



FINAL REPORT | LESSONS LEARNED FROM THE 2023 PILOT

**INNOVATIVE SOLUTIONS TO CLIMATE CHANGE ADAPTATION
AND DISASTER RISK REDUCTION FROM**

PROJECT LAWA

LOCAL ADAPTATION TO WATER ACCESS

June 2024



**INNOVATIVE SOLUTIONS TO CLIMATE CHANGE ADAPTATION
AND DISASTER RISK REDUCTION FROM**

PROJECT LAWA
LOCAL ADAPTATION TO WATER ACCESS

Copyright © 2024 World Food Programme

Overall Coordination: Hannes Goegele, Krystian Harold Javier, and Matteo Vailati

Editors: Sugi Kim and David Jo

Publication cover and design: Vanessa Pamittan

Photo Credits: Dale Rivera, Dante Diosina, Jr., Earvin Perias, Haelin Jeon, and Department of Social Welfare and Development

Reproduction and dissemination of material in this information product for educational or other non-commercial uses are authorized without any prior written permission from the copyright holders provided the source is fully acknowledged. Reproduction of material in this information product for resale or other commercial purposes is prohibited without written permission. Applications for such permission should be addressed to the Director, Communications, Advocacy and Marketing Division
e-mail: wfp.publications@wfp.org.

If using parts of the publication, **cite as follows:**

World Food Programme Philippines. (2024). Innovative Solutions to Climate Change Adaptation and Disaster Risk Reduction from Project LAWA – Local Adaptation to Water Access. WFP Philippines.

Learn more about Project LAWA:



Table of Contents

List of Acronyms

Executive Summary

1.	Background	4
2.	Objectives	6
3.	Map	8
4.	Targeting Criteria	9
5.	Activities	11
6.	Small Farm Reservoir Technical Design	13
7.	Testimonials	19
8.	Rate of Assistance	21
9.	Monitoring	22
10.	Partnerships	23
11.	Results	26
12.	Recommendations	31
13.	LAWA at scale	34
14.	Conclusion	37
15.	Annexes	38

List of Acronyms

Cash for Work (CfW)

Cash for Training and Work Program (CFT/W)

Climate Change Adaptation and Mitigation and Disaster Risk Reduction (CCAM-DRR)

Community Based Participatory Planning (CBPP)

Cordillera Administrative Region (CAR)

Department of Agriculture Bureau of Soils and Water Management (DA-BSWM)

Department of Social Welfare and Development (DSWD)

Disaster Response Management Bureau (DRMB)

Disaster Risk Reduction – Climate Change Adaptation (DRR-CCA)

Kapit-Bisig Laban sa Kahirapan-Comprehensive and Integrated Delivery of Social Services (KALAHI CIDDS)

LAWA (Local Adaptation to Water Access)

Local Chief Executive (LCE)

Local Government Unit (LGU)

Memorandum of Understanding (MoU)

Municipal Agricultural Office (MAO)

Municipal Social Welfare Department Office (MSWDO)

Pantawid Pamilyang Pilipino Program (4Ps)

Philippine Atmospheric, Geophysical, and Astronomical Services Administration (PAGASA)

Risk Resiliency Program (RRP)

Risk Resiliency Program for Climate Change Adaptation and Mitigation and Disaster Risk Reduction (RRP-CCAM-DRR)

Small farm reservoir (SFR)

United Nations World Food Programme (WFP)

Executive Summary



REXLON "REX" T. GATCHALIAN

Secretary of Social Welfare and Development

The Department of Social Welfare and Development (DSWD) strongly believes that the risks and hazards brought by disasters and calamities can be mitigated by putting in place policies and programs aimed at reducing such risks and fostering disaster resilience among poor Filipino communities.

One of these is the pilot implementation of the Project on Local Adaptation to Water Access or Project LAWA, a program that aims to mitigate the impacts of drought and dry spells through the creation of small farm reservoirs (SFRs).

This initiative utilizes a cash-for-training and work intervention, which serves as a labor component, offering temporary income opportunities to economically vulnerable sectors of the population.

To document the gains of the pilot projects, the United Nations World Food Programme (UN-WFP) Philippines crafted the Project LAWA Documentation Report. This document aims to evaluate, review, and pinpoint challenges and best practices that will shape the replication and expansion of the project in the succeeding years.

With this, I would like to congratulate the UN-WFP Philippines, LGUs and partner-beneficiaries, Department of Agriculture (DA), and members of the DSWD Disaster Response Management Bureau (DRMB) for spearheading the completion of the pilot implementation of the program.

May this document be used by partners and stakeholders as a valuable reference toward a stronger and more responsive disaster preparedness and mitigation programs for poor communities around the country.

DIPAYAN BHATTACHARYYA

Country Director ad interim
United Nations World Food Programme

In Filipino, "*lawa*" means lake.

For Project LAWA (Local Adaptation to Water Access), WFP is incredibly proud to have worked side by side with our partner Government to engage farmers, both men and women, in building their own *lawas* – or water reservoirs – so they have continuous access to water and more opportunities to boost their income.

WFP is excited to further collaborate with our partner Government to scale this initiative so communities are more climate-resilient and learn skills to diversify their livelihoods.





01

Background

The Philippines has the highest disaster risk worldwide due to its exposure and susceptibility to natural hazards compounded with low coping capacities.^{1,2} By 2040, the burden on the national economy due to extreme weather events is estimated at 13.6 percent of the gross domestic product.^{3,4} In 2023, the country incurred an estimated USD 320 million of agricultural, housing, and infrastructure damages from 11 tropical cyclones, of which three were

¹ The World Risk Index ranked the Philippines first among countries with the highest natural disaster risk in 2022 and 2023.

² World Risk Report 2023 published by Bündnis Entwicklung Hilft. https://weltrisikobericht.de/wp-content/uploads/2023/10/WRR_2023_english_online161023.pdf

³ Philippine Development Plan (2023-2028) published by the National Economic and Development Authority.

<https://pdp.neda.gov.ph/philippine-development-plan-2023-2028/>

⁴ The World Bank's Country Climate Development Report for the Philippines indicates that annual losses from typhoons are estimated at 1.2 percent of GDP and can reach as much as 4.6 percent of GDP in extreme cases like Super Typhoon Yolanda (Haiyan) in 2013.

super typhoons.⁵ This is in addition to the losses brought by strong earthquakes ranging from magnitudes of 6 to 7, volcanic activities, and other weather-related hazards. To mitigate and strengthen the country's preparedness to the impact of these events, the Government of the Philippines developed innovative solutions for effective adaptation and disaster risk reduction measures in partnership with organizations such as the United Nations World Food Programme (WFP).

Since 2015, the Department of Social Welfare and Development (DSWD) has implemented the Risk Resiliency Program for Climate Change Adaptation and Mitigation and Disaster Risk Reduction (RRP-CCAM-DRR) with annual funding of approximately USD 24.2 million (in national currency PHP 1.4 billion)⁶. As a member of the Cabinet Cluster on CCAM-DRR, DSWD ensures the provision of social protection measures to the poor and marginalized people. While it

implements various social assistance programmes, it also envisions convergence and collaborative programs to address the root causes of poverty.

In 2022, the Philippine Atmospheric, Geophysical, and Astronomical Services Administration (PAGASA) issued El Niño watch and alerts which showed the persistence of dry spells in 2023. This led to identifying strategies to mitigate the projected impact of El Niño. As a member of the National Task Force for El Niño and as a readiness strategy, DSWD implemented a project in line with the Government's vision to achieve water sufficiency and food security.

In the first quarter of 2023, in partnership with the Department of Agriculture Bureau of Soils and Water Management (DA-BSWM) and WFP, DSWD initiated Project LAWA (the Local Adaptation to Water Access) to address dry spell or drought-like conditions and to mitigate the effects of erratic climate.



⁵ The computation of total agricultural, housing, and infrastructure damages was based on the latest Situational Reports published on the National Disaster Risk Reduction and Management Council Monitoring Dashboard.

⁶ Executive Orders 43, s. 2011 and 24 s. 2017, the Cabinet Cluster on Climate Change Adaptation, Mitigation and Disaster Risk Reduction was

created and reorganized in recognition of the urgency to pursue measures to adapt and mitigate the effects of climate change in the Philippines. In line with the National Climate Change Action Plan 2011 – 2028.



02

Objectives

Project LAWA was envisioned as a sustainable solution to alleviate the challenges faced by communities during periods of severe drought conditions and to better mitigate the impact of water scarcity. Prior to LAWA's pilot, the Risk Resilience Program (RRP) was implemented over the course of 10 days in the most vulnerable provinces in major urban centres and river basins across the country.

Initially planned as a 10-day Cash for Work (CfW) program and based on the lessons learned from the RRP, Project LAWA became a 15-day Cash for Training and Work (CFT/W) which aimed to provide temporary employment to poor and disadvantaged families vulnerable to climate hazards through the implementation of Disaster Risk Reduction – Climate Change Adaptation (DRR-CCA) activities. Communities worked to build small farm reservoirs (SFRs), equivalent to small water catchments⁷. Other DRR-CCA activities included street sweeping, desilting of community drainages and canals, tree and mangrove planting, and community gardening.

Specifically, the objectives were:



To enhance socioeconomic resilience by providing additional income support to economically disadvantaged and marginalized families of Indigenous Peoples, farmers, and fisherfolks affected by El Niño;



To ensure water availability and food security during the potential impact of drought induced by El Niño; and



To foster robust partnerships and collaboration with Local Government Units (LGUs), the private sector, non-governmental organizations, and other stakeholders for sustained and impactful intervention.

In addition to the provision of rainwater storage and the generation of income to the communities, the pilot aimed to generate empirical data to gauge LAWA's feasibility, viability, and impact. The pilot provided a platform to review the existing policy of DSWD to implement the RRP-CCAM-DRR and to develop more guidance for focused and impactful interventions.⁸



⁷ The 15-day timeline was identified by technical experts from the Department of Agriculture based on the number of days required of the 50 project recipients participating in the Cash for Work.

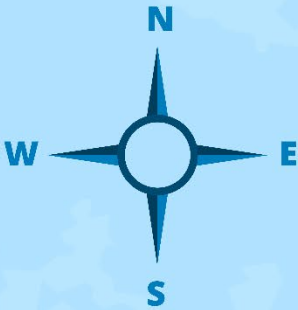
⁸ Guidance for the Implementation of Risk Resiliency Program through Cash for Work and Training: An organizational level policy guidance for the

implementation of the Risk Resiliency Program for Climate Change Adaptation and Mitigation and Disaster Risk Reduction for the 2023.

03

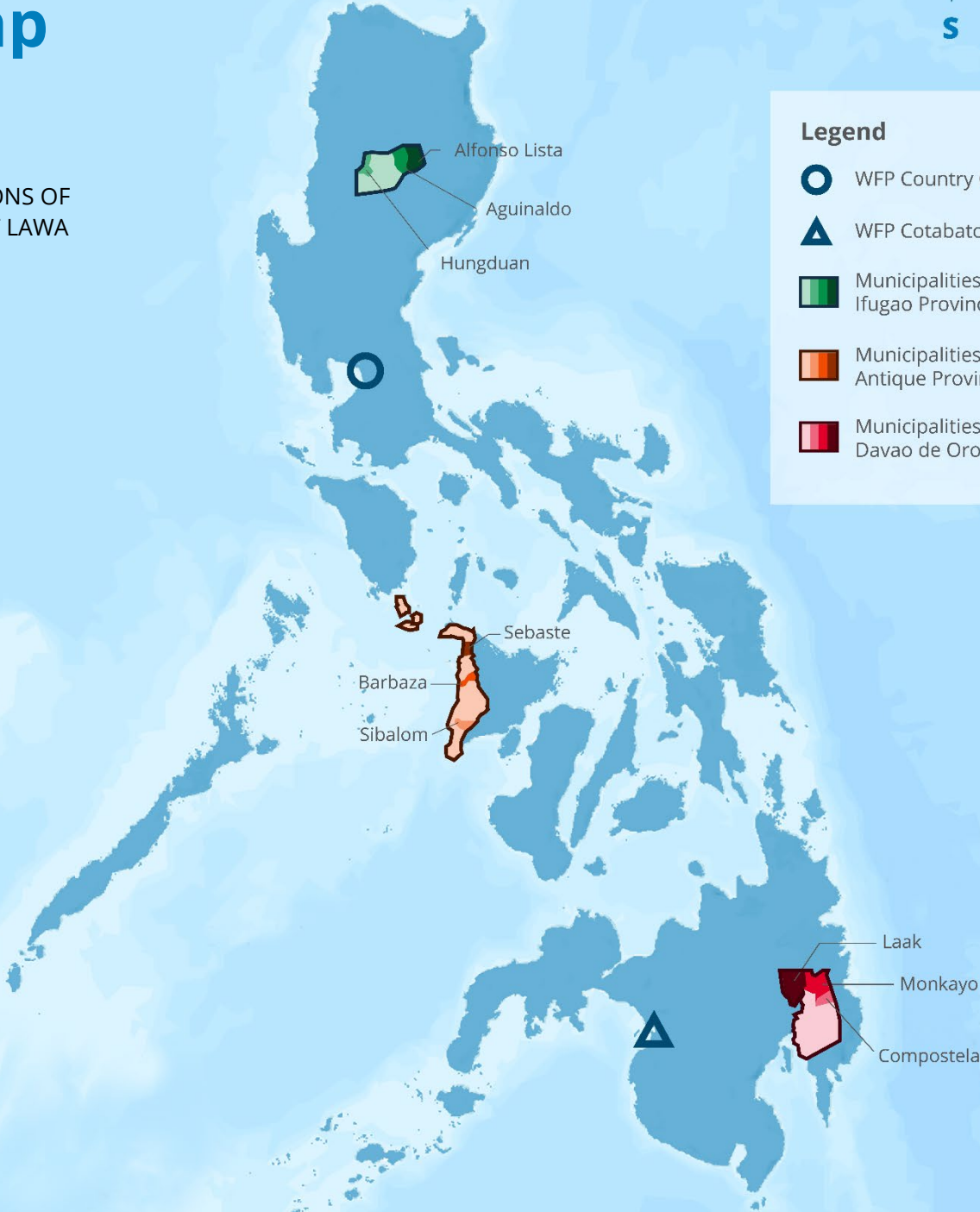
Map

PILOT LOCATIONS OF PROJECT LAWA



Legend

- WFP Country Office
- WFP Cotabato Sub-Office
- Municipalities in Ifugao Province
- Municipalities in Antique Province
- Municipalities in Davao de Oro Province





04

Targeting Criteria

Geographical targeting. The identification of the target LGUs for the pilot implementation was based on the data provided by PAGASA in reference to El Niño Watch/Advisories. Aside from the forecast, DSWD considered the following aspects in close coordination with the provincial and local authorities:

1. Vulnerability and susceptibility to climate-induced hazards;
2. Poverty incidence in the area;





3. LGUs with existing farmers, fisherfolks and Indigenous Peoples groups or association; and
4. Willingness of local authorities to participate and serve as proponent of the test run.

As a result, the pilot testing was conducted in the Cordillera Administrative Region (CAR) and Regions VI and XI. In these regions, DSWD identified three participating provinces and each province was allotted three LGUs to serve as the project locations:

Region	Province	Municipality
CAR	Ifugao	Alfonso-Lista
		Aguinaldo
		Hungduan
Region VI	Antique	Sebaste
		Barbaza
		Sibalom
Region XI	Davao de Oro	Monkayo
		Laak
		Compostela

At the LGU, the Municipal Agricultural Office (MAO) determined the exact project sites for the establishment of the SFRs based on existing data, local knowledge, and experiences, in view of the landscape and terrains. In the nine pilot LGUs, 90 target project sites were identified.

Beneficiary targeting. To identify project participants, DSWD used its **beneficiary targeting mechanism** to support LGUs in engaging communities. The targeting criteria included:

-  Poor families who are current or previous recipients of government social protection programmes, such as the 4Ps: Pantawid Pamilyang Pilipino Program, Sustainable Livelihood Program, RRP-CCAM-DRR, KALAHI CIDDS, etc.;
-  Families identified as poor according to the Government's social registry database or the Listahanan, also known as the National Household Targeting System for Poverty Reduction;
-  Families who are members of farmers and fisherfolk's associations and Indigenous Peoples groups.
-  Poor families who were identified, validated, and endorsed by the LGUs through the Municipal Social Welfare Department Office (MSWDO) in coordination with other local offices such as the MAO and the concerned barangays.

For each project, LGUs identified 50 project participants to build the SFRs. In total, 4,500 people participated in the pilot.





05

Activities

The following activities helped ensure effective project execution and documented the processes and delivery mechanisms.

DSWD, in coordination with DA-BSWM and WFP, established a core group and conducted a series of inception meetings and scoping exercises. The core group identified the general implementation design. DSWD developed the policy guidance to provide reference to partners, field workers and LGUs to conduct project activities. DSWD issued a departmental circular which was cascaded at the sub-national level to provide directions with regards to fund management (such as the rate of cash assistance and other administrative requirements), coordination mechanism, inter-

agency engagements, monitoring strategies, and community feedback mechanisms.

Upon issuance of a guiding document, the core group coordinated with the sub-national and local authorities. DSWD, DA, and WFP conducted social preparation activities including courtesy visits to the Local Chief Executives (LCEs), also referred to as LGU mayors, and site identification in coordination with MAO and MSWDO. This led to the identification and orientation for project participants and other preparatory steps for the project implementation. In addition, WFP ensured the delivery of hand tools used during the 15-day CfW.

DSWD incurred an operational cash advance in anticipation of the completion of the scope of work and payment thereof. After rendering the 15-day CfW, DSWD coordinated with the LGUs and agreed on a schedule for direct cash disbursement in line with the rules and regulations of the Commission on Audit. DSWD conducted direct cash payments to project recipients.

After the 15-day CfW, DSWD allocated funds to onboard project monitors to ensure maintenance and management of the SFRs for 90 days. The identification and recommendation thereof came from the LGUs. In total, there were 90 project monitors assigned to 90 SFRs. To ensure sustainability, DSWD conducted an **official turnover ceremony to LGUs and farmers' associations** to affirm their ownership and responsibility in sustaining the SFRs.





06

Small Farm Reservoir Technical Design

To optimize water storage capacity for agricultural sustainability, each SFR was estimated to have a minimum capacity of 800 m³ which was calculated as the amount of water to provide relief in cases of drought. There were four types of SFRs depending on the location of the site, terrain, and target service areas⁹:

1. Dug out type;
2. Rectangular type;
3. Semicircular embankment type; and
4. Straight embankment type.

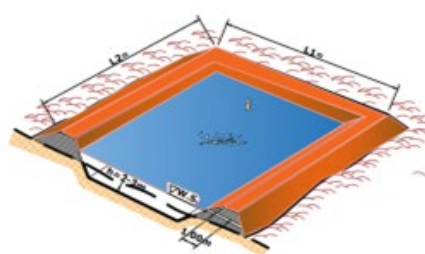
⁹ Detailed specification of the types of SFR may be found on the next page. The national reference is <https://amtec.uplb.edu.ph/wp-content/uploads/2019/07/PAES610-RainwaterandRunoffManagement->

[SmallFarmReservoir.pdf, Philippine Agricultural Engineering Standards \(PAES 610:2016\) for Rainwater and Runoff Management.](#)

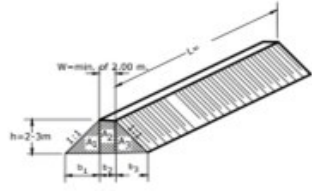
4 Types of SFR and the Technical Specifications and Designs

TYPES OF SFR

Dug-Out Type



PERSPECTIVE VIEW
NOT TO SCALE



TYPICAL PLAN OF SMALL FARM RESERVOIR(SFR) (DUG-OUT TYPE)
NOT TO SCALE

$W = \text{min. of } 2.00 \text{ m}$
 $h = 2.3 \text{ m}$
 b_1 , b_2


Total Length = $2 (L_1) + 2 (L_2)$
 Total Volume $V_T = 2 V_1 + 2V_2$
 where : $V_1 = 2 A_1 \times 2L_1 = 2 (A_1L_1)$
 $V_2 = 2 A_2 \times 2L_2 = 2 (A_2 L_2)$

Works:
 Reservoir: Excavation (Vol. of fill)
 Dam Embankment: Fill and Compaction

ISO/IEC 17025: 2017

LA-2016-2998 LA-2023-423A
 ATEL-1-1021-2998 Soil and Water Resources
 Laboratory Services Division Research Division

"Lape't Tubig ay Pag-Ingatan at Pangalagaan
 Tugong sa Mambuhay na Agrikultura at Kabuhayan"

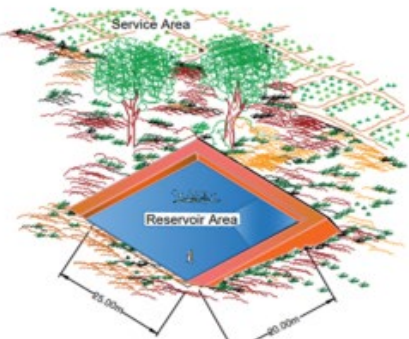


Management System
ISO 9001:2015

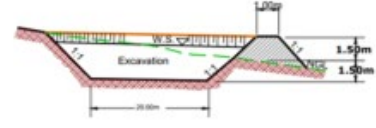
5

TYPES OF SFR

Rectangular Type



PERSPECTIVE VIEW
NOT TO SCALE



CROSS-SECTION OF EMBANKMENT
NOT TO SCALE


Works:
 Reservoir: Excavation (Vol. of fill)
 Dam Embankment: Fill and Compaction

TYPICAL PLAN OF SMALL FARM RESERVOIR(SFR) (RECTANGULAR TYPE)
NOT TO SCALE

ISO/IEC 17025: 2017

LA-2016-2998 LA-2023-423A
 ATEL-1-1021-2998 Soil and Water Resources
 Laboratory Services Division Research Division

"Lape't Tubig ay Pag-Ingatan at Pangalagaan
 Tugong sa Mambuhay na Agrikultura at Kabuhayan"

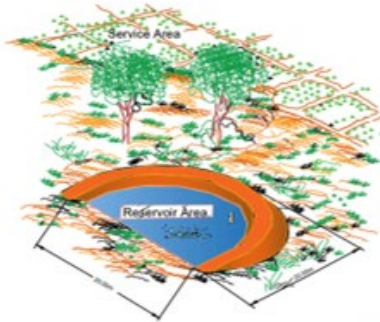


Management System
ISO 9001:2015

6

TYPES OF SFR

Semicircular Embankment Type



PERSPECTIVE VIEW
NOT TO SCALE



CROSS-SECTION OF EMBANKMENT
NOT TO SCALE

Works:
Reservoir: Excavation (Vol. of fill)
Dam Embankment: Fill and Compaction

TYPICAL PLAN OF SMALL FARM RESERVOIR(SFR)
(SEMICIRCULAR EMBANKMENT TYPE)

ISO/IEC 17025: 2017

LA-2016-2998 LA-2023-423A
ATEL-1-1021-2998 SOI and Water Resources
Laboratory Services Division Research Division

"Lago'y Tuhig ay Pag-Ingatan at Pangalagaan
Tungo sa Masunlad na Agrikultura at Kabuhayan"



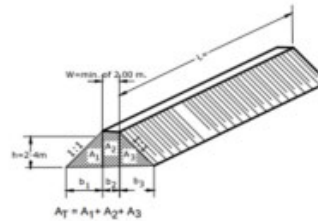
7

TYPES OF SFR

Straight Embankment Type



PERSPECTIVE VIEW
NOT TO SCALE



Works:
Reservoir: Excavation (Vol. of fill)
Embankment: Fill and Compaction

TYPICAL PLAN OF SMALL FARM RESERVOIR(SFR)
(STRAIGHT EMBANKMENT TYPE)

ISO/IEC 17025: 2017

LA-2016-2998 LA-2023-423A
ATEL-1-1021-2998 SOI and Water Resources
Laboratory Services Division Research Division

"Lago'y Tuhig ay Pag-Ingatan at Pangalagaan
Tungo sa Masunlad na Agrikultura at Kabuhayan"



8

Based on the standard specification and if properly maintained, the SFRs will last five years. If the communities conduct annual desilting, the unit may last beyond five years.

Each SFR can supply water to 0.5 to 1 ha of rice field (equivalent to 12 to 24 basketball courts), which has a high water-use footprint.



IFUGAO
Cordillera Administrative Region






ANTIQUE
Region VI (Western Visayas)






“

A circular portrait of Rodolfo Manzano, an elderly man with short dark hair, wearing a purple and white striped shirt. He is looking slightly to the right of the camera with a neutral expression.

We have experienced El Niño before. It was very hot without water. It was very hard because there was no water supply. So we had a hard time farming. Someone came here to validate if there is a place where we can install the LAWA. The Bureau of Soils and Water Management came. This area was rehabilitated. And Project LAWA came. What we did to build the LAWA is we helped each other. We used a pail to pass each other to make it fast. This project can really help us because it can supply 30 ha (equivalent to 720 basketball courts). The cooperative members are very happy. I thank the UN WFP for the help they extended to us, even the tools and equipment we used to build the LAWA.

Rodolfo Manzano, Chairman of TIMARCO
(Tinago Irrigators Marketing Cooperative)

“

A circular portrait of Edito Eburna, a middle-aged man with dark hair, wearing a blue polo shirt. He is looking slightly to the left of the camera with a neutral expression.

“We asked for additional equipment and tools. There were plenty of women, around 20. The men were around 30. There were 50 overall. Even though it is manual labor, the women were very hard working. Without Project LAWA, our income was very small. But because of this project, I can see that our income will boom because there is tilapia. Now that El Niño is not here yet, we put some tilapia on the LAWA to help our income. We thank DSWD for giving us Project LAWA. This will help a lot of farmers increase their income. It also made our members trust us more.

Edito Eburna, President of ProFaVia

“



“We did manual labor for this project. We were digging, using shovels together with the men. But since there were many women, we didn’t want to be left behind. We were also hesitant because men were physically stronger than women. What we did is, during lunch break, we came back earlier than the men so that they can see that we are powerful and helpful. This is how we finished the project earlier than expected. Thank you to DSWD for giving us this project, especially to us women. We had nothing, and then we received our salaries (under Cash for Work). We were very happy because we can now buy some necessities, especially rice.”

Fe Sericon, Treasurer of Progressive Valencia
Farmers Irrigators Association

“



“We realized that, no matter what, all members of the irrigators association will do the job because of the compensation. But we can see unity among them because there is a purpose. If there is a calamity, our income will lessen. When El Niño comes, we are protected by Project LAWA. Our income will not be affected. The UN WFP provided the equipment. If there were no shovels, gloves, and raincoats... we wouldn’t have finished it. I have always been a farmer. This is why I am grateful. Project LAWA is our best defense against El Niño.”





Glicerio Baclot, Member of TIMARCO

08

Rate of Assistance



The rate of cash assistance was equivalent to **100 percent of current daily minimum regional wage** set forth by the National Wages and Productivity Commission of the Department of Labor and Employment. The rate of assistance varied from region to region depending on the cost of living and poverty threshold:

 Province	 Rate of Assistance	 Number of Days	 Total ¹⁰
Antique	450	15	6,750
Davao de Oro	443	15	6,645
Ifugao	400	15	6,000

¹⁰ Total amount per beneficiary.

Monitoring

There were various levels of monitoring conducted according to each component of the project.

The project monitor conducted daily monitoring of project participants while building the SFRs. This strategy ensured proper checking of CfW participants' attendance and a fair distribution of work of all participants. For a period of 90 days, the project monitor regularly checked and maintained the condition of the SFRs and the site. This was done in close coordination with the concerned barangay.

The **DA-BSWM and Provincial Agricultural Office**, in close coordination with the LGUs through their respective MAO, ensured that the participants followed the design constructed by technical experts. They also ensured that the engineering design of the SFRs did not pose additional safety and security risks to the community.

DSWD, in coordination with the LGU-MSWDO, conducted project validation to ensure that participants were within the targeting criteria set by the Department. This is in addition to ensuring compliance with administrative requirements for cash disbursement and liquidation.

WFP, in close coordination with DSWD, DA-BSWM and LGUs, conducted regular field visits to document the pilot implementation. This involved gauging the short- and long-term impact of the project as well as social and environmental components.

In addition, WFP and DSWD conducted national and sub-national programme review and evaluation workshops to document the accomplishments as well as the gaps and challenges faced by various stakeholders during project implementation.





10

Partnerships

As the lead implementing agency, DSWD takes the lead in overseeing the Project LAWA implementation. DSWD signed a Memorandum of Understanding (MoU) with DA-BSWM, WFP, and LGUs. The MoU identified the roles and responsibilities of partners for each output of the project. The Secretary of Social Welfare and Development Mr. Gatchalian stated that the partnership ensures that vulnerable sectors will be prioritized during periods of water scarcity.



DSWD coordinated partner stakeholders through the design, planning, implementation, and monitoring of the project. Using the funding mechanism under the RRP-CCAM-DRR, DSWD provided **cash assistance** to CfW participants during the pilot implementation. As per the MoU, DSWD’s responsibilities are as follows:

1. Spearhead the overall CFT/W project management;
2. Lead in the conduct of meetings, workshops, technical assistance and among others with the LGUs before, during, and after implementation;
3. Liaise with LGUs in the preparation, implementation, monitoring, and reporting of the project;
4. Facilitate the preparation and approval of the project proposal;
5. Lead the implementation of the CFT/W project including project site validation and monitoring visits;
6. Undertake direct payment of cash assistance to the beneficiaries in close coordination with the mobilisation of concerned LGUs;

“

The Memorandum of Understanding that we have signed symbolizes our unity in the distribution of social protection services to our fellow citizens in need, especially to Indigenous People, farmers, fishermen, and other sectors who may be affected by drought conditions.

—Secretary Rex Gatchalian

7. Monitor progress, consolidate physical and financial accomplishment reports;
8. Lead in the conduct of project implementation review and performance assessment with the LGUs;
9. Ensure community feedback mechanisms in coordination with the concerned LGUs; and
10. Validate the list of beneficiaries.
11. The Disaster Response Management Bureau (DRMB) shall be the implementing and focal office.

As technical experts on water conservation and soil management, **DA-BSWM** provided support in identifying the technical specification and design of the reservoir. Per the MoU, DA-BSWM:

1. Provided technical assistance in the identification of project sites, construction, and maintenance of the project;
2. Led in the conduct of capacity building on SFRs;
3. Monitored the progress of the project;
4. Provided additional resource augmentation, as necessary; and
5. Assigned a focal point/representative or a designate office for coordination, monitoring and implementation of the program.



WFP, as the food security cluster lead, provided technical assistance and resource augmentation to the Government. WFP also provided the hand tools for CfW participants. Specifically, WFP:

1. Participated in the joint conduct of project assessment and evaluation;
2. Provided technical assistance/ knowledge and resource augmentation, e.g., through hand tools for the conduct of the pilot implementation;
3. Documented challenges, good practices, and recommendations; and
4. Assigned a focal point/representative or a designate office for coordination, monitoring and implementation of the program.



As end users, the **LGUs** played a pivotal role. To ensure proper execution and management of the project, the LGUs:

1. Identified government-owned land/s. In some cases LAWA SFRs were in government-owned land/s, in other cases these were private and/or cooperative/ association member-owned land (selected according to the same criteria);
2. Executed a memorandum of agreement to private landowner(s), if any;
3. Selected and organized project participants;
4. Reported, monitored and evaluated the project;
5. Referred grievances and provided redress management;
6. Sustained the project; and
7. Assigned a focal point/representative or a designate office for coordination, monitoring and implementation of the programme.





11

Results

A total of 4,500 recipients built 90 SFRs in nine LGUs. The amount of cash assistance to all participants amounted to approximately USD 0.5 million (in national currency PHP 29,092,500).¹¹

Province	Allocation (in PHP)	Utilization	% of Utilization
Antique	10,125,000	10,125,000	100%
Davao de Oro	9,967,500	9,896,032	100%
Ifugao	9,000,000	9,000,000	100%
Total	29,092,500	29,092,500	100%

¹¹ Payment of project monitors is still ongoing considering the 90-day deployment.

Project Accomplishments



4,500
participants



90
small farm reservoirs
built in 9 local
government units



PHP 29,092,500
worth of
cash assistance
provided

From 6 – 8 March 2024, WFP hosted the National Validation Workshop and participated in the validation and programme review workshop at the regional level through which partners discussed best practices and lessons learned as well as local strategies and initiatives. Partners identified several successes of the project which included:



RESILIENCE

Community resilient infrastructure. Beyond building the SFRs, the project showed that small infrastructure stands as a tangible asset towards a commitment for more sustainable water resource management at the community level. The project successfully introduced infrastructure that is **adaptive** and **shock responsive**. The availability of water in the context of repeated droughts from El Niño is the basis of all livelihood mechanisms.

Agricultural productivity. Participants were able to build a reliable water source which has been used in cases of necessity as an extraordinary intervention measure to avoid crops failure. The access to water allows farmers to maintain agricultural activities without significant disruptions and provides potential livelihoods around the pond.

Going beyond building the pond. The main objective was to build SFRs to serve as water sources; however, it became evident that some LGUs and communities went beyond using the SFRs for water and had constructed perimeter fences to plant vegetables around the pond and used it for fish production, etc. The project showed the potential to augment and enhance food security in the community. Partners assessed that LAWA's first phase is viable towards supporting the community to venture to other agricultural and food security activities including agro-fishery, etc.



SUSTAINABILITY

Skills development and capacity building. The project prioritized skills development and capacity strengthening. Participants gained valuable skills through practical experience in building climate resilient SFRs. Indeed, in some areas such as Antique Province, **people went on to build other SFRs using the newly acquired skills and knowledge.** In addition, during orientation, WFP provided participants with an overview of the impact of climate change on communities and society. In pursuing the collective goal, the agencies involved also gained important technical and operational experience and expertise. LAWA provided a platform for multi-sectoral collaboration which gave each stakeholder the opportunity to extend their skills and expertise.

Program convergence. LAWA is not a stand-alone program. It converges to other social protection programs. The targeting mechanism considers those that are currently and had previously benefitted from the government's social assistance. In its broader sense, it converges with the efforts of DSWD, DA, and the LGUs. This convergence strategy ensures that poor families are aided to sustain their basic needs, improve their living condition, as well as increase their resilience from climate-related hazards.



COMMUNITY EMPOWERMENT

Community engagement. The project implementation process involved active community engagement, fostering a sense of responsibility and ownership. It was clearly communicated that the intention of the SFRs were to support families and the communities around the small infrastructure. This encouraged active participation as participants looked forward to long-term benefits from the pilot.

Community Feedback Mechanism. There were various levels of grievance redress mechanisms. Feedback and grievances were addressed based on the mandate of the key stakeholders. At the national level, DSWD was very keen to address issues pertaining to policy notes and fund management. At the regional level, DSWD provided guidance in terms of concerns pertaining to technical designs and implementation mechanisms. At the local level, LGUs managed grievances in terms of beneficiary targeting and site identification. WFP provided resolutions in terms of queries pertaining to resource augmentation and documentation. The communities were also encouraged to forward and share their feedback to the grievance desk and trunk line of all participating agencies to ensure that it will be addressed accordingly.





WOMEN'S INCLUSIVITY

Gender inclusivity. The project strongly **encouraged the participation of women** in building the SFRs. Although the project requires hard labour, it did not restrict and limit women from engaging to the activity. Participation of women was more inclusive in some areas than in others due to their availability, household tasks, and time to look after their children.

At the 68th Session of the UN Commission on the Status of Women in New York, the Undersecretary of Social Welfare and Development Ms. Emmeline Aglipay Villar highlighted the partnership between the Philippines and WFP. She stated that Project LAWA protects the poorest and most vulnerable families who face severe drought, including women and girls, through the provision of CFT/W.¹²

The project strongly encouraged the participation of women in building the SFRs. Although the project requires hard labour, it did not restrict nor limit women from engaging in activities. Participation of women was more inclusive in some areas than in others due to their availability, household tasks, and time to look after their children.

Protection from sexual abuse and exploitation was sensitized and closely monitored.



NATIONAL AND LOCAL OWNERSHIP

Stakeholders' engagement. Transparent coordination mechanisms, as indicated in the signed partnership agreement, have been established, fostering an open exchange of information among stakeholders. This has facilitated a shared understanding of project goals, challenges, and achievements, creating a collaborative environment along program execution.

Support from local authorities. Consistent with the Local Government Code of the Philippines, LGUs are responsible in ensuring that proper interventions, projects, and programmes are implemented to better the lives of their respective constituents. **Local support was pivotal in the success of the program.** The willingness of the LCEs and active engagement of various offices mandated to deliver the project, such as MAO and MSWDO, played major roles in setting up and executing the project. At the grassroots level, the barangays as well as the farmers' association and Indigenous Peoples groups were also supportive of the initiative.

Accountability and ownership. In the planning stage, LGUs ensured that the project is implemented with integrity and the assistance was directed to those who were in need. The **associations and farmer communities expressed ownership of the project** as it directly impacted their income source. This is evident considering that the project assets were formally turned over to them for sustainability and continuity.

Alignment with national priorities and directions. As part of the National El Niño Task Force, DSWD's role in LAWA was also included in the annual report of the **water security cluster**. LAWA's successes were presented in various forums and technical management meetings.

¹² <https://dfa.gov.ph/dfa-news/news-from-our-foreign-service-postsupdate/34322-philippines-cited-as-leading-the-way-as-a-model-in-gender-responsive-disaster-risk-reduction>



ECONOMIC BENEFITS AND RIPPLE EFFECTS

Temporary job employment. The project provided temporary sources of income for project participants. This social assistance scheme augments poor families to address their basic daily needs. The assistance received was beneficial to **partially, if not totally, support** various needs including food, education of children, medication of sick family members (persons with disabilities, children needing special assistance, etc), start-up for small livelihoods, etc. Some participants were not able to complete the 15-days work due to other personal commitments, but as a strategy, a capable member of their family worked as a replacement to ensure that the household would fully participate in the pilot.

Indirect benefit. Not all participants may benefit from the water source as they do not have land/agriculture in proximity. Sometimes, they may not own but work on nearby fields, and with higher yield, their income will be higher.

Unexpected results. Only a few months after the creation of the SFRs, a significant number of livelihood initiatives were implemented. These range from the use of water in cases of sudden need to the implementation of income-generating activities (such as fish farming) or agricultural

applications. This indicates two positive considerations: some systems implemented can be self-financing, and some can generate income (e.g., the purchase of feed for two farms). The Bureau of Fisheries and Aquatic Resources provided fish for breeding in the ponds.



OTHER CONSIDERATIONS

Safety and security. The technical assistance provided by the agricultural engineers was not limited to the design of the SFRs. They were also very keen to ensure occupational safety and perimeter security. The component of safety and security was directed to the participants as well as to the surrounding communities. These small ponds can potentially be the cause of human and animal drowning, health hazards, erosion and flooding, etc. The inputs of experts were beneficial in the management and maintenance of the SFRs.

Advocacy. The advocacy drive that comes from the project was crucial in introducing the new intervention to other government agencies, partners, as well as international and local audiences. The use of tri-media strengthened the messaging towards early response actions related to El Niño.



12

Recommendations¹³

Based on the successes and lessons learned from the pilot implementation, DSWD will scale Project LAWA in 2024 to reach more areas and specific groups in communities vulnerable to climate shocks. On the scale up, the Secretary of Social Welfare and Development Mr. Gatchalian stated, “We look forward to ... our engagement with WFP to mitigate the potential adverse effects of the El Niño in selected municipalities in the Philippines through the Project LAWA.”¹⁴ The regional and national workshops identified key recommendations for consideration when scaling LAWA.

¹³ Based on the recommendations gathered during the National Validation Workshop conducted on 7 – 8 March 2024 with National and Regional Offices of DSWD and DA and the participating LGUs in Regions XI, VI, and CAR.

¹⁴ DSWD’s speech from the WFP Executive Board First Session 2024 during the Philippines presentation on 28 February 2024.

TIMING

Social preparation and community readiness.

Stakeholders agreed there should be ample time for preparation to ensure that key players are well onboarded, to define their roles and functions, and to prepare the community to engage and implement the project. Sufficient time will be helpful for the social welfare and agriculture offices to assess project participants and select those who receive the assistance. To better ensure readiness and a community driven approach, the Government may conduct and facilitate Community Based Participatory Planning (CBPP).¹⁵

Climatic cycles. Timing related to both climatic cyclicity and livelihood activities can be improved and duly adjusted. Ponds should be established prior to the rainy season in time to store water. The implementation of SFRs must precede the times of maximum rainfall and water harvesting. Livelihood activities must be coordinated with water needs during dry periods (e.g., alternating fish farming to avoid the fish growth period overlapping with the period of minimum water availability for crops).

Technical design. Originally, DA-BSWM recommended the four types of- and technical designs of SFR. During site preparation, there is a need to give more time for the agricultural engineers to assess the area, come up with a design for the SFR based on the landscape, and provide further inputs on the sustainability plan of the project. Majority of LGUs opted to do the “Dug out” and “Semi Dug Out” types and managed to build sturdier and more resilient SFRs. In scaling up the project, there needs to be proper assessment of the type of SFR vis-à-vis the terrain and service areas around the community. This is also related to highlighting safety and security within and around the reservoir.

¹⁵ WFP's Community-Based Participatory Planning modules are available.

AGREEMENTS AND FRAMEWORKS

Identification of community lands. To ensure the access of the community to the SFR, agreements (usufruct) are needed to use the land being owned by private people. This will provide a clear community understanding and agreement as well as avoid misconception and miscommunication which could result in community disagreements.

Policy guidance. The pilot was implemented during barangay election period, hence project implementers, primarily the LGUs, experienced various challenges due to misinterpretations and misconceptions. As a mitigating measure, DSWD issued and clarified the targeting mechanisms and criteria. This limited political interference on the project ensured that the participants were well targeted and identified. Although the timing is crucial, clear policy guidance can mitigate the political influence.

Forging of partnership agreement. Project execution requires clear and agreed terms and conditions. The roles and responsibilities are stipulated in partnership agreements. Although during the pilot implementation, Memorandum of Agreements were simultaneously forged and signed while setting up the project, there needs to be concrete, forged, and signed partnership agreement prior to actual engagement. This will safeguard the participating agencies and will reinforce their accountability and mandate to deliver.





WOMEN'S INCLUSIVITY

Gender transformation. Women farmers successfully participated in the pilot. To increase the participation of women in both project implementation and water management, more gender balance could be achieved. LGUs should encourage women to be a part of activities usually delegated to men, such as the construction of the SFRs. Going beyond the establishment of the ponds, women's participation may be largely engaged in activities such as vegetable gardening, agro-fishery, hydroponics, amongst many others.

To ensure women's leadership and participation, a gender transformation analysis could be conducted to further examine women's representation in leadership roles in groups and committees that are tasked to maintain and sustain the operations of LAWA. Particularly, a case study will be focused on the pilot sites in Davao de Oro which aim to apply gender-transformative approaches to improve management.



TOOLS AND SKILLS AUGMENTATION

Equipment. In addition to the tools provided by WFP, the LGUs and project participants also used and augmented their personal tools. Moving forward, a comprehensive set of tools should be provided to LGUs and CfW participants. It would be best to maximize external resource augmentation in purchasing or procuring other equipment needed to maintain and sustain the SFRs (such as pipes, water pump, perimeter fence, etc). To better support the community, technical specifications should be clearly defined, and the equipment should fit the requirements based on the project's sustainability plan. 004b71

Capacity and skills development. To ensure that proper technical assistance will be cascaded, project implementers should also have enough knowledge and skills on aspects of soil management, water conservation management, biodiversity conservation. This will enable the project implementers, as well as the recipients, to manage, maintain, improve, enhance, and diversify the solution.



COST BENEFIT ANALYSIS

To measure the impact of LAWA on the three dimensions of sustainability – economic, human, and environmental – a cost benefit analysis of the project could also be conducted to examine the collective benefits brought on by LAWA's climate-resilient communities; in other words, their positive contributions to the environment around them. Such an analysis could further inform the social and environmental effects of LAWA at scale.



13

LAWA at scale

For ongoing and future implementation, complementary activities such as vegetable gardening, aquaculture, and hydroponics activities may be linked to the SFRs. As both water and nutritious food is necessary to ensure life quality and productivity, DSWD developed 'Breaking Insufficiency through Nutritious Harvest for the Impoverished', known as BINHI, to promote communities' food security and nutrition through their adoption of climate-resilient and sustainable agricultural practices. This includes communal and urban gardening, vermicomposting, and the planting of disaster-resilient crops, fruit-bearing trees, and mangroves. Through Project LAWA and BINHI, DSWD seeks to address multifaceted challenges posed by water scarcity and food insecurity. These are implemented through DSWD's Risk Resiliency Program, using CFT/W as modalities.

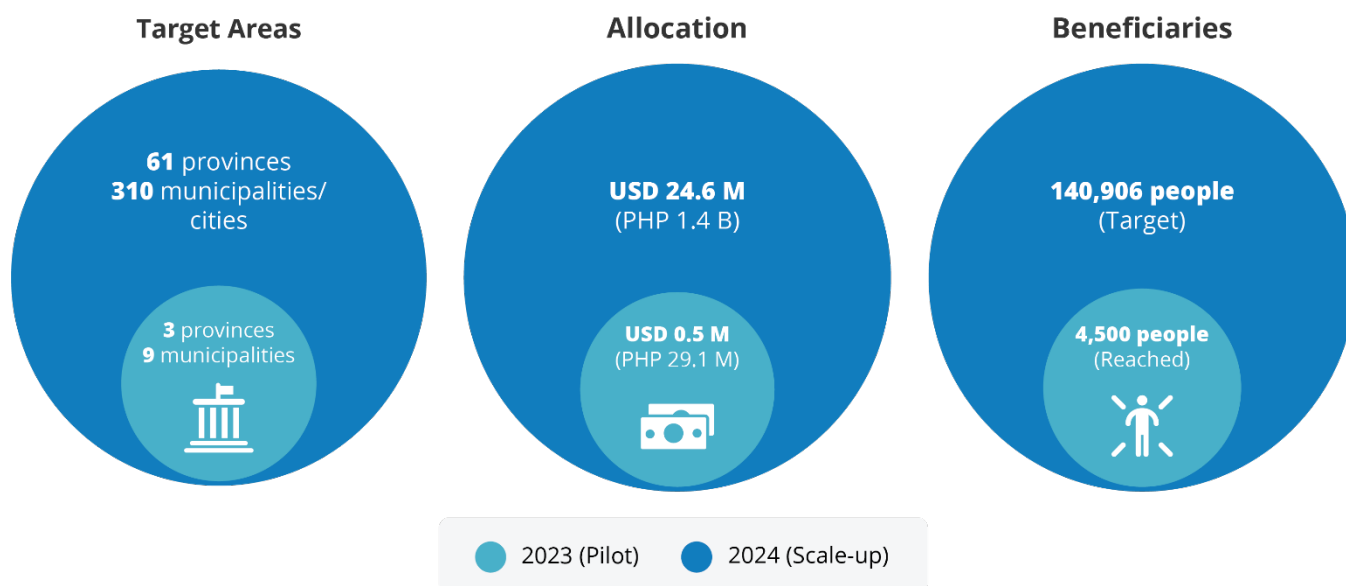
In April 2024, DSWD began the nationwide implementation of LAWA and BINHI which will be rolled out in 310 municipalities, including urban centres, and in 61 provinces across 16 regions. This will result in 1,319 target water harvesting facilities that will cover at least 6,630 hectares of agricultural land to support 140,000 families. Locations were chosen as those highly affected by drought brought on by El Niño and with the highest number of poor families based on the *Listahanan 3* database. Beneficiaries will work for 10 to 25 days and will be paid based on the Regional Daily Minimum Wage Rate of the area as prescribed by the National Wages and Productivity Commission of the Department of Labor and Employment (DOLE).

As a convergence strategy, DOLE allocated additional funding to more beneficiaries and to build more SFRs and BINHI sites. DOLE aligned the *Tulong Panghanapbuhay sa Ating Disadvantaged/Displaced Workers* (TUPAD) CFW

implementation to that of the Standard Operating Procedures of LAWA and BINHI.¹⁶ DOLE disbursed the assistance according to their own financial and audit regulations.

As of May 2024, over a quarter of a million families were provided with cash assistance through LAWA. The Department forecasts over 2,500 SFRs to be built which will support over 2,500 ha of agricultural land. Just one SFR will preserve a replenishable supply of 1,000 cubic meters of water. With these projections, which were calculated by the Department of Agriculture’s National Urban and Peri-Urban Agriculture Program, LAWA will enable the harvesting of nearly 6.3 million kilograms of a diverse range of vegetables to be part of the diets of over 170,000 poor families. Furthermore, the Department will consider the consolidation of municipal and provincial ordinances to support RRP-CCAM-DRR from 75 provinces and 405 municipalities and cities.

Project LAWA 2023 Pilot vs. 2024 Scale-up



¹⁶ TUPAD is a community-based national programme designed to offer temporary employment to people adversely affected by crisis situations. In addition to providing temporary jobs, the program also

seeks to uphold people's dignity by engaging them in meaningful community service and improvement projects.

Project LAWA Regional Allocation (2023 vs. 2024)

Region	Allocation (in PHP)		Increase
	2023 (Pilot)	2024 (Scale-up)	
Central Office	-	9,581,086	▲
National Capital Region	-	343,771,088	▲
Cordillera Administrative Region	9,000,000	81,767,560	▲
Ilocos Region	-	91,372,720	▲
Cagayan Valley	-	88,145,064	▲
Central Luzon	-	169,982,405	▲
CALABARZON <i>(Cavite, Laguna, Batangas, Rizal, Quezon)</i>	-	113,615,912	▲
MIMAROPA (Southwestern Tagalog Region)	-	18,618,299	▲
Bicol Region	-	41,692,040	▲
Western Visayas	10,125,000	107,676,240	▲
Central Visayas	-	45,437,238	▲
Eastern Visayas	-	48,679,400	▲
Zamboanga Peninsula	-	24,466,900	▲
Northern Mindanao	-	56,834,892	▲
Davao Region	9,967,500	46,865,717	▲
SOCCSKSARGEN <i>(South Cotabato, Cotabato, Sultan Kudarat, Sarangani, and General Santos City)</i>	-	67,834,696	▲
Caraga Administrative Region	-	64,428,720	▲
Total	29,092,500	1,420,769,977	▲ 4,783.6%

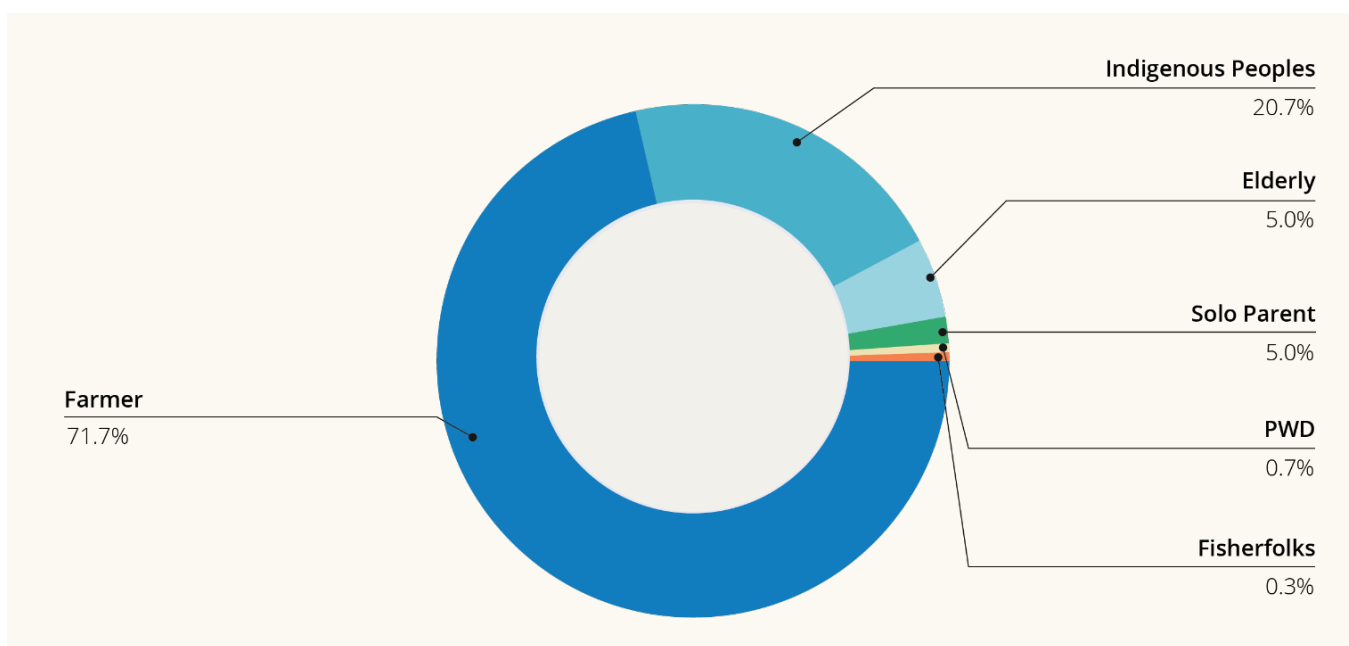
Conclusion

There is clear evidence that Project LAWA **provides and boosts communities' critical water supplies** and has immense potential to **increase their adaptive capacities and livelihoods**. Further expansion is needed to increase the number of target communities. This will ensure that no one is left behind, particularly the farmers and Indigenous Peoples in the Philippines who are solely dependent on agricultural activities as their primary or only source of income.

Annexes

ANNEX A: Actual Accomplishment

Target Areas	LGU	Target		Accomplishment	
		SFR	# of people	SFR	# of people
Ifugao CAR	Aguinaldo	10	510	10	510
	Alfonso-Lista	10	510	10	510
	Hungduan	10	510	10	510
Antique Region VI	Barbaza	10	510	10	510
	Sebaste	10	510	10	510
	Sibalom	10	510	10	510
Davao De Oro Region XI	Compostela	10	510	10	510
	Laak	10	510	10	510
	Monkayo	10	510	10	510
Total	9 LGUs	90	4,590	90	4,590¹⁷



¹⁷ Including 90 project monitors who were mobilized to maintain the SFRs for 90 days.

ANNEX B: Photo Captions

Front Cover

Fe Sericon, Treasurer of the Progressive Valencia Farmers Irrigators Association in Davao de Oro, feeds fish in a water reservoir they built as part of Project LAWA co-implemented by the Government and WFP. © WFP/Earvin Perias

Page 5

Women from the Progressive Valencia Farmers Irrigators Association in Davao de Oro pose for a photo by the water reservoir they built under Project LAWA. © WFP/Earvin Perias

Page 9

An aerial shot of a water reservoir built in Davao de Oro. © WFP/Dante Diosina, Jr.

Page 11

In Antique Province, communities are working together to build a water reservoir to mitigate the impacts of El Niño as part of the Government's Cash for Work Program. © WFP/Dale Rivera

Page 13

A water reservoir in Monkayo, Davao de Oro. © Department of Social Welfare and Development (DSWD)

Page 23

WFP, represented by Country Director a.i. Dipayan Bhattacharyya, and the Department of Social Welfare and Development held a ceremonial launching of the Project LAWA at BINHI in Doña Remedios Trinidad, Bulacan. © WFP/Dale Rivera

Page 24

WFP, together with the DSWD, launched Project LAWA on September 2023 in Monkayo, Davao de Oro. © WFP/Haelin Jeon

Page 31

Aerial view of the Project LAWA site along with rice paddies and farm plantation in Davao de Oro. © WFP/Dante Diosina, Jr.

Page 34

Closer view of a small farm reservoir constructed by the Progressive Valencia Farmers Irrigators Association in Compostela, Davao de Oro. © WFP/Earvin Perias

Back Cover

An aerial view of a small farm reservoir in Compostela, Davao de Oro. © WFP/Dante Diosina, Jr.

Learn more about Project LAWA:



