોરણ ઉપલબ્ધ કરાવી, સતત આવક મળી રહે તેનું આયોજન કરવું.
- જમીન સંપાદન કરવા વાળા સહકર્મ પ્રાધિકારી તેમજ પ્રભાવિ પરિવારો વચ્ચે આપસી સહયોગ દ્વારા મૈત્રી પૂર્ણ સંબંધ બની રહે.
- જમીન સંપાદન કરવા તેમજ કોઈપણ નિર્માણ કાર્ય કરતા પહેલા વળતર તેમજ પુનર્સ્થાપન આપવા નું નક્કી કરવું

વળતર ની નીતિ

- જમીન સંપાદન કરવાની જવાબદારી રેલ મંત્રાલય દ્વારા ત્રિચુકત સહકર્મ પ્રાધિકારીની રહેશે.
- જમીન આપનાર વ્યક્તિઓને વળતરની રકમ આર.એ.એ., 2008 અનુસાર આપવામાં આવશે. બજાર કિંમત આર.એ.એ., 2008 ના અનુરુપ નિર્ધારિત કરવામાં આવશે. જમીન સંપાદ કરવાની અભિવાર્યતાને ધ્યાનમાં રાખીને દરેક સીમામાં જમીન ની બજાર કિંમત કરતા તેની કિંમતના 60(%)ટકા વધુ આપવામાં આવશે. (સેક્સન20F, (9),આર.એ.એ.,2008)
- જમીનથી હિત બધ્ધ કોઈ વ્યક્તિ, જમીન સંપાદન ના જહેર ની રાજ્યપત્ર માં પ્રસ્થિધીની તારિખ થી ત્રીસ દિવસ ની અંદર જમીન સંપાદન બાબતે વાંધો જહેર કરી શકે છે. સેક્સન 20D (1),આર.એ.એ.,2008)
- મકાન તેમજ જમીન બંને માથી જેને અધિકૃત કરવામાં આવનાર છે, સંલગ્ન ભવન અને અન્ય જંગમ સંપત્તિ તેમજ ધાર્મિક સ્થાનો, વૃક્ષો, ઝાડીયો તેમજ તે જમીન પર ઊભા પાક ની બજાર કિંમત સુસંગત ક્ષેત્ર માં કોઈ વિશેષજ્ઞદ્વારા કરવામાં આવશે. (સેક્સન 20G,(4,5,6),આર.એ.એ.,2008)
- જમીન સંપાદન ત્યારે પૂર્ણ સમજવામાં આવશે કે જ્યારે જમીન નું અધિકૃત્ત્વ અધિકારપત્ર સરકાર દ્વારા ત્રિચુકત કરવામાં આવેલ અધિકારી દ્વારા આપવામાં આવશે તેમજ વર્તમાન નિયમો મુજબ વળતર નક્કી કરવામાં આવશે.
- વળતર ની રકમ ની ચુકવણી જમીન સંપાદન કર્યાના જહેર નામાની પ્રસ્થિધી પછી એક વર્ષમાં કરવામાં આવશે. અત્યાજ્ય પરિસ્થિતિમાં આ મુદત છ મહિના સુધી વધારવામાં આવશે. પરંતુ જો કોઈ જગ્યાએ આ મુદત કરતા વધારે સમય લાગેલો આવા સંજોગોમાં વધારાની મુદતમાંટે દરેક મહિને નક્કી કરવામાં આવેલ વળતરની

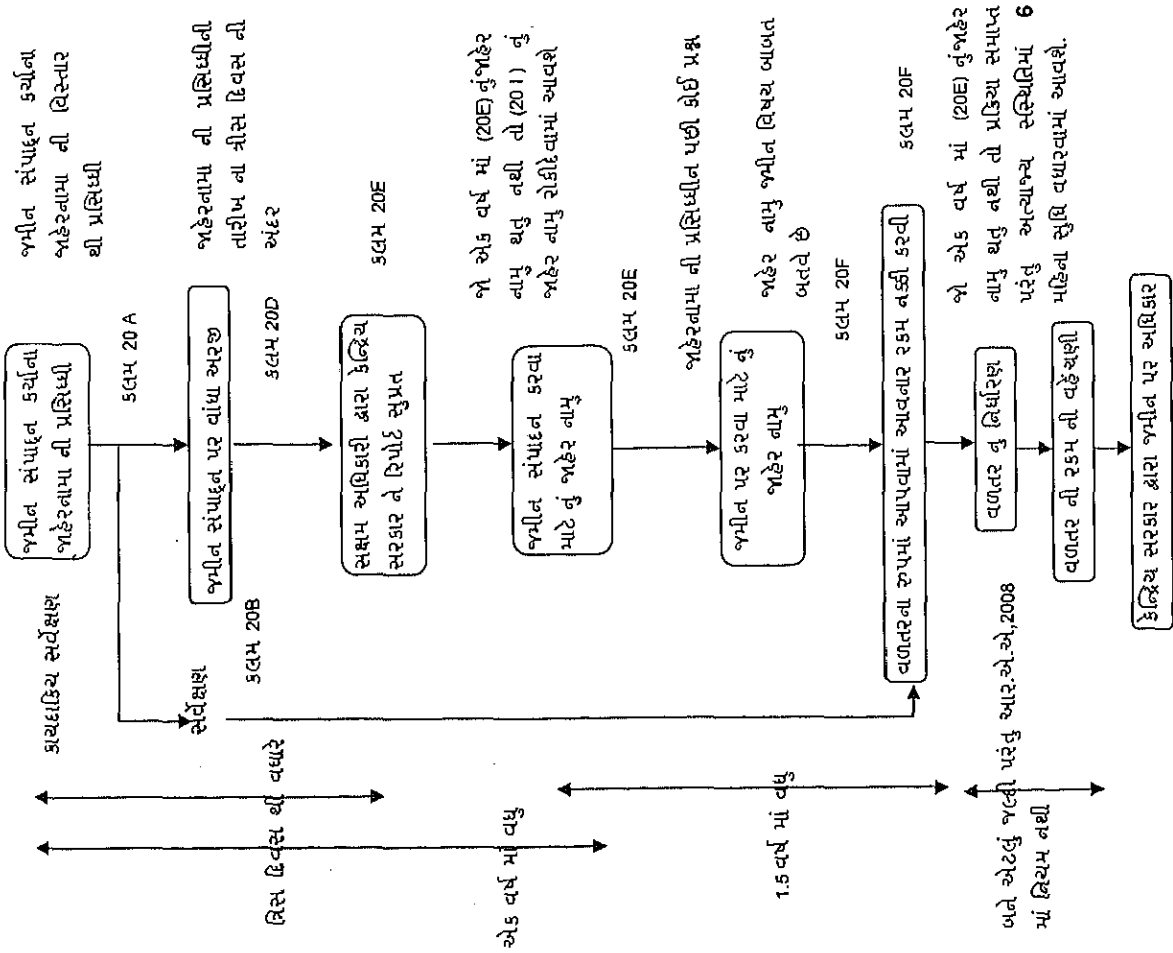
રકમનાં 5(%) ટકા દરથી વધારે વળતર આપવામાં આવશે.(સેક્સન 20F (1,2,3),આર.એ.એ.,2008)

- જો હિતબધ્ધ કોઈ વ્યક્તિ દ્વારા વળતર ની રકમ પર અધિકાર મેળવવા માટે વળતર મળ્યાની સુચના નાં એક વર્ષ માં નહિ કરવાં આવેતો આ રકમ કાર્યાલય સંસ્થની પાસે અલગ ખતામાં પરિચોજના પુરી થાય ત્યાં સુધી રાખવામાં આવશે. સમબંધિત પક્ષ સાથા અને પુરા દસ્તાવેજો સાથે અથવા દસ્તાવેજો ની તપાસ પછી સીધા તેમજ ઊત્તરાધિકારી દ્વારા પેતના વળતરની રકમ માટે ધાવો કરી શકે છે.
- આ અધિનિયમ દ્વારા જમીન સંપાદન પ્રક્રિયા માં જમીન સંપાદન અધિનિયમ,1894 લાગુ પડતો નથી.
- અનુરેખીય જમીન નાં સમ્પાદન બાબતે જેમકે રેલ્વે લાઈન માં ફક્ત ઓછી પહોળાય વાળી પટ્ટીઓ માં જમીન સંપાદન કરવામાં આવે છે, પ્રભાવિત પરિવારો નાં પ્રત્યેક ખાતેદરો ને એટલી રકમ આપવામાં આવશે કે જે સરકાર દ્વારા નિર્ધારિત કરવાં આવશે, આ નિર્ધારિત રકમ 20,000 થી ઓછી હશે નહિ. જમીન, મકાન તેમજ અન્ય સંપત્તિ નું સંપાદન જે નીતિ થી કરવામાં આવ્યું છે વળતર ની રકમ કરતા નીતિનાં અન્ય ફાયદા પણ આપવામાં આવશે.
- પરંતુ જો આવી જમીન નાં સંપાદન થી જમીનવાળા કિસ્તાનો જમીન વગરના બનીજાય છે અથવા નાના તેમજ સીમાન્ત કિસ્તાનોની શ્રેણીમાં આવી જાય છે, તો તે પુનર્સ્થાપન સહાયતા ના રૂપમાં 750 દિવસ ની કૃષિ મજુરી મળવા ને પાત્ર છે.

વળતર ની રકમની ગણના

- સેક્સન 20A(8 (a), સેક્સન 20 F) ના અધારે જહેર નામાની પ્રસ્થિધી ની તારીખે જમીન ની બજાર કિંમત
- જમીન પર અધિકર લેવાના સમયે, અન્ય જમીનથી આ જમીનને અલગ કરતી વખતે હિત બધ્ધ વ્યક્તિ દ્વારા ભોગવતી પેડેલ નુકસાની (8(b), સેક્સન 20F)
- જમીન પર અધિકર લેવાના સમયે, હિત બધ્ધ વ્યક્તિ દ્વારા કોઈ પણ પ્રકારે તેમની સ્થાવર સંપત્તિ અથવા તેમની રોજગારી ને પ્રભાવિત કરવા વાળા જમીન અધિકૃત્ત્વ ના કારણે ઊંકાવવા માં આવેલ નુકસાની (8(C), સેક્સન 20F)
- જમીન અધિકૃત્ત્વ કરવાથી કોઈપણ વ્યક્તિ પોતાના નિવાસ તેમજ વ્યવસાય ના સ્થાનો બદલવામાં બાધ્ય બનેતો તેમના પરિવર્તન માટે આનુષંગિક ચુક્તિ ચુક્ત વ્યય (8(વ), સેક્સન 20F)
- ઉપર ભતાવ્યા મુજબ જમીનની બજાર કિંમત કરતા વધુ યથાસ્થિતિ, સહકર્મ પ્રાધિકારી તેમજ મધ્યસ્થ, દરેક બાબતમાં અધિકૃત્ત્વ ની અનીવાર્ય સ્થિતિ ના રૂપ માં, આવી બજાર કિંમત પર 60(%) ટકા વધુ રકમ આપવામાં આવશે.

રેલ, અધિનિયમ, 2008 અન્તર્ગત જમીન સંપાદન પ્રક્રિયા નું સંચિત



નોંધ: જે.બી.આઈ.સી. સેપ્રોક ટીમ દ્વારા ડી.એફ.સી. પરિયોજના માટે બનાવવામાં આવેલ, જે આર.એ.એ. 2008 પર આધારિત છે, કોષ્ટક માં લખાયેલ અંક આર.એ.એ. ની ધાર ઓ બતાવે છે.

મુળ જિવાસી વ્યક્તિ તેમજ અનુસુચિત ખતિ/અનુસુચિત જન ખતિઓ માટે

પુનર્વાસ અને પુનર્સ્થાપન ની વિશેષ સુવિધા

- વળતર રાષ્ટ્રીય પુનર્વાસ અને પુનર્સ્થાપન નીતિ 2009 અનુસાર આપવામાં આવશે.
- જિલા પ્રશાસન અધિકારી ને વળતર તેમજ સહાયતા ની પ્રક્રિયાને સરળ બનાવવા માટે અનુરોધ કરવામાં આવશે.

અનધિકૃત તેમજ ઠરઠા વગર રહેતા લોકો માટે વળતર

અનાધિકારીઓ ને પ્રભાવિત ઢાંચાના મુલ્ય ના રુપમાં વળતર આપવામાં આવશે.

સ્વામુહિક સંપત્તિ સંસ્થાધનો નું વળતર

જો પુનર્સ્થાપન થાય છે તો, પુનર્સ્થાપન થાવા વાળી જગ્યાએ અસરગ્રસ્તો ને જે સુવિધાઓ આપવામાં આવે છે તેવી જ સુવિધાઓ પરિયોજના કિયાન્વયન સંસ્થા દ્વારા તે જગ્યાએ પહેલાથી રહેનાર પરિવારોને પણ આપવા માં આવશે.

ફરિયાદ નીવારણ

મુખ્ય પરિયોજના અધિકારી ચોતાના ક્ષેત્ર ની ફરિયાદ સંભાળશે

ડી.એફ.સી.સી.આઈ.એલ. ના મુખ્ય પરિયોજના અધિકારી કાર્યાલયોના સરનામા,

પ્રમુખ પરિયોજના અધિકારી કાર્યાલય જયપુર
બી-૧૨, હનુમાન નગર, મેટ્રો હોસ્પિટલ ની સામે, સિરસી રોડ, જયપુર

પ્રમુખ પરિયોજના અધિકારી કાર્યાલય અજમેર
૪૨ એ/ ૩ સિવિલ લાઈન, અજમેર-૩૦૫૦૦૧

પ્રમુખ પરિયોજના અધિકારી કાર્યાલય અમદાવાદ
જુના ડી.આર.એમ.લવન, પહેલો માળ, અમદાવાદ રેલ્વે સ્ટેશન, અમદાવાદ-૩૮૦૦૦૨

પ્રમુખ પરિયોજના અધિકારી કાર્યાલય વડોદરા
13-14, 17-18, પનોરમા કોમ્પ્લેક્સ, ત્રીજો માળ, આર સી દત્ત રોડ, અલકાપુરી વડોદરા-7

