

Joint Terminal Evaluation Report
on
The Project on Capacity Enhancement for Sustainable
Agriculture and Irrigation Development in Mizoram
in the Republic of India

Joint Terminal Evaluation Team

February 2023

Japan International Cooperation Agency
Economic Development Department

ED
JR
23-021

Index

INDEX	I
PROJECT SITE MAP	III
ABBREVIATION	IV
1. OUTLINE OF THE TERMINAL EVALUATION	1
1-1 OBJECTIVES	1
1-2 SCHEDULE	1
1-3 MEMBERS	1
1-4 EVALUATION METHOD	1
<i>1-4-1 Criteria for Evaluation</i>	2
<i>1-4-2 Data Collection Method</i>	2
2. OUTLINE OF THE PROJECT	3
2-1 BACKGROUND	3
2-2 SUMMARY OF THE PROJECT	3
2-3 COOPERATION PERIOD	5
2-4 IMPLEMENTATION STRUCTURE	5
2-5 TARGET AREA	6
2-6 TARGET GROUP	6
3. RESULT OF THE SURVEY	7
3-1 INPUT	7
<i>3-1-1 Input by Japanese Side</i>	7
<i>3-1-2 Input by Indian Side</i>	8
3-2 PROGRESS OF THE ACTIVITIES	8
3-3 ACHIEVEMENT OF OUTPUTS	13
3-4 ACHIEVEMENT OF PROJECT PURPOSE	24
3-5 PROJECTION OF ACHIEVEMENT OF OVERALL GOAL	26
<i>3-6-1 Impact of COVID-19 pandemic</i>	27
<i>3-6-2 Extension of the project period</i>	27
<i>3-6-3 Communication among Project members</i>	28
<i>3-6-4 Promoting Factor and Inhibiting Factor</i>	28
<i>3-6-5 Relationship with other donor</i>	30

4.	EVALUATION BY THE SIX EVALUATION CRITERIA.....	31
4-1	RELEVANCE.....	31
4-2	COHERENCE.....	32
4-3	EFFECTIVENESS.....	33
4-4	EFFICIENCY.....	34
4-5	IMPACT.....	35
4-6	SUSTAINABILITY.....	36
4-6	CONCLUSION.....	38
5.	RECOMMENDATIONS.....	39
5-1	RECOMMENDATION FOR SLCC, IDC AND BAIDC.....	39
5-2	RECOMMENDATION FOR SAMETI.....	40
5-3	RECOMMENDATION FOR SLCC AND IDC.....	40
6.	LESSON AND LEARNED.....	42

ANNEX 1: Schedule of the Joint Terminal Evaluation

ANNEX 2: List of Key Informants

ANNEX 3: Project Design Matrix Version 3.0

ANNEX 4: Plan of Operation Version 11

ANNEX 5: List of Inputs

5-1 List of experts

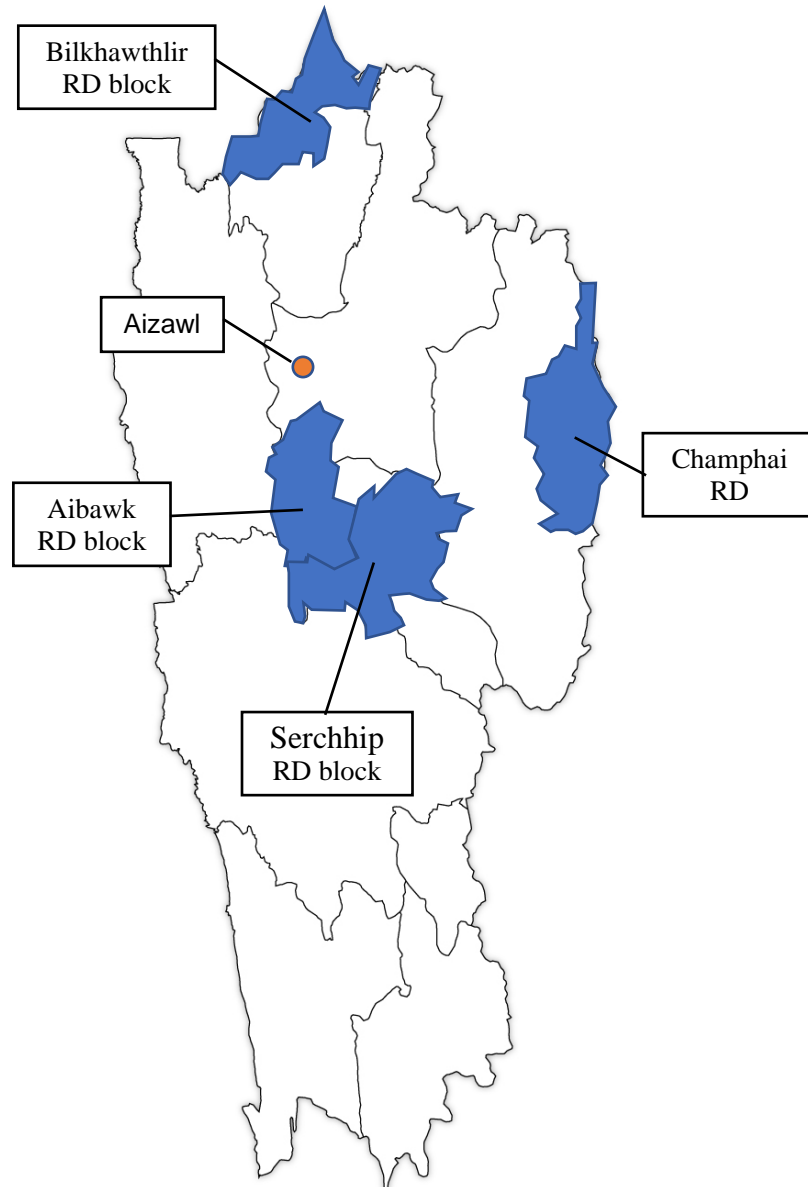
5-2 List of Counterparts

5-3 List of Equipment

5-4 List of Basic Trainings and Workshops

ANNEX 6: Evaluation Grid

Project site map (Mizoram State, India)



Project site: All of Mizoram State

Pilot Rural Development (RD) blocks:

Bilkhawthlir RD block (Kolasib district : Area: 538 km², Population: 58,487)

Aibawk RD block (Aizawl District : Area: 530 km², Population: 17,128)

Champhai RD block (Champhai district : Area: 634 km², Population: 43,040)

Serchhip RD block (Serchhip district : Area: 827 km², Population: 43,242)

Abbreviation

ATMA	Agriculture Technology Management Agency
BAIDC	Block Agriculture and Irrigation Development Committee
C/P	Counterpart
CSS	Centrally Sponsored Scheme
CTO	Core Training Officer
CUDBAS	A Method of Curriculum Development Based on Vocational Ability Structure
DAHV	Department of Animal husbandry and Veterinary
DOA	Department of Agriculture
DOF	Department of Fisheries
DOS	Department of Sericulture
DOH	Department of Horticulture
DPR	Detailed Project Report
FGD	Focus Group Discussion
FOCUS	Fostering Climate Resilient Upland Farming Systems in the North East Project
GIS	Geographic Information System
GOI	Government of India
GOM	Government of Mizoram
IDC	Inter-Departmental Committee
IFAD	International Fund for Agricultural Development
INR	Indian Rupee
IWRD	Irrigation and water resources department
JCC	Joint Coordination Committee
JICA	Japan International Cooperation Agency
JIFAS	JICA Sustainable Farming System
JPT	JICA Project team
JPY	Japanese Yen
KVK	Krishi Vigyan Kendra
LRSWCD	Land Resources, Soil and Water Conservation Department
MAIDA	Mizoram Agriculture & Irrigation Development Authority
MIDH	Mission for Integrated Development of Horticulture
MIP	Minor Irrigation Project
NABARD	National Bank for Agriculture and Rural Development
NAFC	National Adaptation Fund for Climate Change
NSFM	National Food Security Mission
OJT	On-The-Job Training
PDM	Project Design Matrix
PMT	Project Management Team
PO	Plan of Operation
PRA	Participatory Rural Appraisal
RD	Rural Development
R/D	Record of Discussion
RIDF	Rural Infrastructure Development Fund

RKVY	Rashhtriya Krishi Vikas Yojana
SAMETI	State Agricultural Management and Extension Training Institute
SEDP	Socio-Economic Development Policies
SLCC	State Level Coordination Committee
TOT	Training of Trainers
WRC	Wet Rice Cultivation
WUA	Water Users Association

1. Outline of the Terminal Evaluation

1-1 Objectives

Japan International Cooperation Agency (JICA) launched a technical cooperation project “The Project on Capacity Enhancement for Sustainable Agriculture and Irrigation Development in Mizoram” (herein after referred to as “the Project”) in July 2017 to support the Government of India. Since the Project is to be completed in March 2023, JICA dispatched a terminal evaluation team and conducted the joint terminal evaluation survey. The survey is carried out with the aim of reviewing and analyzing the achievement of project purpose and outputs, the implementation process, evaluating the Project in terms of six evaluation criteria and drawing lessons learned and recommendations.

1-2 Schedule

The terminal evaluation survey is conducted from 30 January to 15 February 2023. Details of the survey schedule are shown in Annex 1.

1-3 Members

(1) Indian Side

Name	Affiliation
Dr. James L. T. Thanga	Associate Professor, Department of Economics, Mizoram University
Mrs. Vanlalkhumbiri Chhangte	Research Officer, Planning & Program Implementation Department

(2) Japanese Side

Name	Field	Affiliation
Ms. SADAMOTO Yutori	Team Leader	Deputy Director, Team 3, Agriculture and Rural Development Group 1 Economic Development Department
Mr. HIRAKI Takumi	Cooperation Planning	Team 3, Agriculture and Rural Development Group 1 Economic Development Department
Mr. OKANO Teppei	Evaluation Analysis	Consultant, ICONS Inc.

1-4 Evaluation Method

The terminal evaluation survey was conducted in accordance with the procedure of JICA Guideline for Project Evaluation. The project frameworks to be evaluated are the Project Design Matrix (PDM) version 3.0 revised on 18 February 2019 and the Plan of Operation (PO) version 11 revised on 15 December 2022

1-4-1 Criteria for Evaluation

The evaluation in this survey was conducted using the five evaluation criteria defined by the Organization for Economic Cooperation and Development (OECD) / Development Assistance Committee (DAC) shown in Table 1.

Table 1: Six evaluation criteria

Criteria	Descriptions
Relevance	Relevance is assessed and justified by the project purpose and overall goal in relation with the needs of the beneficiaries, policies of the Government of India and appropriateness of strategy or measures.
Coherence	Coherence is analyzed in terms of consistency with development assistance policies of the government of Japan and JICA, synergy with other projects and consistency with the global framework
Effectiveness	Effectiveness is assessed by evaluating the effect that the Project has achieved and contributed to the beneficiaries.
Efficiency	Efficiency is analyzed by focusing on the relationship between outputs and inputs/activities in terms of timing, quality and quantity.
Impact	Impact is identified and/or projected by referring to direct and indirect, positive and negative impacts caused by the Project.
Sustainability	Sustainability is assessed in political/institutional, organizational, financial and technical aspects by examining the extent to which the achievement of the Project will be sustained and/or expanded after the Project is completed.

1-4-2 Data Collection Method

The following information/data used for the evaluation.

- (1) Review of Documents (Progress report, End line survey report etc.)
- (2) Questionnaire Survey
- (3) Interview Survey
- (4) Direct observations

2. Outline of the Project

2-1 Background

In Mizoram, about 60% of the population is engaged in agriculture, and the rural poverty rate is as high as 35.4% compared to the Indian average of 25.7%. Although agriculture is the main industry in Mizoram, many crops are imported from other states due to low agricultural productivity. For example, rice is the staple food in Mizoram, but only one-third of the annual demand is produced in the state.

Under these circumstances, in response to the request from the Government of India, JICA conducted " the Study on Development and Management of Land and Water Resources for Sustainable Agriculture in Mizoram" from September 2013 to May 2015 and carried out the following activities: 1) formulating a long-term and comprehensive agricultural master plan covering the entire state, 2) developing a project plan for small-scale irrigation projects through inter-departmental collaboration, and 3) developing a project plan for small-scale irrigation projects. Proposed project planning procedures for small-scale irrigation projects. The formulated master plan was officially approved by the Chief Minister of the state in May 2015.

Although the master plan was successfully prepared and operationalized, it was found that the organizational capacity to implement the master plan was still low. Therefore, the Government of India has submitted another request for technical cooperation project "The Project on Capacity Enhancement for Sustainable Agriculture and Irrigation Development in Mizoram" to enhance the capacity of the state government for efficient and effective formulation of plans and implementation of model projects based on the master plan. The R/D were signed in October 2016 and the Project was launched in July 2017.

2-2 Summary of the Project

The project has been implemented based on PDM version 3.0 revised on 18 February 2019. And PO Version 11 revised on 15 December 2022. The outline of the Project is as follows.

(1) Overall Goal

Sustainable agriculture and irrigation development*¹ will be expanded in Mizoram

(2) Project Purpose

Organizational capacity of the Government of Mizoram to promote sustainable agriculture and irrigation development is enhanced

¹ Sustainable agriculture and irrigation development must be economically viable, socially responsible and ecologically sound. These shall be achieved by uplifting the farmers' income with due regard to environmental conservation through proper assessment of farmers' needs, available resources and market opportunities.

(3) Output

1. Methods² for sustainable agriculture and irrigation development are developed.
2. Capacity of the state government officials, in planning and implementation of sustainable agriculture and irrigation development, is enhanced.
3. Collaborative implementation framework among the state government departments, in the field of sustainable agriculture and irrigation development, is established.

1. Activity

<Formulation of draft Methods in the first pilot villages>

- 1-1. Conduct baseline survey (Satellite image, GIS data, land use, farming situation, and socio-economic conditions) in order to understand the current situation of pilot RD blocks.
- 1-2. Collect and analyze existing guidelines, manuals and training materials in specific subjects and draft the methods.
- 1-3. Establish Block Agriculture and Irrigation Development Committee (BAIDC) which will coordinate the project planning, implementation and monitoring at each pilot RD block.
- 1-4. Select one pilot village in each pilot RD block.
- 1-5. Conduct participatory rural appraisal (PRA) and elaborate land use plan, resource management plan, village farming plan and village irrigation plan in each pilot village.
- 1-6. Prepare an implementation plan for each department and implement prioritized activities based on the above plans in each pilot village by utilizing the Project fund and resources.
- 1-7. Monitor and evaluate the progress and results of the activities by BAIDC.
- 1-8. Revise the methods for agriculture and irrigation development according to the results of activities.
- 1-9. Conduct follow-up activities.

<Verification and refinement of the methods in the second pilot villages>

- 1-10. Select two or three pilot villages in each pilot RD block.
- 1-11. Conduct PRA and elaborate land-use plan, resource management plan, village farming plan and village irrigation plan in each pilot village.

² Methods comprise implementing guideline, officers' manuals, and training materials for farmers. The methods will be refined through pilot activities.

- 1-12. Prepare an implementation plan for each department and implement prioritized activities based on the above plans in each pilot village by utilizing the Government fund and resources.
- 1-13. Monitor and evaluate the progress and results of the activities by BAIDC.
- 1-14. Finalize the methods.

<Capacity enhancement of the state government officials>

- 2-1. Assess the technical level of the counterpart (C/P) personnel and set up goals of capacity enhancement.
- 2-2. Conduct study tours to learn domestic and foreign advanced practices.
- 2-3. Conduct basic trainings to the state government field staff
- 2-4. Conduct on the job training (OJT) through activities in the pilot villages.
- 2-5. Verify the achievement of the goals set by C/P personnel.
- 2-6. Organize seminars for the state government field staff working for agriculture and irrigation development in the state to disseminate the outputs of the Project.

<Establishment of collaborative implementation framework among the state government departments>

- 3-1. Prepare a collaboration and cooperation framework (institutional and organizational structure, budget allocation, decision-making process etc.) among state departments relating to agriculture and irrigation development in Mizoram based on the activity 1 and 2.
- 3-2. Elaborate an action plan to expand project outputs to all RD blocks in Mizoram.

2—3 Cooperation Period

July 2017 to March 2023 (Five years and Eight months)

2—4 Implementation Structure

Implementation Agency in the State of Mizoram, India

- Irrigation and Water Resources Department (IWRD)
- Department of Agriculture (DOA)
- Department of Horticulture (DOH)
- Land sources and Soil and Water Conservation Department (LRSWCD)

Other relevant Organization

- Rural Development Department (RDD),

- Commerce and Industries Department (C&ID),
- Department of Forest and Environment (DFE&CC),
- Department of Fisheries (DOF)

2-5 Target Area

- All of Mizoram State
- Pilot Rural Development (RD) blocks: Bilkhawthlir RD block (Kolasib district), Aibawk RD block (Aizawl District), Serchhip RD block (Serchhip district) and Champhai RD block (Champhai district)

2-6 Target Group

【Direct Beneficially】

- The state government officials (IWRD, DOA, DOH, LRSWCD)

【Indirect Beneficially】

- Farmers at the pilot RD blocks and other relevant organizations.

3. Result of the Survey

3-1 Input

3-1-1 Input by Japanese Side

Table 2 shows the comparison of the input planned in PDM version 3.0 revised in 18 February 2019 and the actual inputs from the Japanese side.

Table 2: Input by Japanese side

Plan (PDM version 3.0)	Actual (as of January 2022)										
1) Experts: - Chief Advisor/ Development Planning - Irrigation / O&M / Farmers' Organization (1) - Food Crop Cultivation Technologies and Farmers' Organization (2) - Cash Crop Cultivation Technologies (1) - Cash Crop Cultivation Technologies (2) - Marketing - Land Use and Resources Management - Environmental and Social Considerations - Project Coordinator/Training	[Japanese Experts] The following experts were dispatched (Total 157 P/M) - Chief Advisor / Development Planning - Irrigation / Operation & Maintenance (O&M) / Farmers' Organization (1) - Food Crop Cultivation Technologies and Farmers' Organization (2) - Cash Crop Cultivation Technologies (1) - Cash Crop Cultivation Technologies (2) - Marketing - Land Use and Resources Management - Environmental and Social Considerations - Design /Construction Management										
2) Equipment - Satellite image map (if necessary) - Machineries and equipment necessary for offices, surveys, activities in the pilot villages	[Equipment] Machinery and equipment such as Copying machines, Multifunction printers, Projectors, Video camera, Desktop PCs, Generators, Video conference equipment with a total cost of approximately 7,228,000 JPY were provided.										
3) Training - Training in other states India - Training in Japan	[Training in Japan] 18 counterpart personnel participated in the training in Japan. (8 people in 2018 and 10 people in 2019) <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Title of Training</th> <th style="text-align: center;">Duration</th> </tr> </thead> <tbody> <tr> <td>Capacity enhancement training on agriculture extension and irrigation development and management in hilly area</td> <td style="text-align: center;">Sep-Oct 2018</td> </tr> <tr> <td>Capacity enhancement training on agriculture extension, irrigation development and management and food crop cultivation in hilly area</td> <td style="text-align: center;">Sep 2019</td> </tr> </tbody> </table> One scheduled training in Japan was cancelled due to travel restrictions imposed by COVID-19.	Title of Training	Duration	Capacity enhancement training on agriculture extension and irrigation development and management in hilly area	Sep-Oct 2018	Capacity enhancement training on agriculture extension, irrigation development and management and food crop cultivation in hilly area	Sep 2019				
Title of Training	Duration										
Capacity enhancement training on agriculture extension and irrigation development and management in hilly area	Sep-Oct 2018										
Capacity enhancement training on agriculture extension, irrigation development and management and food crop cultivation in hilly area	Sep 2019										
4) Project operation cost	[Project operation cost] <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Period</th> <th style="text-align: center;">Amount (JPY)</th> </tr> </thead> <tbody> <tr> <td>July 2017 to July 2018:</td> <td style="text-align: right;">17,598,000</td> </tr> <tr> <td>August 2018 to August 2021:</td> <td style="text-align: right;">73,829,000</td> </tr> <tr> <td>October 2021 to March 2023:</td> <td style="text-align: right;">32,192,000</td> </tr> <tr> <td colspan="2" style="text-align: center;"><u>Total JPY 123,619,000 (INR 76,831,140)³</u></td> </tr> </tbody> </table>	Period	Amount (JPY)	July 2017 to July 2018:	17,598,000	August 2018 to August 2021:	73,829,000	October 2021 to March 2023:	32,192,000	<u>Total JPY 123,619,000 (INR 76,831,140)³</u>	
Period	Amount (JPY)										
July 2017 to July 2018:	17,598,000										
August 2018 to August 2021:	73,829,000										
October 2021 to March 2023:	32,192,000										
<u>Total JPY 123,619,000 (INR 76,831,140)³</u>											

³ INR 1= JPY 1.608970 / JICA Monthly exchange rate in January 2023

(Source: Project report)

3-1-2 Input by Indian Side

Table 3 shows the comparison of the input planned in PDM version 3.0 revised in 18 February 2019 and the actual inputs from the Indian side.

Table 3: Input by India side

Plan (PDM version 3.0)	Actual (as of January 2023)										
1) Personnel - Counterpart (C/P) personnel of related departments	[Allocation of Counterpart Personnel] A total of 61 counterpart personnel since 2017 - IWRD :15 people - DOA :16 people, - DOH :17 people, - LRSWCD :13 person The breakdown of the above C/P members is Project Management Team (PMT):15 people, Core Training Officer (CTO):8 people, Aibawk BAIDC member 15 people, Camphai BAIDC member:11 people and Bilkjawthlir BAIDC member:12 people. 50 of these personnel are active as of January 2023.										
2) Equipment/facilities - Office space at MID Aizawl, Kolasib, Serchhip and Champhai	[Project Office and necessary Equipment] Office space with furniture for Japanese experts and BAIDC in 5 locations as follow - JICA Project Team office : Aizawl city - Bilkhawthlir BAIDC : Kolasib town - Serchhip BAIDC : Serchhip town - Champhai BAIDC : Champhai town - Aibawk BAIDC: Aizawl city										
3) Others - Travel expenses and allowances for C/P personnel	[Other expenses] Necessary expenses and allowance are provided.										
4) Counterpart budget	[Budget for the project activities] <table border="1"> <thead> <tr> <th>Period</th> <th>Amount (INR)</th> </tr> </thead> <tbody> <tr> <td>July 2017 to July 2018:</td> <td>138,000</td> </tr> <tr> <td>August 2018 to August 2021:</td> <td>11,537,491</td> </tr> <tr> <td>October 2021 to March 2023:</td> <td>4,634,644</td> </tr> <tr> <td colspan="2">Total INR16,310,135 (JPY 26,242,518)⁴</td> </tr> </tbody> </table>	Period	Amount (INR)	July 2017 to July 2018:	138,000	August 2018 to August 2021:	11,537,491	October 2021 to March 2023:	4,634,644	Total INR16,310,135 (JPY 26,242,518) ⁴	
Period	Amount (INR)										
July 2017 to July 2018:	138,000										
August 2018 to August 2021:	11,537,491										
October 2021 to March 2023:	4,634,644										
Total INR16,310,135 (JPY 26,242,518) ⁴											

(Source: Project report)

3-2 Progress of the Activities

The project was originally planned as five-years project, from July 2017 to July 2022. However, due to various restrictions on traveling and meeting, etc. caused by COVID-19 pandemic since March 2020, it was difficult to implement the activities on schedule. As a result of discussions among the JICA Project Team (JPT), PMT, and JICA, the project period has been extended by eight months to

⁴ INR 1= JPY 1.608970/JICA Monthly exchange rate in January 2023

March 2023. During the extended period, the Project focus on the activities related to Output2 and Output 3, to expand the coverage area by disseminating the BAIDC system (JIFAS). Table 4 shows the progress of the activities.

Table 4: Progress of activity

Activity	Progress
<Formulation of draft Methods in the first pilot villages>	
1.1 Conduct baseline survey (Satellite image, GIS data, land use, farming situation, and socio-economic conditions) in order to understand the current situation of pilot RD blocks.	<p>【Completed】</p> <ul style="list-style-type: none"> • GIS data analysis was carried out to understand hydrological and geographical condition of pilot RD blocks • Pre baseline survey and base line survey were conducted by the Mizoram University and necessary socio economic and agriculture data by village were collected and compiled.
1.2 Collect and analyze existing guidelines, manuals and training materials in specific subjects and draft the methods.	<p>【Completed】</p> <ul style="list-style-type: none"> • The working groups were formed to help the PMT for discussion and drafting the Method with the aspect of crop production, farmers’ organization, irrigation and overall implementation procedure. • Following drafts of Methods were compiled under this activity. <ul style="list-style-type: none"> ➢ Implementation guideline ➢ Officers’ Manual <ul style="list-style-type: none"> - Construction Management - Strengthening of Water Users Association (WUA) for O&M of Minor Irrigation Project - Manual for Improving Agricultural Extension ➢ Training Material
1.3 Establish Block Agriculture and Irrigation Development Committee (BAIDC) which will coordinate the project planning, implementation and monitoring at each pilot RD block.	<p>【Completed】</p> <ul style="list-style-type: none"> • 4 BAIDC are established in pilot RD blocks • PMT was established in State level • BAIDC Serchhip was dissolved based on the recommendation made by the JICA Review Mission in 2019
1.4 Select one pilot village in each pilot RD block.	<p>【Completed】</p> <ul style="list-style-type: none"> • 4 pilot villages were selected with discussion among BAIDC and approved by PMT. <ul style="list-style-type: none"> ➢ Buhchangphai (Bilkhawthlir RD Block) ➢ Sailam (Aibawk RD Block) ➢ Serchhip II (Serchhip RD Block) ➢ Hnahlan (Champhai RD Block)
1.5 Conduct participatory rural appraisal (PRA) and elaborate land use plan, resource management plan, village farming plan and village irrigation plan in each pilot village.	<p>【Completed】</p> <ul style="list-style-type: none"> • PRA workshops were conducted with BAIDC member for 4 pilot villages as follows. <ul style="list-style-type: none"> ➢ 11 Dec. 2017 Buhchangphai ➢ 17 Nov. 2017 Sailam ➢ 21 Nov. 2017 Serchhip II ➢ 1 Dec. 2017 Hnahlan
1.6 Prepare an implementation plan for each department and implement prioritized activities based on the above plans in each pilot village by utilizing the Project fund and resources.	<p>【Completed】</p> <ul style="list-style-type: none"> • BAIDC Annual Activity Plan 2018 were prepared for 4 villages. Total 20 projects were listed in the plan. • 19 projects out of 20 projects listed on the BAIDC Annual Activity Plan 2018 were implemented including DPR

	<p>preparation in infrastructure related activities.</p> <ul style="list-style-type: none"> • The BAIDC Annual Activity Plan for 2019 including 10 projects in 4 villages were formed in February 2019 and implemented accordingly.
1.7 Monitor and evaluate the progress and results of the activities by BAIDC.	<p>【Completed】</p> <ul style="list-style-type: none"> • Feedback meeting at 4 pilot villages were conducted in Feb. 2019. • The progress review meeting for BAIDC Annual Activity Plan 2019 was held every two months. • Feedback meeting with farmers and BAIDC member was conducted in 1st pilot villages. • The overall wrap up meeting for 1st pilot was carried out with concern government official on 21 May 2020.
1.8 Revise the methods for agriculture and irrigation development according to the results of activities.	<p>【Completed】</p> <ul style="list-style-type: none"> • The Implementation Guidelines and Officers' Manual were revised by the Core Training Officers appointed to the JPT and PMT. • On-line test was conducted for officers' manual as follows. <u>Manual for Improving Agricultural Extension"</u> • The online test was conducted in May to June 2020 • 17 BAIDC members joined in the online test and 15 BAIDC members who obtained 90% or above of the total score were eligible to receive the certificate <u>Manual for "Construction Management" and "Strengthening of WUA for O&M of MIP"</u> • The online test was conducted on July 2020 • 13 BAIDC members joined in the online test and 13 BAIDC member who obtained 90% or above of the total score were eligible to receive the certificate.
1.9 Conduct follow-up activities.	<p>【Completed, but inefficient implementations】</p> <ul style="list-style-type: none"> • The follow-up activities were carried out by BAIDC from May 2020 for the following villages with 7 projects. <ul style="list-style-type: none"> ➢ Buhchangpai (3 projects) ➢ Sailam (2 projects) ➢ Hnahlan (2 projects) • Agriculture Technology Management Agency (ATMA) and JPT conducted on-site training on the preparation of Organic Manure 'Bokashi' to the WRC farmers from 2nd Pilot village Lamchhip in July 2022. • To enhance and facilitate the activities of WUA from the 1st and 2nd Pilot Villages, checking the conditions of the Irrigation facilities were carried out during July 2022. • To enhance and facilitate the cultivation activities of WUA from the 1st and 2nd Pilot Villages, farmers were provided with seeds in October 2022. • The follow-up activities in 1st pilot village were not carried out as planned due to the travel and meeting restrictions caused by COVID-19 pandemic.
<Verification and refinement of the methods in the second pilot villages>	
1.10 Select two or three pilot villages in each pilot RD block.	<p>【Completed】</p> <ul style="list-style-type: none"> • With recommendation of operational instruction survey by JICA HQ, the number of pilot villages reduced to one per RD block. • The following three villages were selected by BAIDC and

	<p>approved by PMT.</p> <ul style="list-style-type: none"> ➤ Bilkhawthlir North (Bilkhawthlir RD Block) ➤ Lamchhip (Aibawk RD Block) ➤ Tlangsam (Champhai RD Block)
1.11 Conduct PRA and elaborate land-use plan, resource management plan, village farming plan and village irrigation plan in each pilot village.	<p>【Completed】</p> <ul style="list-style-type: none"> • Core Training Officers supervised and BAIDC conducted the activities. • The awareness meeting on sustainable land use and resources management with the discussion of village agriculture development vision were carried out in three villages. <ul style="list-style-type: none"> ➤ Bilkhawthlir North (18 Oct. 2019) ➤ Lamchhip (15 Oct. 2019) ➤ Tlangsam (22 Oct. 2019)
1.12 Prepare an implementation plan for each department and implement prioritized activities based on the above plans in each pilot village by utilizing the Government fund and resources.	<p>【Completed】</p> <ul style="list-style-type: none"> • Core Training Officers supervised and BAIDC conducted the activities. • After joint field survey, BAIDC have prepared BAIDC annual activity plan 2020 for 3 villages. <ul style="list-style-type: none"> ➤ Bilkhawthlir North (4 Nov. 2019) ➤ Lamchhip (15 Nov. 2019) ➤ Tlangsam (19 Nov. 2019) • The annual activity plans were submitted to PMT in November 2019 and PMT made comments for refining. • The plan was officially approved and the necessary budget for implementation of BAIDC annual activity plan 2020 and 2021 are provided. • The fund allocation to irrigation works was delayed due to COVID-19 pandemic
1.13 Monitor and evaluate the progress and results of the activities by BAIDC.	<p>【Completed, but inefficient implementations】</p> <ul style="list-style-type: none"> • Due to the travel restriction of Japanese expert to India, monitoring of the activities was carried out by national expert of JPT in the field. • Inefficient implementations are observed due to the travel and meeting restrictions caused by COVID-19 pandemic. • The Japanese and national expert were conducting video-conferencing every week and confirm the progress, schedule and issues. Although there is delay in some activities due to lockdown and delay in budget arrangement, 89% of the activities are carried by BAIDC member. • OJT and Off-JT for agriculture extension and construction management are in the process.
1.14 Finalize the methods.	<p>【Completed】</p> <ul style="list-style-type: none"> • Implementation guideline and officers' manual were finalized and print. • Since some aspects of the verification in the 2nd pilot activity were found to be insufficient, it was decided to revise it periodically in the future.
Activity 2	
<Capacity enhancement of the state government officials>	
2.1 Assess the technical level of the counterpart (C/P) personnel and set up goals of capacity enhancement.	<p>【Completed】</p> <ul style="list-style-type: none"> • Conduct Curriculum Development Based on Vocational Ability Structure (CUDBAS) workshop and follow up workshop with PMT and BAIDC member on 8 August and

	<p>31 October 2017 respectively.</p> <ul style="list-style-type: none"> • Total 41 personnel prepared their skills development target based on the assessment of their technical level during the workshop. • Questionnaire is given to each BAIDC member to self-grade their technical skill in the priority items they themselves have selected, which is assessed annually by JPT.
2.2 Conduct study tours to learn domestic and foreign advanced practices.	<p>【Completed】</p> <ul style="list-style-type: none"> • “Capacity enhancement training on agriculture extension and irrigation development and management in hilly area” was carried out in Tokushima Prefecture in Japan for 12 days in September and October 2018. Eight officers participated in the training. • “Capacity enhancement training on agriculture extension, irrigation development & management and food crop cultivation in hilly area” 15 days in September 2019. Ten officers participated in the training. • Wrap-up meeting were held to share the experiences in training in Japan.
2.3 Conduct basic trainings to the state government field staff	<p>【Completed】</p> <ul style="list-style-type: none"> • Basic trainings and workshops were implemented during the project period as shown in Annex5-4. • Core Training Officers (CTO) were assigned and trained to ensure that Mizoram personnel proactively continue to strengthen their skills. • During COVID-19 period, on-line trainings were provided to counterparts but it is not effective due to poor connectivity • Additional training was also provided to officials in all RD blocks to implement the Action Plan. However, timely implementation was difficult due to COVID-19.
2.4 Conduct on the job training (OJT) through activities in the pilot villages.	<p>【Completed, but inefficient implementations】</p> <ul style="list-style-type: none"> • OJT, through pilot activities in the 1st pilot villages and 2nd pilot villages were conducted. • Due to the travel restriction of Japanese experts to India, the opportunities of OJT in 2nd pilot village were limited.
2.5 Verify the achievement of the goals set by C/P personnel.	<p>【Completed】</p> <ul style="list-style-type: none"> • The technical level is self-evaluated, and a score of 1 to 5 is given, and the field of capacity enhancement and the technical level were evaluated every year. • Initially, monitoring of this technical level was started for 76 people, but due to frequent changes of BAIDC members, 22 people have been able to continue monitoring since 2017. • The evaluation was carried out during endline survey period. Compare to self-rating score between 2017 and 2021, 80% of PMT increase the skills
2.6 Organize seminars for the state government field staff working for agriculture and irrigation development in the state to disseminate the outputs of the Project.	<p>【Completed】</p> <ul style="list-style-type: none"> • The 1st seminar to share the achievements and JIFAS was carried out with the presence of Minister / Secretary of DOA and IWRD on 6 January 2022. • The 2nd seminar was held in 31 January 2023.
Activity 3	
3.1 Prepare a collaboration and cooperation framework (institutional and	<p>【Completed】</p> <ul style="list-style-type: none"> • Necessary actions for establishment of collaboration and

<p>organizational structure, budget allocation, decision-making process etc.) among state departments relating to agriculture and irrigation development in Mizoram based on the activity 1 and 2.</p>	<p>cooperation framework were discussed in the PMT meeting on 28 May 2019.</p> <ul style="list-style-type: none"> • The road map for institutionalization of “method” and “BAIDC functions” including establishment of collaboration and cooperation framework was prepared by PMT and approved by the 4th JCC on 22 November 2019. • Sensitization workshop was conducted in four departments. • Based on the recommendation of sub-committee headed by Planning Secretary, the Inter Departmental Committee (IDC) and State Level Coordination Committee (SLCC) for JIFAS operation are officially established in November 2022.
<p>3.2 Elaborate an action plan to expand project outputs to all RD blocks in Mizoram.</p>	<p>【Completed】</p> <ul style="list-style-type: none"> • Based on the approved action plan, BAIDC in 6 RD blocks in 1st batch were formed and BAIDC annual activity plan for 2022/23 for 25 villages were prepared in May 2022 • Progress Review Meeting were conducted with the 1st Batch in the 6 RD blocks. During the meeting, BAIDC members were also presented and reiterated the various manuals. • Guidelines for Irrigation Project, Manual for Improving Agricultural Extension. Progress review meeting were conducted in each RD blocks in October 2022. • Preparation of BAIDC Annual Activity Plan 2023-24 (Batch-2) was conducted for 10 RD Blocks in October 2022. BAIDC members selected their priority villages and prepared the BAAP based on the availability of CSS and SSS. • Ratification of BAAP 2023-24 (Batch-2) for 10 RD Blocks were conducted from November to December 2022. BAIDC members from 2nd Batch each explain and provided information to the village leaders and farmers. • Sensitization program was conducted in 4 departments

(Source: Project report)

3–3 Achievement of Outputs

The activities of the Project were implemented in line with the PO, and the all indicators set for Outputs 1, 2 and 3 were achieved. Table 5 shows the status of the achievement of outputs.

Table 5: Status of achievement of Output

	Verifiable Indicator	Status of achievement
<p>Output 1</p>	<p>1-1 Production of food crop is increased by 12.5% in pilot farmers in the first pilot villages.</p>	<p>Achieved</p>
	<p>1-2 Farm income of cash crop is increased by 12.5% in the pilot farmers (excluding orchard or plantation farmers) in first stage pilot villages.</p>	<p>Achieved</p>
	<p>1-3 50% of the technologies practiced in the pilot farmers are disseminated to other farmers in the first pilot villages</p>	<p>Achieved</p>
	<p>1-4 More than 80% of village plan are implemented in the first pilot villages.</p>	<p>Achieved</p>
	<p>1-5 Activities are commenced based on BAIDC annual plan in the second stage pilot villages by utilizing the budget of Indian central/Mizoram gov.</p>	<p>Achieved</p>
<p>Output 2</p>	<p>2-1 More than 60% of the nominated counterparts achievement goal set by them.</p>	<p>Achieved</p>

	2-2 More than 50% of BAIDC and PMT members acquire necessary skills for implementation of sustainable agriculture and irrigation development	Achieved
Output 3	3-1 Action plan to expand project output to all RD blocks in Mizoram is prepared by PMT	Achieved

(1) Achievement of Output 1

Output 1. Methods for sustainable agriculture and irrigation development are developed.

Indicator 1-1: Production of food crop is increased by 12.5% in pilot farmers in the first pilot villages.

【Achieved】

- The average yield for 3 years for 12 WRC pilot famers in 3 villages are achieved 4,455 kg/ha which is **60.4% higher** than productivity of controlled farmers' average of 2,777 kg/ha

The 1st pilot villages subject to indicator 1-1 are the following 4 villages in 4 BAIDC. The activity plan for each pilot village is shown in the table below.

Table 6: The activity plan in 1st Pilot Villages.

Village	Target Area	IN No.	Name of Project	Department in charge
Buhchangphai	Settled Slope	BU-01	Improvement of areca nuts productivity	DOA / KVK
		BU-02	Improvement of bloom grass productivity	LRSWCD
	WRC	BU-03	Improvement of WRC area productivity	DOA IWRD
Sailam	Settled Slope	SA-02	Support for transition from Jhum to settled farming	DOH
		SA-03	Improvement of orange productivity	DOH
	WRC	SA-05	Improvement of WRC area productivity	DOA DOA IWRD
Sechhip II	WRC	SE-03	Rehabilitation of Lumtui MIP	IWRD
Hnahlan	<i>Jhum</i>	HN-01	Improvement of Jhum cultivation	LRSWCD DOA
	Settled Slope	HN-02	Promotion of vegetable cultivation in grape field	DOH IWRD
	WRC	HN-04	Improvement of WRC area productivity	DOA DOH

(Source: Project report)

Some of these pilot activities aim to increase food production in the Wet Rice Cultivation (WRC) through sustainable cultivation and irrigation techniques. For this reason, "Production of food crop"

set in this indicator is measured by the amount of increase in rice production by WRC in 1st pilot villages. The base figure for “the increase” in the indicator is the production of rice of randomly selected "control farmer" in the endline survey. The comparison between the "controlled farmers" and "pilot farmers” confirms the result of the intervention on the target farmers. Note that BAIDC Serchipp was not included in the endline survey because it is no longer in the target area of the activity. Therefore, comparisons were made on the changes in yields in 3 villages. The result shows that the average yield for 3 years for 12 WRC pilot famers in 3 villages are achieved 4,454.99 kg/ha which is 60.4% higher than productivity of controlled farmers’ average of 2,777.10 kg/ha. Thus, the indicator 1-1 has been achieved.

Table 7: Production in the WRC in 1st Pilot Villages.

Year	Pilot (A)		Controlled (B)		Difference b/w A and B (%)
	No.of cases	Average production (kg/Ha)	No.of cases	Average production (kg/Ha)	
2018-2019	11	4250.46	12	2676.51	58.8
2019-2020	12	4961.75	12	2830.45	75.3
2020-2021	12	4135.72	12	2824.33	46.4
3years		4454.99		2777.10	60.4

(Source: Endline survey report)

Indicator 1-2: Farm income of cash crop is increased by 12.5% in the pilot farmers (excluding orchard or plantation farmers) in first stage pilot villages.

【Achieved】

- The cash income of pilot farmers and controlled farmers are INR121,433 and INR88,917 respectively in average. The income of pilot farmers is **36.5% higher** than the one of controlled farmers.

Indicator 1-2 measures the extent to which farm income is improved by cash crop production. Pilot farmers grow cash crops and other crops together, making it difficult to estimate the amount of cash crop production on cultivated land. Therefore, the endline survey team analyzed the data on the increase in farm income from cash crop production. For the purpose, farm income from the sale of cash crops grown by the pilot farmers was studied, and an equal number of other cash crop growers were sampled for comparison. The cash crops surveyed included, Sweet Corn, French Bean, Tomato, Mizo Chili, Mustard Leaf, Mock Tomato, Chana, Potatoes, and Cowpea leaf. Crops which have been grown prior to the start of the Project, such as Oranges, Arecanuts, and Bloom, were excluded from the analysis, as it was considered difficult for the project activities to have an immediate impact on production. The table below shows that the income of the pilot farmers is 36.5% higher than that of

the control farmers.

Table 8: Annual income from Cash crops in 1st Pilot Villages.

in Rupees

	2018-2019		2019-2020		2020 -2021		3 years average	
	Control	Pilot	Control	Pilot	Control	Pilot	Control	Pilot
Annual Income by Cash Crop	104,050	203,650	95,550	103,150	67,150	57,500	88,917	121,433
Difference	95.7%		7.9%		-14.3%		36.5%	

Cash Crop: Broom, Sweet Corn, French Bean, Tomato, Mizo Chili, Mustard Leaf, Mock Tomato, Chana, Potatoes, Cowpea leaf

(Source: Endline survey report)

It can be seen from the table that the income of the pilot farmers has decreased in 2020-2021. According to the pilot farmers, the reasons are restriction caused by COVID-19 pandemic and natural factors such as insect infestation. In the meantime, at the Focus Group Discussion (FGD) meeting held on 21 November 2021, it was noted that cash crop production has improved significantly due to the implementation of the JICA project. The productivity of the varieties introduced by JPT was also highly appreciated. Therefore, it is assumed that the Project had a positive impact on increasing farmers' income from cash crops.

Indicator 1-3: 50% of the technologies practiced in the pilot farmers are disseminated to other farmers in the first pilot villages

【Achieved】

- Out of 21 major skills provided to pilot farmers, 14 skills (66.7%) are disseminated to others in cultivation technologies.
- Out of 42 skills in total provided in 3 pilot villages, 26 skills (61.9 %) are rooted in WUA

This indicator measures the extent to which the technologies transferred by the Project have been disseminated from the pilot farmers to other farmers. According to the endline survey, 14 out of a total of 21 technologies for cultivation were reported to have been disseminated to other farmers. Among 42 key technologies (14 technologies / village) transferred to the WUA, 26 key technologies achieved at least 75% of their planned targets, indicating that the technologies are being adopted and utilized.

The survey was conducted to determine whether pilot farmers learned the new technology and disseminated it to other farmers through FDG. The results are shown in the table below. Technologies that had not been disseminated to other farmers tended to be less well understood by the pilot farmers.

The results showed that the technologies related to “Promotion of vegetable cultivation in grape fields” in Hnahlan and “Improvement of WRC area productivity” in Buhchangphai have not been widely disseminated to other farmers.

Table 9: List of technology introduced in 1st Pilot Villages.

ID	Activity		Technology	Dissemination to other farmers
HN-03	Improvement of WRC area productivity	1	Nursery Management (shifting from Jhum type nursery)	Yes
		2	Line transplanting	Yes
		3	Weeding at the proper time	Yes
HN-02	Promotion of vegetable cultivation in grape fields	4	Selection of marketable vegetable	No
		5	Raising of vegetable seedlings	No
		6	Proper fertilizer application	No
BU-03	Improvement of WRC area productivity	7	Nursery Management	No
		8	Line transplanting	No
		9	Weeding at the proper time	No
BU-01	Improvement of arecanut productivity	10	Nursery preparation for raising healthy arecanut seedlings	Yes
		11	Inter crop cultivation (banana)	Yes
		12	Construction of half-moon terrace	Yes
BU-02	Improvement of Broom Grass productivity	13	Selection of Phiahpui variety to meet a market need	Yes
		14	Proper time of harvesting to sell Grade 1 quality products	Yes
		15	Contour line planting	No
SA-04	Improvement of WRC area productivity	16	Nursery Management	Yes
		17	Line transplanting	Yes
		18	Weeding at the proper time	Yes
SA-03	Improvement of orange productivity	19	Pruning and training	Yes
		20	Construction of half-moon terrace	Yes
		21	INM and IPM	Yes

(Source: Endline survey report)

Regarding technology transfer to WUAs, 14 key technologies were transferred to WUAs in the three regions. The status of the establishment of each technology is shown in the table below.

Table10: List of technology introduced in 1st Pilot Villages.

WUA	Key Activities		Key Technologies	Achievement
1. Lantui MIP, Water User Association –	Water User Association (WUA)	1	Establishment and registration of WUA	100%
		2	Awareness of role and responsibilities of WUA	75%
		3	Financial management and book keeping	100%
	Community Managed Consutrcution Work	4	Management of manpower, machinery & material supply	75%
		5	Quality control of construction works	100%
		6	Monitoring and recording of the works	100%
		7	Financial management and book keeping	100%

	Operation of Irrigation Facilities	8	Water distribution plan	50%	
		9	Normal operation and emergency measures	75%	
		10	Water management at on-farm level	75%	
		11	Measurement and recording	50%	
	Maintenance for irrigation system	12	Preparation of maintenance plan	50%	
		13	Maintenance activities, cleaning and repair works	75%	
		14	Collection of water fee and budget allocation	50%	
	2. Tuikhurui MIP, Water User Association – Butchangphai	Water User Association (WUA)	15	Establishment and registration of WUA	100%
			16	Awareness of role and responsibilities of WUA	100%
			17	Financial management and book keeping	100%
		Community Managed Construction Work	18	Management of manpower, machinery & material supply	50%
			19	Quality control of construction works	75%
			20	Monitoring and recording of the works	75%
			21	Financial management and book keeping	75%
Operation of Irrigation Facilities		22	Water distribution plan	75%	
		23	Normal operation and emergency measures	50%	
		24	Water management at on-farm level	75%	
		25	Measurement and recording	50%	
Maintenance for irrigation system		26	Preparation of maintenance plan	75%	
		27	Maintenance activities, cleaning and repair works	75%	
		28	Collection of water fee and budget allocation	50%	
3. Dihanui, Water User Association – Hnahlan	Water User Association (WUA)	29	Establishment and registration of WUA	100%	
		30	Awareness of role and responsibilities of WUA	75%	
		31	Financial management and book keeping	100%	
	Community Managed Construction Work	32	Management of manpower, machinery & material supply	75%	
		33	Quality control of construction works	50%	
		34	Monitoring and recording of the works	50%	
		35	Financial management and book keeping	50%	
	Operation of Irrigation Facilities	36	Water distribution plan	75%	
		37	Normal operation and emergency measures	50%	
		38	Water management at on-farm level	75%	
		39	Measurement and recording	25%	
	Maintenance for irrigation system	40	Preparation of maintenance plan	50%	
		41	Maintenance activities, cleaning and repair works	50%	
		42	Collection of water fee and budget allocation	25%	

(Source: Endline survey report)

1-4 More than 80% of village plan are implemented in the first pilot villages.

【Achieved】

- Out of 82 activities under 7 following up 1st pilot projects, 79 activities (96%) are implemented

Indicator 1-4 measures the implementation of the pilot project activities implemented in the 1st pilot village. For each of the activities planned in the seven projects implemented, the survey asked whether they were implemented or not. The results showed that out of a total of 82 activities, 79 activities were implemented as planned (96.3%).

Of the three activities that were not implemented, “Field Investigation, topographic survey for development of terraces and construction” on HN-02 was due to lack of funds; “Evaluation” on BU-

01 was due to difficulties in assessing the areca nuts harvest, which takes 5-7 years; and “Make strategy on above subject” on BU-03 was assumed to be due to the fact that the WRC cultivation did not proceed as they had expected.

Table 11: Implemented activities in 7 following up 1st pilot projects

		Pilot Project	Planned Activities	Implemented	Activities <u>NOT</u> implemented
Hnahlan	HN-02	Promotion of vegetable cultivation in grape field	11	10	• Field Investigation, topographic survey for development of terraces and construction
	HN-04	Improvement of WRC area productivity	15	15	
Saiam	SA-03	Improvement of orange productivity	7	7	
	SA-05	Improvement of WRC area productivity	15	15	
Buhchangphai	BU-01	Improvement of Arecanut productivity	7	6	• Evaluation
	BU-02	Improvement of broom grass productivity	9	9	
	BU-03	Improvement of WRC area productivity	18	17	• Development of strategy
			82	79	

(Source: Endline survey report)

1-5 Activities are commenced based on BAIDC annual plan in the second stage pilot villages by utilizing the budget of Indian central/Mizoram gov.

【Achieved】

- According to the endline survey report, 77 activities under 11 pilot projects were implemented by BAIDC in the second pilot villages with funding support from the state and central government.

The 2nd pilot villages assessed by this indicator are the following 3 villages in the 3 BAIDC. The activity plan for each pilot village is shown in the table below. These pilot projects in the 2nd pilot village are planned to be implemented with the budgets of state and central budgets government. According to the endline survey, the Action plan for each BAIDC was implemented through the Central Sponsored Scheme (CSS), the allocation of funds from the State's Socio-Economic Development Policies (SEDP) and Rural Infrastructure Development Fund (RIDF), which is the GOM's loan from National Bank for Agriculture and Rural Development (NABARD). The major CSS integrated into the activities were, National Food Security Mission (NFSM), Mission for Integrated Development of Horticulture (MIDH), National Adaptation Fund for Climate Change (NAFC),

Rashtriya Krishi Vikas Yojana (RKVY).

Table 12: The activity plan in 2nd Pilot Villages.

Village	Target Area	IN No.	Name of Project	Funding sources
Bikhawthlir North	WRC	BN-01	Increase production of paddy and productivity of WRC area	CSS
		BN-02	Improvement of vegetables productivity	CSS
		BN-03	To control and reduce stream bank erosion and protect the cropland from huge loss of fertile soil.	CSS, SEDP
		BN-04	Rehabilitations and Extensions of Lungzawn M.I Project	
Lamchhip	Settled Slope	LC-01	Achieve sustainable vegetable cultivation	IWRD, RIDF, CSS, SEDP
	WRC	LC-02	Enhance paddy production	DOA, CSS, SEDP
		LC-03	Promote Rabi crops	CSS, SEDP
Tlamsam	Settled Slope	TL-01	Increase vegetable production in Kharif	JICA, DOH, RSWCD, CSS, SEDP
		TL-02	Promotion of vegetables cultivation in Rabi	DOH, CSS, SEDP
	WRC	TL-03	Improvement of WRC area productivity	IWRD RIDF, DOA, SEDP, CSS
		TL-04	Introduction of Rabi crops	DOA, DOH, SEDP, IWRD RIDF, CSS

(Source: Project report)

A total of 108 activities were planned for the 2nd pilot village, of which 92 were implemented with funding support from the state and central government. Since approximately 85% of the planned activities have been implemented, this indicator is judged to have been achieved.

Some of the pilot activities that were not implemented were due to the lockdown and the lack of funds and delays caused by COVID-19. In particular, most of the planned activities by LC-03, "Promote Rabi crops" were not able to be implemented due to lack of funds.

Table 13: Implemented activities in the 2nd pilot projects

		Pilot Project	Planned	Done	Major activities NOT implemented (as of Jan-Feb 2022)
Bikawthir North	BN-01	Increase production of paddy and productivity of WRC area	15	15	• Evaluation
	BN-02	Improvement of vegetables productivity	7	7	
	BN-03	To control and reduce stream bank erosion and protect the cropland from huge loss of fertile soil.	5	4	
	BN-04	Rehabilitations and Extensions of Lungzawn M.I Project	6	6	
Lanchhip	LC-01	Achieve sustainable vegetable cultivation	10	9	• Prepare DPR • Construct Irrigation facilities • Monitor the cultivation and collect field data • Conduct yield and profitability survey
	LC-02	Enhance paddy production	8	6	
	LC-03	Promote Rabi crops	6	1	
Tlangsam	TL-01	Increase vegetable production in Kharif	13	10	• Conduct training • Construct terrace • Monitor and collect data • Conduct yield survey • Provide irrigation facilities • Discuss and prepare next year program
	TL-02	Promotion of vegetables cultivation in Rabi	7	7	
	TL-03	Improvement of WRC area productivity	9	7	
	TL-04	Introduction of Rabi crops	9	5	
			95	77	

(Source: Endline survey report)

(2) Achievement of Output 2

Output 2: Capacity of the state government officials, in planning and implementation of sustainable agriculture and irrigation development, is enhanced.

More than 60% of the nominated counterparts achieve the goal set by them.

【Achieved】

- Compare to self-rating score between 2017 and 2021, 80% of PMT increase the skills level and 100% of BAIDC member acquire some knowledge to improve their services.

Indicator 2-1 measures the extent to which counterpart members have achieved the goals set based on their self-assessment. However, continuous monitoring of capacity building has been difficult due to frequent turnover of counterpart officials, thus an online self-assessment test on technical and management skills was conducted to measure the achievement of the indicator. The table below shows the number of participants in the test from each department.

Table 14: Number of the participants of online test

Department	PMT	BAIDC	Total
DOA	2	5	7
DOH	3	5	8
LRSWCD	2	5	7
IWRD	3	6	9
	10	21	31

(Source: Endline survey report)

The test involves more than 97 questions to be answered by 22 officials from DOA, DOH and LRSWCD and 84 questions by 9 officials from IWRD. The result of the test, it was confirmed that all members (100%) acquires some skill and knowledge to improve their service. According to the analysis by endline survey team, the score of self-perception of skill acquisition, PMT members of DOA, DOH, and LRSWCD improved by 24.9% and BAIDC members by 27.2%; for PMT members of IWRD improved by more than 80% and BAIDC members by more than 28%.

Although it has not a direct measurement of the indicator set in the PDM, indicator 2-1 can be considered as achieved since all counterparts perceive that their capacities have improved.

2-2 More than 50% of BAIDC and PMT members acquire necessary skills for implementation of sustainable agriculture and irrigation development

【Achieved】

- 88.9 % of BAIDC and PMT member understand the more than 50% of the contents of extension manual and the operational guideline developed through project activities
- 77.8% of BAIDC and PMT member understand the more than 75% of the contents of the operational guideline.

Indicator 2-2 assesses the extent to which PMT and BAIDC members have acquired the knowledge and skills. The online tested was conducted on the content of the Extension Manual and Operational Guideline which developed through the project activities. Among 31 counterparts who participate a test related to indicator 2-1, a total 18 person submitted the response. The results showed that more than 88 % of BAIDC and PMT member understand the more than 50% of the contents of extension manual and 77% of the members understand the 75% of the contents of the operational guideline.

Table 15: Result of the online test

Subject of online test	Score		
	<50%	50-75%	>75%
Extension Manual	11.1	89.9	0
Implementation Guidelines	11.1	11.1	77.8

(Source: Endline survey report)

Table 16: Number of the participants of online test

Department	PMT	BAIDC	Total
DOA	0	5	5
DOH	2	4	6
LRSWCD	0	5	5
IWRD	1	1	2
	3	15	18

(Source: Endline survey report)

Although the number of people taking the test is limited, it is possible to determine overall trends given that BAIDC members of 3 RD blocks and PMT member submitted the test. Also 4 departments participated to the online test. Based on the above, it can be judged that indicator 2-2 has been achieved.

(3) Achievement of Output 3

Output 3: Collaborative implementation framework among the state government departments, in the field of sustainable agriculture and irrigation development, is established.

3-1 Action plan to expand project output to all RD blocks in Mizoram is prepared by PMT

【Achieved】

- Action plan to expand JIFAS was prepared and approved by JCC.
- BAIDC, SLCC and IDC was officially established for the implementation of the action plan

Indicator 3-1 has been achieved since the collaborative implementation framework has been established and action plan to expand the system was approved by 6th JCC.

The road map to institutionalize the new methods, was prepared and finalized under the initiative of PMT. The role of PMT and JCC members are clearly decided and the Project had taken necessary actions accordingly. Although it was challenging to achieve the milestones set in the roadmap on schedule due to COVID-19, the action plan was prepared by PMT and approved on 6 December 2021.

In the action plan, the expansion of JIFAS is planned in a period of 6 years from 2021-22 to 2026-27. BAIDC will be established in all 28 RD Blocks (11 districts) in 3 batches. BAIDC activities are planned as a three-year plan, with the first-year plan is focusing on training, the second-year plan is limited to activities mainly in the WRC, and the third-year plan is implementation of overall activities. The budget for 2022/2023 is estimated INR2,056,000.

- 2021-22 – 1st Batch (6RD Blocks)
- 2022-23 – 2nd Batch (10 RD Blocks)
- 2023-24 – 3rd RD Batch (10 RD Blocks)

In addition, the status of achievement of Output 3 is supplemented as follows: TOR of BAIDC was partly approved at the 5th JCC on 15 December 2020 and operational rules and institutional set up was approved at the 6th JCC on 6 December 2021. IDC and SLCC were officially launched in November 2022 with a notification by Under Secretary of IWRD. Subsequently, the roles of each department were clarified through PMT meetings. Moreover, a monitoring system of operation of

3-4 Achievement of Project Purpose

Project Purpose: Organizational capacity of the Government of Mizoram to promote sustainable agriculture and irrigation development is enhanced.

1. The methods are approved by JCC, and officialized
【Mostly achieved】
➤ The operational guideline for JIFAS is approved at 6th JCC meeting
➤ JIFAS has been approved at 8th JCC meeting
➤ Notification for JIFAS will be issued after endorsement by Chief Minister

According to PDM, "methods" include an implementation guideline, officer's manuals, and training materials for farmers. The methods have been refined through pilot activities and incorporated into “Operational guideline for JICA sustainable farming system (JIFAS)”. The guideline was approved at 6th JCC meeting and related 3 officers’ manuals and DPR preparation guideline for irrigation project have been finalized.

JIFAS was also approved at the 8th JCC meeting. Two plans of JIFAS, Plan-A and Plan-B, had been considered. Through a series of discussions among stakeholders, it was decided to approve Plan-B, which was considered more practical. The differences between the two plans are shown in the table below. Plan-B, which has a simpler structure, was chosen to achieve institutionalization in a timely manner.

JIFAS Structure (Plan-A)	JIFAS Structure (Plan-B)
<ul style="list-style-type: none"> ● Achieving convergence planning at block level and state level ● IDC has responsibility to recommend the sanction based on BAIDC plan ● SLCC endorse the BAIDC plan and make sanction ● MAIDA allocate the fund accordingly 	<ul style="list-style-type: none"> ● Achieving convergence planning at block level ● Each Department approve the BAIDC plan separately with the present funding system ● SLCC, IDC and MAIDA monitor the implementation of JIFAS and responsible to expand JIFAS all over Mizoram

At 8th JCC meeting, IWRD was appointed as a nodal department and Planning & Programme Implementation Dept (PPID) was decided to be included in IDC. JCC also decided that other departments such as Department of Fisheries (DOF), Department of Sericulture (DOS) and

Department of Animal husbandry and Veterinary (DAHV), and the District Commissioners (DCs) would be included in JIFAS, when the system matures.

Although, official gazette is not issued yet, JIFAS will be approved by the notification after endorsement by Chief Minister. The notification and the gazette have equivalent legal effect. Thus, this indicator is expected to be achieved at the same time with Indicator 3.

2. At least 2 activities based on collaborative implementation framework in each block are implemented by BAIDC in the 2nd pilot project

【Achieved】

- 11 pilot projects in 2nd pilot villages were implemented by BAIDC under collaborative implementation framework.

Indicator 2 was achieved since 11 pilot projects have been implemented by BADIC in 2nd pilot villages, namely Bikhawthlir North, Lamchhip and Tlangsam since 2020. Continuous follow up and monitoring have been carried out using MIS introduced by the Project. The details of the activities are mentioned in “Table 13: Implemented activities in 2nd pilot projects” in the previous section.

In addition, activities have already been initiated for 6 blocks of the 1st batch villages and preparation has started in 10 RD blocks in 2nd batch villages according to JIFAS plan B as of December 2022. Therefore, it can be concluded that this indicator has been achieved.

3. Action plan to expand project output to all RD blocks and the Methods are endorsed by Chief Minister

【Mostly achieved】

- Action plan was Approved by JCC members at 6th JCC meeting.
- The endorsement by Chief Minister have not issued yet.

The indicator has not been fully achieved yet. The action plan was approved at 6th JCC meeting on 6 December 2021 and the activities are already started according the action plan. However, the endorsement by Chief Minister has not yet issued.




At this point, the project has prepared the necessary materials for the presentation and is working on the coordination. In addition, in 10 February 2023, Chief Representative of JICA India Office visited Mizoram and met with Chief Minister. The importance of JIFAS was discussed during the meeting and the Chief Minister expressed his appreciation of JIFAS. Therefore, it is considered that the Project is in the final step to achieve the indicator, however, at the time of the terminal evaluation, it is not clear when the endorsement will be issued.

3–5 Projection of achievement of Overall Goal

Overall Goal: Sustainable agriculture and irrigation development will be expanded in Mizoram.

Projects for sustainable agriculture and irrigation development are commenced in more than additional 4 blocks in Mizoram
【On track to achieve the overall goal】
<ul style="list-style-type: none"> ➤ JIFAS was decided to be institutionalized as a state guideline in the 6th JCC. ➤ An action plan for the expansion of JIFAS was approved in the JCC and is planned to be expanded to 28 blocks in 3 batches. ➤ 1st batch (6 blocks) has been already started implementation and 2nd batch (10 blocks) is under preparation.

In the Action plan, which approved through the activities of Output 3, total 28 BAIDCs will be established in 3 batches by 2027. Each BAIDC implement activities based on 3 years plan. If these activities are implemented as planned, the numerical target of this indicator is expected to be achieved. Thus, it can be judged that the Project is on track to achieve the indicator of overall goal. The timeline of the plan is as follow.

	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
1st batch	Preparation 	Start operation	Continue		
2nd batch		Preparation 	Start operation	Continue	
3rd batch			preparation 	Start operation	Continue

As of January 2023, the progress of the activities of BADIC in each batch is shown in bellow

1st batch	Awareness meeting, Selection of target village, Develop Annual Activity plan (2022/23), Discussion with Farmers, Operation and Training on MIS, Implementation of the activities listed in BAIDC annual activity plan with government fund and conduct feedback meeting
2nd batch	Awareness meeting, Selection of target village, Develop Annual Activity plan (2023/24), Discussion with Farmers, Operation and Training on MIS, Follow up training on BAIDC system
3rd batch	Awareness meeting, training on MIS and follow up training on BAIDC system,

On the other hand, the overall goal of the Project is the expansion of the sustainable bottom-up system at the state level, including the involvement of decision makers in the state level. While there

is a high probability of achieving the numerical target of this indicator, continued efforts by SLCC, IDC, and other stakeholders will be required to mature the system for more effective implementation.

3—6 Implementation Process

The project has launched in July 2017 as a five-year project. Although the Project was scheduled to complete in July 2022, the project period has been extended for eight months, due to the impact of COVID-19 pandemic.

3-6-1 Impact of COVID-19 pandemic

Since the first infected case was confirmed in Mizoram on 25 March 2020, the government of Mizoram has taken restrictive measures, including a strict lockdown of the area and restrictions on travel and meetings. Not only did travel restrictions make it difficult for BAIDC members to reach the field, but farmers in pilot villages also requested that the frequency and duration of stay of external visitors be reduced as much as possible. In addition, there was temporary closure of the Project / IWRD office in 2020 due to the confirmation of infected cases of relevant personnel.

These restrictions imposed by COVID-19 were a major constraint, especially since it occurred at a time when the motivation of stakeholders was improving, with the timing of the start of the second pilot activities and receipt of the recommendations from the survey by JICA Headquarters. Under these circumstances, discussions and communication among project members were continued using online conference/communication tools. Although no fatal delays occurred due to the effort by the project members, some activities have been behind the schedule. In particular, follow-up/monitoring in the field, OJT of C/Ps, and discussions among stakeholders were not able to be conducted as planned. Furthermore, with regard to the institutionalization of JIFAS, it was difficult for JPT to conduct outreach activities to high-level officials remotely from Japan. These difficulties caused by COVID-19 have affected the delay in achieving the indicators of the project purpose.

3-6-2 Extension of the project period

As mentioned above, some activities could not be fully implemented due to the impact of COVID-19. Even though the indicators set in the PDM were generally achieved, the activity period was extended to ensure the achievement of the overall goal. The main activities during the extended period were 1) Brushing up operation system, 2) Further Capacity enhancement and 3) Public relations. For 1) Brushing up operation system, JIFAS was extended to additional RD blocks and manuals / procedures were simplified to encourage the involvement of BAIDC members. Also, the monitoring system, TRESSA, has been introduced and related training has been provided. For 2) Strengthening staff capacity, the capacity building program was developed and implemented in collaboration with State Agricultural Management and Extension Training Institute (SAMETI). For 3) Public relations,

the PR activities were conducted through SNS such as Facebook. TV advertisement is also planned to be broadcast.

3-6-3 Communication among Project members

The Joint Coordination Committee (JCC) meeting was held 8 times and functioned as a coordination body for decision making and information exchange related to the project activities.

	Date	Main topic
1	8 August 2017	• Confirmation of work plan and implementation structure
2	5 July 2018	• Report on progress and challenges of 1st pilot activities • Report on the draft of new method
3	18 February 2019	• Approval of 1st pilot activities • Report on survey by JICA HQ and recommendations
4	22 November 2019	• Approval of Roadmap for institutionalization • Discussion on implementation of 2nd pilot activities
5	15 December 2020	• Approval of the framework for the method and system • Discussion on implementation of 2nd pilot activities
6	6 December 6, 2021	• Approval of action plan for JIFAS
7	24 May 2022	• Report on the result of end-line survey • Approval of JIFAS • Discussion on extension of project period
8	21 September 2022	• Discussion on institutionalization of JIFAS
9	15 February 2023	• Report on the terminal evaluation survey

In addition, PMT meetings and BAIDC meetings were held regularly and information sharing has been conducted using the group-talk function of WhatsApp in regular communication.

3-6-4 Promoting Factor and Inhibiting Factor

【Promoting Factors】

Collaboration with SAMETI

The project has been working with SAMETI on capacity building. SAMETI is an autonomous state-level institute with a mandate to conduct capacity building programs for extension workers in the state. Capacity building in collaboration with such institute can provide efficient training and has an advantage in terms of ensuring sustainability. The project and SAMETI have discussed and agreed to include a course on JIFAS in SMETI's annual training plan. In addition, awareness training for 4 departments and BAIDC members, including new staff, was provided. Public relations activities to promote understanding of JIFAS were also conducted in collaboration with SAMETI.

Introduction of Management Information System (MIS)

The operational monitoring system, MIS (TRESSA), was introduced to reduce the burden on field

staff. With the system, the progress of each pilot project can be monitored by all concerned officials via smartphone or PC. Since collecting information from farmers at the field level takes a lot of time and effort, a simplified process using digital technology is expected to increase the participation of IDC members in the activities.

Coordination by Local staff under COVID-19 restrictions

Local staff employed by the project have acquired skills and experiences through project activities. Their performance contributed to the smooth implementation of the project activities. In particular, during periods of travel restrictions for Japanese experts imposed by COVID-19, the local staff have maintained frequent contact with the JPT and coordinated among the various levels of stakeholders to ensure the continuity of activities. Through the contribution of local staff, delays in activities were minimized.

Collaboration with external experts

A team of external experts have supported the project activities and contributed to the effective implementation of the project activities according to the characteristics of Mizoram. Especially, experts from Mizoram University played a key role in the Project. They provided necessary advice and guidance for the implementation of activities and supported capacity building of counterparts, such as Training of Trainers (TOT) for CTO. The baseline survey and endline surveys were also conducted by the experts from Mizoram University.

【Inhibiting Factors】

Shortage of manpower

There was a lack of personnel from the state level to the local level who could be continuously involved in project activities. In addition, PMT members are extremely busy with their own duties and it makes the Project members difficult to schedule regular meetings. The BAIDC members are also not fully involved in some RD blocks because the project activities have been the additional work to their regular duties. Due to shortages of field staff, monitoring and follow-up activities could not be carried out as planned in some cases.

Turnover of C/P personnel

The replacements and transferring of C/P personnel have occurred several times during the project period. When trained personnel are transferred or resign, the skills would be lost and additional costs are incurred to train and update newly assigned personnel. To address this issue, the Project has appointed CTOs. However, some of these officers were also replaced due to unavoidable reasons. At this point, PMT assigned 7 CTOs and the Project provided training to enhance their skills and

knowledge to expand JIFAS.

Delays in the release of funds

2nd pilot activities and 1st batch activities experienced delays in the release of CSS funding. Due to these delays, some activities could not be implemented. In addition, a limited state government budget resulted in shortages of manpower in each level.

Collaboration between 4 departments

At the central level, there are officers with sufficient capabilities, and interdepartmental cooperation takes place through regular meetings. On the other hand, it is reported that the activities are often carried out under the direction of their line Ministries. A number of interviewees in the endline survey pointed out the need to strengthen cooperation between the 4 departments.

In the terminal evaluation survey, it was observed that there was smooth cooperation among the officers at both PMT and BAIDC levels. Some commented that there was a change in mindset regarding the convergency through the implementation of the project activities. This suggests that a joint implementation system among the 4 departments is gradually improving through the implementation process.

3-6-5 Relationship with other donor

IFAD support the project, Fostering Climate Resilient Upland Farming Systems in the North East (FOCUS)⁵ to increase agricultural income of farmers and to enhance their resilience to climate change in Mizoram and Nagaland state. Some personnel in DOA, DOH and LRSWCD were assigned as project memembr in Project Directors' office of International Fund for Agricultural Development (IFAD). Although there is no collaboration in the project activities, C/P and JPT have been in constant communication with FOCUS for information sharing.

⁵ The overall goal of FOCUS is to increase agricultural income of 201,500 households, and to enhance their resilience to climate change. Target area is 4 districts in Mizoram state and 8 districts in Nagaland state. The project period is 2017-2024. Total cost is estimated at USD 168.47 million for the two states. The cost would be financed by an IFAD loan of USD 75.5 million, and, parallel financing using CSS, State funds etc. Beneficiaries are a total of 201,500 households, including 64,500 households in Mizoram. DOA is the nodal agency in Mizoram

4. Evaluation by the Six Evaluation Criteria

The results of the evaluation by six evaluation criteria are explained in this chapter. The results are presented in five-point scale: “High”, “Relatively High”, “Moderate”, “Relatively Low”, and “Low”.

4–1 Relevance : High

The Project Purpose and the Overall Goal are consistent with the strategy of the agricultural sector of India and Mizoram. The project aimed at strengthening the organizational capacity of government staff to provide efficient services for the targeted farmers. The approach is appropriate to the needs of target beneficiaries.

(1) Political Priority (+)

In 12th Five Year Plan (2012- 2017) of India, irrigation development was one of the pillars that contribute to increasing farmers' income by expanding agricultural production. Although the 13th Five-Year Plan has not been formulated since the Planning Commission of India was dissolved, its successor organization, NITI Aayog emphasized increasing agricultural productivity to accelerate growth of the nation. Also, GOI is aiming to transform Indian agriculture for sustainable and inclusive growth by improving farmers' nutrition and income and through technological innovation.

In Mizoram, agriculture has been identified as a priority sector in the 12th Five Year Plan of Mizoram state (2012-2017), which includes 1) promotion of horticulture, 2) post-harvest handling / processing, 3) improvement of grain production / productivity, and 4) irrigation development. Also, Mizoram Agriculture Development Vision 2035, which is a master plan of agriculture sector in Mizoram sets targets of 1) 4% annual growth in the agriculture sector and 2) 50% of self-sufficiency of paddy. The project was designed and implemented to contribute to the achievement of the target.

The project supports these plans and policy mentioned above through enhancing capacity for sustainable agricultural and irrigation development. Thus, the Project is consistent with the policies of the Government of India.

(2) Needs of target area and beneficiaries (+)

In Mizoram, about 60% of the population is engaged in agriculture and the rural poverty rate is higher than the Indian average. Increasing the income and productivity of farmers is one of the primary needs of GOM. However, the agricultural and irrigation development projects implemented in the past were dependent on the central government for both budget and project content. As a result, state government officials do not have sufficient capacity for planning, implementation, and interdepartmental coordination at the field level. In order to improve this situation, the Project supports

strengthening the organizational capacity of the GOM and establishing a sustainable bottom-up system to assist farmers. Therefore, the Project is in line with needs of target area and beneficiaries.

(3) Appropriateness of the project approaches (+)

The direct target of the Project is C/P personnel and the indirect targets are the local farmers/other related organizations. The approach of the Project is designed to benefit these targets. The project supports to establish appropriate method and mechanisms for C/P to assist farmers. At the same time, it supports enhancement of C/P capacities and to institutionalization of the bottom-up structure. Though two phases of pilot projects, the Project established JIFAS and now it is institutionalized and on the way to expansion to other districts in the state. This approach encourages the GOM to shift to bottom-up and interdepartmental collaboration structure from a vertical administrative structure. Also, through implementation of JIFAS, actual needs of farmers can be refracted to the development plan in these areas.

4-2 Coherence: High

Coherence of the Project is deemed as High since the Project is in line with the policies of the Japanese government and JICA. It will also contribute to the achievement of the targets of Sustainable development goals (SDGs).

(1) Consistency with the policies of the Japanese government and JICA (+)

Japan's "Country Assistance Policy for India (March 2016)" states that the GOJ will work on programs to increase the incomes of the poor (including improvement of small-scale infrastructure, enhancement of agricultural productivity, and establishment of food value chains) which contributes to poverty reduction and social sector development in the section (3) "Support for Sustainable and Inclusive Growth". Also, JICA identifies "Inclusive growth in rural areas" as a development issue in India to be addressed by JICA in "JICA Country Analysis Paper (2018)"

(2) Specific synergies and interconnections with other JICA projects (+)

JICA applied a participatory approach in "The Study on Development and Management of Land and Water Resources for Sustainable Agriculture in Mizoram" in India, and the results of the study were highly appreciated by C/P of the Project. Therefore, the same method was adopted in this project.

(3) Consistency with international frameworks (+)

Sustainable Development Goal 2 is "End hunger, achieve food security and improved nutrition and promote sustainable agriculture". The project is in line with the targets of the goal 2, specifically "double the agricultural productivity and incomes of small-scale food producers" in 2.3, "ensure

sustainable food production systems and implement resilient agricultural practices” in 2.4 and “Increase investment, including through enhanced international cooperation” in 2.a. The outcome of the Project is expected to contribute the achievement of the SDG targets.

4–3 Effectiveness : Moderate

Judging from an interview conducted by the joint terminal evaluation team, and the result of the end-line survey, Effectiveness is deemed as Moderate. Although the indicators of the Project Purpose are likely to be achieved, 2 indicators out of 3 indicators has not yet been fully achieved at the final stage of the Project. The causal relationship between the Project Purpose and each Output is properly set.

(1) Achievement of the Project Purpose (-)

1 out of 3 indicators has been already achieved and remaining 2 indicators have been mostly achieved and are expected to be achieved in the near future.

The possibility of achieving Indicator 1 is high as JIFAS was approved at the 8th JCC meeting and the issuance of the notification to institutionalize JIFAS is in the final step. However, the endorsement of the Chief Minister is required to continue the process and the indicator is expected to be achieved after the issuance of the endorsement. As for Indicator 2, it has been achieved by implementing 11 pilot projects in 3 RD blocks in 2nd pilot villages. Regarding Indicator 3, the action plan to extend JIFAS and the methods are institutionalized by JCC but have not yet endorsed by Chief Minister. Although the indicator is likely to be achieved, it is not yet certain when the endorsement will be issued.

The difficulty in conducting high-level outreach due to COVID-19 may be one of the reasons why the indicators have not yet achieved as scheduled. However, it is important to ensure the institutionalization by the endorsement in order to promote further expansion of JIFAS, since top-down institutionalization will be the basis of JIFAS in parallel with a bottom-up approach in the field level.

(2) Promoting and Hindering Factors in Effectiveness (±)

COVID-19 pandemic occurred at the same time that 2nd pilot activity was just launched. This situation had a significant impact on the implementation of the project activities. Due to the restriction imposed by the pandemic, sufficient follow-up and monitoring could not be carried out in the pilot villages. In addition, the lack of funds and human resources made the implementation of some activities difficult. Although activities were continued using online tools, there were not enough opportunities for discussion among project members and capacity building through OJT / Study tour. These issues led to difficulties in creating mutual understanding and awareness of stakeholders.

On the other hand, it is worth noting that even under these challenging circumstances, the indicators of Outputs have been achieved and Project Purpose have been almost achieved.

(3) Cause and Effect Relations (+)

The project is designed to enhance the organizational capacity of the government of Mizoram (Project Purpose) by developing and refining the methods through pilot activities (Output 1), implementing capacity enhancement of the state government officials for planning and implementation of collaborative activities (Output 2), and institutionalizing of the bottom-up system to support farmers (Output 3). Each output, the appropriate methods, the capacity to implement the methods, and the institutional support to ensure the implementation are all essential to achieving the Project Purpose. Therefore, the causal relationship between Project Purpose and Outputs is appropriately set.

4-4 Efficiency : Relatively High

Inputs by Japanese side were generally adequate, although the dispatch of Japanese expert and training in Japan was cancelled during COVID-19 restriction, the intended results were achieved to some extent. On the Indian side, the budget allocation was sufficient, but there were shortage of personnel and delays in the release of funds for some pilot activities. Note that the impact of COVID-19 is unavoidable and will be taken into account in the evaluation as an external condition.

(1) Efficiency of Input by Japanese side (\pm)

Due to COVID-19, Japanese experts were unable to travel to India. As a result, many of the experts' activities were conducted remotely from Japan. For the reason, there were some delays in activities such as OJT, monitoring and follow up and discussions with C/Ps. In addition, training in Japan that was planned to be carried out in 2020 were cancelled. Although these inputs were not provided as planned, other inputs by Japanese side, such as the allocation of funds for 1st pilot projects, equipment, training and other necessary expenses were adequately provided. In addition, during the extension period, the MIS was introduced and related trainings were provided.

(2) Efficiency of Input by Indian side (-)

All departments have been fully committed to the Project, however, allocation of human resources for project activities was not adequate due to shortage of personnel. In particular, at BAIDC level, it was difficult to assign adequate number of competent personnel. Also, during the period affected by COVID-19, there were delays and shortages in funds for pilot activities. Other input such as office space and budget allocations for pilot projects were generally adequate. In particular, the assignment of 8 CTOs was an effective input to the smooth implementation of the Project.

(3) Important assumption of output (+)

Important assumption of output set in the PDM is “Majority of IWRD, DOA, DOH, LRSWCD staff who acquire the technologies under the Project are not transferred or resigned.”. For some unavoidable reasons, personnel turnover has occurred several times. Thus, the important assumption has not been fully satisfied. Also, various limitations caused by COVID-19 is considered as an external condition. Under these challenging situations, all the indicators of Outputs were achieved through effective utilization of limited inputs.

(4) Collaboration with other projects (+)

JICA had conducted the study for agriculture development in Mizoram from September 2013 to May. The Master plan was developed through the study and it is the basis of the Project. In addition, the study demarcated the Mizoram State into seven agriculture zones based on present agriculture characteristics, available resources, and market opportunities. The information was utilized when PMT and JPT prepared the selection criteria of pilot villages. The DPR Preparation Guideline for Minor Irrigation Project prepared in the Master Plan in 2015 has been reviewed and updated according the result of the study.

4–5 Impact : Relatively High

The foundation for achieving the Overall Goal was established. To achieve the overall goal within 3 to 5 years after completion of the Project, budget execution according to DPR of each village, proper operation of TRESSA, and ongoing evaluation of JIFAS by IDC and SLCC are essential.

(1) Prospect on achievement of the Overall Goal (\pm)

Through the achievement of the Project Purpose, the basis for achieving the Overall Goal was established. The action plan for the expansion of JIFAS was approved in the JCC and activities to expand JIFAS to other RD blocks have been started in 3 batches. However, project activities in batch 1 village are not progressing as planned due to delay of release of funds. There is concern that this delay discourages the participation of farmers.

On the other hand, in order to disseminate JIFAS throughout the state within several years, continuous capacity enhancement of stakeholders and implementation of activities according the action plan with adequate budget execution by GOM are essential. In addition, periodical assessments of BAIDC activity and continuous updating of operational guidelines need to be carried out by IDC and SLCC. It is also necessary to continue to utilize TRESSA to monitor the progress of the activities in the fields. With institutional support and the active commitment of the personnel, the indicator of Overall goal “Projects for sustainable agriculture and irrigation development are commenced in more

than additional 4 blocks in Mizoram” is expected to be achieved with continued and proactive engagement of stakeholders in Mizoram.

(2) Cause and Effect Relations (+)

The Project Purpose is to enhance organizational capacity of the GOM to operate JIFAS for sustainable agricultural and irrigation development. The aims of the Overall Goal is to expanded the system throughout Mizoram. In order to apply the system to other blocks in the state, institutional support and implementation of activities according to the action plan are required. And these requirements are to be accomplished through project purpose. Thus, the causal relationship between the Project Purpose and the Overall Goal is appropriate.

(3) Other impact (+)

The institutionalization of JIFAS, as a platform of inter-departmental collaboration through project activities is a major achievement. It is expected that the quality of services provided to farmers will be greatly improved once the bottom-up mechanism is expanded and matured. It is also noted that the institutionalization of the new system has changed the mindset of government officials. Collaboration among departments and the exchange of information and experiences between field staff are expected to enable more effective support for farmers.

4–6 Sustainability : Relatively High

In terms of political aspect, there are no critical factors that constrain the sustainability of the Project. Technical and organizational sustainability also expected to be secure with proactive effort by C/P. On the other hand, some issues remain from financial aspect.

(1) Political aspect (+)

The agriculture is one of the priority sectors in Mizoram and sustainability from political aspect is considered to be assured unless election in November 2023 bring a major change in policy. The master plan of agricultural sector targets 4% annual growth and an increase in the self-sufficiency rate to 50% by 2035. The project is in line with the master plan and JIFAS is expected to contribute the achievement of targets. At the same time GOM emphasize the promotion of convergence, which is the important concept of JIFAS. Since the inter-departmental cooperation will be enhanced through the implementation, the outcome of the Project is expected to be utilized even after completion of the Project. Therefore, sustainability from political aspect is secured, and it will be more certain once the institutionalization of JIFAS is fully completed.

(2) Organizational aspect (\pm)

(2)-1 Implementation Structure

With the approval of the Operational Guideline, the implementation structure of JIFAS has been clearly identified. In the structure, SLCC is the responsible body for system expansion and hold SLCC meetings twice a year. IDC is in charge of approving the BAIDC annual plan, appointing BAIDC chairperson / members, conducting monitoring and evaluation, and capacity building of BAIDC members. BAIDC is the main implementer of activities and is responsible for preparing activity plans for each village, including funding plans. These committees are all composed of several departments, and it is expected that inter-departmental coordination will be promoted. It is a positive factor for organizational sustainability that these roles and responsibilities are clearly identified in the guidelines.

(2)-2 Human resources

Delays in activities due to shortage of manpower were observed during the project period. In some cases, sufficient activities were not carried out due to availability of field staffs. The shortage of resources due to lack of funds will not be improve in short period of time and some concerns remain in terms of sustainability. However, the institutionalization of BAIDC would enable each department to implement JIFAS as part of its regular operations, rather than as an additional task.

(3) Financial aspect (-)

In pilot projects, funding has often been delayed despite the approval of the DPR, which includes the funding plan. Some activities of 2nd pilot project were cancelled or postponed due to lack of fund. With respect to 1st batch, 59 out of the 118 projects have encountered delays in funding. During the field visit of terminal evaluation survey, many farmers commented that the timing of support is particularly important. For farmers, especially those who have just started their activities, delays in support due to funding may lead to a loss of reliability of JIFAS and sense of participation. When funds cannot be disbursed in a timely manner, alternative measures should be prepared. If the current delays in CSS funding are not improved, the financial sustainability is considered questionable.

(4) Technical aspect (+)

(4)-1 Capacity enhancement

Ongoing training of personnel is essential to the statewide dissemination of the system. In the event of personnel changes appropriate handover and training should be provided. To address these issues, the Project collaborated with SAMETI and agreed to incorporate JIFAS training courses in SAMETI's annual training plan. This is a significant advantage in ensuring technical sustainability. In addition, the operational guideline stipulates the assignment of two or more CTOs from each of the four departments to strengthen the capacity of BAIDC members. Thus, technical sustainability would be ensured through the collaboration with SAMETI and proactive engagement of CTO.

(4)-2 Guidelines and Manuals

The project prepared the guideline for JIFAS, 3 officers' Manuals and DPR preparation guidelines. These were printed and distributed to PMT, CTO, and BAIDC members. The project also prepared various training materials. These materials are expected to be updated and utilized as needed.

The individual techniques of sustainable agriculture and irrigation developed through the pilot activities in each village have been compiled in 3 officers' manuals. As mentioned in "Achievement of Output 1, Indicator 1-3," more than 60% of skill have been transferred among farmers. Since these techniques are recognized as beneficial to farmers, it is expected that the dissemination will be carried out by BAIDC members using the manuals.

(4)-3 Monitoring system

MIS has been introduced for efficient monitoring of BAIDC activities and is now in operation in 1st Batch. Since MIS reduces the burden on the field and helps effective information sharing, it is expected to be used on a continuous basis in the future. The administrative costs of the server required for MIS operation will be covered by IWRD. Ongoing training is also planned to be provided to BAIDC members by SAMETI.

4-6 Conclusion

From the perspective of the six evaluation criteria, the relevance of the Project is assessed as “High”, since the Project objective is highly consistent with the national policy and development needs of India. Coherence is assessed as “High” since the Project is in line with Japan’s aid policy. The effectiveness of the Project is deemed as “Moderate”, the indicators set in the PDM have not fully achieved and the timeline of the expected achievement is uncertain at this point. The efficiency is assessed as “Relatively High”. Even some of the inputs were insufficient, all the indicators of Outputs were achieved under the various limitations imposed by COVID-19. The Project’s impact is “Relatively High”. The foundation for achieving the Overall Goal was established. However, dissemination activities in the action plan are not progressing as planned at this point. The sustainability of the Project is assessed as “Relatively High”, due to financial issues such as delays in the release of funds.

5. Recommendations

5-1 Recommendation for SLCC, IDC and BAIDC

【Ensuring JIFAS operation】

JICA Sustainable Farming System (JIFAS) was established for the development of sustainable agriculture and irrigation in Mizoram through the project. In order to achieve Overall Goal in the future, and to spread the project outcomes to the entire state, ensuring JIFAS operation in accordance with Operational Guideline is required. Based on the above, the following recommendations are made.

- Ensure input of annual plans and activities into the MIS (TRESSA)
- Continue monitoring and follow up of BAIDC activities by IDC and SLCC using MIS (TRESSA)
- Conduct annual evaluation of the effectiveness and efficiency of JIFAS by IDC and SLCC and revise the guidelines based on the evaluation results if necessary
- Ensure dissemination of BAIDC to 28 RD blocks according to the Action Plan

	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
1st batch	Preparation ████████████████████	Start operation	Continue		
2nd batch		Preparation ████████████████████	Start operation	Continue	
3rd batch			preparation ████████████████████	Start operation	Continue

- Consider to assigning a facilitator by the IDC chairperson from officers of IWRD for coordination and management of JIFAS MIS activities, facilitation of IDC meeting, and inter-departmental communication.

【Utilize and update the Officers' Manual】

Three Officers' Manuals (Improving Agriculture Extension, Construction Management, and Strengthening of WUA for O&M of Irrigation Project) and DPR preparation guidelines were prepared by the project. For the sustainable development of agriculture and irrigation in Mizoram, it is expected that these manuals be utilized, disseminated, and penetrated within each department, and that regular updates be made.

It is also recommended that the above manuals and guidelines be uploaded to each Department's website so that BAIDC members can make use of the Officers' Manual.

【Utilize JIFAS to resolve issues existing within Government of Mizoram】

- Decreasing of the number of officials and budget

It is predicted that the number of officials will dramatically decrease since majority of officers reach retirement age by 2027, and that the budgets related to agriculture have been limited. JIFAS has a realistic planning function that takes into account the number of staff and the budget. Thus, JIFAS is effective in efficiently managing the assets that exist at that time. It is expected that JIFAS will be used effectively to resolve issues that exist within state Government of Mizoram.

- Delay of funds

Frequent delays in the release of funds have prevented activities in accordance with the plan prepared by BAIDC, and it is found that has led to a decline in farmers' motivation. However, in some cases, productivity had increased even without funding due to the awareness raising of farmers in the project. BAIDC members are expected not to solely on funds, but to raise farmers' awareness while increasing their productivity.

【Future Development】

- Expand state-level implementation structure

JIFAS is currently in the process of establishing a framework for joint implementation at the block level. However, the system is headed by the SLCC, and the four department approve BAIDC plans individually. For the further development of Mizoram, MAIDA, a higher level of SLCC including the minister, should be organized to establish a funding system for the entire agricultural and irrigation development.

- Expansion of departments involved

It is recommended that the Department of Fisheries, Department of Animal Husbandry and Veterinary, Department of Sericulture, and Commerce and Industries Department be involved ensure in the JIFAS, in addition to the four department, as there remain problems that cannot be solved by four departments.

5-2 Recommendation for SAMETI

【Continued capacity building by SAMETI】

SAMETI offers capacity building trainings to BAIDC members. It was agreed to include a training course on JIFAS in SAMETI's annual training plan. The sustainability of the training program is important to secure the sustainability of JIFAS. Therefore, it is recommended that SAMETI continues to implement JIFAS training in the future.

5-3 Recommendation for SLCC and IDC

【Finding a sales channels to motivate farmers 】

Farmer motivation is important for improving food self-sufficiency and livelihoods. Even if crop yields increase, if there are no sales channels, there is no incentive to produce more than the amount

needed for self-sufficiency. In light of the above, it is recommended that the Mizoram government create a crop purchase mechanism to create new sales channels, utilize government-owned rice milling and processing facilities, and promote information exchange and negotiations with traders by BAIDC members.

6. Lesson and Learned

- **Irrigation Development with Community Participation**

The project was able to complete a high-quality product by establishing irrigation facilities through the participation of residents. In addition, if the project is based on resident participation, it is expected to improve the capacity of BAIDC members since there are many processes involved in planning, procurement, and establishment. Based on the above, it is recommended the community participation approach for the establishment of irrigation facilities, taking advantage of the results of the project.

- **Cooperation of local experts**

Mizoram has a unique culture and geography compared to other states in India. This project was greatly facilitated by cooperation in line with Mizoram's unique characteristics. In particular, Mizoram University professors conducted baseline and endline surveys, and CTOs received training to develop facilitators by professors. In the future, when implementing projects in special environments, it will be important to involve local experts.

- **Farmers' mindset change**

Since farmers are based on subsistence farming and slash-and-burn farming, it is difficult to significantly change their techniques and attitudes toward commercial agriculture through training. However, the pilot activities showed that by introducing model farmers and organizations and sharing case studies, farmers are more motivated and more likely to convert to commercial farming. Based on the above, it is useful to create a mechanism for sharing case studies among farmers be created in order to improve farmers' capacities.

- **Use of digital technology**

Noting that more farmers owned smart phones, communication via WhatsApp was taken. This produced positive outputs when they were forced to work remotely by COVID-19. In addition, efficiency was improved by the introduction of the MIS. Thus, the positive implementation of new technologies helped to expand the results.

- **Relationship with High Level**

This project had to be implemented jointly with the four department. The daily involvement of a responsible person in a position to give instructions to the four Departments should have facilitated smooth decision-making on the project and coordination among the departments.

- **Set targets in line with Mizoram Agriculture Development Vision 2035**

Deployment and secure operation of the JIFAS will contribute significantly to achieving the Mizoram Agriculture Development Vision 2035. It is believed that the JIFAS has been utilized more by all departments by setting specific indicators for agricultural promotion in line with “Vision 2035”.

Annex 1 Schedule for Terminal Evaluation

C	O	H	Date	Mr. Teppei Okano Consultant	Ms. Yutori Sadamoto (Team leader)	Mr. Takumi Hiraki (Cooperation Planning)	Activities
			1/29 Sun	Dep from Narita			
1			1/30 Mon	Arrival in Mizoram (11:45 Arrive at Aizawl airport) Meeting			14:30 at IWRD for self introduction 14:30 or 15:00 to 17:30 at JPT office, briefing of the Project
2			1/31 Tue	Meeting			Seminar
3			2/1 Wed	Site visit			7:00 Leave Aizawl for Kolasib 10:30 Meeting with BAIDC member 14:00 Meeting with farmers & WUA at Buchangphai village (1st pilot) 16:00 Leave Buchangphai for Kolasib Stay at Kolasib
4			2/2 Thu	Site visit			7:00 Leave Kolasib to Chemphai area 8:00 Meeting with farmers at Chemphai (2nd pilot) 10:00 Leave Chemphai to Kolasib 11:00 Meeting with BAIDC 13:00 Leave Kolasib to Aizawl 17:00 Arrival at Aizawl Stay at Aizawl
5			2/3 Fri	Site visit			7:00 Leave Aizawl to Samlukhai 11:00 Meeting with farmers at Samulkhai 15:00 Meeting with farmers at Terchhip 16:00 Leave Terchhip to Aizawl 17:00 Arrival at Aizawl
7			2/5 Sun	Report Writing		Dep from Narita	Day off
8			2/6 Mon	Meeting		Arrival in Mizoram (11:45 Arrive at Aizawl airport) Meeting	Pick up Mr. Hiraki at 12:00 at the airport 8:30 Discussion with JPT 10:00 Interview with SAMETI 13:30 Interview with CE of I&WRD 15:00 Director of DOA
9			2/7 Tue	Interview	Dep from Narita	Interview	9:00 Interview with Japanese experts 12:20 Director of LRSWCD 14:00 Interview with PMT members at IWRD office 16:00 Interview with Japanese experts
10			2/8 Wed	Interview	Arrival in Mizoram (11:45 Arrive at Aizawl airport) Interview	Interview	10:00 Director of DOH Pick up Ms. Sadamoto at 12:00 at the airport AM : Additional interview or data collection 14:00 Joint evaluation team meeting 16:00 Interview with Secretary
11			2/9 Thu	Site visit	Site visit	Site visit	7:00 Leave Aizawl for Sailam 10:00 Interview with farmers 12:00 Site visit WRC area 15:00 Leave Sailam to Serchhip 16:00 Arrive at Serchhip Stay at Serchhip
12			2/10 Fri	Site visit	9:00 Leave Lumtui MIP for Serchhip 14:30 Meeting with Chief Minister	9:00 Leave Lumtui MIP for Serchhip 14:30 Meeting with Chief Minister	8:15 Leave Serchhip for Lumtui MIP for interview 10:00 Leave Lumtui MIP for Serchhip 11:00 Discussion with BAIDC member 12:00 Leave Serchhip to Lamchhip 13:00 Interview with farmers and BAIDC member 15:00 Leave Lamchhip to Aizawl 17:30 Arrive at Lamchhip Stay at Aizawl
13			2/11 Sat	Preparation of Report and M/M	Handing Over Ceremony at Sailam	Handing Over Ceremony at Sailam	Preparation of Report and M/M
14			2/12 Sun	Internal meeting (+JPT)			9:00 - 16:00 Internal meeting (+JPT)
15			2/13 Mon	Internal meeting/Preparation of documents Discussion with Mizoram Joint Evaluation Members Discussion with Project experts			9:00 - 13:00 Preparation of documents 14:00 Discussion with Mizoram Joint Evaluation Members 17:00 Discussion with Project experts
16			2/14 Tue	Discussion and documentation			10:00 - 16:00 Discussion and documentation
17			2/15 Wed	Discussion and documentation / Preparation for JCC JCC (Signing of M/M)			10:00 - 16:00 Discussion and documentation / Preparation for JCC 16:00 - 17:00 JCC (Signing of M/M)
18			2/16 Thu	Dep from Mizoram (14:45) / Arrival in Delhi (20:20)			Dep from Mizoram / Arrival in Delhi
19			2/17 Fri	Report to JICA India/Embassy Dep from Delhi			Report to JICA India/Embassy Dep from Delhi
20			2/18 Sat	Arrival in Narita			Arrival in Narita

Annex 2 List of Key Informants

- ♦ **Chief Minister of Mizoram state**

Mr. Zoramthanga

- ♦ **Secretary, Agriculture, Irrigation and Water Resources Departments**

Mr. J.Hmingthanmawia,

- ♦ **Irrigation and water resources department /IWRD**

Mr. Lalrotluanga (CE)

Mr. Beizawzi T Azyu (S.E.)

Mr. K.Hamlet (Sr.E.E)

Ms. Ruatkimi Varte (EE)

- ♦ **Department of Agriculture / DOA**

Mr. James Lalsiamliana (Director)

Mr. Pradip Chhetri (Deputy Director)

Mr. Lalmalsawma (JD, DoA)

- ♦ **Land Resources, Soil and Water Conservation Department /LRSWCD**

Mr. Hualthanga Chhakchhak (Director)

Mr. Vanlalmuanpuia Chhangte (SCE)

Mr. C. Laldanmawia (DO)

- ♦ **Department of Horticulture / DOH**

Mr. C.H.Lalmuanpuia (Director)

Ms. Dr. Jenny Zoremthuangi, DOH (Deputy Director)

- ♦ **State Agricultural Management and Extension Training Institute /SAMETI**

Ms. Lalnunpuii Parte(Director)

Ms.Vanlalramchhani Chhangte

Dr. B Lalrosiami Khuhly,

♦ **Block Agriculture and Irrigation Development Committee / BAIDC AIBAWK**

Mr. Lalrindika Khiantge (LRSWCD) Aibawk
Ms. Melony Zoremsangi(IWRD)Aibawk
Mr. Jacob Lalmalsawma (DOH)Aibawk
Mr Zirsangliana (JE, IWRD)Aibawk
Mrs. MS Dawngliani Fanai (HD DoH) Aibawk
Mr. C Rozuala (GS, DoA)Aibawk
Mr. PC Vannghaka (RO, LRSWCD) Aibawk
Mr..Lalrindika Khiantge (SCR, LRSWCD)Aibawk
Mr. Lalzamliaana (JE, IWRD) Aibawk

♦ **Block Agriculture and Irrigation Development Committee / BAIDC BILKHAWTHLIR**

Mr. Jonathan Lalchhanmawia(LRSWCD) Bilkhawthlir
Mr. P.Lalnunthara (SDO, IWRD) Bilkhawthlir
Mr. Lalsangpuia (JE, IWRD) Bilkhawthlir
Mr. Malsawmdawngkima (BAO, DoA) Bilkhawthlir
Mr. C.Zosanga (DHO, DoH) Bilkhawthlir
Mr. Ramhluna Kawilam (DHC, DoH) Bilkhawthlir
Mr. Jonathan Lalchhanmawia (SCR, LRSWCD) Bilkhawthlir
Mr. Vanlalhlimpua (SA, IWRD) Bilkhawthlir
Mr. Nauraj Saraukoti (RO, LRDWCD) Bilkhawthlir

♦ **Block Agriculture and Irrigation Development Committee / BAIDC SERCHHIP**

Mr.P.Lalbiakkima (SDO, IWRD) Serchhip
Mr. C Vanlalchanchinmawia (JE, IWRD) Serchhip

♦ **Farmers in Bunchamphai: 20 people**

♦ **Farmers in Chemphai: 7 people**

♦ **Farmers in Samlukhai: 12 people**

♦ **Farmers in Terchhip :13 people**

♦ **Farmers in Sailam:11 people**

♦ **Farmers in Lumtui:3 people**

♦ **Farmers in Lamchhip: 5 people**

Project Design Matrix

Version 3.0

Date : 18 February 2019

Project Title:	The Project on Capacity Enhancement for Sustainable Agriculture and Irrigation Development in Mizoram
Implementation Agency :	Irrigation and Water Resources Department (IWRD), Department of Agriculture (DOA), Department of Horticulture (DOH), Land Resources and Soil and Water Conservation Department (LRSWCD) in the State of Mizoram, India
Target Group	Direct target: The state government officials (IWRD, DOA, DOH, LRSWCD) Indirect target: Farmers at the pilot RD blocks and other relevant organizations.
Period of Project:	July 2017 to July 2022 (5 years)
Project Site :	All of Mizoram State Pilot Rural Development (RD) blocks: Bilkhawthlir RD block (Kolasib district), Aibawk RD block (Aizawl District) and Champhai RD block (Champhai district) in Mizoram 1st pilot villages : Buhchangpai (Bilkhawthlir), Sailam (Aibawk) and Hnahlan (Champhai) 2 nd pilot villages : 1 villages will be selected in each pilot RD block

Project Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions	Achievement	Remarks
<p>Overall Goal: Sustainable agriculture and irrigation development* will be expanded in Mizoram</p> <p>* Sustainable agriculture and irrigation development must be economically viable, socially responsible and ecologically sound. These shall be achieved by uplifting the farmers' income with due regard to environmental conservation through proper assessment of farmers' needs, available resources and market opportunities.</p>	<p>1. Projects for sustainable agriculture and irrigation development are commenced in more than additional 4 blocks in Mizoram</p>	<ul style="list-style-type: none"> Monitoring data of IWRD, DOA, DOH and LRSWCD 			
<p>Project Purpose: Organizational capacity of the Government of Mizoram to promote sustainable agriculture and irrigation</p>	<p>1. The methods are approved by JCC, and officialised. 2. At least 2 activities based</p>	<ul style="list-style-type: none"> Minutes of the Meetings of JCC The official letter 	<ul style="list-style-type: none"> Policies of Central and Mizoram government on 		

Project Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions	Achievement	Remarks
development is enhanced.	<p>on collaborative implementation framework in each block are implemented by BAIDC in the 2nd pilot project</p> <p>3. Action plan to expand project output to all RD blocks and the Methods are endorsed by Chief Minister</p>	<p>from higher authority (Chief Minister)</p> <ul style="list-style-type: none"> • Technical Cooperation Project (TCP) Progress and completion reports 	<p>agriculture and irrigation development are maintained.</p>		
<p>Outputs:</p> <p>1. Methods* for sustainable agriculture and irrigation development are developed.</p> <p>* Methods comprise implementing guideline, officers' manuals, and training materials for farmers. The methods will be refined through pilot activities.</p>	<p>Indicators:</p> <p>1.1 Production of food crop is increased by 12.5% in pilot farmers in the first pilot villages.</p> <p>1.2 Farm income of cash crop is increased by 12.5% in the pilot farmers (excluding orchard or plantation farmers) in first stage pilot villages.</p> <p>1.3 50% of the technologies practiced in the pilot farmers are disseminated to other farmers in the first pilot villages</p> <p>1.4 More than 80% of village plan are implemented in the first pilot villages.</p> <p>1.5 Activities are commenced based on BAIDC annual plan in the second stage pilot villages by utilizing the budget of Indian central/Mizoram gov.</p>	<ul style="list-style-type: none"> • Baseline survey reports. • Questionnaire survey and analysis • TCP Progress and completion reports • Finalized documentation of the methods 	<ul style="list-style-type: none"> • Majority of IWRD, DOA, DOH, LRSWCD staff who acquire the technologies under the Project are not transferred or resigned. 	<ul style="list-style-type: none"> • 	

Project Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions	Achievement	Remarks
1. Capacity of the state government officials, in planning and implementation of sustainable agriculture and irrigation development, is enhanced.	2.1 More than 60% of the nominated counterparts achievement goal set by them. 2.2 More than 50% of BAIDC and PMT members acquire necessary skills for implementation of sustainable agriculture and irrigation development	<ul style="list-style-type: none"> Established achievement goal Questionnaire survey and reports 			
2. Collaborative implementation framework among the state government departments, in the field of sustainable agriculture and irrigation development, is established.	3.1 Action plan to expand project output to all RD blocks in Mizoram is prepared by PMT	<ul style="list-style-type: none"> Finalized Action Plans 		<ul style="list-style-type: none"> Communication among 4 departments were encouraged after forming PMT and BAIDC which will contribute to the establishment of collaborative implementation framework Through the preparation of method in the working group discussion, the platform to collaborate each department are gradually established. 	

Activities	Input		Important Assumptions
	Japan	Mizoram	
<p><Formulation of draft Methods in the first pilot villages></p> <p>1.1 Conduct baseline survey (Satellite image, GIS data, land use, farming situation, and socio-economic conditions) in order to understand the current situation of pilot RD blocks.</p> <p>1.2 Collect and analyze existing guidelines, manuals and training materials in specific subjects* and draft the methods.</p> <p>1.3 Establish Block Agriculture and Irrigation Development Committee (BAIDC) which will coordinate the project planning, implementation and monitoring at each pilot RD block.</p> <p>1.4 Select one pilot village in each pilot RD block.</p> <p>1.5 Conduct participatory rural appraisal (PRA) and elaborate land-use plan, resource management plan, village farming plan and village irrigation plan in each pilot village.</p> <p>1.6 Prepare an implementation plan for each department and implement prioritized activities based on the above plans in each pilot village by utilizing the Project fund and resources.</p> <p>1.7 Monitor and evaluate the progress and results of the activities by BAIDC.</p> <p>1.8 Revise the methods for agriculture and irrigation development according to the results of activities.</p> <p>1.9 Conduct follow-up activities.</p> <p><Verification and refinement of the methods in the second pilot villages></p> <p>1.10 Select two or three pilot villages in each pilot RD block.</p> <p>1.11 Conduct PRA and elaborate land-use plan, resource management plan, village farming plan and village irrigation plan in each pilot village.</p> <p>1.12 Prepare an implementation plan for each department and implement prioritized activities based on the above plans in each pilot village by utilizing the Government fund and resources.</p> <p>1.13 Monitor and evaluate the progress and results of the activities by BAIDC.</p> <p>1.14 Finalize the methods.</p>	<p>1) Personnel/ Experts</p> <ul style="list-style-type: none"> - Chief Advisor/Development Planning - Irrigation / O&M / Farmers' Organization (1) - Food Crop Cultivation Technologies and Farmers' Organization (2) - Cash Crop Cultivation Technologies (1) & (2) - Marketing - Land Use and Resources Management - Environmental and Social Considerations - Project Coordinator/Training <p>2) Equipment</p> <ul style="list-style-type: none"> • Satellite image map (if necessary) • Machineries and equipment necessary for offices, surveys, activities in the pilot villages (such as irrigation facilities) <p>3) Counterpart Training</p> <ul style="list-style-type: none"> • Training in other states of India • Training in Japan 	<p>1) Personnel Counterpart (C/P) personnel of related departments</p> <p>2) Equipment/facilities Office space at MID in Aizawl, Kolasib, Serchhip and Champhai</p> <p>3) Others Travel expenses and allowances for C/P personnel</p>	<ul style="list-style-type: none"> • Climate change does not affect agricultural production drastically. • Activities in the pilot villages are not restricted due to natural disaster • Farmers in pilot villages are willing to participate in the Project activities • Central and Mizoram government provide enough fund to implement activities in the second pilot villages.

Activities	Input		Important Assumptions
	Japan	Mizoram	
* Subjects comprise of i) land-use plan, ii) resource management plan, iii) village farming plan, iv) village irrigation plan, v) design, construction and operation & maintenance (O&M) of small-scale irrigation facilities, vi) establishment and strengthening of water users' associations, vii) dissemination technologies of food and cash crop production, viii) dissemination skills on farm management and marketing etc.			
<p><Capacity enhancement of the state government officials></p> <p>2.1 Assess the technical level of the counterpart (C/P) personnel and set up goals of capacity enhancement.</p> <p>2.2 Conduct study tours to learn domestic and foreign advanced practices.</p> <p>2.3 Conduct basic trainings to the state government field staff</p> <p>2.4 Conduct on the job training (OJT) through activities in the pilot villages.</p> <p>2.5 Verify the achievement of the goals set by C/P personnel.</p> <p>2.6 Organize seminars for the state government field staff working for agriculture and irrigation development in the state to disseminate the outputs of the Project.</p>			
<p><Establishment of collaborative implementation framework among the state government departments></p> <p>3.1 Prepare a collaboration and cooperation framework (institutional and organizational structure, budget allocation, decision-making process etc.) among state departments relating to agriculture and irrigation development in Mizoram based on the activity 1 and 2.</p> <p>3.2 Elaborate an action plan to expand project outputs to all RD blocks in Mizoram.</p>			

Abbreviations: Block Agriculture and Irrigation Development Committee (BAIDC), Rural Development (RD), Technical Cooperation Project (TCP)

Project Title: The Project on Capacity Enhancement for Sustainable Agriculture and Irrigation Development in Mizoram

Activities	Year	2017				2018				2019				2020				2021				2022				2023		Implementation Organizations	
		Month	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	Japan	GoM			
Output 2: Capacity of the state government officials, in planning and implementation of sustainable agriculture and irrigation development, is enhanced.																													
2.1 Assess the technical level of the counterpart (C/P) personnel and set up goals of capacity enhancement.	Plan				■																					JPT	PMT BAIDC		
	Actual			■																									
2.2 Conduct study tours to learn domestic and foreign advanced practices.	Plan					■		■			■			■			■									JPT	-		
	Actual							■			■			■			■												
2.3 Conduct basic trainings to the state government field staff	Plan					■		■		■			■			■			■							JPT	PMT		
	Actual				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■				
2.4 Conduct on the job training (OJT) through activities in the pilot villages.	Plan						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		JPT	PMT		
	Actual						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■				
2.5 Verify the achievement of the goals set by C/P personnel.	Plan																						■			JPT	BAIDC		
	Actual																						■						
2.6 Organize seminars for the state government field staff working for agriculture and irrigation development in the state to disseminate the outputs of the Project.	Plan												■									■				JPT	PMT		
	Actual												■	■									■						
Output 3: Collaborative implementation framework among the state government departments, in the field of sustainable agriculture and irrigation development, is established.																													
3.1 Prepare a collaboration and cooperation framework (institutional and organizational structure, budget allocation, decision-making process etc.) among state departments relating to agriculture and irrigation development in Mizoram based on the activity 1 and 2.	Plan																									JPT	PMT		
	Actual												■	■		■	■	■	■	■	■	■	■	■	■				
3.2 Elaborate an action plan to expand project outputs to all RD blocks in Mizoram.	Plan																									JPT	PMT		
	Actual																								■	■			

Annex 5-1 List of Expert

	Name	Post
1	Shigeki YAMAOKA	Chief Advisor/RuralDevelopment Planning
2	Kunita OKUWA	Irrigation/O&M/Farmers' Organisation (1)
3	Takuya SAISHO	Food Crop Cultivation Technique/Farmers' Organisation (2)
4	Katsuyuki YAMAMOTO	Cash Crop Cultivation Technique (1)
5	Mitsuharu TAKEMURA	Cash Crop Cultivation Technique (2)
6	Yodai OKUYAMA	Marketing
7	Ahamad AL-HAMBALI	Land Use / Resources Management
8	Miki MORIMITSU	Environment and Social Consideration
9	Junji KAWANO	Design and Construction Management

Annex 5-2 List of counterpart

Type of C/P	Name	Department	Position	Duration					
				2017	2018	2019	2020	2021	2022
PMT member	Mr. Lalrotluanga	IWRD	CE	✓	✓	✓	✓	✓	✓
PMT member	Mr. Beizawzi T Azyu	IWRD	S.E.(W&D)	✓	✓	✓	✓	✓	✓
PMT member	Mr. K.Hamlet	IWRD	Sr. E.E.(W)	✓	✓	✓	✓	✓	✓
PMT member	Ms. Ruatkimi Varte	IWRD	EE	✓	✓	✓	✓	✓	✓
PMT member	Mr. Rohmingthanga Colney	DOA	Director		✓	✓	✓	✓	
PMT member	Mr. H.Saithantluanga	DOA	Director	✓	✓	✓	✓		
PMT member	Mr. James Lalsiamliana	DOA	Addl.Director				✓	✓	✓
PMT member	Mr. Lalthanzuala	DOA	Jt. Director	✓	✓	✓	✓	✓	✓
PMT member	Ms. Dr.Elizabeth Saipari	DOH	Director	✓	✓	✓	✓	✓	✓
PMT member	Mr. C.H. Lalmuanpuia	DOH	Director						✓
PMT member	Mr. T. Vanlaltlana	DOH	Jt. Director						✓
PMT member	Ms. Dr. Jenny Zoremthluingi	DOH	Dy. Director			✓	✓	✓	✓
PMT member	Mr. Hualthanga Chhakchhuak	LRSWCD	Director	✓	✓	✓	✓	✓	✓
PMT member	Mr. Lalchhanhima	LRSWCD	Dy. Director	✓	✓	✓	✓	✓	✓
PMT member	Mr. Vanlalmuanpuia Changte	LRSWCD	SCE				✓	✓	✓
Core Training officer	Ms. Ruatkimi Varte	IWRD	EE			✓	✓	✓	✓
Core Training officer	Mr. Vanlalpekhlua Sailo	IWRD	EE			✓	✓	✓	
Core Training officer	Mr. Jacob Lalmalsawma	DOH	BHO			✓	✓	✓	✓
Core Training officer	Ms. Emelyne Lalmawipuii	DOH	Asst. Director						✓
Core Training officer	Ms. Lalrindiki	DOA	Asst. Director			✓	✓	✓	✓
Core Training officer	Ms. Lalnunpuuii Parte	DOA	SAMETI Director			✓	✓	✓	✓
Core Training officer	Mr. C. Laldanmawia	LRSWCD	SCR			✓	✓	✓	✓
Core Training officer	Ms. K. Lalremruati	LRSWCD	ASCE					✓	✓
BAIDC member (AIBAWK)	Mr. H. Piangthanga	IWRD	EE	✓	✓	✓	✓	✓	✓
BAIDC member (AIBAWK)	Ms.Melony Zoremsangi	IWRD	SDO	✓	✓	✓	✓	✓	✓
BAIDC member (AIBAWK)	Mr.P.Lalbiakkima	IWRD	SDO			✓	✓	✓	
BAIDC member (AIBAWK)	Mr.Zirsangliana	IWRD	JE			✓	✓	✓	✓

Annex 5-2 List of counterpart

Type of C/P	Name	Department	Position	Duration					
				2017	2018	2019	2020	2021	2022
BAIDC member (AIBAWK)	Mr.J.Rokima	DOA	DAO					✓	✓
BAIDC member (AIBAWK)	Mr.Lalmalsawma Khawlhiring	DOA	BTM			✓	✓	✓	✓
BAIDC member (AIBAWK)	Mr.Lalchharliana	DOA	BAO					✓	✓
BAIDC member (AIBAWK)	Mr.Lalrongenga	DOA	AAI		✓	✓	✓	✓	
BAIDC member (AIBAWK)	Mr.Lalchhanhima	LR,SWCD	DO					✓	
BAIDC member (AIBAWK)	Mr.PC Vannghaka	LR,SWCD	RO					✓	
BAIDC member (AIBAWK)	Mr.Lalrindika Khiangte	LR,SWCD	SCR		✓	✓	✓	✓	✓
BAIDC member (AIBAWK)	Mr.C.Lalremsiama	DoH	DHO					✓	✓
BAIDC member (AIBAWK)	Mr. B. Lalchamlia	DoH	ADHO	✓	✓	✓	✓	✓	✓
BAIDC member (AIBAWK)	Mr.Lalrosanga Khiangte	DoH	PO, CoE					✓	✓
BAIDC member (AIBAWK)	Mr.Jacob Lalmalsawma	DoH	BHO			✓	✓	✓	✓
BAIDC member (CHAMPHAI)	Mr.Laldingliana Hrahse	IWRD	EE		✓	✓	✓	✓	✓
BAIDC member (CHAMPHAI)	Mr.Lalhruaitluanga	IWRD	SA			✓	✓	✓	✓
BAIDC member (CHAMPHAI)	Mr.B.Lahmuchhuaka	DOA	DAO				✓	✓	✓
BAIDC member (CHAMPHAI)	Ms.V.Lalhriatpuii	DOA	ADAO				✓	✓	✓
BAIDC member (CHAMPHAI)	Mr.C.Lalhriatpuia	DOA	PD			✓	✓	✓	
BAIDC member (CHAMPHAI)	Mr.Israela Hauhna	LR,SWCD	RO					✓	✓
BAIDC member (CHAMPHAI)	Mr.Lalrinngeta	LR,SWCD	Dy,Ranger	✓	✓	✓	✓	✓	✓
BAIDC member (CHAMPHAI)	Mr.B.Lalzazova	DoH	DHO					✓	✓
BAIDC member (CHAMPHAI)	Ms.H.Lahmachhuani	DoH	Sr.HD			✓	✓	✓	✓
BAIDC member (CHAMPHAI)	Mr.Lahmangaihzuala	DoH	HD					✓	✓
BAIDC member (CHAMPHAI)	Mr.K.Zonunsanga	DoH	ADHO	✓	✓	✓	✓	✓	✓
BAIDC member (BILKHAWTHLIR)	Mr. Lalchhandama	IWRD	EE	✓	✓	✓	✓	✓	✓
BAIDC member (BILKHAWTHLIR)	Mr. P. Lalnunthara	IWRD	SDO	✓	✓	✓	✓	✓	✓
BAIDC member (BILKHAWTHLIR)	Mr.Rosangpuia	IWRD	JE			✓	✓	✓	✓
BAIDC member (BILKHAWTHLIR)	Mr.Ngurrinsanga Sailo	DOA	DAO					✓	
BAIDC member (BILKHAWTHLIR)	Mr.Joseph Lalnuntluanga	DOA	ADAO					✓	

Annex 5-2 List of counterpart

Type of C/P	Name	Department	Position	Duration					
				2017	2018	2019	2020	2021	2022
BAIDC member (BILKHAWTHLIR)	Mr.Malsawmdawngkima	DOA	BAO					✓	✓
BAIDC member (BILKHAWTHLIR)	Mr.V.Vanlawma	LR,SWCD	DO				✓	✓	
BAIDC member (BILKHAWTHLIR)	Mr.PC Lalmuankima	LR,SWCD	RO	✓	✓	✓	✓	✓	✓
BAIDC member (BILKHAWTHLIR)	Mr.Jonathan Lalchhanmawia	LR,SWCD	SCR				✓	✓	✓
BAIDC member (BILKHAWTHLIR)	Mr.C.Zosangliana	DoH	DHO					✓	✓
BAIDC member (BILKHAWTHLIR)	Mr.Ramhluna Kawilam	DoH	DHC	✓	✓	✓	✓	✓	✓
BAIDC member (BILKHAWTHLIR)	Dr.Vanlalremruati Hnamte	DoH	ADHO	✓	✓	✓	✓	✓	✓

Annex 5-3 List of equipment

Name of Equipment	Specification	No.	Purchase Price			Purchase date	Present Location
			Price	Currency	Equivalent to JPY		
Copying machine	Canon Image CLASS MF4720w	1	14,500	INR	25,218	14-Jul-17	in I&WRD Office
Multifunction printer	Richo MP C2003	1	3,797	USD	429,763	11-Sep-17	in I&WRD Office
Projector	PLAY PP004	1	294	USD	33,276	13-Oct-17	in I&WRD Office
Video camera	Sony HXR-MC 2500P	1	1,401	USD	158,572	18-Oct-17	in I&WRD Office
Desktop PC	HP 570-PO53IN	5	3,917	USD	443,346	18-Oct-17	in I&WRD Office
Multifunction printer	SHARP AR6031	4	9,346	USD	1,057,827	10-Nov-17	in I&WRD Office
Generator	Honda EX2400	4	310,000	INR	539,152	9-Nov-17	in I&WRD Office
Copying machine	Hp Offices Jet 7612	4	1830	USD	207,129	10-Nov-17	in I&WRD Office
Projector	EB-X05	2	37500	INR	60,975	25-Jun-19	in I&WRD Office
Brush cutter	STIHL FS55	10	215000	INR	338,313	26-Jun-19	in I&WRD Office
Desktop computer	Asus Core i5	4 9 7 5	782500	INR	1,167,185	15-Jul-21	in I&WRD office in DOA office in DOH office in LRSWCD office
UPS	UPS 725	4 9 7 5	48750	INR	72,716	15-Jul-21	in I&WRD office in DOA office in DOH office in LRSWCD office
USB Microphone	Logtech	4 9 7 5	287500	INR	428,838	15-Jul-21	in I&WRD office in DOA office in DOH office in LRSWCD office
Webcam (Logitech C922 Pro)	Logitech C922 Pro	4 9 7 5	297950	INR	444,425	15-Jul-21	in I&WRD office in DOA office in DOH office in LRSWCD office
TV (Haier)	LE42A6500AG	4 9 7 5	975000	INR	1,454,320	15-Jul-21	in I&WRD office in DOA office in DOH office in LRSWCD office
Projector	Epson EB-E01	2	76000	INR	136,333	7-Nov-22	in I&WRD Office
Projector	Zeb LP4000	1	29000	INR	52,022	7-Nov-22	in I&WRD Office
Generator	Honda EX2400	1	99700	INR	178,847	11-Nov-22	in I&WRD Office
Total					7,228,257		

Annex 5-4 List of Basic Training & Workshop

Name of Training	Objectives	Date
		19th May 2022 (Thenzawl) 20th May 2022 (Hmuntha) 20th May 2022 (Saipum)
Conduct Awareness training on BAIDC System/JIFAS, organized by SAMETI in collaboration with JICA Project Team	For the expansion of BAIDC system/JIFAS in all over the state, 10 RD Block BAIDC members 2nd batch are trained.	19th & 20th July 2022 26th & 27th July 2022 28th & 29th July 2022 2nd & 3rd Aug 2022
Conduct MIS-JIFAS training for the batch-1, 6 RD Block BAIDC members	MIS-JIFAS trainings were conducted for 6 RD Block BAIDC members for information sharing and monitoring of JIFAS activities.	26th July 2022 28th July 2022 1st Aug 2022 3rd Aug 2022 4th Aug 2022 5th Aug 2022
Conduct Awareness training on BAIDC System/JIFAS, organized by SAMETI in collaboration with JICA Project Team at SAMETI training hall.	Another 12 RD Block BAIDC members 3rd batch are trained for the expansion of BAIDC system/JIFAS in all over the state.	6th & 7th Sep 2022 8th & 9th Sep 2022 13th & 14th Sep 2022
Conduct Progress Review Meeting for Batch-1, 6 RD block	JPT facilitated Progress Review Meeting for Batch-1 at the District office. The BAIDC members from each department shared their progress based on the prepared Plan.	11th Oct 2022 (Bilkhawthlir N) 12th Oct 2022 (Aibawk) 12th Oct 2022 (Serchhip) 14th Oct 2022 (Champhai) 17th Oct 2022 (Khawzawl) 20th Oct 2022 (Lunglei)
Conduct BAIDC Annual Activity Plan 2023-24 for Batch-2, 10 RD Block	BAIDC members prepared BAIDC Annual Activity Plan for priority villages within their respective RD Block based on availability of CSS & SSS.	11th Oct 2022 (East Lungdar) 12th Oct 2022 (N Thingdawl) 14th Oct 2022 (West Phaileng) 17th Oct 2022 (Zawnuam) 18th Oct 2022 (Tlangnuam) 19th Oct 2022 (Ngopa) 21st Oct 2022 (Lungsen) 25th Oct 2022 (Bungtlang S & Chawngte) 28th Oct 2022 (Tipa)

Annex 5-3 List of equipment

Name of Equipment	Specification	No.	Purchase Price			Purchase date	Present Location
			Price	Currency	Equivalent to JPY		
Copying machine	Canon Image CLASS MF4720w	1	14,500	INR	25,218	14-Jul-17	in I&WRD Office
Multifunction printer	Richo MP C2003	1	3,797	USD	429,763	11-Sep-17	in I&WRD Office
Projector	PLAY PP004	1	294	USD	33,276	13-Oct-17	in I&WRD Office
Video camera	Sony HXR-MC 2500P	1	1,401	USD	158,572	18-Oct-17	in I&WRD Office
Desktop PC	HP 570-PO53IN	5	3,917	USD	443,346	18-Oct-17	in I&WRD Office
Multifunction printer	SHARP AR6031	4	9,346	USD	1,057,827	10-Nov-17	in I&WRD Office
Generator	Honda EX2400	4	310,000	INR	539,152	9-Nov-17	in I&WRD Office
Copying machine	Hp Offices Jet 7612	4	1830	USD	207,129	10-Nov-17	in I&WRD Office
Projector	EB-X05	2	37500	INR	60,975	25-Jun-19	in I&WRD Office
Brush cutter	STIHL FS55	10	215000	INR	338,313	26-Jun-19	in I&WRD Office
Desktop computer	Asus Core i5	4 9 7 5	782500	INR	1,167,185	15-Jul-21	in I&WRD office in DOA office in DOH office in LRSWCD office
UPS	UPS 725	4 9 7 5	48750	INR	72,716	15-Jul-21	in I&WRD office in DOA office in DOH office in LRSWCD office
USB Microphone	Logtech	4 9 7 5	287500	INR	428,838	15-Jul-21	in I&WRD office in DOA office in DOH office in LRSWCD office
Webcam (Logitech C922 Pro)	Logitech C922 Pro	4 9 7 5	297950	INR	444,425	15-Jul-21	in I&WRD office in DOA office in DOH office in LRSWCD office
TV (Haier)	LE42A6500AG	4 9 7 5	975000	INR	1,454,320	15-Jul-21	in I&WRD office in DOA office in DOH office in LRSWCD office
Projector	Epson EB-E01	2	76000	INR	136,333	7-Nov-22	in I&WRD Office
Projector	Zeb LP4000	1	29000	INR	52,022	7-Nov-22	in I&WRD Office
Generator	Honda EX2400	1	99700	INR	178,847	11-Nov-22	in I&WRD Office
Total					7,228,257		

Annex 5-4 List of Basic Training & Workshop

Name of Training	Objectives	Date
Curriculum Development Based on Vocational Ability Structure	To identify present skill level and setting target	8th August 2017 31st October 2017
Technical training of facilitator	To understand the facilitation to extract the need and information from the village	1st November 2017 2nd November 2017
Participatory Development Planning	To understand the procedure, pros and cons of PDP and important points for PDP	11th December 2017 16th November 2017 20th November 2017 30th November 2017
GIS Training	To understand the GIS operation for analysis	31st Oct - 1st November 2017
Water balance study on irrigation planning	To understand the calculation of crop water requirement and hydrological analysis	30th October 2017
Awareness and seminar for village development and extension	To understand village structure by analyzing results of baseline survey and how to read and use PDM for BAIDC	6th February 2018 8th February 2018
Orientation and awareness programme for planning method	To understand how to prepare BMOC activity plan	27th February 2018 5th March 2018 8th March 2018 12th March 2018
Participate to national workshop for Himachal Pradesh Crop Diversification	To understand the advanced practice of crop diversification and project funded by JICA	7th - 8th March 2018
Workshop on IEE and environmental monitoring (EM) for construction works	To understand how to implement IEE and EM	11th May 2018
Technical training on WRC and basic farm input for slope agriculture	To understand present farmers' rice cultivation method and necessary improvement points and vetiver cultivation method	1st June 2018
Technical training for WRC and Vegetable cultivation	To understand rice seed production, vegetable cultivation, marketing and farm management	22nd May 2018 23rd May 2018 24th May 2018 28th May 2018 29th May 2018
Technical training on soil erosion control	Provision of Changkham to present soil erosion	22nd - 24th May 2018
Technical training for WRC and agricultural activities	To understand basic important techniques for WRC and how to prepare organic fertilizer by using available resources	8th June 2018 14th June 2018
Capacity enhancement training on agriculture extension and irrigation development and management in hilly area	Deepening the knowledge of (1) agriculture extension system planning, implementation and monitoring (2) irrigation facility development and management practice of farmer for hill area cultivation, resources utilization and management and agriculture processing and marketing	24th September - 5th October 2018
Study tour for strengthening the organization	To study the society structure and function of Reiek Block Turmeric Society	10th October 2018
Paddy cultivation training	To understand the basic cultivation technologies on paddy cultivation and advantage of SRI cultivation	25th October 2018
Wrap up meeting on Training in Japan (1st Batch)	Sharing the experience in training in Japan	26th October 2018
Technical training on Rabi vegetable cultivation	To understand the characteristic and environment, nursery preparation and transplanting for tomato, cabbage, Chinese cabbage, broccoli and knot khol	10th October 2018 13th November 2018 10th December 2018
Technical training on rapeseed cultivation	To understand the cultivation management cultivation for rapeseed	27th October 2018 13th November 2018 16th November 2018
Study tour for advanced cultivation and marketing of broom grass	To see the advanced practice on the broom grass cultivation	23rd November 2018
Pruning and basic cultivation training on orange cultivation	To understand the pruning technologies and basic cultivation skills	7th December 2018
Construction Management Training	construction material selection, quality control, time management, safety control on the construction works, community contract and environmental management during construction	23rd January 2019 24th January 2019 25th January 2019
Technical training on capacity development of financial management on WUA	Had training regarding financial management for WUA as well as BAIDC members (Irrigation and Finaman). To improve our activities we had review meeting, group discussion and presentation. Sharing opinion regarding the activities and planning for next activity.	21st February 2019 22nd February 2019
Technical training on conduct feedback meeting	Buhchangphai: had a fruitful feedback meeting with pilot farmers. All the farmers want to continue for next year activity as a pilot farmer	29th January 2019 5th February 2019 7th February 2019 12th February 2019
Technical training on preparation of annual activity plan 2019/20	At Dawk. At DAWK office, Akaw we had a meeting on selection of techniques to be introduced in 2019 in Jhum area. Triangle method of maize, cowpea, soyabean cultivation had been selected and changkham to be constructed for soil erosion control. Buhchangphai: JPT went to each department concerned places to make a plan. All the line departments had prepared new plan for	18th March 2019 19th March 2019 4th March 2019 23rd March 2019 25th March 2019
Technical training on detailed planning and budgeting for agriculture extension	We had a meeting in each Districts to prepared Annual Detail Plan	25th March 2019 19th March 2019 14th March 2019

Annex 5-4 List of Basic Training & Workshop

Name of Training	Objectives	Date
Conduct trainings for pilot farmers (inter cropping, nursery raising, soil conservation measures, weed control, etc.)	To acquire basic knowledge on arecanut cultivation BAIDC gave training to pilot farmers	6th April 2019
Field Demonstration of Site Preparation, Propagation & Planting Technology. Facilitation of on-site training on upkeeping of plantation including weeding, application of fertilizer etc.	Broom 7 pilot farmers participated in the training. Things we learnt were:- 1.Application of chemical fertilizer 2.Importance of weeding 3.Importance of spacing 4. Importance of inter cropping	15th April 2019
Facilitation of classroom training	We had orientation meeting with WRC pilot farmers and selection of paddy variety. Training on paddy cultivation has been done.	14th May 2019
Facilitation of on-site training on nursery preparation	On-site training was conducted regarding soil preparation by using pp chemicals and seed treatment.	16th May 2019
Facilitation of on-site training	20/20meter square measured for monitoring and established changkham at 5 Jhum pilot farmers farm	2, 3, 4, 10 April 2019
Provision of input and technical guidance	Provision of input (maize seeds) and technical guidance was given during the training for 2nd year Jhum pilot farmers	25th March 2019
Provide training for introducing INM, PM and 1DM for 30 farmers	Provided training on IDM, IPM, to 31 Sailam orange farmers and IPM, IDM inputs had been distributed to 4 pilot farmers.	29th April 2019
Construction of half-moon terrace by Pilot Farmers	4 pilot farmers participated training on half- moon terrace at the cultivation area	8th May 2019
Facilitation of on-site training on Nursery preparation,IPM and INM	On-site training on paddy nursery preparation by using salt water seeds were selected, top soil collected from forest and mixed with bokashi and ash and put into plastic tray. Line transplanting training was done at the same date.	13th June 2019
Technical training on market survey	Had a market survey at Champhai vegetable markets with BAIDC and JPT. Also provided marketing training at Hnahlan for our pilot	22nd April 2019 23rd April 2019
Select pilot farmers (Select cluster having good access >> instruct them to practice changkham) by VCP	Discussed about 2nd year jhum for next year or not? But cannot finalized yet, we need to consider with VCP and farmers 5 farmers selected for jhum, training on Changkham was done	26th March 2019
Facilitation of training on planning	On that training crops variety had been selected with the farmers. They have selected Tomato, sweet corn, bitter gourd and cabbage for kharif season.	8th May 2019
Facilitation of training for Kharif crops	Class room training on kharif vegetables crops had been done for pilot farmers regarding spacing, nursery, transplant	22nd April 2019
Facilitation of training on line transplanting, water management, use of organic matters and land leveling	Training on line transplanting and land leveling, spacing and water management was done for 2 pilot farmers.	20th June 2019
Technical training on quality control of concrete works	Conduct of cube test and slump test to check the quality of cement works	24th May 2019
Technical training on construction supervision	To understand the needs and necessity of proper supervision during stages of construction	24th June 2019
Technical training on evaluation on time extension	To acquaint the contractors about the conditions of time extension and to identify work items which will be constructed within time extension period considering cultivation season of farmers in the 1st pilot villages	25th June 2019
GIS training for 2nd pilot	To have basic skills for various operations in GIS which are necessary for preparation of contour map, land use map, layout map etc. required for better understanding of landforms, meaningful planning of activities and preparation of DPR	26th June 2019 28th June 2019 1st July 2019
Core Trainers orientation & induction meeting	JPT explained the purpose/task of core trainers to understand and refine the content of project of implementation guideline, farm management for sustainable agriculture, strengthening Farmer's organization, construction management of MIP, strengthening of WUA for O&M for MIP and gave reading materials regarding present issues of Agriculture and development	21st June 2019
Meeting on Final Summary Report	Had discussion on "the study on development and management of land and water resources for sustainable agriculture in Mizoram". Also, Dr. Lalnilawma, Mizoram University and Ms. Lalrokimi, Open Doors (NGO) were participated in the meeting.	27th June 2019
Training on importance of Farmers Organization	To gain and understand the advantages of community works about Farmer's organization slide show of Sri Lanka Farmers organization and WUA contract works was presented. Also, had discussion about how to improve the farmers condition by forming farmers organization	19th July 2019
Facilitation of training for orange cultivation	Training on Orange cultivation had been done for pilot farmers regarding Insect pest management IIPM)	26th July 2019
Onsite training for technical guidance of manual weeder	Onsite training for technical guidance for the operation of manual weeder had been done to the pilot farmers and providing 3 different type of manual weeder to the pilot farmers	20th August 2019
Market Survey at Bara Bazar	Market survey was conducted in Bara Bazar, to understand the actual price, supply and value chain of cereals, oil seeds to acquire the basic knowledge of Mizo agriculture marketing	8th August 2019

Annex 5-4 List of Basic Training & Workshop

Name of Training	Objectives	Date
Review meeting on Market Survey	Had review meeting regarding market survey and also discussed and checked implementation guideline for sustainable agriculture and irrigation development	14th August 2019
Study/discussion on Implementation Guidelines for Sustainable agriculture and irrigation development	Study continued of implementation guidelines for sustainable agriculture and irrigation development	27th August 2019
Meeting on Farm Management Manual for Sustainable Agriculture Version 2.2	Study continued and check Farm management manual for Sustainable Agriculture Version 2.2	13th Sept 2019
Training on Implementation guideline for 2nd Pilot Village	Core trainers had training on Implementation Guidelines for 2nd pilot village for the smooth functioning of BAIDC Activity	11th Oct 2019
Conduct Workshop on Need Assessment for 2nd pilot village	Need Assessment workshop have been conducted in 2nd pilot villages to understand village conditions.	15th Oct 2019
		17th Oct 2019
		22nd Oct 2019
Facilitation of training for agriculture Rabi crops	Class room training on agriculture Rabi crops had been done for pilot farmers and the villager regarding cultivation method of the crops and providing of the seeds (Rape-seed, cowpea and Field pea)	11th Nov 2019
		14th Nov 2019
		29th Nov 2019
Onsite training for Horticulture Rabi crops	Onsite training on Rabi crops had been done for the pilot farmers regarding INM, PM, nursery, transplanting and spacing of the crops and providing of the seeds (Spinach, Beet-root, Radish, Tomato and Green chili)	21st Nov 2019
Technical training on preparation of BAIDC annual activity plan 2020/21	Champhai: BAIDC members prepared Annual Activity Plan for Tlangsam Village, 2nd Pilot village Kolasib: BAIDC members prepared Annual Activity Plan for Bilkhawthlir "A" Village, 2nd Pilot village	4th Nov 2019
		15th Nov 2019
		19th Nov 2019
Training on Ratification for the 2nd Pilot Village	For the smooth function of BAIDC activity core trainer and BAIDC member were trained regarding how to conduct ratification meeting in 2nd Pilot villages	9th Dec 2019
Conducted Ratification at 2nd pilot villages	BAIDC conducted Ratification meeting at 2nd pilot villages and explained BAIDC Annual Activity Plan for their villages	11th Dec 2019
		12th Dec 2019
		12th Dec 2019
Preparation of Monitoring sheet for 2nd Pilot villages	Aizawl: Each department BAIDC member prepared monitoring sheet/detailed plan for 2nd pilot village Kolasib: Each department BAIDC member prepared monitoring sheet/detailed plan for 2nd pilot village Champhai: Each department BAIDC member prepared monitoring sheet/detailed plan for 2nd pilot village	15th Jan 2020
		16th Jan 2020
		20th Jan 2020
		21st Jan 2020
		22nd Jan 2020
		23rd Jan 2020
Study tour to Nagaland to discuss educational tour for IWRD staff.	The pre mission (IWRD + JPT) visited Water Resources Department in Kohima, Nagaland to seek for the possibility of educational visit for IWRD staff. The mission visited Jakhama village after discussion at WRD. They inspected canal constructed through beneficiary system and had interactions with WUA members	22nd - 23rd Jan 2020
Technical training on conduct feedback meeting for BAIDC member	Training on facilitation of feedback meeting and Self evaluation of BAIDC was done for Aibawk RD Block, Bilkhawthlir RD Block, Champhai RD Block, BAIDC members	3rd Feb 2020
		6th Feb 2020
		10th Feb 2020
International workshop on "Impact of Crop Diversification on Farmers income and Food Security"	JICA Project Team along with Mr. Jonathan Lalchhanmawia, RO, LRSWCD attended the International workshop on "Impact of Crop Diversification on Farmers income and Food Security" in Dharamshala, Distt. Kangra, HP, India	10th - 12th Feb 2020
Technical training on conduct feedback meeting for 1st pilot villages	Mamam: Had feedback meeting with pilot farmers to improve our activities. Group discussion and presentation. Sharing opinion regarding the activities and planning for next activity. Buhchangphai: Had feedback meeting with pilot farmers. Activities	4th Feb 2020
		7th Feb 2020
		11th Feb 2020
Training on Broom marketing and cultivation	Had training on broom marketing and cultivation for broom farmers. Prominent broom farmer Mr. Lalthlamuanga from Saipum village was Resource Person	11th Feb 2020
Monitoring Mission Workshop	Two days workshop was conducted to create a common understanding of new approach and refining of roadmap for	17th Feb 2020
		18th Feb 2020
Conduct training for Kharif crop cultivation including land preparation	Implemented on-site training on kharif crop cultivation (pumpkin & sweet corn) for 2nd pilot farmers	24th Feb 2020
Technical training on development and construction of terraces	On-site training on development and construction of terraces has been done at 2nd pilot farmers plot	18th March 2020
Technical training on construction of Half-moon terraces	Implemented on-site training on half-moon terrace construction	11th March 2020
Online interview with Pilot farmers	Conducted online (phone call) interview with pilot farmers regarding current situation survey on Farmer's livelihood amid Covid-19	April - May 2020 June - August 2020 September - November 2020
Transfer of technology (TOT) on Khariff crop cultivation	Implemented class room training Transfer of technology (TOT) on Kharif crop cultivation	8th May 2020
Training on Paddy cultivation (WRC) 2nd pilot villages	Implemented Class room and on-site training for WRC 2nd pilot farmers	8th May 2020
		15th May 2020

Annex 5-4 List of Basic Training & Workshop

Name of Training	Objectives	Date
Facilitation of on-site training on INM&IPM	Class room and on-site training on INM and IPM had done for 2nd pilot farmers	15th May 2020
Training on WRC 1st pilot village	On-site training on seed treatment and nursery preparation was done	28th May 2020
Training on vegetables cultivation at 1st pilot village	On-site training on vegetables cultivation was conducted for pilot farmers	11th June 2020
Training on WRC 1st pilot villages	On-site training on seed selection using salt water, seed treatment, nursery preparation, line transplanting, uses of fertilizers and pp chemicals was done	12th June 2020
		15th June 2020
		26th June 2020
		8th July 2020
		15th July 2020
Training on Paddy cultivation (WRC) 2nd pilot villages	Implemented on-site training on seed selection using salt water, seed treatment, nursery preparation, line transplanting, uses of fertilizers and pp chemicals for WRC pilot farmers	2nd September 2020
		2nd June 2020
		10th June 2020
		16th June 2020
		23rd June 2020
Online test for Manual for Improving Agricultural Extension	Conducted online test for understanding of Manual for Improving Agricultural Extension	1st July 2020
		4th September 2020
Online test for Officers Manual for Construction Management and Operation and Management Manual	Conducted online test for Officers Manual for Construction Management and Operation and Management Manual	June 2020
Online test for Officers Manual for Construction Management and Operation and Management Manual	Conducted online test for Officers Manual for Construction Management and Operation and Management Manual	July 2020
Training on Rabi Crop cultivation, 2nd t pilot village	Implemented training on Rabi crop cultivation (Bean, Pumpkin, Mustard and carrot)	20th August 2020
Technical training on after-care of Arecanut nursery and Banana cultivation, 1st pilot village	Implemented on-site training on after-care of Arecanut nursery and Banana cultivation	3rd September 2020
Training O&M for Irrigation Department	Japanese expert gave online training on O&M for Irrigation Department	3rd September 2020
Training on water tank construction under DoA, 2nd pilot village	Conducted training on water tank construction (water harvesting structure) under PMKSY (DoA) scheme	8th September 2020
Training on Rabi crop cultivation, 2nd pilot village	Implemented class-room training on Rabi crop cultivation (carrot and water melon)	30th September 2020
Training on Planting of vetiver Grass, 2nd pilot village	Implemented on-site training on planting of vetiver grass	1st October 2020
Training on O&M for Lau Lui WUA, 1st Pilot village	Conducted O&M training to WUA	20th October 2020
Technical training on Rajma cultivation (Rabi crop), 1st and 2nd pilot village	Conducted training on Rajma cultivation (importance of line transplanting, weeding earthingup, uses of pp chemicals, fertilizers)	22nd October 2020
Training on Rabi crop cultivation, 1st Pilot village	Conducted class-room and on-site training on Rabi crop cultivation (rape seed and cowpea)	11th November 2020
Training on Rabi Crop cultivation 2nd Pilot village	Implemented training on Rabi crop cultivation (Rape seed and cowpea)	16th November 2020
Facilitation of on-site training on Integrated Pest Management (IPM) and Integrated Nutrient Management (IMP), 2nd pilot	Class-room and on-site training on 1PM and IPM for WRC pilot farmers (Rabi)	16th November 2020
Training on Rabi crop cultivation, 1,1 and 2nd pilot village	Implemented class-room training on Rabi crop cultivation (field pea)	18th November 2020
Training on Rabi crop cultivation 2nd pilot village	Implemented on-site training on Rabi crop cultivation (Carrot and water melon)	23rd November
Training on Rabi crop cultivation 2nd pilot village	Implemented on-site training on Rabi crop cultivation (Carrot and water melon)	4th December 2020
Core Trainers Training for preparation of BAIDC & Farmer's Feedback Meeting, 1st & 2nd Pilot Villages	Core Trainers are given technical guidance for the BAIDC and Farmer's feedback meeting in 1st and 2nd pilot villages	15th January 2021
Training on Broom Grass	Conducted training on broom grass cultivation management, harvesting technique and processing	29th January 2021
Conduct Technical training on BAIDC feedback meeting, 151 & 2nd Pilot Activities	Champhai , Bilkhawthlir 'N' and Aibawk RD Blocks. Core Trainer facilitated BAIDC feedback meeting to discuss achieved outcome, ratings of achievements, reasons and improvements for next year	3rd February 2021
Conduct Technical training on farmers' feedback meeting, 1s1 & 2nd Pilot Activities	BAIDC members conducted feedback meeting with farmers to discuss and evaluate achieved outcome, ratings of achievements, reasons and improvements for year at Pt and 2nd Pilot villages, Champhai , Bilkhawthlir 'N' and Aibawk RD Blocks	9th February 2021
		17th February 2021
		4th February 2021
		5th February 2021
		10th February 2021
Technical Training on O&M for Water Users Association	Implemented Operation and Maintenance training to WUA. (Buhchangphai, Tuikhurlui)	11th February 2021
		18th February 2021
Technical Training on O&M for Water Users Association	Implemented Operation and Maintenance training to WUA. (Buhchangphai, Tuikhurlui)	19th February 2021
Online meeting/training for Preparation of BAIDC Annual Activity Plan 2021/22	Implemented Online meeting/training for Preparation of BAIDC Annual Activity Plan 2021/22 to the core trainers.	5th February 2021
Preparation of BAIDC Annual Activity Plan 2021/22 for 1st and 2nd Pilot village	Prepared BAIDC Annual Activity plan 2021/22 for 1st and 2nd village based on BAIDC & Farmers' feedback meeting	26th February 2021
Preparation of Monitoring sheet/Details Plan	Implemented preparation of Monitoring Sheet for 1st & 2nd Pilot Village	8th March 2021
		11th March 2021
		16th March 2021
Explanation of BAAP to the pilot farmers for Approval at 1st & 2nd Pilot villages	Conducted explanation of BAAP to the pilot farmers for Approval at 1st & 2nd Pilot villages	9th, 12th, 17th March 2021
		25th March 2021
		26th March 2021
		26th March 2021
Explanation of BAAP to the pilot farmers for Approval at 1st & 2nd Pilot villages	Conducted explanation of BAAP to the pilot farmers for Approval at 1st & 2nd Pilot villages	8th April 2021

Annex 5-4 List of Basic Training & Workshop

Name of Training	Objectives	Date
		9th March 2021
Technical Training on O&M for Water Users Association	Implemented Operation and Maintenance training to WUA. (Bilkhawthlir)	21st April 2021
Training on Kharif crop cultivation at 1st & 2nd pilot village	Implemented on-site training on kharif crop cultivation (cabbage) for 1st & 2nd village	21st April 2021 22nd April 2021
Training on Paddy cultivation 1st & 2nd pilot village	Implemented on-site training on paddy cultivation for 1st & 2nd village. Seed selection, seed treatment, preparation of modified mat nursery, line transplanting and water management.	23rd & 24th June 2021
Training on after care of banana cultivation	Implemented training on aftercare of banana cultivation. Time of sucking and transplanting was taught to the farmers.	7th July 2021
Training on Tomato and field pea for Rabi crop cultivation	Conducted training on Tomato and field pea cultivation for 1st pilot village. Soil preparation, nursery management and use of fertilizers were taught to the farmers.	20th Oct 2021
Training on Rabi crop cultivation	Implemented training on cabbage and field pea cultivation for Rabi crop at 2nd pilot village	21st Oct 2021
Training on Rajma cultivation	Implemented training on Rajma cultivation for Rabi crop at 1,1 & 2nd pilot village	28th Oct 2021 3rd Nov 2021
Training on Water-melon cultivation for winter crop cultivation	Implemented training on water-melon cultivation at 2nd pilot village	10th Nov 2021
Technical Training on O&M for Water Users Association	Implemented Operation and Maintenance training to WUA. (Serchhip, Lumtui MIP)	2nd Nov 2021
Training on Chili, cabbage and tomato cultivation for Winter crop cultivation	Implemented training on chili, cabbage and tomato cultivation at 2nd pilot village	18th Nov 2021
Technical training to Core Training Officers to conduct New System	Conducted training on Importance of statistics and information related to agriculture, such as Village Based Basic Data, and use of existing data : Information needed to clarify how the Priority village was selected Sustainable Land Use & Resources Management: Land use methods and valuable resources on slopes in neighbouring countries and Mizoram	22nd Dec 2021
1st sensitization training program on BAIDC system	Conducted training on 1st sensitization to the 6 RC Block BAIDC members. Expert from MZU gave Ppt to the participants	7th Jan 2022
Transfer of Technology to Core Training Officers	Implemented training on Village Agriculture Development Vision to the CTO	12th Jan 2022
Training on construction management 2nd pilot project villages for IWRD staff	Implemented Transfer of Technology for 1WRD staff regarding construction management 2nd pilot project villages for IWRD staff	17th Jan 2022
Transfer of Technology to Core Training Officers	Conducted TOT to core training officers on preparation of BAAP	18h Jan 2022 25th Jan 2022 1st Feb 2022 8th Feb 2022 15th Feb 2022 22nd Feb 2022
Conduct Technical training on BAIDC feedback meeting, 1st & 2nd Pilot Activities	Champhai, Bilkhawthlir 'N' and Aibawk RD Blocks, JPT facilitated BAIDC feedback meeting to discuss achieved outcome, ratings of achievements, reasons and	8th March 2022 8th March 2022 11th March 2022
Conduct Technical training on farmers' feedback meeting, 1st & 2nd Pilot Activities	BAIDC members conducted feedback meeting with farmers to discuss and evaluate achieved outcome, ratings of achievements, reasons and improvements - for year at 1st and 2nd Pilot villages, Champhai , Bilkhawthlir 'N' and Aibawk RD Blocks	9th March 2022 (Buhchangphai) 9th March 2022 (Lamchhip) 9th March 2022 (Sailam) 9th March 2022 (Tlangsam) 10th March 2022 (Bilkhawthlir) 10th March 2022 (Hnahlan)
Conduct Awareness meeting, BAIDC Annual Plan Preparation, inform BAIDC Annual Plan to the farmers in Six (6) RD Blocks	BAIDC conducted awareness meeting of JIFAS, preparation of BAIDC Annual Activity Plan for 25 villages in 6 RD blocks and informed BAAP to the farmers.	10th May 2022 (Aibawk) 10th May 2022 (Champhai) 10th May 2022 (Lunglei) 11th May 2022 (BAAP Aibawk) 11th May 2022 (BAAP Lunglei) 17th May 2022 (Khawzawi) 17th May 2022 (Kolasib) 17th May 2022 (Serchhip) 18th May (BAAP Kolasib) 18th May (BAAP Serchhip) 12th May 2022 (Ngur) 12th May 2022 (Samlukhai) 12th May 2022 (Sialsuk) 12th May 2022 (Tualcheng) 13th May 2022 (Chawilung) 13th May 2022 (Hmunhmeltha) 13th May 2022 (Tachhip) 18th May 2022 (Chawngtlai) 18th May 2022 (Tualte) 19th May 2022 (Bungtlang) 19th May 2022 (Kolasib) 19th May 2022 (Meidum)

Annex 5-4 List of Basic Training & Workshop

Name of Training	Objectives	Date
		19th May 2022 (Thenzawl) 20th May 2022 (Hmuntha) 20th May 2022 (Saipum)
Conduct Awareness training on BAIDC System/JIFAS, organized by SAMETI in collaboration with JICA Project Team	For the expansion of BAIDC system/JIFAS in all over the state, 10 RD Block BAIDC members 2nd batch are trained.	19th & 20th July 2022 26th & 27th July 2022 28th & 29th July 2022 2nd & 3rd Aug 2022
Conduct MIS-JIFAS training for the batch-1, 6 RD Block BAIDC members	MIS-JIFAS trainings were conducted for 6 RD Block BAIDC members for information sharing and monitoring of JIFAS activities.	26th July 2022 28th July 2022 1st Aug 2022 3rd Aug 2022 4th Aug 2022 5th Aug 2022
Conduct Awareness training on BAIDC System/JIFAS, organized by SAMETI in collaboration with JICA Project Team at SAMETI training hall.	Another 12 RD Block BAIDC members 3rd batch are trained for the expansion of BAIDC system/JIFAS in all over the state.	6th & 7th Sep 2022 8th & 9th Sep 2022 13th & 14th Sep 2022
Conduct Progress Review Meeting for Batch-1, 6 RD block	JPT facilitated Progress Review Meeting for Batch-1 at the District office. The BAIDC members from each department shared their progress based on the prepared Plan.	11th Oct 2022 (Bilkhawthlir N) 12th Oct 2022 (Aibawk) 12th Oct 2022 (Serchhip) 14th Oct 2022 (Champhai) 17th Oct 2022 (Khawzawl) 20th Oct 2022 (Lunglei)
Conduct BAIDC Annual Activity Plan 2023-24 for Batch-2, 10 RD Block	BAIDC members prepared BAIDC Annual Activity Plan for priority villages within their respective RD Block based on availability of CSS & SSS.	11th Oct 2022 (East Lungdar) 12th Oct 2022 (N Thingdawl) 14th Oct 2022 (West Phaileng) 17th Oct 2022 (Zawnuam) 18th Oct 2022 (Tlangnuam) 19th Oct 2022 (Ngopa) 21st Oct 2022 (Lungsen) 25th Oct 2022 (Bungtlang S & Chawngte) 28th Oct 2022 (Tipa)

Annex 6 Evaluation Grid : The Project on Capacity Enhancement for Sustainable Agriculture and Irrigation Development in Mizoram

I. Achievements of the Project

Evaluation Item		Indicator / Evaluation Questions	Necessary Data	Source of Information	Acquisition Means
Main Category	Sub Category				
1. Achievement of Overall Goal	Overall Goal: Sustainable agriculture and irrigation development* will be expanded in Mizoram	1. Projects for sustainable agriculture and irrigation development are commenced in more than additional 4 blocks in Mizoram	- Monitoring data of IWRD, DOA, DOH and LRSWCD	- Interview results - Project report	- Documentary survey - Interview
		- Is there a necessity of additional indicators / revision of indicators?			
		- Are there any factors affect achievement of Overall Goal?	- Important Assumption:	- Interview results	- Interview
2. Achievement of Project Purpose	Project Purpose Organizational capacity of the Government of Mizoram to promote sustainable agriculture and irrigation development is enhanced.	1. The methods are approved by JCC, and officialized	- Minutes of the Meetings of JCC - The official letter from higher authority (Chief Minister)	- Minutes of the Meetings of JCC - Project Report - End line survey report - Interview results	- Documentary survey - Interview
		2. At least 2 activities based on collaborative implementation framework in each block are implemented by BAIDC in the 2nd pilot project	- Technical Cooperation Project (TCP) Progress and completion reports		
		3. Action plan to expand project output to all RD blocks and the Methods are endorsed by Chief Minister			- Documentary survey - Interview
		- Are there any factors affect achievement of Overall Goal?	- Important Assumption: - Policies of Central and Mizoram government on agriculture and irrigation development are maintained.	- Interview results	-
3. Achievement of Outputs	Output 1 Methods* for sustainable agriculture and irrigation development are developed.	1-1 Production of food crop is increased by 12.5% in pilot farmers in the first pilot villages.	- End line survey reports. - Questionnaire survey and analysis - TCP Progress and completion reports - Finalized documentation of the methods	- Project Report - End line survey report - Interview results	- Documentary survey - Interview
		1-2 Farm income of cash crop is increased by 12.5% in the pilot farmers (excluding orchard or plantation farmers) in first stage pilot villages.			
		1-3 50% of the technologies practiced in the pilot farmers are disseminated to other farmers in the first pilot villages			
		1-4 More than 80% of village plan are implemented in the first pilot villages.			
		1-5 Activities are commenced based on BAIDC annual plan in the second stage pilot villages by utilizing the budget of Indian central/Mizoram gov.			
		- Are there any factors affect achievement of Output 1?	- Important assumption: Majority of IWRD, DOA, DOH, LRSWCD staff who acquire the technologies under the Project are not transferred or resigned.	- Interview results	
	Output 2 Capacity of the state government officials, in	2-1 More than 60% of the nominated counterparts achievement goal set by them.	- Established achievement goal - Questionnaire survey and reports	- Project Report - End line survey report	- Documentary survey - Interview
	2-2 More than 50% of BAIDC and PMT members				

Evaluation Item		Indicator / Evaluation Questions	Necessary Data	Source of Information	Acquisition Means
Main Category	Sub Category				
	planning and implementation of sustainable agriculture and irrigation development, is enhanced.	acquire necessary skills for implementation of sustainable agriculture and irrigation development			
		- Are there any factors affect achievement of Output 2?	- Important assumption: Majority of IWRD, DOA, DOH, LRSWCD staff who acquire the technologies under the Project are not transferred or resigned.	- Project Report - Interview results	
	Output 3 Collaborative implementation framework among the state government departments, in the field of sustainable agriculture and irrigation development, is established.	3-1 Action plan to expand project output to all RD blocks in Mizoram is prepared by PMT	- Finalized Action Plans	- Action Plan - Project report	- Documentary survey - Interview
		- Are there any factors affect achievement of Output 3)?	- Important assumption: Majority of IWRD, DOA, DOH, LRSWCD staff who acquire the technologies under the Project are not transferred or resigned.	- Project Report - Interview results	
4. Inputs	1) Japanese Experts Long term expert and Short-term expert	Are the inputs from Japanese side (Experts, Equipment, Training, and Budget) implemented as planned?	Quantity, quality and timing of input	- Project Report - Interview results	- Documentary survey - Interview
	2) Counterparts training Training of counterpart personnel in Japan and other countries				
	3) Equipment				
	4) Local cost of project activities				
	1) Allocation of counterpart personnel	Are the inputs from India side (CP, Office space / facility, Budget) implemented as planned?	Quantity, quality, and timing of input	- Project Report - Minutes of JCC - Interview results	- Documentary survey - Interview
	2) Provision of the project office and facilities necessary for the project implementation.				
	3) Other cost				

II. Process of the Project Implementation

Evaluation Item		Evaluation Questions	Necessary Data	Source of Information	Acquisition Means
Main Category	Sub Category				
1.Implementation of planned activities	Activities of output 1	<p><Formulation of draft Methods in the first pilot villages> 1.1 Conduct baseline survey (Satellite image, GIS data, land use, farming situation, and socio-economic conditions) in order to understand the current situation of pilot RD blocks. 1.2 Collect and analyze existing guidelines, manuals and training materials in specific subjects* and draft the methods. 1.3 Establish Block Agriculture and Irrigation Development Committee (BAIDC) which will coordinate the project planning, implementation and monitoring at each pilot RD block. 1.4 Select one pilot village in each pilot RD block. 1.5 Conduct participatory rural appraisal (PRA) and elaborate land use plan, resource management plan, village farming plan and village irrigation plan in each pilot village. 1.6 Prepare an implementation plan for each department and implement prioritized activities based on the above plans in each pilot village by utilizing the Project fund and resources. 1.7 Monitor and evaluate the progress and results of the activities by BAIDC. 1.8 Revise the methods for agriculture and irrigation development according to the results of activities. 1.9 Conduct follow-up activities.</p>	<ul style="list-style-type: none"> - Records of Inputs and activities - Progress of activities - Cross relationship of activities 	<ul style="list-style-type: none"> - Project report - Interviews with Japanese experts and the India side 	<ul style="list-style-type: none"> - Document survey - Interview
		<p><Verification and refinement of the methods in the second pilot villages> 1.10 Select two or three pilot villages in each pilot RD block. 1.11 Conduct PRA and elaborate land-use plan, resource management plan, village farming plan and village irrigation plan in each pilot village. 1.12 Prepare an implementation plan for each department and implement prioritized activities based on the above plans in each pilot village by utilizing the Government fund and resources. 1.13 Monitor and evaluate the progress and results of the activities by BAIDC. 1.14 Finalize the methods.</p>			
	Activities of output 2	<p><Capacity enhancement of the state government officials> 2.1 Assess the technical level of the counterpart (C/P) personnel and set up goals of capacity enhancement. 2.2 Conduct study tours to learn domestic and foreign advanced practices. 2.3 Conduct basic trainings to the state government field staff 2.4 Conduct on the job training (OJT) through activities in the pilot villages. 2.5 Verify the achievement of the goals set by C/P personnel. 2.6 Organize seminars for the state government field staff working for agriculture and irrigation development in the state to disseminate the outputs of the Project.</p>			

Evaluation Item		Evaluation Questions	Necessary Data	Source of Information	Acquisition Means
Main Category	Sub Category				
	Activities of output 3	<p><Establishment of collaborative implementation framework among the state government departments></p> <p>3.1 Prepare a collaboration and cooperation framework (institutional and organizational structure, budget allocation, decision-making process etc.) among state departments relating to agriculture and irrigation development in Mizoram based on the activity 1 and 2.</p> <p>3.2 Elaborate an action plan to expand project outputs to all RD blocks in Mizoram.</p>			
2. Technical transfer	Method of technical transfer	- Are there any problems in technical transfer?	- Result of activities Stakeholder's opinion	- Project report - Interview results	- Documentary survey - Interviews
3. Change of activities	Addition and deletion of activities	- Validity of activity change	- Additional activity / deletated activity	- Project report	- Documentary survey
4. Relationship with stakeholders	Relationship among the Project team, between project team and stakeholder	- Have regular meeting and/or JCC held at regular interval and worked for issue resolution?	- Munities of JCC - Stakeholder's opinion	- Munities of JCC - Interview result	- Interviews
		- Have the Project team and counterpart sufficiently communicated with each other to share information?	- Communication among stakeholders - Stakeholder's opinion	- Project report - Interview results	- Interviews
		- Have the system for chain command and division of roles been established?	- Confirm the chain command and division of role - Stakeholder's opinion	- Project report - Interview results	- Interviews
5. Ownership	Ownership of CP organizations	- Have the counterparts actively participated to the Project activities?	- Participation of India CPs - Stakeholder's opinion	- Project report - Interview results	- Documentary survey - Interview
		- Has the India side allocated enough budget for the Project activities?	- Budget allocation	- Project report - Interview results	- Documentary Survey
6. Monitoring and evaluation	Result of monitoring and evaluation, achievement of the Project	- Are there monitoring and feedback system?	- Monitoring and feedback system	- Project report - Interview results	- Documentary survey - Interview
7. Relationship with other donors	Relationship between other donors	- Is there any collaboration with other donors in the second half of the Project? - Are there any plans for the further collaboration?	- Contents of collaboration with other donors - Stakeholder's opinion	- Project report - Interview results	- Documentary survey - Interview
8. Contribution factors and hindering factors	Factors affecting the Implementation Process	- Are there any factors affecting the implementation of the Project? (Implementation structure, policy, social environment, etc.)	- Contribution factors	- Project report - Interview results	- Documentary survey - Interview
			- Hindering factors		

Evaluation Item		Evaluation Questions	Necessary Data	Source of Information	Acquisition Means
Main Category	Sub Category				
8. Recommendations by JICA Survey team	1 st Feb 2019	<ul style="list-style-type: none"> - Improve the mechanism on communication and chain of command between PMT and BAIDC - Clarification of BAIDC Functions - Institutionalization of BAIDC - Capacity development of core trainer for dissemination of technical skills - Preparation of Second Pilot Activities utilizing the Government fund and resources - Improve the Guidelines and Manuals to be more practical - Allocation of Counterpart Funds for the Project - For the future project activity 	<ul style="list-style-type: none"> - Project reports - Stakeholder's opinion 	<ul style="list-style-type: none"> - Project reports - Interview results 	<ul style="list-style-type: none"> - Documentary survey - Questionnaire survey - Interview
	2 nd Feb 2020	<ul style="list-style-type: none"> - The vision of future development of Mizoram agriculture - The benefits and challenges for “new approach” for sustainable agriculture and irrigation development - The necessary actions till March 2022 to proceed - “roadmap” for institutionalization of “New approach” 	<ul style="list-style-type: none"> - Project reports - Stakeholder's opinion - 	<ul style="list-style-type: none"> - Project reports - Training reports - Interview results 	<ul style="list-style-type: none"> - Documentary survey - Interview

III. Five evaluation criteria

Evaluation Items		Evaluation Items	Evaluation Questions	Necessary Data	Source of Information	Acquisition Means
Category						
Relevance	1. Priorities in relevant national policies of India	Consistency with policies and strategy of India	<ul style="list-style-type: none"> - Consistency with following policies and plans: - SCADD, PNDES, PNSR etc - Priority of agriculture sector 	<ul style="list-style-type: none"> - Development plan - Related documents 	<ul style="list-style-type: none"> - Project report - Related documents 	<ul style="list-style-type: none"> - Document survey
	2. Necessity	Needs of target area and beneficiaries	<ul style="list-style-type: none"> - Needs of counterparts and beneficiaries. 	<ul style="list-style-type: none"> - Need of target group - Satisfaction level of beneficiaries - Stakeholder's opinion - Number of farmers participated in the Project activities 	<ul style="list-style-type: none"> - Project report - Interview results 	<ul style="list-style-type: none"> - Documentary survey - Interview
	3. Relevance of the project plan	Relevance of the project plan	<ul style="list-style-type: none"> - Is the project plan appropriate? 	<ul style="list-style-type: none"> - Related documents - Stakeholder's opinion 	<ul style="list-style-type: none"> - Project report - Interview results 	<ul style="list-style-type: none"> - Documentary survey - Interview
		Factor that inhibit the relevance (if any)	<ul style="list-style-type: none"> - Are there any factor that inhibit the relevance of the project plan? 	<ul style="list-style-type: none"> - Related documents - Stakeholder's opinion 	<ul style="list-style-type: none"> - Project report - Interview results 	<ul style="list-style-type: none"> - Documentary survey - Interview
	4. Appropriateness of the project approaches	Appropriateness of selection of beneficiaries	<ul style="list-style-type: none"> - Is the selection of beneficiaries and pilot sites appropriate? 	<ul style="list-style-type: none"> - Related documents - Stakeholder's opinion 	<ul style="list-style-type: none"> - Project report 	<ul style="list-style-type: none"> - Documentary survey
		Appropriateness of selection of target groups	<ul style="list-style-type: none"> - Is the selection of core farmers appropriate? 	<ul style="list-style-type: none"> - Related documents - Stakeholder's opinion 	<ul style="list-style-type: none"> - Project report 	<ul style="list-style-type: none"> - Documentary survey
		Appropriateness of selection of CPs	<ul style="list-style-type: none"> - Is the number and capacity of CP appropriate? - Do they have adequate experiences and capacity for the Project activities? 	<ul style="list-style-type: none"> - Related documents - Stakeholder's opinion 	<ul style="list-style-type: none"> - Project report - Interview results 	<ul style="list-style-type: none"> - Documentary survey - Interview
		Appropriateness of approach of the dissemination of technology to the farmers	<ul style="list-style-type: none"> - Is the method of the dissemination of technology appropriate? 	<ul style="list-style-type: none"> - Related documents - Stakeholder's opinion 	<ul style="list-style-type: none"> - Project report - Interview results 	<ul style="list-style-type: none"> - Documentary survey - Interview
	Superiority of Japanese technology	<ul style="list-style-type: none"> - Example that use of superiority Japanese technology. 	<ul style="list-style-type: none"> - Stakeholder's opinion 	<ul style="list-style-type: none"> - Project report - Interview results 	<ul style="list-style-type: none"> - Documentary survey - Interview 	
Coherence	1. Consistency with the development cooperation policies of the Japanese government and JICA	Consistency with the priorities in Japanese ODA	<ul style="list-style-type: none"> - Japanese ODA policy for India and Country Assistance Program for the Republic of India 	<ul style="list-style-type: none"> - Japanese ODA Policy - JICA Country Analysis Paper - Related documents 	-	-
	2. Specific synergies & interconnections with other JICA projects	Specific linkages with other JICA projects	<ul style="list-style-type: none"> - Synergy with other JICA projects 	<ul style="list-style-type: none"> - Related documents - Stakeholder's opinion 	-	-
	3. Consistency with international frameworks	Consistency with international frameworks	<ul style="list-style-type: none"> - Development Goals in the SDGs 	<ul style="list-style-type: none"> - Related documents 	-	-
Efficiency	1. Achievement of the Project purpose	Achievement of the Project purpose	<ul style="list-style-type: none"> - Probability of achievement of the project purpose when referring to a status of the objectively verifiable indicators 	<ul style="list-style-type: none"> - Comparison between plan and achievement - Stakeholder's opinion 	<ul style="list-style-type: none"> - Project report - Interview results 	<ul style="list-style-type: none"> - Documentary survey - Interview

Evaluation Items		Evaluation Items	Evaluation Questions	Necessary Data	Source of Information	Acquisition Means
Category						
			- Constraints to hinder achievement of the project purpose, if any	- Progress of activity - Stakeholder's opinion	- Project report - Interview results	- Documentary survey - Interview
	2. Causal relation "from outputs to project purpose"	Contribution of outputs for achieving the project purpose	- Contribution of outputs based on achievement of the verifiable indicators for achieving the project purpose	- Comparison between plan and achievement	- Project report	- Documentary survey
		External conditions to affect achievement of the project purpose	- Is external condition satisfied?	- Policies of Central and Mizoram government on agriculture and irrigation development are maintained.	- Project report	- Documentary survey - Interview
			- Other external conditions	- Stakeholder's opinion	- Interview results	- Interview
Efficiency	1. Progress of the inputs	Situation of the progress of the inputs	- Japanese side: Dispatch of the experts, Provision of equipment, Training in Japan, Local cost	- Input of the Project - Progress of activity	- Project report - Interview results	- Documentary survey - Interview
			- India side: Allocation of CP, Project cost	- Input of the Project - Progress of activity	- Project report - Interview results	- Documentary survey - Interview
		Appropriateness of the inputs	- Appropriateness of the field of the experts, Satisfaction level of participants of the trainings, utilization of result of the Project	- Progress of activity - Stakeholder's opinion	- Project report - Interview results	- Documentary survey - Interview
		Negative effects caused by issues on the inputs	- Are there any negative effects caused by the issues related to inputs? (such as delay in budget execution / shortage of budget / absence of staff etc.)	- Progress of activity - Stakeholder's opinion	- Project report - Interview results	- Documentary survey - Interview
	2. Achievement of the output	Achievement of the output	- Situation of achievement of the output	- Achievement of Output - Stakeholder's opinion	- Project report - Interview results	- Documentary survey - Interview
	3. Causal relationship between the inputs and the outputs of the activates	Appropriateness of Inputs for achieving outputs	- The excess and deficiency in resources of the Project such as human resources.	- Comparison between plan and achievement	- Project report - Interview results	- Documentary survey - Interview
		To achieve the outputs, can situations in outside of the Project have any effects?	- Other external conditions for the achievements of outputs	- Majority of IWRD, DOA, DOH, LRSWCD staff who acquire the technologies under the Project are not transferred or resigned.	- Project report - Interview results	- Documentary survey - Interview
	4. Coordination with other projects	Collaboration with other JICA project and other cooperation project.	- Cooperation and synergy effects with other JICA project	- Other JICA projects	- Project report - Interview results	- Documentary survey - Interview
- Cooperation and synergy effects with projects implemented by other donors			- Other donors			
Impact	1. Probability of achievement of the overall goal	Probability of achievement of the overall goal	- Prospect of achievement of the overall goal	- Degree of contribution by the Project for the improvement	- National Statistics (Start and End of the Project)	- Documentary survey - Interview
		Factors that may promote or hinder generation of the overall goal	- Is there high possibility that the external conditions are satisfied?	- Stakeholder's opinion	- Interview results	- Interview
		Constraining factor for achievement of Overall goal	- Factors inhibit or promote the achievement of overall goal	- Stakeholder's opinion	- Interview results	- Interview

Evaluation Items		Evaluation Items	Evaluation Questions	Necessary Data	Source of Information	Acquisition Means
Category						
	2. Casual relationship	Relationship between overall goal and project purpose	<ul style="list-style-type: none"> - Isn't there significant gap between the Overall Goal and the Project purpose? - Does the achievement of the Project purpose contribute the achievement of the Overall Goal? 	<ul style="list-style-type: none"> - Review of PDM and PO - Stakeholder's opinion 	<ul style="list-style-type: none"> - PDM, PO - Project report - Interview results 	<ul style="list-style-type: none"> - Documentary survey - Interview
	3. Spillover effects: positive	Positive impact	<ul style="list-style-type: none"> - Are there any positive impacts of the Project? 	<ul style="list-style-type: none"> - Progress of activity - Stakeholder's opinion 	<ul style="list-style-type: none"> - Project report - Interview results 	<ul style="list-style-type: none"> - Documentary survey - Interview
	4. Spillover effects: negative	Negative impact	<ul style="list-style-type: none"> - Are there any negative impacts of the Project? 	<ul style="list-style-type: none"> - Progress of activity - Stakeholder's opinion 	<ul style="list-style-type: none"> - Project report - Interview results 	<ul style="list-style-type: none"> - Documentary survey - Interview
Sustainability	1. Political aspect	Policies in the post project stage	<ul style="list-style-type: none"> - Possibility of continuation of political assistance in post project stage. 	<ul style="list-style-type: none"> - Development policy of Gov't of Mizoram - Ownership of Gov't of Mizoram - Stakeholder's opinion 	<ul style="list-style-type: none"> - Policy documents - Project report - Interview results 	<ul style="list-style-type: none"> - Documentary survey - Interview
	2. Institutional aspect	Institutional capacity of CPs continue the activities in the post project stage	<ul style="list-style-type: none"> - Structure to continue the activities by India side in post project stage. 	<ul style="list-style-type: none"> - Mandate of CP and other related authority - Structure in the post project period. - Ownership of CP and farmers 	<ul style="list-style-type: none"> - Project report - Interview results 	<ul style="list-style-type: none"> - Documentary survey - Interview
	3. Financial aspect	Cost estimation for undertaking the necessary activities that should be continued in the post project stage	<ul style="list-style-type: none"> - Possibility of continuation of budget allocation for the activities in post project stage. 	<ul style="list-style-type: none"> - Budget plan of CPs - Availability of another financial source 	<ul style="list-style-type: none"> - Project report - Interview results 	<ul style="list-style-type: none"> - Documentary survey - Interview
	4. Technical aspect	Technical capacity of the CP staff to undertake necessary tasks that should be continued in the post project stage	<ul style="list-style-type: none"> - Situation of utilization of techniques and result of the Project. - How will the deliverables of the Project be utilized / updated? 	<ul style="list-style-type: none"> - Progress of technical transfer - Skill and knowledge to maintain the material and equipment 	<ul style="list-style-type: none"> - Project report - Interview results 	<ul style="list-style-type: none"> - Documentary survey - Interview