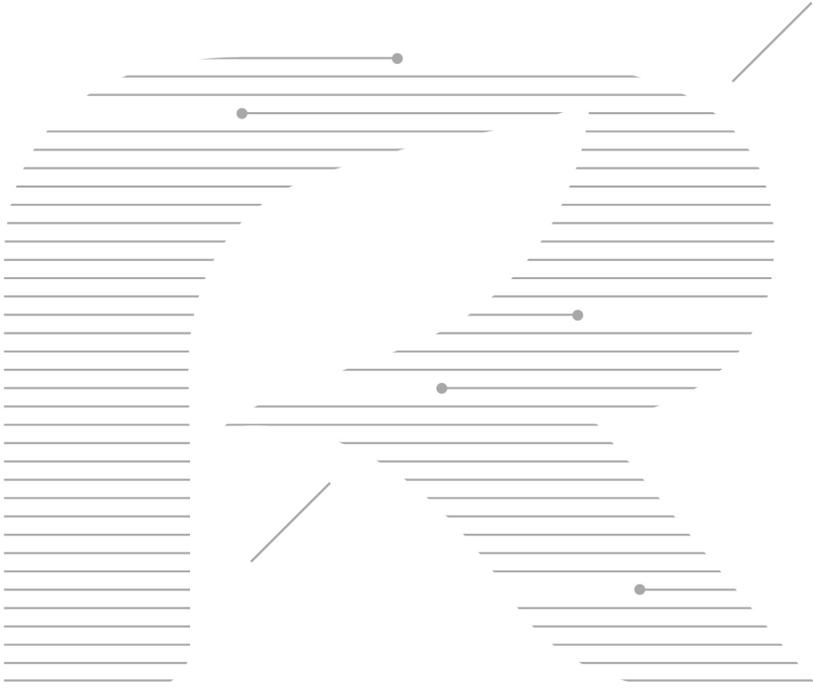


KREI

2023 Evaluation Summary Report

Ex-Post Evaluation on the
Rural Development Project for MIC Zone
in the Philippines

Kim Jongsun · Joo Yeongseon



Korea Rural Economic Institute

The original Korean document was translated into English by, a professional translation company.

Chapter 1. Project Overview	1
Chapter 2. Evaluation Overview	
1. Project Design Matrix for Evaluation (PDMe) and Evaluation Matrix	5
2. Evaluation Stages	8
3. Formation of Evaluation Team	14
4. Methods of Evaluation	14
5. Limitations	17
Chapter 3. Evaluation Results	
1. Relevance	19
2. Coherence	24
3. Efficiency	26
4. Effectiveness	30
5. Impact	35
6. Sustainability	37
7. Cross-cutting Issues	39
Chapter 4. Implications and Suggestions	41

Chapter 1

〈Table 1-1〉 Philippine MIC Project District Rural Development Project Overview (Summary)	3
---	---

Chapter 2

〈Table 2-1〉 PDMe for Evaluated Project	6
〈Table 2-2〉 Post-Evaluation Schedule	8
〈Table 2-3〉 Evaluation Matrix	9
〈Table 2-4〉 Domestic Research Method and Purpose	15
〈Table 2-5〉 PM Interview Details	16

Chapter 3

〈Table 3-1〉 Relevance with Philippine Government Policy	20
〈Table 3-2〉 Relevance of Project Plan (budget, project period, personnel input, etc.)	22
〈Table 3-3〉 Relevance of Project Target Area and Beneficiary Selection	23
〈Table 3-4〉 Expertise and Relevance of Personnel During the project execution process	24
〈Table 3-5〉 Efficiency of Project Input Costs	27
〈Table 3-6〉 Efficiency of Project Period	28
〈Table 3-7〉 Efficiency of Achieving Output Compared to Input Resources	29

〈Table 3-8〉 Efficiency of Supported Facilities	29
〈Table 3-9〉 Satisfaction with Facility Construction and Equipment Support	31
〈Table 3-10〉 Effectiveness of Project in Improving Living Environment	32
〈Table 3-11〉 PM Interview Details on the Effect of the Project on Improving the Living Environment	32
〈Table 3-12〉 Effectiveness of the Project in Strengthening Village Residents' Capabilities	33
〈Table 3-13〉 Effectiveness of the Project in Increasing Village Residents' Income	34
〈Table 3-14〉 Comparison of Village Residents' Income (annual average) Before and After the Project	34
〈Table 3-15〉 Frequency of Village Residents' Usage of Facilities	35
〈Table 3-16〉 Contents of Interviews with Village Residents Regarding Usage of Facilities	36
〈Table 3-17〉 Impact of Project Performance on Other Regions	37
〈Table 3-18〉 Sustainability of Project Operation	38
〈Table 3-19〉 Whether the Project is Financially Self-Sufficient	38
〈Table 3-20〉 Contents of In-Depth Interviews with Public Officials Regarding Project Management and Operation	38
〈Table 3-21〉 Gender Equality	40
〈Table 3-22〉 Negative Impact on the Environment	40

Chapter 4

〈Table 4-1〉 Problems and Needed Improvements	44
--	----

1

Project Overview

The 2009 Korea-Philippine summit resulted in an agreement to establish a Philippine Complex Industrial Complex. Following this, a rural development project was initiated in Malagana Village, Claveria City, Misamis Oriental, Mindanao Island, Philippines. This project spanned 37 months from 2010 to 2013 (Heo Jang et al., 2020). This initiative marked the second phase of the rural development project, focusing on constructing an Agricultural Industrial Complex (MIC) in Claveria City. Unlike the previous single-village project, this endeavor extended to three villages (Aposkahoy, Hinaplanan, and Gumaod), providing broader support that benefited all residents.

Claveria City primarily relies on agricultural income, with approximately 31% (26,055 ha) of its area designated as farmland. However, only 7,538 ha are actively cultivated, indicating significant untapped agricultural potential (Rural Development Corporation, 2012). Consequently, the Philippine government sought specific assistance, selecting Claveria City as a pilot

area for implementing the Agricultural Industrial Complex (MIC). Leveraging the area's agricultural prospects, efforts were directed towards enhancing basic living environments and providing facility support to bolster farmers' income and productivity in the targeted region (Korea Rural Community Corporation, 2012).

Building on the success of the 2010 project, the Korea Rural Community Corporation remained actively engaged in the 2015 MIC project, under the local management of the Philippine Department of Agriculture. This initiative is designed to enhance productivity and uplift the living standards of farmers in Claveria City by facilitating the transfer of agricultural infrastructure and farming technology in the short term, while aiming to elevate farm household incomes in the mid to long term. Additionally, the project is anticipated to support the expansion of Korean companies into overseas markets and foster a mutually beneficial relationship between these companies and the local community.

This evaluation constitutes a post-assessment conducted three years after the conclusion of the 'Philippine MIC Project District Rural Development Project'. It scrutinizes various factors, including facility utilization, beneficiary satisfaction, the impact of strengthening local farmers' capabilities, income augmentation through agricultural education and knowledge dissemination, and enhancements in living conditions. The analysis focuses on assessing the project's effectiveness and sustainability.

**〈Table 1–1〉 Philippine MIC Project District Rural Development Project Overview
(Summary)**

Project Title	• A Rural Development Project for MIC Zone in the Philippines (2015–2020)	
Duration	• 2015–2020	
Budget	• 2,666,571,180KRW (Approximately 2,015,548 USD)	
Implementing institutions	<ul style="list-style-type: none"> • Implementing institution: Korea Rural Community Corporation • Project Management Consultant (PMC): Dong Il Engineering Consultants Co., Ltd 	
Purpose	<ul style="list-style-type: none"> • Contribute to the increase in household income and improvement of the socio-economic condition of the rural community by utilizing the Korean experience on rural development and agriculture technologies. • Enhance the quality of life and increase agricultural productivity in the rural area through the provision of agricultural and social infrastructures, transfer of cultivation technologies and building villagers' capacity • Strengthen the relationship and cooperation between the Republic of Philippines and the Republic of Korea through the successful implementation of the Project 	
Target site	• Barangays of Hinaplanan, Aposkahoy, and Gumaod, Municipality of Claveria, Misamis Oriental Province, Philippines	
Activities	Construction of Buildings and Facilities	<ul style="list-style-type: none"> • Hinaplanan: Rural road pavement (3.2km), Road Construction for Mechanical Construction Facilities (L=140m, Yard 10*20m), Mechanical Dryer (1 unit), Solar Dryer (1 unit), Multipurpose covered court (1 unit) • Aposkahoy: Developing spring water, Vinyl greenhouses (2 units), Storage construction to put agricultural machinery (1 unit), Multipurpose covered court (1 unit) • Gumaod: Small bridge (1 unit)
	Support Equipment	• SUV car (1), truck (1), machineries (6), tool set (1), laptop (5), printer (2).
	Dispatch Experts	<ul style="list-style-type: none"> • Project Manager: 25.8 Month • Rural Development Expert: 3 Month • Agricultural Technology Transfer Expert: 3 Month
	Education to enhance the capacity	<ul style="list-style-type: none"> • Invitational Training <ul style="list-style-type: none"> – Related public officials (Management level) / 1 time, 7 people, 7 days – Related public officials (Working level) / 1 time, 8 people, 14 days • Local training <ul style="list-style-type: none"> – Strengthening residents' capabilities through local education workshops (2 times)

The subject of this evaluation is the ‘Philippine MIC Project District’, implemented from December 31, 2015, to December 31, 2020, in Hinaplanan Village, Aposkahoy Village, and Gumaod Village, located in Claveria City, Misamis Oriental, Mindanao Island, Philippines. Classified as a ‘rural development project’, its objective is to enhance agricultural productivity by improving the transportation and accessibility of agricultural products through the paving of rural roads, installation of bridges, and provision of vehicle support. Furthermore, the project aims to augment agricultural income by establishing cassava solar and mechanical drying facilities, greenhouses, and warehouses. Additionally, the establishment of the MPCC (Multi-Purpose Cooperative Center) fosters community exchange, cultural and sports activities, and enhances living conditions through the development of drinking water facilities (Ministry of Agriculture, Food and Rural Affairs, 2020).

The Korea Rural Community Corporation served as the management agency, while Dongil Technology Corporation acted as the project implementation agency, responsible for operational oversight. The project directly benefited a total of 7,710 residents from the project site villages, comprising 2,930 individuals from Hinaplanan, 2,280 from Aposkahoy, and 2,500 from Gumaod. Additionally, 210 public officials who participated in invitation-based training sessions and local capacity-building programs are also considered direct beneficiaries.

2

Evaluation Overview

1. Project Design Matrix for Evaluation (PDMe) and Evaluation Matrix

In this post-evaluation, an Evaluation Project Design Matrix (ePDM) was created by reviewing the logical structure between project goals, outputs, and activities based on the existing PDM established during the project implementation stage, as well as through interviews with domestic project stakeholders. Unlike the project goals of the existing PDM, the ePDM divided the goals into high-level goals, mid- to long-term performance, and short-term performance for evaluation. Indicators were presented to determine whether the performance of each goal was achieved.

〈Table 2-1〉 PDMs for Evaluated Project

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>■ Overall Goal</p> <ul style="list-style-type: none"> - Increase income through improvement of living environment in rural areas and income increase projects. 	<ul style="list-style-type: none"> - Equipment support - Increased productivity - Increased income 	<ul style="list-style-type: none"> - Statistical data/interview/survey 	<ul style="list-style-type: none"> - Maintaining the government's continuous poverty eradication and agriculture-oriented policies - Maintain social, economic, and political stability
<p>■ Mid-long term purpose</p> <ol style="list-style-type: none"> 1. Increased income of beneficiary farmers 2. Changes in residents' perceptions and attitudes 	<ol style="list-style-type: none"> 1.1. Rate of change in agricultural production of beneficiary residents 1.2. Farm household income increase rate of beneficiary residents 2.1. Whether agricultural technology is spread within other regions 	<ol style="list-style-type: none"> 1. Statistical data/interview/survey 	
<p>■ Short term purpose</p> <ul style="list-style-type: none"> - Utilization and operation of established facilities - Facility satisfaction - Strengthening the agricultural production and management capabilities of farmers and related public officials in beneficiary areas 	<ol style="list-style-type: none"> 1.1. Drying facility utilization performance 1.2. Green house utilization performance 1.3. Agricultural machinery utilization performance 2.1. Local residents' satisfaction with supported facilities and equipment 3.1. Field application of acquired technology 3.2. Satisfaction of public officials participating in invitation training 3.3. Application of technology to work by civil servants who participated in invitation training 	<ul style="list-style-type: none"> - Beneficiary farm survey - MIC district civil servant facility operation reports or data - Survey of civil servants who participated in invitation training 	

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>■ Outputs</p> <ol style="list-style-type: none"> 1. Infrastructure construction (MPCC, bridges, drying facilities, greenhouses, road paving) 2. Farming education and technology transfer 3. Support for related equipment 4. Invitational training 	<ol style="list-style-type: none"> 1. Facilities built according to plan 2. Number of local trainings/number of people trained 3. Equipment provided compared to plan 4. Whether invitational training is implemented/number of civil servants who completed the training 	<ul style="list-style-type: none"> - Completion report - Expert dispatch performance report - Invitation training result report - Site visit results: Support for facilities and equipment - Local residents' satisfaction results - Expert activity report performance 	<ul style="list-style-type: none"> - Reliability of design/construction - Report reliability - Reliability of management reports of buildings and facilities - Employees' willingness to educate/train - Cooperation with local officials
<p>■ Activities</p> <ol style="list-style-type: none"> 1. Facility support <ol style="list-style-type: none"> 1.1. drying facility 1.2. Multipurpose Cover court (MPCC) 1.3. Rural road paving 1.4. plastic house 1.5. Drinking water development 2. Equipment support <ol style="list-style-type: none"> 2.1. SUV, truck (1 each) 2.2. Agricultural machinery (6 types including management machinery) 2.3. office equipment 3. Dispatch of experts <ol style="list-style-type: none"> 3.1. PM 3.2. rural development 3.3. Farming guidance 4. Capacity building <ol style="list-style-type: none"> 4.1. Invitation training held 4.2. Conducting resident capacity building training 	<p>■ Input</p> <ul style="list-style-type: none"> • Korean side's Responsibility <ul style="list-style-type: none"> - Facility construction project cost - Dispatch of experts for project management and farming education - Installation of infrastructure and buildings - Equipment and material support project costs - High-ranking and working-level civil servants invited to Korea for training • Philippine side's Responsibility <ul style="list-style-type: none"> - Free project land provided - Designate a project coordinator - Administrative support such as project-related licensing and approval - Office provided - Duty exemption, customs clearance, etc. for equipment - Safety, legal and administrative support according to project implementation 		<p>■ Assumption</p> <ul style="list-style-type: none"> - Agreement on securing all conditions for project implementation by the recipient country, which provides land for infrastructure and buildings; - Willingness to actively pursue project and administrative support

Source: Written by the Author.

2. Evaluation Stages

The evaluation spanned a duration of eight months, as detailed in (Table 2-2). Beginning with evaluation planning in May, the project proceeded in the following sequence: conducting interviews with the Project Manager (PM) of the executing agency and formulating the Project Design Matrix (PDM) and evaluation matrix. Initially, the domestic evaluation team planned a field investigation for November 2023, following the selection of a Philippine investigation company. However, due to security concerns on Mindanao Island, Philippines, the field investigation was canceled. Instead, the task was reassigned to the investigation company and the responsible public officials.

Notably, the project area is in close proximity to regions inhabited by Islamic rebels. Consequently, the local project trip was called off amid fears of potential terrorist attacks triggered by the outbreak of the Israel-Palestinian conflict. Given these circumstances, on-site investigations were requested by the assigned public officials, and an external investigation team was commissioned to cross-verify opinions between the public officials and residents of the beneficiary area.

(Table 2-2) Post-Evaluation Schedule

Schedule	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Planning	▶	▶						
Liturerature Review	▶	▶	▶	▶	▶	▶		
PM Interview		▶						
PDM / Evaluation Matrix	▶	▶	▶	▶	▶			
Field Survey					▶	▶	▶	
Survey Result Analysis						▶	▶	▶
Report Writing								▶

Source: Written by the Author.

To effectively integrate the developed ePDM into the evaluation process, an evaluation matrix was devised, aligning with the OECD/DAC evaluation standards. This matrix functioned as a roadmap for conducting interviews and field investigations, organizing the matrix according to post-implementation status and stakeholder characteristics.

〈Table 2-3〉 Evaluation Matrix

Criteria	Index	Detailed Questions	Method	
1. Relevance	1.1. Compliance with Domestic and International Development Cooperation Policies, Strategies, and Priorities	1.1.1. Do the objectives and contents of the project align with the policies and strategies of the following partner countries? – The Philippine government’s national development plan and medium to long-term strategy priorities – The policy and implementation strategy priorities of the local governments in the Philippines	Literature Review, Interview	
		1.1.2. Do the objectives and contents of the project align with the following policies and strategies of our government? – Korean government’s country-specific cooperation strategy (CPS) and other cooperation strategy projects with the Philippines – The Ministry of Agriculture, Food and Rural Affairs’ ODA strategy		
		1.1.3. Does this project contribute to the achievement of the Sustainable Development Goals (SDGs)?		
	Appropriateness of Project Plan and Content	1.2. Appropriateness of Project Implementation Plan	1.2.1. Was the process of discovering and selecting the project led by the recipient country? 1.2.2. Are the project’s plans and contents logically and consistently structured?	Literature Review, Interview
		1.3. Appropriateness of Region Selection	1.3.1. Was the selection of the target region appropriately made considering residents’ opinions and the needs of the partner country? 1.3.2. Was regional balanced development of the recipient country considered? 1.3.3. Were the contents of this project suitable for the target area?	
		1.4. Differentiation from Similar Projects	1.4.1. Did this project have distinct differences from existing rural development projects? 1.4.2. Were there additional related projects linked to this project?	

Criteria		Index	Detailed Questions	Method
Appropriateness of Project Implementation Process	1.5. Appropriateness of Implementing Agency and Input Personnel	1.5.1. Did the implementing agency possess the appropriate qualifications for performing the tasks? 1.5.2. Were the input personnel (expertise, number, duration, etc.) suitable for carrying out the project and achieving its goals? 1.5.3. Was the project's supervision system and execution supervision carried out transparently? 1.5.4. Was the selection process and activities of dispatched experts appropriate?	Literature Review, Interview	
	1.6. Appropriateness of Risk Management	1.6.1. Were the occurrence and resolution methods of conflicts of interest appropriate? 1.6.2. Was the occurrence of risks and the response to them appropriate?		
	1.7. Appropriateness of the Monitoring Process	1.7.1. Was a monitoring plan established and executed? 1.7.2. Were the monitoring results fed back and accepted? 1.7.3. Was the situation appropriately managed when project risk factors arose?		
2. Efficiency	Economic Efficiency of Resource Utilization	2.1. Efficiency of Budget Execution Compared to Plan	2.1.1. Was the project executed efficiently within the planned time and budget scope? 2.1.2. Was the execution and management of the project budget efficient? 2.1.3. Were there additional costs incurred due to project delays and other issues?	Literature Review, Interview
		2.2. Output Results Compared to Input	2.2.1. Was the budget allocation among project input factors appropriate? 2.2.2. Was the actual input (personnel, funds, time, etc.) compared to the input plan and the achievement of project outputs efficient? 2.2.3. Can the achieved results be created more effectively with less cost? 2.2.4. Do project participants believe that the output results compared to the inputs were efficient?	
	Efficiency of Project Operation	2.3. Efficiency of Project Operation System	2.3.1. Was the project management system (Philippine Government-PMC-KRC) operated efficiently? 3.3.2. Was the PMC's project execution system efficiently established and operated?	Literature Review, Interview, Survey
	Efficiency of Technology Application	2.4. Practicality of Transferred Technology	2.4.1. Was the utilization and practicality of the transferred storage and processing technology adequately supported according to local conditions? 2.4.2. Were the fields of education and technology transfer selected considering the local environment and agricultural situation?	Interview, Survey, Field Visit

Criteria		Index	Detailed Questions	Method
			2.4.3. Was the supported storage and processing technology efficient in improving agricultural productivity in the project target area?	
		2.5. Local Utilization of Input Equipment	2.5.1. Were the input equipment not duplicated with existing equipment and were all necessary resources supported? 2.5.2. Is the input equipment being continuously utilized? 2.5.3. Is the input equipment being regularly inspected and maintained?	
3. Effectiveness	Short-term Effects of the Project	3.1. (Facility Construction) Greenhouse, Drying Facility, Warehouse	3.1.1. Were the supported facilities constructed according to the pre-plan? 3.1.2. To what extent are the facilities being utilized? 3.1.3. Are the project participants satisfied with the supported facilities? 3.1.4. Have the supported facilities increased the agricultural income of the project participants?	Interview, Survey, Field Visit
		3.2. (Facility Construction) Bridge, Water Supply Development, Road Paving, Village Hall (MPCC)	3.2.1. Were the supported facilities constructed according to the pre-plan? 3.2.2. To what extent are the facilities being utilized? 3.2.3. Are the project participants satisfied with the supported facilities? 3.2.4. Have the supported facilities improved the living environment of the project participants?	
		3.3. (Equipment Support) SUV Vehicles, Trucks, Agricultural Machinery, Laptops, Office Supplies such as Copiers	3.3.1. Was the equipment supported according to the pre-plan? 3.3.2. To what extent is the supported equipment being utilized? 3.3.3. Are the project participants satisfied with the supported equipment?	
		3.4. (Expert Dispatch) PM, Rural Development Experts, Agricultural Guidance Experts	3.4.1. Was the expert dispatch operated according to the pre-plan? 3.4.2. Was the community capacity building program operated according to the pre-plan? 3.4.3. Are the project participants satisfied with the expert dispatch? 3.4.4. Are the project participants satisfied with the local training programs (greenhouse crop production, agricultural machinery operation and maintenance, cassava production and post-harvest management training)?	
		3.5. Invitational Training	3.5.1. Was the invitational training conducted according to the pre-plan?	

Criteria	Index	Detailed Questions	Method
Mid-term Effects of the Project		3.5.2. Are the participants satisfied with the field and lecture programs of the invitational training?	
	3.6. Changes in Perception and Attitude of Beneficiaries and Local Residents	3.6.1. Do the project participants believe that the storage condition of harvested crops has improved? 3.6.2. Do the project participants believe that their agricultural capabilities have been enhanced? 3.6.3. Do the project participants believe that the outcomes of this project have been expanded/spread to other regions?	
	3.7. Increase in Farm Income through Agricultural Productivity Improvement	3.7.1. Has the project led to an increase in agricultural productivity among the residents? 3.7.2. Has the project created added value for the produced goods? 3.7.3. Has this project contributed to increasing the farm income of the beneficiaries?	
	3.8. Promotion of Friendly Relations between the Two Countries	3.8.1. Has cooperation between Korea and the Philippines continued after this project? 3.8.2. Has the perception of cooperative projects with Korea improved within the Philippines?	
4. Impact	Possibility of Achieving Long-term Outcomes	4.1.1. Do you think that the capacity-building programs and facilities supported by the project are being sustainably utilized after the project's completion? 4.1.2. Has this project contributed to the improvement of production, storage, and processing of agricultural products in the Philippines?	Interview, Survey
	Ripple Effects of the Project	4.2. Contribution to Institutional Change/ Development 4.2.1. Has this project contributed to the achievement of agricultural development goals in the Philippines?	
		4.3. Derivative Effects 4.3.1. Were there any unintended effects (positive or negative) of the project? 4.3.2. Were the measures to mitigate negative impacts appropriate?	
5. Sustainability	Operational Sustainability 5.1. Self-Operational Capability	5.1.1. Are there sufficient human resources to operate and manage the facilities independently? 5.1.2. Has the capacity to operate and manage the facilities independently been enhanced? 5.1.3. (Facility Management) Do they have the capability or contingency plans to independently carry out repairs and maintenance of the supported facilities and equipment if needed? 5.1.4. Is the support from the central and local governments ongoing?	Interview, Survey

Criteria		Index	Detailed Questions	Method
		5.2. Institutional Stability	5.2.1. Have systems been established for the sustainable operation and management of the project?	
		5.3. Financial Self-Sufficiency	5.3.1. Is the financial status of the implementing agency (local government) sound? 5.3.2. Does the implementing agency (local government) have the financial capability to manage the operation of the project in the future?	
	Post-Management and Follow-up Actions	5.4. Establishment of Post-Management System	5.4.1. Is the maintenance of the facilities and equipment supported by this project being carried out appropriately? 5.4.2. Do they have an appropriate decision-making system and the ability to manage cooperative institutions for the maintenance of the facilities and equipment supported by this project? 5.4.3. Are there adequate maintenance plans and funding plans in place for the supported facilities and equipment?	
6. Cross-Cutting	Gender Mainstreaming	6.1. Inclusion of Measures to Promote Gender Equality in Project Planning, Implementation, and Results	6.1.1. Were gender relations and gender equality considered throughout all phases of the project? 6.1.2. To what extent did this project impact gender equality?	Interview, Survey
		6.2. Female Participation Among Direct Beneficiaries	6.2.1. What is the proportion of women among the facility managers and staff at the time of the post-evaluation? 6.2.2. Were women included among the participants of local and domestic training programs?	
	Environmental Impact	6.3. Implementation of Preliminary Environmental Impact Assessments	6.3.1. Were environmental impacts sufficiently considered during project planning and implementation? 6.3.2. Were there any intended or unintended impacts on the environment?	
		6.4. Land Environment	6.4.1. Did the development of facilities cause any damage to the land or natural environment? 6.4.2. Did the facility development negatively affect the natural landscape and environmental improvement within the project area?	

3. Formation of Evaluation Team

The evaluation team comprised one evaluation manager and one researcher from the Korea Rural Economic Institute. To conduct a field research, the survey and field visit in the Philippines was entrusted to the Southern Philippine University of Science and Technology, located within the project area.

4. Methods of Evaluation

4.1. Investigations in Korea

In Korea, the initial procedures involved a literature review, stakeholder interviews (including project execution managers), and the development of a PDM and evaluation matrix. For the literature review, internal statistical data and reports were obtained and referenced with assistance from officials from the Philippine Department of Agriculture. Additionally, utilizing the project feasibility report, annual report, and completion report from the Korea Rural Community Corporation and Dongil Technology Corporation, a PDM was formulated to comprehend and assess the project.

〈Table 2-4〉 Domestic Research Method and Purpose

Research Method	Target	Purpose of Investigation
Literature Review	<ul style="list-style-type: none"> • Project report (pre-feasibility study report, annual report, construction completion report, etc.) • Philippine national strategy and sector strategy related to project • Korea-Philippines Country Partnership Strategy (CPS) 	<ul style="list-style-type: none"> • Compliance with the 6 OECD DAC evaluation criteria (especially Relevance) • Basic data for conducting stakeholder interviews and completing local surveys
Stakeholder Interview	<ul style="list-style-type: none"> • Project Manager – DONG IL Engineering Consultants Co., Ltd. 	<ul style="list-style-type: none"> • Compliance with OECD DAC 6 evaluation criteria • Basic data for filling out various surveys, checklists, etc., such as on-site inspections, interviews, and surveys. • Other information collection
Reporting of Interim and Final Results	<ul style="list-style-type: none"> • Project Management Agency – MAFRA, KRC 	<ul style="list-style-type: none"> • Interviews and collection of related data related to the overall project implementation process (discovery, management, follow-up, etc.) • Discussion on follow-up management

Source: Written by the Author.

A face-to-face and written interview with the project PM took place on June 23, 2023. During the interview, discussions encompassed various aspects such as the project overview, performance, encountered challenges, and follow-up measures to sustain project effectiveness. Topics included local conditions during the project, cooperation from local government entities, deviations from the initial plan during project execution, and guidelines for follow-up management. The investigation primarily focused on assessing implemented actions.

〈Table 2–5〉 PM Interview Details

Interviewee	Affiliation	Date	Interview Details
SeChul Son (PM)	DONG IL Engineering Consultants Co., Ltd.	2023. 6. 23.	<ul style="list-style-type: none"> • Local situation at the time of the project, major project details and difficulties such as local government cooperation, etc. • Reasons for change when pursuing project plan • Whether action is taken after the project ends, such as a follow-up management manual, etc. • Opinions regarding follow-up measures and follow-up projects • Suggestions for key points, etc. when inspecting facilities and interviewing local stakeholders

Source: Written by the Author.

4.2. Field Study

Field research within the project area villages was carried out by a designated field research agency (Southern Philippine University of Science and Technology) from November 10 to 12, 2023. Preceding the field survey, a preliminary workshop was conducted for 14 researchers in early October 2023. The questionnaire, prepared by the Rural Economic Research Institute, was translated into the local language for use during the survey. In collaboration with the Philippine Department of Agriculture and local authorities, residences of eligible survey participants were identified, with interviews conducted at Multi-Purpose Cooperative Centers (MPCCs) established in each village. Utilizing the Agricultural Registry established by the Philippine government in 2012 to register and manage farmers nationwide, village residents eligible for the survey were identified. Respondents were selected through random sampling from the village resident database.

The survey gauged satisfaction with facilities, frequency of usage, and

other aspects using a 5-point Likert scale. Additionally, residents were encouraged to provide additional insights, including problems encountered and requests for follow-up management, through open-ended questions. A total of 162 villagers responded to the survey, comprising 41 from Gumaod village, 61 from Hinaplanan village, and 60 from Aposkahoy village. Furthermore, a separate survey targeting 20 public officials directly involved in project promotion and management was conducted.

5. Limitations

Throughout the evaluation process, collaboration with the Philippine Department of Agriculture, local government officials, and local survey companies proceeded smoothly. Additionally, village residents actively participated in the survey. However, due to security concerns in the Mindanao project target area, the Korean evaluation team was unable to visit the project site. Consequently, there was a limitation in conducting specific case studies to analyze the project's effectiveness and impact comprehensively. To address this, additional written interviews were conducted with local public officials to supplement the content. Nonetheless, there remained a limitation in generating sufficient supplementary research to demonstrate the correlation between this project and changes in village residents' income.

3

Evaluation Results

1. Relevance

1.1. Relevance with Policies and Strategies

1.1.1. Relevance with Philippine Agricultural Policies and Strategies

The Philippine government introduced ‘Our Ambition 2040 (AmBisyon Natin 2040)’ in 2016, which encompassed agricultural and rural development among its nine focal areas aimed at fostering a middle-class society free from poverty. To actualize this vision, the Philippine Development Plan 2017–2022 was formulated as a national strategy. Subsequently, the ‘Philippine Development Plan 2023–2028’, unveiled in January 2023, continued to prioritize ‘agriculture and agriculture-related industries’, emphasizing a strategy of ‘modernization’.

Embedded within the Philippine Development Plan is a strategy to ‘enhance economic opportunities in the agriculture, forestry, and fisheries sector’. This strategy seeks to broaden economic prospects for workers in these sectors while improving accessibility to economic opportunities for small-scale farmers and fishermen (Heo Jang et al., 2020a). To facilitate economic expansion and accessibility, the strategy delineates detailed implementation plans, including the maintenance of small-scale irrigation facilities, utilization of agricultural and fishing machinery, and physical connectivity between production sites and markets.

The project components, such as road construction, small-scale bridge development, provision of drinking water, and support for agricultural product drying facilities, align closely with the Philippines’ strategy for agriculture, forestry, and fisheries to enhance economic opportunities for small-scale farmers.

In a survey of 20 relevant public officials, 85% (17 individuals) indicated that this project is congruent with the Philippines’ national development plan and agricultural strategy.

〈Table 3–1〉 Relevance with Philippine Government Policy

Category	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Related Public Officials (20 ppl)	0%	5%(1)	10%(2)	65%(13)	20%(4)

Source: Local survey results.

1.1.2. Compatibility with International Development Goals

The Philippine MIC Project District Rural Development Project aimed to enhance villagers' living environments by constructing roads and bridge facilities in underdeveloped areas, developing drinking water infrastructure, and boosting residents' income through support for agricultural product drying facilities and greenhouses. Consequently, the project's objectives align with the first goal (end poverty) and the sixth goal (water and sanitation) of the UN's Sustainable Development Goals (SDGs).

1.1.3. Relevance with Korea's Post Philippines National Cooperation Strategy

Korea's national cooperation strategy with the Philippines, revised in 2023, aligns with key growth engines such as transportation and digital sectors in accordance with the Philippine Development Plan (2023–2028). It aims to address crises including climate change and food security while enhancing resilience for sustainable growth. The strategy focuses on five key cooperation areas, including transportation, water management, health and hygiene, climate change and environment, and ICT. Among these, support for regional development emphasizes strengthening food security by enhancing productivity and the value chain in agricultural and fisheries industries, thus contributing to poverty reduction through participatory rural development. Consequently, the objectives of this evaluation project are consistent with Korea's national cooperation strategy with the Philippines.

1.2. Relevance of Project Plan

This project was promoted as a follow-up project to the ‘Philippine Rural Development Project’ that was being implemented at the time at the request of the Philippine government, and greatly reflected the Philippine government’s will to promote the project. Demand discussions, field trips, and feasibility studies were conducted with the Philippine government from November to December 2012, and project implementation discussions and inspection of the project site were conducted twice in March 2014 and June 2015. In this process, it is judged that the project plan for this project was established through an appropriate process in that the project demand and project implementation conditions were confirmed through interviews with residents and public officials of the project site.

In addition, as shown in <Table 3-2>, in a survey of 20 related public officials, 70% of respondents responded that the plan for this project was properly established.

<Table 3-2> Relevance of Project Plan (budget, project period, personnel input, etc.)

Category	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Public Officials(20)	5%(1)	5%(1)	20%(4)	60%(12)	10%(2)

Source: Results of survey questionnaires.

The target sites for this project were three villages (barangays): Aposkahoy, Hinaplanan, and Gumaod. As Korea’s KOICA project is already in progress in the project area, the feasibility study team determined that this project would proceed smoothly, and that there would be expected economic effects from the project as Korean companies have leased or are planning

farms. At the time of conducting the feasibility study, the project target area and beneficiaries were appropriately selected. In addition, as shown in <Table 3-3>, 75% of related public officials, 68% of Aposkahoy village residents, 90% of Gumaod village residents, and 84% of Hinaplanan village residents supported the selection of project target area and beneficiaries. The response was that it was done appropriately.

<Table 3-3> Relevance of Project Target Area and Beneficiary Selection

Category		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Public Officials(20)		10%(2)	0%	15%(3)	50%(10)	25%(5)
Villagers	Aposkahoy(60)	1.67%(1)	3.33%(2)	26.67%(16)	61.67%(37)	6.67%(4)
	Gumaod(41)	0%	0%	9.76%(4)	73.17%(30)	17.07%(7)
	Hinaplanan(61)	0%	4.92%(3)	11.48%(7)	72.13%(44)	11.48%(7)

Source: Results of survey questionnaires.

1.3. Relevance of Project Execution Process

During the project execution process, there were repeated project interruptions and resumption due to the declaration of martial law in the Mindanao region of the Philippines and the coronavirus outbreak, but from 2016 to 2020, a project manager (PM) was dispatched for 25.9 months to oversee the overall project work. In addition, during the same period, rural development experts and agricultural guidance experts were each dispatched to the field for three months to promote local education and training to strengthen the capabilities of village residents, such as education for rural development and income improvement and facility gardening technology education.

As a result of a survey of relevant public officials, they responded that appropriately qualified project managers (PMs) and Korean experts were dispatched, and that they understood the local situation in the Philippines and had relevant knowledge.

〈Table 3-4〉 Expertise and Relevance of Personnel During the project execution process

Category	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Public Officials(20)	5%(1)	10%(2)	15%(3)	55%(11)	15%(3)

Source: Results of survey questionnaires.

2. Coherence

2.1. Internal Coherence

The project subject to this evaluation, the ‘Philippine MIC Project District Rural Development Project’, is in consistent harmony with the ‘Philippine Rural Development Project (2010-2013, approximately KRW 1.1 billion)’ completed in 2013. The Philippine rural development project targeted the Malagana village in Claveria City, Oriental, the same area as this evaluation project, and was promoted with the goal of contributing to rural development through the creation of a corn production and processing facility complex.

The ‘Philippine Multi-Industry Clusters: MIC Creation Project’, which was to be promoted through an agreement between the Korean and

Philippine governments, could not continue, but both the project subject to this evaluation and the Philippine rural development project completed in 2013 were implemented in the Philippines. It was promoted in connection with the MIC project.

In addition, the project subject to this evaluation is highly consistent with Korea's National Cooperation Strategy with the Philippines (2023). Korea's key areas of cooperation with the Philippines include 'improving agricultural and livestock productivity' and 'resident-participatory rural development', and the main goals of this evaluation project, 'improving rural living environment' and 'increasing farm household income', are key areas of cooperation with the Philippines. It is consistent with

2.2. External Coherence

The goal of improving the living environment in rural areas and enhancing agricultural productivity through this project subject to evaluation shows a similar direction to the Philippine cooperation strategy proposed by major donor countries and international organizations in the international community.

The United States Agency for International Development (USAID)'s 'Philippines National Development Cooperation Strategy (2020-2024)' presents development goals of 'strengthening democratic governance', 'expanding inclusive market-based growth', and 'improving the resilience of the environment and local communities'. There is (Heo Jang et al., 2020a). USAID's development cooperation strategy for the Philippines

does not provide a detailed direction for development cooperation in the agriculture and rural areas, making it difficult to determine external consistency with the project subject to this evaluation. However, the importance of private sector participation and community development is also reflected in the project subject to this evaluation. is being emphasized.

In the ‘Philippines Country Strategic Opportunities Program (COSOP: 2017-2022)’ of the International Fund for Agricultural Development (IFAD), ‘establishing a competitive agri-food value chain support system’ is presented as an agriculture-related goal. To this end, small-scale agricultural producers, projectes, and vulnerable village residents in regions such as Eastern Visayas and Mindanao were presented as priority support targets (Heo Jang et al., 2020a). This evaluation project, which aims to improve living conditions and increase income for village residents in vulnerable areas, appears to be consistent with IFAD’s Philippine development strategy.

3. Efficiency

3.1. Economic Efficiency of Resource Use

The project subject to this evaluation had a total budget of 2.66 billion won to improve the living environment and income of three villages (Aposkahoy, Hinaplanan, and Gumaod). In particular, a large budget of approximately 1.6 billion won was invested to build facilities such as pav-

ing rural roads, developing drinking water sources and installing water supply pipes, multi-purpose cover courts (MPCC), and agricultural product drying facilities.

It was found that investing 60% of the total project cost to build infrastructure to improve the living environment in the project village and to build facilities to increase farm income was generally efficient.

The survey results showed that project budget execution and management were efficient. However, 10% of the civil servants surveyed responded that they were not efficient in achieving output relative to project input, which was because they were somewhat dissatisfied with the use of the supported facilities.

〈Table 3-5〉 Efficiency of Project Input Costs

Category	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The project budget and management were executed transparently and efficiently.	0%	0%	35%(7)	55%(11)	10%(2)

Source: Results of survey questionnaires (20 public officials).

3.2. Efficiency of Project Period

This project was originally planned to be completed by December 31, 2018, but the project was suspended twice due to martial law and COVID-19, and the project period was extended until December 31, 2020. Due to the declaration of martial law throughout Mandanao, the project was suspended for approximately 13.5 months (August 1, 2017 to September

13, 2018), and the project progress at that time remained at 42.5%, and the project was suspended for approximately 7 months due to COVID-19. stopped.

During the two project suspension periods (approximately 20.5 months), it was almost impossible for the project executing agencies (Korea Rural Community Corporation and Dongil Technology Corporation) to communicate with the local community, and it was difficult to manage facilities through the local government (Claveria City). There was this. In addition, while the project period was extended, prices rose significantly, and while the project cost was carried out according to the budget prepared in 2015, it was found that there were difficulties in procuring facility materials (see <Appendix 3> PM interview results).

As a result of the survey, most respondent public officials (75%) responded that the project was implemented as planned within the project period and budget despite unexpected circumstances. On the other hand, 20% of respondents expressed the opinion that the planned project period was not efficient.

<Table 3-6> Efficiency of Project Period

Category	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
It was implemented as planned within the planned period and budget.	10%(2)	10%(2)	15%(3)	55%(11)	20%(4)

Source: Results of survey questionnaires (20 public officials).

3.3. Degree of Performance Achieved Compared to Input Resources

The performance of this project was found to be relatively efficient compared to the input resources (Table 3-7). However, considering that 10% of the survey respondents responded that ‘achieving the output was not efficient’, it can be seen that there is a clear beneficiary group that does not receive benefits from the outcomes of this project.

As a result of a survey on the efficiency of the facilities (rural roads, multi-purpose cover courts, drinking water, bridges, greenhouses, etc.) supported through this project, it was found that these facilities were appropriately supported according to the local situation (Table 3-8). In particular, 93% of Gumaod village residents responded that facilities (small bridges) were efficiently supported.

Table 3-7 Efficiency of Achieving Output Compared to Input Resources

Category	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Actual input and achievement of project output were efficient compared to the input plan.	5%(1)	5%(1)	35%(7)	50%(10)	5%(1)

Source: Results of survey questionnaires (20 public officials).

Table 3-8 Efficiency of Supported Facilities

Category	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Public Officials(20)	0%	5%(1)	0%	65%(13)	20%(4)	
Villagers	Aposkahoy(60)	2%(1)	7%(4)	15%(25)	60%(36)	7%(4)
	Gumaod(41)	2%(1)	0%	5%(2)	73%(30)	20%(8)
	Hinaplanan(61)	0%	2%(1)	17%(10)	65%(39)	17%(10)

Source: Results of survey questionnaires.

The Multi-Purpose Cover Court (MPCC), one each installed in Aposkahoy Village and Hinaplanan Village, is used for purposes such as gatherings, meetings, and sports activities of village residents, and the facility utilization and satisfaction rate are high.

Two drinking water facilities, including a drinking water supply pipe (3.7 km) and a water tank, were installed in Aposkahoy Village, and a greenhouse (two interconnected houses) was installed. As a result of the on-site inspection, drinking water facilities are having difficulties due to poor water flow, and greenhouses are rarely used, so the efficiency of the facilities can be considered low. The utilization and satisfaction level of the small bridges installed in Gumaod Village are very high. The installation of bridges has become a great help in transporting and moving agricultural products.

4. Effectiveness

4.1. Improving the Living Environment of Village Residents

As shown in (Table 3-9), it was found that the beneficiaries of the project (residents of the three villages, public officials) were generally satisfied with the supported facilities (bridges, road paving, drinking water, MPCC, etc.). However, there were some residents who were not satisfied with the drinking water facilities in Aposkahoy Village and the mechanical drying facilities in Hinaplanan Village.

〈Table 3-9〉 Satisfaction with Facility Construction and Equipment Support

Category		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Public Officials (20)	Satisfied with supported facilities	0%	0%	25%(5)	50%(10)	25%(5)
	Satisfied with supported equipment	5%(1)	15%(3)	25%(5)	45%(9)	10%(2)
Aposkahoy (60)	Satisfied with drinking water facilities	5%(3)	10%(6)	53%(32)	25%(15)	7%(4)
	Satisfied with greenhouse facilities	0%	10%(6)	52%(87)	2%(1)	2%(1)
	Satisfied with the MPCC	0%	0%	18%(12)	75%(45)	7%(4)
Hinaplanaan (61)	Satisfied with road pavement	0%	3%(2)	8%(5)	55%(33)	33%(20)
	Satisfied with the MPCC	0%	2%(1)	12%(7)	62%(37)	25%(15)
	Satisfied with solar dryer facility	2%(1)	3%(2)	63%(38)	23%(14)	8%(5)
	Satisfied with mechanical dryer facilities	3%(2)	12%(7)	72%(42)	10%(6)	3%(2)

Source: Results of survey questionnaires.

Although the effect of improving the living environment of the beneficiary village residents through this project was generally high, it was found that there were some differences between villages and among village residents (〈Table 3-10〉). While 90% of Gumaod Village resident respondents responded that their living environment was improved through this project, 12% of Aposkahoy Village resident respondents responded that their living environment was not improved.

〈Table 3-10〉 Effectiveness of Project in Improving Living Environment

Category		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Public Officials(20)		0%	0%	10%(2)	70%(14)	20%(4)
Villagers	Aposkahoy(60)	0%	12%(7)	43%(26)	42%(25)	3%(2)
	Gumaod(41)	0%	2%(1)	17%(7)	56%(23)	24%(10)
	Hinaplanan(61)	0%	5%(3)	39%(24)	48%(29)	8%(5)

Source: Results of survey questionnaires.

The multi-purpose cover court is used for purposes such as village residents' meetings and sports activities, and the installation of a bridge in Gumaod Village has made smooth and rapid transportation of agricultural products possible. Additionally, paving rural roads in the Hinaplanan region had the effect of increasing the movement of people and goods (〈Table 3-11〉).

〈Table 3-11〉 PM Interview Details on the Effect of the Project on Improving the Living Environment

Category	Interview Details
Multipurpose Cover Court(MPCC)	<ul style="list-style-type: none"> In the case of MPCC (Multipurpose Cover Court), it is used in various ways, such as for residents' meetings and sports facilities in the beneficiary village. Solar drying facilities and other equipment were also found to be highly utilized after being installed.
Small Bridge	<ul style="list-style-type: none"> A small bridge (3M) was built in the Gumaod area and the bridge is in very good condition. Before the bridge was built, it took a lot of time and manpower to transport agricultural products to the other side of the road due to the river. Currently, smooth and fast transportation of goods is possible thanks to bridges.
Road Pavement	<ul style="list-style-type: none"> Approximately 3.4km of rural roads in the Hinaplanan area were paved and connected to the highway. Accordingly, the effect of population influx and increased movement in the village is expected.

Source: PM interview Results.

4.2. Strengthening the Capacity of Village Residents

It was found that the dispatch of experts and invited training for local education in Korea was very helpful in acquiring agricultural knowledge and strengthening capabilities of beneficiaries (civil servants and residents of three villages).

〈Table 3-12〉 Effectiveness of the Project in Strengthening Village Residents' Capabilities

Category		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Public Officials(20)		0%	0%	40%(8)	55%(11)	5%(1)
Villagers	Aposkahoy(60)	0%	3%(2)	30%(18)	62%(37)	5%(3)
	Gumaod(41)	0%	0%	10%(4)	68%(28)	22%(9)
	Hinaplanan(61)	0%	2%(1)	21%(13)	61%(37)	16%(10)

Source: Results of survey questionnaires.

4.3. Increased Income of Villagers

Although there are some differences between villages and village residents, it was found that this project had some effect on increasing the income of the beneficiary village residents. As a result of the survey, 83% of Gumaod Village residents, 51% of Hinaplanan Village residents, and 45% of Aposkahoy Village residents responded that their income increased.

〈Table 3-13〉 Effectiveness of the Project in Increasing Village Residents' Income

Category		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Public Officials(20)		0%	0%	15%(3)	60%(12)	25%(5)
Villagers	Aposkahoy(60)	0%	12%(7)	43%(26)	42%(25)	3%(2)
	Gumaod(41)	0%	0%	17%(7)	53%(22)	30%(12)
	Hinaplanan(61)	0%	6%(4)	43%(26)	43%(26)	8%(5)

Source: Results of survey questionnaires.

Income before and after the project was surveyed among project beneficiaries (residents of three villages). As a result, the annual income (average value) of Aposkahoy village residents increased by about 560,000 won after the project, Gumaod village residents increased by about 700,000 won, and Hinaplanan village residents increased by about 300,000 won.

However, there is a limitation of the survey in that it was unable to investigate how and to what extent this project contributed to the increase in income of village residents.

〈Table 3-14〉 Comparison of Village Residents' Income (annual average) Before and After the Project

Unit: php

	Aposkahoy(60)		Gumaod(41)		Hinaplanan(61)	
	Before	After	Before	After	Before	After
Average	45,544	66,213	56,656	88,115	40,427	54,197
Median	39,000	49,000	40,000	50,000	30,000	40,000
Maximum	200,000	400,000	240,000	800,000	192,000	312,000
Minimum	4	1,000	40	5,000	3,000	70

Source: Results of survey questionnaires.

5. Impact

5.1. Potential for Achieving Long-Term Results

As the multi-purpose cover court (MPCC), rural roads, and bridges are highly utilized by village residents, if the operation and management of these facilities continues, it is expected that the effect of improving the living environment in the mid to long term will continue (〈Table 3-15〉).

However, villagers' utilization of drinking water facilities, greenhouses, and agricultural product drying facilities is very low. In particular, the greenhouses in Aposkahoy Village and the mechanical drying facilities in Hinaplanan Village are rarely used. The possibility of maintaining and utilizing these facilities in the medium to long term is expected to be low.

〈Table 3-15〉 Frequency of Village Residents' Usage of Facilities

	Category	Never Used	Rarely	Sometimes	Always
Aposkahoy (60)	Drinking Water Facilities	58%(35)	3%(2)	7%(4)	32%(19)
	Greenhouse (Vinyl House)	98%(59)	2%(1)	0%	0%
	Multipurpose Cover Court	7%(4)	38%(23)	17%(10)	38%(23)
Gumaod (41)	Small Bridge	0%	30%(12)	20%(8)	50%(20)
Hinaplanan (61)	Road Pavement	3%(2)	23%(14)	17%(10)	57%(34)
	Multipurpose Cover Court	3%(2)	32%(19)	25%(15)	40%(24)
	Solar Drying Facility	68%(41)	17%(10)	10%(6)	5%(3)
	Mechanical Drying Facility	83%(50)	17%(10)	0%	0%

Source: Results of survey questionnaires.

<Table 3–16> Contents of Interviews with Village Residents Regarding Usage of Facilities

Category	Interview Details
Multipurpose Cover Court	<ul style="list-style-type: none"> • Satisfied with the MPCC and am using it well, but it requires cleaning and maintenance. • Both MPCCs in Aposkahoy and Hinaplanan need roof repairs.
Greenhouse (Vinyl House)	<ul style="list-style-type: none"> • Most residents have never used greenhouses, and many do not even know they exist. • Residents who received training at the time of the project have used it.
Drinking Water Facilities	<ul style="list-style-type: none"> • The drinking water facility works, but the speed of water coming out is so slow that it is difficult to use. • There is a great demand for drinking water facilities, but there are many cases where people are far away from the facilities and do not benefit from them. Residents who live far away from facilities may not know where the facilities are. • In addition, residents do not believe that the water provided by the drinking water facility is actually drinkable. Most residents who use drinking water facilities do not drink it, but use it for washing dishes and bathing. There are many residents who opined that the only problem with this project is water.
Small Bridge	<ul style="list-style-type: none"> • The small bridge in Gumaod was a great help to the residents. When it is not raining, residents use the bridge without problems and even trucks can pass through it. • However, when it rains a lot, water can reach the bridge, and in this case, it becomes muddy and quite slippery.
Mechanical Drying Facility	<ul style="list-style-type: none"> • Hinaplanan’s mechanical dryer is almost unusable because it has difficulty using electricity and is not maintained. More solar drying facilities are needed. • However, solar drying facilities are also inaccessible to residents. Residents who use solar drying facilities have a high level of satisfaction.

Source: Results of survey questionnaires.

5.2. Ripple Effect

The policy and economic ripple effects of this project are not expected to be high due to low utilization of facilities other than infrastructure facilities for improving living environments such as multi-purpose cover

courts (MPCC), rural roads, and bridges. However, it was found that there was some influence from other regions due to living infrastructure facilities. As a result of the survey, 90% of public officials responded that the effects of this project were expanded to other regions.

〈Table 3-17〉 Impact of Project Performance on Other Regions

Category		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Public Officials(20)		0%	5%(1)	5%(1)	70%(14)	20%(4)
Villagers	Aposkahoy(60)	0%	12%(7)	43%(26)	42%(25)	3%(2)
	Gumaod(41)	0%	0%	17%(7)	53%(22)	30%(12)
	Hinaplanan(61)	0%	6%(4)	43%(26)	43%(26)	8%(5)

Source: Results of survey questionnaires.

6. Sustainability

It was found that the sustainability of operation and management of the facilities built in the three villages was not high. As a result of the survey, there were generally positive opinions about the possibility of securing the capacity and budget for facility operation and management, but there were also many negative opinions. In particular, residents of Aposkahoy and Hinaplanan villages showed relatively more negative opinions regarding the sustainability of facility operation and management and financial self-sufficiency.

〈Table 3-18〉 Sustainability of Project Operation

Category		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Public Officials(20)		0%	15%(3)	5%(1)	65%(13)	15%(3)
Villagers	Aposkahoy(60)	7%(4)	7%(4)	31%(19)	53%(32)	2%(1)
	Gumaod(41)	0%	2%(1)	32%(13)	61%(25)	5%(2)
	Hinaplanan(61)	0%	7%(4)	42%(25)	50%(30)	2%(1)

Source: Results of survey questionnaires.

〈Table 3-19〉 Whether the Project is Financially Self-Sufficient

Category		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Public Officials(20)		0%	5%(1)	25%(5)	65%(13)	5%(1)
Villagers	Aposkahoy(60)	2%(1)	7%(4)	48%(29)	43%(26)	0%
	Gumaod(41)	0%	2%(1)	46%(19)	51%(21)	0%
	Hinaplanan(61)	3%(2)	5%(3)	57%(35)	33%(20)	2%(1)

Source: Results of survey questionnaires.

〈Table 3-20〉 Contents of In-Depth Interviews with Public Officials Regarding Project Management and Operation

Category	Interview Details
Administrative Issues	<ul style="list-style-type: none"> The project was transferred to the Local Government Unit (LGU) of Claveria and the Barangay Local Government Units (BLGU) of Aposkahoy, Hinaplanan and Gumaod. The facilities are managed through the Provincial Agricultural Office (MAO), Provincial Economic Development Office (MEDO), and Barangay Local Government Unit (BLGU). For greenhouses and dry sheds constructed in Aposkahoy and Hinaplanan, electricity has not yet been installed as LGU-Claveria is processing the transfer of site ownership for issuance of building permits. A building permit is required for electrical installation from Misamis Oriental Rural Electric Service Coop In. (MORESCO).
Management and Operational Issues	<ul style="list-style-type: none"> LGU-Claveria is still enacting ordinances regarding fees for the use of cassava mechanical dryers, and greenhouses and drying sheds are managed by the Claveria Provincial Agricultural Office (MAO). The remaining facilities are managed by the BLGUs of Hinaplanan, Aposkahoy and Gumaod.
Financial Issues	<ul style="list-style-type: none"> The Local Government Unit (LGU) of Claveria and the Barangay Local Government Units (BLGU) of Aposkahoy, Hinaplanan and Gumaod are required to set aside annual budgets for the operating and maintenance costs of the projects.

Source: Results of survey questionnaires.

The facilities constructed as a result of this project were finally acquired and handed over to the Claveria Local Government Unit (LGU) on January 14, 2021. However, the ownership of the land for issuing construction permits for facilities has not yet been transferred to the barangay local government (BLGU), and as a result, facilities such as greenhouses and mechanical cassava drying facilities are not being utilized due to lack of electricity. In addition, the possibility of continuous operation of this project is low as budget securing and enactment of ordinances for facility management and operation have not yet been achieved.

6. Cross-cutting Issues

Gender equality was generally considered throughout the implementation process of this project, and it was found that the project had generally not had a significant negative impact on natural landscape and environmental improvement.

However, regarding the environmental issue of this project, opinions among village residents are conflicting. Residents of Aposkahoy village (12%) and Hinaplanan village (13%) responded that there was a negative impact on the environment.

〈Table 3-21〉 Gender Equality

Category		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Public Officials(20)		0%	15%(3)	20%(4)	60%(12)	5%(1)
Villagers	Aposkahoy(60)	0%	7%(4)	47%(28)	41%(25)	5%(3)
	Gumaod(41)	0%	0%	44%(18)	49%(20)	7%(3)
	Hinaplanan(61)	5%(3)	10%(6)	42%(26)	38%(23)	5%(3)

Source: Results of survey questionnaires.

〈Table 3-22〉 Negative Impact on the Environment

Category		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Public Officials(20)		5%(1)	50%(10)	15%(3)	30%(6)	0%
Villagers	Aposkahoy(60)	5%(3)	65%(39)	18%(11)	10%(6)	2%(1)
	Gumaod(41)	5%(2)	78%(32)	12%(5)	5%(2)	0%
	Hinaplanan(61)	3%(2)	77%(47)	7%(4)	10%(6)	3%(2)

Source: Results of survey questionnaires.

4

Implications and Suggestions

The project subject to this evaluation was promoted with the purpose of improving the living environment and increasing income of the Claveria project district in support of the 2011 agreement between the Korean and Philippine governments to create an agricultural and industrial complex (MIC) pilot area. To this end, facilities such as rural road paving, small bridges, solar and mechanical cassava drying facilities, greenhouses, warehouses, multi-purpose cover courts (MPCC), and drinking water facilities were built in three villages. The direct beneficiaries of this project are a total of 7,710 residents of the three villages in the project site.

A local survey was commissioned to a local professional organization (Southern Philippine University of Science and Technology) to evaluate the relevance, efficiency, effectiveness, impact, and sustainability of the project. However, due to security issues in the project area, it was impossible for the Korean evaluation team to visit the site, so there was a limitation in that specific case studies to analyze the effectiveness and impact

of the project were insufficient. In particular, there was not enough supplementary research to determine the connection between this project and changes in village residents' income.

Overall, this project was consistent with the Philippines' agricultural policy and strategy and Korea's Cooperation Strategy with the Philippines (CPS). In addition, the establishment of the project plan, the project implementation process, and the selection of project target areas and beneficiaries were generally conducted appropriately.

A budget of 1.6 billion won, equivalent to 60% of the total project budget of 2.7 billion won, was appropriately invested in building infrastructure facilities to improve living conditions and increase income. However, the project period was extended due to unexpected circumstances such as the corona virus pandemic, but the achievement of output compared to the project plan was relatively good. In addition, the effect of improving the living environment of the beneficiary village residents through this project was generally good, and it was found that it had some effect on increasing the income of the village residents.

As the multi-purpose cover court (MPCC), rural roads, and bridges are highly utilized by village residents, if the operation and management of these facilities continues, it is expected that the mid- to long-term effect of improving the living environment through this will continue. Meanwhile, since villagers' utilization of drinking water facilities, greenhouses, and agricultural product drying facilities is very low, the possibility of maintaining and utilizing these facilities in the mid to long term is expected to be low.

The sustainability of the project subject to this evaluation is judged to be low. Even though more than two years have passed since the end of this

project, the Claveria local government's institutional arrangements and budget for facility management and operation have not yet been prepared.

Therefore, in terms of continuous operation and management of facilities, active management is necessary, including budget and manpower input from the Philippine government (especially Claveria local government). In the current situation where the sustainability of the project is low, the Korean side needs to lead discussions so that the Philippine government can actively operate and manage the facility instead of supporting additional follow-up projects or post-management support.

Based on the results of the post-evaluation of the project subject to this evaluation, we would like to suggest problems in the project and improvements for continuous operation as follows (see <Table 4-1>).

First, it is necessary to improve the utilization of underutilized facilities. Facilities that are underutilized can be broadly divided into two types. First, solar drying facilities and drinking water facilities are facilities that are vulnerable to villagers' accessibility, and are only used by villagers who are close to the facilities. It is necessary to increase the utilization of solar drying facilities by installing additional solar drying facilities within the village. In the case of drinking water facilities, there is the problem of poor accessibility, but the amount of drinking water supplied is insufficient due to damaged water supply pipes, and villagers' confidence in using water facilities is low. Therefore, in order to improve the use of drinking water facilities to improve living environments, it is necessary to repair damaged water supply pipes and promote the safety of drinking water. In the long term, a bedrock well construction project that utilizes groundwater is needed by securing budget from local governments.

Another type of facility that is underutilized is mechanical drying facilities and greenhouse facilities. Currently, for villagers to use cassava mechanical drying facilities, they must pay usage fees such as electricity bills, and they need budget and professional manpower to manage greenhouse facilities and seedbeds. Therefore, it is desirable for local governments (Claveria LGU, Barangay BLGU) to directly manage and operate mechanical drying facilities and greenhouses by enacting ordinances to ensure profitability. This could lead to an increase in the income of village residents who use the facility.

〈Table 4-1〉 Problems and Needed Improvements

Category	Facility	Problem	Needed Improvement
Underutilized Facilities	Solar Dryer	<ul style="list-style-type: none"> • Difficult for many residents to use due to lack of accessibility (only nearby residents can use) 	<ul style="list-style-type: none"> • Additional installation of solar drying facilities (improved accessibility and usability)
	Mechanical Dryer	<ul style="list-style-type: none"> • Problems with electricity supply and facility maintenance • Problem of profitability compared to usage fee 	<ul style="list-style-type: none"> • Enactment of local ordinances for facility operation and management • Directly managed and operated by local governments (Claveria LGU, Hinaplanan BLGU) (securing profitability)
	Green House	<ul style="list-style-type: none"> • Absence of seedbed and facility management personnel • No profitability due to lack of use 	<ul style="list-style-type: none"> • Local government (Aposkahoy BLGU) management and operation (securing profitability)
	Drinking Water facility	<ul style="list-style-type: none"> • Damaged water supply pipe, water does not come out well • Due to lack of accessibility, only nearby residents can use it • Used for washing dishes, bathing, etc. rather than drinking water. 	<ul style="list-style-type: none"> • Water supply pipe repair • Promoting the safety of drinking water • Need for bedrock tube wells to utilize groundwater in the long term
Highly Utilized Facilities	MPCC	<ul style="list-style-type: none"> • Roof repairs, cleaning and maintenance required 	<ul style="list-style-type: none"> • Cleaning and management of the village itself • Local government (BLGU) maintenance

Category	Facility	Problem	Needed Improvement
	Small Bridge	• Roads are slippery after rain	• Maintenance needed by local government (BLGU)
	Road Pavement	• Insufficient repair and management of damaged roads	• Maintenance needed by local government (BLGU)

Source: Written by the author.

Secondly, the plan to operate and manage highly utilized facilities is needed. Those include facilities with strong public goods characteristics, such as multipurpose cover courts (MPCC), small bridges, and rural roads. In order to continuously improve the utilization of these facilities, the local government (BLGU) must be responsible for the management, maintenance, and repair of the facilities.

Third, in order to improve the sustainability and effectiveness of the project, priority should be given to institutionalizing the management system at the Philippine government level before additional follow-up projects by the Korean government. It is necessary to establish institutional arrangements (enactment of local ordinances, designation of management entities, establishment of operation manuals, etc.) for the management and operation of facilities supported by the Korean government (especially mechanical drying facilities and greenhouse facilities), and stable manpower and budget allocation.

Ultimately, in order to achieve the mid- to long-term goals of this project, active project management and operation at the level of the Philippine government (especially Claveria LGU and Barangay BLGU) must be preceded, and the Korean government continues to request this from local governments in the Philippines and monitors progress.