Republic of Tajikistan Ministry of Transport

Republic of Tajikistan The Project for Capacity Development for Road Disaster Management

Project Completion Report

February 2021

JAPAN INTERNATIONAL COOPERATION AGENCY
CTI ENGINEERING INTERNATIONAL CO., LTD.
KOKUSAI KOGYO CO., LTD.
CENTRAL NIPPON EXPRESSWAY CO., LTD.

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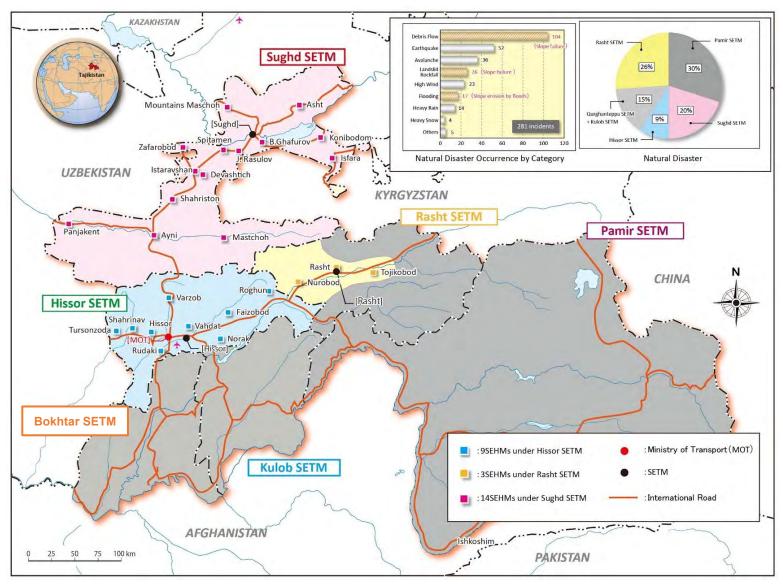
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Location Map

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List of Abbreviations/Acronyms

ADB	Asian Development Bank
CBR	Cost Benefit Ratio
CoESCD	Committee for Emergency Situations and Civil Defense
COVID-19	Coronavirus Disease 2019
C/P	Counterpart
DB	Database
DI	Scientific Research, Design and Survey Institute
DIR	Department of International Relations
EAF	Economic Analysis and Forecasting Department
EBRD	European Bank for Reconstruction and Development
GIS	Geographic Information System
ITU	Information Technology Unit
JCC	Joint Coordination Committee
ЛСА	Japan International Cooperation Agency
MOT	Ministry of Transport
MPEU	Maintenance, Planning, and Evaluation Unit
PDM	Project Design Matrix
PO	Plan of Operation
RCM	Road Construction and Management Department
RCU	Road Construction Unit
R/D	Record of Discussion
RDMT	Road Disaster Management Taskforce
RRT	Rapid Response Team
SEHM	State Enterprise for Highway Maintenance
SETM	State Enterprise for Transport Management
WB	World Bank

1 Basic Information of the Project

1.1 Country

Republic of Tajikistan

1.2 Title of the Project

The Project for Capacity Development for Road Disaster Management

1.3 Duration of the Project

Plan: 24th February 2017 – 30th September 2020 Actual: 24th February 2017 – 15th March 2021

1.4 Background

The road network in the Republic of Tajikistan is 27,000km, mostly constructed during the Soviet era. The Ministry of Transport (hereinafter referred to as MOT), the central governing body for the transport sector in Tajikistan has jurisdiction over 14,000 km of the network. Since the country is a landlocked and mountainous (93% of the area is termed mountainous), nearly 90% of freight transport within the country is by road and the road transport plays a vital role in the people's lives, Since independence from the Soviet Union in 1991, the country experienced a fateful civil war in the early 90s causing a severe economic setback which forced road assets unattended and many roads suffered damage during the civil war.

There has been international assistance for rehabilitation of roads for the last 10 years. However, the pavement ration of these roads is only 30% and many arterial roads still have potholes, broken shoulder pavement and other damages indicating inadequate maintenance. It is estimated that about 200km of roads are losing the road function each year.

Until now, Japan International Cooperation Agency (hereinafter referred to as JICA) has been extending its cooperation to MOT for the improvement of road maintenance from both aspects of hard and soft components through "The Project for the Improvement of Road Maintenance" (Technical Cooperation, R/D signed in 2013), "The Project for Improvement of Equipment for Road Maintenance in Khatlon Region and Districts of Republican Subordination" (Grant Aid, G/A signed in 2013) and "The Project for Improvement of Equipment for Road Maintenance in Sughd Region and the Eastern Part of Khatlon Region" (Grant Aid, G/A signed in 2015) and they have contributed to the improvement of road maintenance.

On the other hand, road disaster management has not been conducted in an appropriate manner, although Tajikistan is a mountainous country and has disaster-prone area. Falling rocks, landslide and avalanche disasters occur in many road sections during the severe winter weather season and this may be aggravated during the next spring season when the ice melts and brings down a tremendous volume of the melted water to major rivers flowing through the mountainous passes causing further disasters. Therefore, technical capability improvement on road disaster management of MOT as well as State

Enterprise of Transport Management (hereinafter referred to as SETM) and State Enterprise on Highway Management (hereinafter referred to as SEHM) which is responsible for the management of International and Republican Road is required. Thus, the GOT requested the technical cooperation of Capacity Development for Road Disaster Prevention Management to the GOJ.

In response to this request, JICA dispatched the Detailed Planning Survey mission to discuss the contents of the Project with MOT and other authorities concerned of the Republic of Tajikistan. Based on the agreements between JICA and the authorities concerned of the Republic of Tajikistan, the Minutes of Meetings was signed on September 29, 2016. Hence, the title of the project was renamed as the Project of Capacity Development for Road Disaster Management.

1.5 Overall Goal and Project Purpose

1) Overall Goal: Road disasters are mitigated in the International and Republican Roads in the

target SETMs/SEHMs

2) Project Purpose: Capacity of MOT and the target SETMs/SEHMs for effective road disaster

management is improved

1.6 Implementing Agency

The Project was implemented with the following government bodies.

Ministry of Transport (MOT), Hissor SETM and its 9 SEHMs, Sughd SETM and 14 SEHMs, Rasht SEHM and its 3 SEHMs (Nurobod, Rasht, and Tajikobod) and Scientific Research, Design and Survey Institute (DI).

1.7 JICA Experts Team

The JICA Experts Team (hereinafter the Experts Team) was formed for the Project consisting of CTI Engineering International Co., Ltd. (hereinafter CTII), Kokusai Kogyo Co., Ltd. (hereinafter KKC) and Central Nippon Expressway Co., Ltd. (hereinafter CNE). The team members are listed under Table 2-2.

1.8 Outline of the Project

- 1. Country: Republic of Tajikistan
- 2. Project Title: The Project of Capacity Development for Road Disaster Management
- **3. Project Period:** February 2017 March 2021

4. Overall Goal:

Road disasters are mitigated in the International and Republican Roads in the target SETMs/SEHMs

5. Project Purpose:

Capacity of MOT and the target SETMs/SEHMs for effective road disaster management is improved

6. Output:

- (1) Road disaster management structure of MOT and the target SETMs/SEHMs is strengthened
- (2) Road disaster recoveries by the target SETMs/SEHMs are improved through standardization
- (3) Process of locally adaptable road disaster prevention is established at the target SETMs/SEHMs
- (4) Data necessary for road disaster management is available at MOT and the target SETMs for budget preparation and road disaster recovery and prevention
- (5) MOT and the target SETMs/SEHMs are capable of preparing budget proposal for road disaster prevention

7. Activities:

[Related to Output (1)]

- 1.1 Classify target disasters through collection and analysis of the past disaster record
- 1.2 Review organizational and technical aspects of current state of disaster management relevant to MOT and the target SETMs/SEHMs, including their communication network for disaster recovery called Rapid Response Team (RRT)
- 1.3 Clarify the roles and responsibilities of Road Disaster Management Taskforce (RDMT) supporting SETM/SEHM (RDMT) formed at MOT and its members as well as their capacity development plans.
- 1.4 Support the target SETMs/SEHMs through the Project activities according to the clarified roles and responsibilities (by RDMT)
- 1.5 Develop an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs based on the feedbacks from the project activities for approval by MOT.

[Related to Output (2)]

- 2.1 Examine locally adaptable disaster recovery works based on the current state review (Activity 1.2)
- 2.2 Develop a disaster recovery manual for SETM/SEHM/RRT, including action for preparedness, which is used for Activity 2.3-2.5
- 2.3 Conduct trainings on disaster recovery works to all target SETMS/SEHMs and MOT (i.e. action for preparedness, survey, selection of works, design, cost estimate, supervision, preparation of disaster recovery work sheet) (in Hissor and Sughd SETMs)
- 2.4 Conduct on-site drills for simulated disaster recovery for all target SETMs/SEHMs (in Hissor and Sughd SETMs)
- 2.5 Plan and implement disaster recovery works for the disasters occurred in any target SEHMs by the relevant SEHMs/SETMs
- 2.6 Update and finalize the manual reflecting feedbacks from Activities 2.4-2.6
- 2.7 Certify trainers for disaster recovery from the staff of the target SETMs/SEHMs

[Related to Output (3)]

- 3.1 Examine hazard evaluation methods and locally adaptable prevention measures based on the current state review (Activity 1.2)
- 3.2 Develop a disaster prevention manual for SETM/SEHM, consisting of hazard evaluation and locally adaptable prevention measures, which is used for Activity 3.3-3.10

- 3.3 Conduct trainings on hazard evaluation to all target SETMs/SEHMs and MOT (i.e. screening, selection of hazardous sites, hazard/risk assessment and preparation of hazard evaluation sheet) (in Hissor and Sughd SETMs)
- 3.4 Select the target sections for hazard evaluation in each SETM
- 3.5 Conduct hazard evaluation at the target sections by all target SEHMs in coordination with the respective target SETMs

[Related to Output (4)]

- 4-1. Develop a plan for road disaster management database (data collection system) based on the current state review (Activity 1.2)
- 4-2. Design a database (disaster management data collection) system with installed hardware, consisting of spread sheets
- 4-3. Develop road disaster management database (data collection system) manuals for users (i.e. MOT and the target SETMs) and administrator, which are used for Activity 4.4-4.10
- 4-4. Conduct trainings on database (disaster management data collection) use for MOT and all target SETMs (i.e. collection, input, compilation, analysis and reporting of data) (at MOT and each target SETM)
- 4-5. Collect data of disaster recovery at all target SETMs in 2017 as baseline data in the prescribed from improved by the Project
- 4-6. Collect data necessary for disaster management from the target SEHMs (i.e. disaster recovery sheets, hazard evaluation sheets, end prevention measure sheets)
- 4-7. Digitalize the data collected from the target SEHMs by the respective target SETMs for submission to MOT
- 4-8. Integrate the digitized data submitted by the target SETMs into the database
- 4-9. Release the database (disaster management data collection) to MOT and all target SETMs
- 4-10. Develop simple annual road disaster management report for senior management of MOT
- 4-11. Update and finalize the database (data collection system) design and the manuals, reflecting feedbacks from the database users

[Related to Output (5)]

- 5.1 Plan and implement a pilot study on cost-effectiveness of locally adaptable disaster prevention measures at the target sections selected in the first year under Output 3, using simple hazard location maps.
- 5.2 Create a budget item for disaster prevention in the regular budget of SETM/SEHM/MOT
- 5.3 Prepare budget for locally adaptable disaster prevention for the priority sites identified under Output 3 by all the target SEHMs/SETMs and MOT, utilizing the results of Output 3&4
- 5.4 Develop project proposal(s) on large-scale prevention measures for the priority site(s) in the target section(s) under Output 3, which cannot be handled by the target SETMs/SEHMs, and studies for prevention measures for funding by international donor(s) as needed, utilizing the results of Output 3 &4.

8. Counterparts:

Ministry of Transport (MOT), Hissor SETM and its 9 SEHMs, Sughd SETM and 14 SEHMs, Rasht SEHM and its 3 SEHMs (Nurobod, Rasht, and Tajikobod) and Scientific Research, Design and Survey Institute (DI)

2 Results of the Project

2.1 Results of the Project

2.1.1 Input by the Japanese Side

Table 2-1 Summary of Input by Japanese Side

Planned	Actual	Remark
1. Experts: 82.55MM	1. Experts: 86.15MM (104.4%)	Total Man-Month
1) Chief Advisor / Road Disaster Management	1) Chief Advisor / Road Disaster Management	
2) Deputy Chief Advisor / Road Disaster	2) Deputy Chief Advisor / Road Disaster	See detail of expert
Management 2	Management 2	input in Table 2-2
3) Institution	3) Institution	
4) Disaster Recovery Measures	4) Disaster Recovery Measures	
5) Disaster Prevention Measures 1	5) Disaster Prevention Measures 1	
6) Disaster Prevention Measures 2	6) Disaster Prevention Measures 2	
7) Hazard Evaluation	7) Hazard Evaluation	
8) Machineries and Equipment O&M	8) Machineries and Equipment O&M	
9) Cost Estimation	9) Cost Estimation	
10) Database 1	10) Database 1	
11) Database 2	11) Database 2	
12) Instrumentation Monitoring	12) Instrumentation Monitoring	
13) Project Monitoring / Japan Training	13) Project Monitoring / Japan Training	
2. Equipment:	2. Equipment:	For holding a remote
- Total station: 3 units	- Total station: 3 units	on-line conference
- Auto level: 6 units	- Auto level: 6 units	(JCC meeting,
- Radar distance meter: 31 units	- Radar distance meter: 31 units	dissemination
- Early warning monitoring equipment: 8 sets	- Early warning monitoring equipment: 8 sets	seminar)
- Giant breaker: 2 units	- Giant breaker: 2 units	
- Handheld breaker: 4 units	- Handheld breaker: 4 units	
- Prefabricated Steel Cage for Gabions: 1 set	- Prefabricated Steel Cage for Gabions: 1 set	
- Flexible intermediate bulk containers: 1 set	- Flexible intermediate bulk containers: 1 set	
- Satellite phone: 2 units	- Satellite phone: 2 units	
- Printer: 1 unit	- Printer: 1 unit	
- Laptop computer: 3 sets	- Laptop computer: 3 sets	
- Desktop computer: 4 sets	- Desktop computer: 4 sets	
	- Video conferencing system: 2 sets	
3. Training in Japan: 2 times	3. Training in Japan: 2 times	See detail of training
		in Japan in Table 2-3
	1	<u> </u>

Note: The boldfaced in the above table show the contents modified during the Project from the original plan.

Table 2-2 Name List of JICA Expert Team

No.	Name	Position	Company	MM	Work in Tajikistan	Work in Japan	Total
1	Hiroshi	Chief Advisor/ Road Disaster	CTH	Plan	9.53	1.00	10.53
1	MITA	Management 1	CTII	Actual	7.06	4.07	11.13
2	Takashi	Deputy Chief Advisor/ Road	KKC	Plan	4.10	0.50	4.60
2	KUWANO	Disaster Management 2	KKC	Actual	4.10	0.50	4.60
3	Hironori	Institution (~July 2019)	CNE	Plan	5.30	0.00	5.30
3	INOUE	institution (~Jury 2019)	CNE	Actual	3.23	0.00	3.23
4	Daisuke	Institution (August 2019~ July	CNE	Plan	0.00	0.00	0.00
7	HAJIMA	2020)	CNE	Actual	1.43	0.27	1.70
5	Toshiyuki	Institution (August 2020~)	CNE	Plan	0.00	0.00	0.00
	MORI	mstitution (August 2020 -)	CIVE	Actual	0.00	0.97	0.97
6	Robinson	Disaster Recovery Measures	CTII	Plan	7.80	0.00	7.80
0	SHRESTHA	Disaster Recovery Measures	CIII	Actual	6.20	2.20	8.40
7	Masanori	Disaster Prevention Measures	CTII	Plan	8.83	0.00	8.83
/	TOZAWA	1	CIII		8.17	1.26	9.43
8	Masashi	Disaster Prevention Measures	CTH	Plan	5.00	0.00	5.00
0	ІЛСНІ	2	CTII	Actual	5.00	0.00	5.00
9	Takashi	Hazard Evaluation	KKC	Plan	8.00	0.00	8.00
9	HARA	Hazard Evaluation	KKC	Actual	7.97	0.03	8.00
10	Satoshi	Machineries and Equipment	CTII	Plan	7.20	0.00	7.20
10	KOGAWA	Operation & Maintenance	CIII	Actual	6.00	1.20	7.20
11	Hiromitsu	Cost Estimation	CTII	Plan	6.33	1.00	7.33
11	OGATA	Cost Estillation	CIII	Actual	5.97	1.36	7.33
12	Junichiro	Database 1	CTII	Plan	6.87	0.00	6.87
12	OGAWA	Database 1	CIII	Actual	4.86	0.00	4.86
13	Hitomi	Database 2	CTII	Plan	1.03	1.00	2.03
13	IWAMASA	Database 2	CIII	Actual	2.80	2.44	5.24
14	Yoshiyuki	Instrumentation Monitoring	CTII	Plan	5.73	0.00	5.73
14	YAGIRI	instrumentation Monitoring	CIII	Actual	5.73	0.00	5.73
15	Seiji	Project Monitoring/ Japan	CTII	Plan	2.33	1.00	3.33
13	OZAWA	Training		Actual	1.86	1.47	3.33
	Total			Plan	78.05	4.50	82.55
		101111		Actual	70.38	15.77	86.15

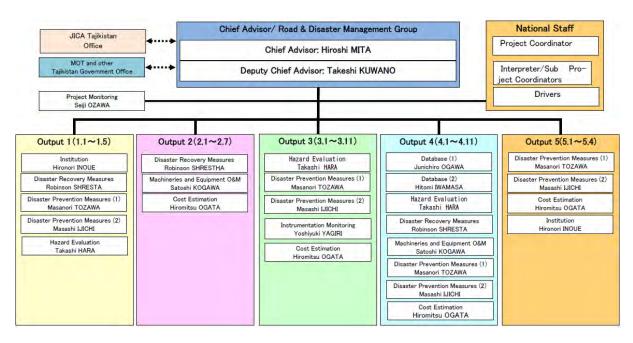


Figure 2-1 Organization of JICA Expert Team

Table 2-3 Training in Japan Conducted by the Project

Year	Schedule	No. of Participants
1st	25 June 2018 ~ 5 July 2018	7
2nd	23June 2019 ~ 4 July 2019	9
	Total	16
		- JICA Hokkaido
		- JICA Chubu
	- Central Nippon Expressway Company Limited	
Orga	nization accepted the training	- CTI Engineering International Co., Ltd.
		- Civil Engineering Research Institute for Cold Region
		- Hokkaido Regional Development Bureau under
		Ministry of Land, Infrastructure, Transport and Tourism

Table 2-4 Name List of Trainees for 1st Training in Japan

No.	Name	Organization
1	Mr. HALIMOV JAMOLUDIN	MOT/RDMT
2	Mr. KHASANOV BAKHROM	SEHM Rudaki
3	Mr. NEMATOV ODILJON	SEHM Faizobod
4	Mr. OBIDOV MITYUBLO	SETM Rasht
5	Mr. QAYUMOV ASLIDDIN	SETM Sughd
6	Mr. OIEV DAVLATBOI	SEHM Ayni
7	Mr. KHUJAMULLOEV KHUKMRON	DI/RDMT

Table 2-5 Name List of Trainees for 2nd Training in Japan

No.	Name	Organization
1	Mr. VALIEV DILSHOD	MOT/EAF
2	Mr. AKSAKOLOV UKUMATSHO	MOT/RDMT
3	Ms. KHOJAROY LATIFY	SETM Sughd
4	Mr. AZIZOV MIRZO	SEHM Mastchoh
5	Mr. ABDIEV FARRUKH	SETM Hissor
6	Ms. BOBOKHONOVA ZUHRO	SEHM Varzob
7	Mr. KURBONALIEV JAMSHED	SEHM Rasht
8	Mr. MAMADJONOV UMED	SEHM Tojikobod
9	Mr. TOIROV TABREZ	DI/RDMT

2.1.2 Input by the Tajikistan Side

Planned	Actual	Remark
1. Personnel	1. Personnel	No change
- Project Director: Deputy Transport Minister, MOT	- Project Director: Deputy Transport Minister, MOT	
- Deputy Project Director: Head of RCM, MOT	- Deputy Project Director: Head of RCM, MOT	
- Project Manager: Head of International Relation	- Project Manager: Head of International Relation	
Dept. MOT	Dept. MOT	
- Regional Managers: Heads of the target SETMs	- Regional Managers: Heads of the target SETMs	
- Relevant Staff of MOT	- Relevant Staff of MOT	
- Relevant staff of DI	- Relevant staff of DI	
- Relevant staff of the target SETMs/SEHMs	- Relevant staff of the target SETMs/SEHMs	
- Other personnel mutually agreed upon as necessary	- Other personnel mutually agreed upon as necessary	
2. Land, Building and Facilities	2. Land, Building and Facilities	No change
- Land, building and facilities: necessary for the	- Land, building and facilities: necessary for the	
implementation of the Project	implementation of the Project	
- Office spaces for the Project in the building of	- Office spaces for the Project in the building of	
MOT, Hissar and Soghd SETMs with office	MOT, Hissar and Soghd SETMs with office	
furniture and utilities such as internet connectivity,	furniture and utilities such as internet connectivity,	
telephone line, electricity, etc.	telephone line, electricity, etc.	
3. Local Costs	3. Local Costs	No change
- Cost for installation, operation and maintenance of	- Cost for installation, operation and maintenance of	
the provided equipment	the provided equipment	
- Administration and operational costs, including fuel	- Administration and operational costs, including fuel	
costs, and materials for prevention/recovery	costs, and materials for prevention/recovery	
works. Meal allowances for SETMs/SEHMs to	works. Meal allowances for SETMs/SEHMs to	
participate in training, drills of	participate in training, drills of	
prevention/recovery works.	prevention/recovery works.	

Table 2-6 Joint Coordination Committee (JCC) Meeting

No.	Date	
1st JCC Meeting	May 2017	
2 nd JCC Meeting	July 2017	
3 rd JCC Meeting	November 2017	
4 th JCC Meeting	April 2018	
5 th JCC Meeting	November 2018	
6 th JCC Meeting	April 2019	
7 th JCC Meeting	October 2019	
8 th JCC Meeting	August 2020	
9 th JCC Meeting	December 2020	

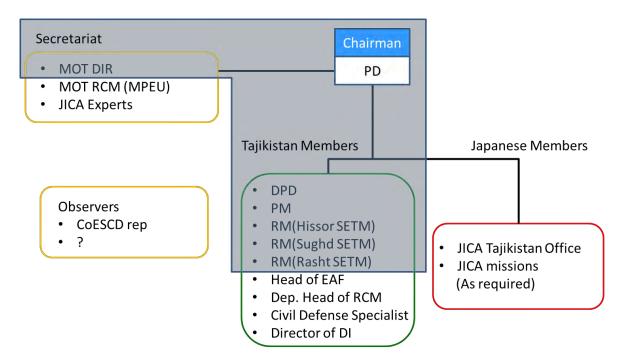


Figure 2-2 Structure of JCC Members

2.2 Achievement of the Project

2.2.1 Outputs and Indicators

(1) Achievement of Output-1

For the disaster prevention management, it is important to establish and strengthen an organizational system. Also, basic data for disaster recovery and disaster prevention is vital for road disaster management. Therefore, at the onset of the project, a baseline survey was conducted to verify classification of the target disaster and organizational/technical conditions related to disaster prevention management. The result of the baseline survey was compiled into a report which became the basis of activities required under of output 2, 3 and 4 under the Project.

In addition, the Road Disaster Prevention Task Force (RDMT) was established under the Project to foster project ownership and securing sustainability of road disaster management by MOT. Before the Project commenced, basic data for disaster recovery and disaster prevention was not sufficiently shared within MOT departments, and when a road disaster occurred, a senior management staff was frequently dispatched to the site. However, after the establishment of RDMT, it became the central point of contact upon disaster occurrence and to take an active role in enabling MOT to dispatch necessary directions to SETMs/SEHMs. Furthermore, at the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs was prepared by the C/Ps based on the feedback of each activity with support from the Experts, and this plan including institutionalization of RDMT was approved by MOT. By visualizing the roles and responsibilities of each organization in charge, a sustainable system of disaster management was built that would function upon completion of the Project. In addition, 2 people belonging to RDMT members were promoted to higher managerial positions of MOT thus enabling making decisions related to road disaster management.

Major achievements under this output are listed as follows;

- i) Review of the current situation of organizational and technical aspects related to disaster prevention management
- ii) Clarification of roles and responsibilities of RDMT formed to support the target SETMs/SEHMs
- iii) Aggressive and continuous support by RDMT members on project activities steadfastly fostering project ownership
- iv) Development of improvement plan for the disaster management structure of MOT and the target SETMs/SEHMs in collaboration with C/Ps based on the feedback of each activity, and approved this plan by MOT

Table 2-7 Results Summary of Output-1

Out	Output 1: Road Disaster Management Structure of MPT and the Target SETMs/SEHMs Is Strengthened							
	Indicators	Before project (February 2017)	Achievement (February 2021)	Means of Verification	Achieved / Not Achieved			
1a.	By Jun 2017, a report on current disaster management relevant to MOT and the target SETMs/SEHMs is developed	- Lack of basic data on road disaster management	- The review results of current disaster management relevant to MOT and the target SETMs/SEHMs were compiled as a report at the end of June 2017.	- Current Road Disaster Manageme nt Report	Achieved			
1b.	By July 2017, roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM(R DMT) is clarified.	- No taskforce is established.	- RDMT was established in July 2017 and roles and responsibilities are clarified Roles: RDMT acts as a team to participate in all project activities to achieve all outputs in cooperation with the Experts Team. All members will acquire skills and knowledge to enhance own specialized field of road disaster management duties of MOT and Design Institute. The team will support activities of other counterparts Responsibilities: Members will share activities so that participation in project activities do not hinder other duties of MOT and DI. As such, RDMT will convene a monthly meeting so that participation by each member is prearranged considering the specialized field of each member. Upon confirming that monthly meetings are held as agreed, targets and development plans of each member will be agreed with the Experts Team.	- Approval on 2 nd JCC	Achieved			
1c.	By the end of the Project, 80% of members of RDMT are able to support SETMs/SEHMs according to their respective roles and responsibilities.	- No taskforce is established.	- Roles and responsibilities of each member were approved in July 2018 and put into action RDMT actively participate in activities to achieve Output-2 to Output-5 (80% or more of the members participate in each activity at least once) and support the target SETMs/SEHMs.	- Final Progress Report (DEC 2020)	Achieved			
1d.		- No plan of disaster management structure of MOT and the target SETMs/SEHMs is established.	- An improvement plan for the disaster management structure of MOT and the target SETMs/SEHMs is developed in collaboration with C/Ps based on the feedback of each activity and approved by MOT in October 2020. - MPEU appointed as in charge of the	- MOT Approval letter	Achieved			

Output 1: Road Disaster Management Structure of MPT and the Target SETMs/SEHMs Is Strengthened							
Indicators	Before project (February 2017)	Achievement (February 2021)	Means of Verification	Achieved / Not Achieved			
including institutionalizatio n of RDMT, is approved by MOT		disaster prevention management system, and a system was built in which RDMT members continue to support activities even after the project.					



Baseline Survey



RDMT Monthly Meeting



Presentation by RDMT in JCC Meeting



Discussion on the Database System

(2) Achievement of Output-2

In Tajikistan, road disaster management is mainly limited to post disaster recoveries from major road disasters such as slope failure, rockfall and avalanches. These post disaster recoveries were carried out utilizing limited resources of budget, manpower and machineries action was heavily relied upon experience and knowledge of veteran engineers and technicians without an overall standardization. It was therefore an urgent task of the Experts Team to understand how recovery works were carried out by various SETMs at the initial stage of the project from the prospective of standardization. Based on the result of the baseline survey the Experts Team and the C/Ps agreed on standardizing main elements of disaster recovery works. Thus, the tangent for technical transfer on Output 2 was to achieve 1) identifying the size of disasters and post action required, 2) preparation of method statements of disaster recovery, 3) effective use of machineries and equipment, and 4) safe working procedures for disaster recovery by lectures and on site drills. It was confirmed from the test results conducted after the training and on-site drills that these transferred knowledges and techniques were fully understood by the target SETMs/SEHMs.

The Experts Team made efforts so that the manual prepared in this activity was full of figures and illustrations. Thus, the manual became user friendly for even non-experienced engineers and technicians. In addition, reference documents prepared during seminars, workshops and on the trainings were enclosed in the manual. This promoted understanding of C/Ps. The manual provided to the C/Ps was prepared the form of both publication and digitalized formats. The aim of such was to utilize the manual effectively even after the completion of the Project. Through such activities, the Experts Team is confident that skills and know-hows acquired by the C/Ps under the Project will be transferred and disseminated within MOT, SETMs and SEHMs. Thus, the standardization process for disaster recovery works would be fixed into the disaster management system.

Major achievements under this output are listed as follows;

- i) Developed a road disaster recovery manual and approved the final version by MOT
- ii) Participation of all target SETMs/SEHMs in trainings and on-site drills and passing the subsequent examinations
- iii) Acquiring of knowledges and techniques through continuous follow-up training
- iv) Planning and implementation of disaster recovery works for the disaster occurred in target SEHMs with understanding the contents of the manual

Table 2-8 Results Summary of Output-2

Out	Output-2: Road disaster recoveries by the target SETMs/SEHMs are improved through standardization						
	Indicators	Before project (February 2017)	Achievement (February 2021)	Means of Verification	Achieved / Not Achieved		
2a.	By Dec 2017, a road disaster recovery manual for SETM/SEHM/RRT is developed	- No manual for road disaster recovery	- Developed the Road Disaster Recovery Manual (First Edition) in December 2017.	- Road Disaster Recovery Manual (First Edition)	Achieved		
2b.	80% of the training participants from all target SETMs/SEHMs passes the post-training test on disaster recovery works	- No training for disaster recovery workers	 Disaster recovery work training was conducted using the manual in February 2018. All participants (100% = 59/59) passed the post-training exam. 	- Test results	Achieved		
2c.	80% of the trainees from all target SETMs/SEHMs passes the post-drill test on disaster recovery works for each job category	- No training for disaster recovery workers	- Mock trainings of disaster recovery works were conducted a total of three times, and all participants (100% = 56/56) passed the post-training test.	- Test results	Achieved		
2d.	Disaster recovery works in the drills are planned and implemented by all target SETMs/SEHMs according to the manual	- No training for disaster recovery workers	- All target SETMs/SEHMs planed and implemented disaster recovery works according to the manual in the drills.	- Review by the Experts	Achieved		

Out	Output-2: Road disaster recoveries by the target SETMs/SEHMs are improved through standardization						
	Indicators	Before project (February 2017)	Achievement (February 2021)	Means of Verification	Achieved / Not Achieved		
2e.	Disaster recovery works at the actual disaster sites are planned and implemented by all relevant target SETMs/STHMs according to the manual	- Disaster recovery works rely upon experience and knowledge of engineers and technicians without an overall standardization	- On July 2019, the plan of disaster recovery works conducted by C/Ps based on the manual at the four SEHMs under the jurisdiction of Soghd SETM was confirmed by Experts, and opinions were exchanged and advice was given for future improvements for C/P.	- Review by the Experts	Achieved		
2f.	By the end of the Project, the finalized manual is approved by MOT	- No manual for road disaster recovery	- Approved the finalized manual by MOT in December 2020.	- MOT Approval letter	Achieved		



On-site drill using Total Stations



On-site training using Rock Brakers



Post-training test after training



follow-up Training

(3) Achievement of Output-3

The target disasters (slope failure, rockfall, landslide, debris flow, slope erosion by floods and inundation) in this project are classified based on the disaster type and the mechanism of occurrence. In order to implement appropriate hazard evaluation and prevention measures, it is indispensable to fully understand such knowledge, and this is linked to the control of road disaster damage.

In the hazard evaluation activities, technical transfer on understanding hazards involving slope failure,

the most basic element of road disaster prevention, and the evaluation method was conducted through lectures and OJT (On-the-Job Training). In consideration of the limited project period and winter seasons, it was necessary to carry out the detailed planning carefully by the Experts Team in collaboration with the C/Ps in advance. The short-term intensive training was successfully conducted. In addition, a hazard evaluation sheet which reflected the on-site conditions peculiar to Tajikistan was prepared. Disaster factors based on technical and statistical analysis were developed, in which disaster factors were indicated by numerical values. As a result, hazard evaluation could be performed quantitatively, and the C/Ps were able to rank and extract high-risk areas, not relying on experience of veteran engineers.

In activities of disaster prevention measures, the Experts Team placed importance on understanding engineering constraints facing SETMs/SEHMs. Locally adoptable disaster prevention measures taking into consideration of the site condition topography, geology and hydraulic were proposed by the Experts Team in collaboration with the C/Ps. For large-scale disasters prevention measures not capable to be handled directly by MOT due to budgetary constraints, planning was carried for use under Output-5 for preparing project proposals. Through these activities carried out, the target SETMs/SEHMs relieved the technical transfer for a series of road disaster prevention processes from the evaluation to construction stage.

Major achievements under this output are listed as follows;

- i) Developed a road disaster prevention manual, the final version of which was approved by MOT
- ii) Participation of all target SETMs/SEHMs in trainings and passing the subsequent examinations
- iii) Acquiring of knowledge and techniques through continuous follow-up training
- iv) Development of planning and implementation skill on road disaster prevention measures at the target SETMs/SEHMs by understanding the contents of the manual

Table 2-9 Results Summary of Output-3

	Output-3: Process of Locally Adaptable Road Disaster Prevention is Established at the Target SETMs/SEHMs							
	Indicators	Before project (February 2017)	Achievement (February 2021)	Means of Verification	Achieved / Not Achieved			
3a.	By Oct. 2017, a road disaster prevention manual for SETM/SEHM is developed	- No manual for road disaster prevention	- Developed the Road Disaster Prevention Manual (First Edition) in October 2017 Added the section on disaster prevention in August 2018.	- Road Disaster Prevention Manual (First Edition)	Achieved			
3b.	80% of the training participants from all target SETMs/SEHMs passes the post-training test on hazard	- No training on hazard evaluation and locally adaptable	- Over 80% of participants (100% = 58/58) of each training conducted in 2017 and 2018 passed the post-training examination.	- Test results	Achieved			

	Indicators	Before project (February 2017)	Achievement (February 2021)	Means of Verification	Achieved / Not Achieved
	evaluation and locally adaptable prevention measures each	prevention measures			
3c.	Hazard evaluation is conducted at least twice by all target SETM/SEHM for 10 target sections in all target SETMs according to the manual	- Not conducted hazard evaluation	- Hazard evaluations were conducted twice in each of the 10 selected target sections according to the manual. Hissor SETM: 4 sections Sughd SETM: 4 sections Rasht SETM: 2 sections Total: 10 sections	- Review by the Experts	Achieved
3d.	Locally adaptable prevention measures are planned by all target SETMs for 4 priority sites in Hissar and Soghd SETMs according to the manual.	- Not planned for locally adaptable prevention measures	- Identified 4 priority sites and planned locally adaptable prevention measures according to the manual. (Varsob: 2 sites, Ayni: 1 site, Khoja Obi Garm: 1 site)	- Review by the Experts	Achieved
3e.	Locally adaptable prevention measures are implemented by 4 target SEHMs at 4 priority sites in Hissar and Soghd SETMs according to the manual	- Not conducted for locally adaptable prevention measures	- Implemented locally adaptable prevention measures according to the manual at the 4 target priority sites. (November 2018, October 2019)	- Review by the Experts	Achieved
3f.	80% of the observers from the other 22 SEHMs passes the post-observation test on implementation	- Not conducted for locally adaptable prevention measures	- Over 80% (100% = 47/47) of the training participants from the target SETMs/SEHMs passed the post-observation test in December 2018. (Hissor: 13, Sughd: 25, Rasht: 9)	- Test results	Achieved
3g.	By March 2020, future disaster prevention plans are developed for 10 target sections by all target SETMs	- Not planned for future disaster prevention plans	- Based on the results of hazard evaluations conducted in 2017 and 2018, all target SETMs prepared future disaster prevention plans for 10 target sections in May 2020.	- Future disaster prevention plans	Achieved
3h.	By the end of the Project, the finalized manual is approved by MOT	- No manual for road disaster prevention	- Approved the finalized manual by MOT in November 2020.	- MOT Approval letter	Achieved



Installation of Early warning monitoring equipment



Hazard evaluation on the site



Implementation of the Pilot project



Training of disaster prevention measures

(4) Achievement of Output-4

The purpose of developing and maintaining a database (hereinafter referred to as DB) for road disaster management is to effectively compile disaster records stored at various locations in a central location so that such compiled data can be extracted and also acts as a tool for the purpose of disaster recovery and prevention purposes and ideally for the budget purpose. DB was developed by the Experts Team with ease of operation and convenience of users in mind. Since it is also important to fully understand the level of users on computer use before DB development, Experts investigated during the baseline survey necessary basic information for DB system development such as skills and knowledge of computer operation and IT environment available for targeted users. In addition to the step-by-step improvement of the DB, securing the sustainability of DB system by timely responding to the expecting concerns/issues of DB operation/maintenance during or after the project was supported by Experts.

From the perspective of human resource development, lectures and trainings were conducted in a way that foster ownership through discussions and collaboration with the C/P.

In addition, the local project staff were made to fully understand the technical contents of DB by the Experts Team. They conducted multiple follow-up trainings at the target SETMs/SEHMs offering guidance in Tajik. This continued during the period when the expert in charge was not in Tajikistan.

Major achievements under this output are listed as follows;

i) Developed a road disaster management database manual the final version of which was approved by

MOT

- ii) Participation of MOT and all target SETMs/SEHMs in trainings and passing the subsequent examinations
- iii) Acquiring of knowledges and techniques through continuous follow-up training
- iv) Prepared a simple disaster management report and submission of the report to MOT once a year from 2019

Table 2-10 Results Summary of Output-4

	Output 4: Data Necessary for Road Disaster Management is Made Available for MOT and the Target SETMs for Budget Preparation and Disaster Recovery Works and Prevention					
	Indicators	Before project (February 2017)	Achievement (February 2021)	Means of Verification	Achieved / Not Achieved	
4a.	By Dec 2017, road disaster management database (disaster management data collection system) is developed according to the design developed through the Project	- No database	 - Developed road disaster management database (initial version) in October 2017. - Added additional functions to DB system in March 2018. 	- Road disaster management database (initial version)	Achieved	
4b.	By Dec 2017, road disaster management database (data collection system) manuals for users and administrator are developed	- No manual for database	- Developed road disaster management database manual (First Edition) in December 2017 Added section on additional functions to DB system in March 2018.	- Road disaster management database manual (First Edition)	Achieved	
4c.	80% of the training participants from MOT and the target SETMs passes the post-training test on database (disaster management data collection system) use.	- No database	- Over 80% of participants (100% = 18/18) of each training conducted in November and December 2017 passed the post-training examination.	- Test results	Achieved	
4d.	By Mar 2019, the database (disaster management data collection system) is released to MOT and the target SETMs	- No database	- Based on the result of workshops and discussion with ITU and MPEU carried out in October 2018, database was updated on March 2019, and it was released to MOT and the target SETMs in April 2019.	- Letter to MOT	Achieved	
4e.	From 2019, a simple disaster management report is submitted to senior management of MOT once a year	- Not submitted the disaster management report	- Simple disaster management reports utilizing the database are submitted to MOT April 2019 and April 2020.	- Simple disaster management reports	Achieved	

	Output 4: Data Necessary for Road Disaster Management is Made Available for MOT and the Target						
SE	TMs for Budget Preparat	tion and Disaster R	ecovery Works and Prevention	n			
	Indicators	Before project (February 2017)	Achievement (February 2021)	Means of Verification	Achieved / Not Achieved		
4f.	By the end of the Project, the finalized manual is approved by MOT	- No manual for database	- Approved the finalized manual by MOT in January 2021.	- MOT approval letter	Achieved		



DB Training



Follow-up training



Trial of improved DB



DB workshop

(5) Achievement of Output-5

Prevention measures introduced in the Project are essentially measures assessed adequate after implementing both hazard evaluation and analysis on prevention measures which are a new concept to Tajikistan. Therefore, the Experts Team made sure that C/Ps fully understood the concept of technical evidence (especially cost-effectiveness) first policy by utilizing the results of Output-3 and Output-4. The cost-effectiveness of the prevention measures was substantiated by calculating and comparing the cost of the measure to be implemented against its probable economic effect. This technical evidence first policy was used for briefing to other ministries and authorities in charge of financial approval as well as to the public during the dissemination seminar. Also, the Experts Team assisted the C/Ps on preparing supplemental technical references with visual illustrations to enable easier understanding by such third parties. These activities not only promoted to secure the budget in Tajikistan, but also made it possible for the C/Ps to treat it as the main explanatory data/document for the project proposal to be submitted to international donors.

Considering future economic development of Tajikistan, it is indispensable to continuously implement prevention measures even after the Project. Under Output-5, a new cost item for disaster prevention measures was estimated for the preparation of the FY 2021 budget, and a budget plan was prepared in March 2020. At this time, the needs for the budget were emphasized by attaching technical grounds and substantiation paper by which each measure and formulating future plans.

For large-scale preventive and conservation measures that are difficult to be handled by MOT, the activity on preparing project proposals were carried out. Such proposals required an input from the road disaster prevention perspective on 1) how to identify the area affected, 2) the size of the disaster anticipated and 3) what prevention measures would need to be introduced including the cost, investigation and analytical works required. Therefore, the C/Ps were supported by the Experts Team on understanding the theoretical technical basis and on creating project proposals. A project proposal from the MOT combining 3 projects were submitted to the State Investment Committee in June 2020.

As a result of the above activities under Output-5, the technical capacity of MOT and the target SETMs to prepare a budget for road disaster prevention measures has improved, and a budget system has been constructed that will lead to the continuous implementation of road prevention measures even after the project.

Major achievements under this output are listed as follows;

- i) Holding dissemination seminars for enlightening MOF and related agencies on cost-effectiveness (Value for Money) of disaster prevention measure
- ii) Development of a report on the pilot study on cost-effectiveness of disaster prevention measures
- iii) Preparation of the budget proposal for disaster prevention measures for 2022 FY based on the midterm development plans
- iv) Submission of a project proposal for large-scale disaster prevention by MOT to the State Investment Committee

Table 2-11 Results Summary of Output-5

	Output-5: MOT and the target SETMs/SEHMs are capable of preparing budget proposal for road disaster prevention							
	Indicators	Before project (February 2017)	Achievement (February 2021)	Means of Verification	Achieved / Not Achieved			
5a.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed	- No study/ report of locally adaptable disaster prevention	- Developed a pilot study report on the cost-effectiveness of locally adaptable disaster prevention in March 2020 and submitted it to MOT.	- Pilot study report	Achieved			
5b.	By the end of the	- Not prepared of	- The annual budget for 3 sites	- Budget	Achieved			

Output-5: MOT and the target SETMs/SEHMs are capable of preparing budget proposal for road disaster prevention					
In	ndicators	Before project (February 2017)	Achievement (February 2021)	Means of Verification	Achieved / Not Achieved
for I adap prev mea prep targ MO regu FY 2	get proposal locally ptable disaster vention asures are pared by all let SETM and of as part of the alar budget for 2022 based on future elopment plans	budget proposal based on the future development plans	were prepared by undertaking design, planning and cost estimation by C/Ps with guidance by the Experts Team. - However, the submission of the budget from MOT to MOF was postponed due to the unexpected outbreak of the COVID-19.	proposal for locally adaptable disaster prevention measures	
Projone propscal- prev prio stud prev subi to ir done fund	the end of the ject, at least project posal for large-e disaster vention of the prity site(s) and lies for vention is mitted by MOT international or(s) for ding, utilizing results of put 3 and 4	- Not submitted project proposals for large-scale disaster prevention by MOT to international donors	- Under the guidance of Experts, a total of three project proposals were prepared by the target SETMs/SEHMs and submitted to the MOT. - MOT submitted these three project proposal budgets with combining into one to the Tajikistan Investment Commission in June 2020 so that it will be included in the list of investment programs 2021-2025 in Tajikistan. After government approval, this project proposal to be submitted to international aid agencies by either the government or the MOT.	- MOT Interview	Not Achieved



Seminar for MOT and three SETMs



Cost estimation training for target SETMs/SEHMs

2.2.2 Project Purpose and Indicators

(1) Project Purpose

The project purpose is expected to be achieved by outputs achievements (Figure 2-3). The achievement status of project purpose based on indicators is shown in Table 2-12.

Overall Goal: Road disasters are mitigated in the International and Republican Roads in the target SETMs/SEHMs

- a. All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project.
- b. By Jul 2024, disaster prevention measures are planned and / or implemented at least 5 priority sites in the target SETMs according to the disaster prevention manual developed through the Project.
- c. From Aug 2020 to Jul 2023, the average duration required for road re-opening per disaster handled by the target SETMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018)

Project Purpose: Capacity of MOT and the target SETMs/SEHMs for effective road disaster management is improved

- a. By the end of the Project, 80% of results of the disaster recovery works by the target SETMs/ SEHMs, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans
- b. By the end of the Project, 80% of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the Japanese Expert Team
- c. 80% of results of the disaster prevention measures #2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality and safety specified in the plans.
- d. By the end of the Project, budget request for disaster prevention in the target SETMs for FY 2022 is submitted to Ministry of Finance (MOF) as part of the regular budget

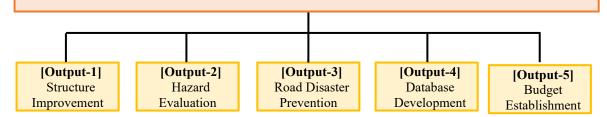


Figure 2-3 Schematic Structure of the Project Outputs

 Table 2-12
 Results Summary of Project Purpose

	Project Purpose: Capacity of MOT and the target SETMs/SEHMs for effective road disaster management is improved				
	Indicators	Achievement in February 2021		Means of Verification	Related outputs and other intervention
a.	By the end of the Project, 80% of results of the disaster recovery works by the target SETMs/ SEHMs, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans	- Over 80% (100% = 70/70) of results of disaster recovery works by the target SETMs/ SEHMs, according to the disaster recovery manual, meet requirements of time, cost, quality, and safety specified in the plans.	100%	- Review by the Experts	[Related output] - Output-2 [Other intervention] - Not Applicable
b.	By the end of the Project, 80% of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the Japanese Expert Team	- Over 80% (100% = 240/240) of the results of the hazard evaluation that was conducted by all target SEHMs according to the manual was assessed accurate by the Japanese Expert Team.	100%	- Review by the Experts	[Related output] - Output-3 [Other intervention] - Not Applicable
c.	80% of results of the disaster prevention measures #2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality and safety specified in the plans.	- Over 80% (100% = 4/4) of results of the disaster prevention measures that was carried out by Hissor and Sughd SETM and 2 target SEHMs according to the manual was confirmed to meet requirements by the Japanese Experts Team.	100%	- Disaster prevention measures sheet and activity report	[Related output] - Output-3 [Other intervention] - Not Applicable
d.	By the end of the Project, budget request for disaster prevention in the target SETMs for FY 2022 is submitted to Ministry of Finance (MOF) as part of the regular budget	- The budget request for FY 2021 had to be postponed due to the unexpected impact of the outbreak of COVID-19. In August 2021, the MOT is expecting to submit a budget request for disaster prevention in the target SETMs to MOF as part of the regular budget for FY 2022.	0%	- MOT Interview	[Related output] - Output-5 [Other intervention] - Not Applicable

(2) Overall Goal

Achievement status of overall goal based on indicators is shown in Table 2-13.

Table 2-13 Results Summary of Overall Goal

	Overall Goal: Road disasters are mitigated in the International and Republican Roads in the target SETMs/SEHMs				
	Indicators	Achievement in February 2021		Means of Verification	Related outputs and other intervention
a.	All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project. By Jul 2024, disaster	- All disaster recovery works by the target SETMs/SEHMs are planned and implemented since introducing of disaster recovery manual (April 2018). The number of works as at end of project in each SETM are following: SETM Hissor: 20 SETM Sughd: 28 SETM Rasht: 22 Total: 70 - This needs to be maintained In May 2020, the target SETM	100%	- Database record	[Related output] - Output-2 [Other intervention] - Not Applicable
0.	prevention measures are planned and / or implemented at least 5 priority sites in the target SETMs according to the disaster prevention manual developed through the Project.	planned disaster prevention measures for 10 sections according to the disaster prevention manual. These plans were submitted to the MOT and approved in June 2020 This needs to be maintained.	100%	approval letter	- Output-3 [Other intervention] - Not Applicable
c.	From Aug 2020 to Jul 2023, the average duration required for road re-opening per disaster handled by the target SETMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018)	- The average duration required for road re-opening per disaster handled by the target SETMs is as follows. The average duration in 2019 has decreased by more than 20% compared to 2017 and 2018. Vear	100%	- Database record	[Related output] - Output-3, 4 [Other intervention] - Not Applicable

2.2.3 History of PDM Modification

Table 2-14 History of PDM Modification

Version	Date	Amendment of PDM	
Version 0	February 2017	Original	
Version 1	July 2017	1. Indicators (Overall Goal, Project Purpose and Output) [Amendment]	
		1) Overall Goal b: at least $X \rightarrow$ at least 5 priority sites	
		2) Overall Goal c: is decreased by $X\% \rightarrow$ is decreased by 20%	
		: from X to X \rightarrow from May 2017 to April 2018	
		3) Project Purpose a, b and c: $X\% \rightarrow 80\%$	
		4) Output 1c, 2b, 2c, 3b, 3f and 4c: $X\% \rightarrow 80\%$	
		[Reason]	
		- Setting of time and clarification of target numbers	
Version 2	November	1. Indicators (Output)	
	2018	[Amendment] Added bold description	
		1) 4a. By Dec 2017, road disaster management database (disaster management data collection system) is developed according to the design developed through the Project	
		2) 4b. By Dec 2017, road disaster management database (data collection	
		system) manuals for users and administrator are developed	
		3) 4c. 80 % of the training participants from MOT and the target SETMs	
		passes the post-training test on database (disaster management data	
		collection system) use.	
		4) 4d. By March 2019, the database (disaster management data collection	
		system) is released to MOT and the target SETMs	
		2. Activities	
		[Amendment] Added bold description	
		1) 4.1 Develop a plan for road disaster management database (data	
		 collection system) based on the current state review (Activity 1.2) 4.2 Design a database (disaster management data collection) system 	
		with installed hardware, consisting of spreadsheets	
		3) 4.3 Develop road disaster management database (data collection	
		system) manuals for users (i.e. MOT and the target SETMs) and administrator, which are used for Activity 4.4-4.10	
		4) 4.4 Conduct trainings on database (disaster management data	
		collection system) use to MOT and the target SETMs (i.e. collection, input, compiling, analysis and reporting of data) at MOT and each SETM	
		5) 4.9 Release the database (disaster management data colle	
		system) to MOT and all target SETMs	
		6) 4.11 Update and finalize the database (data collection system) design	
		and the manuals reflecting feedbacks from the database users	
		[Reason]	
X7 : 2	T 1 2020	- Clarified the role and definition of "database" in this project	
Version 3	July 2020	1. Project Period	
		[Amendment] There were and four months from the data when the first Japanese Expert	
		Three years and four months from the date when the first Japanese Expert	
		arrived in Tajikistan (i.e. 12/April/2017 to 11/August/2020) →Three years and eleven months from the date when the first Japanese Expert	
		arrived in Tajikistan (i.e. 12/April/2017 to 11/March/2021)	
		2. Indicator (Overall Goal and Project Purpose)	
		1) Overall Goal: b. By July 2023 → By Feb. 2024	
		2) Project Purpose: d. for FY 2021 \rightarrow for FY 2022	
		[Reason]	
		- Revised project period and plans under the influence of COVID-19	

2.2.4 Others

(1) List of Products (Report, Manuals, Handbooks, etc.) Produced by the Project

Table 2-15 List of Products Produced by the Project

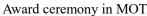
Output	Products (Report, Manuals, Handbooks, etc.)			
Output-1	- Current Road Disaster Management Report (2017)			
	- Improvement Plan of Disaster Management Structure (2020)			
Output-2	- Road Disaster Recovery Manual (2020)			
Output-3	- Road Disaster Prevention Manual (2020)			
Output-4	- Road Disaster Management Database (Data Collection System) Manual (2019)			
Output-5	- Project Proposal for Large-Scale Disaster Prevention (2020)			
	- Study Session Material on Infrastructure Investment System in Japan (2019.11)			
Others	- Seminar Material on Pilots of Road Disaster Prevention (2020.3)			
	- Final Dissemination Seminar Presentation (2021)			
	- Final Progress Report (2021)			

(2) Other Achievement Not Stated in the PDM

i) Commendation by the MOT

In recognition of the high degree of contribution to MOT, Mr. Mita, Chief Advisor of the Expert team, received the "Honorary Road Engineer Award", and two national staff members, Mr. Umed and Mr. Hussein, received the "Encouragement Award". On October 1, 2019, the award ceremony was held by MOT.







Honorary Road Engineer Award

ii) Broadcast nationwide on local TV

During the pilot project of prevention measurement works, an interview by a local TV production company (Johonna MOTV, http://jahonnaMOTj/) was conducted, and the introduction of locally adaptable prevention measures in the pilot project was aired nationwide for about 10 minutes in the evening prime time (October 2019).

The contents of the introduction was included the history and current utilization status of prevention

measures (prefabricated steel cage for gabions) in Japan, the construction/completion status of the pilot project in Varsob and the completion status of other pilot projects in Ayni.







Interview by Local TV

iii) MOT newspaper

In the MOT's internal newspaper, the pilot project in Varsob and the status of observation/analysis and technology transfer on early warning monitoring equipment were introduced.



Articles on the JCC Meeting



Article on Early Warning Monitoring Equipment

iv) Enlightenment by creating videos for the public and students

Publicity videos for enlightenment for children (for elementary and junior high school students) and adults (for people in their 30s to 40s) to disseminate the concept of road disaster prevention was produced.

The content of the video is to enlighten that by utilizing road disaster prevention to road investment, it is possible to develop road's resilience for road disasters and improve productivity in economic and daily activities.

3 Results of Joint Review

3.1 Results of Review based on DAC Evaluation Criteria

In accordance with JICA's Project Monitoring and Evaluation System, the project was evaluated in light of five evaluation criteria of: Relevance, Effectiveness, Efficiency, Impact and Sustainability by the joint review using the following categories: **High, Fair, Low**

Then the total project evaluation rate would be given by;

Highly Satisfactory/Satisfactory/Partially Satisfactory/Unsatisfactory

Based on joint evaluation for DAC Evaluation Criteria, the project was rated as:

Highly Satisfactory

(Evaluation result of sub-criteria, Relevance: High, Effectiveness: High, Efficiency: Fair, Impact: High, Sustainability: High)

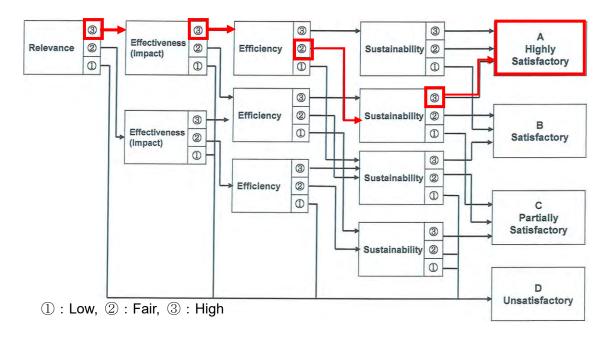


Figure 3-1 Overall Rating of the Project

3.1.1 Relevance

Based on following observation, the Relevance of the Project is evaluated as "High".

(1) Relevance with the Development Policy of the Tajikistan

In 2016, the Tajikistan government adopted the "National Development Strategy of the Republic of Tajikistan for the Period up to 2030". In the current development strategy up to 2030, 3 major points (Strengthening Country's Institutional Capacity, Human Capital Development and Quality of Economic Growth and Efficiency of the Real Sector of Economy) have been identified together with 12 strategy points. One of the specified challenges is significant restoration and development of local infrastructure with low road density and poor road quality. In 2011, the Tajikistan government developed "National Target Development Strategy for Transport Sector of the Republic of Tajikistan to the Year 2025". Under

this development program, the government has the policy of 2020 to 2025 which aims to complete rehabilitation of international and republican roads, and to gradually expanding investment to local roads. In addition, the government places a strong emphasis on improving the road transport infrastructure in order to take advantage of being a vital commercial transit location with bordering countries so that the national economy may be boosted and the national social welfare is stabilized. This project also supported the achievements related to SDGs (Sustainable Development Goals) targets 3, 9, and 11, which are international goals adopted at the United Nations Summit.

At the end of the project, there is no change in the policy of Tajikistan. Thus, the project relevance is still high.

The contribution of this project to other related policies is shown Table 3-1.

Table 3-1 Policies and Contributions

Policy	Goals	Contribution
SDGs United Nations	Goal 3: Good health and well-being	Reduction of traffic accident and road closing by disaster prevention and disaster recovery works Improvement of road/roadside environment by hazard evaluation and disaster prevention
9 MINISTER MINISTERS	Goal 9: Industry, innovation and infrastructure	- Enhancement of road disaster management cycle - Road disaster management by prevention measures - Accumulation of observation data and preparation of estimated budget utilizing DB - Training of SETMs/SEHMs - Improvement of monitoring technology by introducing early warning monitoring equipment
	Goal 11: Sustainable cities and communities	- Maintaining road and roadside environment in a good condition by inspecting on a regular basis
National Development Strategy 2030	- Implementation and achievement of three major points of strategy (Strengthening Country's Institutional Capacity, Human Capital Development and Quality of Economic Growth and Efficiency of the Real Sector of Economy) - Key challenges: Significant restoration and development of local infrastructure with low road density and poor road quality.	 Introduction and institutionalization of road disaster management technology Establishment of RDMT and clarification of their roles and responsibilities Training of SETMs/SEHMs in rural areas Improvement of road/roadside environment by hazard evaluation and disaster prevention
National Target Development Strategy for Transport Sector of the Republic of Tajikistan to the Year 2025	- Complete rehabilitation of international and republican roads, and gradually expanding investment to local roads	 Improvement of road/roadside environment by hazard evaluation and disaster prevention Accumulation of observation data and preparation of estimated budget utilizing DB Improvement of monitoring technology by introducing early warning monitoring equipment Training of SETMs/SEHMs

(2) Relevance with the Assistance Policy of Japan

In the latest National Assistance Policy for Tajikistan (September 2018) under the basic policy of "Support for nation-building capable of sustainable and stable economic and social development", the following three points are mentioned as priority areas of assistance; (i) improvement of economy and industrial development infrastructure, (ii) improvement of basic social services, and (iii) promotion of stabilization. As the content of cooperation for (i) above, development of transportation infrastructure that contributes to the revitalization and stabilization of the local economy by improving logistics by strengthening connectivity between cities and regions in Tajikistan together with connectivity to the Central Asian countries is mentioned. In addition, as the content of cooperation for (ii) above, there is a policy to provide support in the fields of disaster prevention, environment, education, etc. throughout the country including the capital.

From the above, the overall goal of this project is in line with the assistance policy of Japan and is relevant.

(3) Consistency with Needs of Target Group

Tajikistan is a landlocked country surrounded by China, Kyrgyzstan, Uzbekistan, and Afghanistan and depends on road traffic for about 65% of domestic freight transportation and about 99% of passenger transportation (road network extension: about 30,000km). For this reason, domestic highways serve as important transportation infrastructure in Tajikistan's economy and society, and international highways that traverse and cross the country from north to south and east to west are designated as the Asian Highway and the CAREC Corridor (Central Asia Regional Economic Cooperation Corridor). On the other hand, mountainous areas occupy 93% of the country, and about half of the country is covered with mountains at an altitude of 3,000m or so. Roads that pass through mountainous areas are frequently damaged by disasters. These are rockfalls, landslides, and avalanches in winter, as well as floods caused by melted snow in spring, causing regional isolation and delays in the transportation of goods due to road closures. Regardless of this situation, only recovery and maintenance of the roads were conducted after road disasters, without engineering investigation (hazard evaluation) and disaster prevention measures are not planned and implemented. Therefore, this project which aimed to mitigate road disasters in the international and republican roads in the target SETMs/SEHMs by improving the road disaster prevention management capacity of MOT and the target SETMs/SEHMs is consistent with the needs of the target group.

3.1.2 Effectiveness

Based on following observation, the Effectiveness of the Project is evaluated as "High".

(1) Achievement of the Project Outputs

In this part, the achievement status of outputs and project purpose set out in the Project Design Matrix

(PDM) is evaluated. Firstly, the achievement status of each output is summarized in Table 3-2.

Table 3-2 Achievement Status of Outputs

Output	No. of Indicator	No. of Achievement	Achievement Rate
Output-1	4	4	100%
Output-2	6	6	100%
Output-3	8	8	100%
Output-4	6	6	100%
Output-5	3	2	67%
Total	27	26	96%

All but one of the indicators of the Output-5 were achieved. In the unachieved indicator (5c), preparation of the project proposal by C/P and the confirmation by the government was completed as planned by the end of the project. However, owing to the outbreak of COVID-19 and affecting Tajikistan from early 2020, the submission of this project proposal to the international donors was delayed.

(2) Achievement of the Project Purpose

Achievement status of project purpose is summarized in Table 3-3.

Table 3-3 Achievement Status of Project Purpose

Project Purpose	Achievement Rate	Related Outputs
Indicator 1	100%	Output-2
Indicator 2	100%	Output-3
Indicator 3	100%	Output-3
Indicator 4	0% (See 2.2.2)	Output-5
Total	75%	

The indicator 4 is assessed as 0% as the budget request for FY 2021 had to be postponed to FY2022 due to the unexpected impact of the outbreak of COVID-19, same as above achievement of the Project Outputs and thus undeterminable at this point. However, in August 2021, MOT is expected to submit this budget request for disaster prevention in the target SETMs to MOF as part of the regular budget for FY 2022. Therefore, it is most likely to be achieved after the project is completed.

(3) Evaluation of Effectiveness

In addition to achievement of outputs and project purpose, the following two points, which are external conditions, have not changed since the PDM was established and did not affect the achievement of the project purpose.

- i) Natural disaster/political instability/ economic crisis that affect the project activities do not occur
- ii) Security situation of Tajikistan, which limits the activities of the JICA experts, especially in the project sites, does not deteriorate compared with the same in 2016

According to the above results, the activities and outputs of this project were effective in achieving

the project purpose.

3.1.3 Efficiency

Based on following observation, the Efficiency of the Project was evaluated as "Fair". This assessment does not take into consideration of loss of time due to numerous changes made after occurrence of COVID-19 since March 2020 on the project plan. It is assessed that the promptness of change was far quicker than the COVID-19 damage on the project.

(1) Efficiency of Inputs from Japanese Side

The input of experts increased by 4.4% from the original plan, but this was mainly due to the following changes and additions of activities aimed at increasing the added value of the project while being affected by COVID-19. Other activities were completed as originally planned.

- Additional session of Dissemination Seminar held
- Additional survey and reporting on the current road asset management level in Tajikistan

Experts who have different specialties for road disaster management such as hazard evaluation, cost estimation, institution (A specialist from Central Nippon Expressway Co., Ltd. which is road management company took part) and database development were assigned. Development of manuals and technical transfer was carried out by each specialists in charge. Other inputs are mentioned in 2.1.1, and each expert's visit timing to Tajikistan was flexibly adjusted according to the progress and purpose of each outputs, to allow self-growth of C/Ps. The inputs were made with the appropriate quality, quantity, and timing to produce outputs, such as concentrating the inputs in the earlier of the project and dry season. Although the project period was modified due to the impact of the COVID-19, the project plan was flexibly reviewed according to the situation, and all activities were implemented based on the revised plan including remote implementation from Japan. Regarding remote implementation from Japan, a new remote conference equipment was introduced in Tajikistan in consultation with MOT in consideration of the Internet environment and security on the Tajikistan side and simultaneous connection from multiple accounts. By utilizing this equipment, JCC and dissemination seminars were held in the form of Web conferences and it became possible to implement planned operations despite travel restriction of experts.

(2) Efficiency of Inputs from Tajikistan Side

RDMT supported the target SETMs/SEHMs while actively participating in activities toward achieving outputs 2 to 5 according to their respective roles and responsibilities. In addition, since the expenses of the local cost were borne by the Tajikistan side according to the pre-conditions of PDM, activities were conducted smoothly. The project activity costs including travel/accommodation expenses for participation in JCCs, seminars, and trainings were borne by the Japanese side. This encouraged the target SETMs/SEHMs

to participate in project activities. As a result, training participants were 3,571 man-day on 206 events. In this way, the inputs of the project contributed to the efficient achievement of the project outputs.

3.1.4 Impact

Based on following observation, the Impact of the Project was evaluated as "High"

(1) Prospect for Achievement of Overall Goal

Following the achievement of the Project Purpose, in order to achieve the Overall Goal it is important for the Outputs of the project to be deeply understood to ensure satisfactory implementation by MOT and the target SETMs/SEHMs after project completion. The achievement status of the Overall Goal at the end of the project is 100% as shown in Table 2-13. This was the result of achievement of 5 Outputs and the achievement of the Project Purpose (the achievement rate is 100%). This momentum must be kept after the project completion. With following aspects impact for overall goal will be satisfied (see Table 3-4).

Table 3-4 Prospects for Achievement to the Overall Goal

Overall Goal	Impacts to Overall Goal	Condition to satisfy Overall Goal
Road disasters	- All disaster recovery works by the target	- Continuation of planning and
are mitigated in	SETMs/SEHMs are planned and implemented	implementation of disaster recovery
the International	according to the disaster recovery manual	works according to the disaster
and Republican		recovery manual
Roads in the	- Disaster prevention measures for 10 sections	- Implementation of disaster prevention
target	planned according to the disaster prevention	measures based on the plan must be
SETMs/SEHMs	manual by the target SETM	maintained
	- The average duration in 2019 has decreased	- Continuation of more than 20%
	by more than 20% compared to 2017 and 2018.	decrease of average duration

(2) Other Impacts

The following other impacts are observed. In conclusion, the impacts of the Project expanded beyond the improvement of the road disaster management capability of C/Ps.

- Since proper maintenance of road infrastructure will lead to reduction of maintenance costs, ensuring traffic safety, saving of driving costs, and shortening of driving time, this project had a great impact on social economics and local industries.
- A total of two dissemination seminars were held inviting SETMs/SEHMs of the non targeted area, related ministries and agencies including the MOF, international donors, university officials, local residents, etc., who were not included in the C/Ps in this project. Since it was conducted as enlightenment activities on road disasters management in Tajikistan, new channels between the C/Ps and these peripheral parties were developed.
- On the database system introduced in this project, IT engineers commented on the possibility of further updating of the system (such as increasing data types, adding new functions, developing to cloud

network, etc.). In this way, through this collaborative work between the Experts team and the Tajikistan side, it has led to creation of an environment in which the content of system can be independently examined, and the operation and renewal can be considered on its own in the future.

3.1.5 Sustainability

Based on following observation, the Sustainability of the Project was evaluated as "High"

(1) Policy Aspects

As described in the 3.1.1, the current policy and strategy of Tajikistan continues to prioritize the development of road infrastructure. It would not be expected any changes on this policy for time being because of the high demand of infrastructure development. In addition, MOT is aiming to strengthen road asset management in Tajikistan in collaboration with the World Bank and the Asian Development Bank, so it is expected that road disaster management will be further strengthened.

(2) Institutional and Technical Aspects

Through the activities of this project, manuals and DB have been developed, and knowledge and skills of C/Ps related to road disaster management have improved greatly. Since the outputs of this project were achieved and road disaster management work was officially approved by MOT, it can be said that the foundation work for MOT has been established and MOT can continue to accumulate further knowledge and technology on this field. In particular, the fact that two RDMT members were promoted to important positions in MOT during this project will be a big boost for sustainability after this project. Since there is no specific plan of reorganization of MOT or changes of engineers in the target SETMs/SEHMs so far, it is considered that there is almost no possibility of downsizing the organizational aspect of road disaster management. In addition, technical cooperation and continuous activities including the technology transfer of human resource development can be expected through the wide range of personal connections and new channels established through the seminars and trainings conducted in this project. Furthermore, since the systems (DB, Hazard Evaluation, etc.) that were developed under the project were discussed and created by the Experts Team and the C/Ps in collaboration with the aim of creating systems and adopting manuals that can be easily edited and updated, these are expected to be used continuously from the sustainability viewpoint.

(3) Financial Aspects

It is necessary to secure a reasonable budget in order to ensure the implementation of road disaster management by MOT even after the project is completed. This budget security has been a major bottleneck in road asset management in Tajikistan for many years. The Output-5 of this project is the one focusing on this point. A budget system that leads to a continuous implementation of disaster prevention measures was established and MOT and the target SETMs improved their technical ability

required to prepare technical documents and budget proposals for securing a budget. Unfortunately, it was not possible to formally apply for and secure a budget by the end of the project. However, continuous raising awareness of road disaster prevention, which is indispensable for considering future economic development of Tajikistan, and collaborating with the MOF and international donors, the necessary budget allocation expects to be proceeded in the near future.

3.1.6 Conclusion

This project aims to improve the capacity of MOT and the target SETMs/SEHMs for effective road disaster management on international and republican roads under the jurisdiction of the target SETMs in Hissor, Sughd and Rasht regions and the 26 SEHMs under the target SETMs. In addition, the overall goal aims to mitigate road disasters in the International and Republican Roads in the target SETMs/SEHMs. This objective is highly relevant because not only is it consistent with Tajikistan's development policy, development needs and Japan's ODA policy, it is also appropriate in terms of means and timing of implementation. In this project, the road disaster management organization and system, manuals and a database on disaster recovery work, disaster prevention measures and road disaster management, that were not existing prior to the commencement of the project, were established. In addition, not only lectures but also on-site training was conducted to improve the capacity for road disaster management at the site level. As a result, it was confirmed that the understanding and technical capabilities of the road disaster management cycle of C/P were improved, and actual works on the site were implemented according to the manual developed in the project. As a result, the project purpose has been almost achieved, and each indicator of the overall goal has been achieved at the time of project completion, which the effectiveness was evaluated as high. Regarding the impact, since proper maintenance of road infrastructure through the activities of this project will be implemented and it will lead to reduction of maintenance costs, ensuring traffic safety, saving driving costs, and shortening driving time, socio-economy, local industry, etc., it is expected to have a great impact on the future. Also, those who were not included in the C/Ps such as non-targeted SETMs/SEHMs, related ministries and agencies including the MOF, international donors, university officials and local residents were invited to dissemination seminars. In these seminars, it was not only an opportunity for enlightenment of activities related to road disaster management but also for introduction of the project and promotion of understanding to those surrounding the C/Ps themselves in daily activities. Therefore, the impacts of the Project expanded beyond the improvement of the road disaster management capability of C/Ps. In terms of efficiency, the plan of activities of the Project was appropriately reconsidered while being affected by unexpected outbreak of the COVID-19 at the end of the project. Then, IT equipment was introduced in a timely manner, and the project could be completed by remote implementation from Japan. Furthermore, the effect of the project was greatly brought out by conducting additional activities aimed at increasing the added value of the project, activating ownership by establishing RDMT which contributed on gathering a large number of participants in training and seminars consistently. Although project purpose and outputs were achieved,

the efficiency was evaluated as "Fair" based purely on assessing the result of the final input and the final project duration compared to the original plan. This assessment did not take into consideration of loss of time due to numerous changes made after occurrence of COVID-19 since March 2020 on the project plan. Finally, in addition to the above-mentioned organizational and technical capacity improvement, MOT and the target SETMs have improved their capacity to prepare budget proposals for road disaster prevention measures through the activities under output-5. In this way, a budget system which functions for planning and implementation of road prevention measures has been developed by the C/Ps. Therefore, sustainability of the project was evaluated to as high.

From the above, the evaluation of this project is judged to be "Highly Satisfactory".

3.2 Key Factors Affecting Implementation and Outcomes

Followings are the affecting factors observed.

(1) Outbreak of COVID-19

Owing to the outbreak of COVID-19 globally and affecting both Tajikistan and Japan since early 2020, some of the project activities were suspended. In order to achieve the Project Purpose after the resumption of project activities, it was decided to extend the project duration and Japan and Tajikistan side concluded the M/M (Minutes of Meeting) in early June 2020. Considering this situation, the Experts Team introduced IT equipment in a timely manner and completed the project by remote control.

(2) Unforeseen Weather Condition

Owing to the less rainfall than average in rainy season from April to October 2018, road disasters applying the manual did not occur. Therefore, disaster recovery works at the actual disaster sites was postponed to the next year.

(3) Cooperated Operation with Experts Team and C/Ps

The Experts Team assigned experts and local staffs who had experience in the previous JICA technical cooperation project "The Project for the Improvement of Road Maintenance" (2013-2016), and implemented the project as a team. Especially thanks to the strong support of local staffs, it was possible to communicate smoothly with the C/Ps from the initial stage of the project. In addition, since the local staffs were always stationed at the office in MOT, they were able to communicate and support closely with the members of RDMT, which led to smooth project management. Furthermore, during the period when the Experts Team was not assigned in Tajikistan, follow-up trainings aimed at maintaining the technical capabilities and motivation of the C/Ps were conducted by local staffs, which contributed to higher effectiveness with the limited assignment of the Experts Team.

3.3 Evaluation on the Results of the Project Risk Management

(1) Changes in Personnel in JCC and RDMT Member

The JCC Chairman and Project Director, Deputy Minister of MOT, was transferred and replaced once during the project. There were also changes in the members of RDMT. However, there was no negative effect on the project due to continues support by the successor of Project Director, RDMT members and other JCC members.

(2) Consideration of the Ramadan Period

Considering the burden on the C/Ps and local staffs during the Ramadan period, activities were planned to minimize activities during the period as much as possible. Also, trainings in Japan were adjusted so that not be overlapped with the Ramadan period. Therefore, there was no negative effect on the performance of the project.

(3) Election of President

Former Soviet Union countries were thrown into confusion in 2020. In August, a protest was caused against that President Lukashenko, who were in power for a long time in Belarus, was elected for the sixth time. Also, in Kyrgyzstan, a protest was occurred against the result of the parliamentary election in October. There was no such radical action in Tajikistan for the election of President, but some impact was confirmed to the project, such as some activities (manual approval) took longer than as usual due to the participation of MOT staff in the event.

3.4 Lessons Learnt

(1) Establishment of Project Ownership

In the project, the C/Ps actively participated in training and seminars centered on RDMT members (training participants 3,571 man-days on 206 events). In addition, by continuing to conduct regular follow-up trainings utilizing local staffs, the C/Ps were motivated, and they always took action in the project. In this way, project ownership of the C/Ps was built, and it became a powerful driving force to achieve the project purpose and outputs under the project. Therefore, it is important that the process of improving the abilities required collaborative works between the Experts Team and the C/Ps, respecting the self-growth of the C/Ps for soliciting project ownership, and enabling them to implement themselves.

(2) Maximizing the Effect of Japan Training

The C/Ps who experienced the training in Japan not only gained valuable knowledge in Japan, but also became more motivated and increased project ownership in the project than who did not participate. However, the scale of Japan training (duration, number of trainee) had to be reduced from the initial plan. Also, since young generations are moving away from learning Russian language these days, some

young engineers felt difficulty understanding fully the contents with Russian interpreters only. For these reasons, it is important to maximize the effects of training in Japan by taking into consideration of the following points.

- Extended training period, increased number of trainees
- Improving travel efficiency; considering better flight and transit times between Tajikistan and Japan
- Adding interpreter of Tajik Japanese; considering the level of young engineers in Russian language

(3) Necessity of Basic Knowledge and Experience of Technique

In each pilot project of disaster prevention measures, the chief engineer of each SEHM in charge was supposed to satisfy technical requirements and perform construction plan, estimation, and construction supervision. However, due to lack of related technical knowledge and experience among them, the pilot project was conducted in a form of assistance by project local staffs. Therefore, acquisition of basic civil and construction knowledge and experience is necessary for implementing similar measures in the future.

(4) Establishment of Cross-organizational Taskforce

By establishing RDMT, cross-organizational cooperation and prompt road disaster response became possible.

(5) Active participation of local staffs

As described in 2.2.4, the active participation of local staffs enabled smooth transfer of techniques and continuous communication with the C/Ps. This system was highly evaluated and commended by MOT. In addition, the support provided by local staffs was a major factor that allowed the Experts Team to properly manage and control the project utilizing video conferencing system from Japan despite the difficult situation during the COVID-19 outbreak.

4 For the Achievement of Overall Goals after the Project Completion

4.1 Prospects to Achieve Overall Goal

This chapter is prepared by having a joint review meeting between the Experts Team and the C/Ps on the prospect of achieving the Overall Goal of the Project. This shall be evaluated after approximately 3 years after the Project completion.

The Overall Goal is predetermined in PDM as below.

Overall Goal:

Road disasters are mitigated in the International and Republican Roads in the target SETMs/SEHMs

Indicator:

- a. All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project.
- b. By Jul 2024, disaster prevention measures are planned and / or implemented at least 5 priority sites in the target SETMs according to the disaster prevention manual developed through the Project.
- c. From Aug 2020 to Jul 2023, the average duration required for road re-opening per disaster handled by the target SETMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018)

Based on the discussion with the C/Ps, following prospects to achieve the Overall Goals for the Project are concluded in Table 4-1.

Table 4-1 Prospects for Achievement to the Overall Goal

	Indicator	Actual Situation
a.	All disaster recovery	Since the introduction of the Road Disaster Recovery Manual in April 2018,
	works by the target	all disaster recovery work (70 disaster recovery works out of 70 disasters)
	SETMs/SEHMs are	by the target SETMs/SEHMs has been planned and implemented according
	planned and implemented	to the manual. Also, it was confirmed by Experts Team that works
	according to the disaster	performance is appropriate and they well understood and obtained the
	recovery manual	required skills. In addition, the establishment of RDMT as a cross-
	developed though the	organizational taskforce made it possible to collaborate across organizations
	Project.	and respond quickly to road disasters. RDMT itself will be dissolved at the
		end of this project, but MPEU intends to take over and continue activities.
		Furthermore, the road disaster recovery manual and the database system
		which were introduced in the Project were approved by MOT. The target
		SETM/SEHMs are continuing to move ahead further. Based on such, there
		is a <u>High prospect</u> that all disaster recovery works will be planned and
		implemented according to the manual.

	Indicator	Actual Situation
b.	By Jul 2024, disaster	In the hazard evaluation activities, technical transfer on understanding the
	prevention measures are	hazards involving slope failure, the most basic element of road disaster
	planned and / or	prevention, and the evaluation method for the hazard was conducted through
	implemented at least 5	lectures and OJT. Disaster prevention measures for 10 sections were already
	priority sites in the target	planned according to the disaster prevention manual by the target SETM.
	SETMs according to the	Also, it was confirmed by the Experts Team that plans were appropriate and
	disaster prevention	they well understood and obtained the required skills. In addition, the road
	manual developed through	disaster prevention manual and the database system which were introduced
	the Project.	in the Project were approved by MOT. The target SETM/SEHMs are
		continuing to move ahead further. Furthermore, internal consideration within
		MOT has also begun on technology transfer especially regarding the
		database to non-targeted 3 SETMs. Based on such, there is a <u>High prospect</u>
		that all plans of disaster prevention measures will be planned and
		implemented according to the manual.
c.	From Aug 2020 to Jul	The average duration required for road re-opening is not always determined
	2023, the average duration	by the factor of acquiring the knowledge and skills of disaster recovery
	required for road re-	works. However, disaster recovery works that used to be relied upon the
	opening per disaster	experience of veteran engineer can now be implemented using a
	handled by the target	standardized manual developed under the project. Also, knowledge and
	SETMs is decreased by	skills of disaster recovery works of the target SETMs have steadily increased
	20% compared with the	through lectures and OJT in the project. In addition, the establishment of
	same before the Project	RDMT as a cross-organizational taskforce made it possible to collaborate
	(from May 2017 to April	across organizations and respond quickly to road disasters. RDMT itself will
	2018)	be dissolved at the end of this project, but MPEU intends to take over and
		continue activities. Furthermore, both road disaster recovery and prevention
		manuals which were introduced in the Project were approved by MOT. The
		target SETM/SEHMs are continuing to move ahead further. Also, it has
		become possible to monitor the average duration required for road re-
		opening per disaster using database records. In fact, the average duration in
		2019 has decreased by more than 20% compared to 2017. By continuing to
		steadily implement disaster recovery works according to the manual, there
		is a <u>High prospect</u> that the average duration continues to be decreased by
		20% compared with the 2017 result.

4.2 Plan of Operation and Implementation Structure of the Tajikistan Side to Achieve Overall Goal

Following to the challenges for the Overall Goal, actions to be taken were discussed with the C/Ps as concluded in Table 4-2.

Table 4-2 Target Setting and Actions to Take for Overall Goal

	Indicator	Target	Actions to be taken by C/Ps
a.	All disaster recovery	- Continuous capacity	- Training on disaster recovery works based on
	works by the target	development of disaster	the manual for target SETMs/SEHMs engineers
	SETMs/SEHMs are	recovery works	(training once a year by MOT(MPEU) and
	planned and		RDMT members).
	implemented according	- Utilization and	- Storing of records of disaster recovery works
	to the disaster recovery	improvement of DB with	in the DB appropriately. Training on how to use
	manual developed	organizational support	the system and how to manage the collected
	though the Project.		data.
		- Systematic	- Establishment of internal regulations that
		implementation of	MOT and SETMs/SEHMs to follow the
		disaster recovery works in	manual. Checking if disaster recovery works is
		accordance with the	implemented according to the manual (follow-
		manual	up training once a year by MOT (MPEU) and
			RDMT members).
b.	By Jul 2024, disaster	- Continuous capacity	- Training on disaster prevention measures
	prevention measures are	development of disaster	based on the manual for target SETMs/SEHMs
	planned and / or	prevention measures	engineers (training once a year by MOT
	implemented at least 5		(MPEU) and RDMT members).
	priority sites in the target	- Utilization and	- Storing of records of disaster prevention
	SETMs according to the	improvement of DB with	measures in the DB appropriately. Training on
	disaster prevention	organizational support	how to use the system and how to manage the
	manual developed		collected data.
	through the Project.	- Systematic	- Establishment of internal regulations that
		implementation of	MOT and SETMs/SEHMs to follow the
		disaster prevention	manual. Checking if disaster prevention
		measures in accordance	measures is implemented according to the
		with the manual	manual (follow-up training once a year by MOT
			(MPEU) and RDMT members).
c.	From Aug 2020 to Jul	- Utilization and	- Storing of records of disaster recovery works
	2023, the average	improvement of DB with	in the DB appropriately. Training on how to use
	duration required for	organizational support	the system and how to manage the collected

Indicator	Target	Actions to be taken by C/Ps
road re-opening per		data.
disaster handled by the	- Feed-back utilizing DB	- Recording the number of road disasters and
target SETMs is		duration required for road re-opening per
decreased by 20%		disaster in the DB.
compared with the same		- Analyzing average duration required for road
before the Project (from		re-opening periodically and sharing information
May 2017 to April 2018)		within the MOT.

4.3 Recommendations for the Tajikistan Side

The Overall Goal is to be achieved from 3 to 5 years after the completion of the project. In order to sustainably maintain and improve a series of activities related to road disaster management, it is not only necessary to improve the abilities of individual engineers also to improve the organizational and institutional environment than ever before. From this point of view, recommendations for the Tajikistan side are organized into two categories; 1) short-term challenges that are expected to be solved 3 to 5 years after the completion of the project, and 2) long-term challenges that are expected to be solved more than 5 years.

A list of recommendations is shown in Table 4-3, and details are described later.

Table 4-3 Recommendations for the Tajikistan Side

Challenge	Recommendation
C1 4 4	(1) Development of an Incentive Mechanism for Engineers
Short-term	(2) Involvement of IT Engineers in System Maintenance and Update
Challenges	(3) Sharing and Centralization of Information on Engineering Technology
	(4) Extending Project Know-Hows to Other SETMs/SEHMs
Long-term	(5) Periodic Update of Manuals
Challenges	(6) Update of DB system
	(7) Improving the Efficiency of Budget Securing, Allocation, and Execution

(1) Development of Incentive Mechanism for Engineers

It is necessary to continue trainings of engineers so that the manuals, systems, knowledge and experiences related to road disasters management introduced in this project are to be kept within MOT and to be updated. From this point, it is recommended that an incentive mechanism for engineers to be developed for promoting maintenance and acquisition of technical capacities of disaster recovery works and disaster prevention measures. For example, the CPD (Continuing Professional Development) point-adding system introduced in the Japanese construction industry may motivate more engineers to participate in training and seminars. In addition, it will be an impetus for engineers if such a learning to become qualifications related to road disaster management with better work benefits by MOT and/or

other organizations. Such qualifications may apply during project procurement by scoring the bidder proposing qualified project engineers in the project higher against competitors. As described above, it is recommended to develop a mechanism and system for maintaining and further developing of road disaster capacity while referring to the cases of developed countries.

(2) Involvement of IT Engineers in System Maintenance and Update

In Output-4 under the project, DB system using IT technology was developed to improve disaster management and operation. This system is transferred to MOT as a system that can be easily maintained and updated in Tajikistan. Considering the future development of IT technology, engineers who specialize in IT technology should continue to participate in the operation for DB system. It is further proposed to make improvements as well as continuous use.

(3) Sharing and Centralization of Information on Engineering Technology

Through activities centered on the Output-5, the C/Ps have improved their capacity to prepare project proposals related to road disasters management. It would be expected that several technical assistance and construction projects are provided by JICA as well as other International donors. The engineering technology learnt from these projects needs to be efficiently centralized and shared within MOT. In this connection, it is desirable for MOT to specify a department/person in charge of as the information center to control such engineering information. The option may be either setting up a task force or instruct MPEU to be responsible for. Furthermore, by setting up a specific department/person in charge, it would be possible to continuously follow up on the submission of proposals to international donors that could not be completed under our project. This is rather important as once a large-scale construction project is implemented, this project may provide a wealth of information to enhance the technology know-hows of MOT in terms of planning, design, construction and maintenance including quality and safety control. Thus, it is important for MOT to accumulate such information, manuals and experience through these projects, and to effectively utilize this information for further development of capacity in disaster management technology.

(4) Extending Project Know-How to Other SETMs/SEHMs

The target areas of this project were international roads and republican roads under the jurisdiction of SETMs in Hissor, Sughd and Rasht regions and SEHMs under its umbrella.

On the other hand, the areas that were not targeted in this project were the areas where the number of disasters was relatively small (Bokhtar SETM) and the areas where the security situation was difficult compared to the above-mentioned 3 SETMs (Kulob SETM, Pamir SETM).

It is essential that all the skills and know-how acquired in the project to be transferred to these other regions by the C/Ps. Internal consideration within MOT has also begun on technology transfer to non-targeted 3 SETMs. Taking advantage of this momentum, it is proposed that some of the activities after the end of this project be shared with non-targeted 3 SETMs.

(5) Periodic Update of Manuals

Technical documents (Manuals) developed under the Project were focused to improve the current issues on management of disaster recovery and prevention. These manuals would be required to be upgraded in accordance with the development and diversification of construction technology in Tajikistan. In addition, in Tajikistan, since young people born after the fall of the Soviet Union have no obligation to learn Russian in recent years, it has become evident that young engineers have difficulty understanding Russian documents such as manuals. Considering these points, MOT is recommended to review and upgrade the contents of manuals including development of manuals written in Tajik by his own staff in the future. For such purpose, accumulation of data and information of disaster management and periodical training would be very important for MOT.

(6) Update of DB System

The DB system developed in this project has basic functions for organizing and processing road specifications, disaster risk, disaster history, and other related information. This information should not only be useful for road maintenance of MOT, but may also effectively be used for maintenance of road infrastructure including structures such as bridges in the future. Currently, WB and ADB are also continuing supporting the development of database for road asset management. It is desirable that investigation be carried out by MOT to verify comprehensive operations and updates of the current systems, possible expansion of the current systems, anticipated and future IT development for consideration of the integration of each system.

(7) Improving the Efficiency of Budget Securing, Allocation and Execution

In Output-3, disaster prevention measures were implemented directly by MOT as pilot projects. This was a form of provision of convenience by the Tajikistan side, and the pilot projects were implemented by the MOT staffs using their construction machines owned by the self-budget. It is also necessary to secure the budget and human resources by MOT itself after the project, though the personnel and budget of MOT are limited at present. Therefore, while continuing to try to forecast, apply and secure the budget for road disaster management, it will be necessary to consider ordering forms such as outsourcing of construction work in consideration of budget allocation and efficiency of budget execution in the future. Thus, it is highly recommended to establish a forum for discussions with related organizations such as MOF and appeal to work with international donors for supporting specific projects, which is important to secure the necessary budget and accumulate the achievements in the long term.

4.4 Monitoring Plan from the End of the Project to Ex-post Evaluation

The proposal of the monitoring plan in the post project period with target values is shown in Table 4-4.

Table 4-4 Monitoring Plan (Proposal)

		Monitoring Schedule: May 2024 (After 3years)			
Overall Goal / Indicator		Means of Verification	Monitoring by	Monitoring Item	
Road disasters are mitigated in the International and	a.	All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project.	- Interview of target SETMs staff - Record of DB	- MOT (MPEU/ RDMT)	- Number of road disaster recovery works implemented by the target SETMs/SEHMs
Republican Roads in the target SETMs/ SEHMs	b.	By Jul 2024, disaster prevention measures are planned and / or implemented at least 5 priority sites in the target SETMs according to the disaster prevention manual developed through the Project.	- Interview of target SETMs staff - Record of DB	- MOT (MPEU/ RDMT)	-Number of disaster prevention measures planned and / or implemented by target SEHMs
	c.	From Aug 2020 to Jul 2023, the average duration required for road re-opening per disaster handled by the target SETMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018)	- Record of DB	- MOT (MPEU/ RDMT)	- Number of road disasters handled by the target SETMs - The duration for road re-opening per disaster handled by the target SETMs

Republic of Tajikistan Ministry of Transport

Republic of Tajikistan The Project for Capacity Development for Road Disaster Management

Project Completion Report ANNEX

February 2021

JAPAN INTERNATIONAL COOPERATION AGENCY(JICA)
CTI ENGINEERING INTERNATIONAL CO., LTD.
KOKUSAI KOGYO CO., LTD.
CENTRAL NIPPON EXPRESSWAY CO., LTD.

ANNEX 1: Results of the Project

ANNEX 2: List of Products (Report, Manuals, Handbooks, etc.) Produced by the Project

ANNEX 3: PDM (All versions of PDM)

ANNEX 4: R/D, M/M, Minutes of JCC

ANNEX 5: Monitoring Sheet

ANNEX 1: Results of the Project

1) List of Dispatched Experts

No.	Name	Position	Company*	MM	Work in Tajikistan	Work in Japan	Total
1	Hiroshi	Chief Advisor/ Road Disaster	CTII	Plan	9.53	1.00	10.53
1	MITA	Management 1	CIII	Actual	7.06	4.07	11.13
2	Takashi	Deputy Chief Advisor/ Road Disaster	KKC	Plan	4.10	0.50	4.60
	KUWANO	Management 2	KKC	Actual	4.10	0.50	4.60
3	Hironori	Institution (~July 2019)	CNE	Plan	5.30	0.00	5.30
3	INOUE	institution (~July 2019)	CNE	Actual	3.23	0.00	3.23
4	Daisuke	Institution (August 2019~ July 2020)	CNE	Plan	0.00	0.00	0.00
	HAJIMA	Institution (August 2019~ July 2020)	CNE	Actual	1.43	0.27	1.70
5	Toshiyuki	Institution (August 2020~)	CNE	Plan	0.00	0.00	0.00
	MORI	Institution (August 2020 3)	CNE	Actual	0.00	0.97	0.97
6	Robinson	Disaster Recovery Measures	CTII	Plan	7.80	0.00	7.80
	SHRESTHA	Disaster Recovery incasures	CIII	Actual	6.20	2.20	8.40
7	Masanori	Disaster Prevention Measures 1	CTII	Plan	8.83	0.00	8.83
	TOZAWA	Disaster revention weasures r	CIII	Actual	8.17	1.26	9.43
8	Masashi	Disaster Prevention Measures 2	CTII	Plan	5.00	0.00	5.00
	IJICHI	Disaster Frevention Weasures 2	CIII	Actual	5.00	0.00	5.00
9	Takashi	Hazard Evaluation	KKC	Plan	8.00	0.00	8.00
	HARA		KKC	Actual	7.97	0.03	8.00
10	Satoshi	Machineries and Equipment	CTII	Plan	7.20	0.00	7.20
10	KOGAWA	Operation & Maintenance	CIII	Actual	6.00	1.20	7.20
11	Hiromitsu	Cost Estimation	CTII	Plan	6.33	1.00	7.33
11	OGATA	Cost Estimation	CIII	Actual	5.97	1.36	7.33
12	Junichiro	Database 1	CTII	Plan	6.87	0.00	6.87
12	OGAWA	Database 1	CIII	Actual	4.86	0.00	4.86
13	Hitomi	Database 2	CTII	Plan	1.03	1.00	2.03
13	IWAMASA	Database 2	CIII	Actual	2.80	2.44	5.24
14	Yoshiyuki	Instrumentation Monitoring	CTII	Plan	5.73	0.00	5.73
17	YAGIRI	modumentation wontoning	CIII	Actual	5.73	0.00	5.73
15	Seiji	Project Monitoring/ Japan Training	CTII	Plan	2.33	1.00	3.33
13	OZAWA	110,000 Wolling/ Japan Halling	CIII	Actual	1.86	1.47	3.33
	Total			Plan	78.05	4.50	82.55
		1 Otal		Actual	70.38	15.77	86.15

^{*}CTII: CTI Engineering International Co., Ltd. KKC: Kokusai Kogyo Co., Ltd. CNE: Central Nippon Expressway Co., Ltd.

List of Counterparts

Output	Activities	Responsible Org. (Responsible Person)	Implemented by
	1.1, 1.2	RCM (Head of MPEU)	RDMT
Ontont 1	1.3	RCM (Head of MPEU)	RDMT
Output 1	1.4	RCM (Head of MPEU)	RDMT
	1.5	RCM (Head of MPEU)	RDMT, SETM
	2.1	RCM (Head of MPEU)	RDMT, SETM
	2.2, 2.6	RCM (Head of MPEU)	RDMT, SETM
Output 2	2.3	SETM (Chief Engineer)	SETM
	2.4	SETM (Chief Engineer)	SETM, SEHM
	2.5	SETM (Chief Engineer)	SETM, SEHM
	3.1	RCM (Head of MPEU)	RDMT, SETM
	3.2, 3.10	RCM (Head of MPEU)	RDMT, SETM
Ontant 2	3.3, 3.4, 3.8	SETM (Chief Engineer)	SETM
Output 3	3.5	SETM (Chief Engineer)	SETM, SEHM
	3.6, 3.7	SETM (Chief Engineer)	SETM, SEHM
	3.9	SETM (Chief Engineer)	SETM, SEHM
	4.1, 4.2, 4.3	EAF (Head of ITU Level)	ITU
	4.4	EAF (Head of ITU Level)	ITU, SETM
Output 4	4.5, 4.6, 4.7	RCM, SETM (Chief Engineer)	SETM
	4.8, 4.9	EAF (Head of ITU Level)	ITU, SETM
	4.10	RCM, MOT (Head of MPEU)	MPEU
	5.1	RCM (Head of RCU)	RDMT, SETM
0.4.45	5.2	RCM (Head of MPEU)	MPEU
Output 5	5.3	RCM (Head of MPEU)	MPEU
	5.4	DIR	RDMT

<Abbreviations>

DIR: Department of International Relations

EAF: Economic Analysis and Forecasting Department

ITU: Information Technology Unit MPEU: Maintenance, Planning, and Evaluation Unit

RCM: Road Construction and Management Department

RCU: Road Construction Unit

RDMT: Road Disaster Management Taskforce SETM: State Enterprise for Transport Management

SEHM: State Enterprise for Highway Maintenance

Level		MOT					SETM/SEHM	
Output	RCM (MPEU)	RCM (RCU)	DI	Civil Defense Affairs Specialist	EAF (ITU)	DIR	SETM	SEHM
Output 1	0		0				0	
Output 2	0		O ¹⁾				0	0
Output 3	0		\bigcirc 1)	Advice RDHT			0	0
Output 4	0				0		0	0
Output 5	0	0	0			0	0	

¹⁾ As RDMT

3) List of Trainings

< Output 2>

No.	Seminar/Training on Output-2	Date	Man/Day
1	Basic training on auto level machine for Rasht SETM	2017/10/26 - 2017/10/27	4
2	Training on auto level machine for Rasht SETM	2017/11/07- 2017/11/07	4
3	Survey works in Rsht SETM	2017/11/20- 2017/11/21	3
4	Auto level field survey training in Rasht	2017/12/06- 2017/12/06	5
5	Auto level field survey training in Rasht	2017/12/19- 2017/12/19	3
6	Auto level field survey training in Rasht	2018/02/05- 2018/02/05	4
7	Auto level field survey training in Rasht	2018/02/23- 2018/02/23	3
8	Urgent recovery training in Hissor for Hissor SETM 9 SEHMs and for Rasht SETM and 3 SEHMs	2018/02/06 - 2018/02/09	26
9	Training on urgent recovery in Sughd for Sughd SETM and 14 SEHMs	2018/02/14 - 2018/02/17	28
10	On-site drill for simulated disaster recovery at Ayni SEHM for Panjakent, Ayni, Kuhistoni Mastchoh SEHMs in Sughd region	2018/04/2 - 2018/04/3	5
11	On-site drill for simulated disaster recovery at Istaravshan for Istaravshan, Shahristan and Devashtich SEHMs in Sughd region	2018/04/4 - 2018/04/5	6
12	On-site drill for simulated disaster recovery at Konibodom for Konibodom and Isfara SEHMs in Sughd region	2018/04/6- 2018/04/7	4
13	On-site drill for simulated disaster recovery at Bobojon Ghafurov for Bobojon Ghafurov, Jabbor Rasulov, Spitamen, Mastchoh and Zafarobod SEHMs in Sughd region	2018/04/9- 2018/04/10	11
14	On-site drill for simulated disaster recovery at Asht for Asht SEHM in Sughd region	2018/04/11- 2018/04/12	3
15	Test on Urgent Recovery Manual and on Auto Level Machine for Sughd SETM and 14 SEHMs	2018/04/13- 2018/04/13	30
16	On-site drill for simulated disaster recovery at Fayzobod for Fayzobod and Roghun SEHMs in Hissor region	2018/04/19- 2018/04/20	3
17	On-site drill for simulated disaster recovery at Shahrinav for Tursunzoda, Hisor and Shahrinav SEHMs in Hissor region	2018/04/23- 2018/04/24	4
18	On-site drill for simulated disaster recovery in Hissor SETM for Varzob, Rudaki, Vahdat and Norak SEHMs in Hissor region	2018/04/26- 2018/04/27	12
19	Test on site drill training for Hissor SETM and 9 SEHMs	2018/04/28- 2018/04/28	19
20	On-site drill for simulated disaster recovery for Rasht SETM and 3 SEHMs in Rasht SETM	2018/04/30- 2018/05/2	11.3
21	Supplementary Test on urgent recovery drill training for Sughd SETM and 14 SEHMs in Sughd region	2018/05/8- 2018/05/8	25
22	Autolevel Training in Sughd SETM for Specialists of Sughd SETM	2018/05/17- 2018/05/17	1
23	Auto level field survey training in Rasht for Specialists of Rasht SETM	2018/05/22- 2018/05/22	3
24	Autolevel Training in Hissor	2018/06/5- 2018/06/5	3
25	Monitoring on water level in Rasht for Specialists of Rasht SETM	2018/12/21- 2018/12/21	7
26	Training on urgent recovery manual auto level and total station for Hissor SETM and 9 SEHMs in Hissor region	2019/01/8- 2019/01/10	14
	SET IVI and 7 SETTIVES III THESOT TO GIVE	2017/01/10	L

No.	Seminar/Training on Output-2	Date	Man/Day
27	Test on urgent recovery manual and auto level in Hissor	2019/01/12- 2019/01/12	15
28	Training on urgent recovery manual and forms for Sughd SETM and 14 SEHMs in Sughd region	2019/01/15- 2019/01/16	24
29	Training on Auto level and Total station for Sughd SETM and 14 SEHMs in Sughd region	2019/01/17- 2019/01/17	24
30	Test on urgent recovery manual and forms for Sughd SETM and 14 SEHMs in Sughd region	2019/01/18- 2019/01/18	23
31	Repeat Training on urgent recovery Manual and Forms for Rasht SETM and 3 SEHM	2019/02/05- 2019/02/07	9.7
32	Test on urgent recovery Manual and Forms for Rasht SETM and 3 SEHM	2019/02/08- 2019/02/08	10
33	Total Station training for Hissor SETM and 9 SEHMs in Hissor region	2019/03/1- 2019/03/1	11
34	Monitoring on water level in Rasht	2019/04/9- 2019/04/9	2
35	Training on Urgent Recovery Manual at Panjikent for Panjakent, Ayni and Mastchohi Kuhi SEHMs in Sughd region	2019/05/14- 2019/05/15	6
36	Training on Urgent Recovery Manual at Devashtich for Devashtich, Istaravshan and Shahristan SEHMs in Sughd region	2019/05/16- 2019/05/17	8
37	Training on Urgent Recovery Manual, Giant Rock Breaker Instruction Manual and Practical training on proper Operation of Giant Rock Breaker for 3 SETMs and 26 SEHMs	2019/05/23- 2019/05/25	50.3
38	Monitoring on water level in Rasht	2019/06/11- 2019/06/11	1
39	Fallow up training on Urgent Recovery Manual, Forms and Auto level Machine for Ayni, Panjakent and Mastchohi Kuhi SEHMs and Sughd SETM in Sughd region	2019/06/11- 2019/06/11	8
40	Test on Urgent Recovery Manual, Forms and Auto level Machine for Ayni, Panjakent and Mastchohi Kuhi SEHMs and Sughd SETM in Sughd region	2019/06/12- 2019/06/12	8
41	Fallow up training on Urgent Recovery Manual, Forms and Auto level Machine for Bobojon Ghafurov, Jabbor Rasulov, Spitamen, Devashtich, Zafarobod, Mastchoh, Istaravshan, Shahristan, Asht, Isfara, Konibodom SEHMs and Sughd SETM in Sughd region	2019/06/13- 2019/06/14	17
42	Test on Urgent Recovery Manual, Forms and Auto level Machine for Bobojon Ghafurov, Jabbor Rasulov, Spitamen, Devashtich, Zafarobod, Mastchoh, Istaravshan, Shahristan, Asht, Isfara, Konibodom SEHMs and Sughd SETM in Sughd region	2019/06/15- 2019/06/15	17
43	Follow up training on Urgent Recovery Manua, Forms and Auto level Machine for Rasht SETM and 3 SEHMs in Rasht region	2019/06/18- 2019/06/18	11
44	Test on Urgent Recovery Manual, Forms and Auto level Machine for Rasht SETM and 3 SEHMs in asht region	2019/06/19- 2019/06/19	11
45	Follow up training on Urgent Recovery Manua, Forms and Auto level Machine for Hissor SETM and 9 SEHMs in Hissor region	2019/07/17- 2019/07/17	16
46	Test on Urgent Recovery Manual, Forms and Auto level Machine for Hissor SETM and 9 SEHMs in Hissor region	2019/07/18- 2019/07/18	16
47	Confirmation of usage status of Urgent Recovery Forms and obtaining feedbacks on Urgent Recovery Manual on output 2 activities 2.4 and 2.5 in Rasht region	2019/08/2- 2019/08/2	1
48	Confirmation of usage status of Urgent Recovery Forms and obtaining feedbacks on Urgent Recovery Manual on output 2 activities 2.4 and 2.5 in Hissor region	2019/08/5- 2019/08/8	1
49	Training on updated Urgent Recovery Manual Activity 2.6 for Hissor SETM and 9 SEHMs in Hissor region	2020/07/07- 2020/07/07	14
50	Training on updated Urgent Recovery Manual Activity 2.6 for Sughd SETM and 14 SEHMs in Sughd region	2020/07/15- 2020/07/15	19

No.	Seminar/Training on Output-2	Date	Man/Day
51	Training on updated Urgent Recovery Manual Activity 2.6 for Rasht SETM and 3 SEHMs in Rasht region	2020/07/20- 2020/07/20	12
52	Onsite Simulation Drills Training at Shahristan for Sughd SETM and for Shahristan, Panjakent, Ayni and Mastchohi Kuhi SEHMs in Sughd region	2020/10/13- 2020/10/13	10
53	Test on Urgent Recovery Manual and Urgent Recovery Forms for Sughd SETM and for Shahristan, Panjakent, Ayni and Mastchohi Kuhi SEHMs in Sughd region	2020/10/14- 2020/10/14	8
54	Onsite Simulation Drills Training for Sughd SETM and for Bobojon Ghafurov, Jabbor Rasulov, Spitamen, Devashtich, Istaravshan, Zafarobod, Mastchoh, Asht,Isfara and Konibodom SEHMs in Sughd region	2020/10/15- 2020/10/15	15
55	Test on Urgent Recovery Manual and Urgent Recovery Forms for Sughd SETM and for Bobojon Ghafurov, Jabbor Rasulov, Spitamen, Devashtich, Istaravshan, Zafarobod, Mastchoh, Asht,Isfara and Konibodom SEHMs in Sughd region	2020/10/16- 2020/10/16	16
56	Onsite Simulation Drills Training for Hissor SETM and 9 SEHMs in Hissor region	2020/10/20- 2020/10/20	16
57	Test on Urgent Recovery Manual and Urgent Recovery Forms for Hissor SETM and 9 SEHMs in Hissor region	2020/10/21- 2020/10/21	16
58	Onsite Simulation Drills Training for Rasht SETM and 3 SEHMs in Rasht region	2020/10/30- 2020/10/30	11
59	Test on Urgent Recovery Manual and Urgent Recovery Forms for Rasht SETM and 3 SEHMs in Rasht region	2020/10/31- 2020/10/31	10
	Total		678

<Output 3>

No.	Seminar/Training on Output-3	Date	Man/Day
1	Basic Trainings on Hazard Evaluation for Hissor SETM and 9 SEHMs and for Rasht SETM and 3 SEHMs in Hissor region	2017/09/05- 2017/09/07	25
2	Onsite Hazard Evaluation Trainings for Hissor SETM and 9 SEHMs and for Rasht SETM and 3 SEHMs in Hissor region	2017/09/12- 2017/09/14	20
3	Basic Trainings and Onsite Trainings on Hazard Evaluation for Sughd SETM and 14 SEHMs in Sughd region	2017/09/19- 2017/09/21	20
4	Basic Trainings and Onsite Trainings on Hazard Evaluation at Ayni for Sughd SETM and for Istaravshan, Shahristan, Panjakent, Ayni and Mastchohi Kuhi SEHMs in Sughd region	2017/10/02- 2017/10/05	9.3
5	Installation of Rain Gauge in Varzob SEHM for Hissor region	2017/10/13- 2017/10/13	5
6	Topographical Interpretation Training on Hazard Evaluation for Hissor SETM and 9 SEHMs in MoT Conference hall	2017/10/16- 2017/10/16	10
7	Onsite Hazard Evaluation Training for Hissor SETM and 9 SEHMs and for Rasht SETM and 3 SEHMs	2017/10/17- 2017/10/17	30
8	Examination on Hazard Evaluation for Hissor SETM and 9 SEHMs and for Rasht SETM and 3 SEHMs	2017/10/18- 2017/10/18	30
9	Basic Trainings and Onsite Trainings on Hazard Evaluation at Ayni for Sughd SETM and for Istaravshan, Shahristan, Panjakent, Ayni and Mastchohi Kuhi SEHMs in Sughd region	2017/10/19- 2017/10/19	10
10	Examination on Hazard Evaluation at Ayni for Sughd SETM and for Istaravshan, Shahristan, Panjakent, Ayni and Mastchohi Kuhi SEHMs in Sughd region	2017/10/20- 2017/10/20	10
11	Basic Trainings and Onsite Trainings on Hazard Evaluation at Asht for Sughd SETM and for Bobojon Ghafurov, Jabbor Rasulov, Spitamen, Devashtich, Zafarobod, Mastchoh, Asht, Isfara and Konibodom SEHMs in Sughd region	2017/10/23- 2017/10/23	18
12	Examination on Hazard Evaluation at Asht for Sughd SETM and for Bobojon Ghafurov, Jabbor Rasulov, Spitamen, Devashtich, Zafarobod, Mastchoh, Asht, Isfara and Konibodom SEHMs in Sughd region	2017/10/24- 2017/10/24	19
13	Hand over and Installation of Rain Gauge in Asht for Sughd region	2017/10/25- 2017/10/25	5

No.	Seminar/Training on Output-3	Date	Man/Day
14	Basic Training on Rain Gauge Data Collection for Specialists of Sughd SETM in charge for Rain Gauge System in Sughd region	2017/10/26- 2017/10/26	2
15	Checking the operation condition of Rain gauge at Varzob SEHM in Hissor region	2017/10/31- 2017/10/31	2
16	Asht Rain Gauge Data Collection and Developing of Data in Excel File in Sughd region	2017/11/16- 2017/11/17	2
17	Asht Rain Gauge Data Collection and Developing of Data in Excel File in Sughd region	2018/01/04- 2018/01/04	2
18	Repeat Examination on Hazard Evaluation for Hissor SETM and 9 SEHMs in Hissor region	2018/01/09- 2018/01/09	18
19	Repeat Examination on Hazard Evaluation for Rasht SETM and 3 SEHMs in Rasht region	2018/01/10- 2018/01/10	11
20	Repeat Examination on Hazard Evaluation for Sughd SETM and 14 SEHMs in Sughd region	2018/01/18- 2018/01/18	29
21	Asht Rain Gauge Data Collection and Developing of Data in Excel File in Sughd region	2018/03/06- 2018/03/06	3
22	Checking the operation condition of Rain gauge at Norak SEHM in Hissor region	2018/03/13- 2018/03/13	2
23	Repeat Training on Basic Hazard Evaluation for Hissor SETM and 9 SEHMs in Hissor region	2018/03/15- 2018/03/15	16
24	Repeat Training on Basic Hazard Evaluation for Rasht SETM and 3 SEHMs in Rasht region	2018/06/12- 2018/06/12	10
25	Discussionin Hissor SETM office on 2018 Pilot project in Khoja-ObiGarm Republican Road in Varzob	2018/07/3- 2018/07/3	2
26	Screening and Selection site sections in Roghun for conduction of Hazard Evaluation in Hissor region	2018/07/4- 2018/07/4	4
27	Desktop Study and Screening Sites for Hazard Evaluation for Rasht SETM and 3 SEHMs in Nurobod of Rasht region	2018/07/04- 2018/07/05	4.5
28	Onsite Hazard Evaluation and Data Input Training for Rasht SETM and 3 SEHMs in Tojikobod of Rasht region	2018/07/10- 2018/07/12	7.3
29	Screening, Selection and Preparation for conduction of Hazard Evaluation in Sughd region	2018/07/17- 2018/07/18	4
30	Conduction of Hazard Evaluation at the site for Sughd SETM and 14 SEHMs in Somghor-Adrasmon Republican Road	2018/07/19- 2018/07/20	26.5
31	Preparation for conduction of Hazard Evaluation in Roghun for Hissor SETM in Hissor region	2018/08/7- 2018/08/7	2
32	Conduction of Hazard Evaluation at the site for Hissor SETM and 9 SEHMs in Roghun Hazard Evaluation site section and Input Hazard Evaluation Data	2018/08/08- 2018/08/09	16.5
33	Two in Varzob and one in Norak Rain Gauge Data Collection and Devloping into the Excel in Hissor region	2018/08/23- 2018/08/23	2
34	Discussion in Hissor SETM office on Implementation schedule of Pilot Project Varzob at Khoja-ObiGarm Republican Road	2018/08/28- 2018/08/28	2
35	Demonstration on Assembling of Gabion Pannels and in house training before implementation of 2018 Pilot Project at Khoja-ObiGarm Republican Road in Varzob of Hissor SETM	2018/09/4- 2018/09/5	24
36	Instrumental Monitoring Training on Rain Gauge System for Hissor SETM and 9 SEHMs and for Rasht SETM and 3 SEHMs in Hissor SETM office	2018/09/6- 2018/09/6	26
37	Implementation of Pilot Project in 2018 at Khoja-ObiGarm Republican Road in Varzob of Hissor region for Hissor SETM and 9 SEHMs and for Rasht SETM and 3 SEHMs	2018/09/11- 2018/09/19	28
38	Instrumental Monitoring Training on Rain Gauge System for Sughd SETM and 14 SEHMs at Ayni in Sughd region	2018/09/24- 2018/09/24	25
39	Demonstration on Assembling of Gabion Pannels and in house training before implementation of 2018 Pilot Project at Ayni for Sughd SETM and 14 SEHMs in Sughd region	2018/09/25- 2018/09/25	24
40	Discussion on criteria for identification of Threshold of Rain Gauges Early Warning System for Hissor region	2018/09/27- 2018/09/27	3
41	Carring out of Topo Survey of Ayni Pilot Project in Sughd region	2018/09/28- 2018/09/28	1
42	Preparation of Method Statement for Ayni Pilot Project in Sughd region	2018/10/04- 2018/10/05	2
43	Review of Implemented Pilot Project in 2018 at Varzob Khoja-ObiGarm Republican Road for Hissor SETM and 9 SEHMs and for Rasht SETM and 3 SEHMs in MoT Conference hall	2018/10/09- 2018/10/09	21

No.	Seminar/Training on Output-3	Date	Man/Day
44	Monitorin of landslide at Roghun in Hissor region	2018/10/10- 2018/10/10	3
45	Two set in Varzob and one set in Norak Rain Gauge Data Collection under Hissor SETM	2018/10/15- 2018/10/15	3
46	Preparation works for Implementation of Pilot Project in 2018 at Ayni in Sughd region	2018/10/17- 2018/10/24	2.5
47	Preparation of Foundation/Concrete Casting Works for Lay out Gabion Boxes during Implementation of Pilot Project in 2018 at Ayni of Sughd region	2018/11/01- 2018/11/05	3.8
48	Implementation of Pilot Project in 2018 at Ayni of Sughd region for Sughd SETM and 14 SEHMs Laying out and filling out Gabion Boxes	2018/11/12- 2018/11/16	20.8
49	Implementation of Pilot Project in 2018 at Ayni Filling out and setting in Mega Bags for protection of River Bank by Ayni SEHMs	2018/11/17- 2018/11/18	3.5
50	Review and Test on Pilot Project in 2018 at Varzob Khoja-ObiGarm Republican Road for Hissor SETM and 9 SEHMs and for Rasht SETM and 3 SEHMs in Hissor region	2018/12/05- 2018/12/05	23
51	Monitorin of landslide at Roghun in Hissor region	2018/12/06- 2018/12/06	3
52	Identification and selection of site section for implementation Pilot Project in 2019 in Hissor region	2018/12/07- 2018/12/07	2
53	Review and Test for Implemented Pilot Project at Ayni for Sughd SETM and 14 SEHMs in Sughd region	2018/12/10- 2018/12/10	23
54	Two set in Varzob and one set in Norak Rain Gauge Data Collection under Hissor SETM	2018/12/17- 2018/12/17	4
55	Topo survey for 2019 Pilot Project in Varzob Hissor SETM	2018/12/19- 2018/12/19	1
56	Preparation of Method statement for 2019 Pilot project in Varzob Hissor SETM	2018/12/24- 2018/12/24	5
57	Topo Survey for 2019 Pilot Project in Adrasmon Bobojon Ghafurov SEHM in Sughd region	2019/01/16- 2019/01/16	3
58	Preparation Method of Statement for Varzob Pilot Project in 2019 in Hissor region	2019/01/24- 2019/01/24	1
59	Preparation Method of Statement for Varzob Pilot Project in 2019 Hissor region	2019/02/22- 2019/02/22	2
60	Preparation Method of Statement for Varzob Pilot Project in 2019 Hissor region	2019/02/27- 2019/02/27	2
61	Preparation Method of Statement for Varzob Pilot Project in 2019 Hissor region	2019/03/04- 2019/03/04	4
62	Preparation Method of Statement for Varzob Pilot Project in 2019 Hissor region	2019/03/06- 2019/03/06	2
63	Monitoring of landslide in Roghun Hissor SETM	2019/05/02- 2019/05/02	2
64	Monitoring of landslide in Roghun Hissor SETM	2019/06/07- 2019/06/07	3
65	Hazard Evaluation Training in Tojikobod for Rasht SETM and 3 SEHMs in Rasht region	2019/07/09- 2019/07/11	11
66	Hazard Evaluation Training in Panjakent for Sughd SETM and 14 SEHMs in Sughd region	2019/07/16- 2019/07/18	20
67	Training on Simple Early Warning System for Rasht SETM and 3 SEHMs and Installation of Simple Early Warning System in Rasht SETM	2019/07/30- 2019/07/30	10
68	Training on Simple Early Warning System for Sughd SETM and 14 SEHMs in Sughd region	2019/08/02- 2019/08/02	21
69	Preparation Method of Statement for Pilot Project in 2019 at Adrasmon of Bobojon Ghafurov site in Sughd region	2019/08/03- 2019/08/03	3
70	Installation Simple Early Warning System at Panjakent in Sughd region	2019/08/04- 2019/08/04	1
71	Hazard Evaluation Training at Romit for Hissor SETM and 9 SEHMs in Hissor region	2019/08/06- 2019/08/08	14.7
72	Training on Simple Early Warning System for Hissor SETM and 9 SEHM in Hissor region	2019/08/8- 2019/08/8	14
73	Installation Simple Early Warning System at Hushyori, Varzob in Hissor region	2019/08/09- 2019/08/09	3
74	Two set in Varzob and one set in Norak Rain Gauge Data Collection under Hissor SETM	2019/08/20- 2019/08/20	2

No.	Seminar/Training on Output-3	Date	Man/Day	
75	Preparation activities for implementation of Pilot Project in 2019 at Adrasmon Bobojon Ghafurov SEHM in Sughd region	2019/09/03- 2019/09/04	3	
76	Preparation of Foundation/Concrete Casting Works for Lay out Gabion Boxes during Implementation of Pilot Project in 2019 at Somghor-Adrasmon Republican Road of Bobojon Ghafurov SEHM in Sughd region	2019/09/11- 2019/09/15	4.2	
77	Implementation of 2019 Pilot Project at Somghor-Adrasmon Republican Road of Bobojon Ghafurov SEHM for Sughd SETM and 14 SEHMs in Sughd region	2019/09/16- 2019/09/20	22	
78	Back filling, Stone masonry, Filling of Mega Sand Bags, Installation of Mega Sand Bags and summarising of spent budget during implementation of 2019 Pilot Project at Somghor-Adrasmon Republican Road of Bobojon Ghafurov SEHM in Sughd region (Done by Staff of Bobojon Ghafurov SEHM)	2019/09/21- 2019/09/27	3	
79	Final Review Training on Rain Gauge and Simple Early Warning System for Hissor SETM and 9 SEHMs and for Rasht SETM and 3 SEHMs	2019/09/21- 2019/09/21	24	
80	Preparation of Foundation/Concrete Casting Works for Lay out Gabion Boxes during Implementation of Pilot Project in 2019 Varzob Khoja-ObuGarm Republican Road in Hissor region (Hissor SETM and 9 SEHMs and Rasht SETM and 3 SEHMs)	2019/10/02- 2019/10/05	27.3	
81	Implementation of 2019 Pilot Project at Varzob Khoja-ObiGarm Republican Road in Hissor region (Hissor SETM and 9 SEHMs and Rasht SETM and 3 SEHMs)	2019/10/06- 2019/10/18	24.6	
82	Review and Test on Implemented in 2019 Pilot Project at Bobojon Ghafurov Somghor- Adrasmon Republican Road in Sughd region (Sughd SETM and 14 SEHMs)	2019/10/16- 2019/10/16	23	
83	Review and Test on Implemented in 2019 Pilot Project at Varzob Khoja-ObiGarm Republican Road in Hissor region (Hissor SETM and 9 SEHMs and Rasht SETM and 3 SEHMs)	2019/11/01- 2019/11/01	27	
84	Review of Rain gauge and Data analysis for Hissor SETM	2020/07/10- 2020/07/10	4	
85	Review of Rain gauge and Data analysis for Sugd SETM	2020/07/16- 2020/07/16	5	
86	Review of Rain gauge and Data analysis for Rasht SETM	2020/07/21- 2020/07/21	10	
	Total			

<Output 4>

No.	Seminar/Training on Output-4	Date	Man/Day
1	Basic Training on Data Base System for Specialists of Hissor SETM	2017/10/30- 2017/10/30	4
2	Basic Training on Data Base System for Specialists of Rasht SETM	2017/11/29- 2017/11/29	4
3	Basic Training on Data Base System for Specialists of Rasht SETM	2017/12/05- 2017/12/05	6
4	Basic Training on Data Base System for Specialists of Hissor SETM	2017/12/08- 2017/12/08	4
5	Basic Training on Data Base System for Specialists of Sughd SETM	2017/12/12- 2017/12/12	3
6	Basic Training on Data Base System for Specialists of Hissor SETM	2017/12/20- 2017/12/20	3
7	Basic Training on Data Base System for Specialists of Hissor SETM	2017/12/26- 2017/12/26	4
8	Basic Training on Data Base System for Specialists of Sughd SETM	2018/01/19- 2018/01/19	3
9	Basic Training on Data Base System for Specialists of Hissor SETM	2018/01/24- 2018/01/24	4
10	Basic Training on Data Base System for Specialists of Rasht SETM	2018/02/22- 2018/02/22	7
11	Basic Training on Data Base System for Specialists of Hissor SETM	2018/03/01- 2018/03/01	4
12	Basic Training on Data Base System for Specialists of Sughd SETM	2018/03/06- 2018/03/06	3

No.	Seminar/Training on Output-4	Date	Man/Day
13	Basic Training on Data Base System for Specialists of Hissor SETM	2018/03/15- 2018/03/15	4
14	Basic Training on Data Base System for Specialists of Hissor SETM	2018/04/02- 2018/04/02	4
15	Basic Training on Data Base System for Specialists of Rasht SETM	2018/04/10- 2018/04/10	5
16	Basic Training on Data Base System for Specialists of Hissor SETM	2018/04/13- 2018/04/13	3
17	Basic Training on Data Base System for Specialists of Sughd SETM	2018/04/20- 2018/04/20	4
18	Basic Training on Data Base System for Specialists of Sughd SETM	2018/05/17- 2018/05/17	2
19	Basic Training on Data Base System for Specialists of Rasht SETM	2018/05/21- 2018/05/21	5
20	Basic Training on Data Base System for Specialists of Hissor SETM	2018/06/06- 2018/06/06	3
21	Basic Training on Data Base System for Specialists of Rasht SETM	2018/06/11- 2018/06/11	2
22	Basic Training on Data Base System for Specialists of Hissor SETM	2018/06/13- 2018/06/13	3
23	Workshop on Data Base System for Specialists in charge of Hissor SETM and Rasht SETM	2018/10/26- 2018/10/26	10
24	Basic Training on Data Base System for Specialists of Hissor SETM	2018/12/18- 2018/10/18	3
25	Basic Training on Data Base System for Specialists of Rasht SETM	2018/12/20- 2018/10/20	7
26	Basic Training on Data Base System for Specialists of Sughd SETM	2019/01/15- 2019/01/15	3
27	Training on Modified Name of "Data Base System" into "Data Collection System" for Specialists of Rasht SETM	2019/02/07- 2019/02/07	5
28	Training on Modified Name of "Data Base System" into "Data Collection System" for Specialists of Hissor SETM	2019/04/01- 2019/04/02	3
29	Training on Data Collection System for Specialists of Rasht SETM	2019/04/08- 2019/04/08	5
30	Training on Data Collection System for Specialists of Rasht SETM	2019/04/10- 2019/04/10	6
31	Training on Data Collection System for Specialists of Hissor SETM	2019/04/12- 2019/04/12	3
32	Training on Modified Name of "Data Base System" into "Data Collection System" for Specialists of Hissor SETM	2019/04/18- 2019/04/18	2
33	Training on Data Collection System for Specialists of Hissor SETM	2019/05/07- 2019/05/07	4
34	Training on Data Collection System for Specialists of Rasht SETM	2019/06/10- 2019/06/10	5
35	Training on Data Collection System for Specialists of Hissor SETM	2019/06/18- 2019/06/18	4
36	Training on Data Collection System for Specialists of Hissor SETM	2019/11/22- 2019/11/11	4
37	Training on Data Collection System for Specialists of Hissor SETM	2019/12/6- 2019/12/6	3
38	Workshop on "Data Collection System" for Specialists in charge of Hissor, Sughd and Rasht SETMs in Hissor SETM Conference Hall	2019/12/11- 2019/12/11	11
39	Training on Data Collection System for Specialists of Sughd SETM in JICA Experts Team office	2019/12/12- 2019/12/12	2
40	Training on Data Collection System for Specialists of Hissor SETM	2019/12/18- 2019/12/18	2

No.	Seminar/Training on Output-4	Date	Man/Day
41	Review of Data Collection System for Hissor SETM	2020/07/10- 2020/07/10	4
42	Review of Data Collection System for Sughd SETM	2020/07/16- 2020/07/16	5
43	Review of Data Collection System for Rasht SETM	2020/07/21- 2020/07/21	10
	Total		185

<Output 5>

No.	Seminar/Training on Output-5	Date	Man/Day
1	Discussion on site selection for output 5 activities 5.1 5.3 and 5.4 in Rasht	2019/09/23- 2019/09/23	2
2	Discussion on site selection for output 5 activities 5.1 5.3 and 5.4 in Hissor	2019/09/25- 2019/09/25	1
3	Discussion on site selection for output 5 activities 5.1 5.3 and 5.4 in Rasht	2019/10/31- 2019/10/31	2
4	Conformation on using Collection Books, Standards and Norms by SETMs and SEHMs under the MOT for cost Estimation under the output 5	2020/01/08- 2020/01/08	4
5	Seminar on output 5 on importance of the budget item for disaster prevention for MOT and three SETMs under the project	2020/03/04- 2020/03/04	14
6	Seminar on output 5 on importance of the budget item for disaster prevention for Ministry of Finance	2020/03/05- 2020/03/05	16
7	Cost Estimation training for Hissar SETM and 9 SEHMs under the Hissar SETM	2020/03/10- 2020/03/10	15
8	Explanation of project proposal format for donors for Hissar SETM	2020/03/17- 2020/03/17	2
9	Explanation of project proposal format for donors for Hissar SETM	2020/03/18- 2020/03/18	4
10	Cost Estimation training for Soghd SETM and 14 SEHMs under the Soghd SETM	2020/04/01- 2020/04/01	23
11	Cost Estimation training for Rasht SETM and 3 SEHMs under the Rasht SETM	2020/04/09- 2020/04/09	10
12	Conformation of project proposal format for donors for Hissar SETM	2020/04/13- 2020/04/13	4
13	Conformation of project proposal format for donors for Hissar SETM	2020/04/15- 2020/04/15	3
14	Practical Training on Cost Estimation for Hissor SETM and 9 SEHMs	2020/07/07- 2020/07/07	14
15	Practical Training on Cost Estimation for Sughd SETM and 14 SEHMs	2020/07/16- 2020/07/16	24
16	Practical Training on Cost Estimation for Rasht SETM and 3 SEHMs	2020/07/21- 2020/07/21	12
17	Practical Training on Cost Estimation for Sughd SETM and 14 SEHMs	2020/09/22- 2020/09/22	19
18	Practical Training on Cost Estimation for Hissor SETM and 9 SEHMs and for Rasht SETM and 3 SEHMs at Hissor SETM Conference Hall	2020/09/30- 2020/09/30	25
Total			

ANNEX 2: List of Products (Report, Manuals, Handbooks, etc.) Produced by the Project

Output	Products (Report, Manuals, Handbooks, etc.)		
Output 1	- Current Road Disaster Management Report (2017)		
	- Improvement Plan of Disaster Management Structure (2020)		
Output 2	- Road Disaster Recovery Manual (2020)		
Output 3	- Road Disaster Prevention Manual (2020)		
Output 4	- Road Disaster Management Database (Data Collection System) Manual (2019)		
Output 5	- Project Proposal for Large-Scale Disaster Prevention (2020)		
	- Study Session Material on Infrastructure Investment System in Japan (2019.11)		
Others	- Seminar Material on Pilots of Road Disaster Prevention (2020.3)		
Others	- Final Dissemination Seminar Presentation (2021)		
	- Final Progress Report (2021)		

ANNEX 3: PDM (All versions of PDM)

1) Version 0

Project Design Matrix (PDM ver.0)

Project Title: The Project for Capacity Development for Road Disaster Management

Implementing Agency: Ministry of Transport (MOT)
Target Group: MOT, Hissor SETM and its 9 SEHMs, Sughd SETM and 14 SEHMs, and Rasht SEHM and its 3 SEHMs (Nurobod, Rasht, and Ta-jikobod)

Period of Project: April 2017 - July 2020 (in Tajikistan)

Project Site: International and Republican roads in Hissor and Sughd SETMs as well as Nurobod, Rasht and Tajikobod SEHMs in Rasht SETM

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Overall Goal Road disasters are mitigated in the International and Republican Roads in the target SETMs/SEHMs	a. All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project b. By Jul 2023 disaster prevention measures are planned and / or implemented at least X priority sites in the target SETMs according to the disaster prevention manual developed through the Project c. From Aug 2020 to Jul 2023 the average duration required for road re-opening per disaster handled by the target SETMs is decreased by X% compared with the same before the Project (from X to X)	a-c Hazard evaluation disaster prevention & recovery sheets, in the Database	
Project Purpose Capacity of MOT and the target SETMs/SEHMs for effective road disaster management is improved.	 a. By the end of the Project, X% of results of the disaster recovery works by the target SETMs/SEHMs, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans b. By the end of the Project, X% of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the Japanese Expert Team c. X% of results of the disaster prevention measures #2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality and safety specified in the plans. d. By the end of the Project, budget request for disaster prevention in the target SETMs for FY 2021 is submitted to Ministry of Finance (MOF) as Part of the regular budget 	a. Assessment report b. Prevention sheet c. Recovery sheet d. Data of budget request	A. Policy for disaster management is not discontinued. B. Political instability/economic crisis/serious natural disaster that affect the project sites do not occur. C. Budget including prevention, is approved by MOF
Output Output-1: Road disaster management structure of MOT and the target SETMs/SEHMs is strengthened.	By Jun 2017, a report on current disaster management relevant to MOT and the target SETMs/SEHMs is developed By Jul 2017, roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM(RDMT) is clarified. By the end of the Project, X% of members of RDMT are able to support SETMs/SEHMs according to their respective roles and responsibilities. By the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs, including institutionalization od RDMT, is approved by MOT	Date of report Approval of JCC Joint review based on individual capacity devl plan Official approval document	A. Staff of MOT and the target SETMs/SEHMs trained through the Project do not leave the office in large numbers
Output-2: Road disaster recoveries by the target SETMs/SEHMs	By Dec 2017, a road disaster recovery manual for SETM/SEHM/RRT is developed 2b. X% of the training participants from all target	2a. Acceptance letter 2b. Test results 2c. Ditto 2d ~ e	

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
are improved through standardization	SETMs/SEHMs passes the post-training test on disaster recovery works 2c. X% of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery works for each job category 2d. Disaster recovery works in the drills are planned and implemented by all target SETMs/SEHMs according to the manual 2e. Disaster recovery works at the actual disaster sites are planned and implemented by all relevant target SETMs/STHMs according to the manual 2f. By the end of the Project, the finalized manual is approved	Joint review of the checklist 2e Approval letter	
Output-3.: Process of locally adaptable road disaster prevention is established at the target SETMs/SEHMs	by MOT 3a. By Oct. 2017, a road disaster prevention manual for SETM/SEHM is developed 3b. X% of the training participants from all target SETMs/SEHMs passes the post-training test on hazard evaluation and locally adaptable prevention measures each 3c. Hazard evaluation is conducted at least twice by all target SETM/SEHM for 10 target sections in all target SETMs according to the manual 3d. Locally adaptable prevention measures are planned by all target SETMs for 4 priority sites in Hissar and Soghd SEYMs according to the manual. 3e. Locally adaptable prevention measures are implemented by 4 target SEHMs at 4 priority site in Hissar and Soghd SETMs according to the manual 3f. X% of the observers from the other 22 SEHMs passes the post-observation test on implementation 3g. By Mar. 2020, future disaster prevention plans are developed for 10 target	3a. Acceptance letter 3b. Test results 3c ~ e Joint review of the checklist 3f Test results 3g Approval letter 3h ditto	
Output-4.: Data necessary for road disaster management is available for MOT and the target SETMs for budget preparation and disaster recovery woks and prevention	sections by all target SETMs 3h. By the end of the Project, the finalized manuals is approved by MOT 4a. By Dec 2017, road disaster management database is developed according to the design developed through the Project 4b. By Dec 2017, road disaster management database manuals for users and administrator are developed 4c. X% of the training participants from MOT and the target SETMs passes the post-training test on database use. 4d. By Mar 2019, the database is released to MOT and the target SETMs 4e. From 2019, a simple disaster management report is submitted to senior management of MOT once a year 4f. By the end of the Project, the finalized manual is approved by MOT	 4a. Comparison with the design 4b. Acceptance letter 4c. Test results 4d. Released date 4e. Report 4f. Approval letter 	
Output-5.: MOT and the target SETMs/SEHMs are capable of preparing budget proposal for road disaster prevention	5a. By Mar 2020, a report of a pilot study on cost-effectiveness of the locally adaptable disaster prevention is developed 5d. By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of the regular budget for FY 2021 based on the future development plans 5e. By the end of the Project, at least one project proposal for large-scale disaster prevention of the priority site(s) and studies for prevention is submitted by MOT to international donor(s) for funding, utilizing the results of Output 3 and 4	5a. Acceptance letter 5b. Budget document 5c. Proposals submitted	

Activities		Inputs		Important Assumption	
Output	1:	The Japanese Side The Tajik Side		A. Natural	
Road di SETMs/ 1-1. Ci ar 1-2. Ro di SI fo 1-3. Ci M	1: isaster management structure of MOT and the target /SEHMs is strengthened. lassify the target disasters through collection and nalysis of the past disaster records eview organizational and technical aspects of current isaster management relevant to MOT and the target ETMs/SEHMs, including their communication network or disaster Recovery called Rapid Response Team (RRT) clarify the roles and responsibilities of Road Disaster fanagement Taskforce supporting SETM/SEHM RDMT) formed at MOT and its members as well as their apacity development plans upport the target SETMs/SEHMs through the project	The Japanese Side Japanese Experts 1. Chief Advisor 2. Institution 3. Road Disaster Recovery 3. Road Disaster Prevention 4. Hazard Evaluation 5. O&M of equipment 6. Cost estimate 7. Database 8. Monitoring for	The Tajik Side Personnel 1. Project Director: Deputy Transport Minister, MOT 2. Deputy Project Director Head of RCM, MOT 3. Project Manager Head of International Relation Dept.	A. Natural disaster/political instability economic crisis that affect the project activities do not occur B. Security situation of Tajikistan which limits the activities of the JICA experts, especially in the	
1-5. D str	ctivities according to the clarified roles and esponsibilities (by RDMT) evelop an improvement plan of disaster management cructure of MOT and the target SETMs/SEHMs based on the feedbacks from the project activities for approval by MOT	early warning 9. Local Administrative Coordinator 10. Other experts mutually agreed	MOT 4. Regional Managers Heads of the target SETMs 5. Relevant Staff of MOT	project sites, does not deteriorate compared with the same in 2016	
Output		upon as necessary	6. Relevant staff of DI7. Relevant staff of the	<pre-conditions></pre-conditions>	
	isaster recoveries by the target SETMs/SEHMs are ed through standardization	Equipment	target	A. Tentative list of	
2-1. E: or or 2-2. D R A A A 2-3. C: SI Su	ed through standardization xamine locally adaptable disaster recovery works based in the current state review (Activity. 1.2) everlop a disaster recovery manual for SETM/SEHM and RT, including action for preparedness, which is used for activity 2.3-2.5 conduct trainings on disaster recovery works for all target ETMs/SEHMs and MOT (i.e. action for preparedness, arvey selection of works, design, cost estimate, apervision, disaster recovery sheet) (in Hissor and Sughd ETMs) conduct on -site drills for simulated disaster recovery orks for all target SETMs/SEHMs (in Hissor and Sughd ETMs) lan and implement disaster recovery works for the isaster occurred in any target SEHMs by the relevant EHMs/SETMs (pdate and finalize the manual, reflecting the feedbacks for Act. 2.3-2.5 ertify Trainers for Disaster Recovery from the target ETMs/SEHMs 3: of simple road disaster prevention is established at the test SETMs/SEHMs xamine hazard evaluation methods and locally daptable prevention measures based on the current	1. Equipment for disaster recovery and prevention 2. Hardware and software for database 3. Desktop PC for database at MOT and each SETM 4. Laptop PC for hazard evaluation and monitoring at each SETM 5. Monitoring equipment for simple early warning 6. Other equipment mutually agreed upon as necessary Training of the Tajik Personnel in Japan and/or third country Local costs	SETMs/SEHMs 8. Other personnel mutually agreed upon as necessary Land, Building and Facilities 1. Land, building and facilities necessary for the implementation of the Project 2. Office spaces for the Project in the building of MOT, Hissar and Soghd SETMs with office furniture and utilities such as internet connectivity, telephone line, electricity, etc.	the Project Staff, including Disaster Management Taskforce is finalized B. Internet connection is established at each target SETM Issues & counter measures	
3-2. Property of the control of the	daptable prevention measures based on the current eview (Activity 1.2) evelop a road disaster prevention manual for ETM/SEHM. Consisting of hazard evaluation and clocally adaptable prevention measures, which is used or Activity 3.3-3.10 conduct trainings on hazard evaluation to all target ETMs/SEHMs and MOT (i.e. screening, selection od azardous sites, hazard/risk assessment, hazard valuation sheet) (in Hissor and Sughd SETMs) elect the target sections for hazard evaluation in each ETM conduct hazard evaluation at the target sections by all urget SEHMs in coordination with the respective ETMs dentify priority sites in the target sections based on the valuation results by the respective SETMs develop a future disaster prevention plan for each target ection by the respective SETMs forganize trainings on locally adaptable disaster revention measures to all target TMs/HMs (i.e. election, prevention measure sheet, monitoring for	Cost for activities of JET, local travel & accommodation cost for SETMs/SEHMs to participate in training, drills and prevention/recovery work	Local Costs 1. Cost for installation, operation and maintenance of the provided equipment, 2. Administration and operational costs, including fuel costs, and materials for prevention/recovery works, Meal allowances for SETMs/SEHMs to participate in training, drills, prevention/recovery works		

	Activities	Inputs	Important Assumption
3-9.	Plan and implement locally adaptable prevention		
	measures #1 & #2 on pilot basis at the priority sites in		
	the target sections selected in the first year (in Hissor and		
	Sughd SETMs) by the relevant target SETMs/SEHMs		
a.	Selection of measures		
b.	Design		
c.	Budget preparation		
d.	Supervision		
e.	Prevention measure sheet		
3-10.	Update and finalize the manual, reflecting feedbacks		
	from Activities 3.3-3.9		
3-11.	Certify Trainers for Disaster Prevention from the target SETMs/SETMs		
Outp			
	necessary for road disaster management is available		
	OT and the target SETMs for budget preparation and		
	ter recovery woks and prevention		
4-1.	Develop a plan for road disaster management database		
4-2.	Design a database system with installed hardware, consisting of spread sheets		
1_2	Develop road disaster management database manuals for		
4- 3.	users (i.e. MOT and the target SETMs) and		
	administrator, which are used for Activity 4.4-4.10		
4-4.	•		
T-T.	SETMs (i.e. collection, input, compilation, analysis and		
	reporting of data) (at MOT and each target SETM)		
4-5	Collect data of disaster recovery at all target SETMs in		
т Э.	2017 as baseline data in the prescribed from improved by		
	the Project		
4-6	Collect data necessary for disaster management from the		
. 0.	target SEHMs (i.e. disaster recovery sheets, hazard		
	evaluation sheets, end prevention measure sheets)		
4-7	Digitalize the data collected from the target SEHMs by		
. ,.	the respective target SETMs for submission to MOT		
4-8.	Integrate the digitized data submitted by the target		
	SETMs into the database		
4-9.	Release the database to MOT and all target SETMs		
	Develop simple annual road disaster management report		
	for senior management of MOT		
4-11.	Update and finalize the database design and the manuals,		
	reflecting feedbacks from the database users		
Outp			
-	and the target SETMs/SEHMs are capable of		
	ring budget proposal for road disaster prevention		
5-1.	Plan and implement a pilot study on cost effectiveness of		
	simple disaster prevention measures at the target sections		
	selected in the first year underOutput3, using simple		
	hazard location maps		
5-2.	Create a budget item for disaster prevention in the		
	regular budget of SETM/SEHM/MOT		
5-3.	Prepare a budget for locally adaptable disaster		
	prevention for the priority sites identified under Output 3		
	by all target SETMs and MOT, utilizing the results of		
	Output 3&4		
5-4.	Develop project proposal(s) on large-scale prevention		
	measures for the priority site(s) in the target section(s)		
	under output3, which cannot be handled by the target		
	SETMs/SEHMs, and studies for prevention measures for		
	funding by international donor(s) as needed, utilizing the		
	results of Output 3&4		

2) Version 1

Project Design Matrix (PDM ver.1)

Project Title: The Project for Capacity Development for Road Disaster Management

Implementing Agency: Ministry of Transport (MOT)

Target Group: MOT, Hissor SETM and its 9 SEHMs, Sughd SETM and 14 SEHMs, and Rasht SEHM and its 3 SEHMs (Nurobod, Rasht, and Ta-jikobod)

Period of Project: April 2017 - July 2020 (in Tajikistan)

<u>Project Site: International and Republican roads in Hissor and Sughd SETMs as well as Nurobod, Rasht and Tajikobod SEHMs in Rasht SETM</u>

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Overall Goal Road disasters are mitigated in the International and Republican Roads in the target SETMs/SEHMs	a. All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project b. By Jul 2023 disaster prevention measures are planned and / or implemented at least 5 priority sites in the target SETMs according to the disaster prevention manual developed through the Project c. From Aug 2020 to Jul 2023 the average duration required for road re-opening per disaster handled by the target SETMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018)	a-c Hazard evaluation disaster prevention & recovery sheets, in the Database	
Project Purpose Capacity of MOT and the target SETMs/SEHMs for effective road disaster management is improved.	 a. By the end of the Project, 80% of results of the disaster recovery works by the target SETMs/SEHMs, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans b. By the end of the Project, 80% of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the Japanese Expert Team c. 80% of results of the disaster prevention measures #2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality and safety specified in the plans. d. By the end of the Project, budget request for disaster prevention in the target SETMs for FY 2021 is submitted to Ministry of Finance (MOF) as Part of the regular budget 	a. Assessment report b. Prevention sheet c. Recovery sheet d. Data of budget request	A. Policy for disaster management is not discontinued. B. Political instability/economic crisis/serious natural disaster that affect the project sites do not occur. C. Budget including prevention, is approved by MOF
Output Output-1: Road disaster management structure of MOT and the target SETMs/SEHMs is strengthened.	By Jun 2017, a report on current disaster management relevant to MOT and the target SETMs/SEHMs is developed 1b. By Jul 2017, roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM(RDMT) is clarified. 1c. By the end of the Project, 80% of members of RDMT are able to support SETMs/SEHMs according to their respective roles and responsibilities. 1d. By the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs, including institutionalization od RDMT, is approved by MOT 2a. By Dec 2017,	Date of report Approval of JCC Ic. Joint review based on individual capacity devl plan Id. Official approval document	A. Staff of MOT and the target SETMs/SEHMs trained through the Project do not leave the office in large numbers
Road disaster recoveries by the target SETMs/SEHMs are improved through	a road disaster recovery manual for SETM/SEHM/RRT is developed 2b. 80% of the training participants from all target SETMs/SEHMs passes the post-training test on disaster recovery works	2a. Acceptance letter 2b. Test results 2c. Ditto 2d ~ e Joint review of	

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
standardization	80% of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery works for each job category	the checklist 2e Approval letter	
	2d. Disaster recovery works in the drills are planned and implemented by all target SETMs/SEHMs according to the manual		
	Disaster recovery works at the actual disaster sites are planned and implemented by all relevant target SETMs/STHMs according to the manual		
	2f. By the end of the Project, the finalized manual is approved by MOT		
Output-3.: Process of locally adaptable road	3a. By Oct. 2017, a road disaster prevention manual for SETM/SEHM is developed	3a. Acceptance letter 3b. Test results	
disaster prevention is established at the target	3b. 80% of the training participants from all target SETMs/SEHMs passes the post-training test on hazard evaluation and locally adaptable prevention measures each	3c∼e Joint review of the checklist	
SETMs/SEHMs	Hazard evaluation is conducted at least twice by all target SETM/SEHM for 10 target sections in all target SETMs according to the manual	3f Test results 3g Approval letter 3h ditto	
	 Locally adaptable prevention measures are planned by all target SETMs for 4 priority sites in Hissar and Soghd SEYMs according to the manual. 		
	Locally adaptable prevention measures are implemented by 4 target SEHMs at 4 priority site in Hissar and Soghd SETMs according to the manual		
	3f. 80% of the observers from the other 22 SEHMs passes the post-observation test on implementation		
	3g. By Mar. 2020, future disaster prevention plans are developed for 10 target sections by all target SETMs		
	3h. By the end of the Project, the finalized manuals is approved by MOT		
Output-4.: Data necessary for road disaster	4a. By Dec 2017, road disaster management database is developed according to the design developed through the Project	4a. Comparison with the design 4b. Acceptance	
management is available for MOT and the target	By Dec 2017, road disaster management database manuals for users and administrator are developed	letter 4c. Test results 4d. Released date	
SETMs for budget preparation and	4c. 80% of the training participants from MOT and the target SETMs passes the post-training test on database use.	4e. Report4f. Approval letter	
disaster recovery woks and prevention	By Mar 2019, the database is released to MOT and the target SETMs 4e. From 2019, a simple disaster management report is		
	submitted to senior management of MOT once a year 4f. By the end of the Project, the finalized manual is approved		
Output-5.: MOT and the target SETMs/SEHMs are	by MOT 5a. By Mar 2020, a report of a pilot study on cost-effectiveness of the locally adaptable disaster prevention is developed	5a. Acceptance letter 5b. Budget	
capable of preparing budget proposal for road disaster	By Jun 2020. budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part	document 5c. Proposals submitted	
prevention	of the regular budget for FY 2021 based on the future development plans		
	5c. By the end of the Project, at least one project proposal for large-scale disaster prevention of the priority site(s) and studies for prevention is submitted by MOT to international donor(s) for funding, utilizing the results of Output 3 and 4		

	Activities	Inputs		Important Assumption
Outp	ut 1:	The Japanese Side	The Tajik Side	A. Natural
targe	disaster management structure of MOT and the t SETMs/SEHMs is strengthened. Classify the target disasters through collection and analysis of the past disaster records Review organizational and technical aspects of current disaster management relevant to MOT and the target SETMs/SEHMs, including their communication	1. Chief Advisor 2. Institution 3. Road Disaster Recovery 3. Road Disaster	Personnel 1. Project Director: Deputy Transport Minister, MOT 2. Deputy Project Director	disaster/political instability economic crisis that affect the project activities do not occur B. Security
1-3.	network for disaster Recovery called Rapid Response Team (RRT) Clarify the roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM (RDMT) formed at MOT and its members as well as their capacity development plans	Prevention 4. Hazard Evaluation 5. O&M of equipment 6. Cost estimate 7. Database 8. Monitoring for early	Head of RCM, MOT 3. Project Manager Head of International Relation Dept.	situation of Tajikistan which limits the activities of the JICA experts, especially in the
1-4. 1-5.	Support the target SETMs/SEHMs through the project activities according to the clarified roles and responsibilities (by RDMT) Develop an improvement plan of disaster management	9. Local Administrative Coordinator 10. Other experts	MOT 4. Regional Managers Heads of the target SETMs	project sites, does not deteriorate compared with
Outp	structure of MOT and the target SETMs/SEHMs based on the feedbacks from the project activities for approval by MOT and 2:	mutually agreed upon as necessary Equipment	 5. Relevant Staff of MOT 6. Relevant staff of DI 7. Relevant staff of the 	the same in 2016 <pre-conditions></pre-conditions>
	disaster recoveries by the target SETMs/SEHMs are	1. Equipment for	target	A. Tentative list of
impr	oved through standardization	disaster recovery and prevention	SETMs/SEHMs 8. Other personnel	the Project Staff,
2-1. 2-2.	Examine locally adaptable disaster recovery works based on the current state review (Activity. 1.2) Develop a disaster recovery manual for SETM/SEHM	2. Hardware and software for database	8. Other personnel mutually agreed upon as necessary	including Disaster Management
2-3.	and RRT, including action for preparedness, which is used for Activity 2.3-2.5 Conduct trainings on disaster recovery works for all	3. Desktop PC for database at MOT and each SETM	Land, Building and	Taskforce is finalized B. Internet
	target SETMs/SEHMs and MOT (i.e. action for preparedness, survey selection of works, design, cost estimate, supervision, disaster recovery sheet) (in Hissor and Sughd SETMs)	4. Laptop PC for hazard evaluation and monitoring at each SETM	Facilities 1. Land, building and facilities	connection is established at each target SETM
2-4.	Conduct on -site drills for simulated disaster recovery works for all target SETMs/SEHMs (in Hissor and Sughd SETMs)	5. Monitoring equipment for simple early warning 6. Other equipment	necessary for the implementation of the Project 2. Office spaces for the	•
2-5.	disaster occurred in any target SEHMs by the relevant SEHMs/SETMs	mutually agreed upon as necessary	Project in the building of MOT, Hissar and Soghd	Issues & counter measures
2-6.2-7.	Update and finalize the manual, reflecting the feedbacks from Act. 2.3-2.5 Certify Trainers for Disaster Recovery from the target	Training of the Tajik Personnel in Japan and/or third country	SETMs with office furniture and utilities such as	
Outp	SETMs/SEHMs ut 3:	Local costs	internet connectivity,	
	ess of simple road disaster prevention is established at		telephone line,	
the ta	arget SETMs/SEHMs	Cost for activities of JET, local travel &	electricity, etc.	
3-1.	Examine hazard evaluation methods and locally adaptable prevention measures based on the current review (Activity 1.2)	accommodation cost for SETMs/SEHMs to	Local Costs	
3-2.	Develop a road disaster prevention manual for SETM/SEHM. Consisting of hazard evaluation and 1.locally adaptable prevention measures, which is used for Activity 3.3-3.10	participate in training, drills and prevention/recovery work	Cost for installation, operation and maintenance of the	
3-3.	Conduct trainings on hazard evaluation to all target SETMs/SEHMs and MOT (i.e. screening, selection od hazardous sites, hazard/risk assessment, hazard evaluation sheet) (in Hissor and Sughd SETMs)		provided equipment, 2. Administration and operational costs,	
3-4.	Select the target sections for hazard evaluation in each SETM		including fuel costs, and materials for	
3-5.	Conduct hazard evaluation at the target sections by all target SEHMs in coordination with the respective SETMs		prevention/recovery works, Meal allowances for	
3-6.	Identify priority sites in the target sections based on the evaluation results by the respective SETMs		SETMs/SEHMs to participate in	
3-7. 3-8.	Develop a future disaster prevention plan for each target section by the respective SETMs Organize trainings on locally adaptable disaster		training, drills, prevention/recovery works	
J-0.	prevention measures to all target TMs/HMs (i.e. selection, prevention measure sheet, monitoring for			

	Import		Important
	Activities	Inputs	Assumption
	simple early warning) (in Hissor and Sughd SETMs)		
3-9.	1 7 1 1		
	measures #1 & #2 on pilot basis at the priority sites in		
	the target sections selected in the first year (in Hissor		
	and Sughd SETMs) by the relevant target		
	SETMs/SEHMs		
a.	Selection of measures		
b.	Design		
c.	Budget preparation		
d.	Supervision		
e.	Prevention measure sheet		
3-10.	Update and finalize the manual, reflecting feedbacks		
	from Activities 3.3-3.9		
3-11.	Certify Trainers for Disaster Prevention from the target		
	SETMs/SETMs		
Outp			
	necessary for road disaster management is available		
	IOT and the target SETMs for budget preparation		
	lisaster recovery woks and prevention		
4-1.	Develop a plan for road disaster management database		
4-2.	Design a database system with installed hardware,		
1.2	consisting of spread sheets		
4-3.	Develop road disaster management database manuals		
	for users (i.e. MOT and the target SETMs) and		
	administrator, which are used for Activity 4.4-4.10		
4-4.	Conduct trainings on database use for MOT and all		
	target SETMs (i.e. collection, input, compilation,		
	analysis and reporting of data) (at MOT and each target		
1 5	SETM)		
4-5.	Collect data of disaster recovery at all target SETMs in		
	2017 as baseline data in the prescribed from improved		
4.6	by the Project		
4-6.	Collect data necessary for disaster management from		
	the target SEHMs (i.e. disaster recovery sheets, hazard		
4.7	evaluation sheets, end prevention measure sheets)		
4-7.	2 ,		
10	the respective target SETMs for submission to MOT		
4-8.	Integrate the digitized data submitted by the target SETMs into the database		
4.0			
	Release the database to MOT and all target SETMs Develop simple annual road disaster management		
4 -10.	report for senior management of MOT		
4_11	Update and finalize the database design and the		
т-11.	manuals, reflecting feedbacks from the database users		
Outp		1	
	and the target SETMs/SEHMs are capable of		
	aring budget proposal for road disaster prevention		
	Plan and implement a pilot study on cost effectiveness		
J 1.	of simple disaster prevention measures at the target		
	sections selected in the first year underOutput3, using		
	simple hazard location maps		
5-2.	*		
	regular budget of SETM/SEHM/MOT		
5-3.	Prepare a budget for locally adaptable disaster		
	prevention for the priority sites identified under Output		
	3 by all target SETMs and MOT, utilizing the results of		
	Output 3&4		
5-4.	Develop project proposal(s) on large-scale prevention		
	measures for the priority site(s) in the target section(s)		
	under output3, which cannot be handled by the target		
	SETMs/SEHMs, and studies for prevention measures		
	for funding by international donor(s) as needed,		
	utilizing the results of Output 3&4		

3) Version 2

Project Design Matrix (PDM ver.2)

Project Title: The Project for Capacity Development for Road Disaster Management

Implementing Agency: Ministry of Transport (MOT)

Target Group: MOT, Hissor SETM and its 9 SEHMs, Sughd SETM and 14 SEHMs, and Rasht SEHM and its 3 SEHMs (Nurobod, Rasht, and Ta-jikobod)

Period of Project: April 2017 - July 2020 (in Tajikistan)

<u>Project Site: International and Republican roads in Hissor and Sughd SETMs as well as Nurobod, Rasht and Tajikobod SEHMs in Rasht SETM</u>

 a. All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project b. By Jul 2023 disaster prevention measures are planned and / or implemented at least 5 priority sites in the target SETMs according to the disaster prevention manual developed through the Project c. From Aug 2020 to Jul 2023 the average duration required for road re-opening per disaster handled by the target SETMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018) 	a-c Hazard evaluation disaster prevention & recovery sheets, in the Database	
 a. By the end of the Project, 80% of results of the disaster recovery works by the target SETMs/SEHMs, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans b. By the end of the Project, 80% of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the Japanese Expert Team c. 80% of results of the disaster prevention measures #2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality and safety specified in the plans. d. By the end of the Project, budget request for disaster prevention in the target SETMs for FY 2021 is submitted to Ministry of Finance (MOF) as Part of the regular budget 	a. Assessment report b. Prevention sheet c. Recovery sheet d. Data of budget request	 A. Policy for disaster management is not discontinued. B. Political instability/economic crisis/serious natural disaster that affect the project sites do not occur. C. Budget including prevention, is approved by MOF
 1a. By Jun 2017, a report on current disaster management relevant to MOT and the target SETMs/SEHMs is developed 1b. By Jul 2017, roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM(RDMT) is clarified. 1c. By the end of the Project, 80% of members of RDMT are able to support SETMs/SEHMs according to their respective roles and responsibilities. 1d. By the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs, including institutionalization od RDMT, is approved by MOT 2a. By Dec 2017, a road disaster recovery manual for SETM/SEHM/RRT is developed 2b. 80% of the training participants from all target 	Date of report Approval of JCC Joint review based on individual capacity devl plan Official approval document Acceptance letter Est results Ditto	A. Staff of MOT and the target SETMs/SEHMs trained through the Project do not leave the office in large numbers
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	disaster prevention measures are planned and / or implemented at least 5 priority sites in the target SETMs according to the disaster prevention manual developed through the Project Erom Aug 2020 to Jul 2023 the average duration required for road re-opening per disaster handled by the target SETMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018) By the end of the Project, 80% of results of the disaster recovery works by the target SETMs/SEHMs, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans By the end of the Project, 80% of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the Japanese Expert Team 80% of results of the disaster prevention measures #2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality and safety specified in the plans. By the end of the Project, budget request for disaster prevention in the target SETMs for FY 2021 is submitted to Ministry of Finance (MOF) as Part of the regular budget By Jun 2017, a report on current disaster management relevant to MOT and the target SETMs/SEHMs is developed By Jul 2017, roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM(RDMT) is clarified. By the end of the Project, 80% of members of RDMT are able to support SETMs/SEHMs according to their respective roles and responsibilities. By the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs, including institutionalization od RDMT, is approved by MOT By Dec 2017, a road disaster recovery manual for SETM/SEHM/RRT is developed	disaster prevention measures are planned and / or implemented at least 5 priority sites in the target SETMs according to the disaster prevention manual developed through the Project. From Aug 2020 to Jul 2023 the average duration required for road re-opening per disaster handled by the target SETMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018) By the end of the Project, 80% of results of the disaster recovery works by the target SETMs/SEHMs, according to the disaster requirements of time, cost, quality, and safety specified in the plans By the end of the Project, 80% of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the Japanese Expert Team 80% of results of the disaster prevention measures #2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, neet requirements of time, cost, quality and safety specified in the plans. By the end of the Project, budget request for disaster prevention in the target SETMs/SEHMs is developed By Jul 2017, roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM(RDMT) is clarified. By the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs according to their respective roles and responsibilities. Cl. By the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs, including institutionalization od RDMT, is approved by MOT 2a. By Dec 2017, a road disaster recovery manual for SETM/SEHM/RRT is developed By By dec 2017, a road disaster recovery manual for SETM/SEHM/RRT is developed By By dec 2017, a road disaster recovery manual for SETM/SEHM/RRT is developed

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
standardization	80% of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery works for each job category 2d. Disaster recovery works in the drills are planned and	the checklist 2e Approval letter	
	implemented by all target SETMs/SEHMs according to the manual 2e. Disaster recovery works at the actual disaster sites are		
	planned and implemented by all relevant target SETMs/STHMs according to the manual		
	2f. By the end of the Project, the finalized manual is approved by MOT		
Output-3.: Process of locally adaptable road	3a. By Oct. 2017, a road disaster prevention manual for SETM/SEHM is developed	3a. Acceptance letter 3b. Test results	
disaster prevention is established at the target	3b. 80% of the training participants from all target SETMs/SEHMs passes the post-training test on hazard evaluation and locally adaptable prevention measures each	3c ~ e Joint review of the checklist	
SETMs/SEHMs	3c. Hazard evaluation is conducted at least twice by all target SETM/SEHM for 10 target sections in all target SETMs according to the manual	3f Test results 3g Approval letter 3h ditto	
	3d. Locally adaptable prevention measures are planned by all target SETMs for 4 priority sites in Hissar and Soghd SEYMs according to the manual.		
	Locally adaptable prevention measures are implemented by 4 target SEHMs at 4 priority site in Hissar and Soghd SETMs according to the manual		
	3f. 80% of the observers from the other 22 SEHMs passes the post-observation test on implementation		
	3g. <u>By Mar. 2020.</u> future disaster prevention plans are developed for 10 target sections by all target SETMs		
	3h. By the end of the Project, the finalized manuals is approved by MOT		
Output-4.: Data necessary for road disaster management is	By Dec 2017, road disaster management database (disaster management data collection system) is developed according to the design developed through the Project	4a. Comparison with the design4b. Acceptance letter	
available for MOT and the target SETMs for budget	By Dec 2017, road disaster management database (data collection system) manuals for users and administrator are developed	4c. Test results4d. Released date4e. Report	
preparation and disaster recovery woks and prevention	4c. 80% of the training participants from MOT and the target SETMs passes the post-training test on database (disaster management data collection system) use.	4f. Approval letter	
	By Mar 2019, the database (disaster management data collection system) is released to MOT and the target SETMs		
	From 2019, a simple disaster management report is submitted to senior management of MOT once a year 4f. By the end of the Project, the finalized manual is approved by		
Output-5.:	MOT 5a. By Mar 2020,	5a. Acceptance	
MOT and the target SETMs/SEHMs are	a report of a pilot study on cost-effectiveness of the locally adaptable disaster prevention is developed	letter 5b. Budget	
capable of preparing budget proposal for road disaster	5b. By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part	document 5c. Proposals submitted	
prevention	of the regular budget for FY 2021 based on the future development plans		
	5c. By the end of the Project, at least one project proposal for large-scale disaster prevention of the priority site(s) and studies for prevention is submitted by MOT to international donor(s) for funding, utilizing the results of Output 3 and 4		

	Activities	In	puts	Important Assumption
Outp		The Japanese Side	The Tajik Side	A. Natural
Road	disaster management structure of MOT and the t SETMs/SEHMs is strengthened. Classify the target disasters through collection and analysis of the past disaster records Review organizational and technical aspects of current disaster management relevant to MOT and the target SETMs/SEHMs, including their communication network for disaster Recovery called Rapid Response Team (RRT)	The Japanese Side Japanese Experts 1. Chief Advisor 2. Institution 3. Road Disaster Recovery 3. Road Disaster Prevention 4. Hazard Evaluation 5. O&M of equipment 6. Cost estimate 7. Database 8. Monitoring for	The Tajik Side Personnel 1. Project Director: Deputy Transport Minister, MOT 2. Deputy Project Director Head of RCM, MOT 3. Project Manager Head of International Relation Dept. MOT 4. Regional Managers	A. Natural disaster/political instability economic crisis that affect the project activities do not occur B. Security situation of Tajikistan which limits the activities of the JICA experts, especially in the project sites, does not deteriorate compared with the same in 2016
1-5.	responsibilities (by RDMT) Develop an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs based on the feedbacks from the project activities for approval by MOT ut 2:	9. Local Administrative Coordinator 10. Other experts mutually agreed upon as necessary	Heads of the target SETMs 5. Relevant Staff of MOT 6. Relevant staff of DI 7. Relevant staff of the target	<pre><pre-conditions> A. Tentative list of the Project Staff, including Disaster Management</pre-conditions></pre>
1	disaster recoveries by the target SETMs/SEHMs are		SETMs/SEHMs	Taskforce is
	Examine locally adaptable disaster recovery works based on the current state review (Activity. 1.2) Develop a disaster recovery manual for SETM/SEHM and RRT, including action for preparedness, which is	Equipment 1. Equipment for disaster recovery and prevention 2. Hardware and	Other personnel mutually agreed upon as necessary	finalized B. Internet connection is established at each target SETM
2-3.	used for Activity 2.3-2.5 Conduct trainings on disaster recovery works for all target SETMs/SEHMs and MOT (i.e. action for preparedness, survey selection of works, design, cost estimate, supervision, disaster recovery sheet) (in Hissor	software for database 3. Desktop PC for database at MOT and each SETM	Facilities 1. Land, building and facilities	Issues & counter measures
2-4.	and Sughd SETMs) Conduct on -site drills for simulated disaster recovery works for all target SETMs/SEHMs (in Hissor and Sughd SETMs)	4. Laptop PC for hazard evaluation and monitoring at	necessary for the implementation of the Project 2. Office spaces for the	
2-6.	Plan and implement disaster recovery works for the disaster occurred in any target SEHMs by the relevant SEHMs/SETMs Update and finalize the manual, reflecting the feedbacks from Act. 2.3-2.5	each SETM 5. Monitoring equipment for simple early warning 6. Other equipment	Project in the building of MOT, Hissar and Soghd SETMs with office furniture and	
2-7.	Certify Trainers for Disaster Recovery from the target SETMs/SEHMs	mutually agreed	utilities such as	
Outr	ut 3:	upon as necessary	internet	
	ess of simple road disaster prevention is established at	Training of the Tajik	connectivity, telephone line,	
	arget SETMs/SEHMs	Personnel in Japan	electricity, etc.	
	Examine hazard evaluation methods and locally adaptable prevention measures based on the current review (Activity 1.2)	and/or third country Local costs	Local Costs	
3-2.	SETM/SEHM. Consisting of hazard evaluation and 1.locally adaptable prevention measures, which is used for Activity 3.3-3.10	Cost for activities of JET, local travel & accommodation cost for SETMs/SEHMs to	1. Cost for installation, operation and maintenance of the	
3-3.	Conduct trainings on hazard evaluation to all target SETMs/SEHMs and MOT (i.e. screening, selection od hazardous sites, hazard/risk assessment, hazard evaluation sheet) (in Hissor and Sughd SETMs)	participate in training, drills and prevention/recovery work	provided equipment, 2. Administration and operational costs,	
3-4.	Select the target sections for hazard evaluation in each SETM		including fuel costs, and materials for	
3-5.	Conduct hazard evaluation at the target sections by all target SEHMs in coordination with the respective SETMs		prevention/recovery works, Meal allowances for SETMs/SEHMs to	
3-6.	Identify priority sites in the target sections based on the evaluation results by the respective SETMs		participate in	
3-7.	Develop a future disaster prevention plan for each target section by the respective SETMs		training, drills, prevention/recovery works	
3-8.	Organize trainings on locally adaptable disaster prevention measures to all target TMs/HMs (i.e. selection, prevention measure sheet, monitoring for		WOIRS	

	Activities	Inputs	Important Assumption
3-9.	simple early warning) (in Hissor and Sughd SETMs) Plan and implement locally adaptable prevention measures #1 & #2 on pilot basis at the priority sites in the target sections selected in the first year (in Hissor and Sughd SETMs) by the relevant target SETMs/SEHMs		
a.			
b.	E		
c. d.	C 1 1		
e.	Prevention measure sheet		
3-10.	Update and finalize the manual, reflecting feedbacks from Activities 3.3-3.9		
3-11.	Certify Trainers for Disaster Prevention from the target SETMs/SETMs		
	out 4:]	
for N	necessary for road disaster management is available IOT and the target SETMs for budget preparation		
	disaster recovery woks and prevention		
4-1.	Develop a plan for road disaster management database (data collection system) based on the current state review (Activity 1.2)		
4-2.	Design a database (disaster management data collection) system with installed hardware, consisting		
4-3.	of spread sheets Develop road disaster management database (data collection system) manuals for users (i.e. MOT and the		
	target SETMs) and administrator, which are used for Activity 4.4-4.10		
4-4.	Conduct trainings on database (disaster management data collection system) use for MOT and all target SETMs (i.e. collection, input, compilation, analysis and reporting of data) (at MOT and each target SETM)		
4-5.			
4-6.	Collect data necessary for disaster management from the target SEHMs (i.e. disaster recovery sheets, hazard evaluation sheets, end prevention measure sheets)		
4-7. 4-8.	Digitalize the data collected from the target SEHMs by the respective target SETMs for submission to MOT		
4-9.	SETMs into the database Release the database (disaster management data		
	collection system) to MOT and all target SETMs Develop simple annual road disaster management		
	report for senior management of MOT		
4-11.	Update and finalize the database (data collection system) design and the manuals, reflecting feedbacks from the database users		
Outp	out 5:]	
	Γ and the target SETMs/SEHMs are capable of aring budget proposal for road disaster prevention		
	Plan and implement a pilot study on cost effectiveness of simple disaster prevention measures at the target		
	sections selected in the first year underOutput3, using simple hazard location maps		
5-2.	Create a budget item for disaster prevention in the		
5-3.	regular budget of SETM/SEHM/MOT Prepare a budget for locally adaptable disaster prevention for the priority sites identified under Output 3 by all target SETMs and MOT, utilizing the results of		
	Output 3&4		
5-4.	Develop project proposal(s) on large-scale prevention measures for the priority site(s) in the target section(s)		
	under output3, which cannot be handled by the target SETMs/SEHMs, and studies for prevention measures		
	for funding by international donor(s) as needed, utilizing the results of Output 3&4		

4) Version 3

Project Design Matrix

Project Title: The Project for Capacity Development for Road Disaster Management

Implementing Agency: Ministry of Transport (MOT)

Target Group: MOT, Hissor SETM and its 9 SEHMs, Sughd SETM and 14 SEHMs, and Rasht SEHM and its 3 SEHMs (Nurobod, Rasht, and Ta-jikobod)

Period of Project: April 2017 - February 2021 (in Tajikistan)

<u>Project Site: International and Republican roads in Hissor and Sughd SETMs as well as Nurobod, Rasht and Tajikobod SEHMs in Rasht SETM</u>

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Overall Goal Road disasters are mitigated in the International and Republican Roads in the target SETMs/SEHMs	a. All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project b. By February 2024 disaster prevention measures are planned and / or implemented at least 5 priority sites in the target SETMs according to the disaster prevention manual developed through the Project c. From Aug 2020 to Jul 2023 the average duration required for road re-opening per disaster handled by the target SETMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018)	a-c Hazard evaluation disaster prevention & recovery sheets, in the Database	
Project Purpose Capacity of MOT and the target SETMs/SEHMs for effective road disaster management is improved.	 a. By the end of the Project, 80% of results of the disaster recovery works by the target SETMs/SEHMs, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans b. By the end of the Project, 80% of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the Japanese Expert Team c. 80% of results of the disaster prevention measures #2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality and safety specified in the plans. d. By the end of the Project, budget request for disaster prevention in the target SETMs for FY 2022 is submitted to Ministry of Finance (MOF) as Part of the regular budget 	a. Assessment report b. Prevention sheet c. Recovery sheet d. Data of budget request	A. Policy for disaster management is not discontinued. B. Political instability/economic crisis/serious natural disaster that affect the project sites do not occur. C. Budget including prevention, is approved by MOF
Output Output-1: Road disaster management structure of MOT and the target SETMs/SEHMs is strengthened.	By Jun 2017, a report on current disaster management relevant to MOT and the target SETMs/SEHMs is developed 1b. By Jul 2017, roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM(RDMT) is clarified. 1c. By the end of the Project, 80% of members of RDMT are able to support SETMs/SEHMs according to their respective roles and responsibilities. 1d. By the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs, including institutionalization od RDMT, is approved by MOT	Date of report Approval of JCC Joint review based on individual capacity devl plan Official approval document	B. Staff of MOT and the target SETMs/SEHMs trained through the Project do not leave the office in large numbers
Output-2: Road disaster recoveries by the target SETMs/SEHMs are	By Dec 2017. a road disaster recovery manual for SETM/SEHM/RRT is developed 2b. 80% of the training participants from all target SETMs/SEHMs passes the post-training test on disaster	2a. Acceptance letter 2b. Test results 2c. Ditto 2d ~ e Joint review of	

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
improved through standardization	recovery works 2c. 80% of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery works for each job category 2d. Disaster recovery works in the drills are planned and implemented by all target SETMs/SEHMs according to the manual 2e. Disaster recovery works at the actual disaster sites are planned and implemented by all relevant target SETMs/STHMs according to the manual 2f. By the end of the Project, the finalized manual is approved	the checklist 2e Approval letter	
Output-3.: Process of locally adaptable road disaster prevention is established at the target SETMs/SEHMs	by MOT 3a. By Oct. 2017, a road disaster prevention manual for SETM/SEHM is developed 3b. 80% of the training participants from all target SETMs/SEHMs passes the post-training test on hazard evaluation and locally adaptable prevention measures each 3c. Hazard evaluation is conducted at least twice by all target	3a. Acceptance letter 3b. Test results 3c ~ e Joint review of the checklist 3f Test results 3g Approval letter 3h ditto	
	SETM/SEHM for 10 target sections in all target SETMs according to the manual 3d. Locally adaptable prevention measures are planned by all target SETMs for 4 priority sites in Hissar and Soghd SEYMs according to the manual. 3e. Locally adaptable prevention measures are implemented by 4 target SEHMs at 4 priority site in Hissar and Soghd SETMs according to the manual 3f. 80% of the observers from the other 22 SEHMs passes the post-observation test on implementation 3g. By Mar. 2020, future disaster prevention plans are developed for 10 target sections by all target SETMs 3h. By the end of the Project, the finalized manuals is approved	Sil ulito	
Output-4.: Data necessary for road disaster management is available for MOT and the target SETMs for budget preparation and disaster recovery woks and prevention	by MOT 4a. By Dec 2017. road disaster management database (disaster management data collection system) is developed according to the design developed through the Project 4b. By Dec 2017. road disaster management database (data collection system) manuals for users and administrator are developed 4c. 80% of the training participants from MOT and the target SETMs passes the post-training test on database (disaster management data collection system) use. 4d. By Mar 2019. the database (disaster management data collection system) is released to MOT and the target SETMs 4e. From 2019, a simple disaster management report is submitted to senior management of MOT once a year 4f. By the end of the Project, the finalized manual is approved by MOT	4a. Comparison with the design 4b. Acceptance letter 4c. Test results 4d. Released date 4e. Report 4f. Approval letter	
Output-5.: MOT and the target SETMs/SEHMs are capable of preparing budget proposal for road disaster prevention	5a. By Mar 2020, a report of a pilot study on cost-effectiveness of the locally adaptable disaster prevention is developed 5b. By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of the regular budget for FY 2021 based on the future development plans 5c. By the end of the Project, at least one project proposal for large-scale disaster prevention of the priority site(s) and studies for prevention is submitted by MOT to international donor(s) for funding, utilizing the results of Output 3 and 4	5a. Acceptance letter5b. Budget document5c. Proposals submitted	

	Activities	Inp	puts	Important Assumption
targe 1-1.	ut 1: I disaster management structure of MOT and the t SETMs/SEHMs is strengthened. Classify the target disasters through collection and analysis of the past disaster records Review organizational and technical aspects of current disaster management relevant to MOT and the target	The Japanese Side Japanese Experts 1. Chief Advisor 2. Institution 3. Road Disaster Recovery	The Tajik Side Personnel 1. Project Director: Deputy Transport Minister, MOT 2. Deputy Project	A. Natural disaster/political instability economic crisis that affect the project activities do not occur
1-3. 1-4. 1-5.	SETMs/SEHMs, including their communication network for disaster Recovery called Rapid Response Team (RRT) Clarify the roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM (RDMT) formed at MOT and its members as well as their capacity development plans Support the target SETMs/SEHMs through the project activities according to the clarified roles and responsibilities (by RDMT) Develop an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs based	3. Road Disaster Prevention 4. Hazard Evaluation 5. O&M of equipment 6. Cost estimate 7. Database 8. Monitoring for early warning 9. Local Administrative Coordinator 10. Other experts	Director Head of RCM, MOT 3. Project Manager Head of International Relation Dept. MOT 4. Regional Managers Heads of the target SETMs 5. Relevant Staff of MOT	B. Security situation of Tajikistan which limits the activities of the JICA experts, especially in the project sites, does not deteriorate compared with the same in 2016 <pre-conditions> A. Tentative list of the</pre-conditions>
impr 2-1. 2-2.	on the feedbacks from the project activities for approval by MOT ut 2: disaster recoveries by the target SETMs/SEHMs are oved through standardization Examine locally adaptable disaster recovery works based on the current state review (Activity. 1.2) Develop a disaster recovery manual for SETM/SEHM and RRT, including action for preparedness, which is used for Activity 2.3-2.5 Conduct trainings on disaster recovery works for all	mutually agreed upon as necessary Equipment 1. Equipment for disaster recovery and prevention 2. Hardware and software for database	Relevant staff of DI Relevant staff of the target SETMs/SEHMs Other personnel mutually agreed upon as necessary Land, Building and	Project Staff, including Disaster Management Taskforce is finalized B. Internet connection is established at each target SETM
2-6. 2-7.	target SETMs/SEHMs and MOT (i.e. action for preparedness, survey selection of works, design, cost estimate, supervision, disaster recovery sheet) (in Hissor and Sughd SETMs) Conduct on -site drills for simulated disaster recovery works for all target SETMs/SEHMs (in Hissor and Sughd SETMs) Plan and implement disaster recovery works for the disaster occurred in any target SEHMs by the relevant SEHMs/SETMs Update and finalize the manual, reflecting the feedbacks from Act. 2.3-2.5 Certify Trainers for Disaster Recovery from the target SETMs/SEHMs	3. Desktop PC for database at MOT and each SETM 4. Laptop PC for hazard evaluation and monitoring at each SETM 5. Monitoring equipment for simple early warning 6. Other equipment mutually agreed upon as necessary	Facilities 1. Land, building and facilities necessary for the implementation of the Project 2. Office spaces for the Project in the building of MOT, Hissar and Soghd SETMs with office furniture and utilities such as internet	Issues & counter measures
	out 3: less of simple road disaster prevention is established	Training of the Tajik Personnel in Japan	connectivity, telephone line,	
at the 3-1.	e target SETMs/SEHMs Examine hazard evaluation methods and locally adaptable prevention measures based on the current review (Activity 1.2) Develop a road disaster prevention manual for SETM/SEHM. Consisting of hazard evaluation and 1.locally adaptable prevention measures, which is used for Activity 3.3-3.10	And/or third country Local costs Cost for activities of JET, local travel & accommodation cost for SETMs/SEHMs to participate in training,	electricity, etc. Local Costs 1. Cost for installation, operation and maintenance of the	
3-3.3-4.3-5.	SETMs/SEHMs and MOT (i.e. screening, selection od hazardous sites, hazard/risk assessment, hazard evaluation sheet) (in Hissor and Sughd SETMs) Select the target sections for hazard evaluation in each SETM Conduct hazard evaluation at the target sections by all	drills and prevention/recovery work	provided equipment, 2. Administration and operational costs, including fuel costs, and materials for prevention/recovery works, Meal	
3-6. 3-7. 3-8.	target SEHMs in coordination with the respective SETMs Identify priority sites in the target sections based on the evaluation results by the respective SETMs Develop a future disaster prevention plan for each target section by the respective SETMs Organize trainings on locally adaptable disaster prevention measures to all target TMs/HMs (i.e. selection, prevention measure sheet, monitoring for		allowances for SETMs/SEHMs to participate in training, drills, prevention/recovery works	

		Γ		
	Activities	Inp	uts	Important Assumption
3-9.	simple early warning) (in Hissor and Sughd SETMs) Plan and implement locally adaptable prevention			
	measures #1 & #2 on pilot basis at the priority sites in the target sections selected in the first year (in Hissor			
	and Sughd SETMs) by the relevant target SETMs/SEHMs			
a.	Selection of measures			
b. с.	Design Budget preparation			
d. e.	Supervision Prevention measure sheet			
	Update and finalize the manual, reflecting feedbacks from Activities 3.3-3.9			
	Certify Trainers for Disaster Prevention from the target SETMs/SETMs			
Outp Data	ut 4: necessary for road disaster management is available			
for N	IOT and the target SETMs for budget preparation			
	lisaster recovery woks and prevention			
4-1.	Develop a plan for road disaster management database (data collection system) based on the current state review (Activity 1.2)			
4-2.	Design a database (disaster management data collection) system with installed hardware, consisting of spread sheets			
4-3.	Develop road disaster management database (data collection system) manuals for users (i.e. MOT and the target SETMs) and administrator, which are used for			
4-4.	Activity 4.4-4.10 Conduct trainings on database (disaster management			
	data collection system) use for MOT and all target SETMs (i.e. collection, input, compilation, analysis and reporting of data) (at MOT and each target SETM)			
4-5.	Collect data of disaster recovery at all target SETMs in 2017 as baseline data in the prescribed from improved by the Project			
4-6.	Collect data necessary for disaster management from the target SEHMs (i.e. disaster recovery sheets, hazard evaluation sheets, end prevention measure sheets)			
4-7. 4-8.	Digitalize the data collected from the target SEHMs by the respective target SETMs for submission to MOT Integrate the digitized data submitted by the target			
4-9.	SETMs into the database Release the database (disaster management data			
	collection system) to MOT and all target SETMs			
	Develop simple annual road disaster management report for senior management of MOT			
4-11.	Update and finalize the database (data collection system) design and the manuals, reflecting feedbacks			
Over	from the database users			
Outp MOT	and the target SETMs/SEHMs are capable of			
prepa	aring budget proposal for road disaster prevention			
5-1.	Plan and implement a pilot study on cost effectiveness of simple disaster prevention measures at the target			
	sections selected in the first year underOutput3, using simple hazard location maps			
5-2.	Create a budget item for disaster prevention in the regular budget of SETM/SEHM/MOT			
5-3.	Prepare a budget for locally adaptable disaster prevention for the priority sites identified under Output 3 by all target SETMs and MOT, utilizing the results of Output 3&4			
5-4.	Develop project proposal(s) on large-scale prevention measures for the priority site(s) in the target section(s) under output3, which cannot be handled by the target			
	SETMs/SEHMs, and studies for prevention measures for funding by international donor(s) as needed, utilizing the results of Output 3&4			

RECORD OF DISCUSSIONS

ON

THE PROJECT FOR CAPACITY DEVELOPMENT FOR ROAD DISASTER MANAGEMENT

IN

THE REPUBLIC OF TAJIKISTAN

AGREED UPON BETWEEN
MINISTRY OF TRANSPORT

AND

JAPAN INTERNATIONAL COOPERATION AGENCY

Dushanbe, November 9, 2016

Kiyoshi ISHII

Resident Representative

Japan International Cooperation

Agency

Tajikistan Office

Sherali GANJALZODA Minister of Transport The Republic of Tajikistan Based on the minutes of meetings on the Detailed Planning Survey on the "The Project for Capacity Development for Road Disaster Prevention Management" (hereinafter referred to as "the Project") signed on September 29th, 2016 between Ministry of Transport (hereinafter referred to as "MOT") and the Japan International Cooperation Agency (hereinafter referred to as "JICA"), JICA held a series of discussions with MOT and relevant organizations to develop a detailed plan of the Project.

Both parties agreed the details of the Project and the main points discussed as described in the Appendix 1 and the Appendix 2 respectively.

Both parties also agreed that MOT, the counterpart to JICA, will be responsible for the implementation of the Project in cooperation with JICA, coordinate with other relevant organizations and ensure that the self-reliant operation of the Project is sustained during and after the implementation period in order to contribute toward social and economic development of the Republic of Tajikistan.

The Project will be implemented within the framework of the Agreement on Technical Cooperation signed on February 15, 2005 (hereinafter referred to as "the Agreement") and the Note Verbales exchanged on June 22, 2016 between the Government of Japan (hereinafter referred to as "GOJ") and the Government of the Republic of Tajikistan (hereinafter referred to as "GOT").

The effectiveness of the record of discussions is subject to the exchange of the Note Verbales.

Appendix 1: Project Description Appendix 2: Main Points Discussed

Appendix 3: Minutes of Meetings on Detailed Planning Survey

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ANNEX 4-2

PROJECT DESCRIPTION

Both parties confirmed that there is no change in the Project Description agreed on in the minutes of meetings for Detailed Planning Survey on the Project signed on September 29, 2016 (Appendix 3).

I. BACKGROUND

The road network in the Republic of Tajikistan is 27,000km, mostly constructed during the Soviet era. The Ministry of Transport (MOT), the central governing body for the transport sector in Tajikistan has jurisdiction over 14,000 km of the network. Since the country is a landlocked and mountainous (93% of the area is termed mountainous), nearly 90% of freight transport within the country is by road and the road transport plays a vital role in the people's lives, Since independence from the Soviet Union in 1991, the country experienced a fateful civil war in the early 90s causing a severe economic setback which forced road assets unattended and many roads suffered damage during the civil war.

There has been international assistance for rehabilitation of roads for the last 10 years. However, the pavement ration of these roads is only 30% and many arterial roads still have potholes, broken shoulder pavement and other damages indicating inadequate maintenance. It is estimated that about 200km of roads are losing the road function each year.

Until now, JICA has been extending its cooperation to MOT for the improvement of road maintenance from both aspects of hard and soft components through "The project for the Improvement for Road Maintenance" (Technical Cooperation, R/D signed in 2013), "The project for Improvement of Equipment for Road Maintenance in Khatlon Region and Districts of Republican Subordination" (Grant Aid, G/A signed in 2013) and "The Project for Improvement of Equipment for Road Maintenance in Sughd Region and the Eastern Part of Khatlon Region" (Grant Aid, G/A signed in 2015) and they have been contributed to the improvement of road maintenance.

On the other hand, road disaster management has not been conducted in an appropriate manner, although Tajikistan is a mountainous country and has disaster-prone area. Falling rocks, landslide and avalanche disasters occur in many road sections during the severe winter weather season and this may be aggravated during the next spring season when the ice melts and brings down a tremendous volume of the melted water to major rivers flowing through the mountainous passes causing further disasters.

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Therefore, technical capability improvement on road disaster management of MOT as well as State Enterprise of Transport Management (hereinafter referred to as SETM) and State Enterprise on Highway Management (hereinafter referred to as SEHM) which is responsible for the management of International and Republican Road is required. Thus, the GOT requested the technical cooperation of Capacity Development for Road Disaster Prevention Management to the GOJ.

In response to this request, JICA dispatched the Detailed Planning Survey mission to discuss the contents of the Project with MOT and other authorities concerned of the Republic of Tajikistan. Based on the agreements between JICA and the authorities concerned of the Republic of Tajikistan, the Minutes of Meetings was signed on September 29, 2016, which leads both parties to conclude this Record of Discussions.

II. OUTLINE OF THE PROJECT

Details of the Project are described in the Logical Framework (Project Design Matrix: PDM) (Annex 1) and the Plan of Operation (Annex 2).

1. Title of the Project

Though the requested title of the Project was "The Project for Capacity Development for Road Disaster Prevention Management", the both sides decided to change it to "The Project for Capacity Development for Road Disaster Management" to reflect the goal and activities of the Project.

2 Project Site(s) and Beneficiaries

(1) Project Sites

The Project sites will be International and Republican roads in Hissor and Sughd SETMs as well as Nurobod, Rasht and Tajikobod SEHMs in Rasht SETM

(2) Direct Beneficiaries

The direct beneficiaries (Target Group) will be the relevant staff of MOT, Hissor SETM and its 9 SEHMs, Sughd SETM and 14 SEHMs, and Rasht SEHM and its 3 SEHMs (Nurobod, Rasht, and Tajikobod)

(3) Indirect Beneficiaries

The indirect beneficiaries will be the people using the Project sites.

3. Duration

Three (3) years and 4 months from the commencement of the Project (dispatch of the JICA experts from Japan)

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4. Overall Goal

Road disasters are mitigated in the International and Republican Roads in the target SETMs/SEHMs

5. Project Purpose

Capacity of MOT and the target SETMs/SEHMs for effective road disaster management is improved

6. Outputs

- (1) Road disaster management structure of MOT and the target SETMs/SEHMs is strengthened
- (2) Road disaster recoveries by the target SETMs/SEHMs are improved through standardization.
- (3) Process of locally adaptable road disaster prevention is established at the target SETMs/SEHMs
- (4) Data necessary for road disaster management is available at MOT and the target SETMs for budget preparation and road disaster recovery and prevention
- (5) MOT and the target SETMs/SEHMs are capable of preparing budget proposal for road disaster prevention

7. Input

(1) Input by JICA

- (a) Dispatch of Experts
 - 1) Chief Advisor
 - 2) Institution
 - 3) Road Disaster Work
 - 4) Road Disaster Prevention
 - 5). Hazard Evaluation
 - 6) O&M of equipment
 - 7) Cost estimate
 - 8) Database
 - 9) Monitoring for early warning
 - 10) Local Administrative Coordinator
 - 11) Other experts mutually agreed upon as necessary

(b) Training

Training of the Tajikistan personnel in Japan and/or the third country

(c) Machinery and Equipment

JICA will provide the following items:

- Attachments for back-hoe excavator and air compressor provided under JICA Grant Aid required for disaster recovery
- Total stations, auto levels, radar distance meters and rain gauges for site survey
- 3) Earthwork volume calculation system for disaster recovery
- 4) Database software and hardware for database system
- Desktop computers for MOT and 3 SETMs (4 sets) for database system

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- 6) Laptop computers for 3 SETMs (3 sets) for hazard evaluation
- 7) Other equipment mutually agreed upon as necessary

In case of importation, the machinery, equipment and other materials under II-6 (1) (c) above will become the property of the GOT upon being delivered C.I.F. (cost, insurance and freight) to the Republic of Tajikistan authorities concerned at the ports and/or airports of disembarkation.

(2) Input by MOT and the target SETMs/SEHMs

MOT and the target SETMs/SEHMs will take necessary measures to provide at its own expense:

- (a) Services of MOT and the target SETMs/SEHMs' counterpart personnel and administrative personnel as referred to in II-7;
- (b) Furnished office spaces for the Japanese Experts at the MOT, Gissar and Sogd SETMS, including air conditioners and internet connection;
- (c) Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than the equipment provided by JICA;
- (d) Information as well as support in obtaining medical service;
- (e) Credentials or identification cards;
- (f) Available data (including maps and photographs) and information related to the Project;
- (g) Running expenses necessary for the implementation of the Project;
- (h) Expenses necessary for transportation within the Republic of Tajikistan of the equipment referred to in II-6 (1) as well as for the installation, operation and maintenance thereof; and
- (i) Necessary supports to the JICA experts for the remittance as well as utilization of the funds introduced into the Republic of Tajikistan from Japan in connection with the implementation of the Project

8. Implementation Structure

The Project organization chart is given in the Annex 3. The roles and assignments of relevant organizations are as follows:

- (1) MOT and the target SETMs/SEHMs
 - (a) Project Director

Deputy Minister of MOT will be responsible for overall administration and implementation of the Project.

(b) Deputy Project Director

Head of Road Construction and Maintenance Department (RCM) of MOT will be responsible for overall technical issues of the Project.

(c) Project Manager

Head of International Relation Department of MOT will be responsible for day to day management of the Project.

(d) Regional Managers

Heads of Hissor, Sughd, and Rasht SETMs will be responsible for coordination in their respective regions.

(e) Technical Personnel

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- 1) Civil Defense Specialist, Administration Department, MOT
- Head and staff of Maintenance, Planning, and Evaluation Unit of RCM. MOT
- 3) Head and staff of Road Construction Unit of RCM, MOT
- Head and staff of IT Unit of Economic Analysis and Forecasting Department (EAF), MOT
- 4) Staff of State Unitary Enterprise "Scientific Research, Design and Survey Institute"
- Chief Engineers of Hissor, Sughd, and Rasht SETMs and Technical Production Manager of Gissar SETM
- 6) Heads and Chief Engineers of the target SEHMs
- 7) Other relevant staff of target SETMs/SEHMs

Technical staff will be responsible for the implementation of the project activities in their assigned fields specified in the PO. Tentative list of the personnel is given in the Annex 4.

(2) JICA Experts

The JICA experts will give necessary technical guidance, advice and recommendations to MOT and the target SETMs/SEHMs on any matters pertaining to the implementation of the Project.

(3) Joint Coordinating Committee

Joint Coordinating Committee (hereinafter referred to as "JCC") will be established in order to facilitate inter-organizational coordination. JCC will be held twice a year and whenever deems it necessary. JCC will approve an annual work plan, review overall progress, conduct evaluation of the Project, and exchange opinions on major issues that arise during the implementation of the Project. A list of proposed members of JCC is shown in the Annex 5.

9. Reports

MOT and JICA experts will jointly prepare the following reports in English and Russian.

- (1) Monitoring Sheet on semiannual basis until the project completion.
- (2) Project Completion Report at the time of project completion.

10. Environmental and Social Considerations

(1) MOT agreed to abide by 'JICA Guidelines for Environmental and Social Considerations' in order to ensure that appropriate considerations will be made for the environmental and social impacts of the Project.

III. UNDERTAKINGS OF MOT

1.MOT and GOT will take necessary measures to:

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- (1) ensure that the technologies and knowledge acquired by the Republic of Tajikistan nationals as a result of Japanese technical cooperation contributes to the economic and social development of the Republic of Tajikistan, and that the knowledge and experience acquired by the personnel of the Republic of Tajikistan from technical training as well as the equipment provided by JICA will be utilized effectively in the implementation of the Project; and
- (2) grant privileges, exemptions and benefits to the JICA experts referred to in II-7 (1) above and their families, which are no less favorable than those granted to experts and members of the missions and their families of third countries or international organizations performing similar missions in the Republic of Tajikistan.
- Other privileges, exemptions and benefits will be provided in accordance with the Agreement on Technical Cooperation signed on February 15, 2005 between GOJ and GOT.

IV. MONITORING AND EVALUATION

JICA and the MOT will jointly and regularly monitor the progress of the Project through the Monitoring Sheets based on the Project Design Matrix (PDM) and Plan of Operation (PO). The Monitoring Sheets will be reviewed every six (6) months.

Also, Project Completion Report will be drawn up one (1) month before the termination of the Project.

JICA will conduct the following evaluations and surveys to verify sustainability and impact of the Project and draw lessons. The MOT is required to provide necessary support for them.

- 1. Ex-post evaluation three (3) years after the project completion, in principle
- 2. Follow-up surveys on necessity basis

V. PROMOTION OF PUBLIC SUPPORT

For the purpose of promoting support for the Project, MOT will take appropriate measures to make the Project widely known to the people of the Republic of Tajikistan.

VI. MISCONDUCT

If JICA receives information related to suspected corrupt or fraudulent practices in the implementation of the Project, MOT and the target SETMs/SEHMs will provide JICA with such information as JICA may reasonably request, including information related to any concerned official of the government and/or public organizations of the Republic of Tajikistan.

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MOT and the target SETMs/SEHMs shall not, unfairly or unfavorably treat the person and/or company which provided the information related to suspected corrupt or fraudulent practices in the implementation of the Project.

VII. MUTUAL CONSULTATION

JICA and MOT will consult each other whenever any major issues arise in the course of Project implementation.

VIII. AMENDMENTS

The record of discussions may be amended by the minutes of meetings between JICA and MOT. However, PO may be amended in the Monitoring Sheets.

The minutes of meetings will be signed by authorized persons of each side who may be different from the signers of the record of discussions.

Annex 1 Logical Framework (Project Design Matrix:PDM)

Annex 2 Tentative Plan of Operation Annex 3 Project Organization Chart

Annex 4 Tentative list of the project personnel

Annex 5 A List of Proposed Members of Joint Coordinating Committee



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Annex 1 Logical Framework (Project Design Matrix: PDM)

Project Title: "The Project for Capacity Development for Road Disaster Management in the Republic of Tajikistan"

Target Disaster; (i) Slope failure, (ii) rockfall, (iii) landslide, (iv) debris flow, (v) slope erosion by floods & (vi) inundation Project Period: Three years and four months from the date when the first Japanese Expert arrived in Tajikistan (i.e. •/•/2017 to •/•/••••)

Implementing Organization: MOT Target Group: Relevant staff of MOT, Hissor SETM and its 9 SEHMs, Sughd SETM and its 14 SEHMs, and Rasht SETM and its 3 SEHMs.

Project Site: International & Republican roads within the jurisdiction of the target SEHMs Target Disaster: (i) Slope failure, (ii) rockfall, (iii) landsilde, (iv) debris flow, (v) slope ero

PDM ver . (day/month/year)

Narrative Summary	Objectively verifiable indicators	Verification	Assumptions	
Coverall Goal> Road disasters are miligated in the International and Republican Roads in the larget SETMs/SEHMs	a. All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed through the Project. b. By Jul 2023 (*2), disaster prevention measures are planned and/or implemented at least X (*3) priority sites in the target SETMs according to the disaster prevention manual developed through the Project. c. From Aug 2020 to Jul 2023, the average duration required for road re-opening per disaster handled by the target SEHMs is decreased by X% compared with the same before the Project (from X to X).	a-c Hazard evaluation disaster prevention & recovery sheets, in the Database		
<project purpose=""> Capacity of MOT and the target SETMs/SEHMs for effective road disaster management is improved.</project>	a. By the end of the Project, X% of results of the disaster recovery works by the target SETMs/SEHMS, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans. By the end of the Project, X% of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the Japanese Expert Team. c. X% of results of the disaster prevention measures #2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans. d. By the end of the Project, budget request for disaster prevention in the target SETMs for FY 2021 is submitted to Ministry of Finance (MOF) as part of the regular budget.	a Assessment report b Prevention sheet c Recovery sheet d Date of budget request	A Policy (or dissilar, management is not discontinued. B. Political instability economic crisis/serious natural disaster that after the project sites do not occur. C Budget, including prevention, is approved by MOI?	
COutputs> 1.Road disaster management structure of MOT and the target SETMs/SEHMs is strengthened	1a By Jun 2017, a report on current deaster management relevant to MOT and the target SETMs/SEHMs is developed to By Jun 2017, roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM(RDMT) is clarified. It By the end of the Project, X% of members of RDMT are able to support SETMs/SEHMs according to their respective roles and responsibilities. 1d By the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs, including institutionalization of RDMT, is approved by MOT.	18 Date of report 1b Approval of JCC 1c Joint review based on individual capacity devt plan 1bOfficial approval document	A Staff of MOT and the target SETMs/SEHMs trained through the Project do not leave the office in large	
2. Road disaster recoveries by the target SETMs/SEHMs are improved through standardization.	2a By Dec 2017, a road disaster recovery manual for SETM/SEHM/RRT is developed 2b X% of the training participants from all target SETMS/SETM passes the post-taining test on disaster recovery works 2c X% of the training participants from all target SETMS/SETMs passes the post-taining test on disaster recovery works in the drills are planned and implemented by all target SETMS/SEHMs according to the manual 2e Disaster recovery works in the drills are planned and implemented by all target SETMS/SEHMs according to the manual according to the manual 37. By the end of the frantal	2a Acceptance letter 2b Test results 2c ditto 2d-e John review of the checklist 2e Approval letter		
3 Process of locally adaptable road disaster prevention is established at the target SETMs/SEHMs		3a Acceptance letter 3b Test results 3c-e Joint review of the checklist 3f Test results 3g Approval letter 3h ditto		
4 Data necessary for road advantagement(*1) is available at MOT and the target SETMs for budget preparation and road disaster recovery and		4a Comparison with the design to design 4b Acceptance letter 4c. Test results 4d Released date 4e Report 4f Approval letter 4f Approval letter		
5 MOT and the target SETMs/SEHMs are capable of preparing budget proposal for road disaster	5a By Mar 2020, a report of a pilot study on cost-effectiveness of the locally adaptable disaster prevention is developed 5b By Mar 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT 5b By Mar 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT 5b By Mar 2020, budget proposal for locally adaptable disaster prevention of the priority site(s) and studies 5c By the end of the Project, at least one project proposal for road disaster 5c By the end of the Project, at least one project proposal for road disaster	5a Acceptance letter 5b Budget document 5c Proposals submitted		

(1) Data necessary for road disaster management includes disaster record, results of hazard evaluation, prevention measures, and recovery works among others. (*2) Underlined deadlines in the indicators are set based on the scribt shall be reviewed and approved by the Institute of the Project for approved by the Institute of the December and approved by the Institute of the December and approved by the Institute according to the Despite survey, which shall be reviewed and approved by the Institute of the December and approved by the Institute according to the Despite Survey.

Annex 1 Logical Framework (Project Design Matrix :PDM)

1.1		<tajik side=""></tajik>	<japanese side=""></japanese>	instability/
1.2	ent relevant to MOT and the target SETMs/SEHMs,	Project Director: Deputy	1. Chief Advisor	economic crisis
	•••••		2 Institution	
1.3	ment Taskforce supporting SETM/SEHM (RDMT) formed at MOT and	Head of RCM, MOT	Recovery	do not occur
	its members as well as their capacity development plans (*4)	100	3. Road Disaster	٥
1.4	Support the target SETMs/SEHMs through the project activities according to the clarified roles and responsibilities (by RDMT)	of International Relation Dept. MOT	Prevention 4. Hazard Evaluation	
5.	management structure of MOT and the target SETMs/SEHMs based on the feedbacks from	4. Regional Managers:		activities of the
	the project activities for approval by MOT.	Heads of the target SETMs		JICA experts,
-	Examine locally adaptable disaster recovery works(*5) based on the current state review (Activity 1.2)	. Relevant Staff of MOT Relevant Staff of Di	7, Database 8, Monitoring for	project sites,
22	s used for Activity 2.3-2.5		early warning	does not
2.3	Conduct trainings on disaster recovery works to all target SETMs/SEHMs and MOT (i.e. action for preparedness, survey, selection of	target SETMs/SEHMs:	9. Local Administrative	, compared with
	TMs)		inato	the same in
2.4	Conduct on-site drills for simulated disaster recovery for all target SETMs/SEHMs (in Hissor and Sughd SETMs)	necessary	10.0ther experts	
2.5	ny target SEHMS by the relevant SEHMS/SETIMS	Land, Bullding and		<pre><pre>Conditions></pre></pre>
5.6	Update and finalize the manual reliecting feedbacks from Administratory SETMe/SEHMs	Facilities Land building and	necessary	A Tentative list of
is.	Certify trainers for disaster recovery from the state of the raight of the state of	s necessary	ulpment	ine Project Stan, including
00	Examine hazard evaluation methods and locally adaptable prevention measures (*6) based on the current state review (Activity 1.2)	the implementation of the Project	1. Equipment for disaster recovery	Disaster
3.2	Develop a disaster prevention manual for SETM/SEHM, consisting of hazard evaluation and locally adaptable prevention measures,		and prevention	Taskforce, is
	which is used for Activity 3.3-3.10	MOT, Hissar and Sogd	software	finalized
3.3	Conduct trainings on hazard evaluation to all target SETMs/SEHMs and MOT (i.e. screening, selection of hazardous sites, hazard/risk	with	database	connection is
	assessment and preparation of hazard evaluation sheet) (in Hissor and Sughd SETMs)	such as internet	database at MOT	established at
3,4	Select the target sections for hazard evaluation in each SETM (*7)	ctivity, te		SETM SETM
3.5	Conduct hazard evaluation at the target sections by all target SEHMs in coordination with the respective target SETIMs	line, electricity, etc.	4 Laptop PC tor	
3.6	spective target SE I Ms	Local Costs	and monitoring at	↓ ↓ ↓
3.7		r installa		Issues & counter
3.8	Conduct trainings on locally adaptable prevention measures to all target SET Ms/SEHMS and MOT (i.e. selection of measures, design,	maintenance of the	equipment for	measones
		provided equipment,	simple early	
3.0	Plan and implement locally adaptable prevention measures #1 and #2 on pilot basis at the piloting sites in the taget sections section 2.	operational costs,	6. Other equipment	
	In the first year (in rissal and obgust in rispans) and anger a factor of the first year (in rissal and obgust in rispans) and anger a factor of the first in rispans of the factor of t	lei cost	mutual	
3,10	Update and finalize the manual reflecting reedbacks from Activities 5.5-5.5	materials for	upon as	
3	Certify trainers for nazard evaluation and prevention theasures from the state of the target of the state of the	8	Linconne	
4	Develop a plan for road disaster management database based on the current state review (Activity 1.2)	for SETMs/SEHMs to participate in training,	Training of the Tajik Personnel in Japan	
4.2	Design a database system with installed hardware, consisting of spreadsheets	drills,	and/or third	
4.3	Develop road disaster management database manuals for users (i.e. MOT and the target SETMs) and administrator, which are used	prevention/recovery works	country	
	for Activity 4.4-4.10		Local costs	
4.4	Conduct trainings on database use to MOT and all target SETMs (i.e. collection, input, compiling, analysis and reporting of data) at		JET, local travel &	
	MOT and each SETM		accommodation cost	
4.5	Collect data of disaster recovery works at all target SEHMs in 2017 as baseline data in the prescribed rorm improve by the Project		for SETMS/SEHMs	
4.6	aster recovery streets,		training, drills and	
	sheets) from all target SEHMS by the respective SET ws		prevention/recovery	

Logical Framework (Project Design Matrix :PDM) Annex 1

4.8 Integrate the digitalized data subtilitied by the target SET was title transparent

4.9 Release the database to MOT and all target SETMs

Develop a simple annual road disaster management report for senior management of MOT 4.10

4.11 Update and finalize the database design and the manuals reflecting feedbacks from the database users

Plan and implement a pilot study on cost-effectiveness of locally adaptable disaster prevention measures at the target sections 5.1

Create a budget item for disaster prevention in the regular budget of SETM/SEHM/WOT selected in the first year under Output 3, using simple hazard location maps.

Prepare budget for locally adaptable disaster prevention for the priority sites identified under Output 3 by all target SETMs and MOT, utilizing the results of Output 3&4

Develop project proposal(s) on large-scale prevention measures for the priority site(s) in the target section(s) under Output 3, which cannot be handled by the target SETMs/SEHMs, and studies for prevention for funding by international donor(s) as needed, utilizing

(*4) FIDMT consists of staff of RCM / MOT and Div (*5) As for soil erosion by floods, The Project will focus on measures under the responsibility of MOT such as rehabilitation of slope protection eroded by floods. (*6) Locally adaptable prevention works and soft measures such as monitoring for simple early warning. (*7) Number of hazard evaluation sites would be approximately 100 in the target sections for the first year and approximately 50 in the second and the intring years. The length of a hazard evaluation site would be approximately 100-300m. Prevention measures are implemented at the priority sites in the target sections selected in the first year. (*8) The other SEHMs are expected to participate in the prevention measures. The pilot prevention measures would include both prevention works and soft measures. the results of Output 3 &4

Abbreviation:

DI: State Unitary Enterprise "Scientific Research, Design and Survey Institute" FY: Fiscal Year

JICA: Japan International Cooperation Agency

MOT: Ministry of Transport

SEHM: State Enterprise Highway Maintenance SETM: State Enterprise Transport Management RCM: Road Construction Maintenance Department of MOT

Annex 2				
The Business Care	of far Connective Development for Road Disaster Management in the Republic of Tajikistan"	an"	Moni	Monitoring
Project IIIIe: "Ine Project to Capacity Development of	Year 2nd Year 3nd Year 4th Year 4th Year Amarks		enssi	Solution
Schedule of Major Japanese Inputs				
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Activities Sub-Activities		1	2 B -			(Taje)	Experts	Japan	Tajik		Achevemens	Countermeasures
Output 1:Road disaster management structure of MOT and the target SETMs/SEHMs is	T and the		strengthened.	MOT	Head of RCM		Chief Advisor (CA)					
Classify the target disasters timough collection and analysis 1.1 of the past disaster records	Plan	100000000000000000000000000000000000000		ясмімот	Head of MPEU	Road Disater Mgt Taskforce /RDMT(RCM,	Recov.W., Hazard Eva Prevention		Target TMs/HMs			
	Actual					ía.	M)					
1.2 Review organizational and technical aspects of current	Plan				Head of MPEU		Recov. W. Hazard Eva.					
disaster management relevant to MOT and the target SETMs/SEHMs, including their communication network for disaster Recovery called Rapid Response Team (RRT)	Actual		Alembria (maria)	RCM/MOT		ditto	Prev M, institution					
Clarify the roles and responsibilities of Road Disaster	Plan				Hoad of MPEU	contract of the second	diffo					
Management Taskforce supporting SETM/SEHM (RDMT) formed at MOT and its members as well as their capacity the common plane.	Actual			неммот		ditto						
ueverablishing plans 4. Support the target SETMs/SEHMs through the project	Pien				Head of RCM		difto					
activities according to the clarified roles and responsibilities (by RDMT)	Actual			RCM/MOT		ditta						
Develop an improvement plan of disaster management	Plan		ı		Head of MPEU	NO CONTROCT	Recov.W. Prev. M. Hazard Eva					
structure of MOT and the target SETMs/SEHMs based on the feedbacks from the project activities for approval by	Actural			HCM/MO!		DI), SETM						
Output 2:Road disaster recoverles by the target SETMs/SEHMs are improved through	TWS/SE	HMs are improved throug	ų	Overall:MOT	Head of RCM		Chief Advisor			HDMT participate in the field activities		
standardization		, W		Field:SETM	Head of SEIM					assistants	-	
2.1 Examine locally adaptable disaster recovery works based	Plen			RCM/MOT	Head of MPEU	HDMT (RCM,	Recov W, Cost E, O&M					
on the current state review (Activity, 1.2)	Actual						4040	-		- Company		THE PERSON NAMED IN COLUMN
2.2 Develop a disaster recovery manual for SETM/SEHM and RRT, including action for preparedness, which is used for Activity 2.9-2.5	Plan			RCM/MOT	Head of MPEU	ditto	מונס					
Conduct trainings on disaster recovery works for all target 2.3 SETMs/SEHMs and MOT (i.e. action for preparedness, survey, selection of works, design, cost estimate, supervision, disaster recovery sheet) (in Hissor and Sughd	Plan			SETW	Chel Engineer level (SETM)	SETM	crito.	Eqpt for Recov, travel & accom cost for SEHM/SEHM	Fuel, O&M cost for eqpt, mea! allowance for SETM/SEHM			
Conduct on-site drills for simulated disaster recovery works	ug d			SETM	Chief Erwinger		ditio			- Militar		
2.4 for all target SETMs/SEHMs (in Hissor and Sughd SETMs)	Actual		eş- vheiren		level (SETM)	SETM. SEHM		diffo	diffo			
Plan and implement disaster recovery works for the	Plan			SETM	Chief Engineer	SETM, SEHM	ditto	Affic	ritto			
disaster occurred in any target SEHMs by the relevant SEHMs/SETMs	Actual				level (SETM)		, constraint of the constraint	e e				
2.6 Update and finalize the manual, reflecting the feedbacks	Plan				(ISOM) or Property	HDMT (RCM.	ditto					
from Act 2.3-2.5	Actual			DE LOS	Tiber or set	DI), SETM				dine		
2.7 Certify Trainers for Disaster Recovery from the target	Plan			n/a	rya	n/a	CA, Hecov.W					

Ac	Activities	in Year	2017 # BI IV 1	2018 H R	2019 	V F W W	2	Responsible Org (Tajlk)	Responsible Person (Tajik)	mplementors (Tajk)	Experts	Japan	lapen Tejik		Achievements	Countermeasures
ō	Output 3: Process of simple road disaster prevention is established at the target	on is e	stablished	at the to		SETM s/SEHMs	Mis	Overall:MOT Fleid:SETM	Head of RCM Head of SETM		Chief Advisor			ROMT parteipate in the field activities as senior training assistants		
8,1	8,1 Examine hazard evaluation methods and locally adaptable prevention measures based on the current state review	Plan						BCM/MOT	Hed of MPEU	ВОМТ (ЯСМ, ОД-SETM	Prev. M, Hazard Eva, CostE, Monitoring (Mon)					
5.2	Develop a road disester prevention manual for SETM/SEHM., consisting of hazard evaluation and locally	Plan						RCM/MOT	Hed of MPEU	RDMT (RCM, Dij SETM	Prev M, Hazard Eva, Cost E, Mon					
	adaptable prevention measures, which is used for Activity 3.3-3.10	Actual		ewader:				Filedo	L		Parcell Mose					THE PERSON NAMED IN COLUMN 1
6,6	Conduct trainings on hazard evaluation to all target SETMs/SEHMs and MOT (i.e. screening, selection of hazardous sites, hazard/nisk assessment, hazard	Plan		Trong (maketise				SETM	Chef Engined level (SETM.)	SETM	Eva Eva	Travel & accom cost for	Meal allowance for SETMISEHM			į
	evaluation sheet) (in Hissor and Sughd SETMs)	Actuel			24400								110 mm			CONTRACT OF THE PARTY OF THE PA
3.4	Select the target sections for hazard evaluation in each SETM	Plen	1 for harrand Sea and	•		To house a		SETM	Chisf Engineel level (SETM.)	SEIM	Prev M. Hazard Eva	PC for hazard eva, travel & accom cost for a	O&M cost, meal allowance for			
		Actual										SETM/SEHM	SETMISEHM	map/earm		
3,5	Conduct hazard evalatuon at the target sections by all target SEHMs in coordination with the respective SETMs	Plan				=		SETM	Chief Engineel level (SETM.)	SEHM, SETM	Hazard Eva	ditto	Fuel, O&M cost, meal allowance for			
		Actual											SETM/SEHM			
3,6	3.6 Identify priority sites in the target sections based on the evaluation results by the respective SETMs	Plan						SETM	Chief Engineel level (SETM)	SETM	Hazard Eva	ditto		П		
3.7	Develop a future disaster prevention plan for each target section by the respective SETMs	Plan				5		SETM	Chief Enginedi level (SETM.)	SETM	Hazard Eva, Prev M. Cost E, Mon	ditto		The plans would be utilized in Act 5.3, 5.4		
		Actual						114-44	Chief Engineel	ect.	offic		ı		A CALLED TO SERVICE OF THE SERVICE O	
හ ස	3.8 Organize trainings on locally adaptable disaster prevention measures to all target. MsFHMs (i.e., selection of measures, design, budget preparation, supervision, prevention measure sheet, monitoring for simple early warning ith Hissor and Sugid SETMs).	Plan Actual						∑	lovel (SETM)	S I I I		Travel & accom cost for SETMs/SEHM s	Exasting eqt, fuel for eqpt, meal allowance for SETMSEHM	anii i		
3.9	Plan and implement locally adaptable prevention measures #1 & #2 on plot basis at the priority sites in the target sections selected in the first year (in Hissor and Sughd SETMs) by the relevant target SETMs/SEHMs	Plan	1			I I		SETM	Chief Engineel level (SETM)	SETM. SEHM	Hazard Eva, Prev M, Cost E, Mon	Eqt for prav & monitor, travel & accom cost for SETM/HM	Fuel, O&M cost, existing eqpt, meal allowance for SETM/SEHM			
,		Fian						SETM	dilto	SETM			- Colonia			
, ,	Selection of measures	Actust						SETM	ditto	SETM				- Lucia		
5 4	Design	Actual	Astual : : : :					SETM	difto	SETM						
	Supervision	Pian						SEHM	ditto	SETM	o de la constante de la consta					
0	Prevention measure sheet	Pinn						SEHM	ditto	SETM		- Control				
3.10	3.10 Update and finalize the manual, reflecting feedbacks from activities 3 3-3 9	Plan						RCM/MOT	Head of MPEU	ADMT (RCM. DI) SETM	Hazard Eva, Prev M. Cost E.				Ä	
	\$40000 all 1000 all 1	e e ja				I					CA, Hazard Eva,					
-	Certify Trainers for Disaster Prevention from the target. SETMs/SEHMs	Actual						B/U	r/a	n/a	Prev M			THE STATE OF THE S		THE CONTRACT OF THE CONTRACT O

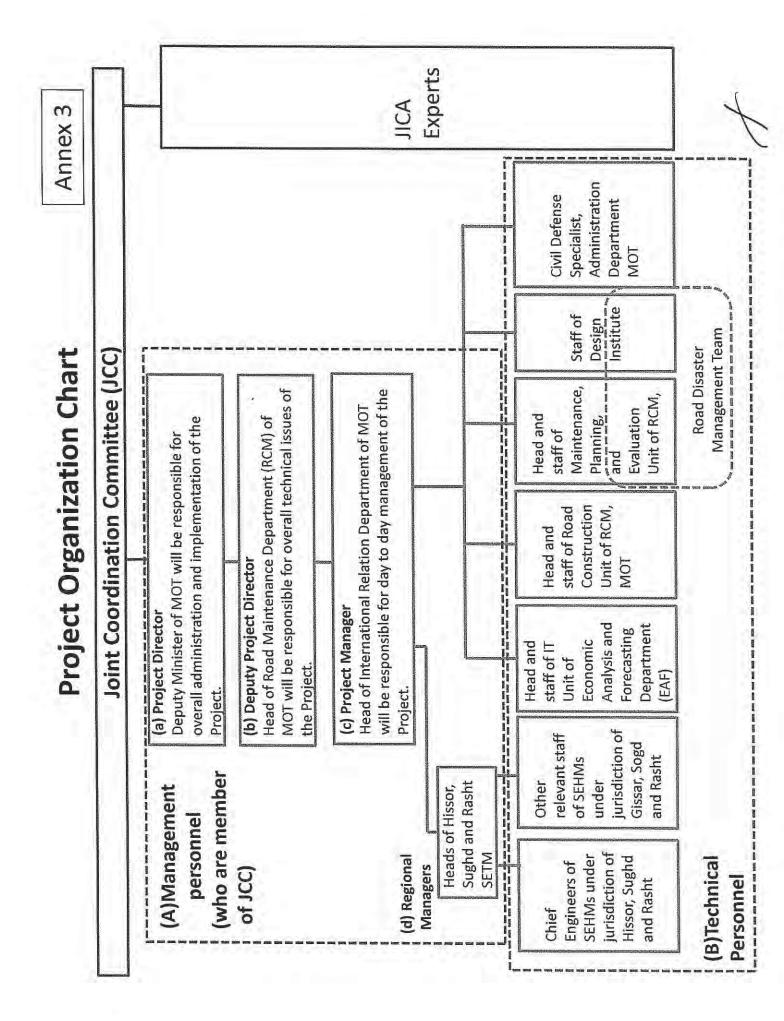


Activities	Year	2018	2019	2020	Hesponsible	- Неаропатые	भारतिमालयञ्ज	Experts	Oeld M	Oeren mejur IIIpans	нетатк	Achievements	issue &
Sub-Activities	à	M M		2 B	Org (Tajlit)	Person (Tajik)	(Tajit)		Japan	Tejik			Countermeasures
Output 4; Data necessary for road disaster management is available for MOT budget preparation and disaster recovery works and prevention	ent is ava	ilable for MOT and the	44	arget SETMs for	MOT (RCM, EAF)			Chief Advisor					or and a
4.1 Develop a plan for road disaster management database	Plan				EAFMOT	Head of ITU	ITU (TBD)	Database (DB)					
4.2 Design a database system with installed hardware, consisting of spread sheets	Plen				EAF/MOT	Head of ITU	ту (тво)	ditto	DB software and hardware	O&M cost			
Develop road disaster management database manuals for users (i.e. MOT and the target SETMs) and administrator, which are used for Activity 4.4-4.10	Plan				EAF/MOT	Head of ITU	ודט (תפס)	diffo					
4.4 Conduct trainings on database use for MOT and all target SETMs (i.e. collection, input, compillation, analysis and reporting of datal (at MOT and each target SETM)	Plen			200	EAF/MOT	Head of MU	תט (תפם)	difto	PC for DB	O&M cost	Suns:		
4.5 Collect data of disaster recovery at all target SEHMs in 2017 as baseline data in the prescribed form improved by the Protect	Plan				HCM/MOT &SETM	Chief Engineer level (SETM)	SETM (ТВО)	Recov.W, CostE, OBM					
4.6 Collect data necessary for disaster management from the farget SEHMs (i.e. disaster recovery sheets, hazard evaluation sheets, and prevention measure sheets).	Plan				RCM/MOT &SETM	Chief Engineer levet (SETM)	SETM (TBD)	Hazrd Eva, Prev. M, Recov. W					
4.7 Digitalize the data collected from the target SEHMs by the respective target SETMs for submission to MOT	Plan				RCM/MOT &SETM	Chief Engineer level (SETM)	SETIM (TBD)		PC for DB	O&M cost	Network connection at TM needed		
4.8 Integrate the digitized data submitted by the target SETMs into the database	Plan				EAF/MOT	Head of TIL	ти (твр)	90	PC for DB	O&M cost	ditta		
4,9 Release the database to MOT and all terget SETMs.	Ptan				EAFMOT	Head of ITU	(TU (TBD)	90	PC for DB	O&M cost	ditto		
4.10 Develop simple anrual road disaster management report for senior management of MOT	Plan				RCM/MOT	Head of MPEU	меео (твр)	Hazrd Eva, Prev M, Recov.W	PC for DB	D&M cost			
4.11 Update and finalize the database design and the manuals, reflecting feedbacks from the database users	Plan				EAF/MOT	Head of ITU	TLunki (TBD)	DB	PC for DB	O&M cost			
Output 5: MOT and the target SETMs/SEHMs are capable of preparing budget prevention	ble of pre		probosal for read disaster	d disaster	мот	тво		Chief Advisor (CA)					Annual minor (no
Plan and implement a pilot study on cost-effectiveness of simple disaster prevention measures at the target sections selected in the first year under Output 3, using ssimple hazard location maps	Pian	Completion of prev measure #1			RCM/MOT	Head of RCU	HDMT (RCM, Di), SETM	Prav. M, Cost E		Travel cost for field survey			**************************************
5,2 Create a budget item for disaster prevention in the regular budget of SETM/SEHM/MOT	Pisn Actual				RCM/MOT	Head of MPEU	МРЕИ(ТВD)	Prev, M, Cost E,					
6.3 Prepare budget for locally adaptable disaster prevention for the priority sites identified under Output 3 by all target SETMs and MOT, utilizing the results of Output 384.	Plan				неммот	Head of MPEU	МРЕЦ(ТВО)	Prev. M. Cost E.					
5.4 Develop project proposal(s) on large-scale prevention measures for the priority site(s) in the target section(s) under Output 3, which cannot be handled by the larget SETAs/SEHMs, and studies for prevention measures for funding by international donor(s) as needed, utilizing the results of Output 3 &4	Plen Actual				International Relations Dept	(твр)	номт (ясм. Бі)	Prav. M. Cost E. Institution					
Duration / Phasing	Plan	Plan.	K 1000				-				The state of the s		
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Activities	Year 2017	2018	ଥ	. 61	2020 21 2	21 22 23 Restrongile	- Hassanetha	molementors	Japanesse	Other Major Inputs	ior Inputs	Remarks		Sense &
Sub-Activities	11 10	2	2	- A	T IN IN	Org (Talik)	Person (Tajik)	(Tailt)		Japan	Tajik		ACTICACETICS	Countermeasures
	Vane 2017	9018	00	0	2020	20 20 20		Company of the	Japanese	Other Ma	Other Major Inputs	Remarks		HATCHING MADE TO THE
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coordination Committee (JCC)	Plan e		•		•	MOT	Project Director	Project Manager (PM)	CA, Local Adm Coordinator					
0.2 Set-up Detalled Plan of Operation (DPO) based on	Plan e Actual					MOT	Dy Pojact Director (DPD)	14 11	CA					
O for review	Plan e Actual					MOT	diffo	All Mgt personnel	y'o					,
annually	Plan sa	•				MOT	ditto	All Mgt personnel	CA					
0.5 Semi-annual Monitoring Sheet for submission to JICA Tallitistan Office	Plan III &					MOT	ditto	All mgt personnel	СА					
	Filen Actual					JICA	JICA Head quarters		•					
0.8 Organize information sharing seminars/workshops for all target SETMs/SEHMs and MOT in Hissar and Sogd SETMs.	Plan • Actual		•			TOW	Dy Pojest Director (DPD)	All Mg1 personnel	CA, all experts in Tajikistan					
Reports/Documents	\ \					-						Series and		
0.10 Inception Report	Plan - Actual											-		Section 1
0.11 Progress Report	Plan Actual						The second second							
11 12 Project Completion Report	Acius (111)													
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Establishment and operation of web-site	Plan I I					AJICA			Š				The second	
Materials for public relations	Plan	Ė				MOT	TB0	TBO	Coordinator				and the second	
Dissemination seminars	Pian S				Ë	MOT	TBD	твр	CA, all experts in Tajikistan					Аналини
Monitoring and Evaluation in the Post-Project period													Addison	A Later Manager Later La
11 Post Monitoring by JICA	Actual :					H JICA	TBO	TBD	TBD					
- Thirteen William Wil	Pish				1	A NICA	TBD	TBD	TBD					









Annex 4: Tentative List of Project Personnel (at central level)

(1) Road Construction and Maintenance Department (RCM)/MOT (Output 1~Output 5)

	Name of staff	Position/ Department	Academic or technical background	Years of work experience	Remarks
1	Rahimzoda Ismoil	Head of RCM	Ph.D. Engineer Mechanic	42 years	Deputy Project Director
2	Anoyatshoev Alovidin	Deputy Head of RCM Head of Road Construction Unit (RCU)	Higher Ed., Civil Engineer	40 years	
3	Negmatov Kudratullo	Chief Specialist of RCU	Higher Ed., Civil Engineer	9 years 5 mon	
4	Abdurakhmonov Saidkabir	Main Specialist of RCU	Higher Ed. Mechanical Engineer	1 year	
5	Nodirov Sherali	Specialist of RCU	Higher Ed. Mechanical Engineer	1 year	
6	Ziyozoda Abdullo	Head of Maintenance, Planning, and Evaluation Unit (MPEU)	Higher Ed., Civil Engineer	11 years	
7	Mavlonazarova Mavjigul	Chief Spesialist of MPEU	Higher Ed., Civil Engineer	18 years	
8	Sangakov Burkhonidin	Chief Specialist of MPEU	Higher Ed., Civil Engineer	5 years	
9	Khalimova Michgona	Main Specialist of MPEU	Higher Ed. Planning Engineer	1 year 5 mon.	
10	Khuchaev Egamberdi	Specialist of MPEU	Higher Ed. Mechanical Engineer	5 years	

(2) Economic Analysis and Forecasting Department/MOT (Output 4)

	Name of staff	Position/ Department	Academic or technical background	Years of work experience	Remarks
1	Yokubzoda Sukhrob	Head of IT Unit	Higher Ed., Technical Education	12 years	THE SAME OF THE SA
2 Khaitov Dzhamshid		Chief Specialist of IT Unit	Higher Ed.	5 years	

(3) International Cooperation Department/MOT (Output 5)

	Name of staff	Position/ Department	Academic or technical background	Years of work experience	Remarks
1	Yokubzoda Farida	Head of International Cooperation Department	Higher Ed.,	13 years	Project Manager
2	Sheraliev Umed	Main Specialist of International Cooperation Department	Higher Ed.	5 years	

(4) Administration Department/MOT

	Name of staff	Position/ Department	Academic or technical background	Years of work experience	Remarks
1	Halimov Jamoliddin	Civil Defense Specialist	Higher Ed.,		

	Name of staff	Position/ Department	Academic or technical background	Years of work experience	Remarks
1	(TBD)	Chief Engineer	Higher Ed		Output 1, 5
2	(TBD)	Road Construction Engineer	Higher Ed		Output 2,5
3	(TBD)	Civil Engineer	Higher Ed		Output 2,5
4	(TBD)	Geologist	Higher Ed		Output 2, 3,5
5	(TBD)	Hydrologist	Higher Ed		Output 2, 3, 5



LIST OF PROPOSED MEMBERS OF JOINT COORDINATION COMMITTEE

1. Function

The Joint Coordinating Committee (hereinafter referred to as "JCC") will be held twice a year and whenever necessity arises. Its functions are as follows:

- (1) To discuss and authorize an annual work plan, including an annual plan of operation (APO) of the Project, based on the detailed PO
- (2) To monitor and review the overall progress (based on PO) and achievements of the Project (based on the PDM)
- (3) To discuss and advise on major issues those arise during the implementation period of the Project.

2. Compositions

The JCC shall be comprised of:

(1) Chairperson

Project Director: Deputy Minister of Ministry of Transport

- (2) Members:
 - a. Tajikistan Members:
 - Deputy Project Director: Head of Road Construction and Maintenance Department (RCM), MOT
 - Project Manager: Head of International Relation Department, MOT
 - Regional Managers: Heads of Hissor, Sughd, and Rasht SETMs
 - Director of Economic Analysis and Forecasting Department, MOT
 - Deputy Director of RCM, MOT
 - Civil Defense Affairs Administration Department? MOT
 - Director of State Unitary Enterprise "Scientific Research, Design and Survey Institute"
 - b. Japanese Members:
 - JICA Tajikistan Office
 - JICA missions if necessary
- (3) Observers:
 - Official(s) of Embassy of Japan
 - Representative of Committee on Emergency Situations and Civil Defense (CoESCD)
 - -Representative of Hydrometeorology Agency
 - Other personnel invited by the Committee
- (4) Secretariat:
 - International Relation Department, RCM, MOT
 - Maintenance, Planning, and Evaluation Unit, RCM, MOT
 - JICA Expert Team

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MAJOR POINTS DISCUSSED

(1) Title of the Project

Though the requested title of the Project was "The Project for Capacity Development for Road Disaster Prevention Management", the both sides decided to change it to "The Project for Capacity Development for Road Disaster Management" to reflect the goal and activities of the Project.

(2) Target Disaster

Both sides agreed that the target disasters in the Project will be (1) slope failure, (2) rockfall, (3) landslide, (4) debris flow, (5) slope erosion by floods and (6) inundation. With regard to the slope erosion by floods, both side agreed that the Project will focus on measures under the responsibility of MOT such as rehabilitation of slope protection eroded by floods.

(3) Target Group

Both sides agreed that amongst four SETMs (Hissor, Kurgan Tyube, Sughd, Kulyob) in the request, Hissor and Sughd SETM, which have socially and economically significant sections of the road which are prone to disaster, will be included in the Target Group, considering the constraint of budget and human resources on Japanese side.

Meanwhile, Tajik side proposed that Rasht SETM, which was not listed in the request, should be included in the Target Group. The Team visited some disaster prone sections along the International road under the jurisdiction of Rasht SETM and recognized that some of them have high risk on disaster. Thus, both sides agreed that three (3) SEHMs under the jurisdiction of Rasht SETM (Nurobod, Rasht, and Tajikobod), which are relatively close to Hissor SETM, will be added into the Target Group.

(4) Formation of Road Disaster Management Task Force for Supporting SETMs/SEHMs

Both sides agreed that Road Disaster Management Task Force (hereinafter referred to as RDMT) supporting SETMs/SEHMs, consisting of staff of Road Construction and Maintenance Department (hereinafter referred to as RCM) in

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MOT and State Unitary Enterprise "Scientific Research, Design and Survey Institute" (hereinafter referred to as DI), should be formed and enhanced through the project activities. RDMT members are expected to participate in review of current status of disaster management, preparation of manuals and field activities for disaster recovery and prevention as senior training assistants as well as pilot study on cost-effectiveness of disaster prevention activities as appropriate. Civil Defense Specialist, Administration Department, would provide advice to the RDMT as needed.

- (5) Coordination with Civil Defense Specialist, Administration Department
 Both sides agreed that the project activities should be implemented in
 coordination with the activities of Civil Defense Specialist, Administration
 Department who is responsible for coordinating and reporting disaster recovery
 works in MOT and training of SETMs on preparation for disaster in collaboration
 with specialists from RCM and/or DI.
- (6) Location and Participants of Disaster Recovery Activities (Output 2)
 Both sides agreed that classroom training and simulated disaster recovery drill will be conducted in Hissor and Sughd SETM, while disaster recovery works during actual disaster situation will be conducted in all target SETMs. Both sides agreed that participants in the classroom trainings and drills will be all three (3) target SETMs and twenty-six (26) target SEHMs. (refer to Annex 1 of Appendix 2 of Attachment 2)

(7) Target Section for Hazard Evaluation (Output 3)

Both side agreed that target sections for Hazard Evaluation will be selected by following process (refer to Annex 1 and 2 of Appendix 2 of Attachment 1):

- a) Road sections with a lot of disasters along the International / Republican road in the target SEHMs will be selected as candidate target sections in each target SETM; and
- Among the candidates, target sections will be selected considering the type of disasters, the social and economic significance, and geographical location of the section.
- (8) Location and Participants for Disaster Prevention Activity (Output 3)
 With regards to the locations and the participants of activities for disaster



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prevention, both sides agreed on the followings considering the budget constraint and time frame of the Project (refer to Annex 1 and 2 of Appendix 2 of Attachment 1):

- a) Hazard evaluations will be conducted for the target sections selected in all target SETMs by all target SETMs/SEHMs;
- b) Locally adaptable disaster prevention measure will be planned for the priority sites selected in the target sections in Hissor and Sughd SETMs by all target SETMs;
- c) Locally adaptable disaster prevention measure will be implemented for the selected priority sites in Hissor and Sughd SETMs by four SEHMs responsible for the sites; and
- d) Future disaster prevention plan will be prepared for the target sections in all target SETMs by themselves.

(9) Priority Site for Pilot Disaster Prevention Measures #1 and #2 (Output 3) A priority site for pilot disaster prevention measures will be selected from each target section for hazard evaluation in Hissor and Sughd SETM selected in the first year of the Project. The sites which satisfy the following conditions will be selected:

- a) Sites that have high urgency based on the hazard evaluation; and
- b) Sites where measures widely applicable in Tajikistan can be demonstrated/practiced.

(10) Introduction of Early Warning (Output 3)

Tajik side requested that introduction of early warning system should be included in the prevention measures. Japanese sides agreed that the Project will include the monitoring the relationship between the rainfall and disaster and preparation of proposal for simple early warning system.

(11) Data Management Method (Output 4)

Tajik side explained that MOT developed road condition and maintenance database assisted by ADB in the past but it is not functioning well because MOT finds difficulty in data input by SETMs and database maintenance. Tajik side requested followings:

 a) SEHMs should be equipped with computers and responsible for data inputs

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b) Software of database should be easy enough for MOT to self-maintain.

Japanese side explained the followings:

- a) Volume of data for disaster management (disaster history, recovery history, the result of hazard evaluation, and prevention measures) is expected to be manageable for SETMs although the lesson learnt shall be taken into consideration
- b) Data forms will be simplified as much as possible.
- c) Software of database available in the market would be used.

(12) Schedule of Budget Preparation (Output 5)

Tajik side explained that the schedule for the budget request is as follows:

Deadline	Activity
March	SEHMs submit the budget proposal to SETMs
July 1 st	SETMs submit the budget proposal to MPEU(with budget breakdown) and EAF (total amount) in MOT
August 1st	MOT submits the budget proposal to MOF

(13) Local Travel and Accommodation Cost for SETM/SEHM

Both sides agreed that local travel and accommodation cost for SETMs/SEHMs to participate in the trainings, drills for disaster recovery, hazard evaluation, disaster prevention measures and workshops/seminars shall be borne by Japanese side, while meal allowance shall be borne by Tajik side.

(14) Internet Connection at Each SETM

Both sides confirmed that Tajik side should secure internet connection at each office in the Target SETMs before the Project launches.

(15) Timing for Project Activities

Tajik side explained that from 25th to 31st of each month is the period for monthly reporting and is the busiest period for SETM. Both sides agreed that the project activities would be scheduled taken into consideration above as much as possible.



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(16) Coordination with Capacity Development Activities for Sogd SETM on Pavement Repair

Both sides confirmed that Sughd SETM has been included as an additional target group of "the Project for Road Maintenance" (2013-2016) only since April 2016 and the level of achievement for pavement inspection and repair is rather limited compared to Hissor SETM. According to the draft post-project strategy of the above project, capacity building for Sughd SETM on pavement repair is expected to be conducted from May to October 2018, in which pilot prevention measures #1 are scheduled at Sughd SETM. Timing of both activities should be coordinated in order to avoid overburden of the staff of Sogd SETM.

(17) Continuous Effort for Budget Preparation for Disaster Prevention
Both side confirmed that the pilot study on cost-effectiveness of the locally
adaptable disaster prevention measures should be conducted not only during
the Project, but should be continued after the Project in order to enhance
accountability, and that disaster management database should be continuously
utilized after completion of the Project to examine effectiveness of the prevention
measures based on the future prevention plans developed through the Project to
prepare budget for prevention measures.

Annex 1: Location and Participants of the Field Activities for Disaster Recovery and Prevention (1)

Annex 2: Location and Participants of the Field Activities for Disaster Recovery and Prevention (2)





(1) Output 2 (Disaster Recovery) Target Group: 3 SETMs & 26 SEHMs (Hissor- 9, Sughd-14, Rasht-3)

11	Cycle I	Cycle II	Cycle III	Participating TM/HM
2.3 Training	Year: 2018 (Jan) Location: 4 sites in G& S TM (2 per TM) Trainee: All 3TM /26HM			
2.4 On-site simulated drill	Year: 2018 (Mar-Apr) Location: G & S TM (2 drill sites per TM: 4 in total): Trainee: 3 TM & 8 HM (2 HM per drill site) Observer: 16 HM	Year: 2019 (Mar-Apr) Location: G& S TM (5 drill sites in total) Trainee: 3 TM & 10 HM (2-HM per drill site) Assistant: 8HM from Cycle1 Observer: 8 HM	Year 2020(Mar-Apr) Location: G& S TM (2 drill sites per TM): Trainee: 3 TM & 8 HM (2- HM per site) Assistant: 10HM from Cycle 2 Observer: (8 HM)	Trainee: -All 3TM -26 HM Assistant -18 HM
2.5 Recovery (OJT) #1, #2,#3	Year: 2018 (May-Jul) Location: Any SEHMs, in which disaster occurred Trainee: Relevant TM/HM	Year: 2019 (May-Jul) Location: Any SEHMs, in which disaster occurred Trainee: Relevant TM/HM	Year: 2020 (May-Jul) Location: Any SEHMs, in which disaster occurred Trainee: Relevant TM/HM	Unknown

(2) Output 3 (Disaster Prevention) Target Group: 3 SETMs & 26 SEHMs

	Cycle I	Cycle II	Cycle III	Participating TM/HM
3.3 Training for hazard eva	Year: 2017 (Aug) Location: G&S TM (2 per TM) Trainee: 3TM /26HM			Trainee: -All 3TM -All 26HM
3.4 Selection of target section	Year:2017 (Jul) Location: G & S TM 4 sections (2 per TM) consisting of around 100 eva sites of 100-300m Trainee: 3TM	Year :2018(Jul) Location: 3 TM 3 sections (1 per TM) consisting of around 50 eva, sites of 100-300m	Year; 2019(Jul) Location: 3TM 3 sections (1 per TM), consisting of 50 eva. sites of 100-300m	Trainee: -All 3 TM
3.5 Hazard Eva	Year: 2017 (Aug-Oct) Location: G & S TM: All 4 target section (I) Trainee: 3 TM/ max.26EM Target sections divided for 26HM	Year: 2018(Aug-Oct) Location: 3TM All 3 target section (II) Trainee:3TM/max.26EM Target sections divided for 26HM	Year 2019(Aug-Oct) Location:3 TM All 3 target section (III) Trainee:3TM/max,26EM Target sections divided for 26HM)	Trainee: -All 3TM -All 26HM
3.6 Selection of Priority site	Year: 2017 (Nov-Dec) Location: G & S TM 1 per target section selected (total 4I: 2 for #1 & 2 for #2) Trainee: 2 TM Observer: 1 TM (R)	Year: 2018 (Nov-Dec) Location: 3 TM 1 per target section selected (total 3) Trainee: 3 TM	Year: 2019 (Nov-Dec) Location: 3 TM 1 per target section selected (total 3) Trainee: 3 TM	Trainee: -All 3TM
3.8 Training for measures	Year: 2018 (Jan-Apr) Location: G & S TM (2 per TM) Trainee: 3 TM & 26HM			
3.9 Prevention #1 (Demonstr ation)	Year: 2018 (Apr-Sep) Location: G & S TM 1 priority site / TM (total 2) Trainee: 3TM & 2-4HM in 2 TM Observer: About 1/2 of other HM			Trainee: -3TM -4-8HM in 2TM Assistant: -2-4HM in 2TM
3.9 Prevention #2 (OJT)	Year 2019 (Aor-Sep) Location: G & S TM 1 priority site / TM (total 2) Partcipant: 3TM & 2-4HM in 2 TM Assistant: 2~4 HM of #1 Observer: About 1/2 of other HM			(Trainee of #1) Observer -18~22 HMs
3.7 Future prevention Plan	Year: 2019 (Jan-Mar) Location: G & S TM All 4 target sections (I) Trainee: 2 TM (G&S) & 2-4 HM in 2TM	Year: 2019 (Jan-Mar) Location: 3 TM All target section (II) Trainee: 3 TM & 3~6 HM in 3TM	Year: 2020 (Jan-Mar) Location: 3 TM All target section (III) Trainee: 3 TM and 3-6 HM in 3TM	Trainee: -All 3TM -8~16 HM in 3 TM
5.3 Budget	Year: 2020 (Mar-July)(*) Location: G& S TM: Budget for 2 sections / TM Trainee: 2 TM& 4~8 HM	Year: 2020 (Mar-July)(*) Location: 3 TM Budget for 1 section/ TM Trainee: 3TM& 3~6 HM	Year: 2020 (March-July) Location: 3 TM Budget for 1 section / TM Trainee: 3TM & 3~6 HM	Trainee: -All 3TM -8~16 HM from 3 TM

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Annex 2 Location and Participants of the Field Activities for Disaster Recovery and Prevention (2)

əic			, CO.		Venue	
CN		Activity	rear	Sogd SETM and its 14 SEHMs Gissar SETM and its	Gissar SETM and its 9 SEHMs	Rasht SETM and its 3 SEHMs
	3.3	Conduct trainings on hazard evaluation	2017 Aug.	2 sections in Sughd	2 sections in Hissor	1 of 2 sections in Hissor
1	3,4	Select the target sections	2017 Jul.	2 sections in Sughd	2 sections in Hissor	1 of 2 sections in Hissor
	3.5	Conduct hazard evaluation	2017 AugOct.	2 sections in Sughd	2 sections in Hissor	1 of 2 sections in Hissor
L	3.6	3.6 Identify priority sites	2017 NovDec.	2 sites in Sughd	2 sites in Hissor	1 of 2 sites in Hissor
1 -4-5-20-5-20-5	3.8	Organize trainings on prevention measure	2018 JanApr.	2 sites in Sughd	2 sites in Hissor	1 of 2 sites in Hissor
	က် တ	Plan and implement prevention measures	2018 AprSep. 2019 AprSep.	1 site in Sughd 1 site in Sughd	1 site in Hissor 1 site in Hissor	Observer for 1 of 2 sites in Hissor Observer for 1 of 2 sites in Hissor
4	3.3	3.3 Select the target sections	2018 Jul.	1 section in Sughd	1 section in Hissor	1 section in Rasht
	3.5 (3.5 Conduct hazard evaluation	2018 AugOct.	1 section in Sughd	1 section in Hissor	1 section in Rasht
	3.6	3.6 Identify priority sites	2018 NovDec.	1 site in Sughd	1 site in Hissor	1 site in Rasht
	3.7	Develop a future disaster prevention plan	2019 JanMar.	3 sections (cycle1+2) in Sughd	3 sections (cycle1+2) in Hissor	1 section in Rasht
	3.3	3.3 Select the target sections	2019 Jul.	1 section in Sughd	1 section in Hissor	1 section in Rasht
	3.5	Conduct hazard evaluation	2019 AugOct.	1 section in Sughd	1 section in Hissor	1 section in Rasht
	3.6	3.6 Identify priority sites	2019 NovDec.	1 site in Sughd	1 site in Hissor	1 site in Rasht
	3.7	Develop a future disaster prevention plan	2020 JanMar.	1 section in Sughd	1 section in Hissor	1 section in Rasht
				Training		9

future plan

2)

MINUTES OF MEETINGS BETWEEN JAPAN INTERNATIONAL COOPERATION AGENCY MINISTRY OF TRANSPORT OF THE REPUBLIC OF TAJIKISTAN

ON JAPANESE TECHNICAL COOPERATION PROJECT

FOR THE PROJECT FOR CAPACITY DEVELOPMENT FOR ROAD DISASTER PREVENTION MANAGEMENT

In response to the official request of the Republic of Tajikistan, the Detailed Planning Survey Team (hereinafter referred to as "the Team") organized by Japan International Cooperation Agency (hereinafter referred to as "JICA") headed by Mr. Shuntaro Kawahara (Senior Advisor), visited the Republic of Tajikistan from September 11 to 30, 2016 for the purpose of working out the details of the technical cooperation programme concerning "The Project for Capacity Development for road disaster prevention management" (hereinafter referred to as "the Project").

During its stay in the Republic of Tajikistan, the Team exchanged views and had a series of discussions for the purpose of working out the framework and contents of the Project with the Ministry of Transport (hereinafter referred to as "MOT").

As a result of the discussions, MOT and JICA agreed upon the matters referred to in the document attached hereto.

Dushanbe, September 29, 2016

Shuntaro KAWAHARA

Leader

Detailed Planning Survey Team

Japan International Cooperation Agency

Japan

Farida YOKUBZODA

Head

International Relation Department

Ministry of Transport

The Republic of Tajikistan

ATTACHED DOCUMENT

1. RECORD OF DISCUSSIONS

Both sides agreed that the Record of Discussions (R/D), the draft of which is attached hereto, will determine the framework of the Project. The R/D will be signed after the formal approval by both sides.

2. MAJOR POINTS DISCUSSED

(1) Title of the Project

Though the requested title of the Project was "The Project for Capacity Development for Road Disaster Prevention Management", the both sides decided to change it to "The Project for Capacity Development for Road Disaster Management" to reflect the goal and activities of the Project.

(2) Target Disaster

Both sides agreed that the target disasters in the Project will be (1) slope failure, (2) rockfall, (3) landslide, (4) debris flow, (5) slope erosion by floods and (6) inundation. With regard to the slope erosion by floods, both side agreed that the Project will focus on measures under the responsibility of MOT such as rehabilitation of slope protection eroded by floods.

(3) Target Group

Both sides agreed that amongst four SETMs (Gissar, Kurgan Tyube, Sogd, Kulyab) in the request, Gissar and Sogd SETM, which have socially and economically significant sections of the road which are prone to disaster, will be included in the Target Group, considering the constraint of budget and human resources on Japanese side.

Meanwhile, Tajik side proposed that Rasht SETM, which was not listed in the request, should be included in the Target Group. The Team visited some disaster prone sections along the International road under the jurisdiction of Rasht SETM and recognized that some of them have high risk on disaster. Thus, both sides agreed that three (3) SEHMs under the jurisdiction of Rasht SETM (Nurabad, Rasht, and Tajikbad), which are relatively close to Gissar SETM, will be added into the Target Group.



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(4) Formation of Road Disaster Management Task Force for Supporting SETMs/SEHMs

Both sides agreed that Road Disaster Management Task Force (hereinafter referred to as RDMT) supporting SETMs/SEHMs, consisting of staff of Road Construction and Maintenance Department (hereinafter referred to as RCM) in MOT and State Unitary Enterprise "Scientific Research, Design and Survey Institute" (hereinafter referred to as DI), should be formed and enhanced through the project activities. RDMT members are expected to participate in review of current status of disaster management, preparation of manuals and field activities for disaster recovery and prevention as senior training assistants as well as pilot study on cost-effectiveness of disaster prevention activities as appropriate. Civil Defense Specialist, Administration Department, would provide advice to the RDMT as needed.

(5) Coordination with Civil Defense Specialist, Administration Department

Both sides agreed that the project activities should be implemented in coordination with the activities of Civil Defense Specialist, Administration Department who is responsible for coordinating and reporting disaster recovery works in MOT and training of SETMs on preparation for disaster in collaboration with specialists from RCM and/or DI.

(6) Location and Participants of Disaster Recovery Activities (Output 2)

Both sides agreed that classroom training and simulated disaster recovery drill will be conducted in Gissar and Sogd SETM, while disaster recovery works during actual disaster situation will be conducted in all target SETMs. Both sides agreed that participants in the classroom trainings and drills will be all three (3) target SETMs and twenty-six (26) target SEHMs. (refer to Annex 1 of Appendix 2 of Attachment 2)

(7) Target Section for Hazard Evaluation (Output 3)

Both side agreed that target sections for Hazard Evaluation will be selected by following process (refer to Annex 1 and 2 of Appendix 2 of Attachment 1):

- Road sections with a lot of disasters along the International / Republican road in the target SEHMs will be selected as candidate target sections in each target SETM; and
- Among the candidates, target sections will be selected considering the type of disasters, the social and economic significance, and geographical location of the

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section.

(8) Location and Participants for Disaster Prevention Activity (Output 3)

With regards to the locations and the participants of activities for disaster prevention, both sides agreed on the followings considering the budget constraint and time frame of the Project (refer to Annex 1 and 2 of Appendix 2 of Attachment 1):

- a) Hazard evaluations will be conducted for the target sections selected in all target SETMs by all target SETMs/SEHMs;
- b) Locally adaptable disaster prevention measure will be planned for the priority sites selected in the target sections in Gissar and Sogd SETMs by all target SETMs;
- Locally adaptable disaster prevention measure will be implemented for the selected priority sites in Gissar and Sogd SETMs by four SEHMs responsible for the sites; and
- d) Future disaster prevention plan will be prepared for the target sections in all target SETMs by themselves.

(9) Priority Site for Pilot Disaster Prevention Measures #1 and #2 (Output 3)

A priority site for pilot disaster prevention measures will be selected from each target section for hazard evaluation in Gissar and Sogd SETM selected in the first year of the Project. The sites which satisfy the following conditions will be selected:

- a) Sites that have high urgency based on the hazard evaluation; and
- Sites where measures widely applicable in Tajikistan can be demonstrated/practiced.

(10) Introduction of Early Warning (Output 3)

Tajik side requested that introduction of early warning system should be included in the prevention measures. Japanese sides agreed that the Project will include the monitoring the relationship between the rainfall and disaster and preparation of proposal for simple early warning system.

(11) Data Management Method (Output 4)

Tajik side explained that MOT developed road condition and maintenance database assisted by ADB in the past but it is not functioning well because MOT finds difficulty in data input by SETMs and database maintenance. Tajik side requested followings:

a) SEHMs should be equipped with computers and responsible for data inputs

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b) Software of database should be easy enough for MOT to self-maintain.

Japanese side explained the followings:

- a) Volume of data for disaster management (disaster history, recovery history, the result of hazard evaluation, and prevention measures) is expected to be manageable for SETMs although the lesson learnt shall be taken into consideration
- b) Data forms will be simplified as much as possible.
 - c) Software of database available in the market would be used.

(12) Schedule of Budget Preparation (Output 5)

Tajik side explained that the schedule for the the budget request is as follows:

Deadline	Activity
March	SEHMs submit the budget proposal to SETMs
July 1 st	SETMs submit the budget proposal to MPEU(with budget breakdown) and EAF (total amount) in MOT
August 1st	MOT submits the budget proposal to MOF

(13) Local Travel and Accommodation Cost for SETM/SEHM

Both sides agreed that local travel and accommodation cost for SETMs/SEHMs to participate in the trainings, drills for disaster recovery, hazard evaluation, disaster prevention measures and workshops/seminars shall be borne by Japanese side, while meal allowance shall be borne by Tajik side.

(14) Internet Connection at Each SETM

Both sides confirmed that Tajik side should secure internet connection at each office in the Target SETMs before the Project launches.

(15) Timing for Project Activities

Tajik side explained that from 25th to 31st of each month is the period for monthly reporting and is the busiest period for SETM. Both sides agreed that the project activities would be scheduled taken into consideration above as much as possible.

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(16) Coordination with Capacity Development Activities for Sogd SETM on Pavement Repair

Both sides confirmed that Sogd SETM has been included as an additional target group of "the Project for Road Maintenance" (2013-2016) only since April 2016 and the level of achievement for pavement inspection and repair is rather limited compared to Gissar SETM. According to the draft post-project strategy of the above project, capacity building for Sogd SETM on pavement repair is expected to be conducted from May to October 2018, in which pilot prevention measures #1 are scheduled at Sogd SETM. Timing of both activities should be coordinated in order to avoid overburden of the staff of Sogd SETM.

(17) Continuous Effort for Budget Preparation for Disaster Prevention

Both side confirmed that the pilot study on cost-effectiveness of the locally adaptable disaster prevention measures should be conducted not only during the Project, but should be continued after the Project in order to enhance accountability, and that disaster management database should be continuously utilized after completion of the Project to examine effectiveness of the prevention measures based on the future prevention plans developed through the Project to prepare budget for prevention measures.

Attachment-1 Draft Record of Discussions

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(Draft)

RECORD OF DISCUSSIONS

ON

THE PROJECT FOR CAPACITY DEVELOPMENT FOR ROAD DISASTER MANAGEMENT

IN

THE REPUBLIC OF TAJIKISTAN

AGREED UPON BETWEEN
MINISTRY OF TRANSPORT

AND

JAPAN INTERNATIONAL COOPERATION AGENCY

Dushanbe, XX, XX, 2016

Mr. Kiyoshi Ishii Chief Representative Japan International Agency Tajikistan Office

Cooperation Position

Name Position Ministry of Transport The The Republic of Tajikistan

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Based on the minutes of meetings on the Detailed Planning Survey on the "The Project for Capacity Development for Road Disaster Prevention Management" (hereinafter referred to as "the Project") signed on September 29th, 2016 between Ministry of Transport (hereinafter referred to as "MOT") and the Japan International Cooperation Agency (hereinafter referred to as "JICA"), JICA held a series of discussions with MOT and relevant organizations to develop a detailed plan of the Project.

Both parties agreed the details of the Project and the main points discussed as described in the Appendix 1 and the Appendix 2 respectively.

Both parties also agreed that MOT, the counterpart to JICA, will be responsible for the implementation of the Project in cooperation with JICA, coordinate with other relevant organizations and ensure that the self-reliant operation of the Project is sustained during and after the implementation period in order to contribute toward social and economic development of the Republic of Tajikistan.

The Project will be implemented within the framework of the Agreement on Technical Cooperation signed on June 22, 2016 (hereinafter referred to as "the Agreement") and the Note Verbales to be exchanged between the Government of Japan (hereinafter referred to as "GOJ") and the Government of the Republic of Tajikistan (hereinafter referred to as "GOT").

The effectiveness of the record of discussions is subject to the exchange of the Note Verbales.

Appendix 1: Project Description Appendix 2: Main Points Discussed

Appendix 3: Minutes of Meetings on Detailed Planning Survey

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PROJECT DESCRIPTION

Both parties confirmed that there is no change in the Project Description agreed on in the minutes of meetings for Preparatory Detail Planning Survey on the Project signed on September 29, 2016 (Appendix 3).

I. BACKGROUND

The road network in the Republic of Tajikistan is 27,000km, mostly constructed during the Soviet era. The Ministry of Transport (MOT), the central governing body for the transport sector in Tajikistan has jurisdiction over 14,000 km of the network. Since the country is a landlocked and mountainous (93% of the area is termed mountainous), nearly 90% of freight transport within the country is by road and the road transport plays a vital role in the people's lives, Since independence from the Soviet Union in 1991, the country experienced a fateful civil war in the early 90s causing a severe economic setback which forced road assets unattended and many roads suffered damage during the civil war.

There has been international assistance for rehabilitation of roads for the last 10 years. However, the pavement ration of these roads is only 30% and many arterial roads still have potholes, broken shoulder pavement and other damages indicating inadequate maintenance. It is estimated that about 200km of roads are losing the road function each year.

Until now, JICA has been extending its cooperation to MOT for the improvement of road maintenance from both aspects of hard and soft components through "The project for the Improvement for Road Maintenance" (Technical Cooperation, R/D signed in 2013), "The project for Improvement of Equipment for Road Maintenance in Khatlon Region and Districts of Republican Subordination" (Grant Aid, G/A signed in 2013) and "The Project for Improvement of Equipment for Road Maintenance in Sughd Region and the Eastern Part of Khatlon Region" (Grant Aid, G/A signed in 2015) and they have been contributed to the improvement of road maintenance.

On the other hand, road disaster management has not been conducted in an appropriate manner, although Tajikistan is a mountainous country and has disaster-prone area. Falling rocks, landslide and avalanche disasters occur in many road sections during the severe winter weather season and this may be aggravated during the next spring season when the ice melts and brings down a tremendous volume of the melted water to major rivers flowing through the mountainous passes causing further disasters.

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Therefore, technical capability improvement on road disaster management of MOT as well as State Enterprise of Transport Management (hereinafter referred to as SETM) and State Enterprise on Highway Management (hereinafter referred to as SEHM) which is responsible for the management of International and Republican Road is required. Thus, the GOT requested the technical cooperation of Capacity Development for Road Disaster Prevention Management to the GOJ.

In response to this request, JICA dispatched the Detailed Planning Survey mission to discuss the contents of the Project with MOT and other authorities concerned of the Republic of Tajikistan. Based on the agreements between JICA and the authorities concerned of the Republic of Tajikistan, the Minutes of Meetings was signed on September 29, 2016, which leads both parties to conclude this Record of Discussions.

II. OUTLINE OF THE PROJECT

Details of the Project are described in the Logical Framework (Project Design Matrix: PDM) (Annex 1) and the Plan of Operation (Annex 2).

1. Title of the Project

Though the requested title of the Project was "The Project for Capacity Development for Road Disaster Prevention Management", the both sides decided to change it to "The Project for Capacity Development for Road Disaster Management" to reflect the goal and activities of the Project.

2 Project Site(s) and Beneficiaries

(1) Project Sites

The Project sites will be International and Republican roads in Gissar and Sogd SETMs as well as Nurabad, Rasht and Tajikbad SEHMs in Rasht SETM

(2) Direct Beneficiaries

The direct beneficiaries (Target Group) will be the relevant staff of MOT, Gissar SETM and its 9 SEHMs, Sogd SETM and 14 SEHMs, and Rasht SEHM and its 3 SEHMs (Nurabad, Rasht, and Tajikbad)

(3) Indirect Beneficiaries

The indirect beneficiaries will be the people using the Project sites.

3. Duration

Three (3) years and 4 months from the commencement of the Project (dispatch of the JICA experts from Japan)

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4. Overall Goal

Road disasters are mitigated in the International and Republican Roads in the target SETMs/SEHMs

5. Project Purpose

Capacity of MOT and the target SETMs/SEHMs for effective road disaster management is improved

6. Outputs

- Road disaster management structure of MOT and the target SETMs/SEHMs is strengthened
- (2) Road disaster recoveries by the target SETMs/SEHMs are improved through standardization.
- (3) Process of locally adaptable road disaster prevention is established at the target SETMs/SEHMs
- (4) Data necessary for road disaster management is available at MOT and the target SETMs for budget preparation and road disaster recovery and prevention
- (5) MOT and the target SETMs/SEHMs are capable of preparing budget proposal for road disaster prevention

7. Input

(1) Input by JICA

- (a) Dispatch of Experts
 - 1) Chief Advisor
 - 2) Institution
 - 3) Road Disaster Work
 - 4) Road Disaster Prevention
 - 5). Hazard Evaluation
 - 6) O&M of equipment
 - 7) Cost estimate
 - 8) Database
 - 9) Monitoring for early warning
 - 10) Local Administrative Coordinator
 - 11) Other experts mutually agreed upon as necessary

(b) Training

Training of the Tajikistan personnel in Japan and/or the third country

(c) Machinery and Equipment

JICA will provide the following items:

- Attachments for back-hoe excavator and air compressor provided under JICA Grant Aid required for disaster recovery
- Total stations, auto levels, radar distance meters and rain gauges for site survey
- 3) Earthwork volume calculation system for disaster recovery
- 4) Database software and hardware for database system
- Desktop computers for MOT and 3 SETMs (4 sets) for database system



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- 6) Laptop computers for 3 SETMs (3 sets) for hazard evaluation
- 7) Other equipment mutually agreed upon as necessary

In case of importation, the machinery, equipment and other materials under II-6 (1) (c) above will become the property of the GOT upon being delivered C.I.F. (cost, insurance and freight) to the Republic of Tajikistan authorities concerned at the ports and/or airports of disembarkation.

(2) Input by MOT and the target SETMs/SEHMs

MOT and the target SETMs/SEHMs will take necessary measures to provide at its own expense:

- (a) Services of MOT and the target SETMs/SEHMs' counterpart personnel and administrative personnel as referred to in II-7;
- (b) Furnished office spaces for the Japanese Experts at the MOT, Gissar and Sogd SETMS, including air conditioners and internet connection;
- (c) Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than the equipment provided by JICA;
- (d) Information as well as support in obtaining medical service;
- (e) Credentials or identification cards;
- (f) Available data (including maps and photographs) and information related to the Project;
- (g) Running expenses necessary for the implementation of the Project;
- (h) Expenses necessary for transportation within the Republic of Tajikistan of the equipment referred to in II-6 (1) as well as for the installation, operation and maintenance thereof; and
- (i) Necessary supports to the JICA experts for the remittance as well as utilization of the funds introduced into the Republic of Tajikistan from Japan in connection with the implementation of the Project

8. Implementation Structure

The Project organization chart is given in the Annex 3. The roles and assignments of relevant organizations are as follows:

- (1) MOT and the target SETMs/SEHMs
 - (a) Project Director
 - Deputy Minister of MOT will be responsible for overall administration and implementation of the Project.
 - (b) Deputy Project Director
 - Head of Road Construction and Maintenance Department (RCM) of MOT will be responsible for overall technical issues of the Project.
 - (c) Project Manager
 - Head of International Relation Department of MOT will be responsible for day to day management of the Project.
 - (d) Regional Managers
 - Heads of Gissar, Sogd, and Rasht SETMs will be responsible for coordination in their respective regions.
 - (e) Technical Personnel



- 1) Civil Defense Specialist, Administration Department, MOT
- Head and staff of Maintenance, Planning, and Evaluation Unit of RCM, MOT
- 3) Head and staff of Road Construction Unit of RCM, MOT
- Head and staff of IT Unit of Economic Analysis and Forecasting Department (EAF), MOT
- Staff of State Unitary Enterprise "Scientific Research, Design and Survey Institute"
- Chief Engineers of Gissar, Sogd, and Rasht SETMs and Technical Production Manager of Gissar SETM
- 6) Heads and Chief Engineers of the target SEHMs
- 7) Other relevant staff of target SETMs/SEHMs

Technical staff will be responsible for the implementation of the project activities in their assigned fields specified in the PO. Tentative list of the personnel is given in the Annex 4.

(2) JICA Experts

The JICA experts will give necessary technical guidance, advice and recommendations to MOT and the target SETMs/SEHMs on any matters pertaining to the implementation of the Project.

(3) Joint Coordinating Committee

Joint Coordinating Committee (hereinafter referred to as "JCC") will be established in order to facilitate inter-organizational coordination. JCC will be held twice a year and whenever deems it necessary. JCC will approve an annual work plan, review overall progress, conduct evaluation of the Project, and exchange opinions on major issues that arise during the implementation of the Project. A list of proposed members of JCC is shown in the Annex 5.

Reports

MOT and JICA experts will jointly prepare the following reports in English and Russian.

- (1) Monitoring Sheet on semiannual basis until the project completion.
- (2) Project Completion Report at the time of project completion.
- 10. Environmental and Social Considerations
 - (1) MOT agreed to abide by 'JICA Guidelines for Environmental and Social Considerations' in order to ensure that appropriate considerations will be made for the environmental and social impacts of the Project.

III. UNDERTAKINGS OF MOT

1.MOT and GOT will take necessary measures to:

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- (1) ensure that the technologies and knowledge acquired by the Republic of Tajikistan nationals as a result of Japanese technical cooperation contributes to the economic and social development of the Republic of Tajikistan, and that the knowledge and experience acquired by the personnel of the Republic of Tajikistan from technical training as well as the equipment provided by JICA will be utilized effectively in the implementation of the Project; and
- (2) grant privileges, exemptions and benefits to the JICA experts referred to in II-6 (1) above and their families, which are no less favorable than those granted to experts and members of the missions and their families of third countries or international organizations performing similar missions in the Republic of Tajikistan.
- Other privileges, exemptions and benefits will be provided in accordance with the Agreement on Technical Cooperation signed on February 15, 2005 between GOJ and GOT.

IV. MONITORING AND EVALUATION

JICA and the MOT will jointly and regularly monitor the progress of the Project through the Monitoring Sheets based on the Project Design Matrix (PDM) and Plan of Operation (PO). The Monitoring Sheets will be reviewed every six (6) months.

Also, Project Completion Report will be drawn up one (1) month before the termination of the Project.

JICA will conduct the following evaluations and surveys to verify sustainability and impact of the Project and draw lessons. The MOT is required to provide necessary support for them.

- 1. Ex-post evaluation three (3) years after the project completion, in principle
- 2. Follow-up surveys on necessity basis

V. PROMOTION OF PUBLIC SUPPORT

For the purpose of promoting support for the Project, MOT will take appropriate measures to make the Project widely known to the people of the Republic of Tajikistan.

VI. MISCONDUCT

If JICA receives information related to suspected corrupt or fraudulent practices in the implementation of the Project, MOT and the target SETMs/SEHMs will provide JICA with such information as JICA may reasonably request, including information related to any concerned official of the government and/or public organizations of the Republic of Tajikistan.

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MOT and the target SETMs/SEHMs shall not, unfairly or unfavorably treat the person and/or company which provided the information related to suspected corrupt or fraudulent practices in the implementation of the Project.

VII. MUTUAL CONSULTATION

JICA and MOT will consult each other whenever any major issues arise in the course of Project implementation.

VIII. AMENDMENTS

The record of discussions may be amended by the minutes of meetings between JICA and MOT. However, PO may be amended in the Monitoring Sheets.

The minutes of meetings will be signed by authorized persons of each side who may be different from the signers of the record of discussions.

Annex 1 Logical Framework (Project Design Matrix:PDM)

Annex 2 Tentative Plan of Operation Annex 3 Project Organization Chart

Annex 4 Tentative list of the project personnel

Annex 5 A List of Proposed Members of Joint Coordinating Committee

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Annex 1 Logical Framework (Project Design Matrix :PDM)

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Remarks

PDM ver . (day/month/year)

Achievement							
Important Assumptions		A Polety for designer management is not discontinued. B Political instatility economic crisisfeances natural disseler that affect the project siles do not occur.	A Staff of MOT and the target SETWSSEHMS trained through the Project do not leave the	omos marge			
Means of Verification	7 0 0 0 2 2	a Assessment report of the sheet of Date of budget request	Ta Date of report Tb Aperoval of JCC Tc Joint review of Individual capacity development plan IbOfficial approval document	2a Acceptance letter 2b Test results 2c ditto 2d-e Joint review of the Checklist 2e Approval letter	3a Acceptance 3b Test results 3c Test results 3c-dont review of the checklist 3f Test results 3g Approval letter 3h ditto	4a Comparison with the design the design de Test results de Relocate A Report 4f Approval letter	Sa Acceptance letter So Budget document Sc Proposals submitted
Narrative Summary Objectively Verifiable Indicators	a. All disaster recovery works by the larget SETMaSSEHMs are planned and implemented according to the disaster recovery manual developed through the Project. b. By Jul 2023 (*2), disaster prevention measures are planned and/or implemented at least X (*3) priority siles in the target by Jul 2021 (*2), disaster prevention measures are planned and/or implemented at least X (*3) priority siles in the target SETMs according to the disaster prevention manual developed through the Project. SETMs according to the disaster prevention manual developed through the Project. C From Aug 2020 to Jul 2023, the average duration required for road re-opening per disaster handled by the target SEHMs is decreased by X% compared with the same before the Project (from X to X).	a. By the end of the Project, X7 of results of the disaster recovery works by the target SETMs/SETMS, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans be by the end of the Project, X7 of the results of the hazard evaluation by all larget SETMs, according to the disaster prevention manual developed through the Project, as sesses accurate by the Japanese Expert Train cannot be project, and the plans of results of the disaster prevention measures &EV by Glassar and Soop SETM and 2 larget SETMs, according to the manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans.	19 Ey Jun 2017, a report on current disaster management relevant to MOT and the larget SETMs/SEHMs is developed to By Jul 2017, roles and responsibilities of Road Disaster Management Taskforce supporting SETMSEHM(RDMT) is clarified. To By the and of the Project, X% of members of RDMT are able to support SETMs/SEHMs according to their respective noies and responsibilities. 18 by the end of the Project, an improvement plan of disaster management structure of MOT and the larget SETMs/SEHMs, including institutionalization of RDMT, is approved by MOT.	2a <u>By Dec 2017</u> a road disaster recovery manual for SETMSEHWIRRT is developed 2b X the other through participants from all target SETMASETHS passes the post-training test on disaster recovery works 2b X the other training participants from all target SETMASETHS passes the post-drill test on disaster recovery works for the drills are planned and implemented by all larget SETMASEHMs according to the manual 2c Disaster recovery works at the actual disaster sites are planned and implemented by all raiset SETMASEHMs according to the manual according to the manual 2c Disaster recovery works at the actual disaster sites are planned and implemented by all relevant target SETMASEHMS 2conding to the manual 2cond	Sa <u>By Oct 2017.</u> a road disaster prevention manual for SETM/SEHM is developed 3b X x of the training participants from all larget SETM/SEHM is developed adaptable prevention measures each 3c Hazard evaluation is conducted at least twice by all target SETM/SEHM for 10 target sections in all target SETMs according 10 the manual 3d Locally adaptable prevention measures are planned by all target SETMs for 4 priority sites in Gissar and Sogd SETMs according to the manual 3e Locally adaptable prevention measures are implemented by 4 target SETMs at 4 priority site in Gissar and Sogd SETMs according to the manual 3s Locally adaptable prevention measures are implemented by 4 target SEHMs at 4 priority site in Gissar and Sogd SETMs according to the manual 3f X v of the observers from the other 22 SEHMs passes the post-observation test on implementation 3g XW Mat 2020, future disaster prevention diams are developed for 10 target sections by all target SETMs 3g By the and of the Protect, the finalized manual is approved by Mo?		The second second is a pilot study on cost-effectiveness of the locally adaptable disaster prevention is developed for <u>By Main 2020</u> , budget proposed for focally adaptable disaster prevention measures are prepared by all largel SETM and MOT as part of the regular budget for FY 2021 based on the future development plans for gat the and of the Project, it least on the project proposal for large-scale disaster prevention of the priority site(s), which cannot be applied to the regular budget for the project proposal for large-scale disaster prevention of the priority site(s), which cannot be applied to the regular budget for the project proposal for large-scale disaster prevention of the priority site(s).
Narrative Summary	<overall goal=""> Road disasters are mitgated in the finemational and Republican Roads in the largest and republican Roads in the largest SEFMs/SEHMs</overall>	Capacity of MoT and the larget SETMASEHMs for effective road dissiler management is improved.	Coutputs> 1.Road disaster management structure of MOT and the target SETMs/SEHMs is strengthened	2. Road disaster recoveries by the target SETMS/SEHMs are improved through standardization.	3 Process of locally adaptable road disaster prevention is established at the target SETMs/SEHMs	4 Data necessary for road disaster management(**) is available at MoT and the larget. SETAs for budget preparation and road disaster road meventing or meaning or meaning the set of the se	S MOT and the larget SETMs/SEHMs are capable of preparing budget proposal for road disaster

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Annex 1 Logical Framework (Project Design Matrix :PDM)

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	programmer through the control of the control of the neet discontinuous through the control of t	<tajik side=""></tajik>	<japanese side=""></japanese>	instability/
	Classify target disasters through contection and amays so the past disaster record. Review organizational and technical aspects of current state of disaster management relevant to MOT and the larget SETMs/SEHMs.	Personnel 1 Prolect Director Deputy	Japanese Experts 1. Chief Advisor	economic crisis
Y.	Tweeter upgangement and worth and the second and th		6	orolect activities
63		2. Deputy Project Director: Head of RCM. MOT	3. Road Disaster Recovery	
		3. Project Manager: Head	3. Road Disaster	B Security
4			Prevention	Tajikistan, which
10			5, O&M of	fmits the activities of the
	the project activities for approval by MOT.	Heads of the target SETMs	6. Cost estimate	JICA experts,
2	Examine locally adaptable disaster recovery works based on the current state review (Activity 1.2)	5. Relevant Staff of MOT	7. Database	project sites,
2.2			early warning	does not
2.3		Larget SETMs/SEHMs.	9, Local Administrative	compared with
			inalo	the same in 2016
2.4		necessary	mutually agreed	Por Conditions
2.5		Land, Building and	- 4	ALIE-CONOMONIS
2.6	8.	1 and huilding and	necessary	A Tentative list of
7.7	CERTIN VARIETS for disasser recovery from the state of the sages of the sages.	s necessary		including
3.1		the Project	disaster recovery	Disaster
3.2		2. Office spaces for the	and prevention	Taskforce, is
	which is used for Activity 3.3-3.10	MOT, Gissar and Sogd	software	finalized B Internet
33	S.		database by for	connection is
	assessment and preparation of hazard evaluation sheet) (in Gissar and Sogd SETMs)	such as internet	database at M	established at
3.4		ectivity, tel	and each SETA	SETM
3.5		line, electricity, etc.	A Laptop PC for	
3.6		Local Costs	and monitoring at	
3.7		r installa	each SETM	Issues & counter
3.8		maintenance of the	equipment for	measures
	budget, supervision, preparation of prevention measure sneet, innihilating hearly warning) in classes a new Source control budget, supervision, preparation of prevention measure sneet, innihilating in bank warning in the princip state of the control budget.	provided equipment,	early warning	
3.9		2. Administration and operational costs,	mutually agreed	
2 4 5		el costs, a	- 3	
3 4 5	O Update and instance in terminal removals and other properties from the staff of the larget SETMs /SEHMs	prevention/recovery	Jecessery	
;		works. Meal allowances for SETMs/SEHMs to	Training of the Tallk Personnel in Japan	
4		participate in training,	and/or third	
4.2	Design a database system with installed hardy	drills,	country	
4		works	Local costs	
			Cost for activities of	
4.	Conduct trainings on database use to MOT and all target SETMS (i.e. collection, liput, compaling, analysis and reporting or water at		- O	
A			to narticipate in	
4.0			ining, drills ar	
			prevention/recovery work	
43	Distributed data collected from the farcet SEHMs by the respective target SETMs for submission to MOT			



Gollect data of disaster recovery works at all target SEHMs in 2017 as baseline data in the prescribed form improve by the Project Collect data necessary for disaster management (i.e. disaster recovery sheets, hazard evaluation sheets, and prevention measure sheets) from all target SEHMs by the respective SETMs
Digitalize the data collected from the target SEHMs by the respective target SETMs for submission to MOT

Annex 1 Logical Framework (Project Design Matrix :PDM)

Integrate the digitalized data submitted by the target SETMs into the database	4.9 Release the database to MOT and all target SETMs	4.10 Develop a simple annual road disaster management report for senior management of MOT	4.11 Update and finalize the database design and the manuals reflecting feedbacks from the database users
4.8	4.9	4.1	4.3

Plan and implement a pilot study on cost-effectiveness of locally adaptable disaster prevention measures at the target sections 5.3

Prepare budget for locally adaptable disaster prevention for the priority sites identified under Output 3 by all target SETMs and MOT, Create a budget item for disaster prevention in the regular budget of SETM/SEHIM/MOT selected in the first year under Output 3, using simple hazard location maps. 5.3

Develop project proposal(s) on large-scale prevention measures for the priority site(s) in the target section(s) under Output 3, which utilizing the results of Output 3&4 5.4

The results of Output 3 &4

(*4) ROMT consists of salf of RCM MOT and DL (*5). Number of hazard evaluation siles would be approximately 100 in the target sections for the first year and approximately 50 in the second and the third years. The length of a hazard evaluation severation measures are implemented at the priority sites in the larget sections selected in the first year. (*6) The other SEHMs are expected to participate in the prevention measures #1 or #2 as observers.

Abbrewialton:
Di: State Unitary Enterprise "Scientific Research, Design and Survey Institute"
FY: Flecal Year
MOT. Ministry of Transport
SEHM: State Enterprise Highway Maintenance
SEHM: State Enterprise Transport Management
RCM: Road Construction Maintenance Department of MOT

Project Title: "The Project for Capacity Schedule of Major Japanese Inputs Expert	Von II	Project Title: "The Project for Capacity Development for Roar Basker Athler Athl		
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V.	Sub-Activities	à	=	- H H	- n	V II II V		Org (Talko	Person (Tajk)	(Tajet)	subbetts	Japan	Tajik		Acnevements	Countermeasures
Output	Output 1:Road disaster management structure of MOT an	and th	ne target	d the target SETMs/SEHMs is strengthened	HMs is st	rengthene	.pg	TCAA	Head of RCM		Chief Advisor (CA)					
1.1 of th	Classify the target disasters through collection and analysis in of the past, disaster records	Plan						ROWMOT	Head of MPEU	Road Disaler Mgt Taskforce //RDMT/RCM. Dil	Retor Work Hizard Eva Prevention measures (Prev M)		Targel			
1.2 Rev dsa SET dsa	1.2 Review organizational and technical aspects of current disaster management relevant to MCT and the larget SETMASEHMs, including ther communication network for district Recovery called Rapid Response Team (RRT)	Plan						RCMMOT	Hrad of MPEU	otto	Recov M. Huzard Eva., Prov M. Insulution					
13 Clar Nan form	Clarty the toles and responsibilities of Road Disaster Wanagement Taskforce supporting SETM/SEHM (RDMT) commet at MOT and its members as well as their capacity development blans.	Plan	1					RCMANOT	Head of MPEU.	0.00	9110					
1 4 Sup activ (by i	1.4 Support the larget SETNs/SEHWs through the project activities according to the clarified roles and responsibilities (by RDMT).	Plan						RCMMOT	Head of RCM	one	dito					
1.5 Dev	1.5 Develop an improvement plan of disaster management structure of MOT and the target SETMANSENMs based on the freedbacks from the project activities for approval by	Plan				1		REMANDE	Hisad of MPEU	RDATT(RCM OI), SETM	Recov M. Prev. M. Hazard Eva					
Output 2	MOT Output 2:Road disaster recoveries by the target SETMs/SEHMs are improved through standardization	TWs/S	SEHMS	are improv	ed throug	4		Cyerat MOT Fleid SETM	Head of RCM Head of SETM		Chief Advisor			REMIT parting alls in the field activities on season making uppiddente		
21 Exar on th	Examine locally adaptable disaster recovery works based on the current state review (Activity, 1.2).	Flan	ı					RCMMOT	Head of MPEU	RDMT (RCM. DI), SETM	Recov M. Cost E. G&M					
2.2 Dev	2.2 Develop a disaster recovery manual for SETM/SEHM and RRT, including action for preparedness, which is used for Activity 2:3-25	Plan						RCMINOT	Hoad of MPEU	etto	ditto					
23 SET SHITN SHIPS	Conduct trainings on disaster rocovery works for all target 2.3 SETMs/SEHMs and MOT (i.e. action for proparedness; survey selection of works, design, cost estimate, authorivsion disaster recovery shost) (in Gissar and Sogid SETMS)	Flan						SETA	Chief Engineer lavel (SETM)	SETM	otto	Egpt for Fuel OBM co Racov, travel & for equi, mea accom cost for allowance for SEHM/SEHM SETM/SEHM	Fuel O&M cost for equi, meal allowance for SETM/SEHM			
2.4 Con	Conduct on-site dails for simulated disaster recovery works for all target SETMIs/SEHMs (in Gissar and Sogd SETMs)	Flan			1	1		SETA	Chief Engineer level (SETM)	SETM, SEHM	ditto	ditto	ollo			
2 5 disa SEH	2 5 Plan and implement disaster recovery works for the disaster cooperate on any target SEHMs by the relevant SEHMsSETMs.	Flan		i	i			SETA	Chief Engineer Invet (SETM)	SETM, SEHM	ditto	otup	dillo			
2.6 Upd from	Update and finalizine the manual, reflecting the feedbacks, from Aut 24-2.6	Plan		2				RCMMOT	Head of MPEU	RDMT (RCM. DII. SETM	9810					
27 Cert	2.7 Certify Trainers for Disaster Recovery from the larget	Placi				1		rVa.	nya	- K/3	SOM RESONAN					

Activities	ries	Year	2017	2018		2019	2020	# # # Re	R Hoomston R		Implesnertors	Japanese Frances	Other M	Other Major Imputs	Remarks	Art incomparity	(sstor &
	Sub-Activities	ā	2 ==	V - N IN IV		1 11 11 1/2	m m N		Org.(Tajk) Pi	Person (Tajkti	(Tajet)		Japan	Tajik			Countermeasures
Outpu	Output 3: Process of simple road disaster prevention		establi	s established at the farget SETMs/SEHMs	the targe	st SETM	s/SEHMs		Overat MOT H	Head of RCM Head of SETM		Chief Advisor			ADMT part pare in the field admices as seed (verlage		
3.4 Ex	3.1 Examine hazard evaluation methods and locally adaptable provention measures, based on the current state review.	Han	1					RC	SCHWAOT 14	LIGHT OF MPEU	RDMT (RCM, DRI SETM	Prev. M. Hazard Eva. Cost E. Montoring (Mon)	n 0				
300	(Activity 1.2) Develop a road disaster prevention manual for	Plan	1					R	RCMANOT H	Hed of MPEU	DO SETM	Prev M. Hazard Eva. Cost E					
3 4 50	SETM/SEHM, consisting of hazard evaluation and locally adaptable prevention measures, which is used for Activity 3.3-3.10	Actual	P		E							Mon					
888	Conduct trainings on hazard evaluation to all target 3.3 SETN4/SEHMs and MOT (i.e. screening, selection of hazardous sites, hazardrisk assessment, hazard evaluation	Pfan	×					id .	SETM	Charl Engineel level (SETM)	SETM	Prev M Hazard	diffo	ditto			
- in	sheet) (in Gissar and Sogd SETMs)	Actual	-														
3.4.88	Select the target sections for hazard evaluation in each 3.4 SETM	Plan	×	No. Section 1	1	14	7	120	SETM	Chet Engraei level (SETM)	SETM	Bva Bva	- 10		- U h		
-		Actual	7										SETM/SEHM	SETWSEHM	mapyeadh		
8 8	3.5 Conduct hazard evaluation at the target, sectors by all target SEHMs in coordination with the respective SETMs	Plan	1		1	ı		8	SETW	Chief Engrised	SEHM SETM	Hazard Eva	ditta	Fuel, O&M cost, meal allowance for SETM/SEHM			
3.0	3.6 Identify priority sites in the target sections based on the evaluation results by the respective SETMs	Plan				1		N.	SETIV	Chief Englised levit (SETIX.)	SETM	Hazard Evo	diffo				
3.7 De	3.7 Develop a future disaster prevention plan for each target section by the respective SETMs	Plan			10		1	188	SETM	Chef Engineel level (SETIM)	SETM	Hazard Evu. Prev.M. Dost E. Mon	detto		The plans would be utilized in Act 1,7,1,6,4,8		
3.8 9.E	3.9 Organize trainings on locally adaptable disister prevendon measures to all target TNA-KHYS. (i. e. salection of measures, dategn, budget preparation; supervision; prevention measure alterly (in Gissar and Sogd SETMs)	Plan		I				8	SETW	Cher Engreed leyel (SETM.)	SETM	g Hg	Travel & accom cost for SET/Ms/SEHM	Exusting ect fuel for expt. meal allowance for SETM/SEHM			
15 PBS BS B	Plan and implement occally adaptable prevention measures 3.9 #1 8 #2 on pilot basis, at the priority siles in the larget sectors section of the priority siles in the larget SETIMS, by the relevant larget SETIMS.	Plan	2 = 1			9		18	SETM	Charl Engreed level (SETM.)	SETM SEHM	Hazard Eva , Prev M. Cost E. Mon	Eqt for prev & monitor, travel & accom cost for SETM/HM	Fuel O&M cost, misking egpt, meal altowance for SETM/SEHM			
0	G. C.	Plan						1X	SETM	ótto	SETM	1					
200	Selection of merchanes	PER						3	SETM	gitto	SETM						
1 6	District consistent of the second of the sec	Plan						68	SETM	office	SETM						
Sur	Supervision	Plan						35	SEHM	SHO	SETM						
8	Prevention measure sheet	Plan						65	SEHM		SETM	3					
Appl Cp	3.10 Update and finalize the manual, reflecting feedbacks from Activities 3.3.3.9	Plan Actual			i	1		RC	RCMMOT	fead of MPEU	HDMT (ROM D0, SETM	Hazard Eva Prev M, Cost E. Mon.					
198	3.11 Certify Trainers for Disaster Prevention from the target SETMs/SEHMs	Ptan Actual					1	n/u		nla	wh	CA, Hazard Eva, Prev M					

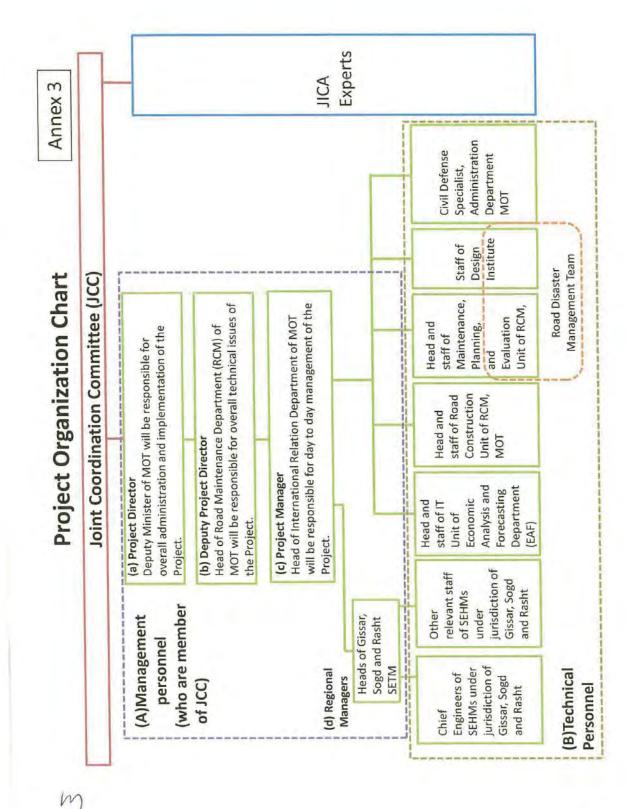
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107	Activities	Year 2	2017	2018	2019	2020	11 12	Retoonsfor	Responsible	Implementors	Japanese	Other Ma	Other Major Inputs	Remarks	Achierments	issue &
-	Sub-Activities	=	2	2 ==	11 11 11	V 1 1 1 1		Org (Tajk)	Org (Tajk) Person (Tajk)	(Talk)		unider	Tajik			Countemeasures
Sut	Output 4: Data necessary for road disaster management is avails budget preparation and disaster recovery works and prevention	t is avail evention	lable for	MOTan	d the targ	is available for MOT and the target SETMs for vention	for	MOT (RCM) EAF)			Chief Advisor					
4	2.1 Develop a plan for road disaster management database	Plan	1					EAFAIDT	Head of ITU	mu maps	Database (DB)					
4.2	Design a database system with installed hardware, consisting of spread sheets	Plan						EAFMOT	Head of ITU	пи (твр)	offic	DB software and hardware	OBM cost			
24	Develop road disaster management database manuais for users (i.e. MOT and the target SETMs) and administrator. Which are used for Activity 4.4-4.10	Plan						EAFANOT	Head of TIU	ти (твр)	otto					
प य		Plan Actual						EAFMOT	Head of (TL)	(ти гтво)	cito	PC for DB	O&M cost			
4	Collect data of disaster recovery at all target SEHMs in 2017 as baseline data in the prescribed form improved by the Protect	Plan Partual	1					RCMMOT	Chiet Enghaer lavel (SETM)	SETM (TBD)	RecoyM, CostE.					
40	Collect data necessary for disaster management from the target SEHMs (i.e. disaster recovery sheets, hazard evaluation sheets, and prevention management sheets)	Plan		Ĭ	1			RCMMOT	Chert Engineer level (SETM)	SETTA (TBD)	Hand Eve Prev M, Recov. W					
4		Plan		İ				RCMMOT	Chief Engineer level (SETM)	SETM (TBD)		PC for DB	O&M cost	Network connection at TM needed		
100	4.8 Integrate the digitized data submitted by the target SETMs into the database.	Plain		i		1		EAFMOT	Head of ITU	mu (180)	DIS	PC for DB	O&M cost	ditto		
(D)	4.9 Release the database to MOT and all target SETMs	Plan			9 11 0	# # #		EAFMOT	Head of ITU	(TU (TBD)	DB	PC for DB	O&M cast	ditto		
0	4.10 Develop simple annual road disaster management report for senior management of MOT	Plan			1	1		RCMMOT	Head of MPBU	MIPEU (TBD)	M. Recov.M	PC for DB	O&M cost			
4.11	Update and finalize the database design and the manuals, reflecting feedbacks from the database users	Flan				1		EAFMOT	Head of mu	(Turk (TBD)	50	PC for DB	O&M cost			
15 8	Output 5: MOT and the target SETMs/SEHMs are capable prevention		paring b	udgetor	oposal fo	of preparing budget proposal for road disaster	aster	MOT	TRU		(CA)					
-	Plan and implement a pilot study on cost-effectiveness of serior simple classister prevention measures at the target sections selected in the first year under Output 3, using ssimple hoses to bening measures.	Plan Actual	Completion measure #1	Completion of previous #1.	n of prov	ļ		RCMMOT	Head of RCU	RDMT (RCM, D0, SETM			Travel cost for field survey			
10		Plan Actual				ı		RCMMOT	Head of MPEU	MPEU(TBD)	Prev M. Cost E.					
m m	Prepare budget for locally adaptable disaster prevention for the priority sites identified under Output 3 by all target SETMs and MOT, utilizing the results of Output 384	Plan Actual						RCMMOT	Head of MPGU	MPEU(TBD)	Prev. M. Cost E.					
5.4	5.4 Develop project proposal(s) on large-scale prevention measures for the priority site(s) in the target section(s) under Output 3, which cannot be handled by the target SETNASEHMS, and studies for prevention measures for manking by international denor(s) as needed, utilizing the measure of Output 3.84.	Plan Actual						international Relations Dept	TUBDI	RDMT (RCM DI)	Prev. M. Cost E. Institution					
'n	Duration / Phasing	Plan				Plan Actual										

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Activities	Year	2017	2018		2019	2020	21 22 23	Responsible	29 22 24 Responsible Responsible	Implementors	Experts	Ciner Ma	ciner major inpuis	Remains	Achievements	Issue &
Sub-Activities	ō	2 ==	11 11	-	- 2 = =	= =		Ong (Tajko	Person (Tajit)	(Tajk)		Japan	Tajik			Countermeasures
	Year	2017	2018		2019	2020	22 22 22	21 22 22 Responsible	-	Implementors	Japanese	Other Ma	Other Major Inputs	Remarks	Issue	Solution
Monitoring Plan	8	IT III IV	T Trill IV	11 11 11	I MILLIN I	I THE PART OF THE PARTY.		Cris	person			Japan	Tajak			
Monitoring	1			Revision	Revision of manual	T. A. C. W. D. B.		MOT	Project Director							
0.1 Joint Coordination Committee (JCC)	Plan *	•		•		9		MOT	Project Director Project	Manager (PM)	Coerdinator					
0.9 Set-un Detailed Plan of Operation (DPO) based on	Plan •							MOT	Dy Poject	All Not	5					
tentative PO for review and approval by JCC	Actual								(Auto) possesor		46					
0.3 Annual Plan of Operation (APO) based on DPO for review and annual by JCC.	Plan e			1				MOT	ditto	personnel	5					
0.4 Joint Monitoring semi-annually	Plan		ŀ		v			MOT	ditto	All Mgt personnel	5					
	Actual	ľ		ľ	,			MOT	ditto	Almos	CA					
0.5 Semi-annual Monitoring Sheet for submission to JICA Tailbleton Office	Actual									personnel	$\overline{}$					
on from JICA Headquartersas needed	Flan							JICA	JICA Head guardera	Officer in charge of the Project	ar.					
-	Actual							MOT	Dv Poleet	All their	C.A. all excerts in	-				
0.8 Organize information sharing seminars/workshops for all	Flan				•			2	Director (DPD)	personnel	Tajlostan					
and the second s	Actual															
Reports/Documents	1															
10 Inception Report	Flan .															
11 Progress Report	Flan				•											
TV Project Completion Report	Plan					•										
Public Relations	1										40					
Establishment and operation of web-site	Flan.	1						Y28'			5					
Materials for public relations	Flan	ı		l		ı		HOT	180	TBO	CA, Local Adm Coordinator					
Dissemination seminars	Plan Actual							TON	180	TBD	CA, all experts in Talifornian					
Monitoring and Evaluation in the Post-Project period	1															
III Boot Monitorian by JICA	Plan							JICA	TBD	TBD	TBD					
Deet Embedon by IICA	Pist.						0	JICA	TBD	180	T8D					

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Annex 4: Tentative List of Project Personnel (at central level)

(1) Road Construction and Maintenance Department (RCM)/MOT (Output 1~Output 5)

	Name of staff	Position/ Department	Academic or technical background	Years of work experience	Remarks
1	Kurbonov Nuridin	Head of RCM	Higher Ed., Civil Engineer	35 years	Deputy Project Director
2	Anoyatshoev Alovidin	Deputy Head of RCM Head of Road Construction Unit (RCU)	Higher Ed., Civil Engineer	40 years	
3	Negmatov Kudratullo	Chief Specialist of RCU	Higher Ed., Civil Engineer	9 years 5 mon	
4	Abdurakhmonov Saidkabir	Main Specialist of RCU	Higher Ed. Mechanical Engineer	1 year	
5	Nodirov Sherali	Specialist of RCU	Higher Ed. Mechanical Engineer	1 year	
6	Ziyozoda Abdullo	Head of Maintenance, Planning, and Evaluation Unit (MPEU)	Higher Ed., Civil Engineer	11 years	
7	Mavlonazarova Mavjigul	Chief Spesialist of MPEU	Higher Ed., Civil Engineer	18 years	
8	Sangakov Burkhonidin	Chief Specialist of MPEU	Higher Ed., Civil Engineer	5 years	
9	Khalimova Michgona	Main Specialist of MPEU	Higher Ed. Planning Engineer	1 year 5 mon.	
10	Khuchaev Egamberdi	Specialist of MPEU	Higher Ed. Mechanical Engineer	5 years	

(2) Economic Analysis and Forecasting Department/MOT (Output 4)

	Name of staff	Position/ Department	Academic or technical background	Years of work experience	Remarks
1	Yokubzoda Sukhrob	Head of IT Unit	Higher Ed., Technical Education	12 years	
2	Khaitov Dzhamshid	Chief Specialist of IT Unit	Higher Ed.	5 years	

(3) International Cooperation Department/MOT (Output 5)

	Name of staff	Position/ Department	Academic or technical background	Years of work experience	Remarks
1	Yokubzoda Farida	Head of International Cooperation Department	Higher Ed.,	13 years	Project Manager
2	Sheraliev Umed	Main Specialist of International Cooperation Department	Higher Ed.	5 years	

(4) Administration Department/MOT

1	Name of staff	Position/ Department	Academic or technical background	Years of work experience	Remarks
1	Halimov	Civil Defense Specialist	Higher Ed.,		

(5) Design Institute (Output 1~3, Output 5)

	Name of staff	Position/ Department	Academic or technical background	Years of work experience	Remarks
1	(TBD)	Chief Engineer	Higher Ed		Output 1, 5
2	(TBD)	Road Construction Engineer	Higher Ed		Output 2,5
3	(TBD)	Civil Engineer	Higher Ed		Output 2,5
4	(TBD)	Geologist	Higher Ed		Output 2, 3,5
5	(TBD)	Hydrologist	Higher Ed	1	Output 2, 3, 5

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Annex 5

LIST OF PROPOSED MEMBERS OF JOINT COORDINATION COMMITTEE

1. Function

The Joint Coordinating Committee (hereinafter referred to as "JCC") will be held twice a year and whenever necessity arises. Its functions are as follows:

- (1) To discuss and authorize an annual work plan, including an annual plan of operation (APO) of the Project, based on the detailed PO
- (2) To monitor and review the overall progress (based on PO) and achievements of the Project (based on the PDM)
- (3) To discuss and advise on major issues those arise during the implementation period of the Project.

2. Compositions

The JCC shall be comprised of:

(1) Chairperson

Project Director: Deputy Minister of Ministry of Transport

(2) Members:

- a. Tajikistan Members:
 - Deputy Project Director: Head of Road Construction and Maintenance Department (RCM), MOT
 - Project Manager: Head of International Relation Department, MOT
 - Regional Managers: Heads of Gissar, Sogd, and Rasht SETMs
 - Director of Economic Analysis and Forecasting Department, MOT
 - Deputy Director of RCM, MOT
 - Civil Defense Affairs Administration Department? MOT
 - Director of State Unitary Enterprise "Scientific Research, Design and Survey Institute"

b. Japanese Members:

- JICA Tajikistan Office
- JICA missions if necessary

(3) Observers:

- Official(s) of Embassy of Japan
- Representative of Committee on Emergency Situations and Civil Defense (CoESCD)
- -Representative of Hydrometeorology Agency
- Other personnel invited by the Committee

(4) Secretariat:

- International Relation Department, RCM, MOT
- Maintenance, Planning, and Evaluation Unit, RCM, MOT
- JICA Expert Team

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MAJOR POINTS DISCUSSED

(1) Title of the Project

Though the requested title of the Project was "The Project for Capacity Development for Road Disaster Prevention Management", the both sides decided to change it to "The Project for Capacity Development for Road Disaster Management" to reflect the goal and activities of the Project.

(2) Target Disaster

Both sides agreed that the target disasters in the Project will be (1) slope failure, (2) rockfall, (3) landslide, (4) debris flow, (5) slope erosion by floods and (6) inundation. With regard to the slope erosion by floods, both side agreed that the Project will focus on measures under the responsibility of MOT such as rehabilitation of slope protection eroded by floods.

(3) Target Group

Both sides agreed that amongst four SETMs (Gissar, Kurgan Tyube, Sogd, Kulyab) in the request, Gissar and Sogd SETM, which have socially and economically significant sections of the road which are prone to disaster, will be included in the Target Group, considering the constraint of budget and human resources on Japanese side.

Meanwhile, Tajik side proposed that Rasht SETM, which was not listed in the request, should be included in the Target Group. The Team visited some disaster prone sections along the International road under the jurisdiction of Rasht SETM and recognized that some of them have high risk on disaster. Thus, both sides agreed that three (3) SEHMs under the jurisdiction of Rasht SETM (Nurabad, Rasht, and Tajikbad), which are relatively close to Gissar SETM, will be added into the Target Group.

(4) Formation of Road Disaster Management Task Force for Supporting SETMs/SEHMs

Both sides agreed that Road Disaster Management Task Force (hereinafter referred to as RDMT) supporting SETMs/SEHMs, consisting of staff of Road Construction and Maintenance Department (hereinafter referred to as RCM) in

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MOT and State Unitary Enterprise "Scientific Research, Design and Survey Institute" (hereinafter referred to as DI), should be formed and enhanced through the project activities. RDMT members are expected to participate in review of current status of disaster management, preparation of manuals and field activities for disaster recovery and prevention as senior training assistants as well as pilot study on cost-effectiveness of disaster prevention activities as appropriate. Civil Defense Specialist, Administration Department, would provide advice to the RDMT as needed.

- (5) Coordination with Civil Defense Specialist, Administration Department
 Both sides agreed that the project activities should be implemented in
 coordination with the activities of Civil Defense Specialist, Administration
 Department who is responsible for coordinating and reporting disaster recovery
 works in MOT and training of SETMs on preparation for disaster in collaboration
 with specialists from RCM and/or DI.
- (6) Location and Participants of Disaster Recovery Activities (Output 2)
 Both sides agreed that classroom training and simulated disaster recovery drill will be conducted in Gissar and Sogd SETM, while disaster recovery works during actual disaster situation will be conducted in all target SETMs. Both sides agreed that participants in the classroom trainings and drills will be all three (3) target SETMs and twenty-six (26) target SEHMs. (refer to Annex 1 of Appendix 2 of Attachment 2)

(7) Target Section for Hazard Evaluation (Output 3)

Both side agreed that target sections for Hazard Evaluation will be selected by following process (refer to Annex 1 and 2 of Appendix 2 of Attachment 1):

- Road sections with a lot of disasters along the International / Republican road in the target SEHMs will be selected as candidate target sections in each target SETM; and
- Among the candidates, target sections will be selected considering the type of disasters, the social and economic significance, and geographical location of the section.
- (8) Location and Participants for Disaster Prevention Activity (Output 3)
 With regards to the locations and the participants of activities for disaster

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prevention, both sides agreed on the followings considering the budget constraint and time frame of the Project (refer to Annex 1 and 2 of Appendix 2 of Attachment 1):

- a) Hazard evaluations will be conducted for the target sections selected in all target SETMs by all target SETMs/SEHMs;
- b) Locally adaptable disaster prevention measure will be planned for the priority sites selected in the target sections in Gissar and Sogd SETMs by all target SETMs;
- Locally adaptable disaster prevention measure will be implemented for the selected priority sites in Gissar and Sogd SETMs by four SEHMs responsible for the sites; and
- d) Future disaster prevention plan will be prepared for the target sections in all target SETMs by themselves.

(9) Priority Site for Pilot Disaster Prevention Measures #1 and #2 (Output 3) A priority site for pilot disaster prevention measures will be selected from each target section for hazard evaluation in Gissar and Sogd SETM selected in the first year of the Project. The sites which satisfy the following conditions will be selected:

- a) Sites that have high urgency based on the hazard evaluation; and
- Sites where measures widely applicable in Tajikistan can be demonstrated/practiced.

(10) Introduction of Early Warning (Output 3)

Tajik side requested that introduction of early warning system should be included in the prevention measures. Japanese sides agreed that the Project will include the monitoring the relationship between the rainfall and disaster and preparation of proposal for simple early warning system.

(11) Data Management Method (Output 4)

Tajik side explained that MOT developed road condition and maintenance database assisted by ADB in the past but it is not functioning well because MOT finds difficulty in data input by SETMs and database maintenance. Tajik side requested followings:

 a) SEHMs should be equipped with computers and responsible for data inputs

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b) Software of database should be easy enough for MOT to self-maintain.

Japanese side explained the followings:

- a) Volume of data for disaster management (disaster history, recovery history, the result of hazard evaluation, and prevention measures) is expected to be manageable for SETMs although the lesson learnt shall be taken into consideration
- b) Data forms will be simplified as much as possible.
- c) Software of database available in the market would be used.

(12) Schedule of Budget Preparation (Output 5)

Tajik side explained that the schedule for the the budget request is as follows:

Deadline	Activity
March	SEHMs submit the budget proposal to SETMs
July 1 st	SETMs submit the budget proposal to MPEU(with budget breakdown) and EAF (total amount) in MOT
August 1st	MOT submits the budget proposal to MOF

(13) Local Travel and Accommodation Cost for SETM/SEHM

Both sides agreed that local travel and accommodation cost for SETMs/SEHMs to participate in the trainings, drills for disaster recovery, hazard evaluation, disaster prevention measures and workshops/seminars shall be borne by Japanese side, while meal allowance shall be borne by Tajik side.

(14) Internet Connection at Each SETM

Both sides confirmed that Tajik side should secure internet connection at each office in the Target SETMs before the Project launches.

(15) Timing for Project Activities

Tajik side explained that from 25th to 31st of each month is the period for monthly reporting and is the busiest period for SETM. Both sides agreed that the project activities would be scheduled taken into consideration above as much as possible.

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(16) Coordination with Capacity Development Activities for Sogd SETM on Pavement Repair

Both sides confirmed that Sogd SETM has been included as an additional target group of "the Project for Road Maintenance" (2013-2016) only since April 2016 and the level of achievement for pavement inspection and repair is rather limited compared to Gissar SETM. According to the draft post-project strategy of the above project, capacity building for Sogd SETM on pavement repair is expected to be conducted from May to October 2018, in which pilot prevention measures #1 are scheduled at Sogd SETM. Timing of both activities should be coordinated in order to avoid overburden of the staff of Sogd SETM.

(17) Continuous Effort for Budget Preparation for Disaster Prevention
Both side confirmed that the pilot study on cost-effectiveness of the locally
adaptable disaster prevention measures should be conducted not only during
the Project, but should be continued after the Project in order to enhance
accountability, and that disaster management database should be continuously
utilized after completion of the Project to examine effectiveness of the prevention
measures based on the future prevention plans developed through the Project to
prepare budget for prevention measures.

Annex 1: Location and Participants of the Field Activities for Disaster Recovery and Prevention (1)

Annex 2: Location and Participants of the Field Activities for Disaster Recovery and Prevention (2)

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Annex 1 Location and Trainee of the Field Activities for Disaster Recovery and Prevention (1)

(1) Output 2 (Disaster Recovery) Target Group: 3 SETMs & 26 SEHMs (Gissar- 9, Sogd-14, Rasht-3)

	Cycle (Cycle II	Cycle III	Participating TM/HM
2.3 Training	Year: 2018 (Jan) Location: 4 sites in G& S TM (2 per TM) Trainee: All 3TM /26HM			
2.4 On-site simulated drill	Year: 2018 (Mar-Apr) Location: G & S TM (2 drill sites per TM: 4 in total): Trainee: 3 TM & 8 HM (2 HM per drill site) Observer: 16 HM	Year: 2019 (Mar-Apr) Location: G& S TM (5 drill sites in total) Trainee: 3 TM & 10 HM (2-HM per drill site) Assistant: 8HM from Cycle1 Observer: 8 HM	Year 2020(Mar-Apr) Location: G& S TM (2 drill sites per TM): Trainee: 3 TM & 8 HM (2- HM per site) Assistant: 10HM from Cycle 2 Observer: (8 HM)	Trainee; -All 3TM -26 HM Assistant -18 HM
2.5 Recovery (OJT) #1, #2,#3	Year: 2018 (May-Jul) Location: Any SEHMs, in which disaster occurred Trainee: Relevant TM/HM	Year: 2019 (May-Jul) Location: Any SEHMs, in which disaster occurred Trainee: Relevant TM/HM	Year: 2020 (May-Jul) Location: Any SEHMs, in which disaster occurred Trainee: Relevant TM/HM	Unknown

(2) Output 3 (Disaster Prevention) Target Group: 3 SETMs & 26 SEHMs

	Cycle I	Cycle II	Cycle III	Participating TM/HM
3.3 Training for hazard eva	Year: 2017 (Aug) Location: G&S TM (2 per TM) Trainee: 3TM /26HM		AZ.K.L.	Trainee: -All 3TM -All 26HM
3.4 Selection of target section	Year:2017 (Jul) Location: G & S TM 4 sections (2 per TM) consisting of around 100 eva sites of 100-300m Trainee: 3TM	Year :2018(Jul) Location: 3 TM 3 sections (1 per TM) consisting of around 50 eva, sites of 100-300m	Year; 2019(Jul) Location: 3TM 3 sections (1 per TM), consisting of 50 eva. sites of 100-300m	Trainee: -All 3 TM
3.5 Hazard Eva	Year: 2017 (Aug-Oct) Location: G & S TM: All 4 target section (I) Trainee: 3 TM/ max.26EM Target sections divided for 26HM	Year: 2018(Aug-Oct) Location: 3TM All 3 target section (II) Trainee:3TM/max.26EM Target sections divided for 26HM	Year 2019(Aug-Oct) Location:3 TM All 3 target section (III) Trainee:3TM/max.26EM Target sections divided for 26HM)	Trainee: -All 3TM -All 26HM
3.6 Selection of Priority site	Year: 2017 (Nov-Dec) Location: G & S TM 1 per target section selected (total 4l: 2 for #1 & 2 for #2) Trainee: 2 TM Observer: 1 TM (R)	Year: 2018 (Nov-Dec) Location: 3 TM 1 per target section selected (total 3) Trainee: 3 TM	Year: 2019 (Nov-Dec) Location: 3 TM 1 per target section selected (total 3) Trainee: 3 TM	Trainee: -All 3TM
3.8 Training for measures	Year: 2018 (Jan-Apr) Location: G & S TM (2 per TM) Trainee: 3 TM & 26HM			
3.9 Prevention #1 (Demonstr ation)	Year: 2018 (Apr-Sep) Location: G & S TM 1 priority site / TM (total 2) Trainee: 3TM & 2-4HM in 2 TM Observer: About 1/2 of other HM			Trainee: -3TM -4-8HM in 2TM Assistant: -2-4HM in 2TM
3.9 Prevention #2 (OJT)	Year 2019 (Aor-Sep) Location: G & S TM 1 priority site / TM (total 2) Partcipant:3TM & 2-4HM in 2 TM Assistant: 2-4 HM of #1 Observer: About 1/2 of other HM			(Trainee of #1) Observer -18~22 HMs
3.7 Future prevention Plan	Year: 2019 (Jan-Mar) Location: G & S TM All 4 target sections (I) Trainee: 2 TM (G&S) & 2-4 HM in 2TM	Year: 2019 (Jan-Mar) Location: 3 TM All target section (II) Trainee: 3 TM & 3~6 HM in 3TM	Year: 2020 (Jan-Mar) Location: 3 TM All target section (III) Trainee: 3 TM and 3~6 HM in 3TM	Trainee: -All 3TM -8~16 HM in 3 TM
5.3 Budget	Year: 2020 (Mar-July)(*) Location: G& S TM: Budget for 2 sections / TM Trainee: 2 TM& 4~8 HM	Year: 2020 (Mar-July)(*) Location: 3 TM Budget for 1 section/ TM Trainee: 3TM& 3~6 HM	Year: 2020 (March-July) Location: 3 TM Budget for 1 section / TM Trainee: 3TM & 3~6 HM	Trainee: -All 3TM -8~16 HM from 3 TM

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Annex 2 Location and Participants of the Field Activities for Disaster Recovery and Prevention (2)

	3	,		Nenue	
Cyc	Activity	Year	Sogd SETM and its 14 SEHMs	Sogd SETM and its 14 SEHMs Gissar SETM and its 9 SEHMs	Rasht SETM and its 3 SEHMs
1	3.3 Conduct trainings on hazard evaluation	2017 Aug.	2 sections in Sogd	2 sections in Gissar	1 of 2 sections in Gissar
-	3.4 Select the target sections	2017 Jul.	2 sections in Sogd	2 sections in Gissar	1 of 2 sections in Gissar
-	3.5 Conduct hazard evaluation 2017 AugOct.	2017 AugOct.	2 sections in Sogd	2 sections in Gissar	1 of 2 sections in Gissar
_	3.6 Identify priority sites	2017 NovDec.	2 sites in Sogd	2 sites in Gissar	1 of 2 sites in Gissar
	3.8 Organize trainings on prevention measure	2018 JanApr.	2 sites in Sogd	2 sites in Gissar	1 of 2 sites in Gissar
1	Plan and implement	2018 AprSep.	1 site in Sogd	1 site in Gissar	Observer for 1 of 2 sites in Gissar
_	3.9 prevention measures	2019 AprSep.	1 site in Sogd	1 site in Gissar	Observer for 1 of 2 sites in Gissar
11-	3.3 Select the target sections	2018 Jul.	1 section in Sogd	1 section in Gissar	1 section in Rasht
	3.5 Conduct hazard evaluation	2018 AugOct.	1 section in Sogd	1 section in Gissar	1 section in Rasht
2	3.6 Identify priority sites	2018 NovDec.	1 site in Sogd	1 site in Gissar	1 site in Rasht
_	3.7 Develop a future disaster	2019 JanMar.	3 sections (cycle1+2) in	3 sections (cycle1+2) in Gissar	1 section in Rasht
-11-	3 3 Select the target sections	2019 Jul.	1 section in Soad	on in Gissar	1 section in Rasht
-	3.5 Conduct hazard evaluation 2019 AugOct.	2019 AugOct.	1 section in Sogd	1 section in Gissar	1 section in Rasht
3	3.6 Identify priority sites	2019 NovDec.	1 site in Sogd	1 site in Gissar	1 site in Rasht
	3.7 Develop a future disaster	2020 JanMar.	1 section in Sogd	1 section in Gissar	1 section in Rasht

training

future plan

MINUTES OF MEETING

BETWEEN

JAPAN INTERNATIONAL COOPERATION AGENCY

AND

MINISTRY OF TRANSPORT

FOR AMENDMENT OF THE RECORD OF DISCUSSIONS

ON

THE PROJECT FOR CAPACITY DEVELOPMENT FOR ROAD DISASTER MANAGEMENT

The Japan International Cooperation Agency (hereinafter referred to as "JICA") and Ministry of Transport (hereinafter referred to as "MOT") hereby agree that the Record of Discussion on "The Project for Capacity Development for Road Disaster Management" (hereinafter referred to as "the Project") signed on November 9th, 2016 will be amended as follows:

1. Project Description (Record of Discussions Appendix 1)

	Before	Amended Version
3.	Duration Three (3) years and 4 months from the commencement of the Project (dispatch of the JICA experts from Japan).	

Reason:

Due to the global spread of the coronavirus disease 2019 (COVID-19), some of the project activities have been suspended. In order to achieve the Project purpose after the project team resume the activities, the Project duration needs to be extended. The duration may be further amended (shortened or extended) depending on the COVID-19 situation.

The both parties acknowledge and agree that this Minutes of Meetings may be executed by electronic signature, which is considered as an original signature for all purposes and has the same force and effect as an original signature. "Electronic signature" includes faxed versions of an original signature or electronically scanned and transmitted versions (e.g., via pdf) of an original signature.

This amendment will become effective as of June 5th, 2020.

Annex1: Record of Discussions (signed on November 9th, 2016)

Annex2: Amended PDM (Version 3) Annex3: Amended PO (Version 4)

Dushanbe, June 9, 2020

闭邊秀樹

Mr. TANABE Hideki Chief Representative JICA Tajikistan Office Mr. Khudoyorzoda Khudoyor Zavqibek

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Minister of Transport

The Republic of Tajikistan

ПРОТОКОЛ ВСТРЕЧ МЕЖДУ

ЯПОНСКИМ АГЕНТСТВОМ МЕЖДУНАРОДНОГО СОТРУДНИЧЕСТВА И МИНИСТЕРСТВОМ ТРАНСПОРТА

КАСАТЕЛЬНО ВНЕСЕНИЯ ИЗМЕНЕНИЯ В ПРОТОКОЛ ОБСУЖДЕНИЙ ПО ПРОЕКТУ УСИЛЕНИЯ ПОТЕНЦИАЛА ПО ПРЕДУПРЕЖДЕНИЮ И ЛИКВИДАЦИИ ЧРЕЗВЫЧАЙНЫХ СИТУАЦИЙ НА ДОРОГАХ

Японское агентство международного сотрудничества (в дальнейшем именуемое «JICA») и Министерство транспорта (в дальнейшем именуемое «МТ») настоящим соглашаются с тем, что Протокол обсуждений «Проекта усиления потенциала по предупреждению и ликвидации чрезвычайных ситуаций на дорогах» (в дальнейшем именуемый «Проект»), подписанный 9 ноября 2016 года, будет изменен следующим образом:

1. Описание Проекта (Приложение 1 Протокола обсуждений)

До внесения изменений	После внесения изменений
3. Продолжительность Три (3) года и 4 месяца с начала проекта (отправка экспертов JICA из Японии).	 Три (3) года и одиннадцать (11) месяцев с начала проекта (отправка экспертов JICA из Японии).

Причина:

В связи с глобальным распространением коронавирусной инфекции (COVID-19) некоторые из мероприятий Проекта были приостановлены. Для достижения цели Проекта после возобновления деятельности проектной группы, необходимо продлить период реализации Проекта. Продолжительность Проекта может быть дополнительно изменена (сокращена или увеличена) в зависимости от ситуации COVID-19.

Обе стороны признают и соглашаются с тем, что данный протокол встреч может быть подписан электронной подписью, которая считается оригинальной подписью для всех целей и имеет ту же силу и эффект, что и в оригинальная подпись. «Электронная подпись» включает факсимильные версии оригинальной подписи или отсканированную и переданную версию (например, через pdf) оригинальной подписи.

Данное изменение вступит в силу с 5 июня 2020 года.

Приложение 1: Протокол обсуждений (подписанный 9 ноября 2016 г.)

Приложение 2: Измененный ДМП (версия 3) Приложение 3: Изменённый ПМ (Версия 4)

Душанбе, 9 июня 2020 г.

ТАНАБЕ Хидеки Глава Представительства JICA в Таджикистане Худоёрзода Худоёр Завкибек Министр транспорта Республики Таджикистан

			1 det Vour	2nd Voar	Jan Vone	Ath Vone	Eth Vans	4 K Var. 104 Var. 151	Moi	Monitoring
Schedule of Major Japanese Inputs	uts	Year			(2019)	20)		Remarks	Issue	Solution
Position	Name	ð	1 11 11	-	=	I II II II	I II II II			
Expert (In Tajikistan)		1								
Chief Advisor/ Road Disaster Management	II Hiroshi MITA	Plan			2		la .			
Deputy Chief Advisor/ Road Disaster Management 2	Takashi KUWANO	Plan		•	ŀ					
Institution	Hironori INOUE Daisuke HAJIMA	Plan Actual	1		•					
Disaster Recovery Measures	Robinson SHRESTA	Plan	8	1						
Disaster Prevention Measures 1	Masanori TOZAWA	Plan	1	i	:					
Disaster Prevention Measures 2	Masashi MCHI	Plan	1	i	•					
Hazard Evaluation	Takashi HARA	Plan Actual	! •	1	ı	1				
Machineries and Equipment O&M	Satoshi KOGAWA	Plan	•			•				
Cost Estimation	Hiromitsu OGATA	Plan	1		•	1				
Database 1	Junichiro OGAWA	Plan	•		•					
Database 2	Hitomi IWAMASA	Plan								
Instrumentation Monitoring	Yoshiyuki YAGIRI	Plan	1	1	!					
Project Monitoring/ Japan Training	Seiji OZAWA	Plan			8					
Project Coordinator		Plan								
Interpreter/Sub Project Coordinator 182		Pian								
Interpreter/Sub Project Coordinator 3		Plan	ı			1				
Expert (in Japan)		\								
Chief Advisor/ Road Disaster Management	t Hiroshi MITA	Plan				•				
Deputy Chief Advisor/ Road Disaster Management 2	Takashi KUWANO	Plan								
Institution	Daisuke HAJIMA									
Disaster Recovery Measures	Robinson SHRESTA					•				
Disaster Prevention Measures 1	Masanori TOZAWA					·				
Hazard Evaluation	Takashi HARA									
Cost Estimation	Hiromitsu OGATA	Plan								
Database 2	Hitomi iWAMASA	Plan	*							
Project Monitoring/ Japan Training	Seiji OZAWA	Pian				•				
Training in Japan		V								
Learn about road disaster management technology in Japan	schnology in Japan	Pian			-					
In-country/Third country Training	70	\								
777		Dian			*****					

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	ACTIVITIE	-	Yea		20	9	6107	2020	2021	6				-	Other M	ajor Inputs	-	Acres Constitution of the	Sense &
NOT		Sub-Activities	à	= -	= -	- ≥ =	1	=	11	E				anese Experts	Japan	Tajik	Remarks	Achievements	Countermeasures
Fig.	Output 1:F	toad disaster management structure of MOT and the	ne targe	t SETMs/	SEHMS	s strengt	hened.			MOT	Head of RGI	W	Chis	1 Advisor (CA)					
ROMMOT Head of MFEU Gito Record M, Hazard	1.1 Classif	y larget disasters through collection and analysis of the saster records	Pian							ясмумо			100	ov.Work,		Target TMs/HMs.			
RCMMOT Head of MFEU Gitto Gitt			Actu	-								/RDMT(ention sures (Prev M)				j	
RCMMOT Head of MPEU dito	1.2 disaste	organizational and technical aspects of current state of	Plan	F						RCM/MOT			Reco Eva.	Prev M, Hazard Prev M,					
RCMMOT Head of MPEU ditto ditto ditto RCMMOT Head of RCM ditto General MOT Head of RCM ditto General MOT Head of RCM ditto General MOT Head of RCM (SETM) Field SETM Fie	disaste	viscrivis, including their communication network for r recovery called Rapid Response Team (RRT)	Actua	9															
RCMMOT Head of RCM ditto ditto ditto RCMMOT Head of RCM ditto RCMMOT Head of RCM SETM FINLESETM Head of RCM SETM FINLESETM Head of RCM SETM RCMMOT Head of RCM SETM RCMMOT Head of RCM RDMT (RCM, DI), Recov M, Cost E SETM Chall Engineer level SETM ditto to SETM SETM ditto SETM Chall Engineer level SETM ditto ditto SETM Chall Engineer level SETM ditto SETM Chall Engineer level SETM SETM ditto SETM Chall Engineer level SETM SETM ditto Givel Engineer level SETM SETM ditto Givel Engineer level SETM SETM ditto Gitto Gitt	1.3 Manag	the roles and responsibilities of Road Disaster ement Taskforce supporting SETM/SEHM (RDMT)	Plan	1						RCM/MOT			diffio						
RCMMOT Head of MPEU RDMT(RCM, Di), Recov.M. Prav., M. Factor M. Cost E. Coveral MOT Head of MPEU RDMT(RCM, Di), Recov.M. Cost E. Coveral MOT Head of MPEU Gitte RDMT(RCM, Di), Recov.M. Cost E. Cover Cost Gitte RCMMOT Head of MPEU Gitte RDMT(RCM, Di), Recov.M. Cost E. Cover Cost Gitte RCMMOT Head of MPEU Gitte Gitte Gitte To The Engineer level SETM. Gitte Gitt	develo	at MOT and its members as well as their capacity oment plans	Actua																
RCMANOT Head of MPEU SETM RECAL M. Prov. M. Prov	1.4 Suppor	1 the target SETMs/SEHMs through the project activities ing to the clarified roles and responsibilities (by RDMT)	Plan	ľ						RCM/MOT			ditto						
RCMANOT Head of MPEU SETA RCMANOT Head of RETM RCMANOT Head of RETM RCMANOT Head of MPEU GRIS SETA GRIS GETM GRIS			Actua	Į										1					
Coverati MOT Head of RCM FIELD SETM FIELD SE	1.5 Develo	p an improvement plan of disaster management structure and the target SETMs/SEHMs based on the feedbacks	Plan					1		RCMMOT				w.M. Prev, M.					
Fueld SETM Head of SETM Chell Admission Found SETM Chell Admission Found SETM Head of SETM FOUNT FIRCUA, DI). Recov M. Coast E. SETM Chell Engineer level SETM ditto Engineer level SETM ditto Engineer level SETM ditto ditto ditto ditto ditto ditto ditto ditto made of MPEU Chell Engineer level SETM. SETM ditto ditto ditto ditto ditto ditto made of MPEU SETM. SETM. SETM. Gitto ditto ditto ditto ditto ditto ditto made of MPEU RDMT (RCM. DI). ditto ditto ditto ditto ditto made of MPEU RDMT (RCM. DI). ditto ditto ditto ditto ditto ditto ditto ditto made of MPEU RDMT (RCM. DI). ditto ditt	from th	e project activities for approval by MOT.	Actua	ļ															
Plan	Output 2:	Road disaster recoveries by the target SETMs/S	EHMs a	re impr	oved thro	ugh star	ndardizat	no		Overal! MC Field:SETA		TM TM	Chie	Advisor			RDMT partoipate in the field activities as senior training		
Plan Actual Plan	2.1 Examir	le locally adaptable disaster recovery works based on the	Plan	Ē						RCM/MOT				w M. Cost E.			48 September 11 Se		
Plane Plan	current	state review (Activity, 1.2)	Actua	7							1								
Plan Actual Plan	2.2 Develo	p a disaster recovery manual for SETM/SEHM/RRT,	Pian							RCMMOT	Head of MPE		ditto						
Plan	2.5		Actua	-									Ī						
Actual Actual Actual		Litrainings on disaster recovery works to all target USEHMs and MOT (i.e. action for preparedness, survey, or worker feature cost estimate according to the control of the cost of the	Płan							SETM	Chief Engine (SETM)		ditto		Egpt for Recov, avel & accom cost w SEHM/SEHM	100 00 10			
Plan	prepar	ition of disaster recovery work sheet) (in Hissor and SETMs)	Actua	ļ												SETM/SEHM			
Actual Actual Chief Engineer News SETM Chief Engineer News Chief Engineer Ne	2,4 Condu	t on-site drills for simulated disaster recovery for all target	Plan		1		1			SETM	Chief Engine (SETM)			3	itto	ditto			
Plan Plan Chief Engineer News SETM Class Chief Engineer News SETM Class Chief Engineer News SETM Class		מבר וונים (וווווווווווווווווווווווווווווווווווו	Actua	Į															
Actual Plan Land of MPEU ROMT (RCM, D), SETM (RCM, D), SET	2.5 Plan at	d implement disaster recovery works for the disasters	Plan		I		1			SETM	Chief Engine (SETM)				atto	ditto			
Plan Plan R.C.M.M.O.T Head of M.P.E.U R.C.M. (P.C.M.D.I). SETM Actual Actual Main			Actua										7						
Actual Na	2.6 Update 2.3-2.5	and finalize the manual, reflecting, feedbacks from Act	Plan					•		RCMMOT									
Certify trainers for disaster recovery from the staff of the target Actual Actual			Actua	_															
	2.7 Certify SETMs	trainers for disaster recovery from the staff of the target (SEHMs)	Pian					1		17/3	200	iva	CA,	Recov.M & OM					

Activities	Year	2017	2	2018	2019	20	2020	2021	7 8 9	The same				Other M	Other Major Inputs			Tall with
Sub-Activities	ò		2	2	= -		2	U II II		(Tajik)	Responsible Person (Tajik)	(Tajik)	Japanese Experts	al.	Tajik	Remarks	Achievements	Countermeasures
Output 3: Process of locally adaptable road disaster prevention is established at the target SETMs/SEH	vention i	s establ	ished a	t the ta	rget SE	TMs/SE	HWs		Over	Dvera MOT H	lead of RCM lead of SETM		Chief Advisor			ROMT participate in the field activities as senior training		
3.1 Examine hazard evaluation methods and locally adaptable	Plan	1							RCM/MO		Hed of MPEU	RDMT (RCM, DI) SETM	Prev. M, Hazard Eva. CostF			diameter of		
provenient megasures based on me current state review (Activity	Actual												Monitoring (Mon)					
3.2 Develop a disaster prevention manual for SETM/SEHM, consisting of hazard evaluation and locally adaptable prevention	Plan	1							RCM/MO		Hed of MPEU	RDMT (RCM, DI) SETM	Frav M, Hazard Eva, Cost E, Mon					
measuresm which is used for activity 3,3-3,10	Actual																	
Conduct trainings on hazard evaluation to all target 3.3 SETMs/SEHMs and MOT (i.e. screening, selection of hazardous	Plan								SETM		Chief Engineel level (SETM.)	SETM	Prov M, Hazard Eva	ditto	dito			
sires, razardrisk assessment and preparation of nazard evaluation sheet) (in Hissor and Sughd SETMs)	Actual																	
3.4 Select the target sections for hazard evaluation in each SETM	Plan	•	I for listand ever and miletuse	II by harudosa		II by lugar			SETM		Chief Engineel level (SETM.)	SETM	Prev M, Hazard Eva	_	_	Network connection at TM needed for		
	Actual													for SETM/SEHM	SETM/SEHM	google maplearth		
3.5 Conduct hazard evalation at the target sections by all target	Plan			1	1	н			SETM		Chief Engineel level (SETM.)	SEHM, SETM	Hazard Eva	ditto	Firel, O&M cost, meal allowance for			
	Actual														SETMISEHM			
3.6 Identify priority sites in the target sections based on the results of the hazard evaluation by the respective target SETMs	Plan		- :	•	н	11			SETM		Charl Engineel level (SETM.)	SETM	Hazard Eva	ditto				
of the same of the	Actual																	
3.7 Develop a future disaster prevention plan for each target section by the respective farms SFTMs.	Plan			•	-	ш			SETM		Charl Engineel level (SETM.)	SETM	Hazard Eva. Prev M. Cost E. Mon	diffo		The plans would be utilized in Act		
5	Actual									Ī		SEHM				1.7,18,48		
Conduct tainings on locally adaptable prevention, measures to all staget SETMs/SEHMs and MOT (i.e. selection of measures,	Plan								SETM		Civet Engineel lavel (SETM.)	SETM	ditto	Travel & accom cost for SETMs/SEHMs	Exusting eqt, fuel for eqpt, meal allowance for	3		
design, budget, supervision, preparation or prevention measure select, monitoring for simple early warning) (in Hissar and Sogd SETMs)	Actual														SETMISEHM			
Plan and implement locally adaptable prevention measures #1 & #2 on pilot basis at the priority sites in the target sections	Plan			ı	1	-			SETM		Chief Engineel lavel (SETM.)	SETM SEHM	Hazard Eva, Prov M. Cost E. Mon	Eqt for prev & monitor, travel &	Fuel, O&M cost, existing eqpt, meal			
selected in the first year (in Hissar and Sogd SETMs) by all target SETMs and the relevant target SEHMs	Actual									ī				SETWIHM	SETMISEHM			
3.10 Update and finalize the manual, reflecting feedbacks from	Plan					ļ,			RCM/MOT		Head of MPEU	HDMT (RCM, DI)	Hazard Eva, Prov					
Activities 3.3-3.9	Actual											SETM	M, Cost E, Mon.					
3.11 Certify trainers for hazard evaluation and prevention measures from the staff of the tarnet SETMs/SEHMs	Plan								g/u	2	n/a	n/a	CA, Hazard Eva, Prev M					
	No.												7					

Output 4: Data necessary for road disaster management is available for NOT and the target SETMs for budget and disaster recovery and prevention 4.1 Develop a plan for road disaster management database on the	-							į	-	implementors 6	į,		Other Major Inputs			Patrice O.
tput 4: Data necessary for road disaster management is avair if disaster recovery and prevention if Develop a plan for road disaster management database on the	ŏ	1 III IV	V = = -	N I II III N	H - V H	2	u m u	(Tajik)	Person (Tajik)		Japanese Experts	Japan	Tajik	Remarks	Achievements	Countermeasures
Develop a plan for road disaster management database on the	lable for	MOT an	d the targ	et SETMs	for budg	et preparation	ration	MOT (RCM, EAF)	(AF)		Chief Advisor					
current state review (Activity 1.2)	Pian Actual	•						EAF/MOT	Head of ITU	(TU (TBD)	Database (DB)					
4.2 Design a database system with installed hardware, consisting of spread sheets	Plan Actual	1						EAF/MOT	Head of ITU	(TU (TBD)	ditio	DB software and hardware	d O&M cost			
4.3 Develop road disaster management database manuals for users (e.e. Mort users for a property of the propert	Plan	•						EAFIMOT	Head of ITU	(TU (TBD)	ditto					
4.4 Conduct trainings on database use to MOT and all target SETMs (i.e. collection, input, compiling, analysis and reporting of data) at MOT and each SETM	Plan Actual							EAFIMOT	Head of TU	(TU (TBD)	difto	PC for DB	O&M cost			
4.5 Collect data of disaster recovery works at all target SETMs in 2017 as baseline data in the prescribed from improve by the Protect.	Plan Actual	J						RCMIMOT	Chief Engineer level (SETM)	evel SETM (TBD)	Recov M, CostE O&M					
4.6 Collect data necessary for disaster management (i.e. disaster recovery sheets, hazard evaluation sheets, and prevention measure sheets) from all target SEHMs by the respective SETMs	Plan	ı	ı	1				RCM/MOT &SETM	Chief Engineer level (SETM)	evel SETM (TBD)	Hazrd Eva. Prév M. Recov. M.	W.				
4.7 Digitalize the data collected from the target SEHMs by the respective target SETMs for submission to MOT	Plan	l	1					RCMMOT	Chief Engineer level (SETM)	evel SETM (TBD)		PC for DB	O&M cost	Network connection at TM needed		
4.8 Integrate the digitalized data submitted by the target SETMs into	Plan Actual		1	1	1			EAFIMOT	Head of ITU	(180)	DB	PC for DB	O&M cost	ditto		
4.9 Release the database to MOT and all target SETMs	Plan			•	*			EAFMOT	Head of ITU	(ти (твр)	90	PC for DB	O&M cost	ditto		
4.10 Develop a simple mannual road disaster management report for senior management of MOT	Plan			i	1			RCM/MOT	Head of MPEU	MPEU (TBD)	Hazrd Eva. Prev M. Recov.M	M. PC for DB	O&M cost			
4.11 Update and finalize the database design and the manuals, reflecting feedbacks from the database users	Plan							EAFMOT	Head of ITU	(T unit (TBD)	90	PC for DB	D&M cost			
Output 5: MOT and the target SETMs/SEHMs are capable of preparing budget proposal for road disaster prevention	paring b	udget pr	oposal fo	r road dis	aster pre	vention		MOT	TBD		Chief Advisor (CA)	2				
5.1 Plan and implement a pilot study on cost-effectiveness of locally adaptable disaster prevention measures at the target sections selected in the first year under Output 3, using simple hazard location maps.	Plan				ı			ROM/MOT	Head of RCU	RDMT (RCM, DI), SETM	DI), Prav. M. Cost E		Travel cost for field survey.	Pl		
5.2 Create a budget item for disaster prevention in the regular budget of SETM/SEHM/MOT	Plan				1			RCM/MOT	Head of MPEU	MPEU(TBD)	Prev. M. Cost E.					
5.3 Prepare budget for locally adaptable disaster prevention for the priority sites identified under Output 3 by all target SETMs and MOT, utilizing the results of Output 384	Plan				1			RCMMOT	Head of MPEU	MPEU(TBD)	Prev. M. Cost E.					
Develop project proposal(s) on large-scale prevention measures for the priority site(s) in the target section(s) under Output 3, which cannot be handled by the target SETNs/SEHMs, and studies for prevention for funding by international donor(s) as needed, utilizing the results of Output 3&4	Plan				1			International Relations Dept	(GBJ)	RDMT (RCM, DI)	Di) Prev. M. Cost E. Institution					
Duration / Phasing	Pian															

Activities	Year	2017	~	2018	2019	2020		2021	7 8 9 Danner	Daemoneible Orn	Demographic	learn Law Andrew		Other Major Inputs	r Inputs			
Sub-Activities	ŏ	11 11 11		11 III IV	11 11 11	1 1	-	пп			Person (Tajik)	(Tajik)	Japanese Experts	Japan	Tajik	Remarks	Achievements	Countermeasures
Monitoring Plan	Year	2017		2018	2019	2020		2021	Respon	Responsible Org	Responsible	Implementors	The second second	Other Major Inputs	r Inputs			lesin &
Survey Su	ð	1 11 11 IV	1 1	1 II III IV 1	≥ = =	= - >	-	и ш и			Person (Tajik)	(Tajik)	Japanese Experts	Japan	Tajik	Remarks	Achievements	Countermeasures
Monitoring									MOT	Pro	Project Director							
0,1 Joint Coordination Committee (JCC)	Plan	0	•	•		•	0		MOT	Pre	Project Director	Project Manager (PM)	CA, Local Adm Coordinator (LAC)					
0.2 Set-up Detailed Plan of Operation (DPO) based on tentative PO for review and approval by JCC	Pian	•							MOT	(O)	Dy Paject Director (DPD)	All Mgt personnel	5					
0.3 Annual Plan of Operation (APO) based on DPO for review and approval by JCC.	Plan	•	1		ı	ı			MOT	ditto	9	All Mgt personnel	CA					
0.4 Joint Monitoring semi-annually	Plan		0	•	•	0			MOT	ditto	9	All Mgt personnel	CA					
0.5 Semi-annual Monitoring Sheet for submission to JICA Tajikistan Office	Plan		•	٠					MOT	ditto	TO TO	All mgt personnel	CA					
0.6 Monitoring Mission from JICA Headquartersas needed	Plan								Your	סור	JICA Head quarters	Officer in charge of the Project						
0.7 Organize Information sharing seminars/workshops for all target SETMs/SEHMs and MOT in Gissar and Sogd SETMs	Plan Actual								TOW	à à	Dy Poject Director (DPD)	All Mgt personnel	GA, all experts in Tajikistan					
Reports/Documents	-																	
() 8 Inception Report	Plan	0																
0.9 Progress Report	Plan	•	•	•	•	•												
10 Project Completion Report	Plan						•											
Public Relations																		
0.11 Establishment and operation of web-site	Plan								JICA				CA					
0.12 Materials for public relations	Plan		l				ı		MOT	T81	Q	TBD	CA, Local Adm Coordinator (LAC)					
.13 Dissemination seminars	Plan	•					•		MOT	TBD	Q	780	CA, all experts in Talkistan					
Monitoring and Evaluation in the Post-Project period																		
0.1 Post Monitoring by JICA	Plan								YOR	TBD	0	180	TB0					
0.2 Post Evaluation by JICA	Plan								• JICA	TBD	0	TBD	180					

Annex 1 Logical Framework (Project Design Matrix :PDM)

Project Title: "The Project for Capacity Development for Road Disaster Management in the Republic of Tajikistan"

Project Period: Three years and eleven months from the date when the first Japanese Expert arrived in Tajikistan (i.e. 12/April/2017 to 11/March/2021)

Iarget Group: Relevant staff of MOT, Hissor SETM and its 9 SEHMs, Sughd SETM and its 14 SEHMs, and Rasht SETM and its 3 SEHMs.

Project Site: International & Republican roads within the jurisdiction of the target SEHMs. Target Disaster. (i)Slope failure, (ii) landslide, (iv) debris flow. (v) slope erosion by floods & (vi) inundation

Narrative Summary	Objectively Verifiable Indicators Achieveme Verification Important Assumptions Achieveme	Means of Verification	Important Assumptions	Achievemen t	Remarks
COverall Goal> Road disasters are mitigated in the International and Republican Roads in the target SETMs/SEHMs	a. All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed through the Project b. By Feb 2024 (*2,5), disaster prevention measures are planned and/or implemented at least 5 (*3) priority sites in the target SETMs according to the disaster prevention manual developed through the Project c. From August 2020 to July 2023, the average duration required for road re-opening per disaster handled by the target SEHMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018)	a~c Hazard evaluation disaster prevention & recovery sheets, in the Database			
<project purpose=""> Capacity of MOT and the target SETMs/SEHMs for effective road disaster management is improved.</project>	 a. By the end of the Project, 80% of results of the disaster recovery works by the target SETMs/SEHMS, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans b. By the end of the Project, 80% of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the JICA Expert Team. c. 80% of results of the disaster prevention measures #2 by Hissor and Sugha SETMs and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans. d. By the end of the Project, budget request for disaster prevention in the target SETMs for FY 2022 is submitted to Ministry of Finance (MOF) as part of the regular budget. 	a Assessment report b Prevention sheet c Recovery sheet d Date of budget request	A Policy for disaster management is not discontinued. B. Political instability/ economic crisis/serious natural disaster that affect the project sites do not occur. C. Budget, including, prevention.		
<outputs> 1. Road disaster management structure of MOT and the target SETMs/SEHMs is strengthened</outputs>	1a By Jun 2017, a report on current disaster management relevant to MOT and the target SETMs/SEHMs is developed to By Jun 2017, roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM(RDMT) is clarified. Cet by the end of the Project, 80% of members of RDMT are able to support SETMs/SEHMs according to their respective roles and responsibilities. 1d By the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs, including institutionalization of RDMT, is approved by MOT.	1a Date of report 1b Approval of JCC 1c Joint review of individual capacity devt plan 1bOfficial approval document	A Staff of MOT and the target SETWs/SEHMs trained through the Project do not leave the office in large numbers		
2. Road disaster recoveries by the target SETMs/SEHMs are improved through standardization.	2a By Dec 2017, a road disaster recovery manual for SETM/SEHM/RRT is developed 2b 80 % of the training participants from all target SETMs/SETMs passes the post-training test on disaster recovery works of the trainees from all target SETMs/SETMs passes the post-drill test on disaster recovery works for each job category 2d Disaster recovery works in the drills are planned and implemented by all target SETMs/SEHMs according to the manual according to the manual according to the manual 2f. By the end of the Project, the finalized manual is approved by MOT.	2a Acceptance letter 2b Test results 2c ditto 2d-e Joint review of the checklist 2e Approval letter			
3 Process of locally adaptable road disaster prevention is established at the target SETMs/SEHMs	3a By Oct. 2017, a road disaster prevention manual for SETM/SETMs passes the post-training test on hazard evaluation and locally adaptable prevention measures each 3c Hazard evaluation is conducted at least twice by all target SETM/SEHM for 10 target sections in all target SETMs according to the manual 3d Locally adaptable prevention measures are planned by all target SETMs for 4 priority sites in Hissor and Sughd SETMs according to the manual. 3e Locally adaptable prevention measures are implemented by 4 target SEHMs at 4 priority sites in Hissor and Sughd SETMs according to the manual. 3e Locally adaptable prevention measures are implemented by 4 target SEHMs at 4 priority sites in Hissor and Sughd SETMs according to the manual. 3f 80 % of the observers from the other SEHMs passes the post-observation test on implementation 3g BVMar. 2020, future disaster prevention plans are developed for 10 target sections by all target SETMs 3h by the end of the Project, the finalized manual is approved by MOT.	3a Acceptance letter 3b Test results 3c-e Joint review of the checklist 3f Test results 3g Approval letter 3h ditto			
4 Data necessary for road disaster management(*1) is available at MOT and the target SETMs for budget preparation and road disaster recovery and prevention	Arthur and a second a second and a second an	4a Comparison with the design Ab Acceptance letter 4c Test results 4d Released date 4e Report 4f Approval letter			
5 MOT and the target SETMs/SEHMs are capable of preparing budget proposal for road disaster prevention	5a <u>By Mar 2020</u> , a report of a pilot study on cost-effectiveness of the locally adaptable disaster prevention is developed 5b <u>By June 2020</u> , budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of the regular budget for FY 2021 based on the future development plans 5c By the end of the Project, at least one project proposal for large-scale disaster prevention of the priority site(s) and studies for prevention is submitted by MOT to international donor(s) for funding, utilizing the results of Output 3 and 4	Sa Acceptance letter Sb Budget document Sc Proposals submitted			

Annex 1 Logical Framework (Project Design Matrix :PDM)

(*1) Data necessary for road disaster management includes disaster record, results of hazard evaluation, prevention measures, and recovery works among others (*2) Underlined deadlines in the Indicators are set based on the seviles of the Project for approved by the first JCC (*3). Target values (X) of the Indicators shall be filled based on the results of the baseline strain be reviewed and approved by the 2nd JCC (*4). The farm "database" is amended to "disaster management data collection system" as approved by the 5" JCC Meeting dated 8 November 2018, (*5). Underlined deadlines and other dates are amended to RID extension purpose in May 2020.

Ac	Activities	Inputs		A Natural disaster/
1.1	Classify target disasters through collection and analysis of the past disaster record	<tajik side=""></tajik>	<japanese side=""></japanese>	political instability/
1,2		1 Project Director Deputy	Japanese Experts 1. Chief Advisor	economic crisis
,			Institution	project activities
5.		Director of Road	3. Koad Disaster Recovery	
			3. Road Disaster	B Security
4.		Maintenance (RCM)		Tajikistan, which
1.5		3. Project Manager: Head of	5. O&M of	limits the
	the project activities for approval by MOT.	100	equipment	activities of the
0	Examine locally adaptable disaster recovery works (*7) based on the current state review (Activity 1.2)	4. Regional Managers:	 Cost estimate Database 	especially in the
00	Paveline a disaste renovam manual for SETAM/SEHAM/SET including and increased asset which is used for Activity 9.3.9.5			does not
23	Conduct trainings on disaster recovery works to all target SETMS/SEHMs and MO	SETMS Relevant Staff of MOT	early warning	deteriorate
i		6. Relevant staff of DI		compared with
2.4	Conduct on-site drills for simulated disaster recovery for all target SETMs/SEHMs (in Hissor and Sughd SETMs)	7 Relevant staff of the	Coordinator	2016
2.5	Plan and implement disaster recovery works for the disasters occurred in any targ	8. Other personnel mutually	mutually agreed	C
26		agreed upon as		sere-conditions>
2.7	W.E. 1	necessary	necessary	A Tentative list of
		Land, Building and		the Project Staff,
5	Examine hazard evaluation methods and locally adaptable prevention measures (*7) based on the current state review (Activity 1.2)	Facilities	1. Equipment for	Disaster
3.2		facilities necessary	and prevention	Management
	which is used for Activity 3.3-3.10	-		finalized
3.3		Project	software for	B Internet
		Project in the building	3. Desktop PC for	connection is
3.4	Select the target sections for hazard evaluation in each SETM (*8)	issor and	database at MOT	each target
3.5	Conduct hazard evaluation at the target sections by all target SEHMs in coordination with the respective target SETMs	furniture and utilities such	4 Laptop PC for	SETM
3.6	Identify priority sites in the target sections based on the results of the hazard evaluation by the respective target SETMs	as internet connectivity,	hazard evaluat	
3.7	Develop a future disaster prevention plan for each target section by the respective target SETMs.	telephone line, electricity,	and monitoring at	location & postate
3.8	Conduct trainings on locally adaptable prevention measures to all target SETMs/SEHMs and MOT (i.e. selection of measures, design,	200	5. Monitoring	measures measures
	budget, supervision, preparation of prevention measure sheet, monitoring for simple early warning) (in Hissor and Sughd SETMs)	osts	equipment for	
3.9		1. Cost for installation,	6 Other equipment	
	in the first year (in Hissor and Sughd SETMs) by all target SETMs and the relevant SEHMs(*9)	to of	mutual	
3.10	3 Update and finalize the manual reflecting feedbacks from Activities 3.3-3.9	provided equipment,		
3.11		operational costs, including fuel costs, and	necessary Training of the Tailk	
4.	Develop a plan for road disaster management database (data collection system) based on the current state review (Activity 1.2)	materials for	Personnel in Japan	
4.2	Design a database (disaster management data collection) system with installed hardware, consisting of spreadsheets	works Meal allowances	and/or third country	
4.3		for SETMS/SEHMs to	Local costs	
	administrator, which are used for Activity 4.4-4.10	participate in training,	Cost for activities of	
4.4	Conduct trainings on database (disaster management data collection system) use to MOT and the target SETMs (i.e. collection, input,	prevention/recovery	accommodation cost	
	compiling, analysis and reporting of data) at MOT and each SETM	works	for SETMs/SEHMs to	
4.5			drills and	
7	Collected dates accommendation of the discontinuous and the date of the date o			

Annex 1 Logical Framework (Project Design Matrix :PDM)

10 0 1	 4.7 Digitalize the data collected from the target SEHMs by the respective SETMs for submission to MOT 4.8 Integrate the data submitted by the target SETMs into the database 4.9 Release the database (disaster management data collection system) to MOT and all target SETMs 4.10 Develop a simple annual road disaster management report for senior management of MOT 4.11 Update and finalize the database (data collection system) design and the manuals reflecting feedbacks from the database users 	work	
1.9	Plan and implement a pilot study on cost-effectiveness of locally adaptable disaster prevention measures at the target sections selected in the first year under Output 3, using simple hazard location maps.		
5.2			
67	Prepare budget for locally adaptable disaster prevention for the priority sites identified under Output 3 by all target SETMs and MOT, utilizing the results of Output 3&4		
5.4	Develop project proposal(s) on large-scale prevention measures for the priority site(s) in the target section(s) under Output 3, which cannot be handled by the target SETMs/SEHMs, and studies for prevention measures for funding by international donor(s) as needed, utilizing the results of Output 3 &4		

In the second and the third years. The length of an inspection site would be approximately 100-300m. Prevention measures are implemented at the priority sites in the target sections selected in the first year. (*9) The other SEHMs are expected to participate in the prevention measures #1 or #2 as observers. The pilot prevention measures would include both prevention works and soft measures.

Abbreviation:
Di: State Unitary Enterprise "Scientific Research, Design and Survey Institute"
FY: Fiscal Year

JICA: Japan International Cooperation Agency
MOT: Ministry of Transport
SEHM: State Enterprise Highway Maintenance
SETM: State Enterprise Transport Management
RCM: Road Construction Maintenance Department of MOT

- 3) Minutes of JCC
- i. 1st JCC Meeting (May 2017)

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) MINISTRY OF TRANSPORT (MOT)

MINUTES OF MEETING FOR THE 1st JOINT COORDINATING COMMITTEE MEETING FOR

THE PROJECT FOR CAPACITY DEVELOPMENT FOR ROAD DISASTER MANAGEMENT, THE REPUBLIC OF TAJIKISTAN

4 th of May 2017

Dushanbe, Tajikistan

The First Joint Coordinating Committee (hereinafter referred to as "JCC") meeting on the Project for Capacity Development for Road Disaster Management (hereinafter referred to as "the Project") was held on the 4th of May, 2017 at the Ministry of Transport (hereinafter referred to as MOT) to outline the Work Plan of the Project including Project Design Matrix Version 1 and the Detailed Plan of Operation Version 1, and to understand the format on Project Monitoring Sheets 3-1 and 3-2 to be used throughout the Project. The JCC members discussed and exchanged opinions on the plan. As the result of the meeting, the JCC members mutually agreed on the matters mentioned in Attachment 1.

Mr. Rustam Valizoda

Chairperson,
Joint Coordination Committee
Deputy Minister,
Ministry of Transport

Mr. Hideki Tanabe

Vice Chairperson, Joint Coordination Committee Chief Representative, JICA Tajikistan Office

ATTACHMENT 1: DETAILS OF MEETING

- The 1st JCC Meeting commenced at 09:10 AM with an opening speech made by Mr.
 Umed Sheraliev, Officer in Department of International Relation, MOT on behalf of
 Ms. Farida Yukubzoda, Project Manager, introducing the attendants.
- 2. The Deputy Minister of Transport, Project Director and Chairperson of JCC, Mr.Rustam Valizoda thanked all participating members including the Counsellor of the Embassy of Japan in Dushanbe, JICA Tajikistan Office and State Enterprise of Transport Management for participating in the 1st JCC meeting. He noted that Japan is one of the major development partners assisting Tajikistan and this bi-lateral relationship is growing year by year. He then expressed full appreciation to JICA on having been provided grant aid assistance on 4 road rehabilitation projects in Khatlon region and a road maintenance machineries supply project to MOT. He furthermore elaborated that the fist technical cooperation project on improvement of road maintenance was successfully completed last year. He confirmed that these projects contribute to development of road sector in Tajikistan. On commencing the 1st JCC meeting today, he assured MOT will closely cooperate with the JICA Experts Team for successful and timely completion of this capacity development project on road disaster management.
- 3. Chief Representative of JICA Tajikistan Office and Vice Chairperson of JCC, Mr. Hideki Tanabe stated that it is of a timely opportunity to collaborate with MOT on the JICA technical cooperation project on capacity development for road disaster management as the effect of climate change is one of the top global issue. On the occasion of the 1st JCC meeting, he feels that all discussions taken place during the meeting will bring about further close understanding amongst participants today.
- 4. Counsellor of the Embassy of Japan in Dushanbe, Mr. Takashi Kamada addressed the participants on how the reputation of the quality of roads built under JICA road rehabilitation projects completed 6 years ago is still providing prestige to the Embassy of Japan in Dushanbe. The Prime Minister of Japan, Mr. Shinzo Abe visited Tajikistan in 2015 and the leaders of the two nations agreed on strengthening cooperation on the transport sector. Furthermore, a ministerial meeting was held in May in Ashkhabat by the group of Cenrtal Asia plus Japan and a topic on road development in Tajikistan was discussed. He also informed that Japan is supporting

- Tajikistan through CoESCD on disaster risk management.
- 5. The Chief Advisor of JICA Experts Team Mr. Hiroshi Mita conducted presentations of the Work Plan of the Project including Project Design Matrix Version 1 and the Plan of Operation Version 1 using Powerpoint slides titled the Project Outline. In addition, the purpose and the format on Project Monitoring Sheets 3-1 and 3-2 were explained and shared among the JCC members.
- Presentation was augmented by the following JCC members of each SETM expressing strong expectation towards this project.
 - -Mr. Odil Mirzoev, Head of Hissor SETM
 - -Mr. Ayubjon Miraminov, Chief Engineer of Sughd SETM
 - -Mr. Saidov Nuriddin, Head of Rasht SETM
- 7. Mr. Kholdorov Olimjon, Director, Design Institute confirmed that Design Institute has already appointed two specific counterparts to participate in Road Disaster Management Taskforce. On the scope of project activities, he requested to the Japanese side on the following points. 1) To add a technical counterpart from Design Institute to participate in Output 4 (Activities 4.1-4.4 and 4.7-4.11), 2) To consider provision of equipment for use by Design Institute for field survey related equipment, earthwork volume calculation system for disaster recovery and database software/hardware for databases system, and 3) To consider participation from Design Institute on Japan Training. Mr. Hiroshi Mita, the JICA Experts Team responded that 1) Addition will be accepted as MOT does not have any objection on the request. Mr. Hideki Tanabe, JICA Tajikistan Office confirmed that the request 2) will be reviewed by the JICA Experts Team for the necessity of such equipment to Design Institute as well as the total budget allocated for such provision of equipment. In addition, Mr. Hideki Tanabe confirmed that for the request 3), the details of Japan Training will be studied by the JICA Experts Team very soon and at that time, such a request will also be considered.
- 8. Ms. Saidmurodova Shoista, Head of Economic Analysis and Forecasting Department, MOT indicated her appreciation that JICA is assisting MOT on such an important subject. She requested whether representatives from Kulob SETM and Pamir SETM can participate in the trainings implemented by Japanese experts as counterparts. Mr.Hideki Tanabe replied that since they are not designated counterparts, they are unable to participate in the project as counterparts, for whom

- the trainings are designed on sites to be participated for long terms. However, there are 2 short-term seminars planned under the project with the aim of expanding the knowledge and experience. Representatives from Kulob SETM and Pamir SETM can participate in such seminars.
- 9. Mr. Sukhrob Yokubzoda, Head of IT Unit, Economic Analysis and Forecasting Department, MOT queried on whether database hardware contains any security related hardware such as Noninterrupted Power Supply(NPS) system. Mr. Hiroshi Mita replied that the anticipated database system is a closed system with a desktop computer to be installed at MOT acting as a server. For the necessity of NPS, he will discuss with Mr. Sukhrob so that the issue does not pose a problem during the operation stage.
- 10. Mr. Hideki Tanabe stated that Output 5 is a very challenging topic to be tackled under the Project. Although, the physical activity is planned to commence from late 2019 using the result of Output 3, he requested the Tajikistan side that MOT shall take advance action to the Ministry of Finance on the subject of establishing a new budget for road disaster prevention. Both MOT and JICA Tajikistan Office should be ready to support as early as from 2017. He stated that JICA Tajikistan Office will do its best. In return, Mr. Rustam Valizoda stated that he understands this as an important subject and MOT will also take necessary action from 2017.
- 11. All JCC members approved the following;
 - -Work Plan dated 27 April 2017
 - -Project Design Matrix Version 1
 - -Detailed Plan of Operation Version 1
 - -The format of Project Monitoring Sheets 3-1 and 3-2 to be used throughout the Project
- 12. For conclusion of the meeting, Mr. Rustam Valizoda, the Chairperson of the JCC appreciated all participants as well as the organizer of the meeting. He hoped that the discussions taken place today would lead to advancement on development of both transport and road sectors in Tajikistan. He assured once again that MOT will closely work together with the JICA Experts Team for successful and timely completion of the project.

The Meeting ended at 12 10 PM on the same day.

ATTACHMENT 2: LIST OF ATTENDEES

Joint Coordinating Committee (JCC)

No.	NAME	ORGANIZATION	POSITION IN PROJECT	ATTENDANCE
1	Mr. Rustam Valizoda	Deputy Minister, MOT	Chairperson, Project Director	Present
2	Mr. Hideki Tanabe	Chief Representative, JICA Tajikistan Office	Vice Chairperson	Present
3	Mr. Ismoil Rahimzoda	Head of Road Construction and Maintenance Department, MOT,	Member Deputy Project Director	Present
4	Ms. Farida Yokubzoda	Head of Department of International Cooperation, MOT,	Member, Project Manager	Absent
5	Mr. Odil Mirzoev	Head of Hissor State Enterprise of Transport Management	Member Regional Manager	Present
6	Ms. Latif Khojaroy	Head of Sughd State Enterprise of Transport Management	Member Regional Manager	Present
7	Mr. Saidov Nuriddin	Head of Rasht State Enterprise of Transport Management	Member Regional Manager	Present
8	Mr. Saidmurodova Shoista	Head of Economic Analysis and Forecasting Department, MOT	Member	Present
9	Mr.Alovidin Anoyatshoev	Deputy Head of Road Construction and Maintenance Department, Head of Road Construction Unit, MOT,	Member	Absent
10	Mr. Jomoliddin Halimov Civil Defense Specialist, MOT		Member	Absent
11	Mr. Kholdorov Olimjon	Director of Scientific Research, Design and Survey Institute	Member	Present
12	Ms. Naoko Nishikawa	Project Formulation Advisor, JICA Tajikistan Office	Member	Present
13	Mr. Mahmadov Shokirjon	Programme Officer, JICA Tajikistan Office	Member	Present

Observers

14	Committee on Emergency Situations and Civil Defense	Colonel Karim Khalifaev
15	Embassy of Japan in Dushanbe	Mr. Takashi Kamada, Counselor
16	State Enterprise of Transport Management, Hissor	Mr. Smoilbek Odinaev, technical products manager
17	State Enterprise of Transport Management, Sughd	Mr. Ayubjon Miraminov, Chief Engineer
18	State Enterprise of Transport Management, Rasht	Mrs. Tavakkalova O., Chief Engineer

Secretariat

Department of International Cooperation, MOT

Mr. Umed Sheraliev

Maintenance, Planning and Evaluation Unit, Road Construction and Maintenance Department, MOT

Mr. Ukumatsho Aksakolov

JICA Experts Team

Mr. Hiroshi Mita

Dr. Takeshi Kuwano

Mr. Hironori Inoue

Mr. Robinson Shrestha

Mr. Satoshi Kogawa

Mr. Hiromitsu Ogata

Mr. Ainiddin Boimurodzoda

Mr. Umedjon Shomirov

Mr. Husein Yuldashev

ATTACHMENT 2: LIST OF ATTENDEES

The Project for Capacity Development for Road Disaster Management Проект усиления потенциала по предупреждению и ликвидации чрезвычайных ситуаций на автомобильных дорогах Participants of Meeting

Участники собрания

Date/Дат	a 4 may, 2017	the 1 st Jaint	Coordinating	Committee Meetic
Venue/M	nistry of Transport		0	
No.	Name of Participants Ф.И.О. Участников	Authority Организация	Position Должность	Signature Подпись
_1	Barenga re	Bujopat	Zou leave p	Complease
2	Takashi Kamada	Embassy of Japa		All you
3	111 Yeari Tanabe	OICA	Cref repor	
4	Naoro Nishikawa	UICA.	Pr. Love Alus	
5	Makenesler Sleveryo	DICA	Ergrence office	
6	Unce Boco Skoueie	Expert Tea	Corol. Asso.	1 1
7	Tul dasher Heysein	Experts team	Coordin Assist	MATE -
8	Satoshi Kozawa	1	Lezurpment Ex	59
9	Takeshi Kuwano	"	Vice teamleader	7 0
10	HIROSHI HITA	EXPENTS TEAM	Chief Advisor	2 v2/55
11	Amiddin Beimurodada	Exports Team	Tecknic. Assista	with.
12	ROBINSON SHRESTHA	FICA BXPERT	Rood Disselv Recovery	To Shake
13	Hironitsu Ogata		Cost Estination	1117
14	Himmoni Imous	JICA Expert		AI.
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The Project for Capacity Development for Road Disaster Management Проект усиления потенцияла по предупреждению и ликвиджани предваглайных ситуаций на витомобильных дорогах.

Participants of Meeting

Учистники собрания

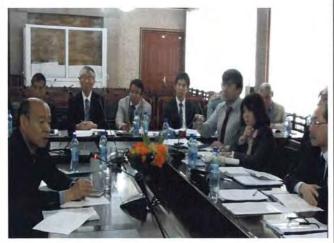
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ATTACHMENT 3: Pictures of the Meeting













ATTACHMENT 4: Agenda Sheet

First Joint Coordinating Committee (JCC) Meeting on the Project for Capacity development for Road Disaster Management

Date : May 04, 2017 (Thursday)

Venue : Conference Room, Ministry of Transport

Time : From 9:10 AM to 12:00 PM

AGENDA:

No.	TIME	TOPICS	SPEAKER
		JCC MEETING	
1,	9:10-9:20	Welcome Remarks and Introduction of Participants	Mr. Umedjon Sheraliev on behalf of Ms. Farida Yoqubdoza(Project Manager) Head, International Relation Department, MOT
2.	9:20-9:25	Opening Remarks from MOT	Mr. Rustam Valizoda, Deputy Minister of Transport (Chairman)
3.	9:25-9:30	Opening Remarks by JICA Tajikistan Office	Mr. Hideki Tanabe, Chief Representative, JICA Tajikistan Office (Vice Chairman)
4.	9.30-9.35	Opening Remarks by Embassy of Japan in Dushanbe	Mr. Takashi KAMADA, Counselor
		 Project Outline Project Work Plan (for approval) Project Monitoring Sheet (for approval) PDM version 1 and DPO (for approval) 	Mr. Hiroshi Mita, Chief Advisor JICA Expert Team
4.	9:35-11:30	- Counterparts from Tajikistan side reporting on technical counterparts on -Road Disaster Management Taskforce (MPEU of RCM and Design Institute) -Output 2 & 3 SETM and SEHM -Output 4 on Database by EAS	Mr. Ismoil Rahimzoda, Head of Road Construction Maintenance Department, MOT Ms. Saidmurodova Shoista, Head of Economic Analysis and Forecasting Department, MOT Mr. Kholdorov Olimjon, Director, Design Institute Mr. Odil Mirzoev, Head of Hissor SETM Ms. Latifi Khojaroy, Head of Sughd SETM Mr. Saidov Nuriddin, Head of Rasht SETM
5	11:30-11:50	Comments, Discussions and Approval	Mr. Rustam Valiizoda
6	11:50-12:00	Closing Remarks	Mr. Rustam Valizoda Mr. Hideki Tanabe

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) MINISTRY OF TRANSPORT (MOT)

MINUTES OF MEETING FOR THE 2nd JOINT COORDINATING COMMITTEE MEETING FOR

THE PROJECT FOR CAPACITY DEVELOPMENT FOR ROAD DISASTER MANAGEMENT, THE REPUBLIC OF TAJIKISTAN

12th of July 2017

Dushanbe, Tajikistan

The Second Joint Coordinating Committee (hereinafter referred to as "JCC") meeting on the Project for Capacity Development for Road Disaster Management (hereinafter referred to as "the Project") was held on the 12th of July, 2017 at the Ministry of Transport (hereinafter referred to as MOT) for approving 12 numeric values/date for various verifiable indicators in Project Design Matrix Version 1 and the proposed method of project monitoring system from November 2017, and to understand the current state of road disaster management in MOT and the result of trial project monitoring as at the end of June 2017. As the result of the meeting, the JCC members mutually agreed on the matters mentioned in Attachment 1.

Mr. Rustam Valizoda

Chairperson,

Joint Coordination Committee

Deputy Minister,

Ministry of Transport

Mr. Hideki Tanabe

Vice Chairperson,

Joint Coordination Committee

Chief Representative,

JICA Tajikistan Office

ATTACHMENT 1: DETAILS OF MEETING

- The 2nd JCC Meeting commenced at 10:00 AM with an opening speech made by Ms. Farida Yukubzoda, Project Manager welcoming all participants and introduced attendants of the meeting. She then expressed sincere apology on behalf of MOT on absentees from MOT and SETMs owing to necessity on taking part in action against sudden flooding in south eastern Tajikistan.
 - 2. The Deputy Minister of Transport, Project Director and Chairperson of JCC, Mr.Rustam Valizoda thanked all members for participating in the 2nd JCC meeting. He noted that Japan is one of the major development partners assisting Tajikistan and this bi-lateral relationship is growing year by year. He then expressed full appreciation to JICA for close cooperation and support for the development sector of the transport sector in Tajikistan. Capacity development for road disaster management is important and he assured MOT will closely collaborate with the JICA Experts Team for successful and timely completion of the project.
 - 3. Chief Representative of JICA Tajikistan Office and Vice Chairperson of JCC, Mr. Hideki Tanabe congratulated participants in convening the 2nd JCC meeting. He noted that this project is proved to be of great importance to Tajikistan where many road disasters occur, even recently. When he visited some damaged road sites in project target area together with the Experts Team, he felt that there were many things we must take as action on road disaster management to respond to future disasters. He believes that we cannot stop disasters but we can minimize or mitigate the scale/volume of damages by making the best use of rich skills and technical knowledge of the Experts Team in this field. He noted that this project was introduced in Transportation Working Group Meeting of Development Coordination Council (DCC) on 29 June and other donor agencies such as ADB and EBRD are paying attention and contemplating on collaboration with this project. As for the budget of disaster prevention measures, he stated that JICA is ready to support MOT on the budgetary dialogue with the Ministry of Finance and other authority to ensure that even a small amount can be secured for the next financial year.
 - 4. Both the Chairperson and the Vice Chairperson were required to leave the meeting

for other urgent matters to attend to, and the role of the acting Chairperson was relegated to Ms. Farida Yukubzoda, Project Manager.

- 5. The Chief Advisor of the Experts Team Mr. Hiroshi Mita conducted presentations of the PDM adoption of 12 numeric values/date in the Project Design Matrix Version 1 (revised on 8 July 2017) and other issues using Powerpoint slides. The details of the key points were as follows;
 - 1) PDM Version 1 (revised on 8 July 2017)

12 numeric values/date will be adopted as below:

On Overall Goal (3 indicators)

-Indicator b: 'at least 5 priority sites'

-Indicator c: 'is decreased by 20%' and 'from May 2017 to April 2018'

On Project Purpose (3 indicators)

-Indicators a, b and c: '80%'

On Outputs (6 indicators)

-Indicators 1c, 2b, 2c, 3b, 3f and 4c: '80%'

Current State of Road Disaster Management

No modifications and change on the Work Plan approved under 1st JCC Meeting. The Experts Team obtained 19 additional documents/information and National Development Strategy 2030 during the baseline survey in between May and June 2017

Road Disaster Management Taskforce (RDMT)

The RDMT members are appointed as follows:

- 1. Mr. Anoyatshoev Alovidin, MOT (Deputy Head of RCM/Head of RCU)
- Ms. Mavlonnazarova Mavjigul, MOT (CS of MPEU, RCM)
- 3. Mr. Sangakov Burkhonidin, MOT (CS of MPEU, RCM)
- 4. Mr. Negmatov Kudratullo, MOT (CS of RCU, RCM)
- Mr. Khujamulloev Hukmuron, Design Institute (Engineer in GED)
- 6. Mr. Khojamerov Izatullo, Design Institute (Engineer in AFD)

(RCM: Road Construction and Maintenance Department, RCU: Road Construction Unit, CS:

Chief Specialist, MPEU: Maintenance Planning and Evaluation Unit, GED: Geological Engineering Department, AFD: Artificial Facilities Department)

The role of RDMT is as follows;

- -The RDMT acts as a team to participate in all project activities to achieve all outputs in cooperation with the Experts Team.
- All members will acquire skills and knowledge to enhance own specialized field of road disaster management duties of MOT and Design Institute.
- The team will support activities of other counterparts.

The responsibilities of RDMT are as follows;

- Members will share activities so that participation in project activities do not hinder other duties of MOT and Design Institute.
- As such, RDMT will convene a monthly meeting so that participation by each member is prearranged considering the specialized field of each member.
- Upon confirming that monthly meetings are held as agreed, targets and development plans of each member will be agreed with the Experts Team.

4) JICA Provision of Equipment and Materials

The supply of prefabricated steel reinforced gabions and sand bags in addition to the provision of equipment presented in 1st JCC Meeting will be provided. The request made by Mr. Kholdorov Olimjon, the Director of the Design Institute under 1st JCC Meeting will be incorporated in this provision with additional 2 numbers of Laser Distance Meter and one number of database software system, based on the result of the review by the Experts Team on adequacy of the request and the availability of the JICA budget. The procurement process will start from July 2017 in Japan. Mr. Mita requested for Design Institute a counterpart, either from 2 appointees of RDMT or others on Output 4.

5) Indicative Budget Required by MOT

The indicative budgets required by MOT as calculated by the Experts Team were 459,000 TJS in 2018, 463,000 TJS in 2019 and 228,000 TJS in 2020.

6) Project Monitoring

The official project monitoring from November 2017 will be carried out with involvement of the RDMT and the Experts Team.

- 6. In charge of Project Monitoring and Japan Training of JICA Experts Team Mr. Seiji Ozawa conducted presentations on the result as at the end of June 2017 that was carried out as trial using handouts. It was confirmed that the project was proceeding smoothly with no forecasted event of concern. Ms. Farida Yukubzoda, the acting Chairperson stated that the project monitoring system introduced for the project and to be carried out from November 2017, was important and MOT will try to do its best for its successful implementation.
- 7. Mr. Aksakolov Ukumatsho, Head of Maintenance, Planning and Evaluation Unit, Road Construction and Maintenance Department, MOT requested that Ms. Mavlonnazarova Mavjigul needs to be replaced due to her personal reason. The acting chairperson made the decision upon consultation with the Chairperson that she will be replaced by Aksakolov Ukumatsho.
- 8. Mr. Sukhrob Yokubzoda Manager, IT Unit, Economic Analysis and Forecasting Department, MOT requested for clarification from the Experts Team on inclusion of non-interrupted power supply via battery system on provision of desktop computers for Output 4 as a part of JICA Provision of Equipment as requested in 1st JCC Meeting. Mr. Hiroshi Mita, Chief Advisor of the Experts Team responded that it has been taken care of and confirmed necessity of such battery system. The details will be finalized as the expert in charge will arrive Dushanbe on 12 July 2017.
- 9. Mr. Sangakov Burkhonidin, Chief Specialist, Maintenance, Planning and Evaluation Unit of Road Construction Maintenance Department, MOT requested for clarification from the Experts Team on the contents of Indicative Budget Required by MOT. Mr. Hiroshi Mita, Chief Advisor of the Experts Team responded that the contents include the costs of materials, labor, equipment and supervision required for conducting disaster recovery works, including on site drills and disaster prevention measures which are required to be performed under the project, based on the Tajikistan cost calculation system and the intended plans of recovery works and prevention measures as conceived by the Experts Team at this stage of the project.

- All JCC members accepted proposals raised by the Experts Team as outlined under
 and 6.
- 11. For conclusion of the meeting, Ms. Naoko Nishikawa, Project Formulation Advisor, JICA Tajikistan Office on behalf of Mr. Hideki Tanabe appreciated all participants as well as the secretariat of the meeting for their inputs into the meeting. She felt that the discussions taken place today was important for advancement on development of the transport and road sectors in Tajikistan. She indicated that there are a lot of activities ahead and they are of very challenging nature. She assured once again that JICA will closely work together with MOT and the Experts Team for successful and timely implementation of the project for the next three years. On behalf of MOT, Ms. Ms. Farida Yokubzoda, the acting Chairperson stated that due to the nature of the topic, implementation of project activities would not be easy. She hoped that specialists and engineers of MOT and the target SETMs/ SEHMs gain knowledge and acquire technical skills on disaster recovery and prevention. She also agreed with Ms. Naoko Nishikawa that for successful and timely

The meeting ended at 11:50 AM on the same day.

completion of the project, based on joint efforts.

ATTACHMENT 2: LIST OF ATTENDEES

Joint Coordinating Committee (JCC)

ATTACHMENT 2: LIST OF ATTENDEES

Joint Coordinating Committee (JCC)

No.	NAME	ORGANIZATION	POSITION IN PROJECT	ATTENDANCE
1.	Mr. Rustam Valizoda	Deputy Minister, MOT	Chairperson, Project Director	Present
2	Mr. Hideki Tanabe	Chief Representative, JICA Tajikistan Office	Vice Chairperson	Present
3	Mr. Ismoil Rahimzoda	Head of Road Construction and Maintenance Department, MOT,	Member Deputy Project Director	Absent
4	Ms. Farida Yokubzoda	Head of Department of International Cooperation, MOT,	Member, Project Manager	Present
5	Mr. Odil Mirzoev	Head of Hissor State Enterprise of Transport Management	Member Regional Manager	Present
6	Ms. Latif Khojaroy	Head of Sughd State Enterprise of Transport Management	Member Regional Manager	Absent
7	Mr. Saidov Nuriddin	Head of Rasht State Enterprise of Transport Management	Member Regional Manager	Absent
8	Mr. Saidmurodova Shoista	Head of Economic Analysis and Forecasting Department, MOT	Member	Absent
9	Mr.Alovidin Anoyatshoev	Deputy Head of Road Construction and Maintenance Department, Head of Road Construction Unit, MOT,	Member	Absent
10	Mr. Jomoliddin Halimov	Civil Defense Specialist, MOT	Member	Present
11	Mr. Kholdorov Director of Scientific Research Olimjon Design and Survey Institute		Member	Absent
12	Ms. Naoko Nishikawa	ishikawa Project Formulation Advisor, JICA Tajikistan Office		Present
13	Mr. Mahmadov Shokirjon	Programme Officer, JICA Tajikistan Office	Member	Present

Observers

14 Committee on Emergency Situations and Civil Defense

Mayor Boisariev Ilhomiddin

15 State Enterprise of Transport Management, Hissor

Mr. Odinaev Ismoilbek, Manager of Technical Production

16 State Enterprise of Transport Management, Rasht

Mrs. Tavakkalova Oimniso., Chief Engineer

17. Head of MPEU of RCM, MOT

Mr. Aqsaqolov Ukumatsho

18. Deputy Head of Economic Analysis and Forecasting Department of MOT

Mr. Valiev Dilshod

Secretariat

Department of International Cooperation, MOT

Mr. Umed Sheraliev

JICA Experts Team

Mr. Hiroshi Mita

Mr. Junichiro Ogawa

Mr. Ainiddin Boimurodzoda

Mr. Umedjon Shomirov

Mr. Khusein Yuldashev

ATTACHMENT 2: LIST OF ATTENDEES

The Project for Capacity Development for Road Disaster Management Проект усиления потенциала по предупреждению и ликвидации чрезвычайных ситуаций на автомобильных дорогах ParticipantsofMeeting

Участники собрания

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No.	Name of Participants Ф.И.О.Участников	Authority Организация	Position Должность	Signature Подпись
1	HIROSHI MITA	JILA BYPENT	CHIEFADVISOR	えのけつう
2	SEJJI OZAWA	JICA EXPERT	PROJECTHONITAL	4 小学学
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The Project for Capacity Development for Road Disaster Management Проект усиления потенциала по предупреждению и ликвидации чрезвычайных ситуаций на автомобильных дорогах

Participants of Meeting

Участники собрания

Date/Дат		2nd TCC	meeting	
Venue/M	ecto Mot hall		Q	
No.	Name of Participants Ф.И.О.Участников	Authority Организация	Position Должность	Signature Подпись
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9	Hideki TANABE	JICA	ChiefRepresentation	山逸秀村
10	Shokinjon MAHMADOV	JICA	Program office	14 cocharges
11	Hirayaki ZAMAMOTO	TICA	Road Adwinistration	山本 済か
12	Naoko NISHIKAWA	JICA	Project Formulation Advisor	Zuy.
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ATTACHMENT 4: Agenda Sheet

Second Joint Coordinating Committee (JCC) Meeting on the Project for Capacity development for Road Disaster Management

Date : July 12, 2017 (Wednesday)

Venue : Conference Room, Ministry of Transport

Time : From 10:00 AM to 11:30 AM

AGENDA:

No.	TIME	TOPICS	SPEAKER
-		JCC MEETING	
1.	10:00-10:10	Welcome Remarks and Introduction of Participants	Ms. Farida Yoqubzoda (Project Manager) Head, International Relation Department, MOT
2.	10:10-10:15	Opening Remarks from MOT	Mr. Rustam Valizoda, Deputy Minister of Transport (Chairman)
3.	10:15-10:20	Opening Remarks by JICA Tajikistan Office	Mr. Hideki Tanabe, Chief Representative, JICA Tajikistan Office(Vice Chairman)
4.	10:20-11:00	 PDM adoption numeric values (for approval) Report on the Current State of Road Disaster Management Equipment Supply Issue Result of Project Monitoring (Trial) Counterparts from Tajikistan side 	Mr. Hiroshi Mita, Chief Advisor JICA Expert Team Mr. Anoyatshoev Alovuddin Deputy Head of Road Construction and Maintenance Department, MOT Ms. Saidmurodova Shoista, Head of Economic Analysis and Forecasting Department, MOT Mr. Kholdorov Olimjon, Director, Design Institute Mr. Odil Mirzoev, Head of Hissor SETM Ms. Latifi Khojaroy, Head of Sughd SETM Mr. Saidov Nuriddin, Head of Rasht SETM
5	11:00-11:20	Comments, Discussions and Approval	Mr. Rustam Valiizoda
6	11:20-11:30	Closing Remarks	Mr. Rustam Valizoda Mr. Hideki Tanabe

Facilitator : Ms. Farida Yoqubzoda, Head of Department on International Relation of MOT

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) MINISTRY OF TRANSPORT (MOT)

MINUTES OF MEETING FOR THE 3rdJOINT COORDINATING COMMITTEE MEETING FOR

THE PROJECT FOR CAPACITY DEVELOPMENTFOR ROAD DISASTER MANAGEMENT, THE REPUBLIC OF TAJIKISTAN

1st of November, 2017Dushanbe, Tajikistan

The Third Joint Coordinating Committee (hereinafter referred to as "JCC") meeting on the Project for Capacity Development for Road Disaster Management (hereinafter referred to as "the Project") was held on the 1st of November, 2017 at the Ministry of Transport (hereinafter referred to as MOT) for approving of achievements until end of October 2017 and, look a-head for 6 months, and the result of project monitoring as of the end of October 2017. As the result of the meeting, the JCC members mutually agreed on the matters mentioned in Attachment 1.

Mr. Alovidin Anoyatshoev

Acting Chairperson, Joint Coordination Committee Head of Road Construction and Maintenance Department, Ministry of Transport

Mr. Hideki Tanabe

Vice Chairperson, Joint Coordination Committee Chief Representative, ЛСА Tajikistan Office

ATTACHMENT 1: DETAILS OF THE MEETING

- 1. The 3-d JCC Meeting commenced at 09:30 AM with an opening speech made by Ms. Farida Yokubzoda, Project Manager, welcoming all participants and introducing attendants of the meeting. She pointed out that capacity development for road disaster management was important for Tajikistan. She appreciated that the Experts Team was working together with the Counterparts and their specialists have started to acquire skills and knowledge on road disaster management. She also stated that she was doing her best to act as the Project Manager of the Project so that in case any issues arose, such issues could be resolved at earliest.
- 2. Head of RCM of Ministry of Transport Mr. Alovidin Anoyatshoev welcomed all participants of the meeting and opened the speech by noting that Japan was one of the major development partners of Tajikistan and the bilateral relationship between two countries were developing year by year. He was very grateful that JICA provided close cooperation on road sector development in Tajikistan. He also stated that the Project was important for the transport sector and ensured that the Ministry of Transport will closely collaborate with the Experts Team for successfully and timely implementation of the Project.
- 3. Chief Representative of JICA Tajikistan Office and Vice Chairperson of JCC, Mr. Hideki Tanabe congratulated participants in convening the 3-d JCC meeting. At the onset of his speech, he remarked the importance of the Project to Tajikistan by referring to various events which took place in the span of a week before this meeting. Firstly, he referred to CAREC meeting held on 27 Oct. 2017 at which all members acknowledged that development of the transport sector was imperative for economic development of member countries. Three out of six CAREC corridor routes goes through Dushanbe-Qurghonteppa-Nijno Pyanj road as well as Vakhdat-Gharm-Jirgatol international road in Tajikistan. A day earlier, he had the opportunity to attend the ceremony on commencement of phase 1 of the Dushanbe to Qurghonteppa road rehabilitation project by ADB and had the honor to speak with the President of Tajikistan HE Emomali Rahmon. Mr. Hideki Tanabe explained to the President on the possibility of JICA's participation in phase 2 of the project in

close cooperation with ADB. As a part of such new road rehabilitation project, we already witnessed rehabilitation on Dushanbe-Panj, Dushanbe-Rusht and Dushabe-Khujand sections. Development Partner countries and organizations involved in transport sector are discussing that such road network expansion increases the need on high attention on road maintenance, road safety and risk management. On 31 Oct. 2017, Mr. Hideki Tanabe chaired the Development Coordination Council (DCC) Transport Working Group meeting attended by various development partner agencies and organizations in Tajikistan such as JICA, WB, EU, USAID, EBRD and others. As the chairperson, he introduced the outline of the Project and could witness the strong interest eyed on the Project by other members and they also must have understood importance of road maintenance, road safety and risk management to be taken into account in new road rehabilitation. He also stressed that one of the most important factor related to such was securing of the budget in the government. He stated that all members would understand that MOT suffered from insufficient funding. He also continued by stating that under the Project, we challenge to face this budget issue from the 3rd year and that we need to secure evidences under the Project to obtain acceptance from the Ministry of Finance and legislators. Although capacity development is the most important element of the Project, he stated that clearing each activity for securing of the budget is nearly as important. On the point of the excellent test result by the Counterparts, he conveyed his sincere gratitude to those Counterparts and engineers who attended the on-site training in the project and requested to participants of JCC to convey the message to all the participants. He stated that JICA is planning assistance to carry out trainings also in Japan in the framework of the Project. However, JICA would not be able to accept all the personnel required to Japan from the Tajikistan side. So he requested to the Tajikistan side to take the best advantage of such training opportunities in Japan, by selecting the best candidates for participation, who are expected to disseminate their knowledge and experience in Japan to other colleague in Tajikistan during the Project and even after its completion. Finally, he stated that upon his arrival in

Tajikistan this January, he witnessed the disaster incident caused by snow avalanche. He warned that the winter was nearing by and MOT must brace itself on taking action required. He hoped that the experience gained under the Project would offer confidence to all the Counterparts to take necessary action. Although he must leave the meeting for another engagement, he hoped for satisfactory exchange of discussion within members.

- 4. Ms. Farida Yokubzoda greeted Mr. Hideki Tanabe for his speech on CAREC meeting and then confirmed that MOT was taking action on finalizing the new National Strategy on Road Safety. Mr. Hideki Tanabe requested that MOT is recommended to reflect the outcome of the Project towards finalization of the strategy. Ms. Farida Yokubzoda confirmed that MOT would like to continue the current close relationship with JICA and agreed that in addition to capacity development, MOT would endeavor to tackle the issue and achieve the target on the budget issues with the Ministry of Finance through participation of MOT specialists.
- 5. The Chief Advisor of the Experts Team Mr. Hiroshi Mita conducted presentations on achievements and anticipated activities for the coming next 6 months. Mr. Seiji Ozawa, the expert in charge of project monitoring and Mr. Khujamulloev Khukmron, a RDMT member presented the result of the project monitoring as satisfactory with no foreseeable issue on hand as the end of Oct. 2017.
- 6. Chief engineer of Rasht SETM, Ms. Tavakalova Oimniso thanked JICA and the Expert Team and acknowledged that the Project was important. She commented that the training was very interesting and she acquired a lot of things about disaster and road disaster prevention in this hazard evaluation trainings.
- 7. The leading Specialist Sughd SETM, Mr. Toshmatov Akramjon thanked the Experts Team for conducting trainings in Ayni SEHM and Asht SEHM. He commented that during hazard evaluation training participants acquired knowledge on road disaster prevention.

- 8. Head of Hissor SETM, Mr. Odil Mirzoev stated that the Project was of high importance for MOT as they faced challenges during disaster occurrence and it will improve the skills of their specialists to mitigate disasters.
- 9. Head of Economic Analysis and Forecasting Department, MOT, Ms.Saidmurodova Shoista thanked the Experts Team for well laid out presentation. She indicated that it would be of value if the manual prepared was translated into Tajik.
- 10. On the issue of 2018 Japan Training and Securing of 2018 Budget for Pilot Projects under the Project, Ms. Farida Yokubzoda stated that all JCC members understood the contents and would refer the subject to the Project Director, Deputy Minister MOT, Mr. Rustam Valizoda. Similarly, she would refer the matter to the Project Director on the official JCC member list and the official RDMT member list due to personnel shifting in August 2017.
- 11. On behalf of MOT, Mr. Alovidin Anoyatshoev, the acting Chairperson stated that the meeting today would contribute to the development of the transport sector and MOT would continue promoting close cooperation with the Expert Team
- 12. For conclusion of the meeting, Ms. Naoko Nishikawa, Acting Deputy Chairperson appreciated all members for participation. She confirmed that the Project is progressing satisfactorily and she hoped that the similar results would be achieved during the next 6 months.

The meeting ended at 12:00 noon time on the same day.

ATTACHMENT 2: LIST OF ATTENDEES

Joint Coordinating Committee (JCC)

No.	NAME	ORGANIZATION	POSITIONIN PROJECT	ATTENDANCE
1	Mr. RustamValizoda	Deputy Minister, MOT	Chairperson, Project Director	Absent
2	Mr. HidekiTanabe	Chief Representative, JICA Tajikistan Office	Vice Chairperson	Present
3	Mr. Alovidin Anoyatshoev	Head of Road Construction and Maintenance Department, MOT,	Member Deputy Project Director	Present
4	Ms. Farida Yokubzoda	Head of Department of International Cooperation, MOT,	Member, Project Manager	Present
5	Mr. Odil Mirzoev	Head of Hissor State Enterprise of Transport Management	Member Regional Manager	Present
6	Ms. Latifi Khojaroy	Head of Sughd State Enterprise of Transport Management	Member Regional Manager	Absent
7	Mr. SaidovNuriddin	Head of Rasht State Enterprise of Transport Management	Member Regional Manager	Absent
8	Ms. Saidmurodova Shoista	Head of Economic Analysis and Forecasting Department, MOT	Member	Present
10	Mr. Jomoliddin Halimov	Civil Defense Specialist, MOT	Member	Present
11	Mr. Kholdorov Olimjon	Deputy Director of Scientific Research, Design and Survey Institute	Member	Present
12	Ms. Naoko Nishikawa	Project Formulation Advisor, JICA Tajikistan Office	Member	Present
13	Mr. Mahmadov Shokirjon	Programme Officer, JICA Tajikistan Office	Member	Present

Observers

14 Design Institute/RDMT Member

15 Design Institute/RDMT Member

16 Design Institute/RDMT Member

17 State Enterprise of Transport Management, Hissor

18 State Enterprise of Transport Management, Rasht

19 State Enterprise of Transport Management, Sughd

20 State Enterprise of Transport Management, Sughd

21. Head of MPEU of RCM, MOT

Mr. Khujamulloev Khukmron

Mr. Khojamerov Izatullo

Mr. Atobekov Firdavs

Mr. Jobirov Jamshed

Ms. Tavakkalova Oimniso, Chief Engineer

Mr. Kayumov Asliddin, Leading Specialist

Mr Toshmatov Akranjon, Leading Specialist

Mr. Aqsaqolov Ukumatsho

Secretariat

Department of International Cooperation, MOT

Mr. Umedjon Sheraliev

JICA Experts Team

Mr. Hiroshi Mita

Mr. Yoshiyuki Yagiri

Mr. Seiji Ozawa

Mr. Ainiddin Boimurodzoda

Mr. Umedjon Shomirov

Mr. Khusein Yuldashev

Mr. Behruz Shomirov

ATTACHMENT 2: LIST OF ATTENDEES

The Project for Capacity Development for Road Disaster Management

Проект усиления потенциаль но предупреждению и ликамальни

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Participants of Meeting.

Участинки сибрами

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ATTACHMENT 3: Pictures of the Meeting













JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) MINISTRY OF TRANSPORT (MOT)

MINUTES OF MEETING FOR THE 4th JOINT COORDINATING COMMITTEE MEETING FOR

THE PROJECT FOR CAPACITY DEVELOPMENT FOR ROAD DISASTER MANAGEMENT, THE REPUBLIC OF TAJIKISTAN

25th of April, 2018 Dushanbe, Tajikistan

The 4th Joint Coordinating Committee (hereinafter referred to as "JCC") meeting on the "Project for Capacity Development for Road Disaster Management" (hereinafter referred to as "the Project") was held on 25th of April, 2018 at the Ministry of Transport (hereinafter referred to as "MOT") for approving of achievement as of 10th of April, 2018, the look ahead schedule for the next 12 month and the result of project monitoring as of 10th of April, 2018. Detailed minutes of the meeting including the items mutually agreed by the JCC members are attached in Attachment 1.

Mr. Alovuddin Anoyatshoev

Acting Chairperson, Joint Coordination Committee

Head, Road Construction and Maintenance Department, Ministry of Transport 田邊秀樹

Mr. Hideki Tanabe

Vice Chairperson.

Joint Coordination Committee

Chief Representative. JICA Tajikistan Office

ATTACHMENT 1: DETAILS OF MEETING

- 1. The 4th JCC Meeting commenced at 09:30 AM with an opening speech made by Ms. Farida Yukubzoda, Project Manager, welcoming and thanking all participants for their attendance. She pointed out that the JCC Committee is based on the provision stipulated under the Record of Discussion signed between Ministry of Transport (MOT) and JICA on 9th of November, 2016. She extended her apology on behalf of the Chairperson of the Committee, Mr. Rustam Valizoda, for his absence due to a sudden visit to Bokhtar by the instruction of the Minister of MOT. She then introduced the attendants of the JCC members.
- 2. Opening remarks was given by Deputy Project Director, the Head, Road Construction and Maintenance Department of MOT, Mr. Alovuddin Anoyatshoev on behalf of Mr. Rustam Valizoda, Deputy Minister of MOT. Mr. Anoyatshoev expressed his sincere gratitude on behalf of the MOT to participants from JICA, State Enterprises under MOT, JICA Experts and all other present in the meeting. He noted that Japan is one of the major development partners of Republic of Tajikistan and the bilateral relationship between the two countries is getting stronger year after year. He further expressed his sincere gratitude to JICA for its close cooperation and continuous support for the development of transport sector of the Republic of Tajikistan. He further added in his speech that this technical cooperation project on capacity development for road disaster management is important for the transport sector and ensured that MOT will closely collaborate with JICA Experts for successful and timely implementation of the project.
- 3. Chief Representative of JICA Tajikistan Office and Vice Chairperson of JCC, Mr. Hideki Tanabe thanked participants from Tajikistan side for maintaining very close cooperation with JICA Office and JICA Experts for implementing this very important project. He reminded all that already a year has elapsed since the project commenced, but the level of mutual cooperation between the two sides have been much more than that. He congratulated the participants on the progress made by the project relating to the successful convening of the 4th JCC meeting in a year, citing that this has become possible not only by the effort of the JICA Experts but by cooperation and collaboration extended by all relevant staffs of MOT. He then referred to the Database and Road disaster recovery manuals and documents prepared by the JICA Experts explaining that these were very important material and

requested JCC members to review their contents for the sake of MOT in future. On the database manual, he pointed out that the manual was the first of its kind in the history of the road sector in Tajikistan and hoped for effective utilization of the manual by all. On the road disaster recovery manual, he pointed out that the manual included new information which was never a part of action and practice MOT had been taking. He pointed out that the importance on the concept of the road disaster management cycle on the cover of the manual was mostly a new concept in Tajikistan. He extended that many people believed that there could not be any plan on disaster occurrence. He clarified that planning was essential for disaster occurrence as this could be performed as preparations for future disaster occurrence. He added that this management cycle would not only end for the technical issue, but applied towards human resource development and also on issues related to the necessary budget on road disaster management. He continued that he had been insisting on importance of this subject from before and once more requested MOT not to keep this subject within themselves, but to bring up the subject for the attention of other parties of the government including the Ministry of Finance, the Presidential Office with sufficient and persuasive evidences to allow allocation of a new budget code on the subject, hence leading the project to an ultimate success. Mr. Tanabe then requested MOT and others related to interact with the JICA Experts not only on training sessions and the 2018 Japan Training this year but to create other occasions for transfer of more knowledge and ideas from the JICA Experts. He emphasized the importance on going through the presentation to be made today for sharing common understanding of the project, especially on continuation on efforts made by both sides. He also confirmed that the presentation would be conducted jointly by the two sides and this was a good evidence on the project ownership by MOT.

- 4. Ms. Farida Yukubzoda thanked Mr. Hideki Tanabe for his speech and acknowledged that proper planning and analysis was required for disaster recovery works. She also explained the Tajikistan side agreed that the financial issue needs to be resolved for successful implementation of this project and confirmed that MOT would endeavor to tackle the issue and achieve the target on the budgetary issue with the Ministry of Finance through participation of MOT specialists.
- 5. The Chief Advisor of the JICA Experts Team Mr. Hiroshi Mita conducted presentation on achievements made as at 10 April 2018 and he confirmed the

satisfactory progress to date, using the power point presentation, based on the progress report provided to all JCC members. On output 4 database presentation, Mr. Boimurodzoda Ainniddin, the project coordinator for the JICA Experts demonstrated use of database system and its function together with Mr. Aqsakolov Ukumatshoh, a RDMT member informing the JCC members on the database system design. The clarification was raised by Mr. Alovuddin Anoyatshoev, the acting Chairperson, on how the hazard risk ranking was set under the hazard evaluation and Mr. Hiroshi Mita, the Chief Advisor of the JICA Experts clarified that the recommended ranking thresholds were proposed by the JICA Experts. Mr. Seiji Ozawa, the Expert in charge of project monitoring and Mr. Khujamulloev Khukmron, a RDMT member presented the result of the joint project monitoring as satisfactory with no foreseeable issues on hand as at 10th April 2018.

- 6. Chief engineer of Sugh SETM Mr. Ayubjon Miraaminov stated on behalf of 3 SETMs participating in the project on achievements made to date and confirmed that each of 14 SEHMs under Sughd SETM were sending a chief engineer and an engineer for various activities for the first year with a very high participation result. He added that for the output 2 training, the training was conducted at Ayni and Khujand and similarly for the output 3 training for hazard evaluation, identification of hazard types and calculation of the extent of disasters, the training was conducted in Asht area. He also stated that output 4 training for database was conducted for SETM engineers and specialists.
- 7. There was no other comments from JCC members on the achievements made to date.
- 8. The Chief Advisor of the JICA Experts Team Mr. Hiroshi Mita conducted presentation on what was planned in the next 12 months under the project as the annual plan of operation using 1) Project Activity Flowchart Revision 1 dated 20 April 2018, 2) The Experts Team Assignment Sheet Revision 1 dated 20 April 2018 and 3) Detailed Plan of Operation (DPO) Revision 2 dated 20 April 2018. JCC members were briefed on partially shifting ahead 8 months on the activity no. 4-11 on Updating on Database Manual the effect on inputs on the JICA Experts, the only change made. There was no clarification or comments from JCC members.
- 9. The Chief Advisor of the JICA Experts Team Mr. Hiroshi Mita then conducted presentation on the 4 topics to be discussed and to be accepted/approved by JCC members. On the first topic, he explained on the finalization of the details on 2018 Japan Training, based on the finalized JICA Tokyo FY2018 budget. Based on such.

7 trainees would be sent to Japan from 23 June 2018 on a 13 days training, splitting the training into the initial week in Hokkaido and the last week in Nagoya region. On the second topic, he explained that the budget required for 2018 pilot project was secured by MOT and he appreciated MOT for securing the budget. He then requested on continuing the same effort on securing the pilot project budget until the end of the project. On the same subject, he explained the analysis made by the JICA Experts on the 5 years trend on road maintenance budget facing MOT and the result was not so optimistic. On the third and fourth subjects, he requested JCC members to approve both 1) Annual plan of operation as presented under 8 above and 2) the result of project monitoring under 5 above.

- 10. On the first topic on the 2018 Japan Training, Ms. Farida Yukubzoda, Project Manager, forwarded a message from Mr. Rustam Valizoda, Deputy Minister of MOT to request JICA to consider for 3 additional trainees under the 2018 Japan Training, although the time remaining was very limited. Mr. Hideki Tanabe, JICA Chief Representative replied that he had already met Mr. Valizoda ahead of the JCC meeting on the reason behind. Upon discussions, it was agreed by both MOT and JICA that the 2018 Japan Training would be conducted with 7 trainees to be agreed by MOT and the JICA Experts, based on the recent discussion made by both, participating in a 13 day training. Mr. Hideki Tanabe also ensured JCC members that he would convey the message from Mr. Rustam Valizoda to JICA Tokyo for consideration under the planned 2019 Japan Training.
- 11. On output 4 database development, Ms. Shoista Saidmurodova, Head of Economic Analysis and Forecasting Department, MOT requested clarification from the JICA Experts whether the database system developed was able to match the current environment on 'online' and if so could this not eliminate the current process on duplicating data input process once at SEHMs and then at the IT Unit. Mr. Hiroshi Mita explained firstly on how at the initial stage before development commenced such basic mechanism on data transfer was agreed between IT Unit, MOT, the counterpart and the JICA Experts. He confirmed that it was then agreed that the data transfer mechanism proposed by the JICA Experts which was currently in use would be suitable considering the usage of personal computers as well as the Internet access situation available at that time at SEHMs. Mr. Hiroshi Mita

- requested Ms. Shoista Saidmurodova for obtaining information on 1) availability of personal computers, 2) computer competency skill and 3) Internet access situation, at 26 SEHMs participating in the project, so that the JICA Experts could take up the subject for consideration.
- 12. Head of Rasht SETM, Mr. Nuriddin Saidov requested that whether rock breakers and 30kg hand held breakers planned to be provided under this project might be provided to Rasht SETM as the SETM faces serious situation. Mr. Hiroshi Mita replied that the prerequisite for provision of both equipment was that such equipment would be mounted on the main equipment to be provided under the past or on-going JICA grant aid projects and that unfortunately Rasht SETM was not a part of such grant aid project.
- 13. On the issues of the annual plan of operation and the result of project monitoring, all JCC members approved the plan presented by Mr. Hiroshi Mita and the result of project monitoring presented by Mr. Seiji Ozawa and Mr. Khukmron Khujamulloev
- 14. Closing remarks from the Tajikistan side was given by Mr. Alovuddin Anoyatshoev. Mr. Anoyatshoev expressed sincere gratitude to both the participants and the organizers of the meeting. He said he hopes the presentations, discussions and comments provided during the course of the meeting will contribute to the development of transport and road sector of the Republic of Tajikistan and assured MOT will closely collaborate with the Expert Team for successful and timely implementation of the project.
- 15. Closing remarks from the Japanese side was made by Mr. Hideki Tanabe. Mr. Tanabe expressed his appreciation to MOT and confirmed that all topics presented by Project expert team during the JCC meeting were approved by JCC members. He then requested MOT to consider inviting relevant Tajikistan offices involved in the budget formulation at this stage in a meeting so that our goal on budget preparation at the project end could be realized. He lastly requested MOT and the JICA Experts to continue dialogue on achieving the user-friendly database system.

The meeting ended at 12:15 PM on the same day.

ATTACHMENT 2: LIST OF ATTENDEES

Joint Coordinating Committee (JCC)

No.	NAME	ORGANIZATION	POSITIONIN PROJECT	ATTENDANCE
1	Mr.RustamValizoda	Deputy Minister, MOT	Chairperson, Project Director	Absent
2	Mr. HidekiTanabe	Chief Representative, JICA Tajikistan Office	Vice Chairperson	Present
3	Mr.Alovidin Anoyatshoev	Head of Road Construction and Maintenance Department, MOT,	Member Deputy Project Director	Present
4	Ms. Farida Yokubzoda	Head of Department ofInternational Cooperation, MOT,	Member, Project Manager	Present
5	Mr. Samad Salimov	Head of Hissor State Enterprise of Transport Management	Member RegionalManager	Present
6	Ms. Khojaroy Latifi	Head of Sughd State Enterprise of Transport Management	Member RegionalManager	Present
7	Mr. Nuriddin Saidov	Head of Rasht State Enterprise of Transport Management	Member RegionalManager	Present
8	Ms. Shoista Saidmurodova	Head of Economic Analysis and Forecasting Department, MOT	Member	Present
10	Mr. Jomoliddin Halimov	Civil Defense Specialist, MOT	Member	Present
11	Mr.Olimjon Kholdorov	Deputy Director of Scientific Research, Design and Survey Institute	Member	Present
12	Ms. Naoko Nishikawa	Project Formulation Advisor, JICA Tajikistan Office	Member	Present
13	Mr. Mahmadoy Shokirjon	Programme Officer, JICA Tajikistan Office	Member	Present

Observers

14 Mr. Ukumatshoh Aqsaqolov	Head of MPEU of RCM, MOT/RDMT Member
15 Mr. Burkhoniddin Sangakov	Chief Specialist, MPEU/RDMT Member
16 Mr. Qudratullo Negmatov	Chief Sepcialist, RCU/RDMT Member
17 Mr. Khukmron Khujamulloev	Design Institute/RDMT Member
18 Mr. Firdavs Atobekov	Design Institute/RDMT Member
19 Ms. Tavakkalova Oimniso	Chief Engineer State Enterprise of Transport Management, Rasht
20 Mr. Ayubjon Miraaminov	Chief Engineer State Enterprise of Transport Management, Sughd
21 Mr. Odil Mirzoev	Chief Engineer State Enterprise of Transport Management, Hissor

Secretariat

Department of International Cooperation, MOT

Mr. Umed Sheraliev

JICA Experts Team

Mr. Hiroshi Mita

Mr Robinson Shrestha

Mr. Satoshi Kogawa

Mr. Seiji Ozawa

Mr. AiniddinBoimurodzoda

Mr. UmedjonShomirov

Mr. KhuseinYuldashev

Mr. Behruz Shomirov

ATTACHMENT 2: LIST OF ATTENDEES

The Project for Capacity Development for Road Disaster Management Проект усиления потенциала по предупреждению и ликвидации чрезвычайных ситуаций на автомобильных дорогах ParticipantsofMeeting

Участники собрания

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No.	Name of Participants Ф.И.О.Участников	Authority Организация	Position Должность	Signature Подпись
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ParticipantsofMeeting

Участники собрания

Date/Дата	25 04.2018	Conference	hall st 1	LOT
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No.	Name of Participants Ф.И.О.Участников	Authority Организация	Position ⁰ Должность	Signature Подпись
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12	Robiusou Shresthe	JICA Expent		
13	Satoski Kogama	JICH Experts		
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ATTACHMENT 3: Pictures of the Meeting



v. 5th JCC Meeting (November 2018)

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) MINISTRY OF TRANSPORT (MOT)

MINUTES OF MEETING FOR THE 5th JOINT COORDINATING COMMITTEE MEETING FOR

THE PROJECT FOR CAPACITY DEVELOPMENT FOR ROAD DISASTER MANAGEMENT, THE REPUBLIC OF TAJIKISTAN

08th of November, 2018 Dushanbe, Tajikistan

The 5th Joint Coordinating Committee (hereinafter referred to as "JCC") meeting on the "Project for Capacity Development for Road Disaster Management" (hereinafter referred to as "the Project") was held on 08th of November, 2018 at the Ministry of Transport (hereinafter referred to as "MOT") for approving 1) the achievement as of the end of October 2018, 2) the look ahead schedule for the next 6 months, 3) the request for approval tabled by the JICA Experts Team and 4) the result of project monitoring as of 8th November 2018. Detailed minutes of the meeting including the items mutually agreed by the JCC members are attached in Attachment 1.

Mr. Rustam Valizoda

Chairperson.

Project Director

Deputy Minister,

Ministry of Transport

Mr. Hideki Tanabe

Vice Chairperson,

Chief Representative.

JICA Tajikistan Office

ATTACHMENT 1: DETAILS OF MEETING

- The 5th JCC Meeting commenced at 09:40 AM with an opening speech made by Mr. Dilovar Olimov, the lead specialist of Department on International Relation, welcoming and thanking all participants for their attendance. He pointed out that the JCC Committee was based on the provision stipulated under the Record of Discussion signed between Ministry of Transport (MOT) and JICA on 9th of November. 2016. He introduced all participants of the JCC members.
- 2. Opening remarks was given by the Deputy Minister of MOT Mr. Rustam Valizoda. He expressed his sincere gratitude on behalf of the MOT to JICA, State Enterprises under MOT and JICA Experts Team and thanked all participants of today's meeting. He noted that Japan was one of the major development partners of Republic of Tajikistan and year by year bilateral relationship between the two countries was developing. He further expressed his sincere gratitude to JICA for its close cooperation and continuous support for the development of transport sector of the Republic of Tajikistan. He further added in his speech that this technical cooperation project on capacity development for road disaster management was important for the transport sector and ensured that MOT would closely collaborate with JICA Experts Team for successful and timely implementation of the project.
- 3. Chief Representative of JICA Tajikistan Office and Vice Chairperson of JCC, Mr. Hideki Tanabe congratulated participants for successfully completion on the first one and a half year of the project. He expressed his happiness that some counterparts were trained in Japan this year and that they would continue participating in activities on disaster prevention management cycle. JICA Tajikistan Office considered this project as an important intervention aimed at enhancing the capacity level of MOT at various levels for which JICA had been working for a long time. He pointed out that this project covered the management structure improvement, road disaster recovery and prevention, database management and most importantly budget proposal preparation. He continued by stating that these activities were interlinked with each other and were expected to lead MOT to contributing to proper road asset management, including measures against disasters and planning before disaster occurrence. He stated that the road asset management included 2 important elements, human resource development and budget allocation. He further expressed that the project was at the half way point and had two more years to achieve outputs

task. He emphasized that JICA was ready to work together with MOT. He continued pointing out that the draft national budget law for the next fiscal year was under discussion by the legislative body and JICA was ready to cooperate with MOT on informing the related authority (Ministry of Finance) and even the legislative body (Parliament) on importance of road asset management and disaster relief. He also pointed out that MOT might be able to utilize materials produced under the project as the basis and evidences for such discussion, Lastly, he hoped that this project would achieve another important issue that the collaboration being made by Japanese and Tajik counterparts would create a better relationship between the two countries.

- 4. The Chief Advisor of the JICA Experts Team Mr. Hiroshi Mita conducted presentation on achievements made as at the end of October 2018 and he confirmed the satisfactory progress to date, using the power point presentation, based on the progress report provided to all JCC members. At the end of his presentation, he presented the changes requested on Project Design Matrix, Detailed Plan of Operation, Project Activity Flowchart and Experts Assignment Sheet and the reasons for such changes for approval by JCC members. Mr. Seiji Ozawa, the expert in charge of project monitoring and Mr. Aqsakolov Ukumatshoh, a RDMT member presented the result of the joint project monitoring as satisfactory with no foreseeable issues on hand as at 08th November 2018.
- On comments and discussions, the following topics were raised by JCC members as follows;
 - 1) Mr. Rustam Valizoda, Chairperson raised the question on why the snow avalanche was not included in this project and a comprehensive reply was provided by Mr. Hideki Tanabe, Vice Chairperson on the historical background on how the disaster types were agreed without snow avalanche between MOT and the JICA Investigation Team in September 2016, which was the basis of R/D signed on 6 November 2016. He continued by saying that inevitable serious snow avalanches hit Tajikistan after this agreement in early 2017. He also informed JCC members on how JICA, and the Embassy of Japan were continuously assisting the Committee on Emergency Situations and Civil Defense and MOT by provision of equipment on the snow

- avalanche topic. Mr. Tanabe also added that the technical transfer already acquired under this project would be useful in challenging measures on snow avalanche under the initiative of MOT and SETMs.
- 2) Mr. Rustam Valizoda, Chairperson requested clarification on precipitation data obtained by the JICA Experts Team from the Meteorological Department whether the data included snowfall or not. Additionally, he asked whether the rainfall gauge provided by JICA measured both rainfall and snowfall. Clarification was made by Mr. Hiroshi Mita, Chief Advisor that the precipitation data obtained from the Meteorological Department was the actual 12 months precipitation data and therefore the precipitation data related to the snow fall was included. However, he clarified that the data disclosed in the progress report and PPT presentation had intentionally excluded either 3 or 4 months of the winter season data as appropriate to simplify the data analysis. He added that the reason for such change was to compare the yearly data based purely on the rainfall data. Additionally, he clarified that the rainfall gauge procured by the JICA Experts Team would measure both rainfall and snowfall, but snowfall would be converted to rainfall based on the conventional conversion method. Mr. Valizoda stated that he understood the mechanism of precipitation data, but he raised his concern that the rainfall gauge would only record and could not be used for either prevention or early warning. Mr. Mita replied that for early warning system, a system would be introduced in 2019 to link the data collected to actual simple early warning system for nearby residents. Mr. Tanabe participated in discussion by stating that MOT and the JICA experts Team should continue discussion on the topic by confirming not only rainfall, but also the effect of increased water level in various rivers during Spring.
- 3) Ms. Shoista Saidmurodova, Head of Economic Analysis and Forecasting Department, MOT requested the JICA Experts Team to submit a letter on the amount of fund required for 2019 pilot project for their action. Mr. Mita confirmed that the team would take immediate action after the 5th JCC Meeting.
- 4) Mr. Aqsakolov Ukumatshoh, Head of Maintenance, Planning and Evaluation Unit and a RDMT member requested to JICA to consider the

- possibility on increasing the number of trainees for 2019 Japan Training after the successful result of 2018 Japan Training. Mr. Tanabe, Vice Chairperson replied that he would take note on this request.
- 5) Mr. Ukumatshoh, then proposed to JCC members for increasing the number of RDMT member from the current 7 to either 8 or 9 as he believed that such would improve the organizational structure of MOT after the completion of the project. Mr. Tanabe, Vice Chairperson suggested that such a constructive proposal should have been agreed by the MOT side and should have been tabled as a topic for discussion and approval. Returning on this suggestion, Mr. Valizoda, Chairperson confirmed that the MOT side concurred to the proposal, however the issue needed to be coordinated with Road Construction Maintenance Department (RCM), MOT on availability of staff without disturbing the routine operation of RCM. Mr. Mita, Chief Advisor agreed to look into this topic, with the idea of having reserve members by sitting down with both Mr. Ukumatshoh and Mr. Anoyatshoev Alovuddin, Head of RCM, MOT. Lastly, Mr. Tanabe confirmed that there was no objection from the JICA side towards increasing the number of RDMT members based on the statement made by the JICA Experts Team.
- 6) Mr. Mita, Chief Advisor requested to clarify whether the 2 topics tabled for approval by JCC members, namely, the request to approve the following documents were approved or not;
 - -PDM Version 2 dated 5 November.
 - -Detailed Plan of Operation Version 3 dated 5 November 2018
 - -Project Activity Flowchart Revision 2 dated 5 November 2018
 - -Experts Team Assignment Sheet Revision 3 dated 5 November 2018
 - -Project Monitoring Sheet Version 4 dated 8 November 2018
 - Mr. Valizoda, Chairperson confirmed that these documents were approved unanimously by JCC members.

- 7) Mr. Rustam Valizoda, Chairperson offered his last remark towards all participants that discussions and comments today would lead to the development of transport and road sector of the Republic of Tajikistan. He assured that MOT would closely collaborate with the JICA Experts Team for successfully and timely implementation of the project.
- 8) Mr. Hideki Tanabe, Vice Chairperson reminded all participants that he was very pleased to attend the handing over ceremony in Sughd under the road maintenance equipment grant aid project last week and he was looking forward to the similar ceremony in Kulob within this month. He hoped that such equipment would also contribute towards the effective maintenance and disaster prevention efforts by MOT.

The meeting ended at 12:30 PM on the same day.

Attachment 2 on the list of attendees, attachment 3 on 5th JCC meeting photographs and attachment 4 on approved documents under 5th JCC meeting comprises the part of the Minutes of Meeting.

ATTACHMENT 2: LIST OF ATTENDEES

Joint Coordinating Committee (JCC)

No.	NAME	ORGANIZATION	POSITIONIN PROJECT	ATTENDANCI
Ī	Mr.RustamValizoda	Deputy Minister, MOT	Chairperson, Project Director	Present
2	Mr. HidekiTanabe	Chief Representative, JICA Tajikistan Office	Vice Chairperson	Present
3	Mr.Alovidin Anoyatshoev	Head of Road Construction and Maintenance Department, MOT,	Member Deputy Project Director	Present
4	Ms. Farida Yokubzoda	Head of Department of International Cooperation, MOT,	Member, Project Manager	Absent
5	Mr. Samad Salimov	Head of Hissor State Enterprise of Transport Management	Member Regional Manager	Present
6	Ms. Khojaroy Latifi	Head of Sughd State Enterprise of Transport Management	Member Regional Manager	Present
7	Mr. Nuriddin Saidov	Head of Rasht State Enterprise of Transport Management	Member Regional Manager	Absent
8	Ms. Shoista Saidmurodova	Head of Economic Analysis and Forecasting Department, MOT	Member	Present
10	Mr. Jomoliddin Halimov	Civil Defense Specialist, MOT	Member	Present
11	Mr.Olimjon Kholdorov	Deputy Director of Scientific Research, Design and Survey Institute	Member	Present
12	Ms. Naoko Nishikawa	Project Formulation Advisor, JICA Tajikistan Office	Member	Absent
13	Mr. Mahmadov Shokirjon	Programmer Officer, JICA Tajikistan Office	Member	Present

Observers

14 Mr. Ukumatshoh Aqsaqolov	Head of MPEU of RCM, MOT/RDMT Member
15 Mr. Burkhoniddin Sangakov	Chief Specialist, MPEU/RDMT Member
16 Mr. Qudratullo Negmatov	Chief Specialist, RCU/RDMT Member
17 Mr. Muhamad Pirov	Design Institute/RDMT Member
18 Ms. Tavakkalova Oimniso	Chief Engineer State Enterprise of Transport Management, Rasht
19 Mr. Ayubjon Miraaminov	Chief Engineer State Enterprise of Transport Management, Sughd
20 Mr. Odil Mirzoev	Chief Engineer State Enterprise of Transport Management, Hissor
21 Mr. Suhrob Yokubzoda	Head of IT Unit MOT
22 Mr. Zulfikor Haknazarov	Specialist of IT Unit MOT

Secretariat

Department of International Cooperation, MOT

Mr. Dilovar Olimov

JICA Experts Team

Mr. Hiroshi Mita

Mr. Masanori Tozawa

Mr. Seiji Ijichi

Mr Junichiro Ogawa

Mr. Seiji Ozawa

Mr. Ainiddin Boimurodzoda

Mr. Umedjon Shomirov

Mr. Khusaindzhon Yuldashev

Mr. Bekhruz Shomirov

The Project for Capacity Development for Road Disaster Management
Проект усиления потенциала по предупреждению и ликвидации
чрезвычайных ситуаций на автомобильных дорогах

ParticipantsofMeeting

Участники собрания

Date/Дата	08.11.2018	5-SCC Me	eting	
Venue/Me	MOT Harll		· ·	
No.	Name of Participants Ф.И.О.Участников	Authority Организация	Position — Должность	Signature Подпись
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6	Hideki TANABE	JICA	Chief Representation	e D. /
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ATTACHMENT 3: 5th JCC Meeting Photographs













ATTACHMENT 4: Approved Documents under 5th JCC Meeting

Project Design Matrix (PDM) Version 2 dated 5 November 2018

Detailed Plan of Operation (DPO) Version 3 dated 5 November 2018

Project Activity Flowchart Revision 2 dated 5 November 2018

Experts Team Assignment Sheet Revision 3 dated 5 November 2018

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) MINISTRY OF TRANSPORT (MOT)

MINUTES OF MEETING FOR THE 6th JOINT COORDINATING COMMITTEE MEETING FOR

THE PROJECT FOR CAPACITY DEVELOPMENT FOR ROAD DISASTER MANAGEMENT, THE REPUBLIC OF TAJIKISTAN

04th of April, 2019 Dushanbe, Tajikistan

The 6th Joint Coordinating Committee (hereinafter referred to as "JCC") meeting on the "Project for Capacity Development for Road Disaster Management" (hereinafter referred to as "the Project") was held on 04th of April, 2019 at the Ministry of Transport (hereinafter referred to as "MOT") for approving 1) the achievement as of the end of March 2019 including the result of project monitoring of the same period, 2) the look ahead schedule for the next 12 months and further until the end of the Project and 3) the contents of the proposed 2019 Japan Training. Detailed minutes of the meeting including the items mutually agreed by the JCC members are attached in Attachment 1.

Mr. Rustam Valizoda

Chairperson,

Project Director

Deputy Minister,

Ministry of Transport

Mr. Hideki Tanabe

Vice Chairperson,

Chief Representative.

JICA Tajikistan Office

ATTACHMENT 1: DETAILS OF MEETING

- 1. The 6th JCC Meeting commenced at 09:40 AM with an opening speech made by Ms. Farida Yokubzoda, Project Manager, Head of Department on International Cooperation at Ministry of Transport, welcoming and thanking all participants for their attendance. She pointed out that the JCC Committee was based on the provision stipulated under the Record of Discussion signed between Ministry of Transport (MOT) and JICA on 9th of November 2016. She introduced all participants of the JCC members and announced the topics of agenda as the following:
 - Achievement to date
 - Demonstration on Output 4
 - Results of Project Monitoring
 - Approval on Activity Implementation Plan Outlined in Section 5
 - Japan Training
- 2. Opening remarks was given by Project Director, Deputy Minister of MOT Mr. Rustam Valizoda. He expressed his sincere gratitude on behalf of the MOT especially to JICA and State Enterprises under MOT and thanked all participants of today's meeting. He also thanked JICA representatives for supporting the development of transport sector in the Republic of Tajikistan and noted that Japan had high contribution especially in the road sector. Under this road sector, the Project is being implemented by the JICA Experts Team by conducting seminars, trainings and providing skills and knowledge to engineers and specialists of SETMs/SEHMs in close cooperation with the staff from MOT and the Design Institute. For this, he expressed his appreciation to the JICA Experts Team for services provided under the framework of the Project. He continued by informing members that based on the achievement, enhancement on capacity development on road disaster management including actions required on both disaster recovery and disaster mitigation measures was witnessed and that 2018 pilot projects at both Ayni and Varzob districts were completed successfully with 2 more sections in 2019 pilot projects. He also expressed hope that the planned procurement of 2 rock breakers and 4 hand breakers would also support actions required under disaster management at SETMs/SEHMs. He also declared that he would instruct the C/Ps from 3 SETMs and related SEHMs to participate in activities in 2019. He stressed that it was

- important that the C/Ps participate actively in the planned activities under the Project to achieve the project purpose. In this respect, he emphasized that 1) he would oversee the Project to ensure active participation by the C/Ps, 2) the C/Ps would deliver the skills and knowledge acquired under the Project to daily road disaster management activities and 3) he would take part in resolving the related budget issues required under the Project.
- 3. Chief Representative of JICA Tajikistan Office and Vice Chairperson of JCC, Mr. Hideki Tanabe commenced his speech by informing members of the new spring season as well as recalling back the disaster during the last winter season affecting the livelihood and properties of the Tajikistan people. He continued by stating that the government of Tajikistan was also aware of importance of disaster management in the country. He stated further that based on implementation of the Project for the last 2 years, MOT already understood the importance of introducing the concept of preventive measures and works before occurrence of disasters even though this concept was a new concept. He appreciated the level of project ownership by MOT to tackle this issue and promised MOT that JICA would cooperate working together with MOT. He continued stating further that by taking advantage of understanding and the initiative taken by the government of Tajikistan to tackle this common issue. it was a good time for us to advocate the issue not only within MOT, but towards the government of Tajikistan to raise awareness and importance of preventive disaster management. He stated that as we entered the 3rd year under the Project, we would be facing the final and one of the most important activity under the Project on the budget planning for future disaster management by MOT. He continued stating that for achieving the required output, understanding within MOT was not sufficient at all and convincing financial authorities of the government including the parliament would be required. He welcomed that a dialogue through a seminar organized by MOT took place on 3 April 2019 with the Ministry of Finance and he expected that similar dialogues would continue in future. He emphasized that the JICA Experts Team and even JICA Tajikistan Office would be ready to assist MOT on this issue. He also hoped for successful implementation on 2019 Pilot Project.
- 4. The Chief Advisor of the JICA Experts Team Mr. Hiroshi Mita conducted presentation on achievements made as at the end of March 2019 and he confirmed the satisfactory progress to date, using the power point presentation, based on the progress report provided to all JCC members. His presentation was supported by 1)

ATTACHMENT 2: LIST OF ATTENDEES

Joint Coordinating Committee (JCC)

No.	NAME	ORGANIZATION	POSITIONIN PROJECT	ATTENDANCE
1	Mr.RustamValizoda	Deputy Minister, MOT	Chairperson, Project Director	Present
2	Mr. HidekiTanabe	Chief Representative, JICA Tajikistan Office	Vice Chairperson	Present
3	Mr.Alovidin Anoyatshoev	Head of Road Construction and Maintenance Department, MOT,	Member Deputy Project Director	Present
4	Ms. Farida Yokubzoda	Head of Department of International Cooperation, MOT,	Member, Project Manager	Present
5	Mr. Samad Salimov	Head of Hissor SETM	Member Regional Manager	Present
6	Ms. Khojaroy Latifi	Head of Sughd SETM	Member Regional Manager	Present
7	Mr. Nuriddin Saidov	Head of Rasht SETM	Member Regional Manager	Present
8	Ms. Shoista Saidmurodova	Head of Economic Analysis and Forecasting Department, MOT	Member	Absent
9	Mr. Jomoliddin Halimov	Civil Defense Specialist, MOT	Member	Absent
10	Mr.Olimjon Kholdorov	Deputy Director of Scientific Research, Design and Survey Institute	Member	Present
11	Ms. Naoko Nishikawa	Project Formulation Advisor, JICA Tajikistan Office	Member	Present
12	Mr. Mahmadov Shokirjon	Programmer Officer, JICA Tajikistan Office	Member	Present

Observers

13 Mr. Ukumatshoh Aqsaqolov Head of MPEU of RCM, MOT/RDMT Member

14 Mrs. Zulfiya Yoroya Chief Specialist, Economic Analysis and Forecasting Department

15 Mr. Burkhoniddin Sangakov Chief Specialist, MPEU/RDMT Member

16 Mr. Qudratullo Negmatov Chief Specialist, RCU/RDMT Member

17 Mr. Salim Niyozov Specialist, MPEU

18 Mr. Muhamad Pirov Design Institute/RDMT Member

19 Mr. Tabrez Tohirov Design Institute/RDMT Member

20 Mr. Abdullo Khayrulloev Design Institute

21 Ms. Tavakkalova Oimniso

22 Mr. Ayubjon Miraminov

23 Mr. Tagoymurod Gulov

24 Mr Ismoil Odinaev

25 Mr. Zulfikor Haknazarov

Chief Engineer Rasht SETM

Chief Engineer Sughd SETM

Chief Engineer Hissor SETM

Head of Technical Production Hissor SETM

Specialist of IT Unit, MOT

JICA Experts Team

Mr. Hiroshi Mita

Mr. Seiji Ozawa

Mr. Ainiddin Boimurodzoda

Mr. Umedjon Shomirov

Mr. Khusaindzhon Yuldashev

Mr. Bekhruz Shomirov

The Project for Capacity Development for Road Disaster Management Проект усиления потенциала по предупреждению и ликвидации чрезвычайных ситуаций на автомобильных дорогах

Participants of Meeting

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No.	Name of Participants Ф.И.О. Участников	Authority Организация	Position Должность	Signature Подпись
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The Project for Capacity Development for Road Disaster Management Проект усиления потенциала по предупреждению и ликвидации чрезвычайных ситуаций на автомобильных дорогах Participants of Meeting

Date/Да	Ta 04/04,2019	by Triet	our dinoching (Exemples.
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No.	Name of Participants Ф.И.О. Участников	Authority Организация	Position Должность	Signature Подпись
1	Hideki Tanabe	Tica	Chief Repr.	回题新科
2	Noroko Nishikawa,	yico_	Project form Acr	
3	SHOKINJON Hahmadh	gica	Senier Prograf	1
4	HIROSHI HITA		CHIEF ADVISOR	
5	Seiji Ozawa	JICA EXPERT	Project Montoring	水产工作
6	Amiddin Boinwoodooda		Proj. coor Tekhric	1.11
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ATTACHMENT 3: 6th JCC Meeting Photographs













JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) MINISTRY OF TRANSPORT (MOT)

MINUTES OF MEETING FOR THE 7th JOINT COORDINATING COMMITTEE MEETING FOR

THE PROJECT FOR CAPACITY DEVELOPMENT FOR ROAD DISASTER MANAGEMENT, THE REPUBLIC OF TAJIKISTAN

11^b of October, 2019 Dushanbe, Tajikistan

The 7th Joint Coordinating Committee (hereinafter referred to as "JCC") meeting on the "Project for Capacity Development for Road Disaster Management" (hereinafter referred to as "the Project") was held on 11th of October, 2019 at the Ministry of Transport (hereinafter referred to as "MOT") for approving 1) the achievement as at the end of September 2019 including the result of project monitoring of the same period and 2) the look ahead schedule for the next 10 months until the end of the Project. Detailed minutes of the meeting including the items mutually agreed by the JCC members are attached in Attachment 1.

Mr. Rustam Valizoda

Chairperson,

Project Director

Deputy Minister,

Ministry of Transport

Mr. Hideki Tanabe

Vice Chairperson,

Chief Representative,

JICA Tajikistan Office

ATTACHMENT 1: DETAILS OF MEETING

- The 7th JCC Meeting commenced at 11:00 AM with an opening speech made by Mr.Dilovar Olimov, the secretariat member from Department of International Cooperation, MOT welcoming and thanking all participants for their attendance. He introduced all participants of the JCC members.
- 2. The opening speech was given by Deputy Project Director, Mr.Alovidin Anoyatshoev who informed absence of Mr. Rustam Valizoda for the today's JCC meeting and that he had been instructed to act as the acting Chairperson on his behalf at the onset of his speech. He expressed his sincere gratitude on behalf of the MOT especially to JICA and State Enterprises under MOT and thanked all participants of today's meeting. He also thanked JICA representatives for supporting the development of transport sector in the Republic of Tajikistan and noted that Japan had high contribution especially in the road sector. Under this road sector, the Project is being implemented by MOT and supported by the JICA Experts Team through conducting seminars, trainings and providing skills and knowledge to engineers and specialists of SETMs/SEHMs in close cooperation with the staff from MOT and the Design Institute. For this, he expressed his appreciation to the JICA Experts Team for services provided under the framework of the Project. He continued by informing members that based on the achievement, enhancement on capacity development on road disaster management including actions required on both disaster recovery and disaster mitigation measures was witnessed and the Pilot Projects at Adrasmon under B.Gafurov district in Sughd region was implemented and in present implementation of Pilot Project is ongoing in Varzob district in Hissor region. He also thanked for JICA procurement of two units of rock breakers and 4 units of hand breakers under the Project. They have been distributed to Hissor SETM and Rasht SETM for use in their daily activities. He stressed that based on the results of performed activities up to now, the skills and knowledge of our engineers and specialists were enhanced through provision of technical information on disaster management on both recovery action and prevention measures.
- 3. Chief Representative of JICA Tajikistan Office and Vice Chairperson of JCC, Mr. Hideki Tanabe commenced his speech stating that the three-quarters of the project duration had elapsed with 10 months remaining, and during this period, the relationship between MOT and JICA had deepened through the activities. He stated

that even though promotion of some counterparts required replacement by new counterparts, these new counterparts were regarded as our friends as well. He continued that the project commenced right after his posting at JICA Tajikistan Office and he eagerly desired to witness completion of the project next year as well. He continued stating that medal awarded to Mr. Hiroshi Mita, the project team leader, by MOT was a testament to great understanding of our mutual cooperation to which all those involved in the project should be proud of. He referred to recent signing of a JICA road rehabilitation grant aid project in Bokhtar-Qizilkala Section and confirmed that the combination of both the grant aid scheme and the technical cooperation scheme to assist MOT was another example of JICA's assistance and our friendship. He reminded that in addition to such friendship, achievement of project purpose and all outputs under the project was also an important factor, which everyone must pursue. He continued by stating that the important topic in today's JCC meeting would be on Output 5 considered as the most challenging to achieve. He stated that he reiterated in other JCC meetings on importance of securing budgets on both road maintenance and disaster risk management measures. He expressed his appreciation that a representative from the Ministry of Finance (hereinafter referred to as "MOF"), Ms. Nazarova Risolat would be participating in the JCC meeting. He continued stating that the meeting would prove useful to her on understanding the project achievement to date as well as the expected achievement at the project completion stage. He stated that he was ready to assist her in any ways for her to establish a mechanism required.

- 4. The Chief Advisor of the JICA Experts Team Mr. Hiroshi Mita conducted presentation on achievements made as at the end of September 2019 and he confirmed the satisfactory progress to date, using the power point presentation, based on the progress report provided to all JCC members. His presentation was supported by presentation on the result of Project Monitoring Sheet Version 6 by Mr. Aqsakolov Ukumatsho. The result of project monitoring indicated that progress was 'satisfactory with no foreseeable issues on hand as at the end September 2019'.
- On comments and discussions, the following topics were raised by JCC members as follows:
 - Mr.Alovidin Anoyatshoev, the acting Chairperson stated that the project offered understanding on how 6 types of road disaster affected the road infrastructure at the target SETMs/SEHMs by technical transfer to the

counterparts. He stated further that the most important action in the future would be on spreading out the skills and knowledge obtained from the project to other colleagues for project sustainability.

- 2) Mr. Saifullo Qodirov, the newly appointed Project Manager commented that the outcome on Output 5 would be of vital importance to MOT and that cooperation between MOT and the MOF would be required for achieving the output. He stated that the road disaster in Tajikistan was of the permanent issue and not a temporary issue. He continued that as such the concept of disaster management system learnt under the project would need to be sustained after the project completion. He stated his hope that the MOF would cooperate to secure the regular budget for the road disaster prevention and he requested that Ms. Risolat Nazarova would report to and share the JCC materials with senior managers of MOF.
- 3) Mr. Hideki Tanabe, the Vice Chairperson stated that this project had 10 more months remaining for further action. He pointed out that we had already secured 2 essential factors such as information (knowledge) and human resources competent on road disaster management. He continued stating that one single factor lacking for sustainable road disaster management would be securing a necessary budget. He ended his comments by stating that now was the time to shift from the current disaster management system to the new cyclic management system.
- The JCC meeting ended with Mr. Alovidin Anoyatshoev, the acting Chairperson declaring that the following 2 topics approved with acceptance made by Mr. Hideki Tanabe, the Vice Chairperson.
 - 1) the achievement as of the end of September 2019 including the result of project monitoring of the same period by the Project Monitoring Sheet Version 6,
 - 2) the look ahead schedule for the next 10 months until the end of the Project.

The meeting ended at 13:00 PM on the same day.

Attachment 2: List of Attendees

Attachment 3: 7th JCC Meeting Photographs.

ATTACHMENT 2: LIST OF ATTENDEES

No.	NAME	ORGANIZATION	POSITION IN PROJECT	ATTENDANCE
1	Mr.RustamValizoda	Deputy Minister, MOT	Chairperson, Project Director	Absent
2	Mr. HidekiTanabe	Chief Representative, JICA Tajikistan Office	Vice Chairperson	Present
3	Mr.Alovidin Anoyatshoev	Head of Road Construction and Maintenance Department, MOT,	Member Deputy Project Director	Present (Acting Chairperson)
4	Mr. Saifullo Qodirov	Head of Department of International Cooperation, MOT,	Member, Project Manager	Present
5	Mr. Samad Salimov	Head of Hissor State Enterprise of Transport Management	Member Regional Manager	Present
6	Ms. Khojaroy Latifi	Head of Sughd State Enterprise of Transport Management	Member Regional Manager	Absent
7	Mr. Nuriddin Saidov	Head of Rasht State Enterprise of Transport Management	Member Regional Manager	Present
8	Mr. Ukumatshoh Aqsaqolov	Head of Economic Analysis and Forecasting Department, MOT	Member	Present
9	Mr. Jomoliddin Halimov	Civil Defense Specialist, MOT	Member	Absent
10	Mr.Olimjon Kholdorov	Deputy Director of Scientific Research, Design and Survey Institute	Member	Present
11	Ms. Naoko Kuwahara	Project Formulation Advisor, JICA Tajikistan Office	Member	Present
12	Mr. Mahmadov Shokirjon	Programmer Officer, JICA Tajikistan Office	Member	Present

Observers

13 Ms. Risolat Nazarova	Head of Unit of Main Department of Budget Policy in the sectors of
	Real Economy of the Ministry of Finance of the Republic of Tajikistan
14 Mr. Qudratullo Negmatov	Chief Specialist, RCU/RDMT Member
15 Mr. Salim Niyozov	Specialist, MPEU/RDMT Member
16 Mr. Burkhoniddin Sangakov	Chief Specialist, MPEU/RDMT Member
17 Mr. Muhamad Pirov	Design Institute/RDMT Member
18 Mr. Abdullo Khayrulloev	Design Institute/RDMT Member

19 Ms. Tavakkalova Oimniso Chief Engineer Rasht SETM

20 Mr. Mirzoali Mansurov Chief Engineer Sughd SETM

21 Mr. Ayubjon Miraminov Engineer Sughd SETM

22 Mr. Tagoymurod Gulov Chief Engineer Hissor SETM

23 Mr Ismoil Odinaev Head of Technical Production Hissor SETM

24 Mr. Zulfikor Haknazarov Specialist of IT Unit, MOT

Secretariat

Department of International Cooperation, MOT

Mr. Dilovar Olimov

JICA Experts Team

Mr. Hiroshi Mita

Mr. Masanori Tozawa

Mr. Seiji Ijichi

Mr. Daysuki Hajima

Mr. Ainiddin Boimurodzoda

Mr. Umedjon Shomirov

Mr. Khusaindzhon Yuldashev

Mr. Bekhruz Shomirov

The Project for Capacity Development for Road Disaster Management Проект усиления потенциала по предупреждению и ликвидации чрезвычайных ситуаций на автомобильных дорогах

ParticipantsofMeeting

Date/Дат	1/10 2019	77ce	plefing	
Venue/M	ecro, n	0.00	0	
No.	Name of Participants Ф.И.О.Участников	Authority Организация	Position Должность	Signature Подпись
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The Project for Capacity Development for Road Disaster Management Проект усиления потенциала по предупреждению и ликвидации чрезвычайных ситуаций на автомобильных дорогах

ParticipantsofMeeting

Date/Дата	1/10 2019	7 300	meeting	
Venue/Me	есто О 1 00		0	
No.	Name of Participants Ф.И.О.Участников	Authority Организация	Position Должность	Signature Подпись
1	Hideki Tomale	TICA	Chief Repres	、田趣田
2	Nacko Kuwaharo.	J100-	Project tormula	sol Mal
3	Shokingon Mahmaelo	2100	Senior frogram	Many
4	HIROSHI MITA	JICA EXPENTS TEAM	CHIEF ADVISOR	3055
5	Daisnike Hagiima	BXDERTS TEAM		87 427
6	Seiji Ljichi	TLAPERTS Team	expert	1910% 3/03
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8	Sehruz Shomirov		Coordinat Asis	// //
9	Yuldasher Hussen		D. Coordh Arsh	
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Attachment 3: 7th JCC Meeting Photographs













JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) MINISTRY OF TRANSPORT (MOT)

MINUTES OF MEETING FOR THE 8th JOINT COORDINATING COMMITTEE MEETING FOR

THE PROJECT FOR CAPACITY DEVELOPMENT FOR ROAD DISASTER MANAGEMENT, THE REPUBLIC OF TAJIKISTAN

21st of August, 2020 Dushanbe, Tajikistan

The 8th Joint Coordinating Committee (hereinafter referred to as "JCC") meeting on the "Project for Capacity Development for Road Disaster Management" (hereinafter referred to as "the Project") was held on 21st of August, 2020 at the Ministry of Transport (hereinafter referred to as "MOT") for approving 1) the achievement as at the end of July 2020 including the result of project monitoring of the same period and 2) the look ahead schedule for the next 7 months until the end of the Project. Detailed minutes of the meeting including the items mutually agreed by the JCC members are attached in Attachment 1.

Mr. Shujoat Sirojzoda

Chairperson,

Project Director

Deputy Minister,

Ministry of Transport

Mr. Hideki Tanabe

Vice Chairperson,

Chief Representative,

JICA Tajikistan Office

ATTACHMENT 1: DETAILS OF MEETING

- The 8th JCC Meeting was convened at 9:30 AM Dushanbe time by facilitator Mr. Dilavor Olimov, the secretariat member from Department of International Relations, MOT welcoming and thanking all participants for their attendance. He introduced all participants of the JCC members. 2 members from JICA Tokyo, 1 member of JICA Tajikistan Office in Japan, and 5 members of the JICA Experts Team participated in the meeting via the remote video conferencing system.
- 2. The opening speech was given by the acting Chairman Deputy Minister of Transport Ms. Siadmurodzoda Shoista (hereunder mentioned as the Acting Chairperson). On behalf of the Government of the Republic of Tajikistan and MOT, the Acting Chairman expressed sincere gratitude to the Government of Japan represented by JICA for the assistance provided to the development of the transport sector of the Republic of Tajikistan. The Acting Chairperson then explained the purpose of the meeting, which was to discuss the results of the achievement since the previous JCC meeting and then summarized the outline of the activities carried out by the JICA Experts Team since the commencement of the Project; such as trainings, seminars for engineers and specialists of SETMs and SEHMs of Hissor, Sughd and Rasht regions including the Design Institute (hereunder mentioned as the DI). The Acting Chairperson continued stating that the trainings provided all engineers and specialists involved to obtain knowledge in a short time, to independently conduct hazard evaluation, to collect information on road disasters, and to integrate into the Data Collection System. Thus, the Acting Chairperson assured that the acquired knowledge and experience would be disseminated to their colleagues in order to further enhance the knowledge, skills and capabilities of engineers and specialists of regional SETMs and SEHMs on road disaster management.

The Acting Chairperson added that pilot projects had been successfully and soundly implemented in Hissor and Sughd regions with new methods and technologies, which had provided opportunities for securing hands-on training to the participants. At the same time, within the framework of the Project, 2 units of rock breakers and 4 units of hand breakers were procured by JICA and transferred to Hissor and Rasht S ETMs for their further works and operations.

The Acting Chairperson concluded the speech by hoping the meeting would be as successful as previous meetings in achieving the goals ahead and re-expressed

- sincere gratefulness on behalf of MOT to the JICA Experts Team for the successful implementation of the Project.
- 3. Chief Representative of JICA Tajikistan Office and Vice Chairperson of JCC, Mr. Hideki Tanabe thanked all the participants. Mr. Tanabe mentioned that in the original schedule, this was supposed to be the last JCC Meeting. But as the project period was extended the final one would be held again during the end of the extended period. Mr. Tanabe stated that one of the biggest task for the MOT would be to identify the tasks completed against tasks remaining and to formulate a solid and justifiable plan that included proper budget allocation to perform the required action in the next fiscal year. Mr. Tanabe continued the speech by requesting participants for active discussion. Mr. Tanabe added that amid difficulties inflicted by COVID-19 pandemic the 8th JCC Meeting was being held as though similarly as in the past JCC Meetings based on the zero distance basis thanks to the recent technology development. Mr. Tanabe asked to use the technology effectively to further deepen the relation between JICA and MOT until the end of the Project.
- 4. The Chief Advisor of the JICA Experts Team Mr. Hiroshi Mita commenced the presentation by informing participants that the previous JCC meeting had been held in October 2019 and that he would be presenting the result of the achievements during the last 10 months since the previous JCC meeting. Mr. Mita told that the project progress report consisting of 200 pages that summarized all activities completed since the project commencement was provided to each participant in addition to this presentation. His presentation on achievements as at the end of July 2020 followed, pointing out the impact caused by COVID-19 Pandemic on the Project. He appreciated JICA for extending the project duration by 7 months in this respect. He confirmed based on the reprogrammed Detailed Plan of Operation attached of the satisfactory progress to date, using the power point presentation. His presentation was supported by presentation on the result of Project Monitoring Sheet Version 7 by Mr. Ozawa Seiji and Mr. Aqsakolov Ukumatsho. The result of project monitoring indicated that progress was 'satisfactory with no foreseeable issues on hand as at the end July 2020'.
- 5. Mr. Tomoshige from JICA Tokyo gave a brief self-introduction. He stated that he had met some participants today during the short-term training on bridge maintenance in Hokkaido. He expressed his appreciation for the cooperation and understanding under this challenging circumstances and he confirmed that the Project was proceeding

- 8. Closing remarks were given by Mr. Aqsaqolov Ukumatsho, Head of Economic Analysis and Forecast. In his remarks, Mr. Ukumatsho expressed gratitude to all the participants of the meeting, as well as to the JICA Experts Team for their presentation. He confided that the results of the Project would contribute to the development of the road sector of in the Republic of Tajikistan and further assured to JICA that the MOT would always closely cooperate with the JICA Experts Team for successfully and timely implementation of the Project.
- 9. Closing Remarks was also given by Mr. Tanabe. Mr. Tanabe first expressed sincere condolence to the deputy minister on the passing away of his father. Mr. Tanabe in his recent courtesy call confirmed that the Deputy Minister fully understood the importance of the Project. Mr. Tanabe then made an announcement about the end of his tenure in Tajikistan and said he had instruction from Tokyo HQ to go back to Japan several weeks ago. Mr. Tanabe then expressed sincere thanks and gratitude to all the members related to the Project both sitting here at the venue and those in Tokyo, including the project directors, project managers who might have changed during the three and half years, with MOT as an institution actively engaged on the Project. Mr. Tanabe explained that the involvement by DI was very important to disseminate the knowledge to the next generation.

Mr. Tanabe then thanked the members of the JICA Expert Team now present in Tokyo headed by Chief Advisor Mr. Mita. He pointed out that the issue of manuals/improvement plans proposed by Mr. Shokirjon was important. Mr. Tanabe then explained a) about the need to consider issues mentioned as comments on the non-targeted regions of the Project, human capacity and budgetary limitations, b) that not all regions could be covered in the Project, thus MOT needed to consider how the knowledge and experience be disseminated to these non-targeted regions, and c) that all those who took part in the trainings under the Project could train other non-targeted regions so long as proper budgetary allocation was secured. Mr. Tanabe therefore emphasized that budgetary Issue (Output 5) was the key factor for the success and sustainability of the Project. He continued stating that even though the

government of Tajikistan would be in a very harsh situation on 2021 national budget formulation and that it might not be possible to realize the new budget for disaster prevention measures in one single trial but we require to continue explaining the relevant ministry on the importance, without giving up.

Mr. Tanabe pointed out on the subject of data base that a) ADB, WB and EBRD were considering support for database management, b) JICA would support MOT in road disaster management and is considering for the next project, and c) the approach by donors might be different, but JICA would be ready to discuss with MOT on the integration of various database.

10. Mr. Ukumatsho in return to Mr. Tanabe's closing remarks, he assured he would convey condolences from Mr. Tanabe to the Deputy Minister. He then expressed gratitude for the continuous support during his tenure. He concluded the meeting by thanking all participants. The meeting ended at 12:00 PM on the same day.

Attachment 2: List of Attendees

Attachment 3: 8th JCC Meeting Photographs.

ATTACHMENT 2: LIST OF ATTENDEES

No.	NAME	ORGANIZATION	POSITION IN PROJECT	ATTENDANCE
1	Mr.Shujoat Sirojzoda	Deputy Minister, MOT	Chairperson, Project Director	Absent
2	Mr. HidekiTanabe	Chief Representative, JICA Tajikistan Office	Vice Chairperson	Present
3	Mr.Alovidin Anoyatshoev	Head of Road Construction and Maintenance Department, MOT,	Member Deputy Project Director	Absent
4	Mr. Saifullo Qodirov	Head of Department of International Cooperation, MOT,	Member, Project Manager	Absent
5	Mr. Samad Salimov	Head of Hissor State Enterprise of Transport Management	Member Regional Manager	Absent
6	Ms. Khojaroy Latifi	Head of Sughd State Enterprise of Transport Management	Member Regional Manager	Absent
7	Mr. Nuriddin Saidov	Head of Rasht State Enterprise of Transport Management	Member Regional Manager	Absent
8	Mr. Ukumatsho Aksakolov	Head of Economic Analysis and Forecasting Department, MOT	Member	Present
9	Mr. Jamoliddin Halimov	Civil Defense Specialist, MOT	Member	Absent
10	Mr.Olimjon Kholdorov	Deputy Director of Scientific Research, Design and Survey Institute	Member	Present
11	Ms. Naoko Kuwahara	Project Formulation Advisor, JICA Tajikistan Office	Member	Present
12	Mr. Mahmadov Shokirjon	Senior Program Officer, JICA Tajikistan Office	Member	Present

Observers

13 Mr. Firuz Tabarov Program Officer, JICA Tajikistan Office 14 Mr. Burkhoniddin Sangakov Head of MPEU, RCM/ RDMT Member 15 Mr. Muhamad Pirov Design Institute/RDMT Member

16 Ms. Tavakkalova Oimniso Chief Engineer Rasht SETM 17 Mr. Mirzoali Mansurov

Chief Engineer Sughd SETM 18 Mr. Tohir Solijonov

Engineer Sughd SETM 19 Mr. Tagoymurod Gulov

Chief Engineer Hissor SETM

The Project for Capacity Development for Road Disaster Management

Проект усиления потенциала по предупреждению и ликвидации

чрезвычайных ситуаций на автомобильных дорогах

Participants of Meeting

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No.	Name of Participants Ф.И.О. Участников	Authority Организация	Position Должность	Signature Подпись
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The Project for Capacity Development for Road Disaster Management
Проект усиления потенциала по предупреждению и ликвидации
чрезвычайных ситуаций на автомобильных дорогах
Participants of Meeting

Date/Дат		8 Torut	Coor Sunstin	Committee !
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No.	Name of Participants Ф.И.О. Участников	Authority Организация	Position Должность	Signature Подпись
1	Tanabe Hideki	JICA	Chief Representati	ve P
2	Shoringon Mahma	dor FICO-	Senior Propre	Olleger Al
3	Firuz Tabarov	JICA	Program Office	Associate -
4	Caugeynoggoga	N.T	304. leelert	Chronist
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ATTACHMENT 3: PHOTOGRAPHS













MINISTRY OF TRANSPORT (MOT) JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

MINUTES OF MEETING FOR THE FINAL (9th) JOINT COORDINATING COMMITTEE MEETING

FOR
THE PROJECT FOR CAPACITY DEVELOPMENT FOR ROAD DISASTER

MANAGEMENT, THE REPUBLIC OF TAJIKISTAN

17th of December, 2020 Dushanbe, Tajikistan

The Final (9th) Joint Coordinating Committee (hereinafter referred to as "JCC") meeting on the "Project for Capacity Development for Road Disaster Management" (hereinafter referred to as "the Project") was held on 17th of December, 2020 at the Ministry of Transport (hereinafter referred to as "MOT") for approving the achievement as at the end of November 2020 and for accepting the draft of the Project Completion Report. Detailed minutes of the meeting including the items mutually agreed by the JCC members are attached in Attachment 1.

Mr. Shujoat Sirojzoda

Chairperson,

Project Director

Deputy Minister,

Ministry of Transport

Mr. Muneo Takasaka

Vice Chairperson,

Chief Representative,

JICA Tajikistan Office

ATTACHMENT 1: DETAILS OF MEETING

- 1. The Final (9th) JCC Meeting was convened at 9:30 AM Dushanbe time by facilitator Mr. Sayfullo Qodirov, the Project Manager from Department of International Relation, MOT welcoming and thanking all participants for their attendance. He introduced all participants of the JCC members. Mr. Tomishige from JICA HQ, Ms. Kuwahara and Mr. Tabarov from JICA Tajikistan Office and 6 members of the JICA Experts Team participated in the meeting via the remote video conferencing system.
- 2. The opening speech was given by the Chairperson Deputy Minister of MOT Mr. Shujoat Sirojzoda (hereunder mentioned as the Chairperson). On behalf of the Government of the Republic of Tajikistan and MOT, the Chairperson expressed sincere gratitude to the Government of Japan represented by JICA for the assistance provided to the development of the transport sector of the Republic of Tajikistan. The Chairperson then explained on the Project; such as trainings and seminars for engineers and specialists of SETMs and SEHMs of Hissor, Sughd and Rash regions including the Design Institute (hereunder mentioned as the DI). The Chairperson continued stating that the trainings provided all engineers and specialists involved to strengthen their skills and knowledge on proper management of disaster prevention and disaster recovery. The Chairperson added that Pilot Projects had been successfully and soundly implemented in Ayni district, B. Gafurov district and Varzob disctrict with new methods and technologies, which had provided opportunities for securing hands-on training to the participants. At the same time, within the framework of the Project, 2 units of rock breakers and 4 units of hand breakers were procured by JICA and transferred to Hissor and Rasht SETMs for their daily works and operations. Also, 2 units of video conference systems were procured by JICA. The Chairperson concluded the speech by hoping the meeting would be as successful as previous meetings in achieving the goals ahead.
- 3. Chief Representative of JICA Tajikistan Office and Vice Chairperson of JCC, Mr. Muneo Takasaka mentioned that JICA considered the development of road sector as one of its important cooperation pillars in Tajikistan since ensuring smooth transportation was a key for the promotion of economic activities in the country. He added that he was pleased to understand that the C/Ps had been trained both in Tajikistan and Japan and that JICA hoped that the C/Ps would continue their activities in ensuring disaster prevention, mitigation and recovery in the long term.

He emphasized the importance of the budget planning component of the Project and that JICA hoped that MOT specialists had gained necessary knowledge and skills on creating budget items for road disaster prevention to enable the Government of Tajikistan to allocate the necessary budget for sustainable road disaster management. At the end of his remarks, he expressed sincere gratitude to MOT, DI and the JICA Experts Team for smooth and successful implementation of the Project.

- 4. The Chief Advisor of the JICA Experts Team Mr. Hiroshi Mita commenced the presentation by informing participants that the Project Progress Report consisting of over 200 pages that summarized all activities completed since the Project commencement and the draft of the Project Completion Report are culmination of efforts of both the C/Ps and the JICA Experts Team. His presentation on achievements as at the end of November 2020 followed using the power point presentation. He appreciated JICA for extending the Project duration by 7 months in this respect. He confirmed that the achievement obtained was quite remarkable.
- 5. Mr. Tomishige from JICA HQ expressed his appreciation for the cooperation and understanding under this challenging circumstance. He added that JICA expected their knowledge, skills and experience which was obtained in the Project would be maintained even after the completion of the Project.
- On comments and discussions, the following topics were raised by JCC members as follows.
 - 1) Mr. Nuriddin Saidov, Head of Rasht SETM stated that the JICA Experts Team provided opportunities to the engineers and specialists to improve and enhance their capabilities through various activities throughout the three-year Project. He added stating that although there was a COVID-19 pandemic they were fortunately able to continue and complete the Project without suspension with the support of JICA and JICA Experts Team. He emphasized that they were ready to continue collaboration with JICA for improvement of the transport sector of the Republic of Tajikistan.
 - 2) Mr. Salim Samadov, Head of Hissor SETM stated that the engineers and specialists were able to independently utilize the knowledge and skills acquired under the Project to their work as they actively participated in the Project. He then stated that specialists learned how to conduct disaster prevention with hazard evaluation, emergency disaster recovery work, and use of rain gauges. He added stating that by the actual on-site training by the

JICA Experts Team, they also learned how to manage rock breakers and hand breakers supplied by JICA. He added that 2 Pilot Projects were conducted in Varzob district to install gabions aside roads and that this installation was beneficial to the residents as road safety and the site condition nearby were improved. He assured that the knowledge and skills obtained under the Project would contribute to the future improvement of road safety and the development of transport sector of the Republic of Tajikistan.

- 3) Mr. Mirzoali Mansurov, Chief Engineer of Sughd SETM expressed his gratefulness to JICA for providing the opportunity to improve the capabilities of specialists in Sughd SETM through the Project. He stated that this Project was a very timely project for MOT and he also hoped that the Project Purpose and Overall Goal would be achieved successfully. He then also thanked for the provision of equipment by JICA, especially for the teleconferencing system introduced in Sughd SETM. He added that they wished to continue utilizing this system and future collaborate with the Japanese side.
- 4) Mr. Aksakolov, RDMT member and the Head of Economic Analysis and Forecasting Department expressed his thanks to the efforts of JICA and the JICA Experts Team for supporting the activities in the Project as the Outputs and Project Purpose were successfully achieved. He stated that the capacity of the C/Ps improved, especially the members of RDMT as RDMT tried best to support other Project participants. He was confident that RDMT would continue to work even after the Project completion to take the necessary action in response to road disasters. He then added that RDMT and the other C/Ps were in a position to share their knowledge and experience with SETMs in other regions not covered by the Project. He concluded stating that MOT was ready to collaborate closely with them and aim to achieve the Overall Goal.
- The session of Comments, Discussion and Acceptance was ended with approval by all JCC members on the following;
 - 1) the achievement as at the end of November 2020 and the remaining activities including the dissemination seminar to be held in February 2021,
 - 2) acceptance of the draft of the project completion report.
- 8. Mr. Shujoat Sirojzoda, Chairperson offered his last remark towards all

participants that MOT was confident that the achievements of the Project would contribute to the development of the transport sector of the Republic of Tajikistan. The Chairperson finally expressed his sincere gratitude on behalf of MOT to JICA and the JICA Experts Team for successful implementation and completion of the Project according to the plan and schedule in the required level.

9. Closing Remarks was also given by Mr. Takasaka. He confirmed that the Project was almost successfully completed, despite the occurrence of COVID-19 pandemic. He then expressed special thanks to MOT, the target SETM/SEHMs, the JICA Experts Team and all the related personnel under the Project. He added that JICA was confident that the C/Ps would continue the activities on road disaster management such as disaster prevention, mitigation and recovery work in the long term. He stated further that JICA also was committed to support these activities for ensuring smooth transportation network in Tajikistan. The Final (9th) JCC Meeting ended at 11:30 AM on the same day.

Attachment 2: List of Attendees

Attachment 3: 9th JCC Meeting Photographs

ATTACHMENT 2: LIST OF ATTENDEES

JCC Member

No.	NAME	ORGANIZATION	POSITION IN PROJECT	ATTENDANCE
1	Mr.Shujoat Sirojzoda	Deputy Minister, MOT	Chairperson, Project Director	Present
2	Mr. Muneo Takasaka	Chief Representative, ЛСА Tajikistan Office	Vice Chairperson	Present
3	Mr.Rustam Valizoda	Head of Road Construction and Maintenance Department, MOT,	Member Deputy Project Director	Absent
4	Mr. Saifullo Qodirov	Head of Department of International Cooperation, MOT,	Member, Project Manager	Present
5	Mr. Samad Salimov	Head of Hissor State Enterprise of Transport Management	Member Regional Manager	Present
6	Ms. Khojaroy Latifi	Head of Sughd State Enterprise of Transport Management	Member Regional Manager	Absent
7	Mr. Nuriddin Saidov	Head of Rasht State Enterprise of Transport Management	Member Regional Manager	Present
8	Mr. Ukumatshoh Aqsaqolov	Head of Economic Analysis and Forecasting Department, MOT	Member	Present
9	Mr. Jamoliddin Halimov	Civil Defense Specialist, MOT	Member	Absent
10	Mr.Olimjon Kholdorov	Deputy Director of Scientific Research, Design and Survey Institute	Member	Absent
11	Mr.Hiroyuki Tomishige	ЛСА HQ	Observer	Present
12	Ms. Naoko Kuwahara	Project Formulation Advisor, JICA Tajikistan Office	Member	Present
13	Mr. Mahmadov Shokirjon	Senior Programme Officer, JICA Tajikistan Office	Member	Present
14	Mr. Tabarov Firuz	Programme Officer, JICA Tajikistan Office	Observer	Present

Observers

15 Mr. Saidahmadov Abdulkhair Chief Engineer, Design Institute

16 Mr. Khukmron Khujamulloev Geologist, Design Institute

17 Mr. Burkhoniddin Sangakov Chief Specialist, MPEU/RDMT Member

18 Mr. Muhamad Pirov Design Institute/RDMT Member

19 Mr. Abdullo Khayrulloev Design Institute/RDMT Member

21 Mr. Abduaziz Sattorov

Specialist, Sughd SETM

22 Mr. Tagoymurod Gulov

Chief Engineer, Hissor SETM

23 Mr Ismoil Odinaev

Head of Technical Production Hissor SETM

24 Mr. Siroji Maksud

Specialist of IT Unit, MOT

Secretariat

Department of International Cooperation, MOT

Mr. Sayfullo Qodirov

JICA Experts Team

Mr. Hiroshi Mita

Mr. Robinson Shrestha

Mr. Masanori Tozawa

Mr. Toshiyuki Mori

Mr. Seiji Ozawa

Ms. Hitomi Iwamasa

Mr. Ainiddin Boimurodzoda

Mr. Umedjon Shomirov

Mr. Khusaindzhon Yuldashev

The Project for Capacity Development for Road Disaster Management Проект усиления потенциала по предупреждению и ликвидации чрезвычайных ситуаций на автомобильных дорогах Participants of Meeting

Date/Да	та 17. 12. 2020	G SI	toras fr	
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No.	Name of Participants Ф.И.О. Участников	Authority Организация	Position	Signature /
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The Project for Capacity Development for Road Disaster Management Проект усиления потенциала по предупреждению и ликвидации чрезвычайных ситуаций на автомобильных дорогах Participants of Meeting

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No.	Name of Participants Ф.И.О. Участников	Authority Организация	Position Должность	Signature Подпись
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ATTACHMENT 3: 9TH JCC MEETING PHOTOGRAPHS













TO CR of JICA TAJIKISTAN OFFICE

PROJECT MONITORING SHEET

Project Title: The Project for Capacity Development for Road Disaster Management

Version of the Sheet: Ver.1 (July 2017)

Name: Hiroshi Mita

Title: Chief Advisor

Submission Date: 30 June, 2017

I. Summary

1 Progress

1-1 Progress of Inputs

Inputs	Plan as of May 2017	Actual as of June 2017		
Experts	<u>Total MM : 82.55MM</u>	Total MM: 9.43MM(11.4%:rate of		
-	1) Chief Advisor / Road Disaster	latest total MM, 82.55MM)		
	Management	1) Chief Advisor / Road Disaster		
	2) Deputy Chief Advisor / Road	Management		
	Disaster Management 2	2) Deputy Chief Advisor / Road		
	3) Institution	Disaster Management 2		
	4) Disaster Recovery Measures	3) Institution		
	5) Disaster Prevention Measures 1	4) Disaster Recovery Measures		
	6) Disaster Prevention Measures 2	5) Disaster Prevention Measures 1		
	7) Hazrd Evaluation	6) Disaster Prevention Measures 2		
	8) Machineries and Equipment O&M	7) Hazrd Evaluation		
	9) Cost Estimation	8) Machineries and Equipment O&M		
	10) Database 1	9) Cost Estimation		
	11) Database 2	10) Database 1		
	12) Instrumentation Monitoring	11) Database 2		
	13) Project Monitoring / Japan Training	12) Instrumentation Monitoring		
	13) Troject Monitoring / Supun Truming	13) Project Monitoring / Japan Training		
Trainees Received	Training in Japan	(Future activity)		
Equipment	Equipment for Output2,3	Attachment-1		
Others	N/A	N/A		
Tajikistan side	Personnel	Personnel		
Operational Expenses	1. Project Director:	1. Project Director:		
Operational Expenses	Deputy Transport Minister, MOT	Deputy Transport Minister, MOT		
	2. Deputy Project Director:	2. Deputy Project Director:		
	Head of RCM, MOT	Head of RCM, MOT		
	3. Project Manager:	3. Project Manager:		
	Head of International Relation	Head of International Relation		
	Dept. MOT	Dept. MOT		
	4. Regional Managers :	4. Regional Managers:		
	Heads of the target SETMs	Heads of the target SETMs		
	5. Relevant Staff of MOT	5. Relevant Staff of MOT		
	6. Relevant Staff of DI	6. Relevant Staff of DI		
	7. Relevant staff of the target	7. Relevant staff of the target		
	SETMs/SEHMs:	SETMs/SEHMs:		
	8. Other personnel mutually agreed	8. Other personnel mutually agreed		
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	necessary for the implementation		necessary for the implementation
	of the Project		of the Project
2.	Office spaces for the Project in the	2.	Office spaces for the Project in
	building of MOT, Hissar and Sogd		the building of MOT, Hissar and
	SETMs 'it h office furniture and		Sogd SETMs 'i th office furniture
	utilities such as internet		and utilities such as internet
	connectivity, telephone line,		connectivity, telephone line,
	electricity, etc.		electricity, etc.
tzoca	l'o sts	tzoca	al 'o sts
1.	Cost for installation, operation and	1.	Cost for installation, operation and
	maintenance of the provided		maintenance of the provided
	equipment,		equipment,
2.	Administration and operational	2.	Administration and operational
	costs, including fuel costs, and		costs, including fuel costs, and
	materials for prevention / recovery		materials for prevention / recovery
	'o rks. Meal allo'a nces for		'o rks. Meal allo'a nces for
	SETMs/SEHMs to participate in		SETMs/SEHMs to participate in
	training drills. Prevention /		training drills. Prevention /
	recovery 'orks		recovery ' orks

1-2 Progress of Acti, ities

Progress of activities is indicated in Monitoring Sheet Form 3-2 (PDM) and Form 3-3 $\mbox{\&PO}$).

1-3 Achie ement of Output

Outp	out/Indicators	Achie	vement	Major Results	Status ¹
		(3)		
		Plan	Actual		
Eu	tput31:				
803	ad d ₄ saster F ana4e	F ent s	structu	re of MET and the target 4HTMs34HT3Ms 45	
stre	en4t4ened.				
1a.	3 y Jun 2017, a report on current disaster management relevant to MOT and the target SETMs/SEHMs is developed	100	100	3 ased on collection of the most recent data on road disaster management and ensuing intervie's 'ith the C/Ps in charge, revie' 'as conducted by the Experts and the current road disaster management report' as compiled by the end of June.	OT
1b.	y Jul 2017, roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM(RD	70	70	Hearings and discussions among Experts, National Staff and RDMT members are being implemented.	OT

¹ OT: On Time, SFT: Scheduled for later, DL: Delay

1	MT) is clarified.				
1.0	,	0	0	N/A	CET
1C.	y the end of the	0	0	N/A	SFT
	Project, t3? of				
	members of RDMT				
	are able to support				
	SETMs/SEHMs				
	according to their				
	respective roles and				
	responsibilities.				
1.1	y the end of the	0	0	N/A	SFT
Tu.	Project, an		0	11/11	51 1
	improvement plan				
	of disaster				
	management				
	structure of MOT				
	and the target				
	SETMs/SEHMs,				
	including				
	institutionalization				
	od RDMT, is				
	approved by MOT				
£ 111	tput32:	'	'		
		N +44	taraet	4HTMs³4HBMs are 4 proKed t4rou44 standard4	katom
	y Dec 2017,	30	30	Data collection by National Staff is to be	OT
Za.	a road disaster	30	30	implemented.	01
				impiemenea.	
	recovery manual for				
	SETM/SEHM/RRT				
	is developed				
2b.	tz? of the training	0	0	N/A	SFT
	participants from all				
	target				
	SETMs/SEHMs				
	passes the				
	post-training test on				
	disaster recovery	1	1	1	
	· · J				
	o rks				
2c	'o rks tx? of the trainess	0	0	N/A	SFT
2c.	tz? of the trainess	0	0	N/A	SFT
2c.	tʒ3 of the trainess from all target	0	0	N/A	SFT
2c.	t33 of the trainess from all target SETMs/SEHMs	0	0	N/A	SFT
2c.	t33 of the trainess from all target SETMs/SEHMs passes the post-drill	0	0	N/A	SFT
2c.	tʒ3 of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster	0	0	N/A	SFT
2c.	t33 of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery orks for	0	0	N/A	SFT
	t3 of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery ' orks for each job category				
	t33 of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery orks for each job category Disaster recovery	0	0	N/A	SFT
	tʒ3 of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery ' orks for each job category Disaster recovery 'o rks in the drills				
	tʒ3 of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery ' orks for each job category Disaster recovery 'o rks in the drills are planned and				
	tʒ3 of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery ' orks for each job category Disaster recovery 'o rks in the drills				
	tʒ3 of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery ' orks for each job category Disaster recovery 'o rks in the drills are planned and				
	tʒ3 of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery ' orks for each job category Disaster recovery 'o rks in the drills are planned and implemented by all				
	t33 of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery 'orks for each job category Disaster recovery 'orks in the drills are planned and implemented by all target SETMs/SEHMs				
	tʒ3 of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery 'orks for each job category Disaster recovery 'orks in the drills are planned and implemented by all target SETMs/SEHMs according to the				
2d.	tʒ3 of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery 'orks for each job category Disaster recovery 'o rks in the drills are planned and implemented by all target SETMs/SEHMs according to the manual	0	0	N/A	SFT
2d.	tʒ3 of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery 'orks for each job category Disaster recovery 'o rks in the drills are planned and implemented by all target SETMs/SEHMs according to the manual Disaster recovery				
2d.	tʒ3 of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery 'orks for each job category Disaster recovery 'o rks in the drills are planned and implemented by all target SETMs/SEHMs according to the manual Disaster recovery 'orks at the actual	0	0	N/A	SFT
2d.	tʒ3 of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery 'orks for each job category Disaster recovery 'o rks in the drills are planned and implemented by all target SETMs/SEHMs according to the manual Disaster recovery	0	0	N/A	SFT

2f.	implemented by all relevant target SETMs/STHMs according to the manual yether yether by the end of the Project, the finalized manual is	0	0	N/A	SFT
E u	approved by MOT tput3::				
Pro	cess of locally adapta	a Die ro	ad d ₄ sas	ter preKent40n 4 sesta I 4 sted at t4e tar4et 4 HTMs3.	4 ӇЂМs
3a.	3 y Oct. 2017, a road disaster prevention manual for SETM/SEHM is developed	20	20	Decided the content of the manual concerning hazard assessment and preventive maintenance measures, and started the description.	OT
	t33 of the training participants from all target SETMs/SEHMs passes the post-training test on hazard evaluation and locally adaptable prevention measures each	0	0	The training is scheduled to be implemented from September through October, 2017. Preparation started.	OT
3c.	Hazard evaluation is conducted at least t' ice by all target SETM/SEHM for 10 target sections in all target SETMs according to the manual	0	0	3 ased on the results of the site visit, the target section 'as decided in the Hissor SETM pipe (4 sections) and in the Sughd SETM pipe (4 sections).	OT
	c ocally adaptable prevention measures are planned by all target SETMs for 4 priority sites in Hissar and Soghd SEE Ms according to the manual.	0	0	N/A	SFT
3e.	c ocally adaptable prevention measures are implemented by 4 target SEHMs at 4 priority site in Hissar and Soghd SETMs according	0	0	N/A	SFT

	to the manual				
3f.	tʒ? of the	0	0	N/A	SFT
011	observers from the				
	other 22 SEHMs				
	passes the				
	post-observation				
	test on				
	implementation				
3 0	³ y Mar. 2020,	0	0	N/A	SFT
Jg.	future disaster			IVII	51 1
	prevention plans				
	are developed for				
	10 target sections				
	by all target SETMs				
2 h	y the end of the	0	0	N/A	SFT
311.	Project, the	0	0	IV/A	SIT
	finalized manuals				
	is approved by				
	MOT				
C					
	tput34.:	dimete	w E ama	see set (A1) s at alaah far MCT and the tarret A1	ITMa
				14eFe nt(A) & aKalaDe for ME T and the tar4et d ecoKery and preKent4on	J I IVIS
		1	10		ОТ
4 a.	³ y Dec 2017,	10	10	Continuation of data collection by Counterparts and	O1
	road disaster			National Staff.	
	management				
	database is				
	developed				
	according to the				
	design developed				
41	through the Project	1.0	1.0		0.00
4b.	³ y Dec 2017,	10	10	Continuation of data collection by Counterparts and	OT
	road disaster			National Staff.	
	management				
	database manuals				
	for users and				
	administrator are				
	developed				
4c.	3	0	0	The training is scheduled to be implemented from	OT
	participants from			November through December, 2017.	
	MOT and the target				
	SETMs passes the				
	post-training test				
	on database use.				
4d.	³ y Mar 2019,	0	0	N/A	SFT
	the database is				
	released to MOT				
	and the target				
	SETMs				
4e.	From 2019, a	0	0	N/A	SFT
	simple disaster				
	management report				
	is submitted to				

r				T	
	nior management				
of	MOT once a				
ye					
_	y the end of the	0	0	N/A	SFT
	oject, the				
	nalized manual is				
ap	proved by MOT				
E utpu	₿ 5.:				
ME T 	and the target 4H	ΓMs ³ 4F	JBMs a	are capa De of prepar4n4 Oud4et proposal for road	dsaster
preKen	1 t40n				
5a. ⊰ y	y Mar 2020,	0	0	N/A	SFT
	report of a pilot				
	ıdy on				
	st-effectiveness				
	the locally				
	aptable disaster				
	evention is				
	eveloped				
	y Jun 2020,	0	0	N/A	SFT
	dget proposal for		Ü		
	cally adaptable				
	saster prevention				
	easures are				
	epared by all				
	rget SETM and				
	OT as part of the				
re	gular budget for				
FS	2021 based on				
	e future				
	evelopment plans				
	y the end of the	0	0	N/A	SFT
		U	U	IN/A	21.1
	oject, at least one				
	oject proposal for				
	rge-scale disaster				
	evention of the				
	iority site(s) and				
	idies for				
	evention is				
	bmitted by MOT				
	international				
	onor(s) for				
	nding, utilizing				
	e results of				
Oı	utput 3 and 4				

1-4 Achie, ement of the ProAAct Purpose

Proje	ct Purpose/Indicators	Achievement	Situation	Expected Time
		(3)		of achievement
Pros	ect Purpose:			
'a pa	caty of ME T and the	tar4et 4HTM	s ³ 4 円長Ms for effect4.kk road d4saster F ana4e	Fe nt 45
4Fpr	oKed.			

$\overline{}$				
a.	- 1	0	N/A	SFT
	Project, tz? of results			
	of the disaster			
	recovery 'orks by the			
	target			
	SETMs/SEHMs,			
	according to the			
	disaster recovery			
	manual developed			
	through the Project,			
	meet requirements of			
	time, cost, quality,			
	and safety specified			
	in the plans			
b.	³ y the end of the	0	N/A	SFT
	Project, t33 of the			
	results of the hazard			
	evaluation by all			
	target SEHMs,			
	according to the			
	disaster prevention			
	manual developed			
	through the Project, is			
	assessed accurate by			
	the Japanese Expert			
	Team	0	N/A	SFT
c.	•	0	IN/A	511
	disaster prevention			
	measures h2 by			
	Hissor and Sughd			
	SETM and 2 target			
	SEHMs, according to			
	the manual developed			
	through the Project,			
	meet requirements of			
	time, cost, quality and			
	safety specified in the			
	plans.			
d.	•	0	N/A	SFT
".	Project, budget	V		~
	request for disaster			
	prevention in the			
\prod				
\prod	target SETMs for FE			
	2021 is submitted to			
	Ministry of Finance			
\prod	(MOF) as part of the			
🖳	regular budget			

1-F Achie, ement of the O, eraæ@aoaæ

Overall Boal/Indicators	Achievement	Situation	Expected Time	l
	(3)		of achievement	ı

60		ted 40 t4e 40 t	ternat40nal and Ee pu9l4can Eo ads 4n t	4e tar4et
4 Н	All disaster recovery orks by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project	0	N/A	SFT
b.	disaster prevention measures are planned and / or implemented at least t3 (£3) priority sites in the target SETMs according to the disaster prevention manual developed through the Project	0	N/A	SFT
c.	From Aug 2020 to Jul 2023 the average duration required for road re-opening per disaster handled by the target SETMs is decreased by tʒ3 compared 'i th the same before the Project (from tʒ to tʒ)	0	N/A	SFT

⁽g1) Data necessary for road disaster management includes disaster record, results of hazard evaluation, prevention measures, and recovery 'orks among others.

1-L Changes of Risks and Actions for Mitigation

N/A

1-1 Progress of Actions undertaPen coy JICA

N/A

1-OProgress of Actions undertaPen coy Go . of TaAPistan

N/A

1-o Progress of En, ironmentaæand SociaæConsiderations & applicacæa)e

N/A

1-11 Progress of Considerations on Gender Pace Ouilding Powerly Reduction af

⁽ε2) 4 nderlined deadlines in the indicators are set based on the schedule of the Tentative PO. They shall be modified according to the Detailed PO to be prepared in the beginning of the Project for approval by the first JCC.

⁽ε3) Target values (τ3) of the indicators shall be filed based on the results of the baseline survey, 4 hich shall be revie' ed and approved by the 2nd JCC.

applicable)

N/A

1-11 Other remarPaote/consideracoeaissues reaaætd'affect to the proAAct such as other JICAKsproAActsk activities of counterpartsk other donorsk private sectorsk NGOs etc.)

N/A

- 2 Deaayof or or P Scheduae and Lor Poocaems (if any)
- 2-1 Detail

N/A

2-2 Cause

N/A

2-3 Action to one a Pen

N/A

2-4 Roæesof Responsible Persons Organizations (JICAk Go. of TaAkistanketc.)

N/A

3 Modification of the ProAtot Impæmentation Pæan

3-1 PO

PO of the project is prepared. It is attached as Monitoring Sheet Form 3-3.

3-2 Other modifications on detailed impæmentation pæan

(Remarks: The amendment of R/D and PDM (title of the project, duration, project site(s), target group(s), implementation structure, overall goal, project purpose, outputs, activities, and input) should be authorized by JICA HDQs. If the project team deems it necessary to modify any part of R/D and PDM, the team may propose the draft.)

N/A

- 4. Measures underta Pen coy Go, of Ta A Pristan or Project Team to Ensure the Sustaina colity of Project after the Pro A Compaction
- 4-1 Financial Sustainability

N/A

4.-2 Technicaæ Satainacility

N/A

4-3 Institutional Sustainability

N/A.

II. Pro Act Monitoring Sheet I k II as Attached

<u>4 ersion 1</u> Dated, 30, June, 2017

Prosect Mongorgy 44eet I (gekagn of Prosect yesgn Matra)

Project Title: The Project for Capacity Development for Road Disaster Management

Implementing Agency: Ministry of Transport (MOT)

Target Fgroup: MOT, Hissor SETM and its 9 SEHMs, Sughd SETM and 14 SEHMs, and Rasht SEHM and its 3 SEHMs (Nurobod, Rasht, and Ta-jikobod)

Period of Project: April 2017 - July 2020 (in Tajikistan)

Project Site: International and Republican roads in Hissor and Sughd SETMs as 'ell as Nurobod, Rasht and Tajikobod SEHMs in Rasht SETM

ger arts							
Ac4gKer ent	(Future activity)	(Future activity)	(Future activity)	(Future activity)	(Future activity)	(Future activity)	(Future activity)
Important Assumption				A. Policy for disaster management is not discontinued. }. Political instability/economic crisis/serious natural	affe o not c in appro		
Means of 4 erification	a-c Hazard evaluation disaster prevention & recovery sheets, in the Database			Assessment report Prevention sheet Recovery sheet Data of budget request			
Objectively 4 erifiable Indicators	a. All disaster recovery ' orks by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project	b. ½ y Jul 2023(g2) disaster prevention measures are planned and / or implemented at least tg(g3) priority sites in the target SETMs according to the disaster prevention manual developed through the Project	c. From Aug 2020 to Jul 2023 the average duration required for road re-opening per disaster handled by the target SETMs is decreased by the compared ith the same before the Project (from the to the total).	a. 'y the end of the Project, tg? of results of the disaster recovery' orks by the target SETMs/SEHMs, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans	b. 3y the end of the Project, tg3 of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the Japanese Expert Team	c. tg? of results of the disaster prevention measures h2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality and safety specified in the plans.	d. 'y the end of the Project, budget request for disaster prevention in the target SETMs for FE 2021 is submitted to Ministry of Finance (MOF) as Part of the regular budget
Narrative Summary	Overall Boal Road disasters are mitigated in the International and Republican Roads in the target SETMs/SEHMs		-	Project Purpose Capacity of MOT and the target SETMs/SEHMs for effective road disaster management is improved.	1-		

					PM Form 3-2 M	Monitoring Sheet Summary
Output Output-1: Road disaster management structure of MOT and the target SETMs/SEHMs is strengthened.	1a.	a report on current disaster management relevant to MOT and the target SETMs/SEHMs is developed	la. Date of reportlb. Approval of JCClc. Joint revie' based on individual capacity devl	A. Staff of MOT and the target SETMs/SEHMs trained through the Project do not	The report 'as compiled by the end of June.	
	1b.	y Jul 2017, roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM(RDMT) is clarified.	plan 1d. Official approval document		Hearings and discussions among Experts, National Staff and RDMT members are being implemented.	
	1c.	⁵ y the end of the Project, t ₃ of members of RDMT are able to support SETMs/SEHMs according to their respective roles and responsibilities.			(Future activity)	
	1d.	y the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs, including institutionalization od RDMT, is approved by MOT			(Future activity)	
Output-2: Road disaster recoveries by the target SETMs/SEHMs are	2a.	3 y Dec 2017, a road disaster recovery manual for SETM/SEHM/RRT is developed	2a. Acceptance letter2b. Test results2c. Ditto		Data collection by National Staff is to be implemented.	
improved through standardization	2b.	tg of the training participants from all target SETMs/SEHMs passes the post-training test on disaster recovery 'orks	2d 4, e Joint revie of the checklist		(Future activity)	
	2c.	tg3 of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery orks for each job category	2e Approval letter		(Future activity)	
	2d.	Disaster recovery 'orks in the drills are planned and implemented by all target SETMs/SEHMs according to the manual			(Future activity)	
	2e.	Disaster recovery ' orks at the actual disaster sites are planned and implemented by all relevant target SETMs/STHMs according to the manual			(Future activity)	
	2f.	y the end of the Project, the finalized manual is approved by MOT			(Future activity)	
Output-3.: Process of locally adaptable road disaster prevention is established at the target SETMs/SEHMs	3a.	³ y Oct. 2017, a road disaster prevention manual for SETM/SEHM is developed	3a. Acceptance letter 3b. Test results 3c 4 e Joint revie' of the		Decided the content of the manual concerning hazard assessment and preventive maintenance measures and started the description.	
	36.	tg of the training participants from all target SETMs/SEHMs passes the post-training test on hazard evaluation and locally adaptable prevention measures each	checklist 3f Test results 3g Approval letter 3h ditto		The training is scheduled to be implemented from September through October, 2017 Preparation started.	
	3с.	Hazard evaluation is conducted at least t' ice by all target SETM/SEHM for 10 target sections in all target SETMs according to the manual			lase d on the results of the site visit, the target section as decided in the Hissor SETM pipe (4 sections) and in the Suphd SETM pine (4 sections).	
	3d.	coally adaptable prevention measures are			(Future activity)	

PM Form 3-2 Monitoring Sheet Summary (Future activity) the tth, Proposals submitted Acceptance letter 3 udget document Acceptance letter Approval letter Released date Comparison **Fest results** design Report 4d. 4e. 4f. 4a. 5a. 5b. 5c. 4b. 4c. of the locally adaptable disaster prevention is .s developed according to the design developed road disaster management database manuals proposal for large-scale disaster prevention of the priority site(s) and studies for prevention is planned by all target SETMs for 4 priority sites in Hissar and Soghd SEE Ms according to the cocally adaptable prevention measures are implemented by 4 target SEHMs at 4 priority site in Hissar and Soghd SETMs according to tg of the observers from the other 22 SEHMs on future disaster prevention plans are developed y the end of the Project, the finalized manuals tg of the training participants from MOT and the target SETMs passes the post-training test the database is released to MOT and the target From 2019, a simple disaster management report is submitted to senior management of a report of a pilot study on cost-effectiveness budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of the regular budget 3 y the end of the Project, at least one project submitted by MOT to international donor(s) for y the end of the Project, the finalized manual for FE 2021 based on the future development funding, utilizing the results of Output 3 and 4 database test for 10 target sections by all target SETMs for users and administrator are developed post-observation management is approved by MOT is approved by MOT through the Project MOT once a year implementation on database use. the road disaster ³ y Mar. 2020, ³ y Dec 2017, ³ y Mar 2019, ³ y Mar 2020, ³ y Dec 2017, ³ y Jun 2020, the manual developed passes SETMS 36 4b. չ Տ 4e. 5d. 5e. 3e. 3f. 3h. 4a. 4d. 5a. 4f. preparing budget proposal for road management is available for MOT preparation and disaster recovery and the target SETMs for budget Data necessary for road disaster SETMs/SEHMs are capable of oks and prevention MOT and the target disaster prevention Output-4.: Output-5.:

Activities	Inputs	uts	Important Assumption
8 utput 1:	The Japanese Side	The Tajik Side	A. Natural disaster/political instability economic crisis that affect
E oad d4.8ster F anager ent structure of MET and t4e target 4HTMs4HRMs & stren4t4ened.	target Japanese Hi perts	<u>Personnel</u>	the project activities do not occur Security situation of Taiikistan 'hich limits the activities of
1-1. Classify the target disasters through collection and analysis of the past disaster records	1. 5. 6		
1-2. Revie' organizational and technical aspects of current disaster management relevant to MOT and the target SETMs/SEHMs, including their communication and one disaster Decorate.	disaster 3. Road Disaster Recovery 5.EHMs, 3. Road Disaster Prevention 4. Hazard Evaluation	 Deputy Project Director Head of RCM, MOT Project Manager 	PPre-Conditionss
	· v. v		A. Tentative list of the Project Staff, including Disaster
Management Taskforce supporting SETM/SEHM (1	o	4. Regional Managers	Internet connection is established at each target SETM
	Ocal Administrative (Other experts mutual)	5. Relevant Staff of MOT Relevant craft of DI	
1-5. Develop an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs based on the feedbacks from the project activities for approval by MOT.	rructure HOupr ent edbacks 1. Equipment for disaster recovery and	SETMS/SEHMS 8. Other personnel mutually agreed upon as necessary	issues & counter measures
Eutput 2:	prevention 2. Hard' are and soft' are for database		
E oan agaster reconstgs by the target hijtris hijs. 4Fproféd t4rou44 standard4at400	3.	id in and hac44 its	
2-1. Examine locally adaptable disaster recovery orks based on the current state revie (Activity 12)	4.	 and, building and facilities necessary for the implementation of 	
2-2. Develop a disaster recovery manual for SETM/SEHM and RRT, including action for preparedness. hich is used for Activity	5.	the Project 2. Office spaces for the Project in the	
	a rning 6. Other equipment mutually agreed upon	building of MOI, Hissar and Soghd SETMs ' ith office furniture and	
2-3. Conduct trainings on disaster recovery orks for all target SETMs/SEHMs and MOT (i.e. action for preparedness, survey	5	(A)	
selection of 'orks, design, cost estimate, supervision, disaster	disaster Traquad of the Tayl Personnel 4n Japan	telephone line, electricity, etc.	
2-4. Conduct on -site drills for simulated disaster recovery orks for		gocal osts	
	tgocal costs	1. Cost for installation, operation and	
2-5. Plan and implement disaster recovery orks for the disaster occurred in any target SEHMs by the relevant SEHMs/SETMs	<u> </u>	maintenance of the provided	
2-6. 4p date and finalize the manual, reflecting the feedbacks from Act. 2.3-2.5		2. Administration and operational costs, including find costs and materials for	
iners for Disaster Recovery from Ms	recover	niclidating ruel costs, and materials for prevention/recovery orks, Meal allo, ances for SFTMs/SFHMs to	
Eutput 3:		participate in training, drills,	
Process of 84 Fple road d4 ster prekentan 4 sesta 34 sed at t4e tarqet 4 HTMs 4 HRMs	46	prevention/recovery orks	
3-1. Examine hazard evaluation methods and locally adaptable prevention measures based on the current revie* (Activity 1.2)	(2)		
3-2. Develop a road disaster prevention manual for SETM/SEHM.	HM.		
5-5. Conduct trainings on hazard evaluation to all target SETMs/SEHMs and MOT (i.e. screening, selection od	,		
	n sheet)		
3-4. Select the target sections for hazard evaluation in each SETM	31 M		

	PM Form 3-2 Monitoring Sheet Summary
3-5. Conduct hazard evaluation at the target sections by all target	
3-6. Identify priority sites in the target sections based on the	
3-7. Develop a future disaster prevention plan for each target section	
5-8. Organize trainings on locally adaptable disaster prevention measures to all target TMc/HMc (i.e. calection prevention	
measures to an target times this concern, provention measure sheet monitoring for simple early 'arning) (in Hissor	
and Sughd SETMs)	
3-9. Plan and implement locally adaptable prevention measures h1 &	
h2 on pilot basis at the priority sites in the target sections	
selected in the first year (in Hissor and Sughd SETMs) by the	
relevant target SETMs/SEHMs	
b. Design	
c. ³u dget preparation	
d. Supervision	
e. Prevention measure sheet	
3-10. 4p date and finalize the manual, reflecting feedbacks from	
Activities 3.3-3.9	
3-11. Certify Trainers for Disaster Prevention from the target SETMs/SFTMs	
Eutput 4:	
avata necessary for road dasster F angaer ent asaloda De for	
ME T and the target HTMs for Judget preparaton and danster	
recokey o ols and prekatan	
4-1. Develop a plan for road disaster management database	
4-3. Develop road disaster management database manuals for users	
(i.e. MOT and the target SETMs) and administrator, 'hich are	
4-4. Conduct trainings on database use for MOT and all target	
SETIMS (1.e. collection, input, compilation, analysis and	
4-5. Collect data of disaster recovery at all target SETIMS in 2017 as	
4-6. Collect data necessary for disaster management from the target SFHMs (i.e. disaster recovery sheets hazard evaluation sheets	
end prevention measure sheets)	
4-7. Digitalize the data collected from the target SEHMs by the	
4-8. Integrate the digitized data submitted by the target SETMs into	
4-9. Release the database to MOT and all target SETMs	
4-10. Develop simple annual road disaster management report for	
senior management of MOT	
4-11. 4 pdate and finalize the database design and the manuals, reflecting feedbacks from the database users	
E utput 5:	
ME T and tse target 4 HFMss4 HBMs are capa Die of preparsing Dudget proposal for road desaster prefentan	
1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	

disaster prevention measures at the target sections selected in the first year underOutput3, using simple hazard location maps 5-2. Create a budget item for disaster prevention in the regular budget of SETM/SEHM/MOT 5-3. Prepare a budget for locally adaptable disaster prevention for the priority sites identified under Output 3 by all target SETMs and MOT, utilizing the results of Output 3 &4 5-4. Develop project proposal(s) on large-scale prevention measures for the priority site(s) in the target SETMs/SEHMs, and studies for prevention measures for funding by international donor(s) as needed, utilizing the results of Output 3&4 donor(s) as needed, utilizing the results of Output 3&4						
disaster prevention measur the first year underOutput3 Create a budget item for di budget of SETM/SEHM/N i-3. Prepare a budget for locall priority sites identified unc MOT, utilizing the results. A. Develop project proposal(s) for the priority site(s) in th hich cannot be handled b studies for prevention mea donor(s) as needed, utilizing	es at the target sections selected in, , using simple hazard location maps	saster prevention in the regular	y adaptable disaster prevention for the ler Output 3 by all target SETMs and of Output 3&4	s) on large-scale prevention measures e target section(s) under output3,	y the target SETMs/SEHMs, and sures for funding by international	g the results of Output 3&4
	5-1. Plan and implement a pilot study on cost effectiveness of simple disaster prevention measures at the target sections selected in the first year underOutput3, using simple hazard location maps	5-2. Create a budget item for disbudget of SETM/SEHM/MG	5-3. Prepare a budget for locally priority sites identified unde MOT, utilizing the results of	5-4. Develop project proposal(s) for the priority site(s) in the	' hich cannot be handled by studies for prevention measu	donor(s) as needed, utilizing

Project Title: The Project for Capacity Development for Road Disaster Management in the Republic of Tajikistan Form 3-3 Project Monitoring Sheet (Plan of Operation)

Dated 30, June, 2017

Version 1

lssue Plan 2. Deputy Chief Advisor/Road Disaster Management 2 1g. Interpreter/ Bub Project Coordinator (1) 2. Deputy Chief AdvisorARoad Disaster Learn about road disaster management 15. Interpreter/ Bub Project Coordinator (2) ... 16. Interpreter/Plub Project Coordinator (3) 13. Project Monitoring № apan Training 13. Project Monitoring Adapan Training Machineries and akuipment OaM 6. Disaster Prevention Measures 2 5. Disaster Prevention Measures 1 technology in Japan In-country/Third country Training Prevision by the adeperts Team Expert (in Tajikistan)

1. Chief AdvisorARoad Disaster Disaster Recovery Measures 1. Chief AdvisorARoad Disaster 12. Instrumentation Monitoring . Hakard avaluation 2. Prevision by JICA 1. Cost aestimation Cost astimation **Training in Japan** Expert (in Japan) 10. Database 1 11. Database 2 11. Database 2 Management 2 Management 3. Institution N¥A nputs

	Voor	2041	41,0		2001		adianos de la constitución de la		Other Major Ippute	Analysis of the Analysis of th	legip a
Activities	9	1107	Φ11/7	A 11.7	1202	Responsible	Person Implementor	Japanese	Ottrer Major Inputs	- Remarks Achi	Achievem Counterm
	Month 1	1 2 3 4 F L 1 0 0 11 11 12	12 1 2 3 4 F L 1 0 0 11	⊕ 11,1112 1 2 3 4 F L 1 ⊕ ⊕ 11,1112 1	1 2 3 4 F L 1 0 0 11 11	12 Olg (1 g)iry (T	ajiK) strajny	Silochus	Japan TajiK	SHO	easures
Output 1IRoad disaster management structure of MOT and the≀target SETMs'⊾ÆHMs is strengthened	ructure o	of MOT and the target SETM:	s'∟ŒHMs is strengthened.			TOM TOM	Head of RCM	Chief Advisor (CA)			
Classify target disasters through collection 1.1 and analysis of the past disaster records	Plan					RCM)ANOT HE	Head of Road MParP Disater Mgt	_	Target TMs/MMs		
	Actual						ARDMT(RC M, DI)				
Revie-P organikational and technical 1.2 aspects of current state of disaster management relevant to MOT and the	Plan					RCMAMO HE	Head of ditto MParP	Recov. M, Hakard ava, Prev M,			
target SarTMs./BarHMs, including their communication net-brik for disaster recovery called Rapid Response Team (RPT)	Actual										
Clarify the roles and responsibilities of Road 1.3 Disaster Management TasKbrce 1.9 Disaster Management TasKbrce	d Plan					RCMAMD H	Head of ditto	ditto			
MOT and its members as Pell as their capacity development plans	Actual										
Support the target Sa/TMsA/a/HMs through the project activities according to the	Plan					RCMAMD HE	Head of ditto RCM	ditto			
clarified roles and responsibilities (by RDMT)	Actual										
Develop an improvement plan of disaster 1.5 management structure of MOT and the tarnet SaTMs 4/8/HMs based on the	Plan					RCMAMD M	Head of RDMT(RCM DI), Sa/TM	1 Recov.M, Prev, M. Hakard ava			
feedbacks from the project activities for approval by MOT.	Actual										
Output 2:Road disaster reco, eries œythe target SETMsLEHMs are impro, ed through standardization	ythe targ	get SETMS'⊾ÆHMs are imp	ro, ed through standardi	zation		Overall:MOT He Field:SarTM RC	Head of RCM Head of CATM	Chief Advisor		RDMT partcipate in the field activities as	
2.1 Poffs based on the current state review	y Plan					RCMAMO HE	Head of RDMT MParP (RCM, DI),	Recov M, Cost av,			
(Actvity. 1.2)	Actual						3				
Develop a disaster recovery manual for SaTMA-SHIMRRT, including action for	Plan					RCMAMD H	Head of ditto MPavP	ditto			
preparedness, p hich is used for Activity 2.2-2.5	Actual										
Conduct trainings on disaster recovery 2.3. PorKs to all target SaTMsÆaHMs and MOT (i.e. action for preparedness, survey,	Plan					SarTM ear	Chief SaTM angineer level (SaTM)	ditto	ak pt for Fuel, OaM Recov, cost for travel ay ekpt, meal		
selection of 4-DrKs, design, cost estimate, supervision, preparation of disaster recovery AorK sheet) (in Hissor and Sughd SATMs)	Actual							Sar Nar HM	for IMASa		
Conduct on-site drills for simulated disaster recovery for all target SarTMs/8/aHMs (in	r Plan					SarTM Ct	Chief SarTM, amgineer SarHM	ditto	ditto ditto		
Hissar and Sogd Sa⁄TMs)	Actual					9 9	wTM)				
Plan and implement disaster recovery 2.5 PorKs for the disasters occurred in any	Plan					SarTM	Chief SarTM, avngineer SarHM	ditto	ditto ditto		
target SavHMs by the relevant SavHMs AgarTMs	Actual					9 (9)	arTM)				
Ppdate and finalike the manual, reflecting, feedbacks from Act 2.3-2.5	Plan					RCMAMD He	Head of RDMT MParP (RCM, DI),	ditto			
	Actual						B				
Certify trainers for disaster recovery from the staff of the target SaTMsAaHMs	Plan					n/va n/	nAva nAsk	CA, Recov.M			
	Actual										

			1			Diocles	ign เทรแนน	Diousign Institute, art-coach Analysis at Forcasting Upt, 11 tool 1 thit, Mit arcovial intensions in Hall in the Action and Maintensions Dept, Inchastical Constitution 1 thit. RCMicordad Constitution 1 thit.	Alialyono	P. Incholing	Pr	FIIR, IVI.	AF OWIGINES	וווס, ו ומייי	IIg a arvaia	NOII # IIII'	- INIMI Vac	Oliburaciio	alia maine	י יישבת ביואו	KCF UNIVau	CONSTRUCT	1011 # 1111,
Δ.	Activities	Year	2011	=		211⊕	Ф		,	21,10			202'		Responsible	Responsible	Implementor	Japanese	Other Major Inputs		Remarks Ac	evem	Issue ar
) (Month 1 2 3	3 4 F L 1	1 0 0 11 11 12 1 2	က	4 F L 1 O		e 11 11 12 1 2	3 4 F	L I O O	11 11 12 1	1 2 3 4	F L 1 O	. 0 11 11 12	Org (TajiK)	(TajiK)	s(TajiҞ)	akperts	Japan	TajiK			easures
Ont	Output 3: Process of locazzy adaptacozaneo ad disaster pre, ention is estacolished at the target SETMs\SEHMs	noonad disast	er pre, et	ntion is est	aœlished a	t the tar	get SETA	1s'SEHMs							Overall:MOT Field:Sa/TM	Head of RCM Head of		Chief Advisor		RDM part the I	RDMT partcipate in the field activities as		
3.1	a/Kamine hakard evaluation methods and locally adaptable prevention measures based on the current state revie-P (Activity	Plan													RCMAMD		RDMT (RCM, DI) SarTM	Prev. M, Hakard awa, Costa, Monitoring					
	1.2)	Actual																(Mon)					
3.2	Develop a disaster prevention manual for 2 SaTMA-8HM, consisting of hakard evaluation and locally adaptable prevention	Plan													RCMAMD	Hed of MPa∕rP	RDMT (RCM, DI) SarTM	Prev M, Hakard ava, Cost av, Mon					
		Actual																					
3.3	Conduct trainings on hakard evaluation to 3 all target SarTMs/49HMs and MOT (i.e. screening, selection of hakardous sites.	Plan													SæTM	Chief angineel level (Sa/TM	SarTM	Prev M, Hakard ava	ditto	ditto			
		Actual														_							
ധ ച	Select the target sections for hakard gevaluation in each SarTM	Plan		I for	for hakard eva		Ħ	I for hakard		Ħ	I for hakard	p.			SarTM	Chief angineel level (Sa/TM	SarTM	Prev M, Hakard ava h	PC for O hakard m eva, travel al	Oa/M cost, Net meal con allo-Pance at T	Net-PorK connection at TM		
		Actual														_		8 8 0	com for MÆæ	ГМ/88а/	needed for google map/e/arth		
3.5	Conduct hakard evalatuon at the target 3.5 sections by all target SæHMs in coordination Pith the respective target SæHMs	Plan			1			п			Ħ-				SarTM	Chief angineel level (Sa/TM	SavHM, SavTM	Hakard awa d	ditto Fr	Fuel, OaM cost, meal allo-Pance			
		Actual														_			S S &	for SæTMÆæ HM			
	Identify priority sites in the target sections 3.6 based on the results of the hakard evaluation by the respective larget SaTMs	Plan			н			H			H -				SarTM	Chief angineel level (Sa/TM	SayTM SayHM	Hakard awa	ditto				
D37.5		Actual														_							
3.7	Develop a future disaster prevention plan 7 for each target section by the respective target SaTMs.	Plan						н i			目				SarTM	Chief angineel level (Sa/TM		Hakard ava, d Prev M, Cost av, Mon	ditto	The Utilii	The plans Pould be utiliked in		
		Actual														_	SarHM			Act 4.3	1.7,1.9,		
3.4		Plan													SarTM	Chief avngineel level (Sa/TM)	Sa/TM	ditto	Travel av ant accom ek cost for ek	arkusting ekt, fuel for ekpt, meal allo-Pance			
	n et,	Actual																<u>, </u>	HMs S S S	for SæTMÆæH M			
3.4	Plan and implement locally adaptable prevention measures Ode ODon pilot basis at the priority sites in the target sections	Plan						8 :1				8 -1			SarTM	Chief avngineel level (Sa⁄TM	SarTM. SarHM	Hakard awa, a Prev M, Cost av, Mon n	ankt for Fu	Fuel, Oa/M cost, ek/sting			
	e	Actual																3 8 5 0	⋝	allo-Pance for SarTMA8arH M			
w	a Selection of measures	Plan Actual													SarTM	ditto	Sa/TM						
	b Design	Plan Actual													SarTM	ditto	SarTM						
	c Budget preparation	Plan Actual													SarTM	ditto	SarTM						
J	d Supervision	Plan Actual													SarHM	ditto	SarHM						
v		Plan Actual													SæHM								
3.10		Plan Actual													RCMAMO	ۍ م ر	RDMT (RCM, DI) SarTM	Hakard awa, Prev M, Cost av					
3.11	Certify trainers for hakard evaluation and prevention measures from the staff of the target Sat Ms AMSHMs	Plan													n∕¥a	n∕¥a		CA, Hakard					
	7																				1	1	

		1		Dicolæsign institute, avvi	-coaeon Analysis a/ Fi	Orcasting ⊔pt, 11 F w	DicoBsign Institute, ark cozen Analysis ar Forcasting Dpt, TPoof Pnit, MPa&roMaintenance, Planning ar arvaluation Pnit, RCMcoRad Construction and Maintenance Dept, RCPcoRoad Construction Pnit,	iing a avaluati	N ⊬ NIT, RCIVIC	DROAD CONSTING	tion and Mainter	nance Dept, איי	ookoad Constr	uction # nit,
00:4:4:4	Year	2011		21.1 \varTheta	21,10	10	2021	Responsible	Responsible Impl	ementor Japanese	Other Major Inputs			Issue av
Activities	Month 1 2 3	4 F L 1	0 0 11 11 12 1 2 3 4 F L 1 0 0 11 11 12	F L 1 0 0 11 11 12	2 1 2 3 4 F L 1	⊕ ⊕ 11 11 12	1 2 3 4 F L 1 0 0 11 11 12	Org (TajiK)	erson s(Ta	s(TajiK) akkperts	Japan	TajiK		counterm
Output 4L Data necessary for road disaster management is a Ailacan for MOT and the target SETMs for coulget preparation and disaster reco, ery and preen tion	ter managemen	ntisa, aila	come for MOT and the tar	get SETMs for ∞ud	get preparation a	and disaster reco	o, ery and preen tion	MOT (RCM, a/AF)		Chief Advisor				
Develon a plan for road disaster	_							a*AF-AMOT	Head of ITP ITP	TP (TBD) Database				
management database on the current state	Plan									(DB)				
								a/AF/MOT	Head of ITP ITP	TP (TBD) ditto	十	Oa/M cost		
hard-Pare, consisting of spread sheets	Plan										softPare			
	Actual							\neg		П	hard-Pare			
E-3 database manuals for users (i.e. MOT and	Plan							a/AF/MIOI	Head of III P	II.P (TBD) difto				
the target SarTMs) and administrator, Phich are used for Activity হু.হু.হু.10	Actual							I						
Conduct trainings on database use to MOT § & and all target Sa/TMs (i.e. collection, input,	Plan							a/AFAMOT H	Head of ITP ITP	TP (TBD) ditto	PC for DB O	OarM cost		
compiling, analysis and reporting of data) at MOT and each Sa/TM	Actual													
Collect data of disaster recovery Porfs at §.5 all target SaTMs in 2017 as baseline data in	Plan							RCMAMD a	Chief Sa/TM angineer (TBD)	M Recov.M, Costar, OarM	Mæ			
the prescribed from improve by the Project.	Actual							<u> </u>	vel (arTM)					
Collect data necessary for disaster £.6 management (i.e. disaster recovery sheets,	Plan							RCMAMD G	Chief SarTM angineer (TBD)	M Hakrd ava.	ei ei			
hakard evaluation sheets, and prevention measure sheets) from all target SaHMs by	Actual								arTM)					
2.7 Digitalike the data collected from the target	Plan							RCMAMD a	nief SayTM	N (6)	PC for DB O	Oa/M cost Net-PorK	uo	
submission to MOT	Actual								level (Sa/TM)			at TM needed		
Integrate the digitaliked data submitted by	Plan							a∕AFAMOT ⊩	<u>0.</u>	TP (TBD) DB	PC for DB O	OavM cost ditto		
	Actual													
Release the database to MOT and all target SaTMs	t Plan							a/AFAMOT I	Head of ITP ITP	TP (TBD) DB	PC for DB O	Oa/M cost ditto		
	Actual													
Develop a simple mannual road disaster management report for senior management	Plan							RCMAMO	Head of MPa/P MPa/P (TBD)	P Hakrd ava.	PC for DB	Oa/M cost		
of MOT	Actual													
Ppdate and finalike the database design and the manuals, reflecting feedbacksfrom	Plan							a/AFAMOT F	Head of ITP IT unit (TBD)	iit DB	PC for DB O	OavM cost		
the database users	Actual													
Output FLMOT and the target SETMS\SEHMs are capacoms of preparing coudget proposaæfor road disaster preen tion	:HMs are capaα	ome of prep	aring coudget proposaæt	or road disaster pr	een tion			MOT	BD	Chief Advisor (CA)	€			
5.1 Plan and implement a pilot study on cost- effectiveness of locally adaptable disaster	Plan			Complet	Completion of prev measure			RCMAMO	Head of RDN RCP (RCI	RDMT Prev. M, (RCM, DI), Cost av	T. O	Travel cost for field		
prevention measures at the target sections selected in the first year under Output 3,	Actual								80	5	<u> </u>	livey		
Create a budget item for disaster prevention 5.2 in the regular budget of S&TMAV&HMMOT	ا Plan							RCMAMO	Head of MPa MPavp	MPa/P(TBD) Prev. M, Cost a,				
	Actual							ı						
Prepare budget for locally adaptable 5.3 disaster prevention for the priority sites	Plan							RCMAMD	Head of MPa MPa/P	MPa/P(TBD) Prev. M, Cost a,				
identified under Output 3 by all target SæTMs and MOT, utiliking the results of	Actual													
Develop project proposal(s) on large-scale prevention measures for the priority site(s) 5^2 in the target section(s) under Output 3, Dhich cannot be handled by the target	Pian							International (Relations Dept	TBD) RDN (RCI	RDMT Prev. M, (RCM, DI) Cost a, Institution				
SaTMs-Rat-HMs, and studies for prevention for funding by international donor(s) as needed, utiliking the results of Output 3arg	Actual													
Duration / Phasing	Plan													
	Jergal										+	+	<u> </u>	\prod

								Dla	Design Ir	nstitute, a	WAFcoæor	Analysis	a Forca	sting Dpt, I	ITPodT Pn	it, MPa/P	odMainter	ance, Plk	nning a av.	aluation Pni	Dicobesign Institute, a/A Foocasting and Forcasting Dpt, ITPodT Pnit, MPa/PodNaintenance, Planning aravaluation Pnit, RCMcorbad Construction and Maintenance Dept, RCP or Construction Pnit, Inc. (Inc.)	Construction	and Mainter	nance Dept	RCP of Roa	d Constru	iction Pnit,	_
	A c tivition	Year		2011	=				2,10				2110				2021		Responsible	ible Respons	ble Implementor	Japanese	Other Major Inputs		Acmortee	Achievem	Issue av	
		Month 1	2 3	4 F L	т Ф	ө 11 11 12	12 1 2	3 4 F	t l	11 11 12	1 12 1 2	3 4 F	L 1	→ 11 11 12	1 12 1 2	3 4 F	L I O	11 11	12	ik) (Tajik)	s(TajiK)	awperts	Japan	TajiK		ıts	easures	
Moni	Monitoring																		MOT	Project Director								
0.1	0.1 Joint Coordination Committee (JCC)	Plan		•	•	•		•		•		•		•		•	•		MOT	Project Director	Project Manager	CA, Local Adm						
		Actual		•																		Coordinator (LAC)						
0.2	Set-up Detailed Plan of Operation (DPO)	Plan		•															MOT	Dy Poject Director	t All Mgt personnel	CA						
		Actual	•	•																(DPD)								
0.3	Annual Plan of Operation (APO) based on DPO for review and annoval by ICC	Plan		•															MOT	ditto	All Mgt personnel	CA						_
		Actual		•																								
৩.0	Joint Monitoring semi-annually	Plan				•		•		•		•		•		•			MOT	ditto	All Mgt personnel	CA						
		Actual																										
0.5	Semi-annual Monitoring Sheet for	Plan				•		•		•		•		•		•			MOT	ditto	All mgt personnel	CA						
		Actual																										
9.0	0.6 Monitoring Mission from JICA Headkuarters	Plan																	JICA	JICA Head Ruarters	ad Officer in charge of the							
		Actual																										
0.7	Organike information sharing seminars/PorKshops for all target	Plan																	MOT	Dy Poject Director	t All Mgt personnel	CA, all eléperts in Taitéistan						
		Actual																		<u> </u>		in a second						
Repo	Reports/Documents																											
	0.4 Inception Report	Plan		•																								
AN		Actual	-	•																								
	0.4 Progress Report	Plan		•		•		•		•		•		•		•												
		Actual		•																								
	0.10 Project Completion Report	Plan															•											
0		Actual																										
Publ	Public Relations																											
0.11	0.11 arstablishment and operation of Peb-site	Plan																	JICA			CA						
		Actual																										
0.12	0.12 Materials for public relations	Plan																	MOT	TBD	TBD	CA, Local Adm						
		Actual																				Coordinator (LAC)						
0.13	0.13 Dissemination seminars	Plan			•												•		MOT	TBD	TBD	CA, all ekperts in						
		Actual																				TajiKistan						
Mon	Monitoring and Evaluation in the Post-Project period																											
0.1হ	0.1g Post Monitoring by JICA	Plan																	JICA	TBD	TBD	TBD						
		Actual																										
0.15	0.15 Post avaluation by JICA	Plan																	JICA	TBD	TBD	TBD						
		Actual																										

Attachment-1 Machinery and Equipment Supply

HOuns ent supply

> ProK440n Dyt4e Htperts Tear

Item	No. of Item	Procuremen	nt Period	Procurement Country
1. Total Station	3	2017 July	: Order	Japan
2. Auto 'evel	6	2017 July	: Order	Japan
3. Radar Distance Meters	31	2017 August	: Supply	Japan
4. Early 4 arning Monitoring Equipment	8	2017 July	: Order	Japan
5. ' aptop Computer	3	2017 August	: Supply	Tajikistan
6. Desktop Computer	4	2017 August	: Supply	Tajikistan

> ProK440n Dy JI'A

	Item	No. of Item	Procurement Period	Procurement Country
7.	Attachments for 3 ack-hoe Excavator	2	2017 November : 3 ids	Japan
8.	Attachments for Compressor	2	2017 November : ids	Japan
9.	Fabion Product? ox	Determined for later	2017 November : ids	Japan/ the third country
10.	4 4 3 ag for Sandbag Construction Method	Determined for later	2017 November : 3 ids	Japan

TO CR of JICA TAJIKISTAN OFFICE

PROJECT MONITORING SHEET

Project Title: The Project for Capacity Development for Road Disaster Management

Version of the Sheet: Ver.2 (November 2017)

Name: Hiroshi Mita

Title: Chief Advisor

Submission Date: 31 October, 2017

I. Summary

1 Progress

1-1 Progress of Inputs

Inputs	Plan as of May 2017	Actual as of October 2017
Experts	Total MM: 82.55MM	Total MM: 25.88MM(31.4%:rate of
•		latest total MM, 82.55MM)
	1) Chief Advisor / Road Disaster	1) Chief Advisor / Road Disaster
	Management	Management
	2) Deputy Chief Advisor / Road	2) Deputy Chief Advisor / Road
	Disaster Management 2	Disaster Management 2
	3) Institution	3) Institution
	4) Disaster Recovery Measures	4) Disaster Recovery Measures
	5) Disaster Prevention Measures 1	5) Disaster Prevention Measures 1
	6) Disaster Prevention Measures 2	6) Disaster Prevention Measures 2
	7) Hazard Evaluation	7) Hazard Evaluation
	8) Machineries and Equipment O&M	8) Machineries and Equipment O&M
	9) Cost Estimation	9) Cost Estimation
	10) Database 1	10) Database 1
	11) Database 2	11) Database 2
	12) Instrumentation Monitoring	12) Instrumentation Monitoring
	13) Project Monitoring / Japan Training	13) Project Monitoring / Japan Training
Trainees Received	Training in Japan	(Future activity)
Equipment	Equipment for Output2,3	- Provision by the Experts Team was
1F		completed by the end of Sep, 2017.
		- Provision by the JICA will completed
		by the end of June, 2018
		(Attachment-1)
Others	N/A	N/A
Tajikistan side	Personnel	Personnel
Operational Expenses	1. Project Director:	1. Project Director:
1	Deputy Transport Minister, MOT	Deputy Transport Minister, MO
	2. Deputy Project Director:	2. Deputy Project Director:
	Head of RCM, MOT	Head of RCM, MOT
	3. Project Manager:	3. Project Manager:
	Head of International Relation	Head of International Relation
	Dept. MOT	Dept. MOT
	4. Regional Managers :	4. Regional Managers:
	Heads of the target SETMs	Heads of the target SETMs
	5. Relevant Staff of MOT	5. Relevant Staff of MOT

- 6. Relevant Staff of DI
- 7. Relevant staff of the target SETMs/SEHMs:
- 8. Other personnel mutually agreed upon as necessary

Land, Building and Facilities

- 1. Land, Building and facilities necessary for the implementation of the Project
- 2. Office spaces for the Project in the building of MOT, Hissar and Sogd SETMs with office furniture and utilities such as internet connectivity, telephone line, electricity, etc.

Local Costs

- 1. Cost for installation, operation and maintenance of the provided equipment,
- Administration and operational costs, including fuel costs, and materials for prevention / recovery works. Meal allowances for SETMs/SEHMs to participate in training drills. Prevention / recovery works

- 6. Relevant Staff of DI
- 7. Relevant staff of the target SETMs/SEHMs:
- 8. Other personnel mutually agreed upon as necessary

Land, Building and Facilities

- 1. Land, Building and facilities necessary for the implementation of the Project
- 2. Office spaces for the Project in the building of MOT, Hissar and Sogd SETMs with office furniture and utilities such as internet connectivity, telephone line, electricity, etc.

Local Costs

- 1. Cost for installation, operation and maintenance of the provided equipment,
- Administration and operational costs, including fuel costs, and materials for prevention / recovery works. Meal allowances for SETMs/SEHMs to participate in training drills. Prevention / recovery works

1-2 Progress of Activities

Progress of activities is indicated in Monitoring Sheet Form 3-2 (PDM) and Form 3-3 (PO).

1-3 Achievement of Output

			vement		G 1
	Output/Indicators	(%)	Major Results	Status ¹
		Plan	Actual		
Ou	tput-1:				
Ro	ad disaster manage	ment :	structu	re of MOT and the target SETMs/SEHMs is	
	engthened.				
1a.	By Jun 2017,	100	100	Based on collection of the most recent data on road	OT
	a report on current			disaster management and ensuing interviews with	
	disaster			the C/Ps in charge, review was conducted by the	
	management			Experts and the current road disaster management	
	relevant to MOT			report was compiled by the end of June.	
	and the target				
	SETMs/SEHMs is				
	developed				
1b.	By July 2017,	100	100	The role of RDMT is as follows;	OT
	roles and			-The RDMT acts as a team to participate in all	
	responsibilities of			project activities to achieve all outputs in	
	Road Disaster			cooperation with the Experts Team.	

¹ OT: On Time, SFT: Scheduled for later, DL: Delay

				T
Management Taskforce supporting SETM/SEHM(RD MT) is clarified.			 All members will acquire skills and knowledge to enhance own specialized field of road disaster management duties of MOT and Design Institute. The team will support activities of other counterparts. 	
			The responsibilities of RDMT are as follows; - Members will share activities so that participation in project activities do not hinder other duties of MOT and Design Institute. - As such, RDMT will convene a monthly meeting so that participation by each member is prearranged considering the specialized field of each member. - Upon confirming that monthly meetings are held as agreed, targets and development plans of each member will be agreed with the Experts Team.	
1c. By the end of the Project, 80% of members of RDMT are able to support SETMs/SEHMs according to their respective roles and responsibilities.	8	8	RDMT members are actively supporting the target SETMs/SEHMs. RDMT will be responsible for conducting joint monitoring as required under the Project. An informal training was conducted on 19 October 2017 on 4 RDMT members on how to use forms FM3-1, 3-2 and 3-3. The Experts Team will work jointly for this project monitoring.	OT
1d. By the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs, including institutionalization od RDMT, is approved by MOT	0	0	N/A	SFT
Output-2:				
			SETMs/SEHMs are improved through standardiz	
2a. By Dec 2017, a road disaster recovery manual for SETM/SEHM/RRT is developed	80	80	The English version of Road Disaster Manual has been drafted and the translation work into Rus-sian will commence shortly so that its Version 1 maybe submitted to MOT in early December 2017 as planned.	OT
2b. 80% of the training participants from all target SETMs/SEHMs passes the post-training test on disaster recovery works	0	0	N/A	SFT
2c. 80% of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster	0	0	N/A	SFT

	recovery works for				
2d.	Disaster recovery works in the drills	0	0	N/A	SFT
	are planned and implemented by all target				
	SETMs/SEHMs according to the				
	manual				
2e.	Disaster recovery	0	0	N/A	SFT
	works at the actual				
	disaster sites are				
	planned and				
	implemented by all				
	relevant target				
	SETMs/STHMs				
	according to the manual				
2f.	By the end of the	0	0	N/A	SFT
-1.	Project, the				511
	finalized manual is				
	approved by MOT				
Out	tput-3.:				
Pro	cess of locally adapta	able ro	ad disas	ter prevention is established at the target SETMs/	SEHMs
3a.	By Oct. 2017,	100	100	The road disaster prevention manual for	OT
	a road disaster			SETM/SEHM was developed by Oct. 2017.	
	prevention manual				
	for SETM/SEHM				
21	is developed	50	50		0.77
3b.	80% of the training	50	50	The hazard evaluation training was implemented	OT
	participants from all target			from September through October, 2017.	
	SETMs/SEHMs			Over $80\%(100\% = 58/58)$ of the training	
	passes the			participants from all target SETMs/SEHMs	
	post-training test			passed the post-training test.	
	on hazard			The locally adaptable prevention measures	
	evaluation and			training is scheduled to be implemented in August	
	locally adaptable			2018.	
	prevention			2010.	
	measures each				
3c.		40	40	Based on the results of the site visit, the 10 target	OT
	is conducted at			section was decided:	
	least twice by all			-Hissor SETM pipe (4 sections)	
	target			-Sughd SETM pipe (4 sections)	
	SETM/SEHM for			-Rasht SETM pipe (2 sections)	
	10 target sections				
	in all target SETMs			Hazard evaluation is conducted twice by all target	
	according to the manual			SETM/SEHM for 4 target sections in all target	
				SETMs according to the manual.	
3d.	Locally adaptable	0	0	Based on the results of the site visit, the 4 priority	SFT
	prevention			sites in Hissar and Soghd was selected.	
	measures are				
	planned by all				

	target SETMs for 4 priority sites in				
	Hissar and Soghd SEYMs according to the manual.				
3e.	Locally adaptable prevention	0	0	N/A	SFT
	measures are implemented by 4 target SEHMs at 4 priority site in Hissar and Soghd SETMs according to the manual				
3f.	80% of the observers from the other 22 SEHMs passes the post-observation test on implementation	0	0	N/A	SFT
3g.	By Mar. 2020, future disaster prevention plans are developed for 10 target sections by all target SETMs	0	0	N/A	SFT
3h.	By the end of the Project, the finalized manuals is approved by MOT	0	0	N/A	SFT
	tput-4.:				
				gement (*1) is available for MOT and the target S covery and prevention	ETMS
	By Dec 2017,	90	90	A database for testing to evaluate performance,	OT
	road disaster management database is			usability, etc. was developed. It will be improved the problem and bug in the test database and finalized the database by Dec	
	developed according to the design developed through the Project			2017.	
4b.	By Dec 2017, road disaster management database manuals for users and administrator are	70	70	Draft-ing of the English version of Road Disaster Management DB Manual is under way. With translation work into Russian considered, its version 1 is planned for submission to MOT in early December 2017 as planned.	OT
	developed				
	80% of the training			The training is scheduled to be implemented from	SFT

				<u>, </u>	
	MOT and the target				
	SETMs passes the				
	post-training test				
	on database use.				
4d.	By Mar 2019, the database is released to MOT and the target	0	0	N/A	SFT
	SETMs 2010	0	0	37/4	CET
	From 2019, a simple disaster management report is submitted to senior management of MOT once a year	0	0	N/A	SFT
4f.	By the end of the Project, the finalized manual is approved by MOT	0	0	N/A	SFT
Out	tput-5.:				
		TMs/SI	EHMs a	are capable of preparing budget proposal for road	disaster
	vention			are enhance or brokering a mager brokesen for roun	
_	By Mar 2020,	0	0	N/A	SFT
	a report of a pilot study on cost-effectiveness of the locally adaptable disaster prevention is developed				
	By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of the regular budget for FY 2021 based on the future development plans	0	0	N/A	SFT
5c.	By the end of the Project, at least one project proposal for large-scale disaster prevention of the priority site(s) and studies for prevention is submitted by MOT to international	0	0	N/A	SFT

	donor(s) for			
	funding, utilizing			
	the results of			
	Output 3 and 4			
	Output 5 and 4	l .		
	Achievement of the		-	
Pro	pject Purpose/Indicators	Achievement	Situation	Expected Tim
Dw	oigat Durmaga	(%)		of achievemen
Ca	oject Purpose: pacity of MOT and the proved.	target SETM	Is/SEHMs for effective road disaster mana	gement is
a.	By the end of the	0	N/A	SFT
	Project, 80% of	· ·		
	results of the disaster			
	recovery works by the			
	target			
	SETMs/SEHMs,			
	according to the			
	disaster recovery			
	manual developed			
	through the Project,			
	meet requirements of			
	time, cost, quality,			
	and safety specified			
	in the plans			
٥.	By the end of the	0	N/A	SFT
	Project, 80% of the			
	results of the hazard			
	evaluation by all			
	target SEHMs,			
	according to the			
	disaster prevention			
	manual developed			
	through the Project, is			
	assessed accurate by			
	the Japanese Expert			
	Team			
_	80% of results of the	0	N/A	SFT
).		U	IV/A	51 1
	disaster prevention			
	measures #2 by			
	Hissor and Sughd			
	SETM and 2 target			
	SEHMs, according to			
	the manual developed			
	through the Project,			
	meet requirements of			
	time, cost, quality and			
	safety specified in the			
	plans.			
1.	By the end of the	0	N/A	SFT
	Project, budget			

request for disaster prevention in the target SETMs for FY		
2021 is submitted to		
Ministry of Finance		
(MOF) as part of the		
regular budget		

1-5 Achievement of the Overall Goal

Overall Goal/Indicators	Achievement (%)	Situation	Expected Time of achievement
Overall Goal:	(%)		of achievement
	ted in the inte	rnational and Republican Roads in the targ	et
SETMs/SEHMs		i national and republican reduces in the targ	
a. All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project	0	N/A	SFT
b. By Jul 2023(*2) disaster prevention measures are planned and / or implemented at least 5(*3) priority sites in the target SETMs according to the disaster prevention manual developed through the Project	0	N/A	SFT
c. From Aug 2020 to Jul 2023 the average duration required for road re-opening per disaster handled by the target SETMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018)	0	N/A	SFT

^(*1) Data necessary for road disaster management includes disaster record, results of hazard evaluation, prevention measures, and recovery works among others.

^(*2) Underlined deadlines in the indicators are set based on the schedule of the Tentative PO. They shall be modified according to the Detailed PO to be prepared in the beginning of the Project for approval by the first JCC.

^(*3) Target values of the indicators shall be filed based on the results of the baseline survey, Which shall be reviewed and approved by the 2nd JCC.

1-6 Changes of Risks and Actions for Mitigation

N/A

1-7 Progress of Actions undertaken by JICA

N/A

1-8 Progress of Actions undertaken by Gov. of Tajikistan

N/A

1-9 Progress of Environmental and Social Considerations (if applicable)

N/A

1-10 Progress of Considerations on Gender/Peace Building/Poverty Reduction (if applicable)

N/A

1-11 Other remarkable/considerable issues related/affect to the project (such as other JICA's projects, activities of counterparts, other donors, private sectors, NGOs etc.)

N/A

2 Delay of Work Schedule and/or Problems (if any)

2-1 Detail

N/A

2-2 Cause

N/A

2-3 Action to be taken

N/A

2-4 Roles of Responsible Persons/Organizations (JICA, Gov. of Tajikistan, etc.)

N/A

3 Modification of the Project Implementation Plan

3-1 PO

PO of the project is prepared. It is attached as Monitoring Sheet Form 3-3.

3-2 Other modifications on detailed implementation plan

(Remarks: The amendment of R/D and PDM (title of the project, duration, project site(s), target group(s), implementation structure, overall goal, project purpose, outputs, activities, and input) should be authorized by JICA HDQs. If the project team deems it necessary to modify any part of R/D and PDM, the team may propose the draft.)

N/A

- 4 Measures undertaken by Gov. of Tajikistan or Project Team to Ensure the Sustainability of Project after the Project Completion
- 4-1 Financial Sustainability

N/A

4-2 Technical Sustainability

N/A

4-3 Institutional Sustainability

N/A.

Project Monitoring Sheet I (Revision of Project Design Matrix)

Project Title: The Project for Capacity Development for Road Disaster Management

Implementing Agency: Ministry of Transport (MOT)

Target Group: MOT, Hissor SETM and its 9 SEHMs, Sughd SETM and 14 SEHMs, and Rasht SEHM and its 3 SEHMs (Nurobod, Rasht, and Ta-iikobod)

Period of Project: April 2017 - July 2020 (in Tajikistan)

Project Site: International and Republican roads in Hissor and Sughd SETMs as well as Nurobod, Rasht and Tajikobod SEHMs in Rasht SETM

Version 2 Dated, 31, October, 2017

Remarks							
Achievement	(Future activity)	(Future activity)	(Future activity)	(Future activity)	(Future activity)	(Future activity)	(Future activity)
Important Assumption				A. Policy for disaster management is not discontinued. B. Political instability/economic crisis/serious natural	disaster that affect the project sites do not occur. C. Budget including prevention, is approved by MOF		
Means of Verification	a-c Hazard evaluation disaster prevention & recovery sheets, in the Database			a. Assessment report b. Prevention sheet c. Recovery sheet d. Data of budget request			
Objectively Verifiable Indicators	a. All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project	b. By Jul 2023(*2) disaster prevention measures are planned and / or implemented at least 5(*3) priority sites in the target SETMs according to the disaster prevention manual developed through the Project	the average duration required for road re-opening per disaster handled by the target SETMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018)	By the end of the Project, 80% of results of the disaster recovery works by the target SETMs/SEHMs, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans		measures #2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality and safety specified in the plans.	d. By the end of the Project, budget request for disaster prevention in the target SETMs for FY 2021 is submitted to Ministry of Finance (MOF) as Part of the regular budget
Narrative Summary	Overall Goal Road disasters are mitigated in the International and Republican Roads in the target SETMs/SEHMs	-Q	o d	Project Purpose Capacity of MOT and the target SETMs/SEHMs for effective road disaster management is improved.	<u>-</u> 2	σ΄	

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												-	
The report was compiled by the end of June.	The roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM(RDMT) is clarified.	RDMT will be responsible for conducting joint monitoring as required under the Project.	(Future activity)	The English version of Road Disaster Manual has been drafted and the translation work into Russian will commence shortly so, that its Voresion 1	maybe submitted to MOT in early December 2017 as	(Future activity)	(Future activity)	(Future activity)	(Future activity)	(Future activity)	The road disaster prevention manual for SETM/SEHM was developed by Oct. 2017.	The hazard evaluation training was implemented from September through October,	The locally adaptable prevention measures training is scheduled to be implemented in August 2018.
The report w end of June.	The roles of Road D Taskforce SETM/SE clarified.	DMT wi	(F	he Engli bisaster N rafted an ito Russi	maybe sul early Dec	(F	(F	(F	(F	(F	he road on an	The hazar was imple Septembe	The locally ac prevention m scheduled to A August 2018.
on devl	ıment				the							the	
Date of report Approval of JCC Joint review based individual capacity	plan Official approval document			Acceptance letter Test results Ditto)	Approval letter					Acceptance letter Test results	Joint review of checklist Test results	Approval letter ditto
1a. t 1b.	r 1d.	f s f	7 m 7	2a. r 2b. 2c.		t 7e	n t	o +:	r 1	I.,	3a. r 3b. 3c ~	n 3f	
By Jun 2017, a report on current disaster management relevant to MOT and the target SETMs/SEHMs is developed	By July 2017, roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM(RDMT) is clarified.	By the end of the Project, 80% of members of RDMT are able to support SETMs/SEHMs according to their respective roles and responsibilities.	By the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs, including institutionalization od RDMT, is approved by MOT	By Dec 2017, a road disaster recovery manual for SETM/SEHM/RRT is developed		80% of the training participants from all target SETMs/SEHMs passes the post-training test on disaster recovery works	80% of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery works for each job category	Disaster recovery works in the drills are planned and implemented by all target SETMs/SEHMs according to the manual	Disaster recovery works at the actual disaster sites are planned and implemented by all relevant target SETMs/STHMs according to the manual	By the end of the Project, the finalized manual is approved by MOT	By Oct. 2017, a road disaster prevention manual for SETM/SEHM is developed	80% of the training participants from all target SETMs/SEHMs passes the post-training test on hazard evaluation and locally adaptable	
1a.	1b.	1c.	1d.	2a.		2b.	2c.	2d.	2e.	2f.	3a.	3b.	
Output Output-1: Road disaster management structure of MOT and the target SETMs/SEHMs is strengthened.				Output-2: Road disaster recoveries by the target SETMs/SEHMs are improved through standardization							Output-3.: Process of locally adaptable road disaster prevention is established at	the target SETMs/SEHMs	

PM Form 3-2 Monitoring Sheet Summary

ted	ne site n lected.					ability, roblem se and Dec	version sment o o o o o o o o o o o o o o o o o o o						
Hazard evaluation is conducted twice by all target SETW/SEHM for 4 target sections in all target SETMs according to the manual	Based on the results of the site visit, the 4 priority sites in Hissar and Soghd was selected	(Future activity)	(Future activity)	(Future activity)	(Future activity)	A database for testing to evaluate performance, usability, etc. was developed. It will be improved the problem and bug in the test database and finalized the database by Dec 2017.	Draft-ing of the English version of Road Disaster Management DB Manual is under way. With translation work into Russian considered, its version 1 is planned for submission to MOT in early December 2017 as planned.	(Future activity)	(Future activity)	(Future activity)	(Future activity)	(Future activity)	(Future activity)
						with the						t ted	
						ison unce lette ults d date	Approval letter					Acceptance letter Budget document Proposals submitted	
	T	Т		I I		4b. 4c. 4d.				Π		5a. 5b. 5c.	
Hazard evaluation is conducted at least twice by all target SETM/SEHM for 10 target sections in all target SETMs according to the manual	Locally adaptable prevention measures are planned by all target SETMs for 4 priority sites in Hissar and Soghd SEYMs according to the manual.	Locally adaptable prevention measures are implemented by 4 target SEHMs at 4 priority site in Hissar and Soghd SETMs according to the manual	80% of the observers from the other 22 SEHMs passes the post-observation test on implementation	By Mar. 2020, future disaster prevention plans are developed for 10 target sections by all target SETMs	By the end of the Project, the finalized manuals is approved by MOT	By Dec 2017, road disaster management database is developed according to the design developed through the Project	By Dec 2017, road disaster management database manuals for users and administrator are developed	80% of the training participants from MOT and the target SETMs passes the post-training test on database use.	By Mar 2019, the database is released to MOT and the target SETMs	From 2019, a simple disaster management report is submitted to senior management of MOT once a year	By the end of the Project, the finalized manual is approved by MOT	By Mar 2020. a report of a pilot study on cost-effectiveness of the locally adaptable disaster prevention is developed	By Jun 2020, budget proposal for locally adaptable disaster
3c. It	3d. I	3e. Ii	3f. 8 8 1	3g. <u>I</u>	3h. I	4a. <u>I</u>	4b. I	4c. 8	4d. <u>E</u>	4e. I	4f. I	5a. <u>I</u>	5d. <u>B</u>
						Output-4.: Data necessary for road disaster management is available for MOT and the target SETMs for budget preparation and disaster recovery	wors and prevention					Output-5.: MOT and the target SETMs/SEHMs are capable of preparing budget proposal for road	disaster prevention

				funding, utilizing the results of Output 3 and 4	
				submitted by MOT to international donor(s) for	
		(Future activity)		the priority site(s) and studies for prevention is	
				proposal for large-scale disaster prevention of	
				5e. By the end of the Project, at least one project	
				plans	
				for FY 2021 based on the future development	
				SETM and MOT as part of the regular budget	
				prevention measures are prepared by all target	
nary	Monitoring Sneet Sumi	FM Form 3-2			

	Activities	Inputs	Its	Important Assumption
Ou	Output 1:	The Japanese Side	The Tajik Side	A. Natural disaster/political instability economic crisis that affect
Ro SE	Road disaster management structure of MOT and the target SETMs/SEHMs is strenothened.	Japanese Experts	Personnel	the project activities do not occur Security situation of Taiikistan which limits the activities of
1-1.		1. Chief Advisor 2. Institution 3. Doub Discorder	Project Director: Deputy Transport Minister, MOT Deputy Transport Minister, MOT	
1-7.		. , ,	 Deputy rioject Director Head of RCM, MOT Project Manager 	re-(
1-3.	called Rapid Response Team (RRT) Clarify the roles and responsibilities of Road	5. O&M of equipment 6. Cost estimate		
	Management Taskforce supporting SETM/SEHM (RDMT) formed at MOT and its members as well as their capacity			 Internet connection is established at each target SE I M
1.4	development plans 4. Support the target SETMs/SEHMs through the project activities according to the clarified roles and responsibilities (Av R DMT)	Local Administrative Coordinator Other experts mutually agreed upon as necessary	5. Relevant Staff of MOI 6. Relevant staff of DI 7. Relevant staff of the target	+
1-5.		Equipment 1. Equipment for disaster recovery and	SETMs/SEHMs Other personnel mutually a upon as necessary	Issues & counter measures
Ou	Output 2: Road disaster recoveries by the target SETMs/SEHMs are	2. Hardware and software for database	Land, Building and Facilities	
impr 2-1.	9		1. Land, building and facilities	
2-2.		monitoring at each SETI Monitoring equipment f	the Project 2. Office spaces for the Project in the	
2-3.	 Conduct trainings on disaster recovery works for all target SETMs/SEHMs and MOT (i.e. action for preparedness, survey 	as necessary	utilities such as internet connectivity,	
	selection of works, design, cost estimate, supervision, disaster recovery sheet) (in Hissor and Sughd SETMs)	Training of the Tajik Personnel in Japan and/or third country	terephone mire, erecurenty, ere.	
2-4.		Local costs	Local Costs	
2-5.		Cost for activities of IET local travel &	maintenance of the provided	
2-6.	occurred in any target SEHMs by the relevant SEHMs/SELMs 5. Update and finalize the manual, reflecting the feedbacks from Act. 2.3-2.5	_	equipment, 2. Administration and operational costs, including find configurations and americal for	
2-7.		prevention/recovery work	prevention/recovery works, Meal allowances for SETMs/SEHMs to	
Ou	Output 3: Process of simple road disaster prevention is established at the		participate in training, drills,	
tar	target SETMs/SEHMs		prevention recovery works	
3-1.	 Examine hazard evaluation methods and locally adaptable prevention measures based on the current review (Activity 1.2) Develon a road disaster prevention manual for SFTM/SFHM 			
) 4				
3-3.				
4.5	hazardous sites, hazard/risk assessment, hazard evaluation sheet) (in Hissor and Sughd SETMs) 4. Select the target sections for hazard evaluation in each SETM			

	PM Form 3-2 Monitoring Sheet Summary
3-5. Conduct hazard evaluation at the target sections by all target SEHMs in coordination with the respective SETMs	
3-6. Identify priority sites in the target sections based on the	
3-7. Develop a future disaster prevention plan for each target section	
5-6. Organize trainings on tocarry adaptatic training measures to all target TMs/HMs (i.e. selection, prevention measures cheet monitoring for simple early against) (in Histor	
3-9. Plan and implement locally adaptable prevention measures #1 & #2 on pilot basis at the priority sites in the target sections	
selected in the first year (in filssof and Sugnd SETMS) by the relevant target SETMs/SEHMs	
a. Selection of measures	
o. Design c. Budget preparation	
e. Prevention measure sneet 3-10. Update and finalize the manual, reflecting feedbacks from	
Activities 5.5-5.9 3-11. Certify Trainers for Disaster Prevention from the target	
Output 4:	
Data necessary for road disaster management is available for MOT and the target SETMs for budget preparation and disaster	
recovery woks and prevention	
4-2. Design a database system with installed hardware, consisting of	
spread streets 4-3 Pevelon road disaster management database manuals for users	
used for Activity 4:4-4:10 4.4 Conduct trainings on database use for MOT and all target	
4-5. Collect data of disaster recovery at all target SETMs in 2017 as baseline data in the prescribed from improved by the Project	
4-6. Collect data necessary for disaster management from the target	
SEHMs (i.e. disaster recovery sheets, hazard evaluation sheets,	
4-7. Digitalize the data collected from the target SEHMs by the	
4-8. Integrate the digitized data submitted by the target SETMs into	
4-9. Release the database to MOT and all target SETMs	
4-10. Develop simple annual road disaster management report for	
senior management of MO1 4-11. Update and finalize the database design and the manuals,	
reflecting feedbacks from the database users	
Output 5: MOT and the target SETMs/SEHMs are capable of preparing budget proposal for road disaster prevention	

nary													
PM Form 3-2 Monitoring Sheet Summar													
nitoring S													
3-2 Mo													
PM Form													
	simple	d in	maps	•		for the	Is and		asures	3,	pu	nal	
	ctiveness of	zions selecte	ard location	n the regular		r prevention	target SETN		evention me	under output	s/SEHMs, a	y internation	tput 3&4
	5-1. Plan and implement a pilot study on cost effectiveness of simple	disaster prevention measures at the target sections selected in	the first year underOutput3, using simple hazard location maps	5-2. Create a budget item for disaster prevention in the regular		Prepare a budget for locally adaptable disaster prevention for the	priority sites identified under Output 3 by all target SETMs and	out 3&4	5-4. Develop project proposal(s) on large-scale prevention measures	for the priority site(s) in the target section(s) under output3,	which cannot be handled by the target SETMs/SEHMs, and	studies for prevention measures for funding by international	donor(s) as needed, utilizing the results of Output 3&4
	pilot study	easures at th	tput3, using	for disaster y	M/MOT	ocally adapt	d under Out	MOT, utilizing the results of Output 3&4	osal(s) on la	in the target	led by the ta	measures fo	ilizing the r
	mplement a	evention me	ear underOu	udget item f	budget of SETM/SEHM/MOT	budget for le	ses identifier	izing the res	roject prope	ority site(s)	not be hand	r prevention	s needed, ut
	Plan and i	disaster pr	the first ye	Create a b	budget of		priority si	MOT, util	Develop p	for the pri	which can	studies for	donor(s) a
	5-1.			5-2.		5-3.			5-4.				

Form 3-3 Project Monitoring Sheet (Plan of Operation)
Project Title: The Project for Capacity Development for Road Disaster Management in the Republic of Tajikistan

			N.A (4)
Inputs	Wear 2017 2018 2018 2019 2019 2019 2019 2019 2019 2019 2019	Remarks	Issue Solution
Expert (in Tajikistan) 1. Chief Advisor/ Road Disaster			
Management 2. Deputy Chief Advisor/ Road Disaster	Actual Plan <		
Management 2	Actual		
3. Institution	- Lail -		
4. Disaster Recovery Measures	Plan		
5. Disaster Prevention Measures 1	- Dau		
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7. Hazard Evaluation	Plan Actual		
8. Machineries and Equipment O&M	Plan		
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9. Cost Estimation	Actual		
10. Database 1	Plan		
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11. Database 2	Actual		
12. Instrumentation Monitoring	Plan		
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13. Project Monitoring/ Japan Training	Actual		
14. Project Coordinator	Plan Actual		
15. Interpreter/Sub Project Coordinator	Plan Handard		
(1)& (2)	Actual		
16. Interpreter/Sub Project Coordinator	Lan		
Expert (in Japan)			
1. Chief Advisor/ Road Disaster	Plan		
2. Deputy Chief Advisor/ Road Disaster	Plan		
Management 2	Actual		
9. Cost Estimation	- Lean - September		
11. Database 2	Plan		
A A A A A A A A A A A A A A A A A A A	Plan		
13. PTOJECT MOTITOTING/ Japan Trailing	Actual Ac		
Equipment			
1. Provision by the Experts Team	Actual		
2. Provision by JICA	Plan		
· !!	Actual		
raining in Japan Learn about road disaster management	Plan		
technology in Japan	Actual		
In-country/Third country Training	Div		
N/A	Actual		

Application Part Application Part	ad Construction Unit,	Achievem Counterme	ents asures																									
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ranget disaster management struct target disaster strongh collection lysis of the past disaster records organizational and technical of current state of disaster ment relevant to MCT and the ETMA/SEHMs, including their incation network for disaster ment restwant to MCT and the ment state of disaster recovery response Team Ananagement Taskforce of SETMA/SEHM sthough the target SETMA/SEHMs through an improvement plan of disaster recovery manual for the target SETMA/SEHMs through an improvement plan of disaster colles and responsibilities (by An an improvement plan of disaster rocal disaster recovery an introvement plan of disaster rocal disaster recovery an introvement plan of disaster trainings on disaster recovery all target SETMA/SEHMs and MOT on of or preparedness, survey, to for wisk, a design, cost estimate, or for wisk, a design, cost estimate, increased on the seaster recovery all target SETMA/SEHMs (in hissor and Sughd on-site drills for simulated disaster roor all target SETMA/SEHMs (in nd Sogd SETMs) The disasters occurred in any SETMS and finalize the manual, reflecting, paragraphs and paragraphs and paragraphs and paragraphs and finalize the manual, reflecting, paragraphs and paragraphs and paragraphs and paragraphs and paragraphs and paragraphs and finalize the manual, reflecting, paragraphs and parag			onth 1 2 3	ure of MOT	lan	ctual	lan	stual	lan	ctual	lan	stual	lan	stual	target SE	lan	ctual	lan	stual	lan	stual	lan	stual	lan	stual	lan	stual	
ad disaster manager target disaster register for the past disaster register of current state of disaster register of current state of disaster managewant to MOT and ment relevant to MOT and ment relevant to MOT and recises and response Terrolled Rapid Response Terrolled Response T	;	ř	Mo	nent structı		Act	al the	am					'n		ries by the		ı						Act				Act	
				ad disaster managen	target disasters through co ysis of the past disaster re		rganizational and technics of current state of disaster nent relevant to MOT and	i I Mis/SEHMis, including in ication network for disaste called Rapid Response Tr	e roles and responsibilities Management Taskforce	ig אבן ואו/אברואו (אבטאון) זי d its members as well as th development plans	the target SETMs/SEHMs ct activities according to the	roles and responsibilities (I	an improvement plan of dinent structure of MOT and ETMs/SEHMs based on the	s from the project activitie by MOT.	oad disaster recover	locally adaptable disaster issed on the current state re	1.2)	a disaster recovery manu EHM/RRT, including action	ness, Which is used for A	trainings on disaster recoval target SETMs/SEHMs on for preparedness, surve	or works, design, cost est on, preparation of disaster work sheet) (in Hissor and	on-site drills for simulated for all target SETMs/SEH	nd Sogd SETMs)	implement disaster recoving the disasters occurred in	EHMs by the relevant SETMs	ind finalize the manual, ref is from Act 2.3-2.5		

		-			-		DI=Design	Institute,	EAF-ECC	n Allarysis	0.000	الا الا الا	5	II, INITEO-	Mallitona	id	Ing & Evan	ation orni,	UI=Design Institute, EAT=Econ Analysis & Forcasting Dpt, I U=II Unit, MFEU=Maintenance, Planting & Evaluation Unit, KCM=Koad Construction and Maintenance Dept, KCUFFoad Construction Unit	COIISuucu	III alla maii	Terraine Dr	יוייטטאן פֿאַן, אַניי	Oad Corrsu	Ucitori C.:
Δ	Activities	Year		2017			2018				2019			.,	2020		Responsible	Responsible	Implementor		Other Ma	Other Major Inputs	Remarks	evem	Issue &
(Month 1 2	3 4 5 6 7		8 9 10 11 12 1 2	3 4	2 6 7	8 9 10 11 12	1 12 1 2	3 4 5	8 2 9	9 10 11	12 1 2	3 4 5 (8 2 9	9 10 11 12	Org (Tajik)		s(Tajik)	Experts	Japan	Tajik		ents	asures
Ont	Output 3: Process of locally adaptable road disaster prevention is established at the target SETMs/SEHMs	road disas	ster pre	vention is	establish	ned at th	e targe	SETM	s/SEHM:	"							Overall:MOT Field:SETM	Head of RCM Head of SETM		Chief Advisor			RDMT partcipate in the field activities as		
3.1	Examine hazard evaluation methods and 1 locally adaptable prevention measures based on the current state review (Activity	Plan															RCM/MOT	Hed of MPEU	RDMT (RCM, DI) SETM	Prev. M, Hazard Eva, CostE, Monitoring					
	1.2)	Actual																		(Mon)					
3.2	Develop a disaster prevention manual for 2 SETM/SEHM, consisting of hazard evaluation and locally adaptable prevention	Plan															RCM/MOT	Hed of MPEU	RDMT (RCM, DI) SETM	Prev M, Hazard Eva, Cost E, Mon					
		Actual																							
3.3	Conduct trainings on hazard evaluation to 3 all target SETMs/SEHMs and MOT (i.e. screening, selection of hazardous sites,	Plan															SETM	Chief Engineel evel (SETM	SETM	Prev M, Hazard Eva	ditto	ditto			
		Actual			I fo	for hazard eva	eva																		
3.4		Plan						II for	I for hazard			II for h	for hazard				SETM	Chief Engineel evel (SETM	SETM	Prev M, Hazard Eva	PC for hazard eva, travel	O&M cost, meal allowance	Network connection at TM		
		Actual																			som for M/SE	for SETM/SE HM	needed for google map/earth		
3.5	Conduct hazard evalatuon at the target 5 sections by all target SEHMs in coordination with the respective target SETMs	Plan			н				н			- 目 -					SETM	Chief Engineel level (SETM	SEHM, SETM	Hazard Eva	ditto	Fuel, O&M cost, meal allowance			
		Actual																				for SETM/SE HM			
3.6	Identify priority sites in the target sections 6 based on the results of the hazard evaluation by the respective target SETMs	Plan			I				Ы				B				SETM	Chief Engineel level (SETM	SETM	Hazard Eva	ditto				
		Actual																							
3.7	Develop a future disaster prevention plan 7 for each target section by the respective target SETMs.	Plan							. H				l l				SETM	Chief Engineel level (SETM		Hazard Eva, Prev M, Cost E, Mon	ditto		The plans would be utilized in		
		Actual																_	NEH S				Act 1.7, 1.6,		
3.8	Conduct tainings on locally adaptable g prevention, measures to all target SETMs/SEHMs and MOT (i.e. selection of measures destin burdest surpavision)	Plan															SETM	Chief Engineel level (SETM)	SETM	ditto	Travel & Baccom cost for SETMS/SE	Exusting eqt, fuel for eqpt, meal allowance			
		Actual																			HMs				
3.9		Plan							I - #1				I -#2				SETM	Chief Engineel level (SETM)	SETM.	Hazard Eva, Prev M, Cost E, Mon	Eqt for prev & monitor, travel &	Fuel, O&M cost, existing eqpt, meal			
	the	Actual																			Σ	allowance for SETM/SEH M			
	a Selection of measures	Plan							Ħ				Ħ				SETM	ditto	SETM						
	b Design	Plan															SETM	ditto	SETM						
	c Budget preparation	Plan							Ħ				Ħ				SETM	ditto	SETM						
	d Supervision	Plan Actual															SEHM	ditto	SEHM						
_	e Prevention measure sheet	Plan											Ħ				SEHM	ditto	SEHM						
3.1(3.10 Update and finalize the manual, reflecting feedbacks from Activities 3.3-3.9	Plan															RCM/MOT	Head of MPEU	RDMT (RCM, DI)	Hazard Eva, Prev M,					
3.11	Certify trainers for hazard evaluation and prevention measures from the staff of the	Plan							Ħ		C		H				n/a	n/a	n/a	CA, Hazard Eva, Prev M					
	┑	Actual							\exists		>		\exists												

		1		DI=Design II	DI=Design Institute, EAF=Econ Analysis & Forcasting Upt, 110=11 Unit, MPEU=Maintenance, Pramning & Evaluation Unit, RCM=Road Construction and Maintenance Dept, RCU=Road Construction Unit, CM=Road Construction U	n Analysis & Fo	rcasting Dpt, 110	=II UNIT, MPEU:	=Maintenance,	Planning & Eva	uation Unit, RC	M=Road Constr	uction and Mair	ntenance Dept	, KCU=Koad	Construct	Ion Unit,
Activities	Year	2017		2018	-			-		Responsible	Responsible Person	Implementor Japanese	_	Other Major Inputs	Remarks	Achievem Co	Issue & Counterme
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Output 4: Data necessary for road disaster management is available for MOT and the target SETMs for budget preparation and disaster recovery and prevention	r management is	s available for	MOT and the t	target SETMs	for budget p	reparation an	d disaster rec	overy and pre	evention	MOT (RCM, EAF)		Chief Advisor					
4.1 Develop a plan for road disaster	Plan									EAF/MOT	Head of ITU II	ITU (TBD) Database (DB)	es				
	Actual																
4.2 Design a database system with installed hardware consisting of spread sheets	Plan									EAF/MOT	Head of ITU IT	ITU (TBD) ditto	DB software	O&M cost			
	Actual												and				
Develop road disaster management 4.3 database manuals for users (i.e. MOT and	Plan									EAF/MOT	Head of ITU II	ITU (TBD) ditto					
the target SETMs) and administrator, which are used for Activity 4.4-4.10	Actual																
Conduct trainings on database use to MOT 4.4 and all target SETMs (i.e. collection, input,	Plan									EAF/MOT	Head of ITU II	TU (TBD) ditto	PC for DB	O&M cost			
Ħ	Actual																
Collect data of disaster recovery works at 4.5 all target SETMs in 2017 as baseline data in	Plan									RCM/MOT &SETM	Chief Engineer	SETM (TBD) Recov.M, CostE, O&M	и, О&М				
the prescribed from improve by the Project.	Actual										(SETM)						
Collect data necessary for disaster 4.6 management (i.e. disaster recovery sheets,	Plan									RCM/MOT &SETM	Chief Engineer	SETM (TBD) Hazrd Eva. Prev M,	.va.				
	Actual										(SETM)						
4.7 Digitalize the data collected from the target SEHMs by the respective target SETMs for	Plan									RCM/MOT &SETM	Chief Engineer	SETM (TBD)	PC for DB	O&M cost	Network connection		
	Actual														: TM seded		
4.8 Integrate the digitalized data submitted by the target SETMs into the database	Plan									EAF/MOT	Head of ITU II	пи (твр) рв	PC for DB	O&M cost	itto		
_	Actual																
4.9 Release the database to MOT and all target SETMs	Plan									EAF/MOT	Head of ITU II	ти (твр) рв	PC for DB	O&M cost	ditto		
	Actual																
4.10 Develop a simple mannual road disaster management for senior management	Plan									RCM/MOT	Head of N	MPEU Hazrd Eva. (TBD) Prev M,	va. PC for DB	O&M cost			
	Actual												5				
4.11 Update and finalize the database design and the manuals, reflecting feedbacks from	Plan									EAF/MOT	Head of ITU IT	IT unit DB (TBD)	PC for DB	O&M cost			
the database users	Actual																
Output 5: MOT and the target SETMs/SEHMs are capable of preparing budget proposal for road disaster prevention	Ms are capable	of preparing b	dget propos	al for road di	saster prevent	ion				MOT	TBD	Chief Advisor (CA)	(CA)				
Plan and implement a pilot study on cost- 5.1 effectiveness of locally adaptable disaster	Plan				Completion of	prev measure				RCM/MOT	Head of R	RDMT Prev. M, (RCM, DI), Cost E	,	Travel cost for field			
"	Actual										.n	Σ.		survey			
Create a budget item for disaster prevention 5.2 in the regular budget of SETM/SEHM/MOT	Plan									RCM/MOT	Head of MPEU	MPEU(TBD) Prev. M, Cost E,					
	Actual																
တ္	Plan									RCM/MOT	Head of MPEU	MPEU(TBD) Prev. M, Cost E,					
identified under Output 3 by all target SETMs and MOT, utilizing the results of	Actual																
Develop project proposal(s) on large-scale prevention measures for the priority site(s) in the tradet section(s) under Output 3.	Pian									International Relations Dept	(TBD)	RDMT Prev. M, (RCM, DI) Cost E, Institution	, uo				
winch carried by the target SETMs/SEHMs, and studies for prevention for funding by international donor(s) as	Actual																
rieeded, utilizing trie results of Output 0x4													_				

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Control of the cont		1						ļ		ŀ			ĺ				200		Responsible	Responsible	Implementor	Japanese	Other Major			le &
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Column C		d d	ctual																			Coordinator (LAC)				
Manual Paper of Pap		Set-up Detailed Plan of Operation (DPO)	lan	•															MOT	Dy Poject Director		CA				
Application of protection of			ctual	•																(DPD)						
Commence of the control of the con		Annual Plan of Operation (APO) based on DPO for review and approval by ICC	lan	•															MOT	ditto	All Mgt personnel	CA				
Continue to the continue to			ctual	•																						
Secretarial Possible Formation Plane Formati		Joint Monitoring semi-annually	lan				•		•		•	•		•		•			MOT	ditto	All Mgt personnel	CA				
Columnation of Service Annual Material Report (Fig. 1) Columnation of Service Annual Material Repotential Material Report (Fig. 1) Columnation of Service Annua			ctual			•																				
Color Colo		Semi-annual Monitoring Sheet for submission to IICA Talikistan Office	lan				•		•		•	•		•		•			MOT	ditto	All mgt personnel	CA				
Comparison from JCA Headquarters Responsibility Comparison from JCA Headquarters Comparison from JCA Headquarters Responsibility Comparison from JCA Headquarters Compar			stual																							
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Semination standy Part P		d d	otual																	-	Project					
Signification Significatio		Organize information sharing seminars/workshops for all target	lan																MOT	Dy Poject Director	All Mgt personnel	CA, all experts in				
Reports/Documents	-		ctual																	<u>(</u>)		- ajınsalı				
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Attachment-1 Machinery and Equipment Supply

Equipment Supply

> Provision by the Experts Team

Item	No. of Item	Procurement Period	Procurement Country
1. Total Station	3	Sep. 2017 : Completed	Japan
2. Auto Level	6	Sep. 2017 : Completed	Japan
3. Radar Distance Meters	31	Sep. 2017 : Completed	Japan
4. Early Warning Monitoring Equipment	8	Sep. 2017 : Completed	Japan
5. Laptop Computer	3	Aug. 2017 : Completed	Tajikistan
6. Desktop Computer	4	Jul. 2017 : Completed	Tajikistan

> Provision by JICA

	Item	No. of Item	Procurement Period	Procurement Country
7.	Attachments for Back-hoe Excavator	2	Jan. 2018 : Bids	Japan
8.	Attachments for Compressor	2	Jan. 2018 : Bids	Japan
9.	Gabion Product Box	Determined for later	Jan. 2018 : Bids	Japan/ the third country
10.	UV Bag for Sandbag Construction Method	Determined for later	Jan. 2018 : Bids	Japan

TO CR of JICA TAJIKISTAN OFFICE

PROJECT MONITORING SHEET

Project Title: The Project for Capacity Development for Road Disaster Management

Version of the Sheet: Ver.3 (April 2018)

Name : Hiroshi Mita

Title: Chief Advisor

Submission Date: 25 April, 2018

I. Summary

1 Progress

1-1 Progress of Inputs

Inputs	Plan as of May 2017	Actual as at 10 April 2018
Experts	Total MM: 82.55MM	Total MM: 33.25MM(40.3%:rate of
		latest total MM, 82.55MM)
	1) Chief Advisor / Road Disaster	1) Chief Advisor / Road Disaster
	Management	Management
	2) Deputy Chief Advisor / Road	2) Deputy Chief Advisor / Road
	Disaster Management 2	Disaster Management 2
	3) Institution	3) Institution
	4) Disaster Recovery Measures	4) Disaster Recovery Measures
	5) Disaster Prevention Measures 1	5) Disaster Prevention Measures 1
	6) Disaster Prevention Measures 2	6) Disaster Prevention Measures 2
	7) Hazard Evaluation	7) Hazard Evaluation
	8) Machineries and Equipment O&M	8) Machineries and Equipment O&M
	9) Cost Estimation	9) Cost Estimation
	10) Database 1	10) Database 1
	11) Database 2	11) Database 2
	12) Instrumentation Monitoring	12) Instrumentation Monitoring
	13) Project Monitoring / Japan Training	13) Project Monitoring / Japan Trainir
Trainees Received	Training in Japan	(Future activity)
Equipment	Equipment for Output2,3	- Provision by the Experts Team was
1 1		completed by the end of Sep, 2017.
		- Provision by the JICA will completed
		by the end of 2018.
		(Attachment-1)
Others	N/A	N/A
Tajikistan side	Personnel	Personnel
Operational Expenses	1. Project Director:	1. Project Director:
1	Deputy Transport Minister, MOT	Deputy Transport Minister, MO
	2. Deputy Project Director:	2. <u>Deputy Project Director:</u>
	Head of RCM, MOT	Head of RCM, MOT
	3. Project Manager:	3. Project Manager:
	Head of International Relation	Head of International Relation
	Dept. MOT	Dept. MOT
	4. Regional Managers:	4. Regional Managers:
	Heads of the target SETMs	Heads of the target SETMs
	5. Relevant Staff of MOT	5. Relevant Staff of MOT

- 6. Relevant Staff of DI
- 7. Relevant staff of the target SETMs/SEHMs:
- 8. Other personnel mutually agreed upon as necessary

Land, Building and Facilities

- 1. Land, Building and facilities necessary for the implementation of the Project
- 2. Office spaces for the Project in the building of MOT, Hissar and Sogd SETMs with office furniture and utilities such as internet connectivity, telephone line, electricity, etc.

Local Costs

- 1. Cost for installation, operation and maintenance of the provided equipment,
- Administration and operational costs, including fuel costs, and materials for prevention / recovery works. Meal allowances for SETMs/SEHMs to participate in training drills. Prevention / recovery works

- 6. Relevant Staff of DI
- 7. Relevant staff of the target SETMs/SEHMs:
- 8. Other personnel mutually agreed upon as necessary

Land, Building and Facilities

- 1. Land, Building and facilities necessary for the implementation of the Project
- 2. Office spaces for the Project in the building of MOT, Hissar and Sogd SETMs with office furniture and utilities such as internet connectivity, telephone line, electricity, etc.

Local Costs

- 1. Cost for installation, operation and maintenance of the provided equipment,
- 2. Administration and operational costs, including fuel costs, and materials for prevention / recovery works. Meal allowances for SETMs/SEHMs to participate in training drills. Prevention / recovery works

1-2 Progress of Activities

Progress of activities is indicated in Monitoring Sheet Form 3-2 (PDM) and Form 3-3 (PO).

1-3 Achievement of Output

		Achie	vement		
	Output/Indicators	('	%)	Major Results	Status ¹
		Plan	Actual		
O	utput-1:				
R	oad disaster managem	ent str	ucture o	of MOT and the target SETMs/SEHMs is strengthe	ened.
1a	a report on current disaster management relevant to MOT and the target SETMs/SEHMs is developed	100	100	Based on collection of the most recent data on road disaster management and ensuing interviews with the C/Ps in charge, review was conducted by the Experts and the current road disaster management report was compiled by the end of June 2017.	OT
1b	o. By July 2017, roles and responsibilities of Road Disaster Management Taskforce	100	100	The role of RDMT is as follows; -The RDMT acts as a team to participate in all project activities to achieve all outputs in cooperation with the Experts Team All members will acquire skills and knowledge to enhance own specialized field of road disaster	OT

¹ OT: On Time, SFT: Scheduled for later, DL: Delay

ANNEX 5-46

supporting SETM/SEHM(RD MT) is clarified.			management duties of MOT and Design Institute The team will support activities of other counterparts.	
			The responsibilities of RDMT are as follows; - Members will share activities so that participation in project activities do not hinder other duties of MOT and Design Institute. - As such, RDMT will convene a monthly meeting so that participation by each member is prearranged considering the specialized field of each member. - Upon confirming that monthly meetings are held as agreed, targets and development plans of each member will be agreed with the Experts Team.	
1c. By the end of the Project, 80% of members of RDMT are able to support SETMs/SEHMs according to their respective roles and responsibilities.	25	25	RDMT members are actively participating in Outputs 2, 3 and 4 activities and supporting the target SETM and SEHMs. RDMT members are monitoring project progress.	OT
1d. By the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs, including institutionalization od RDMT, is approved by MOT	0	0	N/A	SFT
Output-2:				
-	s by the	e target	SETMs/SEHMs are improved through standardiza	ation
2a. By Dec 2017, a road disaster recovery manual for SETM/SEHM/RRT is developed	100	100	The English version of Road Disaster Manual was drafted and the translation work into Russian was completed. The manual has been prepared to generate improvement so that even the urgent recovery works are carried out more systematically and in a more planned manner.	OT
2b. 80% of the training participants from all target SETMs/SEHMs passes the post-training test on disaster recovery works	100	100	Trainings on disaster recovery works using Road Disaster Recovery Manual Version 1 were conducted in February 2018. Over 80%(100% =59 /59) of the training participants from all target SETMs/SEHMs passed the post-training test.	OT
2c. 80% of the trainees from all target SETMs/SEHMs passes the post-drill test on disaster	0	0	N/A	SFT

	recovery works for				
2d.	each job category Disaster recovery works in the drills are planned and implemented by all target SETMs/SEHMs according to the	20	20	The on-site drills for simulated road disaster recovery works were conducted from early April 2018. The on-site drill is ongoing and it will be completing by 2 May 2018. The Disaster recovery works in the drills are scheduled to be implemented three times in total.	OT
2e.	manual Disaster recovery works at the actual disaster sites are planned and implemented by all relevant target SETMs/STHMs according to the manual	0	0	N/A	SFT
2f.		0	0	N/A	SFT
	tput-3.:				
3a.		100	100	The road disaster prevention manual for SETM/SEHM was developed by Oct. 2017. However, the Russian version translation will be carried out in May 2018 before activities for disaster prevention actions such as Activity 3.7, 3.8 and 3.9 are carried out.	OT
3b.	80% of the training participants from all target SETMs/SEHMs passes the post-training test on hazard evaluation and locally adaptable prevention measures each	50	50	The hazard evaluation training was implemented from September through October, 2017. Over 80%(100% =58 /58) of the training participants from all target SETMs/SEHMs passed the post-training test. The locally adaptable prevention measures training is scheduled to be implemented in August 2018.	OT
3c.	Hazard evaluation is conducted at least twice by all target SETM/SEHM for 10 target sections in all target SETMs according to the manual	40	40	Based on the results of the site visit, the 10 target section was decided: -Hissor SETM pipe (4 sections) -Sughd SETM pipe (4 sections) -Rasht SETM pipe (2 sections) Hazard evaluation was conducted twice by all target SETM/SEHM for 4 target sections in all target SETMs according to the manual.	OT
3d.	Locally adaptable prevention measures are	0	0	Based on the results of the site visit, the 4 priority sites in Hissar and Soghd were selected.	SFT

	planned by all				
	target SETMs for 4				
	priority sites in				
	Hissar and Soghd				
	SEYMs according				
	to the manual.				
3e.	Locally adaptable	0	0	N/A	SFT
	prevention				
	measures are				
	implemented by 4				
	target SEHMs at 4				
	priority sites in				
	Hissar and Soghd				
	SETMs according				
	to the manual				
3f.	80% of the	0	0	N/A	SFT
	observers from the				
	other 22 SEHMs				
	passes the				
	post-observation				
	test on				
	implementation	0	0	NT/A	CEE
3g.	By Mar. 2020,	0	0	N/A	SFT
	future disaster				
	prevention plans				
	are developed for 10 target sections				
	by all target				
	SETMs				
3h	By the end of the	0	0	N/A	SFT
511.	Project, the			17/21	51 1
	finalized manual is				
	approved by MOT				
Ou	tput-4.:				
	-	disaste	er mana	gement (*1) is available for MOT and the target S	ETMs
				covery and prevention	
	By Dec 2017,	100	100	The Experts Team commenced DB development	OT
	road disaster			from the middle of August 2107 in Japan based on	
	management			the agreed DB system framework. The initial	
	database is			version was completed at the end of October	
	developed			2017.	
	according to the				
	design developed				
	through the Project				
4b.	By Dec 2017,	100	100	The Experts Team submitted Road Disaster DB	OT
	road disaster			Manual version 1 to the target SETMs and ITU	
	management			and RCM of MOT in December 2017.	
	database manuals				
	for users and				
	administrator are				
	developed				
4c.	80% of the training	100	100	Training sessions were held from 22 November	OT
	participants from		1	2017 to 22 December 2017 for both DB	

	MOT and the target SETMs passes the post-training test on database use.			administrators and for DB users. Over 80%(100% =18 /18) of the training participants from all target SETMs/SEHMs passed the post-training test.	
4d.	By Mar 2019, the database is released to MOT and the target SETMs	0	0	N/A	SFT
4e.	From 2019, a simple disaster management report is submitted to senior management of MOT once a year	0	0	N/A	SFT
	By the end of the Project, the finalized manual is approved by MOT	0	0	N/A	SFT
	tput-5.: OT and the target SE	TMs/SI	EHMs a	re capable of preparing budget proposal for roa	d disaster
	evention				
5a.	By Mar 2020, a report of a pilot study on cost-effectiveness of the locally adaptable disaster prevention is developed	0	0	N/A	SFT
	By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of the regular budget for FY 2021 based on the future development plans	0	0	N/A	SFT
5c.	By the end of the Project, at least one project proposal for large-scale disaster prevention of the priority site(s) and studies for prevention is submitted by MOT to international	0	0	N/A	SFT

donor(s) for		
funding, utilizing		
the results of		
Output 3 and 4		

1-4 Achievement of the Project Purpose

Project Purpose/Indicators	Achievement (%)	Situation	Expected Time of Achievement
Project Purpose: Capacity of MOT and the improved.	target SETM	s/SEHMs for effective road disaster manage	ment is
a. By the end of the Project, 80% of results of the disaster recovery works by the target SETMs/SEHMs, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans	0	N/A	SFT
b. By the end of the Project, 80% of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the Japanese Expert Team	0	N/A	SFT
c. 80% of results of the disaster prevention measures #2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality and safety specified in the plans.	0	N/A	SFT
d. By the end of the Project, budget	0	N/A	SFT

request for disaster		
prevention in the		
target SETMs for FY		
2021 is submitted to		
Ministry of Finance		
(MOF) as part of the		
regular budget		

1-5 Achievement of the Overall Goal

O	verall Goal/Indicators	Achievement (%)	Situation	Expected Time of Achievement
Ro	verall Goal: oad disasters are mitigat TMs/SEHMs	ed in the inte	rnational and Republican Roads in the targe	et
a.	All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project	0	N/A	SFT
b.	By Jul 2023(*2) disaster prevention measures are planned and / or implemented at least 5(*3) priority sites in the target SETMs according to the disaster prevention manual developed through the Project	0	N/A	SFT
c.	From Aug 2020 to Jul 2023 the average duration required for road re-opening per disaster handled by the target SETMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018)	0	N/A	SFT

^(*1) Data necessary for road disaster management includes disaster record, results of hazard evaluation, prevention measures, and recovery works among others.

^(*2) Underlined deadlines in the indicators are set based on the schedule of the Tentative PO. They shall be modified according to the Detailed PO to be prepared in the beginning of the Project for approval by the first JCC.

^(*3) Target values of the indicators shall be filed based on the results of the baseline survey, Which shall be reviewed and approved by the 2nd JCC.

1-6 Changes of Risks and Actions for Mitigation

N/A

1-7 Progress of Actions undertaken by JICA

N/A

1-8 Progress of Actions undertaken by Gov. of Tajikistan

N/A

1-9 Progress of Environmental and Social Considerations (if applicable)

N/A

1-10 Progress of Considerations on Gender/Peace Building/Poverty Reduction (if applicable)

N/A

1-11 Other remarkable/considerable issues related/affect to the project (such as other JICA's projects, activities of counterparts, other donors, private sectors, NGOs etc.)

N/A

2 Delay of Work Schedule and/or Problems (if any)

2-1 Detail

N/A

2-2 Cause

N/A

2-3 Action to be taken

N/A

2-4 Roles of Responsible Persons/Organizations (JICA, Gov. of Tajikistan, etc.)

N/A

3 Modification of the Project Implementation Plan

3-1 PO

Detailed Plan of Operation (DPO) was revised to DPO Version 2 dated 20 April 2018.

- Shift Database 2 Expert assignment from December 2018 to April 2018
- Add Activity 3.2 in June 2018
- Add Activity 4.11 in April 2018

It is attached as Monitoring Sheet Form 3-3.

3-2 Other modifications on detailed implementation plan

(Remarks: The amendment of R/D and PDM (title of the project, duration, project site(s), target group(s), implementation structure, overall goal, project purpose, outputs, activities, and input) should be authorized by JICA HDQs. If the project team deems it necessary to modify any part of R/D and PDM, the team may propose the draft.)

N/A

- 4 Measures undertaken by Gov. of Tajikistan or Project Team to Ensure the Sustainability of Project after the Project Completion
- 4-1 Financial Sustainability

N/A

4-2 Technical Sustainability

N/A

4-3 Institutional Sustainability

N/A.

Dated, 20, April, 2018

Version 3

Project Monitoring Sheet I (Revision of Project Design Matrix)

Project Title: The Project for Capacity Development for Road Disaster Management

implementing Agency: Ministry of Transport (MOT)

Target Group: MOT, Hissor SETM and its 9 SEHMs, Sughd SETM and 14 SEHMs, and Rasht SEHM and its 3 SEHMs (Nurobod, Rasht, and Ta-iikobod)

Period of Project: April 2017 - July 2020 (in Tajikistan)

ject Site: International and Republican roads in Hissor and Sughd SETMs as well as Nurobod, Rasht and Tajikobod SEHMs in Rasht SETM

(Future activity) (Future activity) (Future activity) (Future activity) (Future activity) (Future activity) (Future activity) Budget including prevention, is approved by disaster not natural affect the project sites do not occur. Important Assumption instability/economic disaster that for crisis/serions management discontinued. Political Policy MOF Ä B. Hazard evaluation disaster Data of budget request Means of Verification sheets, in the Database prevention & recovery Assessment report Prevention sheet Recovery sheet a-c а. С i Ö All disaster recovery works by the target SETMs/SEHMs are planned and implemented or implemented at least 5(*3) priority sites in the target SETMs according to the disaster prevention manual developed through the the average duration required for road re-opening per disaster handled by the target the same before the Project (from May 2017 to according to the disaster recovery manual SETMs is decreased by 20% compared with By the end of the Project, 80% of results of the measures #2 by Hissor and Sughd SETM and 2 disaster prevention measures are planned and / By the end of the Project, 80% of the results of disaster prevention in the target SETMs for FY requirements of time, cost, quality and safety By the end of the Project, budget request for the hazard evaluation by all target SEHMs, according to the disaster prevention manual SETMs/SEHMs, according to the disaster developed through the Project, is assessed 2021 is submitted to Ministry of Finance 80% of results of the disaster prevention Project, meet requirements of time, cost, quality, and safety specified in the plans recovery manual developed through the target SEHMs, according to the manual Objectively Verifiable Indicators accurate by the Japanese Expert Team disaster recovery works by the target (MOF) as Part of the regular budget developed through the Project, meet developed though the Project From Aug 2020 to Jul 2023 specified in the plans. By Jul 2023(*2) April 2018) Project ပ 6 ပ ن ä. International and Republican Roads Road disasters are mitigated in the Capacity of MOT and the target SETMs/SEHMs for effective road disaster management is improved. Narrative Summary in the target SETMs/SEHMs Project Purpose Overall Goal

PM Form 3-2 Monitoring Sheet Summary

Means of Vermeauon
Date of report Approval of JCC Joint review based on individual capacity devl
plan Official approval document
the
of the

Remarks																
Achievement	the post-training test. The locally adaptable prevention measures training is scheduled to be implemented in August 2018.	Hazard evaluation was conducted twice by all target SETM/SEHM for 4 target sections in all target SETMs according to the manual	Based on the results of the site visit, the 4 priority sites in Hissar and Soghd were selected.	(Future activity)	(Future activity)	(Future activity)	(Future activity)	The Experts team commenced DB development from the middle of August 2107 in Japan based on	The initial version was completed at the end of October 2017.	The Experts team submitted Road Disaster DB Manual version 1 to the target SETMs and ITU and RCM of MOT in December 2017.	Over 80%(100% = 18 / 18) of the training participants from all target SETMs/SEHMs passed the post-training test.	(Future activity)	(Future activity)	(Future activity)	(Future activity)	(Future activity)
Important Assumption																
Means of Verification	3h ditto							4a. Comparison with the design 4b. Acceptance letter							5a. Acceptance letter5b. Budget document5c. Proposals submitted	
Objectively Verifiable Indicators		Hazard evaluation is conducted at least twice by all target SETM/SEHM for 10 target sections in all target SETMs according to the manual	1. Locally adaptable prevention measures are planned by all target SETMs for 4 priority sites in Hissar and Soghd SEYMs according to the manual.		: 80% of the observers from the other 22 SEHMs passes the post-observation test on implementation	9. By Mar. 2020, future disaster prevention plans are developed for 10 target sections by all target SETMs	n. By the end of the Project, the finalized manuals is approved by MOT			o. By Dec 2017, road disaster management database manuals for users and administrator are developed	2. 80% of the training participants from MOT and the target SETMs passes the post-training test on database use.	1. By Mar 2019, the database is released to MOT and the target SETMs	Erom 2019, a simple disaster management report is submitted to senior management of MOT once a year		n. By Mar 2020, a report of a pilot study on cost-effectiveness of the locally adaptable disaster prevention is developed	
Narrative Summary		36.	34.	36.	3f.	Sign Sign Sign Sign Sign Sign Sign Sign	3h.	Output-4.: Data necessary for road disaster management is available for MOT	and the target SETMs for budget	woks and prevention 4b.	46.	44	46.	4f.	Output-5.: MOT and the target SETMs/SEHMs are capable of preparing budget proposal for road	disaster prevention 5b.

				1 IVI 1 OI III 3-2 IV.	in i ulii 3-2 inuliililiig siicel sulliilai
Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption	Achievement	Remarks
	prevention measures are prepared by all target SETM and MOT as part of the regular budget				
	for FY 2021 based on the future development plans				
	5c. By the end of the Project, at least one project				
	proposal for large-scale disaster prevention of the priority site(s) and studies for prevention is			(Future activity)	
	submitted by MOT to international donor(s) for			,	
	funding, utilizing the results of Output 3 and 4				

	Activities		Innute		Important Assumption
Out	Output 1:	The Japanese Side	The Taiik Side	Ą	Natural disaster/political instability
Roa	Road disaster management structure of MOT and the target SETMs/SEHMs is	Incoapance Diverse	Derconnol	;	economic crisis that affect the
stre	ngthened.	oapanese Experts	T CLEONING	ב	project activities do not occur
I-I.	. Classify the target disasters through collection and analysis of the past disaster records	1. Chief Advisor 2. Institution	1. Project Director: Deputy Transport Minister MOT	Ď.	security situation of rajikistan which limits the activities of the
1-2			2. Deputy Project Director		JICA experts, especially in the
		3. Road Disaster Prevention			project sites, does not deteriorate
			3. Project Manager		compared with the same in 2016
1-3.				<pre></pre>	<pre></pre>
	supporting SETIM/SEHIM (KDIM1) formed at MO1 and its members as well as their	6. Cost estimate 7. Database	4. Kegional Managers Heads of the target SETMs	57	
1-4				Ą.	Tentative list of the Project Staff,
-					including Disaster Management
1-5.		10. Other experts mutually agreed upon as	7. Relevant staff of the target SETMs/SEHMs	٢	Taskforce is finalized
	target SETMs/SEHMs based on the feedbacks from the project activities for	necessary	8. Other personnel mutually agreed upon as necessary	D	internet connection is established at each target SETM
Out	Output 2:	Louismont			
Roa	Road disaster recoveries by the target SETMs/SEHMs are improved through	Equipment	Land. Building and Facilities		
stan	===	1. Equipment for disaster recovery and	71. 7 1 1.11.		
2-1.		prevention 7 Hardware and coffware for database	1. Land, building and facilities necessary for		Issues & counter measures
(2. Haluwale allu soltwale 101 uatabase 3. Deskton PC for database at MOT and	2 Office spaces for the Project in the huilding		
2-7.	Develop a disaster recovery manual for SETM/SEHM and RRI, including action for				
7_3		4. Laptop PC for hazard evaluation and	office furniture and utilities such as internet		
.6-7			connectivity, telephone line, electricity, etc.		
	supervision, disaster recovery sheet) (in Hissor and Sughd SETMs)	5. Monitoring equipment for simple early			
2-4.		Warming Ather equipment mutually expeed upon	Local Costs		
			1. Cost for installation, operation and		
2-5.		Training of the Train December 1:- Town	maintenance of the provided equipment,		
ć		Training of the Tajik Fersonnel in Japan	2. Administration and operational costs,		
2-0.	 Update and finalize the manual, reflecting the feedbacks from Act. 2.5-2.5 Certify Trainers for Disaster Recovery from the faroet SFTMs/SFHMs 	angor third country	ts, and materials		
Out	12	Local costs	recovery works, M.		
Pro	Output 5: Process of simple road disaster prevention is established at the target SETMs/SEHMs		tor		
3-1.	Examine hazard evaluation methods and locally adaptable prevention measures	Cost for activities of JET, local travel &	participate III daming, dims,		
		ttion cost for SETMs/SEHM	prevention receipt works		
3-2.		participate in training, drills and			
	evaluation and Ilocally adaptable prevention measures, which is used for Activity	prevention/recovery work			
7-7					
,					
	sheet) (in Hissor and Sughd SETMs)				
3-4.					
3-5.	. Conduct hazard evaluation at the target sections by all target SEHMs in coordination				
2 6					
3-7.					
0					
5-0.	Organize trainings on locally adaptable disaster prevention measures to all target TMs/HMs (i.e. selection, prevention measure sheet, monitoring for simple early				
-		-			

	PM For	n 3-2 Monitoring Sheet Summary
Activities	Inputs	Important Assumption
ng) (in Hissor and Sughd SETMs)		

l	Activities	Inputs	Important Assumption
3	warning) (in Hissor and Sughd SETMs) 3-9. Plan and implement locally adaptable prevention measures #1 & #2 on pilot basis at		
	the priority sites in the target sections selected in the first year (in Hissor and Sughd SETMs) by the relevant target SETMs/SEHMs		
	a. Selection of measures		
	o. Design c. Budget preparation		
	e. Prevention measure sheet		
m m	3-10. Update and finalize the manual, reflecting feedbacks from Activities 3.3-3.9 3-11. Certify Trainers for Disaster Prevention from the target SETMs/SETMs		
ار	Output 4:		
I	Data necessary for road disaster management is available for MOT and the target		
V 1 <	SETMs for budget preparation and disaster recovery woks and prevention		
ı. ∠			
r 4			
-			
4	4-4. Conduct trainings on database use for MOT and all target SETMs (i.e. collection,		
	4-5. Collect data of disaster recovery at all target SETMs in 2017 as baseline data in the		
	prescribed from improved by the Froject. 4.6 Collect data necessary for disaster management from the farget SEHMs (i.e. disaster		
EX 4	4-7. Digitalize the data collected from the target SEHMs by the respective target SETMs		
	4-8. Integrate the digitized data submitted by the target SETMs into the database 4-9. Release the database to MOT and all target SETMs		
4			
-			
4	4-11. Update and finalize the database design and the manuals, reflecting feedbacks from the database users		
	Output 5:		
	MOT and the target SETMs/SEHMs are capable of preparing budget proposal for		
-			
ν Ω	5-1. Plan and implement a pilot study on cost effectiveness of simple disaster prevention measures at the target sections selected in the first year underQuirnit3, using simple		
	hazard location maps		
ς,	5-2. Create a budget item for disaster prevention in the regular budget of SETM/SEHM/MOT		
5	5-3. Prepare a budget for locally adaptable disaster prevention for the priority sites		
	identified under Output 3 by all target SETMs and MOT, utilizing the results of Output 3&4		
2	5-4. Develop project proposal(s) on large-scale prevention measures for the priority		
	site(s) in the target section(s) under outputs, which cannot be handled by the target SETMS/SEHMS, and studies for prevention measures for funding by international donor(s) as needed utilizing the results of Output 3&4		
]	and and an entropy and former in (a) to the		

Project Title: The Project for Capacity Development for Road Disaster Management in the Republic of Tajikistan Form 3-3 Project Monitoring Sheet (Detailed Plan of Operation)

Dated: 20 April 2018

Version 2

Issue Changes are indicated by Learn about road disaster management 2. Deputy Chief Advisor/ Road Disaster Wanagement 2 15. Interpreter/Sub Project Coordinator (1) & (2) .. Deputy Chief Advisor/ Road Disaster lanagement 2 16. Interpreter/Sub Project Coordinator 13. Project Monitoring/ Japan Training 13. Project Monitoring/ Japan Training Machineries and Equipment O&M Disaster Prevention Measures 1 Disaster Prevention Measures 2 technology in Japan n-country/Third country Training 1. Provision by the Experts Team Chief Advisor/ Road Disaster Chief Advisor/ Road Disaster Disaster Recovery Measures 12. Instrumentation Monitoring Project Coordinator Hazard Evaluation 2. Provision by JICA Cost Estimation Cost Estimation 11. Database 2 11. Database 2 10. Database 1 **Janagement** /Janagement 3. Institution ΑX nputs

Year		2017					18				2019		_ T	-	202	Ŀ		Responsible Ora (Taiik)		le Implementor	tor Japanese Experts		Other Major Inputs	puts	Remarks Achir	evem	Issue & Counterme
Month 1	2 3 4	5 6 7	8 9 10	9 10 11 12 1	1 2 3	4 5 6	7 8 9	9 10 11 12	1 2	3 4 5	6 7 8	9 10 11 12	_	2 3 4	9 2	7 8 9 1	10 11 12	Olg (Tajik)	(Tajik)	ક(ા લ્યાપ)	Experts	Japan	_	Tajik			asures
re of N	лот а	Output 1:Road disaster management structure of MOT and the target SETMs/SEHMs	rget SE	ETMs/S		is stren	strengthened	ġ.										MOT	Head of RCM		Chief Advisor (CA)	(A)					
Plan																		RCM)/MOT	Head of MPEU	Road Disater Mgt Taskforce /RDMT(RC		ork	Target TMs/HMs	HMs			
Actual																				M, DI)		"	-				
Plan																		RCM/MOT	Head of MPEU	ditto	Recov. M, Hazard Eva, Prev M, Institution	, va,					
Actual																											
Plan																		RCM/MOT	Head of MPEU	ditto	ditto						
Actual																											
Plan																		RCM/MOT	Head of RCM	ditto	ditto						
Actual																											
Plan																		RCM/MOT	Head of MPEU	RDMT(RCM . DI), SETM	M Recov.M, M Prev, M. Hazard Eva	. va					
Actual																											
<u>re</u>	Output 2:Road disaster recoveries by the target SETMs/SEHMs are improved thro <mark>u</mark> gh standardization	1s/SEHI	ls are	impro	ved thr	s ybno	tandar	dizatio	<u> </u>									Overall:MOT Field:SETM			Chief Advisor			RDMT partcip the fiel activiti	RDMT partcipate in the field activities as		
Plan																		RCM/MOT	Head of MPEU	RDMT (RCM, DI), SETM	Recov M, Cost E, O&M						
Actual																											
Plan																		RCM/MOT	Head of MPEU	ditto	ditto						
Actual																											
Plan																		SETM	Chief Engineer level (SETM)	SETM	ditto	Eqpt for Recov, travel &	or Fuel, O&N cost for eqpt, mea	Fuel, O&M cost for eqpt, meal allowance			
Actual																						cost for SEHM/SE HM	r for /SE SETN	for SETM/SEH M			
Plan																		SETM	Chief Engineer level	SETM, SEHM	ditto	ditto	ditto				
Actual																			(SETM)								
Plan																		SETM	Chief Engineer level	SETM, SEHM	ditto	ditto	ditto				
Actual																			(SETM)								
Plan																		RCM/MOT	Head of MPEU	RDMT (RCM, DI), SETM	ditto						
Actual																											
Plan																		n/a	n/a	n/a	CA, Recov.M &OM						
Actual					_																						

								t		מ	1,510					1		JII, MI	T C I	lainteris	ance, Pi	anning &	Evaluati	on Unit, K	CM=κοαα	Construc	tion and Iv	Jaintenanc	DI=Design Institute, EAF=Econ Analysis & Forcasting Dpt, TU=IT Unit, MPEU=Maintenance, Planning & Evaluation Unit, RCM=Road Construction and Maintenance Dept, RCU=Road Construction Unit	U=Koad C	onstructio	n Uhit,
Δ	Activities	Year		2017					2018					2019	6				20	2020		Resp	0	Responsible Person	Implementor		Other	Other Major Inputs	uts Remarks			Issue & Counterme
		Month 1 2	3	4 5 6 7		8 9 10 11 12 1 2		3	5 6 7	8 9	8 9 10 11 12	2 1 2	3 4	9 9	7 8 9	9 10 11	12 1	2 3 4	5 6	7 8	9 10 11	12		ajik)	s(Tajik)	Experts	Japan	n Tajik		ents	asures	res
Ont	Output 3: Process of locally adaptable road disaster prevention is established at :	road disas	ster pre	eventi	ion is	estab	lished		e targ	et SE	TMs/S	he target SETMs/SEHMs	(A)									Over. Field:	Overall:MOT He Field:SETM RC	Head of RCM Head of SETM		Chief Advisor			RDMT partcipate in the field activities as	e in		
3.1	Examine hazard evaluation methods and 1 locally adaptable prevention measures based on the current state review (Activity	Plan																				RCM	RCM/MOT HE		RDMT (RCM, DI) SETM	Prev. M, Hazard Eva, CostE, Monitoring	rs'					
	1.2)	Actual																								(Mon)						
3.2	Develop a disaster prevention manual for 2 SETM/SEHM, consisting of hazard evaluation and locally adaptable prevention	Plan																				RCM	RCM/MOT HE	Hed of MPEU	RDMT (RCM, DI) SETM	Prev M, Hazard Eva, Cost E, Mon	a, E					
		Actual																														
3.3	Conduct trainings on hazard evaluation to 3 all target SETMs/SEHMs and MOT (i.e. screening, selection of hazardous sites.	Plan																				SETM		Chief Engineel level (SETM	SETM	Prev M, Hazard Eva	ditto	ditto				
		Actual																														
3.4		Plan				I for ha	for hazard eva	eve.			II for hazard	ızard				目 for h	for hazard					SETM		Chief Engineel level (SETM	SETM	Prev M, Hazard Eva	PC for a hazard eva, trav	O&M cost, meal vel allowance	cost, Network connection nce at TM	tion		
		Actual																									& accom cost for SETM/SE		needed for google map/earth	f for		
3.5	Conduct hazard evalatuon at the target sections by all target SEHMs in coordination with the respective target SETMs	Plan				П					н						H					SETM		Chief Engineel level (SETM	SEHM, SETM	Hazard Eva		Fuel, O&M cost, meal allowance	D&M neal nce			
		Actual																										for SETM/SE HM	/SE			
3.6	Identify priority sites in the target sections 6 based on the results of the hazard evaluation by the respective target SETMs	Plan										ы					Ħ					SETM		Chief Engineel	SETM	Hazard Eva	a ditto					
		Actual																														
3.7	Develop a future disaster prevention plan 7 for each target section by the respective target SETMs.	Plan										і, П					Ħ.					SETM		Chief Engineel level (SETM		Hazard Eva, Prev M, Cost E, Mon	a, ditto		The plans would be utilized in	S g 7		
		Actual																							SEHM				Act 1.7, 4.8	χ΄		
3.8	Conduct tainings on locally adaptable grevention, measures to all target SETMs/SEHMs and MOT (it. selection of measures desting burden suparvision).	Plan																				SETM		Chief Engineel level (SETM)	SETM	ditto	Travel & Baccom cost for SETMs/SE	& Exusting eqt, fuel for eqpt, meal /SE allowance	ig sl for seal			
		Actual																									HMs		SEH			
3.9		Plan										I -#1					7#-1	- 2				SETM		Chief Engineel level (SETM)	SEHM.	Hazard Eva, Prev M, Cost E, Mon	a, Eqt for prev & nonitor, travel &	Fuel, O&M cost, existing eqpt, meal	λgΜ 1 eal			
	the	Actual																									accom cost for SETM/HM	allowance for SETM/SEH M	SEH			
10	a Selection of measures	Plan				H	H				H	\parallel					Ħ	Ħ			\parallel	SETM		ditto	SETM							
٠.	b Design	Plan										#						\dag				SETM		ditto	SETM							
<u> </u>	c Budget preparation	Plan									H	\parallel						\dag				SETM		ditto	SETM							
J	d Supervision	Plan Actual										\parallel						Ħ				SEHW		ditto	SEHM			_				
Ð	e Prevention measure sheet	Plan					H					Ħ	H				Ħ	Ħ				SEHM		ditto	SETM							
3.10	3.10 Update and finalize the manual, reflecting feedbacks from Activities 3.3-3.9	Plan					\blacksquare					#	\blacksquare			Ħ	∄	\dagger				RCM	RCM/MOT HE	Head of R	(in	Hazard Eva, Prev M,	ů,					
3.11		Plan					H					\forall	H		-	H						n/a	n/a			CA, Hazard Eva, Prev M	≂ ⊼	\vdash				
		Actual					\exists					\exists	\exists		77		\exists	\exists				\exists	\dashv					\dashv	\dashv	4	\dashv	

	,											,	_						_	-
	Year	2017			2018		-	2019		-	2020		Responsible	ble Person	Implementor	Japanese	Other Major Inputs	nputs Remarks	Achievem	vem Counterme
	Month 1 2 3	3 4 5 6 7	8 9 10 11 12	12 1 2 3	4 5 6 7	8 9 10 11 12	1 12 1 2 3	3 4 5 6 7	8 9 10 11 12	1 2	3 4 5 6 7	7 8 9 10 11 12	11 12 Org (1a)	(Tajik)	s(Tajık)	Experts	Japan	Tajik		
Output 4: Data necessary for road disaster management is available for MOT and the t <mark>ar</mark> get SETMs for budget pre _l	r managem	ent is availa	ble for MC	T and the t	arget SE	TMs for b	udget prep	paration and disaster recovery and prevention	d disaste	recovery	and preve	ntion	MOT (RCM, EAF)	.M.		Chief Advisor				
Develop a plan for road disaster	Plan												EAF/MOT	Head of ITU	ITU (TBD)	Database (DB)			+	<u> </u>
_	Actual																			
Design a database system with installed hardware, consisting of spread sheets	Plan												EAF/MOT	F Head of ITU	ти (твр)	ditto D	DB O&N software	O&M cost		
	Actual															a L	and hardware			
_	Plan												EAF/MO1	F Head of ITU	пи (твр)	ditto				
the target SETMs) and administrator, which are used for Activity 4.4-4.10	Actual																			
Conduct trainings on database use to MOT and all farget SETMs (i.e. collection input	Plan												EAF/MOT	F Head of ITU	пи (твр)	ditto	PC for DB O&N	O&M cost		
=	Actual																			
Collect data of disaster recovery works at all target SETMs in 2017 as baseline data in	Plan												RCM/MOT &SETM	T Chief Engineer	SETM (TBD)	Recov.M, CostE, O&M				
	Actual													(SETM)						
_	Plan												RCM/MOT &SETM	T Chief Engineer	SETM (TBD)	Hazrd Eva. Prev M,				
	Actual													(SETM)		2000				
Digitalize the data collected from the target SEHMs by the respective target SETMs for	Plan												RCM/MOT &SETM	T Chief Engineer	SETM (TBD)	а.	C for DB O&N	O&M cost Network connection	ork	
_	Actual																		P	
Integrate the digitalized data submitted by the target SETMs into the database	Plan												EAF/MOJ	F Head of ITU	по (твр)	<u>a</u>	PC for DB O&N	O&M cost ditto		
_	Actual													T			_			
Release the database to MOT and all target SETMs	Plan												EAF/MOT	F Head of ITU	ITU (TBD)	DB	PC for DB O&N	O&M cost ditto		
	Actual																			
Develop a simple mannual road disaster management	Plan												RCM/MOT	T Head of MPEU	MPEU (TBD)	Hazrd Eva. P Prev M,	PC for DB O&N	O&M cost		
	Actual															-				
Update and finalize the database design and the manuals, reflecting feedbacks from	Plan				\ \								EAF/MOT	F Head of ITU	IT unit (TBD)	90 B0	PC for DB O&N	O&M cost		
the database users	Actual																			
Output 5: MOT and the target SETMs/SEHMs are capable of preparing budget proposál	Ms are capa	ble of prepa	aring budç	yet proposa	for roac	disaster	for road disaster prevention	c					MOT	180		Chief Advisor (CA)				
Plan and implement a pilot study on cost-effectiveness of locally adaptable disaster	Plan					Com	Completion of pre	ev measure					RCM/MOT	T Head of RCU	RDMT (RCM, DI),	Prev. M, Cost E	Trav for fi	Travel cost for field		
	Actual														N H O		Surv	- Sá		
Create a budget item for disaster prevention in the regular budget of SETM/SEHM/MOT	Plan												RCM/MOT	T Head of MPEU	MPEU(TBD)	Prev. M, Cost E,				-
	Actual												-							
ø	Plan												RCM/MOT	T Head of MPEU	MPEU(TBD)	Prev. M, Cost E,				
identified under Output 3 by all target SETMs and MOT, utilizing the results of	Actual																			
	Plan												International Relations Dept	nal (TBD)	RDMT (RCM, DI)	Prev. M, Cost E, Institution				
SETMs/SEHMs, and studies for prevention for funding by international donor(s) as needed, utilizing the results of Output 3&4	Actual																			

	-																					-			_		
Activities	Year	-	2017	Į				2018		_	-	2019				2020		Re	Responsible Pe	Responsible Impl	ntor	9	Other Major Inputs	Remarks	Achievem	m Counterme	e
	Month 1	2 3 4	5 6 7	7 8 9	9 10 11 12	1 2	3 4 5	6 7 8	9 10 11	12 1	2 3 4 5	6 7	8 9 10 1	10 11 12 1	2 3 4	5 6 7	8	10 11 12 ^{Org}	t (Tajik)	ajik) s(Tajik)	jik) Experts	Japan	ı Tajik)
Duration / Phasing	Plan																	H									
	Lordan								1			1	1							$\left\ \cdot \right\ $	$\left\ \cdot \right\ $	4	\parallel	4			П
Monitoring																		MOT									
0.1 Joint Coordination Committee (J00)	Plan		•	•	•		•		•		•			•		•		MOT		Project Proj Director Man	Project CA, Lo Manager Adm	cal					Π
	Actual		•	•	•														1		Coordinator (LAC)	nator					
Set-up Detailed Plan of Operation (DPO)	Plan	•																MOT		Dy Poject All N Director pers	All Mgt CA personnel						
passed on tentative PO for review and approval by JCC	Actual	•																	<u>u</u>								
Annual Plan of Operation (APO) based on	Plan	•																MOT		ditto All N	All Mgt CA personnel						
	Actual	•																									
0.4 Joint Monitoring semi-annually	Plan				•		•		•		•			•		•		MOT		ditto All N	All Mgt CA personnel						
	Actual				•																						
Semi-annual Monitoring Sheet for submission to .IICA Tailkistan Office	Plan				•		•		•		•			•		•		MOT		ditto All m	All mgt CA personnel						Ī
	Actual				•																						
Monitoring Mission from JICA Headquarters	Plan																	JICA		JICA Head Offic quarters char	Officer in charge of the						
	Actual																				oct						
Organize information sharing seminars/workshops for all target	Plan																	MOT		Dy Poject All N Director pers	All Mgt CA, all personnel experts in Tailkistan	ri s					
Ms/SEHMs and MOT in Gissar and id SETMs	Actual																		2	î.							
Reports/Documents																											
0.8 nception Report	Plan	•																									
	Actual	•																									
Progress Report	Plan		•		•		•		•		•			•		•											
	Actual		•		•																						
0.10 Project Completion Report	Plan															•											
	Actual													=													
Public Relations																											
0.11 Establishment and operation of web-site	Plan																	JICA	∢		CA						Г
	Actual																										
Materials for public relations	Plan																	MOT		TBD TBD	CA, Local Adm	cal					
	Actual																					nator					
Dissemination seminars	Plan		Ě	•												•		MOT		TBD TBD	CA, all experts in	Ë					
	Actual			•																	Tajiki	an					
Monitoring and Evaluation in the Post-Project period																											
0.14 Post Monitoring by JICA	Plan																	JICA		TBD TBD	TBD						
	Actual													\exists													\neg
0.15 Post Evaluation by JICA	Plan																	JICA		TBD TBD	TBD						
				ACCOUNT ACCOUNTS AND ACCOUNTS								And the second s		1		design contract of the second	Comment of the Commen	,	-	-		_					٠

Attachment-1 Machinery and Equipment Supply

Equipment Supply

> Provision by the Experts Team

	Item	No. of Item	Procurement Period		Procurement Country
1.	Total Station	3	Sep. 2017	: Completed	Japan
2.	Auto Level	6	Sep. 2017	: Completed	Japan
3.	Radar Distance Meters	31	Sep. 2017	: Completed	Japan
4.	Early Warning Monitoring Equipment	8	Sep. 2017	: Completed	Japan
5.	Laptop Computer	3	Aug. 2017	: Completed	Tajikistan
6.	Desktop Computer	4	Jul. 2017	: Completed	Tajikistan

> Provision by JICA

Item	No. of Item	Procurement Period		Procurement Country
7. Attachments for Back-hoe Excava	tor 2	End of 2018	: Continuing procurement process	Japan
8. Attachments for Compressor	4	End of 2018	: Continuing procurement process	Japan
9. Prefabricated Steel Cage for Gabio	ons 60	May 2018	: Under process for procurement	Kazakhstan
10. Flexible Intermediate Bulk Conta	ainers 400	May 2018	: Under process for procurement	Kazakhstan

TO CR of JICA TAJIKISTAN OFFICE

PROJECT MONITORING SHEET

Project Title: The Project for Capacity Development for Road Disaster Management

Version of the Sheet: Ver.4 (November 2018)

Name: Hiroshi Mita

Title: Chief Advisor

Submission Date: 8 November, 2018

I. Summary

1 Progress

1-1 Progress of Inputs

Inputs	Plan as of May 2017	Actual as of 8th November 2018			
Experts	<u>Total MM: 82.55MM</u>	Total MM: 49.35MM(59.8%:rate of			
		latest total MM, 82.55MM)			
	1) Chief Advisor / Road Disaster	1) Chief Advisor / Road Disaster			
	Management	Management			
	2) Deputy Chief Advisor / Road	2) Deputy Chief Advisor / Road			
	Disaster Management 2	Disaster Management 2			
	3) Institution	3) Institution			
	4) Disaster Recovery Measures	4) Disaster Recovery Measures			
	5) Disaster Prevention Measures 1	5) Disaster Prevention Measures 1			
	6) Disaster Prevention Measures 2	6) Disaster Prevention Measures 2			
	7) Hazard Evaluation	7) Hazard Evaluation			
	8) Machineries and Equipment O&M	8) Machineries and Equipment O&N			
	9) Cost Estimation	9) Cost Estimation			
	10) Database 1	10) Database 1			
	11) Database 2	11) Database 2			
	12) Instrumentation Monitoring	12) Instrumentation Monitoring			
	13) Project Monitoring / Japan	13) Project Monitoring / Japan			
	Training	Training			
Trainees Received	Training in Japan (2 times)	Training in Japan (2 times)			
		- 1st: was conducted on June-July 2018			
		- 2 nd : will be conducted on July 2019			
Equipment	Equipment for Output2,3	- Provision by the Experts Team was			
		completed by the end of Sep, 2017.			
		- Provision by the JICA will completed			
		by the end of 2018.(Attachment-1)			
Others	N/A	N/A			
Tajikistan side	Personnel	Personnel			
Operational Expenses	1. <u>Project Director:</u>	1. Project Director:			
	Deputy Transport Minister, MOT	Deputy Transport Minister,			
	2. <u>Deputy Project Director:</u>	MOT			
	Head of RCM, MOT	2. <u>Deputy Project Director:</u>			
	3. <u>Project Manager:</u>	Head of RCM, MOT			
	Head of International Relation	3. <u>Project Manager:</u>			
	Dept. MOT	Head of International Relation			
		Dept. MOT			

- 4. <u>Regional Managers:</u> Heads of the target SETMs
- 5. Relevant Staff of MOT
- 6. Relevant Staff of DI
- 7. Relevant staff of the target SETMs/SEHMs:
- 8. Other personnel mutually agreed upon as necessary

Land, Building and Facilities

- 1. Land, Building and facilities necessary for the implementation of the Project
- 2. Office spaces for the Project in the building of MOT, Hissar and Sogd SETMs with office furniture and utilities such as internet connectivity, telephone line, electricity, etc.

Local Costs

- 1. Cost for installation, operation and maintenance of the provided equipment,
- 2. Administration and operational costs, including fuel costs, and materials for prevention / recovery works. Meal allowances for SETMs/SEHMs to participate in training drills. Prevention / recovery works

- 4. <u>Regional Managers :</u> Heads of the target SETMs
- 5. Relevant Staff of MOT
- 6. Relevant Staff of DI
- 7. Relevant staff of the target SETMs/SEHMs:
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1-2 Progress of Activities

Progress of activities is indicated in Monitoring Sheet Form 3-2 (PDM) and Form 3-3 (PO).

1-3 Achievement of Output

Output/Indicators		Achievement (%)		Major Results	Status ¹		
			Actual	, , , , , , , , , , , , , , , , , , ,			
Ou	Output-1:						
Ro	ad disaster managemen	t struc	ture of I	MOT and the target SETMs/SEHMs is streng	thened.		
1a.	By Jun 2017, a report on current disaster management relevant to MOT and the target SETMs/SEHMs is developed	100	100	Based on collection of the most recent data on road disaster management and ensuing interviews with the C/Ps in charge, review was conducted by the Experts and the current road disaster management report was compiled by the end of June 2017.	OT		
1b.	By July 2017, roles and responsibilities of Road Disaster	100	100	The role of RDMT is as follows; -The RDMT acts as a team to participate in all project activities to achieve all outputs in cooperation with the Experts Team.	ОТ		

¹ OT: On Time, SFT: Scheduled for later, DL: Delay

Management Taskforce supporting SETM/SEHM(RDMT) is clarified.			- All members will acquire skills and knowledge to enhance own specialized field of road disaster management duties of MOT and Design Institute. - The team will support activities of other counterparts. The responsibilities of RDMT are as follows; - Members will share activities so that participation in project activities do not hinder other duties of MOT and Design Institute. - As such, RDMT will convene a monthly meeting so that participation by each member is prearranged considering the specialized field of each member. - Upon confirming that monthly meetings are held as agreed, targets and development plans of each member will be agreed with the Experts Team.	
1c. By the end of the Project, 80% of members of RDMT are able to support SETMs/SEHMs according to their respective roles and responsibilities.	42	42	RDMT members are actively participating in Outputs 2, 3 and 4 activities and supporting the target SETM and SEHMs. RDMT members are monitoring project progress. The individual capacity development project goals were agreed in July 2018 and it is put into action.	OT
1d. By the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs, including institutionalization od RDMT, is approved by MOT	0	0	N/A	SFT
Output-2:				
2a. By Dec 2017, a road disaster recovery manual for SETM/SEHM/RRT is developed	y the ta	100	The Road Disaster Recovery Manual Version 1 was submitted to MOT on 18 December 2018. The manual has been prepared to generate improvement so that even the urgent recovery works are carried out more systematically and in a more planned manner.	OT
2b. 80% of the training participants from all target SETMs/SEHMs passes the post-training test on disaster recovery works	100	100	Trainings on disaster recovery works using Road Disaster Recovery Manual Version 1 were conducted in February 2018. Over 80%(100% =59 /59) of the training participants from all target SETMs/SEHMs passed the post-training test.	OT

			Ι		
2c.	80% of the trainees	0	0	N/A	SFT
	from all target				
	SETMs/SEHMs				
	passes the post-drill				
	test on disaster recovery works for				
	-				
24	each job category Disaster recovery	33	33	The on-site drills for simulated road disaster	OT
Zu.	works in the drills are	33	33	recovery works were conducted and completed	01
	planned and			on 8 May 2018.	
	implemented by all			The disaster recovery works in the drills are	
	target SETMs/SEHMs			scheduled to be implemented three times in	
	according to the			total.	
	manual				
2e.	Disaster recovery	33	0	Owing to the less than average dry period from	DL
	works at the actual			April to October 2018, road disasters applying	(due to
	disaster sites are			the manual did not occur.	unforeseen
	planned and				weather
	implemented by all				condition)
	relevant target				
	SETMs/STHMs				
	according to the				
	manual			77/1	~~~
2f.	By the end of the	0	0	N/A	SFT
	Project, the finalized				
	manual is approved by				
0	MOT				
	tput-3.: cess of locally adaptabl	le road	disaste	r prevention is established at the target SETM	Is/SEHMs
3a.		100	100	The Road Disaster Prevention manual for	OT
	a road disaster	100	100	SETM/SEHM was developed by Oct. 2017 for	
	prevention manual for			hazard evaluation. The section on disaster	
	SETM/SEHM is			prevention was added and submitted to MOT	
	developed			in August 2018 before activities for disaster	
	•			prevention actions such as Activity 3.7, 3.8 and	
				3.9 were carried out. The section on hazard	
24	80% of the training	80	80	evaluation was updated in July 2018.	OT
] JD.	participants from all	80	80	The hazard evaluation training was	
	target SETMs/SEHMs			implemented from September through October,	
	passes the post-			2017 and from July to September 2018.	
	training test on hazard			Over 80%(100% = 58 / 58) of the training	
	evaluation and locally			participants from all target SETMs/SEHMs	
	adaptable prevention			passed the post-training test in both 2017 and	
	measures each			2018.	
				The training on locally adaptable prevention	
				measures was conducted in August 2018. The	
				post-training test will be conducted in	
				November 2018 following the completion of	
	TT 1 1 2 2	0.5	0.0	Ayni pilot project.	
3c.	Hazard evaluation is	80	80	Based on the results of the site visit, the 10	OT
	conducted at least			target section was decided:	
	twice by all target SETM/SEHM for 10			-Hissor SETM pipe (4 sections)	
	target sections in all			-Sughd SETM pipe (4 sections)	
1.1	target sections in an	I	1	-Rasht SETM pipe (2 sections)	

	target SETMs according to the manual			Hazard evaluation was conducted twice by all target SETM/SEHM for 4 target sections in all target SETMs according to the manual in years 2017 and 2018, completing 8 sections in total.	
3d.	Locally adaptable prevention measures are planned by all target SETMs for 4 priority sites in Hissar and Soghd SEYMs according to the manual.	50	50	Based on the results of the site visit, the 4 priority sites in Hissar and Soghd were selected. Planning is completed for Varsob and Ayni sites, which is the sections to be carried out in 2018. The remaining section is planned in 2019.	OT
3e.	Locally adaptable prevention measures are implemented by 4 target SEHMs at 4 priority sites in Hissar and Soghd SETMs according to the manual	35	35	Implementation is successfully completed for Varsob and implementation is underway for Ayni and it is expected for completion at the end of November 2018.	OT
3f.		0	0	N/A	SFT
3g.	By Mar. 2020, future disaster prevention plans are developed for 10 target sections by all target SETMs	0	0	N/A	SFT
3h.	By the end of the Project, the finalized manual is approved by MOT	0	0	N/A	SFT
Dat	tput-4.: ta necessary for road di budget preparation an			ement (*1) is available for MOT and the target	SETMs
4a.	By Dec 2017, road disaster management database is developed according to the design developed through the Project	100	100	The Experts Team commenced DB development from the middle of August 2107 in Japan based on the agreed DB system framework. The initial version was completed at the end of October 2017. Additional functions to DB system was added in March 2018.	OT
4b.	By Dec 2017, road disaster management database manuals for users and administrator are developed	100	100	The Experts Team submitted Road Disaster DB Manual version 1 to the target SETMs and ITU and RCM of MOT in December 2017. The section on additional functions to DB system was added in March 2018.	OT
4c.	80% of the training participants from MOT and the target SETMs passes the	100	100	Training sessions were held from 22 November 2017 to 22 December 2017 for both DB administrators and for DB users.	OT

	post-training test on database use.			Over $80\%(100\% = 18/18)$ of the training	
	database use.			participants from all target SETMs/SEHMs	
4 1	D 16 2010			passed the post-training test.	GET.
₽d.	By Mar 2019,	0	0	N/A	SFT
	the database is				
	released to MOT and				
1 -	the target SETMs	0	0	N/A	CET
ŧе.	From 2019, a simple disaster management	0	0	IN/A	SFT
	report is submitted to				
	senior management of				
	MOT once a year				
1f	By the end of the	0	0	N/A	SFT
т1.	Project, the finalized	0	U	IVA	51.1
	manual is approved by				
	MOT				
Om	tput-5.:	l			
	-	/Is/SEE	IMs ar	e capable of preparing budget proposal for ro	ad disaste
	vention	15,011	11/15 411	e cupulite of propuling budget proposurior re	au dististe
	By Mar 2020,	0	0	N/A	SFT
	a report of a pilot				
	study on cost-				
	effectiveness of the				
	locally adaptable				
	disaster prevention is				
	developed				
5b.	By Jun 2020,	0	0	N/A	SFT
	budget proposal for				
	locally adaptable				
	disaster prevention				
	measures are prepared				
	by all target SETM				
	and MOT as part of				
	the regular budget for				
	FY 2021 based on the				
	future development				
5.0	future development plans	0	0	N/A	CET
5c.	future development plans By the end of the	0	0	N/A	SFT
5c.	future development plans By the end of the Project, at least one	0	0	N/A	SFT
5c.	future development plans By the end of the Project, at least one project proposal for	0	0	N/A	SFT
Sc.	future development plans By the end of the Project, at least one project proposal for large-scale disaster	0	0	N/A	SFT
ōc.	By the end of the Project, at least one project proposal for large-scale disaster prevention of the	0	0	N/A	SFT
ōc.	future development plans By the end of the Project, at least one project proposal for large-scale disaster prevention of the priority site(s) and	0	0	N/A	SFT
ōc.	future development plans By the end of the Project, at least one project proposal for large-scale disaster prevention of the priority site(s) and studies for prevention	0	0	N/A	SFT
5c.	future development plans By the end of the Project, at least one project proposal for large-scale disaster prevention of the priority site(s) and studies for prevention is submitted by MOT	0	0	N/A	SFT
5c.	future development plans By the end of the Project, at least one project proposal for large-scale disaster prevention of the priority site(s) and studies for prevention is submitted by MOT to international	0	0	N/A	SFT
ōc.	By the end of the Project, at least one project proposal for large-scale disaster prevention of the priority site(s) and studies for prevention is submitted by MOT to international donor(s) for funding,	0	0	N/A	SFT
ōc.	future development plans By the end of the Project, at least one project proposal for large-scale disaster prevention of the priority site(s) and studies for prevention is submitted by MOT to international donor(s) for funding, utilizing the results of	0	0	N/A	SFT
ōc.	By the end of the Project, at least one project proposal for large-scale disaster prevention of the priority site(s) and studies for prevention is submitted by MOT to international donor(s) for funding,	0	0	N/A	SFT

1-4 Achievement of the Project Purpose								
Project Purpose/Indicators	Achievement (%)	Situation	Expected Time of Achievement					
Project Purpose: Capacity of MOT and the target SETMs/SEHMs for effective road disaster management is improved.								
a. By the end of the Project, 80% of results of the disaster recovery works by the target SETMs/SEHMs, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans	0	N/A	SFT					
b. By the end of the Project, 80% of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the Japanese Expert Team	0	N/A	SFT					
c. 80% of results of the disaster prevention measures #2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality and safety specified in the plans.	0	N/A	SFT					
d. By the end of the Project, budget request for disaster prevention in the target SETMs for FY 2021 is submitted to Ministry of Finance	0	N/A	SFT					

(MOF) as part of the		
regular budget		

1-5 Achievement of the Overall Goal

Overall Go	al/Indicators	Achievement (%)	Situation	Expected Time of Achievement					
Road disast	Overall Goal: Road disasters are mitigated in the international and Republican Roads in the target SETMs/SEHMs								
works by SETMs/ planned impleme accordin disaster manual o	ented	0	N/A	SFT					
b. By Jul 2 disaster measure and / or at least 5 sites in t SETMs the disas prevention	prevention s are planned implemented 5(*3) priority he target according to ster on manual ed through	0	N/A	SFT					
c. From Au 2023 the avera required opening handled SETMs by 20% with the the Proje May 201 2018)	age duration for road re- per disaster by the target is decreased compared same before ect (from	0	N/A	SFT					

^(*1) Data necessary for road disaster management includes disaster record, results of hazard evaluation, prevention measures, and recovery works

^(*2) Underlined deadlines in the indicators are set based on the schedule of the Tentative PO. They shall be modified according to the Detailed PO to be prepared in the beginning of the Project for approval by the first JCC.

(*3) Target values of the indicators shall be filed based on the results of the baseline survey, Which shall be reviewed and approved by the 2nd

1-6 Changes of Risks and Actions for Mitigation

N/A

1-7 Progress of Actions undertaken by JICA

N/A

1-8 Progress of Actions undertaken by Gov. of Tajikistan

N/A

1-9 Progress of Environmental and Social Considerations (if applicable)

N/A

1-10 Progress of Considerations on Gender/Peace Building/Poverty Reduction (if applicable)

N/A

1-11 Other remarkable/considerable issues related/affect to the project (such as other JICA's projects, activities of counterparts, other donors, private sectors, NGOs etc.)

N/A

2 Delay of Work Schedule and/or Problems (if any)

2-1 Detail

N/A

2-2 Cause

N/A

2-3 Action to be taken

N/A

2-4 Roles of Responsible Persons/Organizations (JICA, Gov. of Tajikistan, etc.)

N/A

3 Modification of the Project Implementation Plan

3-1 PO

Detailed Plan of Operation (DPO) was revised to DPO Version 2 dated 20 April 2018.

- Shift Database 2 Expert assignment from December 2018 to April 2018
- Add Activity 3.2 in June 2018
- Add Activity 4.11 in April 2018

This was reported in Project Monitoring Sheet Version 3 (April 2018)

Detailed Plan of Operation (DPO) was revised to DPO Version 3 dated 05 November 2018.

- Shift Activity 2.6 from November 2018 to May to June 2019 to tie in with delivery of hydraulic rock breakers to effectively update the manual
- Shift Machineries and Equipment O&M Expert assignment from March 2019 to May to June 2018 It is attached as Monitoring Sheet Form 3-3.

3-2 Other modifications on detailed implementation plan

(Remarks: The amendment of R/D and PDM (title of the project, duration, project site(s), target group(s), implementation structure, overall goal, project purpose, outputs, activities, and input) should be authorized by JICA HDQs. If the project team deems it necessary to modify any part of R/D and PDM, the team may propose the draft.)

N/A

- 4 Measures undertaken by Gov. of Tajikistan or Project Team to Ensure the Sustainability of Project after the Project Completion
- 4-1 Financial Sustainability

N/A

4-2 Technical Sustainability

N/A

4-3 Institutional Sustainability

N/A.

Project Monitoring Sheet I (Revision of Project Design Matrix)

Project Title: The Project for Capacity Development for Road Disaster Management

Implementing Agency: Ministry of Transport (MOT)

Target Group: MOT, Hissor SETM and its 9 SEHMs, Sughd SETM and 14 SEHMs, and Rasht SEHM and its 3 SEHMs (Nurobod, Rasht, and Ta-jikobod)

Period of Project: April 2017 - July 2020 (in Tajikistan)

Project Site: International and Republican roads in Hissor and Sughd SETMs as well as Nurobod, Rasht and Tajikobod SEHMs in Rasht SETM

Version 4 Dated: 8 November, 2018

Remarks							
Achievement	(Future activity)	(Future activity)	(Future activity)	(Future activity)	(Future activity)	(Future activity)	(Future activity)
Important Assumption	Important Assumption			A. Policy for disaster management is not discontinued. B. Political instability/economic crisis/serious natural	affe o not o in appro		
Means of Verification	a-c Hazard evaluation disaster prevention & recovery sheets, in the Database			a. Assessment report b. Prevention sheet c. Recovery sheet d. Data of budget request			
Objectively Verifiable Indicators	a. All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project	b. By Jul 2023(*2) disaster prevention measures are planned and / or implemented at least 5(*3) priority sites in the target SETMs according to the disaster prevention manual developed through the Project	c. From Aug 2020 to Jul 2023 the average duration required for road re-opening per disaster handled by the target SETMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018)	a. By the end of the Project, 80% of results of the disaster recovery works by the target SETMs/SEHMs, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans	b. By the end of the Project, 80% of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the Japanese Expert Team	c. 80% of results of the disaster prevention measures #2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality and safety specified in the plans.	d. By the end of the Project, budget request for disaster prevention in the target SETMs for FY 2021 is submitted to Ministry of Finance (MOF) as Part of the regular budget
Narrative Summary	Overall Goal Road disasters are mitigated in the International and Republican Roads in the target SETMs/SEHMs			Project Purpose Capacity of MOT and the target SETMs/SEHMs for effective road disaster management is improved.			

Remarks											
Achievement	The report was compiled by the end of June 2017. The roles and responsibilities of	Road Disaster Management Taskforce supporting SETM/SEHM(RDMT) is clarified. RDMT members are actively participating in Outputs 2, 3 and 4 activities and supporting the target SETM and SEHMs. RDMT members are monitoring	project progress. (Future activity)	The manual has been prepared to generate improvement so that even the urgent recovery works are carried out more systematically and in a more planned manner.	Over 80%(100% =59 /59) of the training participants from all target SETMs/SEHMs passed the post-training test.	(Future activity)	The on-site drills for simulated road disaster recovery works were conducted from early April 2018. The on-site drill is was completed in May 2018.	Owing to the less than average dry period from April to October 2018, road disasters applying the manual did not occur.	(Future activity)	The road disaster prevention manual for SETM/SEHM was developed by Oct. 2017.	The hazard evaluation training was implemented from September through October, 2017. Over 80% (100% = 58 /58) of the training participants from all target SETMs/SEHMs passed the post-training test.
Important Assumption	A. Staff of MOT and the target SETMs/SEHMs trained through the Project do not leave the office in large	numbers									
Means of Verification		ld. Official approval document		 2a. Acceptance letter 2b. Test results 2c. Ditto 2d ~ e 1oint review of the 	list wal letter					 3a. Acceptance letter 3b. Test results 3c ~ e 	Joint review of the checklist 3f Test results 3g Approval letter 3h ditto
Objectively Verifiable Indicators	By Jun 2017, a report on current disaster management relevant to MOT and the target SETMs/SEHMs is developed 1b. By July 2017,		1d. By the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs, including institutionalization od RDMT, is approved by MOT	cc 2017, ad disaster recovery manual for I/SEHM/RRT is developed	2b. 80% of the training participants from all target SETMs/SEHMs passes the post-training test on disaster recovery works	2c. 80% of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery works for each job category	2d. Disaster recovery works in the drills are planned and implemented by all target SETMs/SEHMs according to the manual	2e. Disaster recovery works at the actual disaster sites are planned and implemented by all relevant target SETMs/STHMs according to the manual	2f. By the end of the Project, the finalized manual is approved by MOT	prevention manual for	3b. 80% of the training participants from all target SETMs/SEHMs passes the post-training test on hazard evaluation and locally adaptable prevention measures each
Narrative Summary	Output Output-1: Road disaster management structure of MOT and the target SETMs/SEHMs is strengthened.	·		Output-2: Road disaster recoveries by the target SETMs/SEHMs are improved through standardization						Output-3.: Process of locally adaptable road disaster prevention is established at	the target SETMs/SEHMs

Monitoring Sneet Summar	SA PRIOR										
FINI FORM 3-2 IN	The training on locally adaptable prevention measures was conducted in August 2018. The post-training test will be conducted in November 2018 following the completion of Ayni pilot project. Hazard evaluation was conducted twice by all target SETM/SEHM for 4 target sections in all target	SETMs according to the manual in years 2017 and 2018, completing 8 sections in total. Based on the results of the site visit, the 4 priority sites in Hissar and Soghd were selected. Planning is completed for Varsob and Ayni sites, which is the sections to be carried out in 2018. The remaining section is planned in 2019.	Implementation is successfully completed for Varsob and implementation is underway for Ayni and it is expected for completion at the end of November 2018.	(Future activity) (Future activity)	(Future activity)	The Experts team commenced DB development from the middle of August 2107 in Japan based on the agreed DB system framework. The initial version was completed at the end of October 2017.	The Experts team submitted Road Disaster DB Manual version 1 to the target SETMs and ITU and RCM of MOT in December 2017.	Over 80%(100% =18 /18) of the training participants from all target SETMs/SEHMs passed the post-training test.	(Future activity)	(Future activity)	(Future activity)
Important Assumption	Thor talk Assumption										
Moone of Vorification	Means of verneation					 4a. Comparison with the design 4b. Acceptance letter 4c. Test results 4d. Released date 	4e. Report 4f. Approval letter				
Objectively Verifiable Indicators		sections in all targe manual Locally adaptable planned by all target in Hissar and Sogh manual.	Locally adaptable prevention measures implemented by 4 target SEHMs at 4 prior site in Hissar and Soghd SETMs according the manual 80% of the observers from the other server.			By Dec 2017, road disaster management database is developed according to the design developed through the Project	By Dec 2017, road disaster management database manuals for users and administrator are developed	. 80% of the training participants from MOT and the target SETMs passes the post-training test on database use.	 By Mar 2019, the database is released to MOT and the target SETMs 	From 2019, a simple disaster management report is submitted to senior management of MOT once a year	
Norrative Summery	36.	3d	3.e. 3.e. 3.f.	33	3fi.	Output-4.: Data necessary for road disaster management is available for MOT and the target SETMs for budget preparation and disaster recovery	woks and prevention 4b.	4c.	44.	46.	4f.

mary																	
PIM Form 3-2 Monitoring Sheet Summary	Remarks																
FM Form 3-2	Achievement			(Finting activity)	(i didic dell'ary)				(Future activity)	(i didic dell'ally)					(Future activity)		
	Important Assumption																
	Means of Verification		5a. Acceptance letter	5b. Budget document	5c. Proposals submitted												
	Objectively Verifiable Indicators	is approved by MOT	5a. By Mar 2020,	a report of a pilot study on cost-effectiveness	of the locally adaptable disaster prevention is	developed	5b. By Jun 2020,	budget proposal for locally adaptable disaster	prevention measures are prepared by all target	SETM and MOT as part of the regular budget	for FY 2021 based on the future development	plans	5c. By the end of the Project, at least one project	proposal for large-scale disaster prevention of	the priority site(s) and studies for prevention is	submitted by MOT to international donor(s) for	finding utilizing the results of Output 3 and 4
	Narrative Summary		Output-5.:	MOT and the target	SETMs/SEHMs are capable of	preparing budget proposal for road	disaster prevention										

L			7		
	ACHVILIES		Inputs	Important Assumption	
ō	Output 1:	The Japanese Side	The Tajik Side	A. Natural disaster/political instability	bility
Str.	Koad disaster management structure of MOI and the target SEIMS/SEHMS is strengthened.	Japanese Experts	Personnel	economic crisis that affect the project activities do not occur	
1-1	.1. Classify the target disasters through collection and analysis of the past disaster	1 Chief Advisor	1 Project Director:	B. Security situation of Tailkistan	
			Deputy Transport Minister, MOT		je
1-2.			2. Deputy Project Director	JICA experts, especially in the	
	relevant to MOT and the target SETMs/SEHMs, including their communication			project sites, does not deteriorate	ate
,			3. Project Manager	compared with the same in 2016	91
1-3.	_			Day Conditions	
	supporting SE IM/SEHM (RDM1) formed at MO1 and its members as well as their	6. Cost estimate	4. Regional Managers	/rie-Conditions/	
-			Feats of the target SETMS S Delayant Stoff of MOT	A. Tentative list of the Project Staff.	Ĥ.
<u>+</u>	4. Support use target SETIMS/SETTIMS unough the project activities according to the clarified roles and recognitifities (by DDMT)	9 Local Administrative Coordinator			ıt)
1-5.		<u>.</u>	7. Relevant staff of the target SETMs/SEHMs		
	target SETMs/SEHMs based on the feedbacks from the project activities for	necessary	8. Other personnel mutually agreed upon as	 B. Internet connection is established at each target SETM 	ned at
Ċ	approval by IMO1		110003341.9		
2 %	Output 2: Road disaster recoveries by the target SETMs/SEHMs are improyed through	Equipment	I and Duilding and Earliffice		
sta	standardization	1. Equipment for disaster recovery and	Land, Dunding and Facilities		
2-1.			1. Land, building and facilities necessary for	Lanna & constant on the contract	
		2. Hardware and software for database	the implementation of the Project Office energy for the Droject in the building	issues & counter measures	
2-5 -2-2					
		4. Laptop PC for hazard evaluation and	office furniture and utilities such as internet		
-2 -2	5. Conduct trainings on disaster recovery works for all target SETIMISSETHMS and MOT (i.e. action for preparedness survey selection of works, design cost estimate.		connectivity, telephone line, electricity, etc.		
	supervision, disaster recovery sheet) (in Hissor and Sughd SETMs)	5. Monitoring equipment for simple early			
2. 4.			Local Costs		
	SETMs/SEHMs (in Hissor and Sughd SETMs)	6. Other equipment mutually agreed upon	1 Cost for installation constitution and		
2-5.		as necessary	cenance of the provided equipment.		
		Training of the Tajik Personnel in Japan	2. Administration and operational costs,		
2-6.		and/or third country	including fuel costs, and material		
-7	./. Certify Trainers for Disaster Recovery from the target SETIMIS/SETIMIS	Local costs	ecovery works, Me		
2 4	Output 3. Process of simple road disaster provention is established at the target SFTMs/SFHMs	WOOD WAR	for SETMs/SEHMs		
3-1.	1. Examine hazard evaluation methods and locally adaptable prevention measures	Cost for activities of JET, local travel &	participate in training, drills,		
, i		ation cost for SETMs/SEHM	prevention/recovery works		
3-2.		participate in training, drills and			
	evaluation and Hocally adaptable prevention measures, which is used for Activity	prevention recovery work			
7	5.5-5.10 2 Conduct trainings on hozord avoluation to all tornat SETMs/SEHMs and MOT (i.e.				
., .,					
	sheet) (in Hissor and Sughd SETMs)				
3-4.					
3-5					
	with the respective SETMs				
3-6.	 Identify priority sites in the target sections based on the evaluation results by the respective SETMs 				
3-7.					
,					
3-0.	o. Organize trainings on rocarry adaptative disaster prevention measures to an darger TMs/HMs (i.e. selection, prevention measure sheet, monitoring for simple early				

warming) (in Histort and Sughed SETNA) The man displacent and Sughed SETNA) The man displacent to deal warming the prevention of the first year (in Histort and Sughed SETNA) The man displacent beally adaptive percentain the first year (in Histor and Sughed SETNA) so that the prototy sites in the target sections selected in the first year (in Histor and Sughed SETNA) so the Design of the revenue that the section of the assures as the section of the section of the assures as the section of the section of the assures as the section of the s		varning) (in Hissor and Sughd SETMs) 'lan and implement locally adaptable prevention measures #1 & #2 on pilot basis at he priority sites in the target sections selected in the first year (in Hissor and Sughd SETMs) by the relevant target SETMs/SEHMs Selection of measures Design Budget preparation Supervision Prevention measure sheet Jpdate and finalize the manual, reflecting feedbacks from Activities 3.3-3.9 Certify Trainers for Disaster Prevention from the target SETMs/SETMs L4: ecessary for road disaster management is available for MOT and the target s for budget preparation and disaster recovery woks and prevention Oevelop a plan for road disaster management database Design a database system with installed hardware, consisting of spread sheets Oevelop road disaster management database manuals for users (i.e. MOT and the arget SETMs) and administrator, which are used for Activity 4.4-4.10 Conduct trainings on database use for MOT and all target SETMs (i.e. collection, nput, compilation, analysis and reporting of data) (at MOT and each target SETM) Allors day of disaster recovery at all target SETMs in 2017 as baseline data in the	Sind III	
		varning) (in Hissor and Sughd SETMs) 'lan and implement locally adaptable prevention measures #1 & #2 on pilot basis at he priority sites in the target Sections selected in the first year (in Hissor and Sughd SETMs) by the relevant target SETMs/SEHMs Selection of measures Design Budget preparation Supervision Prevention measure sheet Jpdate and finalize the manual, reflecting feedbacks from Activities 3.3-3.9 Certify Trainers for Disaster Prevention from the target SETMs/SETMs L4: ecessary for road disaster management is available for MOT and the target s for budget preparation and disaster recovery woks and prevention Develop a plan for road disaster management database Develop road disaster management database manuals for users (i.e. MOT and the arget SETMs) and administrator, which are used for Activity 4.4-4.10 Conduct trainings on database use for MOT and all target SETMs (i.e. collection, nput, compilation, analysis and reporting of data) (at MOT and each target SETM) Allorat data and disaster recovery at all target SETMs in 2017 as baseline data in the		
		Than and implement locally adaptable prevention measures #1 & #2 on pilot basis at he priority sites in the target SETMs/SEHMs Selection of measures Selection of measures Budget preparation Supervision Prevention measure sheet Jpdate and finalize the manual, reflecting feedbacks from Activities 3.3-3.9 Sertify Trainers for Disaster Prevention from the target SETMs/SETMs L4: ecessary for road disaster management is available for MOT and the target s for budget preparation and disaster recovery woks and prevention Develop a plan for road disaster management database Design a database system with installed hardware, consisting of spread sheets Develop road disaster management database manuals for users (i.e. MOT and the arget SETMs) and administrator, which are used for Activity 4.4-4.10 Conduct trainings on database use for MOT and all target SETMs (i.e. collection, nput, compilation, analysis and reporting of data) (at MOT and each target SETM)		
		TETMS) by the relevant target SETMs/SEHMs Selection of measures Selection of measures Design Budget preparation Supervision Prevention measure sheet Jpdate and finalize the manual, reflecting feedbacks from Activities 3.3-3.9 Sertify Trainers for Disaster Prevention from the target SETMs/SETMs L4: ecessary for road disaster management is available for MOT and the target s for budget preparation and disaster recovery woks and prevention Develop a plan for road disaster management database Design a database system with installed hardware, consisting of spread sheets Develop road disaster management database manuals for users (i.e. MOT and the arget SETMs) and administrator, which are used for Activity 4.4-4.10 Conduct trainings on database use for MOT and all target SETMs (i.e. collection, nput, compilation, analysis and reporting of data) (at MOT and each target SETM)		
		Selection of measures Design Budget preparation Supervision Prevention measure sheet Jedate and finalize the manual, reflecting feedbacks from Activities 3.3-3.9 Sertify Trainers for Disaster Prevention from the target SETMs/SETMs 14: ecessary for road disaster management is available for MOT and the target s for budget preparation and disaster recovery woks and prevention Develop a plan for road disaster management database Design a database system with installed hardware, consisting of spread sheets Develop road disaster management database manuals for users (i.e. MOT and the arget SETMs) and administrator, which are used for Activity 4.4-4.10 Conduct trainings on database use for MOT and all target SETMs (i.e. collection, analysis and reporting of data) (at MOT and each target SETM) Allored Adra of disaster recovery at all target SETMs in 2017 as baseline data in the		
		Design Budget preparation Supervision Prevention measure sheet Jpdate and finalize the manual, reflecting feedbacks from Activities 3.3-3.9 Sertify Trainers for Disaster Prevention from the target SETMs/SETMs 14: ecessary for road disaster management is available for MOT and the target s for budget preparation and disaster recovery woks and prevention Develop a plan for road disaster management database Design a database system with installed hardware, consisting of spread sheets Develop road disaster management database manuals for users (i.e. MOT and the arget SETMs) and administrator, which are used for Activity 4.4-4.10 Conduct trainings on database use for MOT and all target SETMs (i.e. collection, nput, compilation, analysis and reporting of data) (at MOT and each target SETM)		
		Budget preparation Supervision Prevention measure sheet Jpdate and finalize the manual, reflecting feedbacks from Activities 3.3-3.9 Sertify Trainers for Disaster Prevention from the target SETMs/SETMs 14: ecessary for road disaster management is available for MOT and the target s for budget preparation and disaster recovery woks and prevention Develop a plan for road disaster management database Jossign a database system with installed hardware, consisting of spread sheets Develop road disaster management database manuals for users (i.e. MOT and the arget SETMs) and administrator, which are used for Activity 4.4-4.10 Conduct trainings on database use for MOT and all target SETMs (i.e. collection, nput, compilation, analysis and reporting of data) (at MOT and each target SETM)		
		Supervision Prevention measure sheet Jpdate and finalize the manual, reflecting feedbacks from Activities 3.3-3.9 Sertify Trainers for Disaster Prevention from the target SETMs/SETMs 14: ecessary for road disaster management is available for MOT and the target s for budget preparation and disaster recovery woks and prevention Develop a plan for road disaster management database Jossign a database system with installed hardware, consisting of spread sheets Develop road disaster management database manuals for users (i.e. MOT and the arget SETMs) and administrator, which are used for Activity 4.4-4.10 Conduct trainings on database use for MOT and all target SETMs (i.e. collection, nput, compilation, analysis and reporting of data) (at MOT and each target SETM)		
3 - 2 3 - 2 3 - 2 3 - 2 3 - 3 3 3 - 3 3 - 3 3 - 3 3		Prevention measure sheet Jpdate and finalize the manual, reflecting feedbacks from Activities 3.3-3.9 Sertify Trainers for Disaster Prevention from the target SETMs/SETMs 4.4: ecessary for road disaster management is available for MOT and the target s for budget preparation and disaster recovery woks and prevention Develop a plan for road disaster management database Design a database system with installed hardware, consisting of spread sheets Develop road disaster management database manuals for users (i.e. MOT and the arget SETMs) and administrator, which are used for Activity 4.4-4.10 Conduct trainings on database use for MOT and all target SETMs (i.e. collection, nput, compilation, analysis and reporting of data) (at MOT and each target SETM)		
3 2	⊃ ∩	Jpdate and finalize the manual, reflecting feedbacks from Activities 3.3-3.9 Sertify Trainers for Disaster Prevention from the target SETMs/SETMs 4. recessary for road disaster management is available for MOT and the target s for budget preparation and disaster recovery woks and prevention Develop a plan for road disaster management database Design a database system with installed hardware, consisting of spread sheets Develop road disaster management database manuals for users (i.e. MOT and the arget SETMs) and administrator, which are used for Activity 4.4-4.10 Conduct trainings on database use for MOT and all target SETMs (i.e. collection, nput, compilation, analysis and reporting of data) (at MOT and each target SETM)		
1872		ectury Hallicts for Disaster revention from the target SETMS/SETMS. 4.4. 4.5. 4.5. 5. 4. 6. 4. 6. 4. 6. 4. 6. 4. 6. 4. 6. 4. 6. 4. 6. 4. 6. 4. 6. 4. 6. 4. 6. 4. 6. 6.		
12,4	1	ecessary for road disaster management is available for MOT and the target secessary for road disaster recovery woks and prevention and disaster recovery woks and prevention overlop a plan for road disaster management database. Sustem with installed hardware, consisting of spread sheets overlop road disaster management database manuals for users (i.e. MOT and the arget SETMs) and administrator, which are used for Activity 4.4-4.10 Conduct trainings on database use for MOT and all target SETMs (i.e. collection, nput, compilation, analysis and reporting of data) (at MOT and each target SETM) collection, analysis and reporting of data) (at MOT and sach target SETM)		
: A	pur a ne	s for budget preparation and disaster recovery woks and prevention bevelop a plan for road disaster management database. Design a database system with installed hardware, consisting of spread sheets Develop road disaster management database manuals for users (i.e. MOT and the arget SETMs) and administrator, which are used for Activity 4.4-4.10. Conduct frainings on database use for MOT and all target SETMs (i.e. collection, nput, compilation, analysis and reporting of data) (at MOT and each target SETM) and analysis and reporting of data) (at MOT and each target SETM).		
a = 2	[Ms	Develop a plan for road disaster management database Design a database system with installed hardware, consisting of spread sheets Develop road disaster management database manuals for users (i.e. MOT and the arget SETMs) and administrator, which are used for Activity 4.4-4.10 Conduct frainings on database use for MOT and all target SETMs (i.e. collection, put, compilation, analysis and reporting of data) (at MOT and each target SETM)		
18.12	Ω	Design a database system with installed hardware, consisting of spread sheets Develop road disaster management database manuals for users (i.e. MOT and the arget SETMs) and administrator, which are used for Activity 4.4.4.10 Conduct trainings on database use for MOT and all target SETMs (i.e. collection, pupt, compilation, analysis and reporting of data) (at MOT and each target SETM)		
- Iai 2		Develop road disaster management database manuals for users (i.e. MOT and the arget SETMs) and administrator, which are used for Activity 4.4.4.10 Conduct trainings on database use for MOT and all target SETMs (i.e. collection, nput, compilation, analysis and reporting of data) (at MOT and each target SETM)		
. I a = 2	О	arget SETMs) and administrator, which are used for Activity 4.4.4.10 Conduct trainings on database use for MOT and all target SETMs (i.e. collection, nput, compilation, analysis and reporting of data) (at MOT and each target SETM) Collect data of disaster recovery at all target SETMs in 2017 as baseline data in the		
nd 1 2	ta	Sonduct trainings on database use for MOT and all target SETMs (i.e. collection, nput, compilation, analysis and reporting of data) (at MOT and each target SETM) Collect data of disaster recovery at all target SETMs in 2017 as baseline data in the		
. la ₁ 2	S	nput, compilation, analysis and reporting of data) (at MOT and each target SETM) Albert data of disacter recovery at all faroet SETMs in 2017 as baseline data in the		
	Ξ.	Tollect data of disaster recovery at all target SETMs in 2017 as baseline data in the		
	\circ	יייי יייי איייי איייי איייי איייי איייי איייי אייייי איייי אייייי איייי אייי איייי איייי איייי אייי איייי אייי איי אייי אייי אייי אייי אייי אייי איי אייי אייי איי אייי אייי איי אייי אייי איי אייי איי איי אייי איי אייי אייי איי אייי אייי איי איי אייי איי איי איי איי אייי איי איי		
12.3	<u>d</u> (rescribed from improved by the Project		
	۽ ر	Collect data necessary for disaster management from the target SEHMS (i.e. disaster account sheets because the parent availables and prevention measure sheets)		
12. 3	Ω	Digitalize the data collected from the target SEHMs by the respective target SETMs		
	fc	or submission to MOT		
	I.	integrate the digitized data submitted by the target SETMs into the database		
		Release the database to MOT and all target SETMs		
the database users the database design and the manuals, reflecting feedbacks from the database users ut 5: I and the target SETMs/SE HMs are capable of preparing budget proposal for disaster prevention Plan and implement a pilot study on cost effectiveness of simple disaster prevention measures at the target sections selected in the first year underOutput3, using simple hazard location maps Create a budget item for disaster prevention in the regular budget of SETM/SEHM/MOT Prepare a budget for locally adaptable disaster prevention for the priority sites		Develop simple annual road disaster management report for senior management of		
the database users out 5: I and the target SETMs/SEHMs are capable of preparing budget proposal for disaster prevention Plan and implement a pilot study on cost effectiveness of simple disaster prevention measures at the target sections selected in the first year underOutput3, using simple hazard location maps Create a budget item for disaster prevention in the regular budget of SETM/SEHWIMOT Prepare a budget for locally adaptable disaster prevention for the priority sites	<u> </u>	Jodate and finalize the database design and the manuals, reflecting feedbacks from		
If and the target SETMs/SEHMs are capable of preparing budget proposal for disaster prevention Plan and implement a pilot study on cost effectiveness of simple disaster prevention measures at the target sections selected in the first year underOutput3, using simple hazard location maps Create a budget item for disaster prevention in the regular budget of SETM/SEHM/MOT Prepare a budget for cally adaptable disaster prevention for the priority sites Labelian and the capable disaster prevention for the priority sites	th	he database users		
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Plan and implement a pilot study on cost effectiveness of simple disaster prevention Plan and implement a pilot study on cost effectiveness of simple disaster prevention measures at the target sections selected in the first year underOutput3, using simple hazard location maps Create a budget item for disaster prevention in the regular budget of SETM/SEHM/MOT Prepar a budget for locally adaptable disaster prevention for the priority sites	La	and the target SETMs/SEHMs are capable of preparing budget proposal for		
	Ë ?	Isaster prevention		
		Tan and implement a pilot study on cost effectiveness of simple disaster prevention neasures at the target sections selected in the first year underOutput3, using simple		
	þ	nazard location maps		
	Ω	Create a budget item for disaster prevention in the regular budget of SETM/SEHM/MOT		
Land Land and Devent O Low all toward CTTM and MOT willing on the		repare a budget for locally adaptable disaster prevention for the priority sites		
Identified under Output 3 by all farget SETIMS and MOT, utilizing the results of Output 3.8.4		identified under Output 3 by all target SETMs and MOT, utilizing the results of Output 3:84		
Develop project proposal(s) on large-scale prevention measures for the priority	D	Develop project proposal(s) on large-scale prevention measures for the priority		
site(s) in the target section(s) under output3, which cannot be handled by the target SETMs/SEHMs, and studies for prevention measures for funding by international	S	ite(s) in the target section(s) under output3, which cannot be handled by the target sETMs/SEHMs, and studies for prevention measures for funding by international		
donor(s) as needed, utilizing the results of Output 3&4	ಕ	lonor(s) as needed, utilizing the results of Output 3&4		

Form 3-3 Project Monitoring Sheet (Plan of Operation)
Project Title: The Project for Capacity Development for Road Disaster Management in the Republic of Tajikistan

Version 3

Dated 8 November 2018

	Year	0	2017				2018					2019				26	2020		_		Mo	Monitoring
Inputs	-	2 3 4 5 6 7		8 9 10 11 12	-	2 3 4	5 6 7 8		9 10 11 12	1 2	3 4 5	_	8 9 10 11 12	11 12 1	2 3	4 5 6	6 7 8 9 10 11	9 10 11	12	Remarks	lssue	Solution
Expert (in Tajikistan)				H	П	Н	H	Н	H			H	H	H	Ħ	H			П	ed by		
1. Chief Advisor/ Road Disaster	Plan							1		1					1				From Version 1 to Version 2			
Management	_				#			1				+	1	+		+	1	#				
2. Deputy Chief Advisor/ Road Disaster					$\frac{1}{4}$	#	1		$\frac{1}{1}$		1		#	$\frac{1}{1}$		$\frac{1}{4}$		#	From Version 2 to Version 3			
Management Z	Actual				‡	ļ		ł	$\frac{1}{1}$		1			#	f			+				
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	Plan		Ī	+	1		F	ŧ	F	ŧ	F		ŧ	ŧ	ĺ		ŧ	\downarrow				
4. Disaster Recovery Measures	Actual		Ī					Ħ	Ħ	Ħ		Ħ	\blacksquare	\dagger		H	\pm	Ħ				
5. Disaster Prevention Measures 1	Plan				1	1	+				1	_				#		1				
	Actual	+	Ŧ		‡	+	#				1	+	1	+	\dagger	+	\downarrow					
6. Disaster Prevention Measures 2	Actual	+			‡	ŧ	+			ŧ	Ŧ	+		+	ŧ	+	ŧ	$^{+}$				
:	Plan	#			ŧ	ŧ	f		f	ŧ	1	f		+		+	ŧ	ŧ				
7. Hazard Evaluation	Actual				E				<u> </u>	E			E	F	E		E					
MyO tramping but Day	Plan						H	В	H	Ħ			Ħ	H			Ħ					
o. Machinelles and Equipment Cam	Actual																					
9. Cost Estimation	Plan		1		$\frac{1}{2}$	#		\bot	\prod		7		1	1		+		$\frac{1}{1}$				
	Dian			ſ		ļ	ŧ	ļ	+	ŧ	Ŧ	+	Ī		ŧ	‡	ŧ	ļ				
10. Database 1	Actual						+	F		ŧ	1	+	1	F	ŧ	+	ŧ	ļ				
0	Plan		E	F			F	E	F	Ē	E	F	Ė	F	E	F	E	L				
11. Database 2	Actual			F			F	E	F	E			E	F	E	F	E	F				
12 Instrumentation Monitoring	Plan					H	H			\Box		Ħ		H		\exists	\exists					
	Actual								1		1			1		4		1				
13. Project Monitoring/ Japan Training		+		+	#		+	1	_			+		\pm	#	#						
	Actual																	\downarrow				
14. Project Coordinator	Actual															t		ŧ				
	1																	F				
										Ħ	F	H	Ħ	H	Ħ	H	Ħ					
16. Interpreter/Sub Project Coordinator																						
(3)	Actual	#								1	1	+	1	#	1	#	#					
Expert (In Japan)	\ 2	+	1	+	#	#	+	$\frac{1}{2}$	1	1	1	+	#	+	1	\dagger		$^{+}$				
Management	Actual		Ŧ	+	‡	+	+	ŧ	Ŧ	ŧ	1	+	ŧ	+	ŧ	+	ŧ	+				
2. Deputy Chief Advisor/ Road Disaster					E		L	E	<u> </u>	E		F	E	F	E		E					
Management 2							\exists		H			H		\exists		\exists						
9. Cost Estimation	Plan	+		#		1	+	\bot	\prod		7	+	1	+	1	+		$\frac{1}{1}$				
	Plan	+				F	+	F	+	ŧ		+	ŧ	+	ŧ	+	ŧ					
11. Database Z	Actual				H	H	\dashv		\exists	\exists		H		H		\parallel						
13. Project Monitoring/ Japan Training			1	+	#	#		1	\perp	1		+	1	+	#	+		1				
Farrinment	Actual	+	#	+	‡	‡	#	Ŧ	#	#	Ŧ	+	#	#	#	‡	‡	‡				
	Plan	+				F	+	ŧ	+	ŧ	F	+	ŧ	+	t	+	ŧ					
Provision by the Experts Team	Actual	_			Ė	F	F	E	F	L		F	L	F	Ė		L					
2 Provision by .IICA	Plan												Ħ	H		\exists						
	Actual				1						1	#		1		1		1				
Training in Japan			1	+	1	1	+	1	4		1	1	1	1	1	4		_				
Learn about road disaster management		+	#	+	#	\downarrow		1	1			+	1	+	#	\downarrow						
lecnnology in Japan	Actual	#	\ddagger	\dagger	‡	#	+	#	\neq	#	lat	#	#	+	#	‡	#	#				1
In-country/rnird country training		‡	#	\dagger	‡	#	+	ŧ	Ŧ	‡	Ŧ	+	Ŧ	+	‡	‡	#	+				
N/A	Actual	+	ļ	ł	ŧ	Ŧ	+	ŧ	+	ŧ	Ŧ	+	ŧ	+	ŧ	+	ŧ					

DI=Design Institute, EAF=Econ Analysis & Forcasting Dpt, ITU=IT Unit, MPEU=Maintenance, Planning & Evaluation Unit, RCM=Road Construction and Maintenance Dept, RCU=Road Construction Unit asures partcipate in the field activities as cost for eqpt, meal allowance Target TMs/HMs SET M/SEH Other Major Inputs Tajik Japan Recov, travel & accom cost for ,nief Advisor (CA) , Hazard Eva Prevention measures (Prev M) Recov. M, Hazard Eva, Prev M, Institution Chief Advisor Cost E, O&M Disater Mgt , Taskforce P RDMT(RCM m (RCM, DI), SETM RDMT (RCM, DI), SETM (Tajik) ETM, Engineer evel (SETM) evel (SETM) RCM Head of Head of MPEU Head of MPEU Person (Tajik) Head of MPEU MPEU MPEU Head o Overall:MOT Field:SETM Month 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 Output 2:Road disaster recoveries by the target SETMs/SEHMs are improved through standardization Output 1:Road disaster management structure of MOT and the target SETMs/SEHMs is strengthened. Actual Actual Plan Plan Actual Actual Plan Plan Plan Plan Plan Plan supporting SETM/SEHM (RDMT) formed at 2.3 works to all target SETMs/SEHMs and MOT recovery work sheet) (in Hissor and Sughd SETMs) Conduct on-site drills for simulated disaster recovery for all target SETMs/SEHMs (in Hissar and Sogd SETMs) Clarify the roles and responsibilities of Road Examine locally adaptable disaster recovery Classify target disasters through collection and analysis of the past disaster records Support the target SETMs/SEHMs through Update and finalize the manual, reflecting, 2.2 SETM/SEHM/RRT, including action for preparedness, Which is used for Activity selection of works, design, cost estimate, supervision, preparation of disaster Certify trainers for disaster recovery from the staff of the target SETMs/SEHMs Develop an improvement plan of disaster 1.5 management structure of MOT and the works based on the current state review feedbacks from the project activities for recovery called Rapid Response Team Plan and implement disaster recovery 2.5 works for the disasters occurred in any management relevant to MOT and the MOT and its members as well as their onduct trainings on disaster recovery target SETMs/SEHMs, including their the project activities according to the clarified roles and responsibilities (by target SETMs/SEHMs based on the i.e. action for preparedness, survey, Review organizational and technical communication network for disaster 1.2 aspects of current state of disaster 1.3 Disaster Management Taskforce target SEHMs by the relevant capacity development plans 2.6 feedbacks from Act 2.3-2.5 approval by MOT. SEHMS/SETMS Actvity. 1.2) RDMT) 2.2-2.5 Activities 2.1 2.7

DI=Design Institute, EAF=Econ Analysis & Forcasting Dpt, ITU=IT Unit, MPEU=Maintenance, Planning & Evaluation Unit, RCM=Road Construction and Maintenance Dept, RCU=Road Construction Unit would be utilized in Act 1.7,1.8, 4.8 partcipate in the field activities as needed for Remarks at TM meal allowance eqt, fuel for eqpt, meal for SETM/SE J&M cost. SETM/SE ETM/SEH allowance SET M/SEH Other Major Inputs cost, existing Tajik ₹ cost for SETMs/SE cost for SETM/HM & accom cost for SETM/SE eva, travel Japan hazard Eqt for prev & monitor, travel & Prev M, Hazard Eva Hazard Eva, Prev M, Cost E, Mon CA, Hazard Eva, Prev M Prev M, Hazard Eva, Cost E, Mon Prev M, Hazard Eva Prev M, Cost E, Mon Prev. M, Hazard Eva, SostE, Monitoring (Mon) Prev M, Cost E. RDMT (RCM, DI) RDMT (RCM, DI) SETM (RCM, DI) SETM (Tajik) SETM ETM. SETM, EHM SETM SETM Ξ Engineel level (SETM ingineel evel (SETM Chief Engineel Ievel (SETM ingineel evel (SETM Engineel evel (SETM ivel (SETM vel (SETM RCM Head of Person (Tajik) Head of MPEU Hed of MPEU Org (Tajik) Month 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 I -#2 II for hazard Ħ Ħ Ħ I -#1 Ι, Π Output 3: Process of locally adaptable road disaster prevention is established at the target SETMs/SEHMs I for hazard Ħ \Box I for hazard eva Plan Actual Actual Actual Actual Actual Plan Actual Actual Plan Actual Plan Actual Year Plan Plan Plan Plan Plan Plan Plan Plan Plan Conduct hazard evalatuon at the target 3.5 sections by all target SEHMs in coordination with the respective target SETMs 3.9 prevention measures #1 & #2 on pilot basis screening, selection of hazardous sites, hazard/risk assessment and preparation of 3.8 prevention, measures to all target SETMs/SEHMs and MOT (i.e. selection of evaluation and locally adaptable prevention Identify priority sites in the target sections 3.6 based on the results of the hazard evaluation by the respective target SETMs Sogd SETMs) by all target SETMs and the relevant target SEHMs locally adaptable prevention measures based on the current state review (Activity Develop a future disaster prevention plan for each target section by the respective target SETMs. Update and finalize the manual, reflecting feedbacks from Activities 3.3-3.9 Conduct trainings on hazard evaluation to 3.3 all target SETMs/SEHMs and MOT (i.e. prevention measures from the staff of the target SETMs/SEHMs Develop a disaster prevention manual for 3.2 SETM/SEHM, consisting of hazard neasuresm which is used for activity 3.3preparation of prevention measure sheet, Certify trainers for hazard evaluation and Examine hazard evaluation methods and nazard evaluation sheet) (in Hissor and monitoring for simple early warning) (in Hissar and Sogd SETMs) at the priority sites in the target sections measures, design, budget, supervision, selected in the first year (in Hissar and conduct tainings on locally adaptable Select the target sections for hazard 3.4 evaluation in each SETM lan and implement locally revention measure sheet Selection of measures c Budget preparation d Supervision Activities 3.10 3.10 3.11 3.7

	rear	7107			20.10			81.07			2020		Occapanion	Responsible	an lamountar lan	_	Other Major Inputs		Achiovomo	nssl san
Activities	Month	1 2 3 4 5 6 7 8 9	8 9 10 11 12 1	1 2 3 4 5	6 7 8	9 10 11 12	1 2 3 4	5 6 7 8	9 10 11 12 1	1 2 3 4	5 6 7 8	8 9 10 11 12	org (Tajik)	Person (Tajik)	s(Tajik) Exp	Experts Jap	Japan Tajik	Remarks		Counterme
Output 4: Data necessary for road disaster management is available for MOT and the target SETMs for budget preparation and disaster recovery and prevention	er mana	gement is available f	or MOT an	d the targ	et SETMs	for budge	t preparat	ion and dis	saster reco	very and	preventio	_	MOT (RCM, EAF)		Chief	Chief Advisor				
4.1 Develop a plan for road disaster management database on the current state review (Activity 1.2)	Plan												EAF/MOT	Head of ITU	TU (TBD) Dat	Database (DB)				
Design a database system with installed hardware, consisting of spread sheets	Plan												EAF/MOT	Head of ITU	ITU (TBD) ditto	DB software and	O&M cost	ost	_	
Develop road disaster management database manuals for users (i.e. MOT and the target SETMs) and administrator, which	Plan												EAF/MOT	Head of ITU	TU (TBD) ditto	A DE	D 0			\vdash
are used for Activity 4.4-4.10 Conduct trainings on database use to MOT 4.4 and all tarret SETMs (i.e. collection input	Actual												EAF/MOT	Head of ITU	ITU (TBD) ditto	PC for DB	r DB O&M cost	ost	_	+
compiling, analysis and reporting of data) at MOT and each SETM	Actual												1							
Collect data of disaster recovery works at all target SETMs in 2017 as baseline data in	Plan												RCM/MOT &SETM	Chief Engineer level (SETM)	SETM (TBD) Rec	Recov.M, CostE, O&M				
the prescribed from improve by the Project.	Actual												ı							
Collect data necessary for disaster 4.6 management (i.e. disaster recovery sheets,	Plan												RCM/MOT &SETM	Chief Engineer level (SETM)	SETM (TBD) Haz	Hazrd Eva. Prev M, Becov M				
nazard evaluation sneets, and prevention measure sheets) from all target SEHMs by	Actual																			
4.7 Digitalize the data collected from the target SEHMs by the respective target SETMs for	Plan												RCM/MOT &SETM	Chief Engineer	SETM (TBD)	PC fo	C for DB O&M cost	ost Network connection	u	
submission to MOT	Actual													level (SETM)						
4.8 Integrate the digitalized data submitted by the target SETMs into the database	Plan												EAF/MOT	Head of ITU	ти (твр) пв	PC for DB	r DB O&M cost			
	Actual												i Cari	_	T	C	_	-		\dashv
4.9 Kerease the database to MOT and an target. SETMs	Plan														(20)	5	ORIN COST	180		
	Actual										+		FORWARD			-	5	- 1	_	+
4.10 Develop a simple mannual road disaster management for senior management	Plan												KCIWIMO	MPEU (MPEU Haz (TBD) Pre	Prev M,	TUB O&M COST	1so		
	Actual												TOWN	E yo		_		-	_	+
4.11 Update and finalize the database design and the manuals, reflecting feedbacks from the database users	Plan												EAF/MO	Head of II U	unit (18D) DB	PC for UB	T DB O&M cost	1so		
Output 5: MOT and the target SETMs/SEHMs are capable of preparing budget proposal for road disaster prevention	IMs are	capable of preparing	budget p	oposal fo	r road dis	aster prev	ention						MOT	TBD	Chief Advis	Chief Advisor (CA)				
Plan and implement a pilot study on cost- 5.1 effectiveness of locally adaptable disaster	Plan					Completio	Completion of prev measure	easure					RCM/MOT	Head of RCU	RDMT Pre (RCM, DI), Cos	Prev. M, Cost E	Travel cost for field	cost		
prevention measures at the target sections selected in the first year under Output 3, using simple hazard location mans	Actual												ī				5			
Create a budget item for disaster prevention 5.2 in the regular budget of SETM/SEHM/MOT	Plan												RCM/MOT	Head of MPEU	APEU(TBD) Pre	Prev. M, Cost E,				
	Actual												ı							
Prepare budget for locally adaptable 5.3 disaster prevention for the priority sites	Plan												RCM/MOT	Head of MPEU	MPEU(TBD) Pre Cos	Prev. M, Cost E,				
identified under Output 3 by all target SETMs and MOT, utilizing the results of	Actual																			
Develop project proposal(s) on large-scale prevention measures for the priority site(s) 5.4 in the target section(s) under Output 3, which cannot be handled by the target	Plan												International Relations Dept	(TBD)	RDMT Pre (RCM, DI) Cos	Prev. M, Cost E, Institution				
SETMs/SEHMs, and studies for prevention for funding by international donor(s) as	1																			

DI=Design Institute, EAF=Econ Analysis & Forcasting Dpt, ITU=IT Unit, MPEU=Maintenance, Planning & Evaluation Unit, RCM=Road Construction and Maintenance Dept, RCU=Road Construction Unit asures Other Major Inputs Tajik Japan CA, Local
Adm
Coordinator
(LAC)
CA, all
experts in
Tajikistan CA, all experts in Tajikistan Officer in charge of the Project All Mgt personnel All Mgt personnel All Mgt personnel s(Tajik) Responsible Person (Tajik) JICA Head quarters Dy Poject Director (DPD) Dy Poject Director (DPD) Project Director Org (Tajik) 1 2 3 4 5 6 7 8 9 10 1112 1 2 3 4 5 6 7 8 9 10 1112 1 2 3 4 5 6 7 8 9 10 1112 1 2 3 4 5 6 7 8 9 10 1112 • • • • • • • • • • • • • • 2017 • Plan Month Actual Actual Actual Actual Plan Actual Plan Actual Actual Actual Plan Actual Plan Actual Actual Plan Plan Actual Plan Actual Plan Plan Plan Actual Plan Plan Plan Plan $0.3 \, \mbox{Annual Plan of Operation} \, (\mbox{APO}) \, \mbox{based on DPO for review and approval by JCC} \, . \label{eq:DPO}$ 0.2 Set-up Detailed Plan of Operation (DPO) based on tentative PO for review and approval by JCC Organize information sharing seminars/workshops for all target SETMs/SEHMs and MOT in Gissar and Sogd SETMs 0.11 Establishment and operation of web-site Monitoring and Evaluation in the 0.1 Joint Coordination Committee (J00) 0.5 Semi-annual Monitoring Sheet for submission to JICA Tajikistan Office 0.4 Joint Monitoring semi-annually Monitoring Mission from JICA Headquartersas needed 0.12 Materials for public relations 0.10 Project Completion Report 0.13 Dissemination seminars 0.15 Post Evaluation by JICA Post-Project period 0.14 Post Monitoring by JICA Duration / Phasing Reports/Documents 0.8 Inception Report 0.9 Progress Report **Public Relations** Monitoring Activities 0.6

TO CR of JICA TAJIKISTAN OFFICE

PROJECT MONITORING SHEET

Project Title: The Project for Capacity Development for Road Disaster Management

Version of the Sheet: Ver.5 (April 2019)

Name : Hiroshi Mita

Title: Chief Advisor

Submission Date: 4 April, 2019

I. Summary

1 Progress

1-1 Progress of Inputs

Inputs	Plan as of May 2017	Actual as at end March 2019		
Experts	<u>Total MM: 82.55MM</u>	Total MM: 53.98MM(65.4%:rate of		
		latest total MM, 82.55MM)		
	1) Chief Advisor / Road Disaster	1) Chief Advisor / Road Disaster		
	Management	Management		
	2) Deputy Chief Advisor / Road	2) Deputy Chief Advisor / Road		
	Disaster Management 2	Disaster Management 2		
	3) Institution	3) Institution		
	4) Disaster Recovery Measures	4) Disaster Recovery Measures		
	5) Disaster Prevention Measures 1	5) Disaster Prevention Measures 1		
	6) Disaster Prevention Measures 2	6) Disaster Prevention Measures 2		
	7) Hazard Evaluation	7) Hazard Evaluation		
	8) Machineries and Equipment O&M	8) Machineries and Equipment O&M		
	9) Cost Estimation	9) Cost Estimation		
	10) Database 1	10) Database 1		
	11) Database 2	11) Database 2		
	12) Instrumentation Monitoring	12) Instrumentation Monitoring		
	13) Project Monitoring / Japan	13) Project Monitoring / Japan		
	Training	Training		
Trainees Received	Training in Japan (2 times)	Training in Japan (2 times)		
		- 1st: was conducted on June-July 2018		
		- 2 nd : will be conducted on July 2019		
Equipment	Equipment for Output2,3	- Provision by the Experts Team was		
1 1		completed by the end of Sep, 2017.		
		- Provision by the JICA will completed		
		by the middle of 2019.		
Others	N/A	N/A		
Tajikistan side	Personnel	Personnel		
Operational Expenses	1. Project Director:	1. Project Director:		
1	Deputy Transport Minister, MOT	Deputy Transport Minister,		
	2. Deputy Project Director:	MOT		
	Head of RCM, MOT	2. <u>Deputy Project Director:</u>		
	3. Project Manager:	Head of RCM, MOT		
	Head of International Relation	3. Project Manager:		
	Dept. MOT	3. Project Manager: Head of International Relation		
	· F · · · · · · · ·	Dept. MOT		

- 4. <u>Regional Managers :</u> Heads of the target SETMs
- 5. Relevant Staff of MOT
- 6. Relevant Staff of DI
- 7. Relevant staff of the target SETMs/SEHMs:
- 8. Other personnel mutually agreed upon as necessary

Land, Building and Facilities

- 1. Land, Building and facilities necessary for the implementation of the Project
- 2. Office spaces for the Project in the building of MOT, Hissar and Sogd SETMs with office furniture and utilities such as internet connectivity, telephone line, electricity, etc.

Local Costs

- 1. Cost for installation, operation and maintenance of the provided equipment,
- 2. Administration and operational costs, including fuel costs, and materials for prevention / recovery works. Meal allowances for SETMs/SEHMs to participate in training drills. Prevention / recovery works

- 4. <u>Regional Managers :</u> Heads of the target SETMs
- 5. Relevant Staff of MOT
- 6. Relevant Staff of DI
- 7. Relevant staff of the target SETMs/SEHMs:
- 8. Other personnel mutually agreed upon as necessary

Land, Building and Facilities

- 1. Land, Building and facilities necessary for the implementation of the Project
- 2. Office spaces for the Project in the building of MOT, Hissar and Sogd SETMs with office furniture and utilities such as internet connectivity, telephone line, electricity, etc.

Local Costs

- 1. Cost for installation, operation and maintenance of the provided equipment,
- 2. Administration and operational costs, including fuel costs, and materials for prevention / recovery works. Meal allowances for SETMs/SEHMs to participate in training drills. Prevention / recovery works

1-2 Progress of Activities

Progress of activities is indicated in Monitoring Sheet Form 3-2 (PDM) and Form 3-3 (PO).

1-3 Achievement of Output

	Output/Indicators		vement %)	Major Results	Status ¹
	•	Plan	Actual		
Ou	tput-1:				
Ros	ad disaster managemen	t struc	ture of I	MOT and the target SETMs/SEHMs is streng	thened.
1a.	By Jun 2017, a report on current disaster management relevant to MOT and the target SETMs/SEHMs is developed	100	100	Based on collection of the most recent data on road disaster management and ensuing interviews with the C/Ps in charge, review was conducted by the Experts and the current road disaster management report was compiled by the end of June 2017.	OT
1b.	By July 2017, roles and responsibilities of Road Disaster	100	100	The role of RDMT is as follows; -The RDMT acts as a team to participate in all project activities to achieve all outputs in cooperation with the Experts Team.	ОТ

¹ OT: On Time, SFT: Scheduled for later, DL: Delay

Management Taskforce supporting SETM/SEHM(RDMT) is clarified.			- All members will acquire skills and knowledge to enhance own specialized field of road disaster management duties of MOT and Design Institute. - The team will support activities of other counterparts. The responsibilities of RDMT are as follows; - Members will share activities so that participation in project activities do not hinder other duties of MOT and Design Institute. - As such, RDMT will convene a monthly meeting so that participation by each member is prearranged considering the specialized field of each member. - Upon confirming that monthly meetings are held as agreed, targets and development plans of each member will be agreed with the Experts Team.	
1c. By the end of the Project, 80% of members of RDMT are able to support SETMs/SEHMs according to their respective roles and responsibilities.	56	56	RDMT members are actively participating in Outputs 2, 3 and 4 activities and supporting the target SETM and SEHMs. RDMT members are monitoring project progress. The individual capacity development project goals were agreed in July 2018 and it is put into action.	OT
1d. By the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs, including institutionalization od RDMT, is approved by MOT	0	0	N/A	SFT
Output-2:	41. 4	4 CT	CONTRACTOR OF THE STATE OF THE	1. 4.
2a. By Dec 2017, a road disaster recovery manual for SETM/SEHM/RRT is developed	y the t 3	100	TMs/SEHMs are improved through standard. The Road Disaster Recovery Manual Version 1 was submitted to MOT on 18 December 2018. The manual has been prepared to generate improvement so that even the urgent recovery works are carried out more systematically and in a more planned manner.	OT
2b. 80% of the training participants from all target SETMs/SEHMs passes the post-training test on disaster recovery works	100	100	Trainings on disaster recovery works using Road Disaster Recovery Manual Version 1 were conducted in February 2018. Over 80%(100% =59 /59) of the training participants from all target SETMs/SEHMs passed the post-training test.	OT

	000/ 01	1 22	1 22	0 000/ (1000/ 56 /50 0 0 0 0	0.77
2c.	80% of the trainees	33	33	Over 80% (100% =56 /56) of participants	OT
	from all target		[passed the post-drill test, Hissor SETM 19,	
	SETMs/SEHMs			Sughd SETM 25, and Rasht SETM 12.	
	passes the post-drill			Two more mock training sessions (once per	
	test on disaster		[year) will be conducted in 2019 and 2020.	
	recovery works for				
	each job category				
2d.	Disaster recovery	33	33	The on-site drills for simulated road disaster	OT
	works in the drills are			recovery works were conducted and completed	
	planned and			on 8 May 2018.	
	implemented by all			The disaster recovery works in the drills are	
	target SETMs/SEHMs			scheduled to be implemented three times in	
	according to the			total.	
	manual				
2e.	Disaster recovery	33	0	Owing to the less than average dry period from	DL
	works at the actual			April to October 2018, road disasters applying	(due to
	disaster sites are			the manual did not occur.	unforeseen
	planned and				weather
	implemented by all				condition)
	relevant target				, , ,
	SETMs/STHMs				
	according to the				
	manual				
2f	By the end of the	0	0	N/A	SFT
21.	Project, the finalized	0	0	IV/A	51.1
11	manual is approved by				
	MOT				
0					
	tput-3.:	la raad	disasta	r prevention is established at the target SETM	Ic/SFHMc
		T	1	The Road Disaster Prevention manual for	
Ja.	By Oct. 2017, a road disaster	100	100		OT
				SETM/SEHM was developed by Oct. 2017 for	
	prevention manual for			hazard evaluation. The section on disaster	
	SETM/SEHM is			prevention was added and submitted to MOT	
	developed			in August 2018 before activities for disaster	
				prevention actions such as Activity 3.7, 3.8 and	
				3.9 were carried out. The section on hazard	
			[evaluation was updated in July 2018.	
3h	80% of the training	100	100	The hazard evaluation training was	OT
	participants from all	100	100	implemented from September through October,	
	target SETMs/SEHMs				
	passes the post-			2017 and from July to September 2018.	
	training test on hazard			Over $80\%(100\% = 58/58)$ of the training	
	evaluation and locally			participants from all target SETMs/SEHMs	
	adaptable prevention			passed the post-training test in both 2017 and	
	measures each			2018.	
	measures each			The training on locally adaptable prevention	
				measures was conducted in August 2018. The	
				post-training test was conducted in November	
				2018 following the completion of Ayni pilot	
			[project.	
2 -	Hazard evaluation is	0.0	00	1 0	OT
3c.		80	80	Based on the results of the site visit, the 10	OT
	conducted at least			target section was decided:	
	twice by all target			-Hissor SETM pipe (4 sections)	
	SETM/SEHM for 10			-Sughd SETM pipe (4 sections)	
				-Sughd SETM pipe (4 sections) -Rasht SETM pipe (2 sections)	

	target SETMs			Hazard evaluation was conducted twice by all	
	according to the			target SETM/SEHM for 4 target sections in all	
	manual			target SETMs according to the manual in years	
				2017 and 2018, completing 8 sections in total.	
3d.	Locally adaptable prevention measures are planned by all target SETMs for 4 priority sites in Hissar	66	66	Based on the results of the site visit, the 4 priority sites in Hissar and Soghd were selected. Planning is completed for Varsob and Ayni sites, which is the sections to be carried out in 2018. Candidate sites in 2019 were selected at the	ОТ
	and Soghd SEYMs according to the manual.			respective SETMs based on the discussion and site investigation with MOT and SETMs as follows; Varsob and Bobojon Ghafurov sites.	
	Locally adaptable prevention measures are implemented by 4 target SEHMs at 4 priority sites in Hissar and Soghd SETMs according to the manual	50	50	Implementation was successfully completed at 2 priority sites (Varsob and Ayni) at the end of November 2018.	ОТ
3f.	80% of the observers from the other 22 SEHMs passes the post-observation test on implementation	100	100	Over 80% (100% = 47/47) of the training participants from the target SETMs/SEHMs passed the post-observation test in December 2018. Hissor SETM 13, Sughd SETM 25, and Rasht SETM 9.	OT
3g.	By Mar. 2020, future disaster prevention plans are developed for 10 target sections by all target SETMs	50	50	Future disaster prevention plans (draft) have been developed for each target section by the respective SETMs based on the results of hazard evaluation in 2017 and 2018. The draft will be re-examined after the 2019 hazard evaluation and will be submitted to MOT and SETMs.	ОТ
3h.	By the end of the Project, the finalized manual is approved by MOT	50	50	The manual was updated by reflecting the outputs from prevention measure (river bank erosion countermeasure) in Ayni SEHM for the time being in November 2018. The update on the Disaster Prevention Manual was carried out by inclusion of the countermeasure construction plan on preventive maintenance (countermeasure on river bank erosion) in Ayni in February 2019.	ОТ
Out	tput-4.:		I.	, , , , , , , , , , , , , , , , , , , ,	
	*	saster	manage	ment (*1) is available for MOT and the target	SETMs
for	budget preparation and	d disas	ter reco	very and prevention	
4a.	By Dec 2017, road disaster management database is developed according to the design developed through the Project	100	100	The Experts Team commenced DB development from the middle of August 2107 in Japan based on the agreed DB system framework. The initial version was completed at the end of October 2017. Additional functions to DB system was added in March 2018.	ОТ
4b.	By Dec 2017, road disaster management database manuals for users and	100	100	The Experts Team submitted Road Disaster DB Manual version 1 to the target SETMs and ITU and RCM of MOT in December 2017. The	OT

	administrator are developed			section on additional functions to DB system was added in March 2018.	
10	80% of the training	100	100	Training sessions were held from 22 November	OT
٦٠.	participants from	100	100	2017 to 22 December 2017 for both DB	OI
	MOT and the target			administrators and for DB users.	
	SETMs passes the				
	post-training test on			Over 80%(100% = 18 / 18) of the training	
	database use.			participants from all target SETMs/SEHMs	
4.1	D 16 0010	100		passed the post-training test.	
4d.	By Mar 2019,	100	90	Based on the result of workshops and meeting with ITU and MPEU carried out in October	DL
	the database is released to MOT and			2018, database is being updated with the	
	the target SETMs			targeted completion by March 2019. It will be	
	the target SETWIS			published for all MOT staffs and SETM staffs	
				on April 2019.	
4e	From 2019, a simple	40	40	The annual road disaster management report	OT
10.	disaster management	40	40	utilizing the database is ongoing.	01
	report is submitted to			anneng me annene is engemig.	
	senior management of				
	MOT once a year				
4f.	By the end of the	60	60	The update of draft manual reflecting changes	OT
	Project, the finalized			based on activities 4-9 and 4-10 is ongoing.	
	manual is approved by				
	MOT				
	tput-5.:				
	T and the target SETN	As/SEE	IMs are	e capable of preparing budget proposal for roa	d disaster
			11115 411	cubasie of brebaring sauger brobosarior for	
pre	vention	13/021			
pre	vention By Mar 2020,	0	0	Based on the discussions being held between the	SFT
pre	vention By Mar 2020, a report of a pilot			Based on the discussions being held between the JICA Experts Team and RDMT members since	
pre	wention By Mar 2020, a report of a pilot study on cost-			Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on	
pre	Nention By Mar 2020, a report of a pilot study on cost- effectiveness of the			Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the	
pre	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable			Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to	
pre	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is			Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on	
pre	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable			Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster	
pre	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is			Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT	
pre 5a.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed	0	0	Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT Minister.	SFT
pre 5a.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed By Jun 2020,			Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT	
pre 5a.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed By Jun 2020, budget proposal for	0	0	Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT Minister.	SFT
pre 5a.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed By Jun 2020, budget proposal for locally adaptable	0	0	Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT Minister.	SFT
pre 5a.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed By Jun 2020, budget proposal for locally adaptable disaster prevention	0	0	Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT Minister.	SFT
pre 5a.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared	0	0	Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT Minister.	SFT
pre 5a.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM	0	0	Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT Minister.	SFT
pre 5a.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared	0	0	Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT Minister.	SFT
pre 5a.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of	0	0	Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT Minister.	SFT
pre 5a.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of the regular budget for	0	0	Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT Minister.	SFT
5a. 5b.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of the regular budget for FY 2021 based on the future development plans	0	0	Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT Minister. N/A	SFT
5a. 5b.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of the regular budget for FY 2021 based on the future development	0	0	Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT Minister.	SFT
5a. 5b.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of the regular budget for FY 2021 based on the future development plans By the end of the Project, at least one	0	0	Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT Minister. N/A	SFT
5a. 5b.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of the regular budget for FY 2021 based on the future development plans By the end of the Project, at least one project proposal for	0	0	Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT Minister. N/A	SFT
5a. 5b.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of the regular budget for FY 2021 based on the future development plans By the end of the Project, at least one project proposal for large-scale disaster	0	0	Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT Minister. N/A	SFT
5a. 5b.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of the regular budget for FY 2021 based on the future development plans By the end of the Project, at least one project proposal for large-scale disaster prevention of the	0	0	Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT Minister. N/A	SFT
5a. 5b.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of the regular budget for FY 2021 based on the future development plans By the end of the Project, at least one project proposal for large-scale disaster prevention of the priority site(s) and	0	0	Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT Minister. N/A	SFT
5a. 5b.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of the regular budget for FY 2021 based on the future development plans By the end of the Project, at least one project proposal for large-scale disaster prevention of the priority site(s) and studies for prevention	0	0	Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT Minister. N/A	SFT
5a. 5b.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of the regular budget for FY 2021 based on the future development plans By the end of the Project, at least one project proposal for large-scale disaster prevention of the priority site(s) and	0	0	Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance, an agreement was made to utilize the proposed MOT Seminar on Dissemination of the JICA Road Disaster Management Project proposed by the MOT Minister. N/A	SFT

donor(s) for funding,		
utilizing the results of		
Output 3 and 4		

1-4 Achievement of the Project Purpose

1 77	Achievement of the Project	Achievement	•	Expected
F	Purpose/Indicators	(%)	Situation	Time of Achievement
Cap	ject Purpose: pacity of MOT and the roved.	target SETM	Is/SEHMs for effective road disaster mana	
a.	By the end of the Project, 80% of results of the disaster recovery works by the target SETMs/SEHMs, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans	0	Owing to the less than average dry period from April to October 2018, road disasters applying the manual did not occur.	DL (due to unforeseen weather condition)
b.	By the end of the Project, 80% of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the Japanese Expert Team	50	Hazard evaluation was conducted twice by all target SETM/SEHM for 4 target sections in all target SETMs according to the manual in years 2017 and 2018, completing 8 sections in total.	OT
c.	80% of results of the disaster prevention measures #2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality and safety specified in the plans.	50	Locally adaptable prevention measures are implemented successfully at 2 priority sites (Varsob and Ayni) at the end of November 2018.	OT
d.	By the end of the Project, budget request for disaster	0	N/A	SFT

prevention in the		
target SETMs for FY		
2021 is submitted to		
Ministry of Finance		
(MOF) as part of the		
regular budget		

1-5 Achievement of the Overall Goal

Ove	erall Goal/Indicators	Achievement (%)	Situation	Expected Time of Achievement
Roa	rall Goal: d disasters are mitigat Ms/SEHMs	ted in the inte	rnational and Republican Roads in the tar	get
1 1 2 3	All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project	0	N/A	SFT
b.]	By Jul 2023(*2) disaster prevention measures are planned and / or implemented at least 5(*3) priority sites in the target SETMs according to the disaster prevention manual developed through the Project	0	N/A	SFT
c.]	From Aug 2020 to Jul 2023 the average duration required for road reopening per disaster handled by the target SETMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018)	0	N/A	SFT

^(*1) Data necessary for road disaster management includes disaster record, results of hazard evaluation, prevention measures, and recovery works among others.

(*2) Underlined deadlines in the indicators are set based on the schedule of the Tentative PO. They shall be modified according to the Detailed

PO to be prepared in the beginning of the Project for approval by the first JCC.

(*3) Target values of the indicators shall be filed based on the results of the baseline survey, Which shall be reviewed and approved by the 2nd

JCC.

1-6 Changes of Risks and Actions for Mitigation

N/A

1-7 Progress of Actions undertaken by JICA

N/A

1-8 Progress of Actions undertaken by Gov. of Tajikistan

N/A

1-9 Progress of Environmental and Social Considerations (if applicable)

N/A

1-10 Progress of Considerations on Gender/Peace Building/Poverty Reduction (if applicable)

N/A

1-11 Other remarkable/considerable issues related/affect to the project (such as other JICA's projects, activities of counterparts, other donors, private sectors, NGOs etc.)

N/A

2 Delay of Work Schedule and/or Problems (if any)

2-1 Detail

N/A

2-2 Cause

N/A

2-3 Action to be taken

N/A

2-4 Roles of Responsible Persons/Organizations (JICA, Gov. of Tajikistan, etc.)

N/A

3 Modification of the Project Implementation Plan

3-1 PO

Detailed Plan of Operation (DPO) was revised to DPO Version 2 dated 20 April 2018.

- Shift Database 2 Expert assignment from December 2018 to April 2018
- Add Activity 3.2 in June 2018
- Add Activity 4.11 in April 2018

This was reported in Project Monitoring Sheet Version 3 (April 2018)

Detailed Plan of Operation (DPO) was revised to DPO Version 3 dated 05 November 2018.

- Shift Activity 2.6 from November 2018 to May to June 2019 to tie in with delivery of hydraulic rock breakers to effectively update the manual
- Shift Machineries and Equipment O&M Expert assignment from March 2019 to May to June 2018 It is attached as Monitoring Sheet Form 3-3.

3-2 Other modifications on detailed implementation plan

(Remarks: The amendment of R/D and PDM (title of the project, duration, project site(s), target group(s), implementation structure, overall goal, project purpose, outputs, activities, and input) should be authorized by JICA HDQs. If the project team deems it necessary to modify any part of R/D and PDM, the team may propose the draft.)

N/A

- 4 Measures undertaken by Gov. of Tajikistan or Project Team to Ensure the Sustainability of Project after the Project Completion
- 4-1 Financial Sustainability

N/A

4-2 Technical Sustainability

N/A

4-3 Institutional Sustainability

N/A.

Project Monitoring Sheet I (Revision of Project Design Matrix)

Project Title: The Project for Capacity Development for Road Disaster Management

Implementing Agency: Ministry of Transport (MOT)

Target Group: MOT, Hissor SETM and its 9 SEHMs, Sughd SETM and 14 SEHMs, and Rasht SEHM and its 3 SEHMs (Nurobod, Rasht, and Ta-jikobod)

Period of Project: April 2017 - July 2020 (in Tajikistan)

Project Site: International and Republican roads in Hissor and Sughd SETMs as well as Nurobod, Rasht and Tajikobod SEHMs in Rasht SETM

<u>Version: 5</u> <u>Dated: 4 April, 2019</u>

Remarks							
Achievement	(Future activity)	(Future activity)	(Future activity)	Owing to the less than average dry period from April to October 2018, road disasters applying the manual did not occur.	Hazard evaluation was conducted twice by all target SETM/SEHM for 4 target sections in all target SETMs according to the manual in years 2017 and 2018, completing 8 sections in total.	Locally adaptable prevention measures are implemented successfully at 2 priority sites (Varsob and Ayni) at the end of November 2018.	(Future activity)
Important Assumption				A. Policy for disaster management is not discontinued. B. Political instability/economic crisis/serious natural	disaster that affect the project sites do not occur. C. Budget including prevention, is approved by MOF		
Means of Verification	a-c Hazard evaluation disaster prevention & recovery sheets, in the Database			a. Assessment report b. Prevention sheet c. Recovery sheet d. Data of budget request			
Objectively Verifiable Indicators	a. All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project	b. By Jul 2023(*2) disaster prevention measures are planned and / or implemented at least 5(*3) priority sites in the target SETMs according to the disaster prevention manual developed through the Project	c. From Aug 2020 to Jul 2023 the average duration required for road re-opening per disaster handled by the target SETMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018)	a. By the end of the Project, 80% of results of the disaster recovery works by the target SETMs/SEHMs, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans	b. By the end of the Project, 80% of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the Japanese Expert Team	c. 80% of results of the disaster prevention measures #2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality and safety specified in the plans.	d. By the end of the Project, budget request for disaster prevention in the target SETMs for FY 2021 is submitted to Ministry of Finance (MOF) as Part of the regular budget
Narrative Summary	Overall Goal Road disasters are mitigated in the International and Republican Roads in the target SETMs/SEHMs			Project Purpose Capacity of MOT and the target SETMs/SEHMs for effective road disaster management is improved.			

Narrative Summary		Objectively Verifiable Indicators	Means of Verification	Important Assumption	Achievement	Remarks
Output Output-1: Road disaster management structure of MOT and the target	1a.	By Jun 2017, a report on current disaster management relevant to MOT and the target		A. Staff of MOT and the target SETMs/SEHMs trained	The report was compiled by the end of June 2017.	
SE I Mis/SEH Ms is strengthened.	1b.	By July 2017, roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM(RDMT) is clarified.	individual capacity devi plan 1d. Official approval document	through the Project do not leave the office in large numbers	The roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM(RDMT) is clarified.	
	1c.	By the end of the Project, 80% of members of RDMT are able to support SETMs/SEHMs according to their respective roles and responsibilities.			RDMT members are actively participating in Outputs 2, 3 and 4 activities and supporting the target SETM and SEHMs. RDMT members are monitoring Project progress.	
	1d.	By the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs, including institutionalization od RDMT, is approved by MOT			(Future activity)	
Output-2: Road disaster recoveries by the target SETMs/SEHMs are improved through standardization	2a.	By Dec 2017, a road disaster recovery manual for SETM/SEHM/RRT is developed	 2a. Acceptance letter 2b. Test results 2c. Ditto 2d ~ e 1oint review of the 		The manual has been prepared to generate improvement so that even the urgent recovery works are carried out more systematically and in a more planned manner.	
	2b.	80% of the training participants from all target SETMs/SEHMs passes the post-training test on disaster recovery works	list val letter		Over 80%(100% =59/59) of the training participants from all target SETMs/SEHMs passed the post-training test.	
	2c.	80% of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery works for each job category			Over 80% (100% =56/56) of participants passed the post-drill test, Hissor SETM 19, Sughd SETM 25, and Rasht SETM 12.	
	2d.	Disaster recovery works in the drills are planned and implemented by all target SETMs/SEHMs according to the manual			The on-site drills for simulated road disaster recovery works were conducted from early April 2018. The on-site drill is was completed in May 2018.	
	2e.	Disaster recovery works at the actual disaster sites are planned and implemented by all relevant target SETMs/STHMs according to the manual			Owing to the less than average dry period from April to October 2018, road disasters applying the manual did not occur.	
	2f.	By the end of the Project, the finalized manual is approved by MOT			(Future activity)	
Output-3.: Process of locally adaptable road disaster prevention is established at	3a.	By Oct. 2017, a road disaster prevention manual for SETM/SEHM is developed	 3a. Acceptance letter 3b. Test results 3c ~ e 		The road disaster prevention manual for SETM/SEHM was developed by Oct. 2017.	
the target SETMs/SEHMs	36.	80% of the training participants from all target SETMs/SEHMs passes the post-training test on hazard evaluation and locally adaptable prevention measures each	Joint review of the checklist 3f Test results 3g Approval letter		Over 80%(100% =58 /58) of the training participants from all target SETMs/SEHMs passed the post-training test.	
	Зс.	Hazard evaluation is conducted at least twice	3h ditto		Hazard evaluation was conducted	

Nornative Summery		Objectively Verificable Indicators	Moon	Moone of Vorification		Important Accumption	rivi Folili 3-2	INTOITION	
Marraule Summary		Objectively verifiable indicators	Mean	or vermeation		Important Assumption	Acmevement		Nelliarks
		by all target SETM/SEHM for 10 target sections in all target SETMs according to the manual					twice by all target SETM/SEHM for 4 target sections in all target SETMs according to the manual in years 2017 and 2018, completing 8 sections in total.	.al	
	3d.	Locally adaptable prevention measures are planned by all target SETMs for 4 priority sites in Hissar and Soghd SEYMs according to the manual.					Based on the results of the site visit, the 4 priority sites in Hissar and Soghd were selected. Planning is completed for the sections to be carried out in 2018 and 2019.	sar 118	
	Зе.	Locally adaptable prevention measures are implemented by 4 target SEHMs at 4 priority site in Hissar and Soghd SETMs according to the manual					Implementation was successfully completed at 2 priority sites (Varsob and Ayni) at the end of November 2018.	.Ily f	
	3f.	80% of the observers from the other 22 SEHMs passes the post-observation test on implementation					Over 80% (100% = 47/47) of the training participants from the target SETMs/SEHMs passed the post-observation test in December 2018.	the the lber	
	3g.	By Mar. 2020, future disaster prevention plans are developed for 10 target sections by all target SETMs					Future disaster prevention plans (draft) have been developed for each target section by the respective SETMs based on the results of hazard evaluation in 2017 and 2018.	ns rr e	
	3h.	By the end of the Project, the finalized manuals is approved by MOT					The manual was updated by reflecting the outputs from prevention measure (river bank erosion countermeasure) in Ayni SEHM for the time being in November 2018.	а. П.	
Output-4.: Data necessary for road disaster management is available for MOT and the target SETMs for budget preparation and disaster recovery	4a.	or management database is cording to the design developed roject		Comparison with design Acceptance letter Test results	the		The Experts team commenced DB development from the middle of August 2107 in Japan based on the agreed DB system framework. The initial version was completed at the end of October 2017.	idle lon ork. sted	
woks and prevention	4	1	4e. Report 4f. Approv	Report Approval letter			Disaster DB Manual version 1 to the target SETMs and ITU and RCM of MOT in December 2017.	to 11 17.	
	4c.	80% of the training participants from MOT and the target SETMs passes the post-training test on database use.					Over 80%(100% =18 /18) of the training participants from all target SETMs/SEHMs passed the post-training test.	he the	
	4d.	By Mar 2019, the database is released to MOT and the target SETMs					The database is being updated with the targeted completion by March 2019. It will be published for all MOT staffs and SETM staffs on April 2019.	y ed	
	4e.	From 2019, a simple disaster management report is submitted to senior management of MOT once a year					The annual road disaster management report utilizing the database is ongoing.	Je	
	4f.	By the end of the Project, the finalized manual is approved by MOT					The update of draft manual reflecting changes based on activities 4-9 and 4-10 is ongoing.	ing.	

					PM Form 3-2 IV	FM Form 3-2 Monitoring Sheet Summary
Narrative Summary		Objectively Verifiable Indicators	Means of Verification	Important Assumption	Achievement	Remarks
Output-5.:	5a.	By Mar 2020,	5a. Acceptance letter		The Ministry of Finance will be	
MOT and the target		a report of a pilot study on cost-effectiveness	5b. Budget document		Invited to MOI Seminar on	
SETMs/SEHMs are capable of		of the locally adaptable disaster prevention is	Proposals submitted		Disaster Management Project	
preparing budget proposal for road		developed			proposed by the MOT Minister.	
disaster prevention	5b.	By Jun 2020,				
		budget proposal for locally adaptable disaster				
		prevention measures are prepared by all target			(Future activity)	
		SETM and MOT as part of the regular budget				
		for FY 2021 based on the future development				
		plans				
	5c.	By the end of the Project, at least one project				
		proposal for large-scale disaster prevention of				
		the priority site(s) and studies for prevention is			(Future activity)	
		submitted by MOT to international donor(s) for				
		funding, utilizing the results of Output 3 and 4				

International control of the training of the Tajitk Section and parameters and software for database at MOT and control of the recessing the control of the requirement mutually agreed upon as for senting at each SETM and control of the training of the Tajitk Personnel in Japan prevention recovery and for simple cardy. 1. The Japanese Experts 2. Deputy Project Director 3. Redown Project Director 4. Hazard Evellment 5. Cock of estimate 6. Cock estimate 7. Database 6. Cock estimate 8. Selvent staff of ID 7. Redownt staff of ID 8. Monitoring greed upon as prevention of the Project in the building of the training of the Tajitk Personnel in Japan 8. Other personnel mutually agreed upon as prevention and mutually agreed upon as prevention of the Project in the building of the Tajitk Personnel in Japan 9. Cocal Administrative Coordinator 10. Other experts mutually agreed upon as prevention and mutually agreed upon as prevention of the Project in the building of the Tajitk Personnel in Japan 10. Cocal Administrative Coordinator 11. Intaining of the Tajitk Personnel in Japan 12. Hardware and Software For database at MOT and office furnine and utilities such as internet connectivity, deleptone line, electricity, etc. 13. Monitoring greed upon as prevention and materials for prevention recovery works and prevention recovery works and prevention recovery works and prevention recovery works and materials for prevention recovery works and	L		•		4 7 7 1
Particular of the ungest effective and undpis of the part deaded Particular Condition		Activities			Important Assumption
the country of the register structure of NOT and the tights of the peat desired: 1.3. Charles to body or the trage tights from the project activities for the peat desired to control and recoluble of the peat desired to control and the c	<u>،</u>	Output 1:	The Japanese Side	The Tajik Side	
1-1. Classify the target disastes relocation and analysis of the past disasts 1-1. Classify the target disastes records and tached a special communities of computer recovery annual for SETMS/SETMS and word for a classification of communities of communities of computer recovery annual for SETMS/SETMS and word for a classification of communities of communities of computer recovery annual for SETMS/SETMS and word for computer of computer on a classification of communities of communities of computer recovery annual for SETMS/SETMS and word for computer of computer on a classification of communities of computer recovery annual for SETMS/SETMS and word for computer of comp	- ×	NOME WAS A CONTROLLED BY THE PROPERTY OF THE STATE OF THE	Japanese Experts	Personnel	project activities do not occur
recent to YOT and the graph Skeptone Franch and reducing the recent diseater management Table to the server separational and technical aspects of current diseater management Table to the server separate Recovery called Rapid Skeptone Franch (Seed Desear Percention 1-1-2). The server is no YOT and the ungest SETNASEMA including the recoverable for the properties are very facility of the very many section of the recoverable for the project activities according to the SETNASEMA to the recoverable for the project activities according to the SETNASEMA to the recoverable for the project activities according to the SETNASEMA to the recoverable for the project activities according to the SETNASEMA to the recoverable for the project activities according to the SETNASEMA to the recoverable for the project activities according to the SETNASEMA to the recoverable for the project activities according to the SETNASEMA to the recoverable for the project activities according to the SETNASEMA to the recoverable for the project activities according to the SETNASEMA to the recoverable for the project activities according to the SETNASEMA to the recoverable for the project activities according to the SETNASEMA to the recoverable for the project activities according to the SETNASEMA to the recoverable for the project activities according to the SETNASEMA to the recoverable for the project activities according to the section of the Project according to the section of the Project according to the section of the Project according to the recoverable for the project activities according to the project activities according to the project activities according to the section of the project activities according to the proj	1			1. Project Director:	
1-3. Review opportunition and the target SETM-SERIMs, including their communication to MOT and the target SETM-SERIMs, including their communication to MOT and the target SETM-SERIMs famely their communication to MOT and the target SETM-SERIMs including their communication to MOT and the target SETM-SERIMs famely their to in members were a tent of consideration to MOT and the target SETM-SERIMs through the project activities for consideration the target SETM-SERIMs through the project activities for consideration of the series management received to the super SETM-SERIMs through the project activities for consideration of the series management received to the feedback from the project activities for appropriate plan of desset management received to the series and the series and the series of the series and the series of the series and the series of the series and the series and the series of the series and the series and the series of the series and the series are series and the serie		records			which limits the activities of the
1-3. Curify the roise and september as well as their especial control for the same september as well as their especial control for the same september as well as their especial control for their especial control		Review			JICA experts, especially in the project sites, does not deferiorate
1-3. Clarify the total and disaster recovery works for all target SETMASEHMS and state transmitted disaster recovery works for all target SETMASEHMS and state transmit locally adjusted to preparation of yorks, design of the target SETMASEHMS and state transmit of perpandition of the properties and perpandition and disaster recovery manufacturation of the properties and the propert		network for disaster Recovery called Rapid Response Team (RRT)			compared with the same in 2016
supporting STMSHM (RMM) formed at MOT and its numbers as well as their electrons of the supporting STMSHM (RMM) and through the project activities for a subport of the target STMSHM (RMM) are insorred activities for the color of the color of through the project activities for the color of through the support STMSHMS based on the feedback from the project of MOT and its number of the color of through the support STMSHMS are improved through the support STMSHMS are improved through the support STMSHMS based on the feedback from the project and the support STMSHMS based on the feedback from the project and the support STMSHMS based on the feedback from the project and the support STMSHMS based on the feedback from the project and the support STMSHMS based on the feedback from the project and the support STMSHMS based on the feedback from the project and the support STMSHMS based on the feedback from the project and the support STMSHMS based on the feedback from the project and the support STMSHMS based on the feedback from the project and the support STMSHMS based on the feedback from the project and the support STMSHMS based on the feedback from the project and the support STMSHMS based on the feedback from the from the feedback from the feedback from the from the feedback from the feedback from the from the feedback from the	1				, :- ; ;
1-4. Support the target SETMSSEHMs through the project activities according to the Chair of the target SETMSSEHMs the would the through the project activities according to the Chair of the target SETMSSEHMs are improved through the project activities of the Chair of the target SETMSSEHMs are improved through the chair of the target SETMSSEHMs are improved through the chair of the target SETMSSEHMs are improved through the chair of the target SETMSSEHMs are improved through the chair of the target SETMSSEHMs are improved through the chair of the target SETMSSEHMs and REIT including action for preparations can be considered to the chair of the chair		supporting SETM/SEHM (RDMT) formed at MOT and its members as well as their			<pre><pre-conditions></pre-conditions></pre>
definition to save desponsible of legs (PMS) Declete an improvement plum of dissers management structure of MOT and the 10-best consisting of the structure of MOT and the 10-best consisting of the structure of MOT and the 10-best consisting of the structure of MOT and the 10-best consisting of the structure of MOT and the 10-best consisting of the structure of MOT and the 10-best consisting of the structure of MOT and the 10-best consisting of the structure of MOT and the 10-best consisting of the structure of works, delign consisting of the structure of works for all trades the month of the structure of works, delign consisting of the structure of the provision meaning and implement deliaser recovery works for all trades the month of the structure of the structure of works, delign consisting of the structure of the structure of works, delign consisting of the structure of works and materials of the structure of works, delign consisting of the structure of the struct	_				
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Output 2: Read disaster recovery and disaster recovery means from the project activities of the region of the regi	1				
Land, Building and Facilities		target SELMS/SEHMS based on the reedbacks from the project activities for approval by MOT	HCCSSAI y		
Rad disaster recoveries by the target SETMASEHMs are improved through 2. Examine locally adaptable disaster recovery works based on the current state review 2. Conduct trainings on disaster recovery works for the disaster recovery or the disaster recovery works and implement disaster prevention in established at the target SETMASEHMs 2. Centify Trainers for Disaster prevention in established at the target SETMASEHMs 3. Develop a run disaster prevention in established at		Output 2:	Equipment		
8.1 Random locally adaptable dissafer recovery works based on the current state revolue. 9. Hardware and software for database at MOT and evaluation of the Project in the building and facilities necessary for the cache of dissaster recovery manual for SETM/SEHMs and RR, including action for perparations and dissaster recovery works for all target SETM/SEHMs and first action for perparations, survey selection of based recovery works for all target SETM/SEHMs for History and Sughd SETM/SH including action for perparation and conduct ratings and evaluation and included dissaster recovery works for the dissaster recovery from the target SETMASSHMs 2-4. Conduct rating on the target SETMASSHMs and for the target SETMASSHMs and interpretation meanures and for the target sections based on the evaluation to all maget SETMASSHMs and the dissaster prevention measures developed by dispulse for the target sections and the dissaster prevention and recovery from the cargomatic for the dis		Road disaster recoveries by the target SETMs/SEHMs are improved through	1 Farrinment for disaster recovery and	Land, Building and Facilities	+
2. Deskep of sistent recovery manual for SETM/SEHM and works for all target SETM/SEHMs and preparedness, which is used for Activity 2.3.2.5 Deskep of sistent recovery manual for SETM/SEHMs and works for all target SETM/SEHMs and monitoning at each SETM 1. Lapop PC for database at MOT and files such as the Project in the building action for preparedness, which is used for Activity 2.3.2.5 Deskep of SETM/SEHMs and works for all target SETM/SEHMs and monitoning equipment for simple early selection of works deep and the search of works deep and the search of works of the dissert recovery works for all target SETM/SEHMs 2. Conduct manual celecting the feedbacks for manual celecting the feedback for Activity 1.2.3.2.5 Develop at manual celecting the feedback for manual cel	s c	standardization		1. Land, building and facilities necessary for	I
2.2. Develop a disaster recovery manual for SETM/SEHM and RRT, including action for perpendenses, which is used for Activity 2.3.2. Conduct trainings on disaster recovery works for all target SETM/SETMS and with these and Sugable SETMS. 2.4. Conduct maining on disaster recovery works for all target SETM/SETMS and molerand disaster recovery works for all target SETM/SETMS and molerand disaster recovery works for all target SETM/SETMS and molerand disaster recovery works for the disaster occurred in any target SETM/SETMS and molerand disaster recovery works for the disaster occurred in any target SETM/SETMS and molerand disaster recovery works for the disaster occurred in any target SETM/SETMS by the relevant SETM/SETMS by the relevant SETM/SETMS by the relevant SETM/SETMS and molerand disaster prevention in early set and including due to the trured training of the trured training and including fuel or sample early set and including fuel or sample early set and including disaster prevention measures and sugable SETMS and MOT (i.e. accepting state of the respective SETMS and MOT (i.e. accepting state or continuition measures and sugable disaster prevention measures are sugable deciring the respective SETMS. 3-4. Conduct trainings of the facility priority 12) or conduct training or the facility priority site in the target sections by all target SETMS/SETMS and MOT (i.e. accepting state or containing the respective SETMS. 3-4. Conduct trainings on brazel very target sections by all target SETMS/SETMS and MOT (i.e. accepting state or containing the section by all target SETMS and MOT (i.e. accepting state or containing the respective SETMS. 3-5. Develop a road disaster prevention measures on all target sections by all target sections by the respective SETMS. 3-5. Conduct hazard evaluation and the traget sections by all target sections by the respective SETMS. 3-6. Secter the target sections by all					Issues & counter measures
preparedness, which is used for Activity 2.3.2.5 3. Conduct ratinings on dissuer recovery works for all target SETM/SEHMs 2. Conduct ratinings on all target SETM/SEHMs and MOT (i.e. action) for perparedness, which is used for Activity 2.3.2.5 3. ETM and the conduct ratinings on the care prevention manual for SETM/SEHMs in the target SETM/SETM/SETM/SETM/SETM/SETM/SETM/SETM/					
2.4. Conduct trainings on disaster recovery works for all larged SETMS. SEHMS and MOT (i.e. action for preparedness, survey selection of works, design, cost estimate. 2.4. Conduct or assister recovery sheet) (in Hissor and Sughd SETMs) 2.5. Conduct mainings on disaster recovery works for the disaster occurred in any target SETMs/SEHMs and MOT (i.e. action for preparedness, survey selection of works, again, cost estimate. 2.4. Conduct or assister recovery sheet) (in Hissor and Sughd SETMs) 2.5. Conduct trainings on disaster prevention measures, which is used for Activity 3.5. Conduct trainings on disaster prevention measures which is used the target sections for hazard evaluation in each SETM 3.5. Conduct trainings on disaster prevention measures which is used the target sections for hazard evaluation in each SETMs 3.5. Conduct trainings on disaster prevention measures which is respective SETMs. 3.6. Gonduct main evaluation at the target sections based on the current review (Activity L.2) 3.5. Conduct trainings on locally adaptable disaster prevention measures which is respective SETMs. 3.6. Gonduct main evaluation at the target sections based on the current review (Hustsor and Sughd SETMs). 3.7. Develop a road disaster prevention measures which is respective SETMs. 3.8. Conduct trainings on locally adaptable disaster prevention measures to a family adaptable disaster prevention measures to a family and the target sections based on the current review (Hustsor and Sughd SETMs). 3.8. Conduct trainings on locally adaptable disaster prevention measures to all target SETMs. 3.9. Develop a road disaster prevention measures to all target SETMs. 3.9. Develop a road disaster prevention measures to all target SETMs. 3.9. Develop a road disaster prevention measures to all target SETMs. 3.9. Develop a road disaster prevention measures to all target SETMs. 3.9. Develop a road disaster prevention measures to all target SETMs. 3.9. Develop a road disaster prevention measures to all target SETMs. 3.9. Develo				of MOT, Hissar and Soghd SETMs with	
MOTI (Le action for perpendents, survey spectron of works, design, cost estimate, survey steed) in thisor and sughed SETMs) 2-4. Conduct training so the ardiard disaster recovery works for all target SETMs/SEHMs in the target SETMs/SEHMs are and finalization measures, which is used for Activity 3-3. Conduct thating so the target sections based on the evaluation in each SETMs in coordination with the respective SETMs. Marning Conduct training or hazard evaluation in each SETMs in respective SETMs. SETMs SETMs in the target sections based on the evaluation measures to all target. The section of hazardevaluation measures have monitoning for sections by all target sections by all target sections for hazard evaluation measures have monitoning for setming and personal p				office furniture and utilities such as internet	
SETMASEHMS (in Hissor and Sughd SETMs) 2-6. Other equipment mutually agreed upon an implement disaster recovery works for all target SETMs/SEHMs in plement disaster recovery works for the disaster recovery works for detail in the target sections by all target SETMs in coordination with the respective SETMs 2-6. Other equipment mutually agreed the provided equipment and including fuel costs, and material and provided and locally adaptable prevention measures and supplementation and locally adaptable disaster prevention measures are disaster prevention and locally adaptable disaster prevention measures by all target SETMs 3-6. Identify priority sites in the target sections by all target SETMs 3-7. Orduct trainings on locally adaptable disaster prevention measures to all target sections for heard orduct required to the disaster prevention measures to all target sections by the respective SETMs 3-8. Orduct trainings on locally adaptable disaster prevention measures to all target sections for heard disaster prevention measures to all target sections for the disaster prevention prevention measures and supplementations and supplementa	_	MOT (i.e. action for preparedness, survey selection of works, design, cost estimate,		comecantly, cichione me, cicariony, cic.	
2-5. Plan and implement disaster recovery works for the disaster occurred in any target SETMs/SEHMs in manual recovery works for the disaster occurred in any target SETMs/SEHMs to maintenance of the provided equipment as as necessary of the disaster occurred in any target SETMs/SEHMs and occurred in any target SETMs/SEHMs and occurred in any target SETMs/SEHMs from the target SETMs/SEHMs and material in and material including finel costs, harded sand locally adaptable prevention measures, which is used for Activity 3.3-3. Develop a read disaster prevention measures, which is used for Activity 3.3-3. Develop a read disaster prevention measures which is used for Activity 3.3-3. Conduct trainings on hazard evaluation in each SETMs in condination with the respective SETMs. 3-4. Select the target sections by the respective SETMs in the traget sections by the respective SETMs. 3-5. Develop a future disaster prevention measures to all target. TANAFMs (i.e. selection, prevention measures to all target.)				1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
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	Activities	Inputs	Important Assumption
3-9.			
	a. Selection of measures		
	b. Design c. Budget preparation		
	d. Supervision		
	e. Prevention measure sheet		
3-1	3-10. Update and finalize the manual, reflecting feedbacks from Activities 3.3-3.9 3-11. Certify Trainers for Disaster Prevention from the target SETMs/SETMs		
On	Output 4:		
Da	Data necessary for road disaster management is available for MOT and the target		
SE			
4-1.			
4-2.			
4-3.	 Develop road disaster management database manuals for users (i.e. MO1 and the towart CETMs) and administrator, which are used for Activity 4 4 10 		
4-4			
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4-5.			
	prescribed from improved by the Project		
4-6.			
7			
. / - †	 Digitalize the data collected from the target SETIMS by the respective target SETIMS for submission to MOT 		
4-8.			
4-9.). Release the database to MOT and all target SETMs		
4-10.			
4-1	MO1. 4-11. Update and finalize the database design and the manuals, reflecting feedbacks from		
	the database users		
On	Output 5:		
Ĭ.	MOT and the target SETMs/SEHMs are capable of preparing budget proposal for		
5-1.	. Plan and implement a pilot study on cost effectiveness of simple disaster prevention		
	measures at the target sections selected in the first year underOutput3, using simple		
5_7			
7			
5-3.			
5-4	Output 5004 L. Develop project proposal(s) on large-scale prevention measures for the priority		
)			
	donor(s) as needed, utilizing the results of Output 3&4		

Form 3-3 Project Monitoring Sheet (Plan of Operation)
Project Title: The Project for Capacity Development for Road Disaster Management in the Republic of Tajikistan

Version 3 Dated 4 April 2019

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DI=Design Institute, EAF=Econ Analysis & Forcasting Dpt, ITU=IT Unit, MPEU=Maintenance, Planning & Evaluation Unit, RCM=Road Construction and Maintenance Dept, RCU=Road Construction Unit

DI=Design Institute, EAF=Econ Analysis & Forcasting Dpt, ITU=IT Unit, MPEU=Maintenance, Planning & Evaluation Unit, RCM=Road Construction and Maintenance Dept, RCU=Road Construction Unit would be utilized in Act 1.7,1.8, 4.8 partcipate in the field activities as needed for Remarks at TM eqt, fuel for eqpt, meal meal allowance for SETM/SE J&M cost. SETM/SE ETM/SEH allowance SET M/SEH Other Major Inputs cost, existing Tajik ₹ cost for SETMs/SE cost for SETM/HM & accom cost for SETM/SE eva, travel Japan hazard Eqt for prev & monitor, travel & Prev M, Hazard Eva Hazard Eva, Prev M, Cost E, Mon CA, Hazard Eva, Prev M Prev M, Hazard Eva, Cost E, Mon Prev M, Hazard Eva Prev M, Cost E, Mon Prev. M, Hazard Eva, SostE, Monitoring (Mon) Prev M, Cost E. RDMT (RCM, DI) RDMT (RCM, DI) SETM (RCM, DI) SETM (Tajik) SETM ETM. SETM, EHM SETM SETM Ξ Engineel level (SETM ingineel evel (SETM Chief Engineel Ievel (SETM ingineel evel (SETM Engineel evel (SETM ivel (SETM vel (SETM RCM Head of Person (Tajik) Head of MPEU Hed of MPEU Org (Tajik) Month 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 I -#2 II for hazard Ħ Ħ Ħ I -#1 Ι, Π Output 3: Process of locally adaptable road disaster prevention is established at the target SETMs/SEHMs I for hazard Ħ \Box I for hazard eva Plan Actual Actual Actual Actual Actual Plan Actual Actual Plan Actual Plan Actual Year Plan Plan Plan Plan Plan Plan Plan Plan Plan Conduct hazard evalatuon at the target 3.5 sections by all target SEHMs in coordination with the respective target SETMs 3.9 prevention measures #1 & #2 on pilot basis screening, selection of hazardous sites, hazard/risk assessment and preparation of 3.8 prevention, measures to all target SETMs/SEHMs and MOT (i.e. selection of evaluation and locally adaptable prevention Sogd SETMs) by all target SETMs and the relevant target SEHMs locally adaptable prevention measures based on the current state review (Activity valuation by the respective target SETMs Develop a future disaster prevention plan for each target section by the respective target SETMs. Update and finalize the manual, reflecting feedbacks from Activities 3.3-3.9 Conduct trainings on hazard evaluation to 3.3 all target SETMs/SEHMs and MOT (i.e. Identify priority sites in the target sections 3.6 based on the results of the hazard prevention measures from the staff of the target SETMs/SEHMs Develop a disaster prevention manual for 3.2 SETM/SEHM, consisting of hazard neasuresm which is used for activity 3.3preparation of prevention measure sheet, Certify trainers for hazard evaluation and Examine hazard evaluation methods and nazard evaluation sheet) (in Hissor and monitoring for simple early warning) (in Hissar and Sogd SETMs) at the priority sites in the target sections measures, design, budget, supervision, selected in the first year (in Hissar and conduct tainings on locally adaptable Select the target sections for hazard 3.4 evaluation in each SETM lan and implement locally revention measure sheet Selection of measures c Budget preparation d Supervision Activities 3.10 3.10 3.11 3.7

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ē	Output 4: Data necessary for road disaster management is available for MOT and the target SETMs for budget pre	ent is avai	lable fo	or MOT	and th	e target	SETM	s for bu	dget pr	eparati	on and	paration and disaster recovery and prevention	er recov	ery and	prever	ntion		MOT (RCM, EAF)			Chief Advisor						
Develop a plan for road disaster management database on the current state review (Activity 1.2)	Plan																	EAF/MOT	Head of ITU	TU (TBD)	D) Database (DB)	ase					
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Develop road disaster management database manuals for users (i.e. MOT and the target SETINs) and administrator, which are used for Activity 4.4.4.1	Plan																	EAF/MOT	Head of ITU	TU (TBD)	D) ditto		25				
Conduct trainings on database use to MOT and all target SETMs (i.e. collection, input, compiling, analysis and reporting of data) at MOT and each SETM	Plan Actual																	EAF/MOT	Head of ITU	LU (TBD)	D) ditto	O P O	PC for DB O&N	O&M cost			
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The respective SEL Miss Digitalize the data collected from the target SEHMs by the respective target SETMs for submission to MOT	Plan																	RCM/MOT &SETM	Chief Engineer level (SETM)	SETM (TBD	TBD)	PCf	PC for DB O&N	O&M cost Netwo	Network connection at TM		
Integrate the digitalized data submitted by the target SETMs into the database	Plan																	EAF/MOT	Head of ITU	TU (TBD)	O)	PC for	or DB O&M	l cost ditto			
Release the database to MOT and all target SETMs	Plan Actual																	EAF/MOT	Head of ITU	TU TTU (TBD)	90 (Q	PC	PC for DB O&N	O&M cost ditto			
Develop a simple mannual road disaster management report for senior management of MOT	Plan																	RCM/MOT	Head of MPEU	MPEU (TBD)	Hazrd Eva. Prev M, Recov.M			O&M cost			
Update and finalize the database design and the manuals, reflecting feedbacks from the database users	Plan Actual																	EAF/MOT	Head of ITU	FU IT unit (TBD)	-	PO	PC for DB O&N	O&M cost			
/SEHI	Output 5: MOT and the target SETMs/SEHMs are capable of preparing budget proposal for road disaster prevention	able of pre	paring	agpnq ƙ	et propo	sal for	road di	saster p	orevent	ion								MOT	TBD		Chief Adviso	Chief Advisor (CA)					
Plan and implement a pilot study on cost- effectiveness of locally adaptable disaster prevention measures at the target sections selected in the first year under Outout 3.	Plan							Сотр	letion of	Completion of prev measure	easure							RCM/MOT	Head of RCU	RDMT (RCM, DI), SETM	Prev. M,	¥	Travel for field survey	Travel cost for field survey			
using simple hazard location mans Create a budget item for disaster prevention in the regular budget of SETM/SEHM/MOT	Plan																	RCM/MOT	Head of MPEU	MPEU(TBD)	(BD) Prev. M,	, ii					
Prepare budget for locally adaptable disaster prevention for the priority sites identified under Output 3 by all target SETIVAs and MOT, utilizing the results of Action 2014	Plan																	RCM/MOT	Head of MPEU	MPEU(TBD)	(BD) Prev. M, Cost E,	, ui					
Develop project proposal(s) on large-scale prevention measures for the priority site(s) in the target section(s) under Output 3, which cannot be handled by the target SETMs/SEHMs, and studies for prevention for funding by international donor(s) as needed, utilizing the results of Output 384	Plan																	International Relations Dept	II (TBD)	(RCM, DI)	Prev. M, Cost E, Institution	kion M					
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TO CR of JICA TAJIKISTAN OFFICE

PROJECT MONITORING SHEET

Project Title: The Project for Capacity Development for Road Disaster Management

Version of the Sheet: Ver.6 (September 2019)

Name : Hiroshi Mita

Title: Chief Advisor

Submission Date: 10 October, 2019

I. Summary

1 Progress

1-1 Progress of Inputs

Inputs	Plan as of May 2017	Actual as at end September 2019		
Experts	<u>Total MM: 82.55MM</u>	Total MM: 64.95MM(78.7%:rate of		
		latest total MM, 82.55MM)		
	1) Chief Advisor / Road Disaster	1) Chief Advisor / Road Disaster		
	Management	Management		
	2) Deputy Chief Advisor / Road	2) Deputy Chief Advisor / Road		
	Disaster Management 2	Disaster Management 2		
	3) Institution	3) Institution		
	4) Disaster Recovery Measures	4) Disaster Recovery Measures		
	5) Disaster Prevention Measures 1	5) Disaster Prevention Measures 1		
	6) Disaster Prevention Measures 2	6) Disaster Prevention Measures 2		
	7) Hazard Evaluation	7) Hazard Evaluation		
	8) Machineries and Equipment O&M	8) Machineries and Equipment O&M		
	9) Cost Estimation	9) Cost Estimation		
	10) Database 1	10) Database 1		
	11) Database 2	11) Database 2		
	12) Instrumentation Monitoring	12) Instrumentation Monitoring		
	13) Project Monitoring / Japan	13) Project Monitoring / Japan		
	Training	Training		
Trainees Received	Training in Japan (2 times)	Training in Japan (2 times)		
		- 1st: was conducted on June-July 2018		
		- 2 nd : was conducted on June-July 2019		
Equipment	Equipment for Output2,3	- Provision by the Experts Team was		
1 1		completed by September 2017.		
		- Provision by the JICA was completed		
		by May 2019.		
Others	N/A	N/A		
Tajikistan side	Personnel	Personnel		
Operational Expenses	1. Project Director:	1. Project Director:		
. 1	Deputy Transport Minister, MOT	Deputy Transport Minister,		
	2. Deputy Project Director:	MOT		
	Head of RCM, MOT	2. <u>Deputy Project Director:</u>		
	3. Project Manager:	Head of RCM, MOT		
	Head of International Relation	3. Project Manager:		
	Dept. MOT	Head of International Relation		
	1	Dept. MOT		

- 4. <u>Regional Managers:</u> Heads of the target SETMs
- 5. Relevant Staff of MOT
- 6. Relevant Staff of DI
- 7. Relevant staff of the target SETMs/SEHMs:
- 8. Other personnel mutually agreed upon as necessary

Land, Building and Facilities

- 1. Land, Building and facilities necessary for the implementation of the Project
- 2. Office spaces for the Project in the building of MOT, Hissar and Sogd SETMs with office furniture and utilities such as internet connectivity, telephone line, electricity, etc.

Local Costs

- 1. Cost for installation, operation and maintenance of the provided equipment,
- 2. Administration and operational costs, including fuel costs, and materials for prevention / recovery works. Meal allowances for SETMs/SEHMs to participate in training drills. Prevention / recovery works

- 4. <u>Regional Managers :</u> Heads of the target SETMs
- 5. Relevant Staff of MOT
- 6. Relevant Staff of DI
- 7. Relevant staff of the target SETMs/SEHMs:
- 8. Other personnel mutually agreed upon as necessary

Land, Building and Facilities

- 1. Land, Building and facilities necessary for the implementation of the Project
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Local Costs

- 1. Cost for installation, operation and maintenance of the provided equipment,
- 2. Administration and operational costs, including fuel costs, and materials for prevention / recovery works. Meal allowances for SETMs/SEHMs to participate in training drills. Prevention / recovery works

1-2 Progress of Activities

Progress of activities is indicated in Monitoring Sheet Form 3-2 (PDM) and Form 3-3 (PO).

1-3 Achievement of Output

	Output/Indicators		vement %)	Major Results	Status ¹
		Plan	Actual		
Ou	tput-1:				
Ro	ad disaster managemen	t struc	ture of I	MOT and the target SETMs/SEHMs is strength	ened.
1a.	By Jun 2017, a report on current disaster management relevant to MOT and the target SETMs/SEHMs is developed	100	100	- Based on collection of the most recent data on road disaster management and ensuing interviews with the C/Ps in charge, review was conducted by the Experts and the current road disaster management report was compiled by the end of June 2017.	OT
1b.	By July 2017, roles and responsibilities of Road Disaster	100	100	The role of RDMT is as follows; -The RDMT acts as a team to participate in all project activities to achieve all outputs in cooperation with the Experts Team.	ОТ

¹ OT: On Time, SFT: Scheduled for later, DL: Delay

	Management Taskforce supporting SETM/SEHM(RDMT) is clarified.			- All members will acquire skills and knowledge to enhance own specialized field of road disaster management duties of MOT and Design Institute. - The team will support activities of other counterparts. The responsibilities of RDMT are as follows; - Members will share activities so that participation in project activities do not hinder other duties of MOT and Design Institute. - As such, RDMT will convene a monthly meeting so that participation by each member is prearranged considering the specialized field of each member. - Upon confirming that monthly meetings are held as agreed, targets and development plans of each member will be agreed with the Experts Team.	
1c.	By the end of the Project, 80% of members of RDMT are able to support SETMs/SEHMs according to their respective roles and responsibilities.	72	72	 RDMT members are actively participating in Outputs 2, 3 and 4 activities and supporting the target SETM and SEHMs. RDMT members are monitoring project progress. The individual capacity development project goals were agreed in July 2018 and it is put into action. 	OT
1d.	By the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs, including institutionalization od RDMT, is approved by MOT	0	20	 In May 2019, a discussion was held with the C/P on how to proceed with the activities. The topic is under discussion between the Experts Team and the C/Ps by creating a flowchart showing the management reporting system between the relevant organizations during disaster recovery and preventive maintenance measures for sharing the final version. 	OT
	put-2:	_			
		ř		TMs/SEHMs are improved through standardize	
2a.	By Dec 2017, a road disaster recovery manual for SETM/SEHM/RRT is developed	100	100	 The Road Disaster Recovery Manual Version 1 was submitted to MOT on 18 December 2018. The manual has been prepared to generate improvement so that even the urgent recovery works are carried out more systematically and in a more planned manner. 	OT
2b.	80% of the training participants from all target SETMs/SEHMs passes the post- training test on disaster recovery works	100	100	 Trainings on disaster recovery works using Road Disaster Recovery Manual Version 1 were conducted in February 2018. Over 80%(100% =59 /59) of the training participants from all target SETMs/SEHMs passed the post-training test. 	OT
2c.	80% of the trainees from all target SETMs/SEHMs	66	66	- On May 2018, over 80% (100% =56/56) of participants passed the post-drill test.	ОТ

passes the post-drill - On June/July 2019, over 80% (100 participants passed the post-drill te	
recovery works for - One more mock training sess	sion will be
each job category conducted in 2020.	1 1 OT
2d. Disaster recovery works in the drills are planned and implemented by all target SETMs/SEHMs according to the manual 66 66 66 66 66 66 66 66 66	the drills are
2e. Disaster recovery 100 100 - On July 2019, the planned state	us of disaster OT
works at the actual disaster sites are planned and implemented by all relevant target SETMs/STHMs according to the manual recovery works implemented by C SEHMs under the jurisdiction of was confirmed by Experts, and c exchanged and advice was give improvements for C/P.	C/P at the four Soghd SETM opinions were
2f. By the end of the 50 50 - In order to update and finalize	the manual, SFT
Project, the finalized feedback from each target SETM in July and August 2019. MOT - Most of the feedback was related to translation.	was collected
Output-3.:	•
Process of locally adaptable road disaster prevention is established at the ta	arget SETMs/SEHMs
3a. By Oct. 2017, 100 100 - The Road Disaster Prevention man	
a road disaster prevention manual for SETM/SEHM was developed by O hazard evaluation. The section on o	Oct. 2017 for
SETM/SEHM is developed prevention was added and submitted August 2018 before activities for deprevention actions such as Activity 3.9 were carried out. The section of evaluation was updated in July 201	ed to MOT in isaster 3.7, 3.8 and n hazard
SETM/SEHM is developed prevention was added and submitted August 2018 before activities for deprevention actions such as Activity 3.9 were carried out. The section of	ed to MOT in isaster (2.3.7, 3.8 and in hazard (8.8). Is implemented (9017 and from aining (7SEHMs in 2017 and orevention (2018. The November
SETM/SEHM is developed SETM/SEHM is developed Developed Set and seveloped Developed Set and seveloped Developed Set and seveloped Developed Devel	ed to MOT in isaster (3.7, 3.8 and in hazard (8.8 simplemented (2017) and from aining (7) SEHMs in 2017 and from (2018). The November Ayni pilot
SETM/SEHM is developed SETM/SEHM is developed August 2018 before activities for d prevention actions such as Activity 3.9 were carried out. The section of evaluation was updated in July 201 3b. 80% of the training participants from all target SETMs/SEHMs passes the post-training test on hazard evaluation and locally adaptable prevention measures each 100 100 The hazard evaluation training was from September through October 2 July to September 2018. Over 80%(100% =58 /58) of the training test in both 2018. The training on locally adaptable permeasures was conducted in August post-training test was conducted in 2018 following the completion of Aproject. 3c. Hazard evaluation is conducted at least 80 100 - Based on the results of the site visit section was decided:	ed to MOT in isaster (3.7, 3.8 and in hazard (8.8 simplemented (2017) and from aining (7) SEHMs in 2017 and from (2018). The November Ayni pilot
SETM/SEHM is developed SETM/SEHM is developed August 2018 before activities for d prevention actions such as Activity 3.9 were carried out. The section of evaluation was updated in July 201 3b. 80% of the training participants from all target SETMs/SEHMs passes the post-training test on hazard evaluation and locally adaptable prevention measures each 100 100 The hazard evaluation training was from September through October 2 July to September 2018. Over 80%(100% =58 /58) of the training test in both 2018. The training on locally adaptable per measures was conducted in August post-training test was conducted in 2018 following the completion of Aproject. 3c. Hazard evaluation is conducted at least twice by all target 100 100 - The hazard evaluation training was from September 2018. - Over 80%(100% =58 /58) of the training on locally adaptable per measures was conducted in August post-training test was conducted in 2018 following the completion of Aproject. 3c. Hazard evaluation is conducted at least twice by all target 100 100 - The hazard evaluation training was from September 2018. - Over 80%(100% =58 /58) of the training on locally adaptable per measures was conducted in August post-training test was conducted in 2018 following the completion of Aproject. 3c. Hazard evaluation is conducted at least twice by all target 100 100 - The hazard evaluation training was from September 2018. - Over 80%(100% =58 /58) of the training test in both 2018. - The training on locally adaptable per measures was conducted in August post-training test was conducted in 2018 following the completion of Aproject.	ed to MOT in isaster (3.7, 3.8 and in hazard (8.8 simplemented (2017) and from aining (7) SEHMs in 2017 and from (2018). The November Ayni pilot
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SETM/SEHM is developed SETM/SEHM is developed Prevention was added and submitted August 2018 before activities for deprevention actions such as Activity 3.9 were carried out. The section of evaluation was updated in July 201 3b. 80% of the training participants from all target SETMs/SEHMs passes the post-training test on hazard evaluation and locally adaptable prevention measures each 3c. Hazard evaluation is conducted at least twice by all target SETM for 10 3c. Hazard evaluation is conducted at least twice by all target SETM for 10 SETM/SEHM for 10 Prevention was added and submitte August 2018 before activities for deprevention was added and submitted August 2018 before activities for deprevention actions such as Activity 3.9 were carried out. The section of evaluation was updated in July 201 - The hazard evaluation training was from September through October 2 July to September 2018. - Over 80%(100% =58 /58) of the training on locally adaptable permeasures was conducted in August post-training test was conducted in 2018 following the completion of Approject. 3c. Hazard evaluation is conducted at least twice by all target SETM/SEHM for 10 SETM/SEHM for 10 SETM/SEHM for 10 Prevention was added and submitte August prevention actions such as Activity 3.9 were carried out. The section of evaluation was updated in July 201 - The hazard evaluation training was from September 2018. - Over 80%(100% =58 /58) of the training on locally adaptable permeasures was conducted in August post-training test was conducted in 2018 following the completion of Appropriate section was decided: 1) Hissor SETM pipe (4 sections) 2) Sughd SETM pipe (4 sections)	ed to MOT in isaster (3.7, 3.8 and in hazard (8.8 simplemented (2017) and from (2017) and from (2018). The November Ayni pilot (1, the 10 target (OT))

	according to the			44 CETM1:4.41	
	according to the manual			target SETMs according to the manual in years	
	IIIaiiuai			2017, 2018 and 2019, completing 10 sections in	
				total.	
3d.	Locally adaptable	100	100	- Based on the results of the site visit, the 4 priority	OT
	prevention measures			sites in Hissor and Sughd were selected.	
	are planned by all			- Planning is completed for Varsob and Ayni sites,	
	target SETMs for 4			which is the sections to be carried out in 2018.	
	priority sites in Hissar			- Candidate sites in 2019 were selected at the	
	and Soghd SEYMs			respective SETMs based on the discussion and	
	according to the			site investigation with MOT and SETMs as	
	manual.			follows; Varsob and Bobojon Ghafurov sites.	
3e.	Locally adaptable	80	80	- Implementation was successfully completed at 2	OT
	prevention measures			priority sites (Varsob and Ayni) at the end of	
	are implemented by 4			November 2018.	
	target SEHMs at 4			- Implementation in another 2 priority sites	
	priority sites in Hissar			(Adrason and Varzob) will be completed in	
	and Soghd SETMs			October 2019.	
	according to the				
	manual				
3f.	80% of the observers	100	100	- Over 80% ($100\% = 47/47$) of the training	OT
	from the other 22			participants from the target SETMs/SEHMs	
	SEHMs passes the			passed the post-observation test in December	
	post-observation test			2018. Hissor SETM 13, Sughd SETM 25, and	
	on implementation			Rasht SETM 9.	
3g.	By Mar. 2020,	50	50	- Future disaster prevention plans (draft) have been	OT
	future disaster			developed for each target section by the	
	prevention plans are			respective SETMs based on the results of hazard	
	developed for 10			evaluation in 2017 and 2018.	
	target sections by all			- The draft will be re-examined after the 2019	
	target SETMs			hazard evaluation and will be submitted to MOT	
	8			and SETMs.	
3h.	By the end of the	50	50	- The manual was updated by reflecting the outputs	ОТ
	Project, the finalized			from prevention measure (river bank erosion	
	manual is approved by			countermeasure) in Ayni SEHM for the time	
	MOT			being in November 2018.	
				- The update on the Disaster Prevention Manual	
				was carried out by inclusion of the	
				countermeasure construction plan on preventive	
				maintenance (countermeasure on river bank	
				erosion) in Ayni in February 2019.	
				- A final draft (English version) of the manual was	
				created in August 2019. After Russian translation,	
				it will be sent to the chief engineer of the relevant	
				SETM for final confirmation. The final version	
				will be completed by November 2019, reflecting	
				feedback from the C/P side.	
Qui	tput-4.:				
	*	saster	manage	ment (*1) is available for MOT and the target S	ETMs
	budget preparation and		_		
	By Dec 2017,	100	100	- The Experts Team commenced DB development	ОТ
1 a.	road disaster	100	100		OI
	management database			from the middle of August 2107 in Japan based	
	is developed according			on the agreed DB system framework. The initial	
	to the design			version was completed at the end of October	
	to the design			2017. Additional functions to DB system was	
1			1	added in March 2018.	

	developed through the				
4b.	Project By Dec 2017, road disaster management database manuals for users and administrator are developed	100	100	- The Experts Team submitted Road Disaster DB Manual version 1 to the target SETMs and ITU and RCM of MOT in December 2017. The section on additional functions to DB system was added in March 2018.	OT
4c.	80% of the training participants from MOT and the target SETMs passes the post-training test on database use.	100	100	 Training sessions were held from 22 November 2017 to 22 December 2017 for both DB administrators and for DB users. Over 80%(100% =18 /18) of the training participants from all target SETMs/SEHMs passed the post-training test. 	OT
4d.	By Mar 2019, the database is released to MOT and the target SETMs	100	100	- Based on the result of workshops and meeting with ITU and MPEU carried out in October 2018, database was updated on March 2019. It was released to MOT and the target SETMs in April 2019.	OT
4e.	From 2019, a simple disaster management report is submitted to senior management of MOT once a year	50	50	- The annual road disaster management report utilizing the database was completed and submitted to MOT in April 2019.	OT
4f.	By the end of the Project, the finalized manual is approved by MOT	60	60	- The update of draft manual reflecting changes based on activities 4-9 and 4-10 was completed on March 2019 and submitted to MOT in April 2019.	OT
	tput-5.: OT and the target SETN	Ms/SEH	IMs are	capable of preparing budget proposal for road o	lisaster
pre	vention				
5a.	By Mar 2020, a report of a pilot study on cost- effectiveness of the locally adaptable disaster prevention is developed	10	10	- Pilot study sites were selected based on discussion with C/P.	OT
5b.	By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of the regular budget for FY 2021 based on the future development plans	10	10	- Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance (MOF), a MOT Seminar on Dissemination of the JICA Road Disaster Management Project was held in April 2019 followed by a subsequent 2018 Pilot Project site with the representative of MOF in July 2019. - Collection of relevant information has commenced from September 2019.	OT
5c.	By the end of the Project, at least one	10	10	- Collection of relevant information has commenced from September 2019.	OT

studies for prevention is submitted by MOT		
to international		
donor(s) for funding,		
utilizing the results of		
Output 3 and 4		

1-4 Achievement of the Project Purpose

	Project Project	Achievement		Expected
	Purpose/Indicators	(%)	Situation	Time of Achievement
Ca	oject Purpose: pacity of MOT and the proved.	target SETM	Is/SEHMs for effective road disaster mana	
a.	By the end of the Project, 80% of results of the disaster recovery works by the target SETMs/SEHMs, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans	50	- On July 2019, the planned status of disaster recovery works implemented by C/P at the four SEHMs under the jurisdiction of Sughd SETM was confirmed by the Experts and opinions were exchanged and advice was given for future improvements for C/P.	OT
b.	By the end of the Project, 80% of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the Japanese Expert Team	50	- Hazard evaluation was conducted twice by all target SETM/SEHM for 4 target sections in all target SETMs according to the manual in years 2017, 2018 and 2019, completing 10 sections in total.	OT
c.	80% of results of the disaster prevention measures #2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality and safety specified in the plans.	50	- Implementation in 2 priority sites (Adrason and Varzob) will be completed in October 2019.	OT

d.	By the end of the Project, budget request for disaster prevention in the target SETMs for FY 2021 is submitted to Ministry of Finance (MOF) as part of the regular budget	10	- Based on the discussions being held between the JICA Experts Team and RDMT members since November 2018 after the 5th JCC Meeting on how to obtain basic understanding from the Ministry of Finance (MOF), a MOT Seminar on Dissemination of the JICA Road Disaster Management Project was held in April 2019 followed by a subsequent 2018 Pilot Project site with the representative of MOF in July 2019.	OT	
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1-5 Achievement of the Overall Goal

O	verall Goal/Indicators	Achievement (%)	Situation	Expected Time of Achievement
Ro	verall Goal: oad disasters are mitiga TMs/SEHMs	ted in the inte	rnational and Republican Roads in the tar	
a.	All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project	0	- On July 2019, the planned status of disaster recovery works implemented by C/P at the four SEHMs under the jurisdiction of Soghd SETM was confirmed by Experts, and opinions were exchanged and advice was given for future improvements for C/P.	SFT
b.	By Jul 2023(*2) disaster prevention measures are planned and / or implemented at least 5(*3) priority sites in the target SETMs according to the disaster prevention manual developed through the Project	0	 Locally adaptable prevention measures are implemented successfully at 2 priority sites (Varsob and Ayni) at the end of November 2018. Implementation in 2 priority sites (Adrason and Varzob) will be completed in October 2019. 	SFT
c.	From Aug 2020 to Jul 2023 the average duration required for road reopening per disaster handled by the target SETMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018)	0	N/A	SFT

^(*1) Data necessary for road disaster management includes disaster record, results of hazard evaluation, prevention measures, and recovery works among others.

- (*2) Underlined deadlines in the indicators are set based on the schedule of the Tentative PO. They shall be modified according to the Detailed PO to be prepared in the beginning of the Project for approval by the first JCC.
- (*3) Target values of the indicators shall be filed based on the results of the baseline survey, Which shall be reviewed and approved by the 2nd JCC.

1-6 Changes of Risks and Actions for Mitigation

N/A

1-7 Progress of Actions undertaken by JICA

N/A

1-8 Progress of Actions undertaken by Gov. of Tajikistan

N/A

1-9 Progress of Environmental and Social Considerations (if applicable)

N/A

1-10 Progress of Considerations on Gender/Peace Building/Poverty Reduction (if applicable)

N/A

1-11 Other remarkable/considerable issues related/affect to the project (such as other JICA's projects, activities of counterparts, other donors, private sectors, NGOs etc.)

N/A

2 Delay of Work Schedule and/or Problems (if any)

2-1 Detail

N/A

2-2 Cause

N/A

2-3 Action to be taken

N/A

2-4 Roles of Responsible Persons/Organizations (JICA, Gov. of Tajikistan, etc.)

N/A

3 Modification of the Project Implementation Plan

3-1 PO

Detailed Plan of Operation (DPO) was revised to DPO Version 2 dated 20 April 2018.

- Shift Database 2 Expert assignment from December 2018 to April 2018
- Add Activity 3.2 in June 2018
- Add Activity 4.11 in April 2018

This was reported in Project Monitoring Sheet Version 3 (April 2018)

Detailed Plan of Operation (DPO) was revised to DPO Version 3 dated 05 November 2018.

- Shift Activity 2.6 from November 2018 to May to June 2019 to tie in with delivery of hydraulic rock

breakers to effectively update the manual

- Shift Machineries and Equipment O&M Expert assignment from March 2019 to May to June 2018 It is attached as Monitoring Sheet Form 3-3.

3-2 Other modifications on detailed implementation plan

(Remarks: The amendment of R/D and PDM (title of the project, duration, project site(s), target group(s), implementation structure, overall goal, project purpose, outputs, activities, and input) should be authorized by JICA HDQs. If the project team deems it necessary to modify any part of R/D and PDM, the team may propose the draft.)

N/A

- 4 Measures undertaken by Gov. of Tajikistan or Project Team to Ensure the Sustainability of Project after the Project Completion
- 4-1 Financial Sustainability

N/A

4-2 Technical Sustainability

N/A

4-3 Institutional Sustainability

N/A.

Version: 6 Dated: 10 October, 2019

Project Monitoring Sheet I (Revision of Project Design Matrix)

Project Title: The Project for Capacity Development for Road Disaster Management

Implementing Agency: Ministry of Transport (MOT)

Target Group: MOT, Hissor SETM and its 9 SEHMs, Sughd SETM and 14 SEHMs, and Rasht SEHM and its 3 SEHMs (Nurobod, Rasht, and Ta-jikobod)

Period of Project: April 2017 - July 2020 (in Tajikistan)

Project Site: International and Republican roads in Hissor and Sughd SETMs as well as Nurobod, Rasht and Tajikobod SEHMs in Rasht SETM

Narrative Summary		Objectively Verifiable Indicators	Means of Verification	Important Assumption	Achievement	Remarks
Overall Goal Road disasters are mitigated in the International and Republican Roads in the target SETMs/SEHMs	ė ė	All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project By Jul 2023(*2) disaster prevention measures are planned and /	a-c Hazard evaluation disaster prevention & recovery sheets, in the Database		- On July 2019, the planned status of disaster recovery works implemented by C/P at the four SEHMs under the jurisdiction of Soghd SETM was confirmed by Experts, and opinions were exchanged and advice was given for future improvements for C/P. - Locally adaptable prevention measures are implemented measures are implemented successfully at 2 priority sites	
	ರ	From Aug 2020 to Jul 2023 the average duration required for road reopening per disaster have average duration required for road reopening per disaster handled by the target SETMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018)		•	(Varsob and Aynı) at the end of November 2018. - Implementation in 2 priority sites (Adrason and Varzob) will be completed in October 2019. (Future activity)	
Project Purpose Capacity of MOT and the target SETMs/SEHMs for effective road disaster management is improved.	<i>ಡ</i>	of the Project, 80% of results of the very works by the target. HMs, according to the disaster nutal developed through the st requirements of time, cost, safety specified in the plans	a. Assessment report b. Prevention sheet c. Recovery sheet d. Data of budget request	A. Policy for disaster management is not discontinued. B. Political instability/economic crisis/serious natural disaster that affect the	- On July 2019, the planned status of disaster recovery works implemented by C/P at the four SEHMs under the jurisdiction of Soghd SETM was confirmed by Experts, and opinions were exchanged and advice was given for future improvements for C/P.	
	ب	By the end of the Project, 80% of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the Japanese Expert Team		project sites do not occur. C. Budget including prevention, is approved by MOF	- Hazard evaluation was conducted twice by all target SETM/SEHM for 4 target sections in all target SETMs according to the manual in years 2017, 2018 and 2019, completing 10 sections in total.	
	ು	80% of results of the disaster prevention measures #2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality and safety specified in the plans.			- Implementation in 2 priority sites (Adrason and Varzob) will be completed in October 2019.	

		Objectively Verificable Leading	Marine Ma	1	1	Monte Summary
	ਰ	By the end of the Project, budget request for disaster prevention in the target SETMs for FY 2021 is submitted to Ministry of Finance (MOF) as Part of the regular budget			- Based on the discussion held between the JICA Experts Team and RDMT members since November 2018 after the since November 2018 after the obtain basic understanding from the Ministry of Finance (MOF), a MOT seminar on Dissemination of the JICA Road Disaster Management Project was held in April2019 followed by a subsequent 2018 Pilot Project site with the representatives of MOF in July 2019.	
Output Output-1: Road disaster management structure of MOT and the target SETMs/SEHMs is strengthened.	1a. 1c. 1d.	By Jun 2017, a report on current disaster management relevant to MOT and the target SETMs/SEHMs is developed By July 2017, roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM(RDMT) is clarified. By the end of the Project, 80% of members of RDMT are able to support SETMs/SEHMs according to their respective roles and responsibilities. By the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs, including institutionalization of RDMT is anneroved by	 1a. Date of report 1b. Approval of JCC 1c. Joint review based on individual capacity devl plan 1d. Official approval document 	A. Staff of MOT and the target SETMs/SEHMs trained through the Project do not leave the office in large numbers	- The report was compiled by the end of June 2017. - The roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM(RDMT) is clarified. - RDMT members are actively participating in Outputs 2, 3 and 4 activities and supporting the target SETM and SEHMs. - RDMT members are monitoring project progress. - RDMT members are monitoring project progress. - Aflowchart showing the management reporting system between the relevant organizations during disaster	
Output-2: Road disaster recoveries by the target SETMs/SEHMs are improved through standardization	2a. 2b. 2c. 2c. 2c.		 2a. Acceptance letter 2b. Test results 2c. Ditto 2d ~ e Joint review of the checklist 2e Approval letter 		maintenance measures is under discussion. - The Road Disaster Recovery Manual Version I was submitted to MOT on 18 December 2018 - Over 80% (100% =59/59) of the training participants from all target SETMs/SEHMs passed the post-training test. - Over 80% (100% =56/56) of participants passed the post-drill test on May 2018. - On June/July 2019, over 80% (100% =51/51) of participants passed the post-drill test. - The on-site drills for simulated road disaster recovery works were conducted and completed on May 2018 and June 2019. - On July 2019, the planned status of disaster recovery works implemented by C/P at the four	

Narrative Summary		Objectively Verifiable Indicators	Means of Verification	Important Assumption	Achievement	Remarks
		manual			SEHMs under the jurisdiction of Sughd SETM was confirmed by Experts, and opinions were exchanged, and advice was given for future improvements.	
	2f.	By the end of the Project, the finalized manual is approved by MOT			- In order to update and finalize the manual, feedback from each target SETM was collected in July and August 2019.	
Output-3.: Process of locally adaptable road disaster prevention is established at	3a.	By Oct. 2017, a road disaster prevention manual for SETM/SEHM is developed	3a. Acceptance letter 3b. Test results 3c ~ e		- The road disaster prevention manual for SETM/SEHM was developed by Oct. 2017.	
the target SETMs/SEHMs	3b.	80% of the training participants from all target SETMs/SEHMs passes the post-training test on hazard evaluation and locally adaptable prevention measures each	Joint review of the checklist 3f Test results 3g Approval letter 3h ditto		- Over 80%(100% =58 /58) of the training participants from all target SETMs/SEHMs passed the post-training test.	
	3c.	Hazard evaluation is conducted at least twice by all target SETM/SEHM for 10 target sections in all target SETMs according to the manual			- Hazard evaluation was conducted twice by all target SETM/SEHM for 4 target sections in all target SETOMs according to the manual in years 2017, 2018 and 2019, completing 10 sections in total.	
	3d.	Locally adaptable prevention measures are planned by all target SETMs for 4 priority sites in Hissar and Soghd SEYMs according to the manual.			- Based on the results of the site visit, the 4 priority sites in Hissar and Soghd were selected Planning is completed for the sections to be carried out in 2018 and 2019.	
	3e.	Locally adaptable prevention measures are implemented by 4 target SEHMs at 4 priority sites in Hissar and Soghd SETMs according to the manual			- Implementation was successfully completed at 3 priority sites (Varsob, Ayni and Adrason at the end of September 2019. The site at Kohja Obi Garm will be completed in October 2019.	
	3f.	80% of the observers from the other 22 SEHMs passes the post-observation test on implementation			- Over 80% (100% = 47/47) of the training participants from the target SETMs/SEHMs passed the post-observation test in December 2018.	
	38.	By Mar. 2020, future disaster prevention plans are developed for 10 target sections by all target SETMs			- Future disaster prevention plans (draft) have been developed for each target section by the respective SETMs based on the results of hazard evaluation in 2017 and 2018.	
	3h.	By the end of the Project, the finalized manuals is approved by MOT			- A final draft (English version) of the manual is under review and for completion by November 2019.	
Output-4.: Data necessary for road disaster management is available for MOT and the target SETMs for budget preparation and disaster recovery	4a.	By Dec 2017, road disaster management database is developed according to the design developed through the Project	 4a. Comparison with the design 4b. Acceptance letter 4c. Test results 4d. Released date 4e. Report 		- The Experts team commenced DB development from the middle of August 2107 in Japan based on the agreed DB system framework. The initial version was completed at the end of October 2017.	

Remarks								
Achievement	- The Experts team submitted Road Disaster DB Manual version I to the target SETMs and ITU and RCM of MOT in December 2017.	- Over 80%(100% =18 /18) of the training participants from all target SETMs/SEHMs passed the post-training test.	- The database was updated on March 2019 and released to MOT and the target SETMs in April 2019.	- The annual road disaster management report utilizing the database was completed and submitted to MOT in April 2019.	- The update of draft manual reflecting changes based on activities 4-9 and 4-10 was completed and submitted to MOT in April 2019	- Pilot study site was selected based on discussion with C/P.	- Based on the discussion held between the JICA Experts Team and RDMT members since November 2018 after the 5 th JCC Meeting on how to obtain basic understanding from the Ministry of Finance (MOF), a MOT seminar on Dissemination of the JICA Road Disaster Management Project was held in April 2019 followed by a subsequent 2018 Pilot Project site with the representatives of MOF in July 2019. - Collection of relevant information has commenced from September 2019.	- Collection of relevant information has commenced from September 2019.
Important Assumption								
Means of Verification	4f. Approval letter					5a. Acceptance letter5b. Budget document5c. Proposals submitted		
Objectively Verifiable Indicators	By Dec 2017, road disaster management database manuals for users and administrator are developed	80% of the training participants from MOT and the target SETMs passes the post-training test on database use.	By Mar 2019, the database is released to MOT and the target SETMs	From 2019, a simple disaster management report is submitted to senior management of MOT once a year	By the end of the Project, the finalized manual is approved by MOT	By Mar 2020, a report of a pilot study on cost-effectiveness of the locally adaptable disaster prevention is developed	By Jun 2020, budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of the regular budget for FY 2021 based on the future development plans	By the end of the Project, at least one project proposal for large-scale disaster prevention of the priority site(s) and studies for prevention is submitted by MOT to international donor(s) for finding will; and the results of Orient 2 and 4
Narrative Summary	woks and prevention 4b.	4c.	4d.	46.	4f.	Output-5.: MOT and the target SETMs/SEHMs are capable of preparing budget proposal for road	disaster prevention 5b.	56.

	Activities	III	Inputs		Important Assumption
On	Output 1:	The Japanese Side	The Tajik Side	A.	Natural disaster/political instability
Ro stre	Road disaster management structure of MOT and the target SETMs/SEHMs is strengthened.	Japanese Experts	Personnel		economic crisis that affect the project activities do not occur
1-1.	1. Classify the target disasters through collection and analysis of the past disaster records	1. Chief Advisor 2. Institution	Project Director: Deputy Transport Minister, MOT	B.	Security situation of Tajikistan which limits the activities of the
1-2.			2. Deputy Project Director Head of RCM MOT		JICA experts, especially in the project sites, does not deteriorate
			3. Project Manager		compared with the same in 2016
1-3.			Head of International Relation Dept. MOT 4. Regional Managers	<pre><</pre>	<pre><pre>-Conditions></pre></pre>
1-4.				Ą.	Tentative list of the Project Staff,
1-5	clarified roles and responsibilities (by RDMT) Develon an improvement plan of disaster management structure of MOT and the	 Local Administrative Coordinator Other experts mutually agreed upon as 	 Relevant staff of DI Relevant staff of the target SETMs/SEHMs 		including Disaster Management Taskforce is finalized
,				B.	Internet connection is established at each target SETM
On	Output 2:	Equipment			
Ro	Road disaster recoveries by the target SETMs/SEHMs are improved through	1. Equipment for disaster recovery and	Land, Building and Facilities		+
2-1.	I. Examine locally adaptable disaster recovery works based on the current state review		1. Land, building and facilities necessary for		T
		2. Hardware and software for database	the implementation of the Project Office charge for the Droject in the building		Issues & counter measures
2-2.	 Develop a disaster recovery manual for SETM/SEHM and RRT, including action for preparedness. which is used for Activity 2.3-2.5 				
2-3.		4. Laptop PC for hazard evaluation and	office furniture and utilities such as internet		
	MOT (i.e. action for preparedness, survey selection of works, design, cost estimate,	monitoring at each SE1M 5. Monitoring equipment for simple early	connectivity, telephone line, electricity, etc.		
2-4.	supervision, disaster recovery sheet) (in Hissor and Sugnd SETMs) 4. Conduct on -site drills for simulated disaster recovery works for all target		Local Costs		
		6. Other equipment mutually agreed upon	1 Cost for installation operation and		
2-5.	5. Plan and implement disaster recovery works for the disaster occurred in any target SFHMs by the relevant SFHMs/SFTMs	as necessary Training of the Tailk Personnel in Japan	maintenance of the provided equipment		
2-6.		and/or third country	2. Administration and operational costs, including final costs and materials for		
2-7.			prevention/recovery works. Meal		
On	Output 3:	<u>Local costs</u>	SETMs/SEHMs		
Prc SF	Process of simple road disaster prevention is established at the target SETMs/SEHMs	Cost for activities of JET, local travel &	participate in training, drills,		
3-1.	1. Examine hazard evaluation methods and locally adaptable prevention measures	ation cost for SETMs/SEHM	prevention/recovery works		
,		participate in training, drills and prevention/recovery work			
3-2.	 Develop a road disaster prevention manual for SE LIVI/SELIM. Consisting of nazard evaluation and Ilocally adaptable prevention measures, which is used for Activity 				
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3-3.					
,					
3-5.					
3-6.	coordination with the respective SETMs . Identify priority sites in the target sections based on the evaluation results by the				
3-7.	 Develop a future disaster prevention plan for each target section by the respective SFTMs 				
3-8.					

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at non improved very for training the target SEHMs (i.e., covery sheets, heard evaluation sheets, end prevention measure sheets) are abmission to MOT the dignized data submitted by the respective target or submission to MOT are dignized data submitted by the respective target or submission to MOT are the data obtained by the respective target of finalize the database design and the manuals, reflecting feedbacks from the database design and the manuals, reflecting feedbacks from the database design and the manuals, reflecting feedbacks from the unant or of disaster management of the results of the research of the results of the results of the training budget proposal for implement a pilot study on cost effectiveness of simple disaster revention in the riral year underOutput3, the luxard location maps and the training the results of the training the target section(s) under couptal, which cannot be handled by the target EHMs, and studies for prevention measures for funding by international tells, and studies for prevention measures for funding by international	of disaster recovery at all target SETMs in 2017 as baseline data in the		
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evention mplement a pilot study on cost effectiveness of simple disaster mplement a pilot study on cost effectiveness of simple disaster nneasures at the target sections selected in the first year underOutput3, le hazard location maps udget item for disaster prevention in the regular budget of HMM/MOI HMM/MOI HALWOOT HALWO	se users		
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implement a pilot study on cost effectiveness of simple disaster In measures at the target sections selected in the first year underOutput3, upde hazard location maps SHAWATOT SHAWAT	revention		
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the target section(s) under output3, which cannot be handled by the target EHMs, and studies for prevention measures for funding by international	project proposal(s) on large-scale prevention measures for the priority		
	he target section(s) under output3, which cannot be handled by the target EHMs, and studies for prevention measures for funding by international		

Project Title: The Project for Capacity Development for Road Disaster Management in the Republic of Tajikistan Form 3-3 Project Monitoring Sheet (Plan of Operation)

Dated 30 September 2019

Version 3

Issue Solution Remarks rom Version 1 to Version 2 1 2 3 4 5 6 7 8 9 10 11 13 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 Learn about road disaster management 2. Deputy Chief Advisor/ Road Disaster Management 2 15. Interpreter/Sub Project Coordinator (1)& (2) 16. Interpreter/Sub Project Coordinator .. Deputy Chief Advisor/ Road Disaster /anagement 2 13. Project Monitoring/ Japan Training 13. Project Monitoring/ Japan Training 8. Machineries and Equipment O&M 5. Disaster Prevention Measures 1 Disaster Prevention Measures 2 n-country/Third country Training 1. Provision by the Experts Team Expert (In Japan)

1. Chief Advisor/ Road Disaster Chief Advisor/ Road Disaster Disaster Recovery Measures 12. Instrumentation Monitoring Project Coordinator . Hazard Evaluation Expert (In Tajikistan) 2. Provision by JICA technology in Japan 9. Cost Estimation Cost Estimation ning in Japan 11. Database 2 10. Database 1 11. Database 2 Management 3. Institution ΑŅ

Activities Month 1 2 3 4 5 6 7 8 9 101112 1 2 3 4 5 7 8 9 101112 1 2 3 4 5 7 8 9 101112 1 2 3 4 5 7 8 9 101112 1 2 3 4 5 7 8 9 101112 1 2 3 4 5 7 8 9 101112 1 2 3 4 5 7 8 9 101112 1 2 3 4 5 7 8 9 101112 1 2 3 4 5 7 8 9 101112 1 2 3 4 5 7 8 9 101112 1 2 3 4 5 7 8 9 101112 1 2 3 4 5 7 8 9 101112 1 2 3 4 5 7 8 9 101112 1	;	2000		0000		0700		200	9		1	_		-4	O WHO I THE	9 011001
tput 1:Road disaster management structure Classify target disasters through collection and analysis of the past disaster records Review organizational and technical Review organizational and technical aspects of current state of disaster	-	2017	F	207	-	207	Ŀ			Responsible	Responsible Implementor Person	antor Japanese	Other Major Inputs	or Inputs Remarks	Achievem	
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lection ords	re of MOT ar	nd the target S	ETMs/SEHMs	is strength	nened.					TOM H M	Head of RCM	Chief Advisor (CA)				
Review organizational and technical aspects of current state of disaster	Ē									RCM)/MOT H	Head of Road MPEU Disater	Recov.Work	F F	Target TMs/HMs		
Review organizational and technical aspects of current state of disaster	ler										/RDMT(RC M, DI)					
management relevant to MOT and the	<u> </u>									RCM/MOT M	Head of ditto MPEU	Recov. M, Hazard Eva, Prev M, Institution				
target SE IMs/SEHMs, including their communication network for disaster Adual (RRT)	ler															
Clarify the roles and responsibilities of Road Plan 1.3 Disaster Management Taskforce	<u> </u>									RCM/MOT H	Head of ditto MPEU	ditto				
MOT and its members as well as their addrain capacity development plans	lal															
Support the target SETMs/SEHMs through Plan 1.4 the project activities according to the	Ē									RCM/MOT H	Head of ditto RCM	ditto				
clarified roles and responsibilities (by Actual	nal															
Develop an improvement plan of disaster 1.5 management structure of MOT and the larger SETM&(SEHMs based on the	E									RCM/MOT H	Head of RDMT(RCM . DI), SETM	RCM Recov.M, TM Prev, M. Hazard Eva				
feedbacks from the project activities for approval by MOT.	lar															
Output 2:Road disaster recoveries by the target SETMs/SEHMs are improved through standardization	target SETN	1s/SEHMs are	improved th	nough star	ıdardization					Overall:MOT He		Chief Advisor		RDMT partcipate the field activities	RDMT partcipate in the field activities as	
2.1 works based on the current state review	Ē									RCM/MOT H	Head of RDMT MPEU (RCM, DI), SETM	Recov M, Ost E,				
(Actvity. 1.2)	nal															
Develop a disaster recovery manual for Plan SETM/SEHW/RRT, including action for	Ē									RCM/MOT H	Head of ditto MPEU	ditto				
preparedness, Which is used for Activity Actual	ler															
Conduct trainings on disaster recovery 2.3 works to all target SETMs/SEHMs and MOT Plan (i.e. action for preparedness, survey,	<u>c</u>									SETM EF	Chief SETM Engineer level (SETM)	ditto	Eqpt for F Recov, Cotravel & e	Fuel, O&M cost for eqpt, meal allowance		
selection of works, design, cost estimate, supervision, preparation of disaster recovery work sheet) (in Hissor and Sughd SETMs)	ler												Щ	for SETM/SEH M		
Conduct on-site drills for simulated disaster Plan Plan recovery for all target SETMs/SEHMs (in	Ē									SETM CI	Chief SETM, Engineer SEHM	ditto	ditto	ditto		
Hissar and Sogd SETMs) Actual	lar									9 9)	ETM)					
Plan and implement disaster recovery works for the disasters occurred in any	Ē									SETM CI	Chief SETM, Engineer SEHM	ditto	ditto	ditto		
target SEHMs by the relevant SEHMs/SETMs	nal															
2.6 feedbacks from Act 2.3-2.5	Ē									RCM/MOT M	Head of RDMT (RCM, DI), SETM	ditto				
Actual	lal															
2.7 Chertify trainers for disaster recovery from Plan the staff of the target SETMs/SEHMs	u									n/a n/a	n/a	CA, Recov.M &OM				
Actual	lal															

DI-Design Institute, EAF=Econ Analysis & Forcasting Dpt, ITU=IT Unit, MPEU-Maintenance, Planning & Evaluation Unit, RCM=Road Construction and Maintenance Dept, RCU-Road Construction Unit Issue & Counterm would be utilized in Act 1.7,1.8, connection at TM eeded for Remarks partcipate i the field activities meal allowance Fuel, O&M cost, meal Exusting eqt, fuel for eqpt, meal D&M cost, SETM/SE SETM/SE HM cost, existing eqpt, meal SETM/SEH SETM/SEH Other Major Inputs Tajik Σ cost for SETMs/SE cost for SETM/SE cost for SETM/HM eva, travel accom Japan Eqt for prev & monitor, travel & hazard HMs Prev M, Cost E, Mon Prev M, Hazard Eva CA, Hazard Eva, Prev M Prev M, Hazard Eva, Cost E, Mon Prev M, Hazard Eva Prev M, Cost E, Mon Hazard Eva, CostE, Monitoring Experts Mon) RDMT (RCM, DI) SETM RDMT (RCM, DI) SETM RDMT (RCM, DI) SETM s(Tajik) SETM SEHM SEHM SETM SETM SEHM SEHM Engineel level (SETM Engineel level (SETM Chief Engineel level (SETM Engineel level (SETM Chief Engineel level (SETM level (SETM vel (SETM Head of RCM Head of SETM Hed of MPEU Person (Tajik) Head of MPEU Hed of MPEU Org (Tajik) Month 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 I - #2 Ħ Ħ Ħ I - #1 п, п Output 3: Process of locally adaptable road disaster prevention is established at the target SETMs/SEHMs II for hazard \Box =for hazard eva Actual Actual Actual Actual Actual Plan Conduct hazard evalatuon at the target sections by all target SEHMs in coordinaiton Develop a disaster prevention manual for SETM/SEHM, consisting of hazard evaluation and locally adaptable prevention screening, selection of hazardous sites, hazard/risk assessment and preparation of prevention measures #1 & #2 on pilot basis evaluation by the respective target SETMs SETMs/SEHMs and MOT (i.e. selection of Sogd SETMs) by all target SETMs and the locally adaptable prevention measures based on the current state review (Activity Develop a future disaster prevention plan for each target section by the respective target SETMs. Certify trainers for hazard evaluation and prevention measures from the staff of the tarnet SETMs/SEHMs. Identify priority sites in the target sections based on the results of the hazard onduct trainings on hazard evaluation to measuresm which is used for activity 3.3measures, design, budget, supervision, preparation of prevention measure sheet, Examine hazard evaluation methods and all target SETMs/SEHMs and MOT (i.e. at the priority sites in the target sections hazard evaluation sheet) (in Hissor and monitoring for simple early warning) (in Hissar and Sogd SETMs) selected in the first year (in Hissar and conduct tainings on locally adaptable Select the target sections for hazard evaluation in each SETM lan and implement locally adaptable 3.8 prevention, measures to all target with the respective target SETMs Update and finalize the manual, re feedbacks from Activities 3.3-3.9 revention measure sheet elevant target SEHMs Selection of measures Budget preparation Supervision Activities Design 3.10 3.10 3.2 3.3 3.4 3.5 3.6 3.9 3.7

7				2004			0700				0000			0000			Annual An	-1411		1		-1		01001
2	Activities		,	1	44		207			,	1 2	40 44	,	202	9	5	Responsible Persor	Responsible Impler	Implementor Japanese s(Tajik) Experts	0	/lajor	rs Remarks	S Achievem	
Ĭ	Month 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 7 8 9 10 11 12 1 12 1 12 1 12 1 12 1 12 1 1	Month 1	gement is av	vailable fo	s 9 10 11 12	and the ta	arget SET	Ms for budge	udget pre	eparation	e 7 8 9	saster reco	overy and	4 5 6 7	ກ	10 11 12 MOT EAF)	MOT (RCM, EAF)		Chief Advisor	Japan	Tajik	×		asures
1.4	Develop a plan for road disaster management database on the current state review (Adivity 1.2)	Plan														EAF/MOT		Head of ITU (TBD)	BD) Database (DB)	98		+		
4.2	Design a database system with installed hardware, consisting of spread sheets	Plan														EAF/MOT	1.	Head of ITU (TBD)	BD) ditto	DB software and bardware	O&M cost	ost		
4.3	Develop road disaster management database manuals for users (i.e. MOT and the target SETMs) and administrator, which are used for Activity 4.4.4.10	Plan														EAF/MOJ	L	Head of ITU (TBD)	3D) ditto)			
4.4	Conduct trainings on database use to MOT and all target SETMs (i.e. collection, input, compiling, analysis and reporting of data) at MOT and each SETM	Plan Actual														EAF/MOJ		Head of ITU (TBD)	BD) ditto	PC for DB	DB O&M cost	ost		
4.5	Collect data of disaster recovery works at all target SETMs in 2017 as baseline data in the prescribed from improve by the Project.	Plan														& RCM	RCM/MOT Chief &SETM Engineer level (SETM)	i i	SETM (TBD) Recov.M, CostE, O&M	M, O&M				
4.6	Collect data necessary for disaster management (i.e. disaster recovery sheets, hazard evaluation sheets, and prevention measure sheets) from all target SEHMs by	Plan Actual														& RCM	RCM/MOT Chief &SETM Engineer level (SETM)		SETM (TBD) Hazrd Eva. Prev M, Recov. M	wa.				
4.7	The reserving SETMS from the target Digitalize the data collected from the target SEHMs by the respective target SETMs for submission to MOT	Plan														RCM &SE	RCM/MOT Chief &SETM Engineer level (SETM)		SETM (TBD)	PC for DB	DB O&M cost	1	uc	
4.8	Integrate the digitalized data submitted by the target SETMs into the database	Plan														EAF/MO]		Head of ITU (TBD)	9D) DB	PC for DB	DB O&M cost	ost ditto		
4.9	Release the database to MOT and all target SETMs	Plan														EAF/MOI	Ī	Head of ITU (TBD)	3D) DB	PC for DB	DB O&M cost	ost ditto		
4.10	Develop a simple mannual road disaster management report for senior management of MOT	Plan Actual														RCM/MO1	MOT Head of MPEU	of MPEU	Hazrd Eva. Prev M, Recov.M	eva. PC for DB	DB O&M cost	ost		
4.11	1 Update and finalize the database design and the manuals, reflecting feedbacks from the database users	Plan											Ħ			EAF/MOT		Head of ITU IT unit (TBD)	DB	PC for DB	DB O&M cost	ost		
5 I	Output 5: MOI and the target SEIMS/SEHMS are capable of preparing budget proposal for road disaster prevention	IMS are	capable or	reparing	puaget	proposa	ror road	disaster	prevent	uo						2				(CA)				
5.1	Plan and implement a pilot study on cost- effectiveness of locally adaptable disaster prevention measures at the target sections selected in the first year under Output 3,	Plan Actual						Com	pletion of	Completion of prev measure	sure					RCM	RCU RCU	of RDMT (RCM, SETM	Prev. M,		Travel cost for field survey	cost		
5.2	Create a budget ltem for disaster prevention in the regular budget of SETM/SEHM/MOT	Plan Actual														RCM	RCMMOT Head of MPEU		MPEU(TBD) Prev. M, Cost E,					
5.3	Prepare budget for locally adaptable disaster prevention for the priority sites identified under Output 3 by all target SETNs and MOT, utilizing the results of	Plan Actual														RCM	RCM/MOT Head of MPEU		MPEU(TBD) Prev. M, Cost E,					
5.4	Develop project proposal(s) on large-scale prevention measures for the priority site(s) in the target section(s) under Output 3, which cannot be handled by the target SETMs/SEHMs, and studies for prevention for funding by international donor(s) as as	Plan														Intern Relat Dept	International (TBD) Relations Dept	RDMT (RCM,	DI) Cost E, Institution	, uo				

DI-Design Institute, EAF=Econ Analysis & Forcasting Dpt, ITU-IT Unit, MPEU-Maintenance, Planning & Evaluation Unit, RCM=Road Construction and Maintenance Dept, RCU-Road Construction Unit asures Achievem Remarks Other Major Inputs Tajik Japan Adm Coordinator (LAC) Adm Coordinator (LAC) CA, all experts in Tajikistan Japanese Experts TBD Implementor s(Tajik) Officer in charge of the Project All mgt ersonnel All Mgt personnel All Mgt personnel All Mgt personnel Project Manager (PM) Responsible Person (Tajik) Dy Poject Director (DPD) Dy Poject Director (DPD) Project Director TBD Responsible Org (Tajik) IICA • • • • • • • • • • • • • • • • • Plan Actual Actual Actual Actual Actual Actual Plan Actual Actual Plan Actual Plan Actual Plan Actual Plan Plan Plan Actual Plan Actual Plan Actual Plan Plan Plan Actual Plan Plan Plan Monitoring Mission from JICA Headquarters: Organize information sharing seminars/workshops for all target SETMs/SEHMs and MOT in Gissar and Sogd SETMs Annual Plan of Operation (APO) based on DPO for review and approval by JCC . 0.2 Set-up Detailed Plan of Operation (DPO) based on tentative PO for review and approval by JCC 0.11 Establishment and operation of web-site Monitoring and Evaluation in the Semi-annual Monitoring Sheet for submission to JICA Tajikistan Office 0.1 Joint Coordination Committee (J00) 0.4 Joint Monitoring semi-annually Materials for public relations 0.10 Project Completion Report Dissemination seminars Post-Project period 0.14 Post Monitoring by JICA 0.15 Post Evaluation by JICA Duration / Phasing Reports/Documents 0.8 Inception Report Progress Report Public Relations Activities Monitoring 0.5 9.0 0.12 0.13 0.3 0.9 0.7

TO CR of JICA TAJIKISTAN OFFICE

PROJECT MONITORING SHEET

Project Title: The Project for Capacity Development for Road Disaster Management

Version of the Sheet: Ver.7 (August 2020)

Name: Hiroshi Mita

Title: Chief Advisor

Submission Date: 21 August, 2020

I. Summary

1 Progress

1-1 Progress of Inputs

Inputs	Plan (Original Plan as of May 2017 was revised on July 2020)	Actual (as at end July 2020)
Experts	Total MM: 86.15MM 1) Chief Advisor / Road Disaster Management 2) Deputy Chief Advisor / Road Disaster Management 2 3) Institution 4) Disaster Recovery Measures 5) Disaster Prevention Measures 1 6) Disaster Prevention Measures 2 7) Hazard Evaluation 8) Machineries and Equipment O&M 9) Cost Estimation 10) Database 1 11) Database 2 12) Instrumentation Monitoring 13) Project Monitoring / Japan	Total MM: 76.67MM(89.0%:rate of latest total MM, 86.15MM) 1) Chief Advisor / Road Disaster Management 2) Deputy Chief Advisor / Road Disaster Management 2 3) Institution 4) Disaster Recovery Measures 5) Disaster Prevention Measures 1 6) Disaster Prevention Measures 2 7) Hazard Evaluation 8) Machineries and Equipment O&M 9) Cost Estimation 10) Database 1 11) Database 2 12) Instrumentation Monitoring 13) Project Monitoring / Japan
Trainees Received	Training Training in Japan (2 times)	Training Training in Japan (2 times) - 1st: was conducted on June-July 2018 - 2nd: was conducted on June-July 2019
Equipment	Equipment for Output2,3	- Provision by the Experts Team was completed by September 2017 Provision by the JICA was completed by April 2019.
Others	N/A	N/A
Tajikistan side Operational Expenses	Personnel 1. Project Director: Deputy Transport Minister, MOT 2. Deputy Project Director: Head of RCM, MOT	Personnel 1. Project Director: Deputy Transport Minister, MOT 2. Deputy Project Director: Head of RCM, MOT

- 3. <u>Project Manager :</u>
 Head of International Relation
 Dept. MOT
- 4. <u>Regional Managers :</u> Heads of the target SETMs
- 5. Relevant Staff of MOT
- 6. Relevant Staff of DI
- 7. Relevant staff of the target SETMs/SEHMs:
- 8. Other personnel mutually agreed upon as necessary

Land, Building and Facilities

- Land, Building and facilities necessary for the implementation of the Project
- 2. Office spaces for the Project in the building of MOT, Hissar and Sogd SETMs with office furniture and utilities such as internet connectivity, telephone line, electricity, etc.

Local Costs

- 1. Cost for installation, operation and maintenance of the provided equipment,
- Administration and operational costs, including fuel costs, and materials for prevention / recovery works. Meal allowances for SETMs/SEHMs to participate in training drills. Prevention / recovery works

- 3. <u>Project Manager:</u> Head of International Relation Dept. MOT
- 4. <u>Regional Managers :</u> Heads of the target SETMs
- 5. Relevant Staff of MOT
- 6. Relevant Staff of DI
- 7. Relevant staff of the target SETMs/SEHMs:
- 8. Other personnel mutually agreed upon as necessary

Land, Building and Facilities

- 1. Land, Building and facilities necessary for the implementation of the Project
- 2. Office spaces for the Project in the building of MOT, Hissar and Sogd SETMs with office furniture and utilities such as internet connectivity, telephone line, electricity, etc.

Local Costs

- 1. Cost for installation, operation and maintenance of the provided equipment,
- Administration and operational costs, including fuel costs, and materials for prevention / recovery works. Meal allowances for SETMs/SEHMs to participate in training drills. Prevention / recovery works

1-2 Progress of Activities

Progress of activities is indicated in Monitoring Sheet Form 3-2 (PDM) and Form 3-3 (PO).

1-3 Achievement of Output

	Output/Indicators		evement %)	Major Results	Status ¹
		Plan	Actual		
Out	tput-1:				
Roa	nd disaster management	struct	ure of M	IOT and the target SETMs/SEHMs is strength	ened.
1a.	By Jun 2017,	100	100	- Based on collection of the most recent data on	OT
	a report on current			road disaster management and ensuing	
	disaster management			interviews with the C/Ps in charge, review was	
	relevant to MOT and			conducted by the Experts and the current road	
	the target			disaster management report was compiled by the	
	SETMs/SEHMs is			end of June 2017.	
	developed				

¹ OT: On Time, SFT: Scheduled for later, DL: Delay

11	By July 2017	100	100	The role of RDMT is as follows;	OT
10.	By July 2017, roles and	100	100	-The RDMT acts as a team to participate in all	01
	responsibilities of Road			project activities to achieve all outputs in	
	Disaster Management			cooperation with the Experts Team.	
	Taskforce supporting			- All members will acquire skills and knowledge	
	SETM/SEHM(RDMT)			to enhance own specialized field of road disaster	
	is clarified.			management duties of MOT and Design Institute.	
				- The team will support activities of other	
				counterparts.	
				The responsibilities of RDMT are as follows;	
				- Members will share activities so that	
				participation in project activities do not hinder	
				other duties of MOT and Design Institute.	
				- As such, RDMT will convene a monthly meeting	
				so that participation by each member is	
				prearranged considering the specialized field of	
				each member.	
				- Upon confirming that monthly meetings are held as agreed, targets and development plans of each	
				member will be agreed with the Experts Team.	
1c.	By the end of the	88	88	- RDMT members are actively participating in	OT
	Project, 80% of			Outputs 2, 3, 4 and 5 activities and supporting	
	members of RDMT are			the target SETM and SEHMs.	
	able to support SETMs/SEHMs			- RDMT members are monitoring project	
	according to their			progress The individual capacity development project	
	respective roles and			goals were agreed in July 2018 and it is put into	
	responsibilities.			action.	
1d.	By the end of the	40	40	- RDMT and the expert in charge discussed on	OT
	Project, an			finalizing the improvement plan of disaster	
	improvement plan of			management structure in early 2020, and this	
	disaster management structure of MOT and			plan was completed in April 2020.	
	the target			- This plan is currently waiting for approval from the MOT senior management.	
	SETMs/SEHMs,			the MOT semor management.	
	including				
	institutionalization of				
	RDMT, is approved by				
	MOT				
	tput-2:	4b = 4 =	wood SE	TMs/SEHMs are improved through standard	ation
	By Dec 2017,	100	100	TMs/SEHMs are improved through standardized The Road Disaster Recovery Manual Version 1	OT
\(^{\alpha a}\)	a road disaster recovery	100	100	was submitted to MOT on 18 December 2018.	01
	manual for			- The manual has been prepared to generate	
	SETM/SEHM/RRT is			improvement so that even the urgent recovery	
	developed			works are carried out more systematically and in	
	000/ 0.1	100	100	a more planned manner.	
2b.	80% of the training	100	100	- Trainings on disaster recovery works using	OT
	participants from all target SETMs/SEHMs			Road Disaster Recovery Manual Version 1 were	
	passes the post-training			conducted in February 2018.	
	test on disaster			- Over 80%(100% =59 /59) of the training	
	recovery works			participants from all target SETMs/SEHMs passed the post-training test.	
	<u>-</u>			passed the post-training test.	

2c.	80% of the trainees	80	80	- On May 2018, over 80% (100% =56/56) of	OT
	from all target			participants passed the post-drill test.	
	SETMs/SEHMs passes			- On June/July 2019, over 80% (100% =51/51) of	
	the post-drill test on			participants passed the post-drill test.	
	disaster recovery works			- One more mock training session will be	
2.1	for each job category	00	0.0	conducted in October to November 2020.	OT
2d.	Disaster recovery	80	80	- The on-site drills for simulated road disaster	OT
	works in the drills are planned and			recovery works were conducted and completed on May 2018 and June 2019.	
	implemented by all			- The disaster recovery works in the drills are	
	target SETMs/SEHMs			scheduled to be implemented three times in total.	
	according to the manual			selection to be implemented times in total.	
2e.	Disaster recovery	100	100	- On July 2019, the planned status of disaster	OT
	works at the actual	100	100	recovery works implemented by C/P at the four	
	disaster sites are			SEHMs under the jurisdiction of Soghd SETM	
	planned and			was confirmed by Experts, and opinions were	
	implemented by all			exchanged and advice was given for future	
	relevant target			improvements for C/P.	
	SETMs/STHMs				
2.2	according to the manual	7.	7.5		
2f.	By the end of the	75	75	- The Experts Team commenced finalization of	OT
	Project, the finalized			the manual from June 2020. In July 2020, the	
	manual is approved by MOT			feedbacks from the C/Ps were obtained and this	
Ow				is being used for the finalization.	
	tput-3.:	road	disastar	prevention is established at the target SETMs/S	SEUM _e
	By Oct. 2017,	100	100	- The Road Disaster Prevention manual for	OT
Ja.	a road disaster	100	100	SETM/SEHM was developed by Oct. 2017 for	01
	prevention manual for			hazard evaluation. The section on disaster	
	SETM/SEHM is			prevention was added and submitted to MOT in	
	developed			August 2018 before activities for disaster	
				prevention actions such as Activity 3.7, 3.8 and	
				3.9 were carried out. The section on hazard	
				evaluation was updated in July 2018.	
3h	80% of the training	100	100	- Over 80% (100% =58 /58) of the training	OT
50.	participants from all	100	100	participants from all target SETMs/SEHMs	01
	target SETMs/SEHMs			passed the post-training test on hazard	
	passes the post-training			evaluation in both 2017 and 2018.	
	test on hazard			- The training on locally adaptable prevention	
	evaluation and locally			measures was conducted in August 2018. The	
	adaptable prevention			post-training test was conducted in November	
	measures each			2018 following the completion of Ayni pilot	
				project.	
3c.	Hazard evaluation is	100	100	- Based on the results of the site visit, the 10	OT
50.	conducted at least twice	100	100	target section was decided:	01
	by all target			1) Hissor SETM pipe (4 sections)	
	SETM/SEHM for 10			2) Sughd SETM pipe (4 sections)	
	target sections in all			3) Rasht SETM pipe (4 sections)	
	target SETMs			- Hazard evaluation was conducted twice by all	
	according to the manual			target SETM/SEHM for 4 target sections in all	
				target SETM/SETM for 4 target sections in an	
				2017, 2018 and 2019, completing 10 sections in	
				total.	
1		l	l	war.	

3d. Locally adaptable prevention measures are planned by all target SETMs for 4 priority sites in Hissar and Soghd SETMs according to the manual.	100	100	 Based on the results of the site visit, the 4 priority sites in Hissor and Sughd were selected. Planning is completed for Varsob and Ayni sites, which is the sections to be carried out in 2018. Candidate sites in 2019 were selected at the respective SETMs based on the discussion and site investigation with MOT and SETMs as follows; Varsob and Bobojon Ghafurov sites. 	OT
3e. Locally adaptable prevention measures are implemented by 4 target SEHMs at 4 priority sites in Hissar and Soghd SETMs according to the manual	100	100	 Implementation was successfully completed at 2 priority sites (Varsob and Ayni) at the end of November 2018. Implementation in another 2 priority sites (Khoja Obi Garm and Varzob) was completed in October 2019. 	OT
3f. 80% of the observers from the other 22 SEHMs passes the post-observation test on implementation	100	100	- Over 80% (100% = 47/47) of the training participants from the target SETMs/SEHMs passed the post-observation test in December 2018. Hissor SETM 13, Sughd SETM 25, and Rasht SETM 9.	OT
3g. By March 2020, future disaster prevention plans are developed for 10 target sections by all target SETMs	100	100	- The request for reviewing the final disaster prevention plan was made by 3 target SETMs in May 2020 and the reviewed plan was submitted to MOT. The plan was approved on 18 June 2020.	OT
3h. By the end of the Project, the finalized manual is approved by MOT	100	100	- Finalization of the manual and subsequent submission of Road Disaster Prevention Manual Ver. 2 to MOT both in English and Russian was made on 25 December 2020.	OT
Output-4.:				
			ment (*1) is available for MOT and the target S	ETMs
for budget preparation and	T			OT
4a. By Dec 2017, road disaster management database (disaster management data collection system) is developed according to the design developed through the Project	100	100	- The Experts Team commenced DB development from the middle of August 2107 in Japan based on the agreed DB system framework. The initial version was completed at the end of October 2017. Additional functions to DB system was added in March 2018.	OT
4b. By Dec 2017, road disaster management database	100	100	- The Experts Team submitted Road Disaster DB Manual version 1 to the target SETMs and ITU and RCM of MOT in December 2017. The	OT
(data collection system) manuals for users and administrator are developed			section on additional functions to DB system was added in March 2018.	

the ma col relo the	Mar 2019, e database (disaster anagement data llection system) is eased to MOT and e target SETMs	100	100	- Based on the result of workshops and meeting with ITU and MPEU carried out in October 2018, database was updated on March 2019. It was released to MOT and the target SETMs in April 2019.	OT
dis rep ser	om 2019, a simple saster management port is submitted to nior management of OT once a year	100	100	- The annual road disaster management report utilizing the database was completed and submitted to MOT in April 2019 and April 2020.	OT
4f. By	the end of the oject, the finalized anual is approved by	100	100	- The manual version 3 which was submitted in April 2019 was jointly reviewed by the expert and the C/Ps and the result indicated that the manual and the data collection system were fit for the purpose established under the Project.	ОТ
Output					
	<u> </u>	s/SEH	Ms are	capable of preparing budget proposal for road	disaster
a ro on the dis	eport of a pilot study cost-effectiveness of e locally adaptable easter prevention is eveloped	100	100	- In March 2020, cost estimation skills required for preparing benefits versus cost sheets were organized into technical sheets for the workshop purpose. The workshop was held for Hissor SETM and relevant SEHMs management on 10 March 2020.	OT
bud loc dis me by MC reg 202 fut	the end of the pject, dget proposal for cally adaptable saster prevention casures are prepared all target SETM and OT as part of the gular budget for FY 22 based on the cure development ans	100	100	 The annual budget for 3 sites were prepared by undertaking design, planning and cost estimation by C/Ps with guidance by the Experts Team. The workshops were held for Sughd SETM and Rasht SETM for summarizing cost estimation skills and knowledge required for SETM/SEHM engineers and managers in April 2020. 	ОТ
pla	the end of the	100	100	- In March 2020, the Experts Team prepared a	OT

ı -4	Achievement of the I	Project Pur	pose	
	oject Purpose/Indicators	Achievement (%)	Situation	Expected Time of Achievement
	oject Purpose:	wast CETMa/	CEITMs for affective read disaster more against	4 :
	proved.	irget SE I Wis/	SEHMs for effective road disaster manage	ement is
a.	- 1 1 1 1	75	- On July 2019, the planned status of disaster	OT
a.	Project, 80% of results of the disaster recovery works by the target SETMs/ SEHMs, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans	73	recovery works implemented by C/P at the four SEHMs under the jurisdiction of Sughd SETM was confirmed by the Experts and opinions were exchanged and advice was given for future improvements for C/P.	
b.	By the end of the Project, 80% of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the Japanese Expert Team	100	- Over 80% (100% = 10/10) of the results of the hazard evaluation that was conducted by all target SETM/SEHM for 4 target sections in all target SETMs according to the manual in years 2017, 2018 and 2019 was assessed accurate by the Japanese Expert Team.	OT
c.	80% of results of the disaster prevention measures #2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality and safety specified in the plans.	100	- Over 80% (100% = 4/4) of results of the disaster prevention measures that was carried out by Hissor and Sughd SETM and 2 target SEHMs according to the manual developed through the Project was confirmed to meet requirements by the Japanese Experts Team.	OT
d.	By the end of the Project, budget request for disaster prevention in the target SETMs for FY 2022 is submitted to Ministry of Finance (MOF) as part of the regular budget	90	- The annual budget for 3 sites were prepared by undertaking design, planning and cost estimation by C/Ps with guidance by the Experts Team.	OT

1-5 Achievement of the	e Overall G	oal	
Overall Goal/Indicators	Achievement (%)	Situation	Expected Time of Achievement
Overall Goal: Road disasters are mitigat SETMs/SEHMs	ted in the inte	ernational and Republican Roads in the tar	get
a. All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project b. By Jul 2024(*2,5) disaster prevention measures are planned and / or implemented at least 5(*3) priority sites in the target SETMs according to the disaster prevention manual developed through the Project	100	- All disaster recovery works by the target SETMs/SEHMs are planned and implemented since introducing of Disaster Recovery Manual (April 2018). The number of works as at end of July 2020 in each SETM are following: SETM Hissor: 20 SETM Sughd: 28 SETM Rasht: 22 Total: 70 - Disaster prevention plan was made for 10 target sections by target SETMs according to the disaster prevention manual in May 2020 and the reviewed plan was submitted to MOT. The plan was approved on June 2020.	OT
c. From Aug 2020 to Jul 2023 the average duration required for road re- opening per disaster handled by the target SETMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018)	0	- There were disasters reported at 3 SETMs for 36 incidents causing 455 hours of traffic disruption in 2018, compared to 136 incidents causing 1,057 hours of traffic disruption in 2017. - The average duration required for road reopening per disaster is calculated 8.79hr/incident based on the data from 2017 to 2018.	SFT

^(*1) Data necessary for road disaster management includes disaster record, results of hazard evaluation, prevention measures, and recovery works among others.

1-6 Changes of Risks and Actions for Mitigation

N/A

1-7 Progress of Actions undertaken by JICA

N/A

^(*2) Underlined deadlines in the indicators are set based on the schedule of the Tentative PO. They shall be modified according to the Detailed PO to be prepared in the beginning of the Project for approval by the first JCC.

^(*3) Target values of the indicators shall be filed based on the results of the baseline survey, which shall be reviewed and approved by the 2nd JCC. (*4): The term "database" is amended to "disaster management data collection system" as approved by the 5th JCC Meeting dated 8 November

^{(*5):} Underlined deadlines and other dates are amended for R/D extension purpose in May 2020.

1-8 Progress of Actions undertaken by Gov. of Tajikistan

N/A

1-9 Progress of Environmental and Social Considerations (if applicable)

N/A

1-10 Progress of Considerations on Gender/Peace Building/Poverty Reduction (if applicable)

N/A

1-11 Other remarkable/considerable issues related/affect to the project (such as other JICA's projects, activities of counterparts, other donors, private sectors, NGOs etc.)

N/A

2 Delay of Work Schedule and/or Problems (if any)

2-1 Detail

N/A

2-2 Cause

N/A

2-3 Action to be taken

N/A

2-4 Roles of Responsible Persons/Organizations (JICA, Gov. of Tajikistan, etc.)

N/A

3 Modification of the Project Implementation Plan

3-1 PO

- 1) Detailed Plan of Operation (DPO) was revised to DPO Version 2 dated 20 April 2018.
- Shift Database 2 Expert assignment from December 2018 to April 2018
- Add Activity 3.2 in June 2018
- Add Activity 4.11 in April 2018

This was reported in Project Monitoring Sheet Version 3 (April 2018)

- 2) Detailed Plan of Operation (DPO) was revised to DPO Version 3 dated 05 November 2018.
- Shift Activity 2.6 from November 2018 to May to June 2019 to tie in with delivery of hydraulic rock breakers to effectively update the manual
- Shift Machineries and Equipment O&M Expert assignment from March 2019 to May to June 2018 This was reported in Project Monitoring Sheet Version 4 (November 2018)
- 3) Detailed Plan of Operation (DPO) was revised to DPO Version 4 dated 14 July 2020.
- Modify the project period to "From April 2017 to February 2021 (47 months from the commencement dispatch of the Experts from Japan)".

- Reschedule of Expert Team assignment and Activities until February 2021
- Shift the remaining JCC Meetings to be carried out as follows.

8th JCC Meeting: August 2021 9th JCC Meeting: February 2021

- Conduct dissemination seminar in February 2021.

It is attached as Monitoring Sheet Form 3-3.

3-2 Other modifications on detailed implementation plan

(Remarks: The amendment of R/D and PDM (title of the project, duration, project site(s), target group(s), implementation structure, overall goal, project purpose, outputs, activities, and input) should be authorized by JICA HDQs. If the project team deems it necessary to modify any part of R/D and PDM, the team may propose the draft.)

N/A

- 4 Measures undertaken by Gov. of Tajikistan or Project Team to Ensure the Sustainability of Project after the Project Completion
- 4-1 Financial Sustainability

N/A

4-2 Technical Sustainability

N/A

4-3 Institutional Sustainability

N/A.

Version: 7 Dated: 21 August, 2020

Project Monitoring Sheet I (Revision of Project Design Matrix)

Project Title: The Project for Capacity Development for Road Disaster Management

Implementing Agency: Ministry of Transport (MOT)

Target Group: MOT, Hissor SETM and its 9 SEHMs, Sughd SETM and 14 SEHMs, and Rasht SEHM and its 3 SEHMs (Nurobod, Rasht, and Ta-jikobod)

Period of Project: April 2017 - March 2021 (in Tajikistan)

Project Site: International and Republican roads in Hissor and Sughd SETMs as well as Nurobod, Rasht and Tajikobod SEHMs in Rasht SETM

Remarks							
Achievement	- All disaster recovery works by the target SETMs/SEHMs are planned and implemented since introducing of Disaster Recovery Manual (April 2018).	- Disaster prevention plan was made for 10 target sections by target SETMs according to the disaster prevention manual in May 2020 and the reviewed plan was submitted to MOT. The plan was approved on June 2020.	- The average duration required for road reopening per disaster is calculated 8.79hr/incident based on the data from 2017 to 2018.	- On July 2019, the planned status of disaster recovery works implemented by <i>C/P</i> at the four SEHMs under the jurisdiction of Soghd SETM was confirmed by Experts, and opinions were exchanged and advice was given for future improvements for <i>C/P</i> .	- Over 80% (100% = 10/10) of the results of the hazard evaluation that was conducted by all target SETM/SEHM for 4 target sections in all target SETMs according to the manual in years 2017, 2018 and 2019 was assessed accurate by the Japanese Expert Team.	- Over 80% (100% = 4/4) of results of the disaster prevention measures that was carried out by Hissor and Sughd SETM and 2 target SEHMs according to the manual developed through the Project was confirmed to meet requirements by the Japanese Experts Team.	- The annual budget for 3 sites were prepared by undertaking design, planning and cost estimation by C/Ps with guidance by the Experts Team.
Important Assumption	aluation disaster n & recovery the Database			A. Policy for disaster management is not discontinued. B. Political instability/economic crisis/serious natural disaster that affect the	project sites do not occur. C. Budget including prevention, is approved by MOF		
Means of Verification	he target a-c Hazard evaluation disaster lemented prevention & recovery manual sheets, in the Database dand / or tes in the disaster he Project c-opening hETMs is me before			a. Assessment report b. Prevention sheet c. Recovery sheet d. Data of budget request	-		
Objectively Verifiable Indicators	a. All disaster recovery works by the target SETMs/SEHMs are planned and implemented according to the disaster recovery manual developed though the Project	b. By February 2024(*2,5) disaster prevention measures are planned and / or implemented at least 5(*3) priority sites in the target SETMs according to the disaster prevention manual developed through the Project	c. From Aug 2020 to Jul 2023 the average duration required for road re-opening per disaster handled by the target SETMs is decreased by 20% compared with the same before the Project (from May 2017 to April 2018)	a. By the end of the Project, 80% of results of the disaster recovery works by the target SETMs/SEHMs, according to the disaster recovery manual developed through the Project, meet requirements of time, cost, quality, and safety specified in the plans	b. By the end of the Project, 80% of the results of the hazard evaluation by all target SEHMs, according to the disaster prevention manual developed through the Project, is assessed accurate by the Japanese Expert Team	c. 80% of results of the disaster prevention measures #2 by Hissor and Sughd SETM and 2 target SEHMs, according to the manual developed through the Project, meet requirements of time, cost, quality and safety specified in the plans.	d. By the end of the Project, budget request for disaster prevention in the target SETMs for FY 2021 is submitted to Ministry of Finance (MOF)
Narrative Summary	Overall Goal Road disasters are mitigated in the International and Republican Roads in the target SETMs/SEHMs		ANNIEV	Project Purpose Capacity of MOT and the target SETMs/SEHMs for effective road disaster management is improved.			<u> </u>

Remarks													
Achievement Remarks	- The report was compiled by the end of June 2017.	- The roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM(RDMT) is clarified.	- RDMT members are actively participating in Outputs 2, 3 and 4 activities and supporting the target SETM and SEHMs RDMT members are monitoring project progress.	 RDMT and the expert in charge discussed on finalizing the improvement plan of disaster management structure in early 2020, and this plan was completed in April 2020. This plan is currently waiting for approval from the MOT senior management. 	- The Road Disaster Recovery Manual Version 1 was submitted to MOT on 18 December 2018	- Over 80% (100% =59/59) of the training participants from all target SETMs/SEHMs passed the post-training test.	 Over 80% (100% = 56/56) of participants passed the post-drill test on May 2018. On June/July 2019, over 80% (100% = 51/51) of participants passed the post-drill test. 	- The on-site drills for simulated road disaster recovery works were conducted and completed on May 2018 and June 2019.	 On July 2019, the planned status of disaster recovery works implemented by C/P at the four SEHMs under the jurisdiction of Sughd SETM was confirmed by Experts, and opinions were exchanged, and advice was given for future improvements. 	- The Experts Team commenced finalization of the manual from June 2020. In July 2020, the feedbacks from the C/Ps were obtained and this is being used for the finalization.	- The road disaster prevention manual for SETM/SEHM was developed by Oct. 2017.	- Over 80% (100% =58 /58) of the training participants from all target SETMs/SEHMs passed the post-training test.	- Hazard evaluation was conducted twice by all target SETM/SEHM for 4 target sections in all target SETMs according to the manual in years 2017, 2018 and 2019, completing 10 sections in
Important Assumption	A. Staff of MOT and the target SETMs/SEHMs trained through the Project do not leave the office in large	numbers											
Means of Verification	Date of report Approval of JCC Joint review based on individual capacity devl	plan 1d. Official approval document			2a. Acceptance letter2b. Test results2c. Ditto	$2d \sim e$ Joint review of the checklist $2e$ Approval letter					3a. Acceptance letter 3b. Test results 3c ~ e	Joint review of the checklist 3f Test results 3g Approval letter 3h ditto	
Objectively Verifiable Indicators	rrent disaster management relevant d the target SETMs/SEHMs is	1b. By July 2017, roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM(RDMT) is clarified.	1c. By the end of the Project, 80% of members of RDMT are able to support SETMs/SEHMs according to their respective roles and responsibilities.	1d. By the end of the Project, an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs, including institutionalization od RDMT, is approved by MOT	2a. By Dec 2017, a road disaster recovery manual for SETM/SEHM/RRT is developed	2b. 80% of the training participants from all target SETMs/SEHMs passes the post-training test on disaster recovery works	2c. 80% of the trainess from all target SETMs/SEHMs passes the post-drill test on disaster recovery works for each job category	2d. Disaster recovery works in the drills are planned and implemented by all target SETMs/SEHMs according to the manual	2e. Disaster recovery works at the actual disaster sites are planned and implemented by all relevant target SETMs/STHMs according to the manual	2f. By the end of the Project, the finalized manual is approved by MOT	3a. By Oct. 2017, a road disaster prevention manual for SETM/SEHM is developed	3b. 80% of the training participants from all target SETMs/SEHMs passes the post-training test on hazard evaluation and locally adaptable prevention measures each	3c. Hazard evaluation is conducted at least twice by all target SETM/SEHM for 10 target sections in all target SETMs according to the manual
Narrative Summary	rget med.	_	_		Output-2: Road disaster recoveries by the target SETMs/SEHMs are	improved through standardization 2		W	(4	CA	Output-3.: Process of locally adaptable road disaster prevention is established		41

Remarke													_
Achievement Remarks	- Based on the results of the site visit, the 4 priority sites in Hissar and Soghd were selected Planning is completed for the sections to be carried out in 2018 and 2019.	- Implementation was successfully completed at 3 priority sites (Varsob, Ayni and Adrason at the end of September 2019. The site at Kohja Obi Garm was completed in October 2019.	- Over 80% (100% = 47/47) of the training participants from the target SETMs/SEHMs passed the post-observation test in December 2018.	- The request for reviewing the final disaster prevention plan was made by 3 target SETMs in May 2020 and the reviewed plan was submitted to MOT. The plan was approved on 18 June 2020.	- Finalization of the manual and subsequent submission of Road Disaster Prevention Manual Ver. 2 to MOT both in English and Russian was made on 25 December 2020.	- The Experts team commenced DB development from the middle of August 2107 in Japan based on the agreed DB system framework. The initial version was completed at the end of October 2017.	- The Experts team submitted Road Disaster DB Manual version 1 to the target SETMs and ITU and RCM of MOT in December 2017.	- Over 80% (100% = 18 /18) of the training participants from all target SETMs/SEHMs passed the post-training test.	- The database was updated on March 2019 and released to MOT and the target SETMs in April 2019.	- The annual road disaster management report utilizing the database was completed and submitted to MOT in April 2019 and April 2020.	- The manual version 3 which was submitted in April 2019 was jointly reviewed by the expert and the C/Ps and the result indicated that the manual and the data collection system were fit for the purpose established under the Project.	- In March 2020, cost estimation skills required for preparing benefits versus cost sheets were organized into technical sheets for the workshop purpose.	
Important Assumption													
Means of Verification						 4a. Comparison with the design 4b. Acceptance letter 4c. Test results 4d. Released date 4e. Report 	4f. Approval letter					5a. Acceptance letter5b. Budget document5c. Proposals submitted	
Objectively Verifiable Indicators	Locally planned l Hissar a manual.	Locally adaptable prevention measures are implemented by 4 target SEHMs at 4 priority sites in Hissar and Soghd SETMs according to the manual	80% of the observers from the other 22 SEHMs passes the post-observation test on implementation	By Mar. 2020. future disaster prevention plans are developed for 10 target sections by all target SETMs	. By the end of the Project, the finalized manuals is approved by MOT	By Dec 2017, road disaster management database (disaster management data collection system) is developed according to the design developed through the Project	By Dec 2017, road disaster management database (data collection system) manuals for users and administrator are developed	80% of the training participants from MOT and the target SETMs passes the post-training test on database (disaster management data collection system) use.	By Mar 2019, the database (disaster management data collection system) is released to MOT and the target SETMs		By the end of the Project, the finalized manual is approved by MOT	By Mar 2020. a report of a pilot study on cost-effectiveness of the locally adaptable disaster prevention is developed	D. d
Narrative Summary		36	3f.	38.	3h.	Output-4.: Data necessary for road disaster management is available for MOT and the target SETMs for budget preparation and disaster recovery	woks and prevention 4b.	46.	4d.	4 9	4f.	able of al for	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption	Achievement	Remarks
	budget proposal for locally adaptable disaster prevention measures are prepared by all target SETM and MOT as part of the regular budget for FY 2022 based on the future development plans			undertaking design, planning and cost estimation by C/Ps with guidance by the Experts Team.	
	5c. By the end of the Project, at least one project proposal for large-scale disaster prevention of the priority site(s) and studies for prevention is submitted by MOT to international donor(s) for funding, utilizing the results of Output 3 and 4			 In March 2020, the Experts Team prepared a project proposal for disaster prevention against major landslide at Sughd SETM in collaboration with the C/Ps. In June 2020, another 2 sites were prepared by Rasht SETM and Hissor SETM with the national staff assisting. 	

(*1): Data necessary for road disaster management includes disaster record, results of hazard evaluation, prevention measures, and recovery works among others.

(*2) Underlined deadlines in the Indicators are set based on the schedule of the Tentative PO. They shall be modified according to the Detailed PO to be prepared in the beginning of the Project for approval by the first JCC.

(*3): Target values (X) of the Indicators shall be filled based on the results of the baseline survey, which shall be reviewed and approved by the 2nd JCC.

(*4): The term "database" is amended to "disaster management data collection system" as approved by the 5th JCC Meeting dated 8 November 2018.

(*5): Underlined deadlines and other dates are amended for R/D extension purpose in May 2020.

Abbreviation:

DI: State Unitary Enterprise "Scientific Research, Design and Survey Institute" FY: Fiscal Year

JICA: Japan International Cooperation Agency MOT: Ministry of Transport

V SEHM: State Enterprise Highway Maintenance
N SETM: State Enterprise Highway Maintenance
N SETM: State Enterprise Transport Management
N RCM: Road Construction Maintenance Department of MOT
N A SETM: State Enterprise Highway Maintenance
N SEHM: State Enterprise Highway Maintenance
N SETM: State Enterprise Highway Maintenance
N SEHM: State Enterprise Highway Maintenance
N SETM:
Output 1: Road disaster management structure of MOT and the target SETMs/SEHMs is strengthened.
Classify the target disasters through collection and analysis of the past disaster records Review organizational and technical aspects of current disaster management relevant to MOT and the target SETMs/SEHMs, including their communication network for disaster Recovery called Rapid Response Team (RRT) Clarify the roles and responsibilities of Road Disaster Management Taskforce supporting SETM/SEHM (RDMT) formed at MOT and its members as well as their canacity development
SETM/SEHM (RDMT) formed at MOT and its members as well as their capacity development plans (*6) Support the target SETMs/SEHMs through the project activities according to the clarified roles and responsibilities (by RDMT) Develop an improvement plan of disaster management structure of MOT and the target SETMs/SEHMs based on the feedbacks from the project activities for approval by MOT
Output 2: Road disaster recoveries by the target SETMs/SEHMs are improved through standardization 2-1. Examine locally adaptable disaster recovery works (*7) based on the current state review (Activity. 1.2) 2-2. Develop a disaster recovery manual for SETM/SEHM and RRT, including action for preparedness, which is used for Activity 2.3-2.5
Conduct trainings on disaster recovery works for all target SETMs/SEHMs and MOT (i.e. action for preparedness, survey selection of works, design, cost estimate, supervision, disaster recovery sheet) (in Hissor and Sughd SETMs) Conduct on -site drills for simulated disaster recovery works for all target SETMs/SEHMs (in Hissor and Sughd SETMs) Conduct on -site drills for simulated disaster recovery works for all target SETMs/SEHMs (in Plan and implement disaster recovery works for the disaster occurred in any target SEHMs by the relevant SEHMs/SETMs Update and finalize the manual, reflecting the feedbacks from Act. 2.3-2.5 Certify Trainers for Disaster Recovery from the target SETMs/SEHMs Localize and finalize the manual, reflecting the feedbacks from Act. 2.3-2.5 Certify Trainers for Disaster Recovery from the target SETMs/SEHMs Examine hazard evaluation methods and locally adaptable prevention measures (*7) based on the current review (Activity 1.2) Develop a road disaster prevention measures, which is used for Activity 3.3-3.10 Conduct hazard evaluation to all target SETM/SEHMs and MOT (i.e. screening, selection of hazard evaluation to all target SETMs/SEHMs and MOT (i.e. screening, selection of hazard evaluation at the target sections by all target SETMs in coordination with the respective SETMs Select the target sections for hazard evaluation in each SETM (*8) Conduct hazard evaluation at the target sections by all target SEHMs in coordination with the respective SETMs Develop a future disaster prevention plan for each target section by the respective SETMs Develop a future disaster prevention plan for each target section by the respective SETMs Develop a future disaster prevention measures #1 & #2 on pilot basis at the priority sites in the target sections selected in the first year (in Hissor and Sughd SETMs) Plan and implement locally adaptable prevention measures #1 & #2 on pilot basis at the priority sites in the target section of measures Design

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Activities	Inputs	Important Assumption
c. Budget preparation		
d. Supervision		
e. Prevention measure sheet		
3-10. Update and finalize the manual, reflecting feedbacks from Activities 3.3-3.9		
3-11. Certify Trainers for Disaster Prevention from the target SETMs/SETMs		
Output 4:		
Data necessary for road disaster management is available for MOT and the target SETMs for		
budget preparation and disaster recovery woks and prevention		
4-1. Develop a plan for road disaster management database (data collection system) based on the		
current state review (Activity 1.2)		
4-2. Design a database (disaster management data collection) system with installed hardware,		
4-3. Develop road disaster management database (data collection system) manuals for users (i.e.		
4-4. Conduct trainings on database (disaster management data collection) use for MOT and all		
target SETMs (i.e. collection, input, compilation, analysis and reporting of data) (at MOT and		
4-5. Collect data of disaster recovery at all target SETMs in 2017 as baseline data in the prescribed		
from improved by the Project		
4-6. Collect data necessary for disaster management from the target SEHMs (i.e. disaster recovery		
sheets, hazard evaluation sheets, end prevention measure sheets)		
4-7. Digitalize the data collected from the target SEHMs by the respective target SETMs for		
submission to MOT		
4-8. Integrate the digitized data submitted by the target SETMs into the database		
4-9. Release the database (disaster management data collection) to MOT and all target SETMs		
4-10. Develop simple annual road disaster management report for senior management of MOT		
4-11. Update and finalize the database (data collection system) design and the manuals, reflecting		
reedbacks from the database users		
Output 5:		
MOI and the target SETIMS/SEHMIS are capable of preparing budget proposal for road		
usasse provinces 1. 1 Dans and invalentation of the deads on coal official and an invalent of the coal and an an account of		
4.2.7 Create a budget item for disaster revenention in the recoular budget of SETM/SEHM/MOT		
5.4 Develor my major proposal(s) on large-graph measures for the priority cite(s) in the		
studies for prevention measures for funding by international donor(s) as needed, utilizing the		
results of Output 3&4		
(*6) RDMT consists of staff of RCM/MOT and DI.		

^(*5) As for soil erosion by floods. The Project will focus on measures under the responsibility of MOT such as rehabilitation of slope protection eroded by floods.

(*7) Locally adaptable prevention measures include prevention works and soft measures such as monitoring for simple early warming.

(*8) Number of hazard evaluation sites would be approximately 100 in the target sections for the first year and approximately 50 in the second and the third years. The length of an inspection site would be approximately 100-300m. Prevention measures are implemented at the priority sites in the target sections selected in the first year.

(*9) The other SEHMs are expected to participate in the prevention measures #1 or #2 as observers. The pilot prevention measures would include both prevention works and soft measures.

Project Title: The Project for Capacity Development for Road Disaster Management in the Republic of Tajikistan Form 3-3 Project Monitoring Sheet (Plan of Operation)

Monitored Date: 31 July 2020

Version 4

Dated 14 July 2020

Remarks Version changes are indicated by rom Version 1 to Version 2 rom Version 2 to Version 3 rom Version 3 to Version 4 Learn about road disaster management Interpreter/Sub Project Coordinator
 & (2) Deputy Chief Advisor/ Road Disaster Deputy Chief Advisor/ Road Disaster Disaster Recovery Measures (Added m June 2020 due to outbreak of Corona Virus Interpreter/Sub Project Coordinator . Institution (Added from March 2020 due to utbreak of Corona Virus Infection) 13. Project Monitoring/ Japan Training 13. Project Monitoring/ Japan Training Hazard Evaluation (Added from March Machineries and Equipment O&M 5. Disaster Prevention Measures 1 Added from March 2020 due to outbreak of Jorona Virus Infection) Disaster Prevention Measures 1 Disaster Prevention Measures 2 . Provision by the Experts Team Chief Advisor/ Road Disaster Disaster Recovery Measures Chief Advisor/ Road Disaster 12. Instrumentation Monitoring Project Coordinator xpert (in Tajikistan) Hazard Evaluation 2. Provision by JICA technology in Japan Cost Estimation Cost Estimation ning in Japan 1. Database 2 11. Database 2 10. Database 1 Janagement 2 **Management** 3. Institution

DI=Design Institute, EAF=Econ Analysis & Forcasting Dpt, ITU=IT Unit, MPEU=Maintenance, Planning & Evaluation Unit, RCM=Road Construction and Maintenance Dept, RCU=Road Construction Unit Issue & Countern asures cost for eqpt, meal Farget FMs/HMs Other Major Inputs Eqpt for Recov, travel & accom cost for Recov. M, Hazard Eva, Prev M, Institution Advisor (CA) Japanese Experts CA, Recov.M &OM Recov M, Cost E, O&M Chief Advisor Road
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Taskforce F
//RDMT(RCM n RDMT (RCM, DI), SETM (RCM, DI), SETM Impleme s(Tajik) SETM, SEHM Chief Engineer level (SETM) level (SETM) Head of MPEU erson Tajik) Head of Head of MPEU RCM Head RCM Responsible Org (Tajik) Overall:MOT Field:SETM 2 3 Month 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 Output 2:Road disaster recoveries by the target SETMs/SEHMs are improved through standardization Output 1:Road disaster management structure of MOT and the target SETMs/SEHMs is strengthened. Actual Plan Plan Plan Plan Plan Plan Plan Plan Plan supporting SETM/SEHM (RDMT) formed at MOT and its members as well as their supervision preparation of disaster Conduct on-site drills for simulated disaster recovery for all target SETMs/SEHMs (in Hissar and Sogd SETMs) MOT (i.e. action for preparedness, survey, Examine locally adaptable disaster recovery works based on the current state review (Actvity. 1.2) Classify target disasters through collection 1.1 and analysis of the past disaster records Support the target SETMs/SEHMs through Update and finalize the manual, reflecting, feedbacks from Act 2.3-2.5 Develop a disaster recovery manual for 2.2 SETM/SEHM/RRT, including action for preparedness, Which is used for Activity 2.2-2.5 selection of works, design, cost estimate, Certify trainers for disaster recovery from 2.7 the staff of the target SETMs/SEHMs Develop an improvement plan of disaster 1.5 management structure of MOT and the target SETMs/SEHMs based on the feedbacks from the project activities for Plan and implement disaster recovery works for the disasters occurred in any target SEHMs by the relevant Clarify the roles and responsibilities of Road Disaster Management Taskforce Conduct trainings on disaster recovery works to all target SETMs/SEHMs and management relevant to MOT and the target SETMs/SEHMs, including their 1.4 the project activities according to the clarified roles and responsibilities (by Review organizational and technical 1.2 aspects of current state of disaster communication network for disaster approval by MOT. SEHMS/SETMS RDMT) Activities 2.1 2.4

o	Output 3: Process of locally adaptable road disaster prevention is established at the target SETMs/SEHMs	ad disaster	prever	ntion is	s establi:	shed at	the tar	get SET	Ms/SEH	Ms						Overall:MOT Field:SETM		_	Chief Advisor	300		RD	RDMT partcipate in the field	
3.1	Examine hazard evaluation methods and 1 locally adaptable prevention measures based on the current state review (Activity	u														RCM/MOT	T Hed of MPEU	RDMT (RCM, SETM	(i)	Prev. M, Hazard Eva, CostE, Monitoring		ğ		
	1.2) Actual	ual																	(Mon					
3.2	Develop a disaster prevention manual for 2 SETM/SEHM, consisting of hazard evaluation and locally adaptable prevention	Ę														RCM/MOT	T Hed of MPEU	RDMT (RCM, SETM	â	Prev M, Hazard Eva, Cost E, Mon				
	measuresm which is used for activity 3.3-Actual	nal														I								
3.3	Conduct trainings on hazard evaluation to 3 all target SETMs/SEHMs and MOT (i.e. screening, selection of hazardous sites.	<u> </u>														SETM	Chief Engineel Ievel (SETM	SETM	Prev Haza	Prev M, ditto Hazard Eva	ditto			
	hazard/risk assessment and preparation of hazard evaluation sheet) (in Hissor and Strivis)	nal														I								
3.4	Select the target sections for hazard 4 evaluation in each SETM Plan	E			I for hazard eva	ard eva		Ĥ.	II for hazard		II for	Ⅲ for hazard	,			SETM	Chief Engineel level (SETM	SETM	Prev Haza	Prev M, PC for Hazard Eva hazard eva, tra			Network connection at TM	
	Actual	nal																		& ac cost SET	& accom for cost for SET SETM/SE HM	for SETM/SE goo HM	needed tor google map/earth	
3.5	Conduct hazard evalatuon at the target 5 sections by all target SEHMs in coordination with the respective target	<u> </u>			ы				В			目				SETM	Chief Engineel level (SETM	SEHM, SETM		Hazard Eva ditto		Fuel, O&M cost, meal allowance		
	SETMs Actual	nal														I					T SET	for SETM/SE HM		
ю.	Identify priority sites in the target sections 3.6 based on the results of the hazard evaluation by the respective target SETMs	<u> </u>							ш							SETM	Chief Engineel level (SETM	SETM SEHM ETM		Hazard Eva ditto				
	Actual	nal																						
3.7	Develop a future disaster prevention plan 7 for each target section by the respective plan target SETMs.	<u>c</u>							1	н		Ħ				SETM	Chief Engineel level (SETM)			Hazard Eva, ditto Prev M, Cost E, Mon		Th wo util	The plans would be utilized in Act 1.7,1.8,	
	Actual	nal																SEHM					m	
3.8	Conduct tainings on locally adaptable 8 prevention, measures to all target SETMs/SEHMs and MOT (i.e. selection of	<u>c</u>														SETM	Chief Engineel Ievel (SETM)	SETM	ditto	Trav accc cost	Travel & Exus accom eqt, cost for eqpt SFTMs/SF allow	Exusting eqt, fuel for eqpt, meal allowance		
	riteasures, design, budget, supervision, preparation of prevention measure sheet, monitoring for simple early warning) (in Hissar and Sogd SETMs)	nal																		Σ Σ	M SET	for SETM/SEH M		
3.9	Plan and implement locally adaptable prevention measures #1 & #2 on pilot basis acrisa	n lei				Ħ										SETM	Chief Engineel	SETM.		Hazard Eva, Eqt for Prev M, Cost prev &	for Fuel,	al, O&M t,		
		u len				#						Ħ				SETM	ditto	SETM	Ŵ H	UQ.	a veti	pair		
	b Design Plan Actual	ın										\parallel				SETM	ditto	SETM						
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	d Supervision Plan	u lei														SEHM	ditto	SEHM				-		
	e Prevention measure sheet Plan	u e				\parallel										SEHM	ditto	SEHM		\vdash				
3.10	Update and finalize the manual, reflecting feedbacks from Activities 3.3-3.9					\parallel									Ħ	RCM/MOT	T Head of MPEU			Hazard Eva, Prev M, Cost				
3.11	Certify trainers for hazard evaluation and prevention measures from the staff of the target SETMs/SEHMs	5														n/a	n/a	n/a		CA, Hazard Eva, Prev M				
	Actual	nal															_	\dashv	\dashv	\dashv				

4. Transception of classifier management of seasons and an administration of seasons on the current state plans. 4. Develop road desister management of seasons and seasons of				
			0	(DB)
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			EAF/MOT Head of ITU (TBD) di	ditto DB software O&M cost and hardware
			EAF/MOT Head of ITU (TBD) di	ditto
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			RCM/MOT Chief SETM (TBD) Ra &SETM Engineer Co	Recov.M, CostE, O&M
			(SETM)	
			SETM (TBD)	Hazrd Eva. Prev M,
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			EAF/MOT Head of ITU (TBD) DB	B PC for DB O&M cost ditto
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			EAF/MOT Head of ITU IT unit (TBD) DB	B O&M cost
Plan Plan Actual Actual		<u> </u>	MOT TBD Ac	Chief Advisor (CA)
out 3, out 3, le	measure		RCM/MOT Head of RDMT PY RCU (RCM, DI), CO SETTM	Prev. M, Travel cost for field
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		<u>C</u>	COMMOT Head of MPEU(TBD) Programmer MPEU COMMOT MPEU	Prev. M. Cost E,
Develop project proposal(s) on large-scale plan prevention measures for the priority site(s) Actual			International (TBD) RDMT Pr Relations (RCM, DI) Co Deot In	Prev. M, Cost E, Institution
Plan Plan				

Monitoring										MOT	Projec Directo				_
0.1 Joint Coordination Committee (J00)	Plan	•		•	•	•	•	•	•	MOT	Project Director	Project Manager	CA, Local Adm		
4	Actual	•		•	•	•	•	•							
0.2 Set-up Detailed Plan of Operation (DPO)	Plan									MOT	Dy Poject Director	act All Mgt r personnel			
	Actual										(DPD)				
0.3 Annual Plan of Operation (APO) based on P	Plan									MOT	ditto	All Mgt personnel	CA		
	Actual														
0.4 Joint Monitoring semi-annually	Plan			•	•	•	•	•	•	MOT	ditto	All Mgt personnel	CA		
•	Actual		•		•	•	•	•	•						
0.5 Semi-annual Monitoring Sheet for submission to JICA Tailkistan Office	Plan			•	•	•	•	•	•	MOT	ditto	All mgt personnel	CA		
	Actual			•	•	•	•	•							
Monitoring Mission from JICA Headquarters P	Plan									JICA	JICA Head quarters	ead Officer in s charge of the Project	fthe		
d	Actual														
Organize information sharing 0.7 seminars/workshops for all target	Plan									MOT	Dy Poject Director (DPD)	ect All Mgt r personnel	CA, all experts in Taiikistan		
	Actual														
Reports/Documents	\ \														
0.8 Inception Report	Plan														
	Actual														
0.9 Progress Report	Plan	•		•	•	•	•	•	•						
	Actual	•		•	•	•	•	•							
0.10 Project Completion Report	Plan									•					
	Actual														
0.11 Establishment and operation of web-site	Plan									JICA			CA		
	Actual														
0.12 Materials for public relations	Plan									MOT	TBD	TBD	CA, Local Adm		
	Actual												Coordinator (LAC)		
Dissemination seminars 0.13 Dissemination seminars	Plan	•								MOT	TBD	TBD	CA, all experts in Taiikistan		
	Actual	•													
Monitoring and Evaluation in the Post-Project period															
JICA	Plan									NICA	TBD	TBD	TBD		
0.15 Post Evaluation by JICA	Plan									JICA	TBD	TBD	TBD		
A	Actual										_	_			_