

Strengthening selected AMIA Villages through Mentorship Program, and Establishment and



Strengthening selected AMIA Villages through Mentorship Program, and Establishment and Implementation of Gender-Sensitive Projects

Submitted by:

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I. INTRODUCTION

A. RATIONALE

In the Philippines, local communities comprising of men and women farmer-fisherfolks are considered to be highly susceptible to disaster events being situated in the Pacific Ring of Fire and along with two major tectonic plates of the world, the Eurasian and Pacific plates (COA, 2014). Tropical cyclones accompanied by heavy rain and strong winds that lead to floods, landslides, and storm surges are frequently occurring in the country. In fact, from 1997 to 2007, the eighty-four (84) typhoons that entered the Philippine Area of Responsibility (PAR) resulted in 13,155 deaths, more than 51 million families affected, and about 158.24 billion pesos worth of losses in agriculture, infrastructure, and private properties (OCD, 2011).

It is evident that the country has been experiencing various natural disasters on a regular basis. The variability and unpredictability in the occurrence of natural disasters in the country have affected the different sectors, primarily the agriculture sector, due to its vulnerability to weather and climate-induced events. In the long run, this will cause a significant effect on the income of men and women whose main source of livelihood is agriculture when disaster strikes.

To assist the Agriculture & Fisheries (AF) communities adapt to erratic climate conditions while pursuing resilient and sustainable livelihoods, the Department of Agriculture (DA) launched the Adaptation and Mitigation Initiative in Agriculture (AMIA) as its flagship program in addressing climate change (CC). Through AMIA, an integrated and multi-stakeholder effort was developed to promote Climate-Resilient Agriculture (CRA) to enable local communities to conduct their own participatory action research toward building climate-resilient A&F livelihoods and communities.

To date, the AMIA program has more than 115 AMIA villages across 41 provinces in the Philippines where climate-relevant support services are being introduced and conducted to address various CC-related challenges in different regions. While AMIA gained substantial outputs in building these communities to be climate-resilient, the different sets of skills of extension workers and various challenges faced by men and women farmer-fisherfolks such as limited information on climate resilient agricultural technologies, limited input support for expansion and new ventures such as value-adding, limited support group/professional networks among others, hampered the full implementation of several initiatives in some regions.

Intensifying the commitment of AMIA not only in establishing and expanding climate-resilient villages in the whole archipelago, but the Program in its ADB proposal document also targets to increase its AMIA Villages to 150 by 2024 (2019 baseline: 77), and at least 50 villages have to pilot projects that enhance the adaptive capacity of women and other socially vulnerable groups (2019 baseline: 0) [Source: DA-Climate Resilient Agriculture Office (CRAO)].

To comply with and address these immediate concerns, the project conducted various capacity-building activities and development of tailor-fitted gender-sensitive projects to further strengthen the implementation, monitoring and

evaluation of initiatives being conducted in Regions 6, 7, 8, and CAR. Gendersensitive projects go beyond promoting the participation of women but drawing specific measures to address access to and quality of services for all including socially vulnerable groups.

Initially, these gender-sensitive projects aimed not only to address the gap in gender and social inclusiveness but also sought to provide additional income in the long run for the project beneficiaries. These gender-sensitive projects were piloted in selected AMIA Villages in Region 6.

Other project activities included sharing the best practices of Region 6 in establishing and carrying out initiatives (adoption and scaling up of CRA technologies, expansion of areas, etc.) expected in AMIA Villages through coaching and mentoring, in this approach, Region 6 acted as big brother to its younger brothers in other regions. Finally, the various trainings were identified to assist the men and women farmer-fisherfolks and other socially vulnerable groups who lack the resources and opportunities they need to use their time in more economically productive activities to gain access to information, resources, and new simple technologies. These approaches somehow cushioned the negative impacts of CC on their livelihoods and primary income and provide a holistic approach that will create Climate-resilient gender-sensitive and socially-inclusive AMIA Villages in the future.

B. OBJECTIVES AND EXPECTED OUTPUTS

The project's overall objective is to strengthen the AMIA villages in Regions 6, 7, 8, and CAR through the development of gender-sensitive projects, coaching/mentoring, and various capacity-building activities.

Specific objectives:

- 1. To develop tailor-fitted interventions for men and women farmerfisherfolks and other vulnerable groups of selected AMIA Villages in Region 6;
- 2. To share best practices of Region 6 to other regions (Regions 7,8 and Cordillera Administrative Region (CAR) through leadership coaching and mentoring in building climate-resilient villages following AMIA's standards and processes;
- 3. To conduct capacity building of AMIA Regional Coordinators, extension staff, and beneficiaries (men and women farmer-fisherfolks and other vulnerable groups) in Regions 6, 7, 8, and CAR.

Hence, the following are the expected outputs:

- a. To document the process of establishing AMIA village:
- To validate/update the AMIA Profiling instrument with gender lens included which can be a tool for Participatory Climate Risk and Vulnerability Assessment (PCRVA);
- c. To monitor AMIA sites in Regions CAR, 6,7 & 8 and have mentored AMIA Coordinators/Implementers;

- d. To develop monitoring and evaluation instrument that will serve as a guide to AMIA Coordinators/Implementers in establishing AMIA Villages;
- e. To identify the training needs of Regional AMIA Counterparts;
- f. To conduct capacity development of AMIA Coordinators/Implementers based on their priority training needs.

II. METHODOLOGY AND ACCOMPLISHMENTS

A. METHODOLOGY

A.1. Mentoring and Monitoring Component

a) Conduct of Project Meetings

A series of project meetings were conducted to critically discuss the process and timeline for accomplishing the goal of the project which is to mentor the AMIA Coordinators. Most of the discussions revolved around leveling off, organizing, and planning the implementation of the project as a team. The team meetings were also conducted to accomplish the activities on process documentation and review/re-assessment of AMIA profiling instrument that can be used as a tool for PCRVA.

b) Process documentation

The project's mentoring component documented the process of establishing AMIA villages in Region 6 and other regions based on previous inputs/information/ experiences of AMIA Coordinators and past protocols of CRAO in establishing AMIA which has improved over time. Through their proven experiences, an implementer's guide in establishing an AMIA village was prepared. This will then be a tool that will guide AMIA Coordinators in establishing or strengthening the AMIA village.

c) Review/re-assessment of PCRVA instrument through team meetings

A baseline survey instrument piloted by AMIA-Ilocos Region was previously used to gather initial information and to profile AMIA beneficiaries. This was provided as one of the instruments used during the conduct of PCRVA. This instrument was also presented to all Regional AMIA Coordinators for their further comments and additional inputs. During team meetings, parameters that include gender lenses have been incorporated into the PCRVA instrument.

d) Monitoring and Evaluation of existing AMIA Villages

Monitoring and evaluation (M&E) is an activity that sought to provide the mentors with a bird's eye view of the project. It allows the team to identify areas of the project that needs improvements to boost performance and meet its targets as planned. Project visits cum Focus Group Discussions (FGDs) and workshops were conducted in the project sites to gather data on the status of its respective AMIA Villages and identify issues, gaps, and challenges encountered during project implementation as well as best practices and success stories.

e) Training Needs Assessment

The training needs of both implementers and beneficiaries were determined through an interview with our AMIA Coordinators and beneficiaries. Specific areas for capacitation were identified to serve as the basis in the formulation of training design for capability-building and/or re-tooling activities for Regions 6, 7, 8, and CAR.

f) Mentoring and Development of Monitoring and Evaluation Instrument

Through mentoring, the team aimed to provide direction through the delivery of a process that has already been proven and has worked in many regions. Mentoring is meant to help or guide the AMIA Coordinators to develop and become more competent in their roles and to make better decisions or give them new perspectives through sharing of successful experiences.

To accomplish Objective 2, an evaluation instrument was crafted to assess the progress of AMIA villages in the targeted regions. While processes differ in each region, this instrument was created to serve as a checklist of the identified activities and milestones in establishing an AMIA village. Data from the checklist was carefully gathered to assess and determine whether the regional implementation was geared towards different phases of the AMIA development pathways.

g) Conduct of Trainings

A capability-building workshop on the topics of Enterprise Development, Cost-Benefit Analysis, and Project Proposal Development was conducted based on the results of the training needs assessment to capacitate the AMIA coordinators from Regions 6,7, 8, and CAR.

A.2. Gender Component

In close coordination with AMIA Region 6 Focal, three AMIA Villages were purposively selected to serve as the study sites for the project. These include the municipalities of Banga in Aklan, Sibunag in Guimaras, and Pontevedra in Negros Occidental.

a) Baseline Surveys

A baseline survey was conducted in the project sites to determine the profiles of the AMIA beneficiaries and their perception regarding climate change. The AMIA Baseline Survey Form was refined to include gender and other social considerations and was used in conducting this activity. The survey form is attached as **Annex 1**. Listed in Error! Reference source not found. is the s chedule of the conduct of the baseline.

Table 1. Schedules of baseline surveys

Site(s)	Date(s)
Sibunag, Guimaras	29 June 2022
Banga, Aklan	30 June 2022
Pontevedra, Negros Occidental	4-5 July 2022

A total of 240 farmer beneficiaries (FBs) were surveyed in the three project sites as presented in **Figure 1**. These include the existing AMIA beneficiaries and those who are yet to receive support from the program but were already geotagged by their respective MAOs.

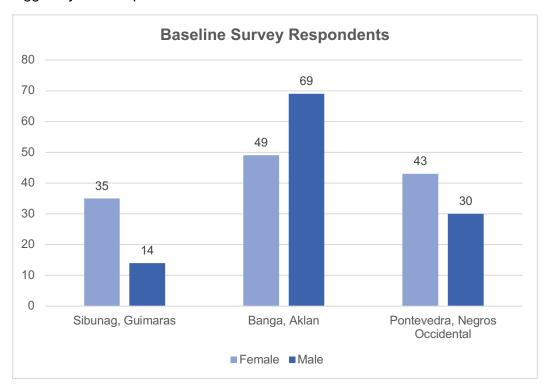


Figure 1. Number of male and female respondents during the baseline survey

In Sibunag, Guimaras, 49 FBs were surveyed, 35 of whom are females and 14 are males. On the other hand, 118 FBs were surveyed in Banga, Aklan including 49 females and 69 males. Lastly, 73 FBs participated in Pontevedra, Negros Occidental comprising 43 females and 30 males. See **Annex 2** for the photo documentation of the baseline surveys.

Responses were encoded in a database developed using KoboToolbox, a free and open web-based system for data collection and analysis. Data collected were then analyzed using IBM SPSS software.

b) Focus Group Discussion

From the list of farmers interviewed during the baseline survey, 20 were selected from each of the sites to participate in the FGD. The team coordinated with the AMIA focal person in the three municipalities in selecting active members who would best represent the FBs in their respective areas, considering that at least 40% of the participants are women. Selected farmers were invited on the dates listed in **Table 2**.

Table 2. Schedules of Focus Group Discussion

Site(s)	Date(s)		
Sibunag, Guimaras	08 August 2022		
Banga, Aklan	09 August 2022		
Pontevedra, Negros Occidental	10 August 2022		

Eighteen AMIA beneficiaries participated in the FGD in Sibunag, Guimaras, composed of 14 females and 4 males. In Banga, Aklan, 11 females and 9 males were present. Correspondingly, an equal number of participants, 11 females and 11 males attended the FGD in Pontevedra, Negros Occidental as indicated in **Figure 2**.

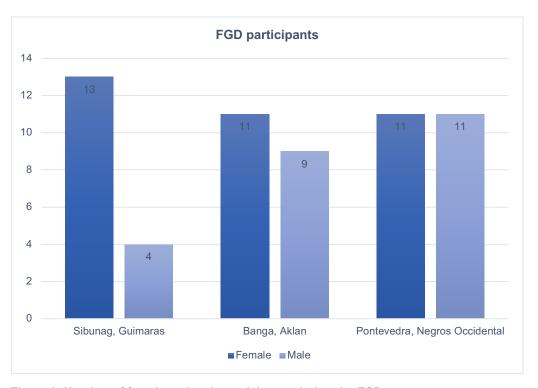


Figure 2. Number of female and male participants during the FGD

The technologies and support services to be deployed in AMIA Villages must be tailor-fitted to the needs of all stakeholders, particularly the women and other vulnerable sectors. An in-depth gender analysis is necessary to identify specific issues that are crucial in identifying what climate-resilient practices are the most appropriate given their conditions.

Following the Harvard Analytical Framework (Gender Analysis Framework) as shown in **Figure 3**, the project will look into three gender-related elements of the communities: Activity Profile, Access, and Control Profile, and Influencing Factors Profile. The Activity Profile identifies the gender divisions of labor in the community that are grouped into three types – productive activities, reproductive activities, and community involvement. On the other hand, the Access and Control Profile lists the resources needed to carry out tasks and benefits derived from them; access and control are disaggregated by gender. Lastly, the Influencing Factors Profile outlines the socioeconomic context

shaped by demographic, economic, legal, institutional, cultural, religious, and behavioral structures of the community.

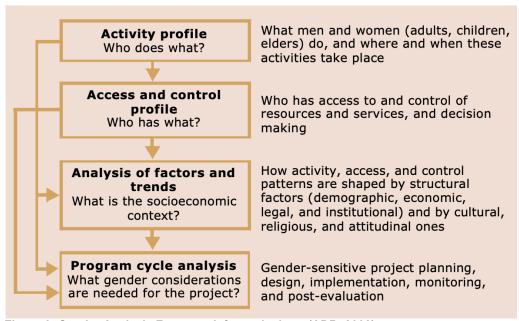


Figure 3. Gender Analysis Framework for agriculture (ADB, 2002) (Retrieved from: https://www.adb.org/sites/default/files/publication/28723/agri2.pdf on 07 March 2022)

c) Gender Analysis

Data gathered through the baseline surveys and FGDs were analyzed and gender-related issues were identified. Validation of the results was conducted in consultation with DA-CRAO and DA RFO 6.

Following the assessment, the identified gender-sensitive interventions were subjected to a checklist (Annex 3) to determine the most appropriate project/s to be deployed in the project sites. The checklist includes indicators that will further ensure that gender considerations are integrated into the building blocks of climate change response namely: Adaptation, Mitigation, Financing Mechanism, and Technological Development. These indicators will help prioritize projects that promote resilience to current and future climate risks while ensuring gender equality through shared control of resources and decision-making. For Adaptation and Mitigation, the checklist looks into whether the proposed project is aligned with climate change-related laws and policies, and if it addresses the varied vulnerabilities of men, women, and other vulnerable groups to climate risks. The criteria for Financing Mechanism, include the assessment of the cost-efficiency and cost-effectiveness of the proposed project. This will provide a measure of how sustainable the project is, and if it will be truly accessible for both women and men and other vulnerable groups in the community. Furthermore, under Technological Development, the criteria seek to ensure that the proposed project reflects the priorities and needs of the FBs. It includes indicators that promote equality in the access and control of the technology, as well as the capacity of the proposed project to maximize the potential of the underrepresented sectors in the community. Additionally, a general set of criteria was included to ensure that there will be no duplication of existing interventions being provided to the AMIA Village. The highest possible

score is 15 points - the higher the score of the proposed project, the higher its gender responsiveness.

B. DISCUSSION OF ACCOMPLISHMENTS

B.1. Preliminary Activities

1. Preliminary and Preparatory Meeting

The project team meeting cum general project planning was held in Baguio City on 8-11 April 2022. The technical research team together with the UPLBFI Project Management Unit (PMU) thoroughly discussed the specific activities to be conducted by each component and its budgetary requirements in preparation for the Kick-off/Inception Meeting with DA-RFO 6 and DA-CRAO.



Figure 4. Project Technical Team with the UPLBFI Project Management Unit

2. Project Kick-Off Meeting

The project team conducted a kick-off meeting on 28-30 April 2022, at the B Hotel, Quezon City to address the initial comments of the DA-CRAO and DA-Region 6 on the approved proposal. Mr. Jonathan Austria discussed the Gender Assessment part of the project to address objective 1 while, Dr. Mary Jane Alcedo, presented the methodologies to be used to achieve objective 2. Further, both components will work together for the fulfillment of objective 3 which is the capacity building of AMIA Regional Coordinators, and extension staff in Regions 6, 7, 8, and CAR.



Figure 5. Project Kick-Off Meeting (Source: DA-AMIA Facebook Page)

One of the major outputs of the meeting was the presentation of the AMIA baseline survey form which has already been presented and commented on by different stakeholders during one of the Zoom meetings conducted by CRAO. Again, this instrument was used during the conduct of PCRVA. As agreed, the instrument will be reviewed by Mr. Austria to add gender-sensitive perspectives.

On the other hand, the guidelines for establishing AMIA Village were presented by Dr. Alcedo, and comments and suggestions were considered in the finalization of the instrument. DA-CRAO Director Alicia Ilaga, Dr. Saturnina Halos (DA Technical consultant), the DA-RFO 6 PMED Chief Carmelita Fantilanan, and the UPLBFI PMU headed by Ms. Dorcas Trinidad attended the said meeting. Among other participants were Ms. Perla Baltazar, Ms. Jewel Labita, Ms. Joy Calvar-Adaraya (DA-CRAO), Mr. Rudolfo Grana, Jr. (DA-Region 6), Ms. Cathy B. Pastor (DA-RFO 1), and Ms. Julie Ann Barril, Ms. Abegail Gillado, Mr. Mark Andrei Inoceno and Mr. Ellison Valencia (UPLBFI).

3. Baseline Survey Instrument Validation Workshop

To finalize the AMIA's baseline survey instrument and the guidelines for establishing AMIA Village, the project team together with the DA-CRAO and DA RFO 6 representatives conducted a validation workshop on 1-3 June 2022 at Bolinao, Pangasinan (**Figure 6**).



Figure 6. Discussion of the AMIA's Baseline Survey and Guidelines in Establishing AMIA Villages facilitated by Ms. Perla Baltazar

The comments and recommendations gathered on the revision of the survey instrument and guidelines from the previous meetings were addressed, and the updated files were sent to DA-RFO 6 and DA-CRAO prior to the validation workshop to give them enough time to review the documents.

The AMIA baseline instrument was subjected to another round of assessment, and the final version was approved upon the inclusion of 'LGBT+' as another gender option under the Socio-Demographic information.

Additionally, the guidelines for establishing AMIA Village were also reviewed. Suggested revisions were the following: (1) flowchart must include the primary actors/agencies that will be involved in every step of the process, especially the involvement and interrelatedness of the DA-Regional Field Offices (DA-RFOs) to Provincial Agricultural Offices (PAOs), Local Government Units (LGUs) and MAOs; (2) AMIA Focal Persons and LGUs involvement in identifying tailor-fitted technologies for the farmers must reflect in the revised guidelines; lastly, (3) an assessment tool must be in place to gauge the progress and status of an AMIA Village vis-à-vis the framework in establishing an AMIA Village.

These outputs were used as part of the recommendations to the DA Secretary William Dar for the adoption of guidelines in establishing AMIA Village nationwide. These outputs can be seen in **Annexes 4**, **5**, **and 6** for the Implementer's Guide in Establishing an AMIA Village, the Assessment Tool to gauge the progress and status of AMIA village, and the Framework in establishing an AMIA village respectively.

B.2. Monitoring and Mentoring Component

a) Monitoring and Mentoring of Cordillera Autonomous Region (CAR) Regional AMIA Focal/Team

On 10-13 August 2022, the team conducted its first monitoring of the AMIA village and mentoring of the Regional AMIA Focal/Team at DA-CAR in Baguio City, Benguet. The activity started with a meeting with Mr. Lito D. Mocati, Climate Change Focal Person in DA-CAR, and his staff. The data on the status of their AMIA sites were discussed including interventions and CRA technologies being implemented in the AMIA sites.



Figure 7. Monitoring of AMIA Village and Mentoring of Regional AMIA Focal/Team at the DA-CAR

It was discussed that among the provinces of CAR, only one has no CRVA map, and is targeted to be completed in 2023. Mr. Mocati also happens to be the focal person of the BP2 Program. According to Mr. Mocati, their target AMIA site could be supported by their BP2 projects, if there are BP2 beneficiaries in the identified AMIA village. In such cases, the different interventions can be concerted in one site.

For the AMIA site in Buguias, Benguet, the land area reported for the AMIA village was 112 hectares with five (5) Farmer-Cooperatives and Associations (FCAs). So far, interventions given to AMIA beneficiaries were water-saving technology through the construction of the diversified dam, provision of water tanks and irrigation hose, crop-livestock/poultry integration, greenhouse, windbreaks, nurseries, and establishment of climate information system (CIS) in partnership with the Rice Watch Action Network (R1).

On the other hand, their AMIA village in Tublay, Benguet has 110 hectares cultivated with four (4) associations as beneficiaries. The major climate hazards identified are typhoons, monsoons, drought, and soil erosion. The climate-resilient interventions that were provided to address these climate hazards include crop-livestock integration projects, greenhouses, rain shelters, nurseries, and windbreaks, among others.

The team also visited the AMIA Village in Buguias, Benguet. A courtesy call to the Municipal Agriculture Office (MAO) was done before going to the exact location of the AMIA village. A meeting with AMIA beneficiaries was conducted upon reaching the project site.



Figure 8. Monitoring of AMIA Village in Buguias, Benguet

During the meeting, major agricultural concerns that are existing in the village were identified and these include the following: (1) unstable market price of vegetables; (2) high input cost for vegetable production, and (3) transportation costs from farm to market. The beneficiaries also suggested that the government can support a contract growing scheme for vegetables to address significant losses when the farm gate price of vegetables consistently drops.

Also, one of the associations was a beneficiary of processing equipment for baking from the Department of Trade and Industry (DTI). Due to the significant price increase of flour and sugar, their bread production enterprise decelerated because villagers cannot afford the higher price of the bread they produced.

The research team also visited the AMIA Village in Tublay, Benguet, AMIA beneficiaries enumerated major concerns which are similar to the issues raised by AMIA beneficiaries in Buguias. They also mentioned that their crops - *sayote*, cabbage, and lettuce were bought at a lower price, forcing them not to sell their harvest in the market but be used solely for village consumption.

Based on the interviews, observations and FGD with AMIA beneficiaries, overall, the AMIA villages in CAR can be identified under Phase 1 in the Development Pathway, although one AMIA Association in Buguias can be classified under Phase 2. As part of

the mentoring, the following recommendations/suggestions were discussed with DA CAR AMIA Facilitators:

- AMIA Focal to closely coordinate with Banner Coordinators for projects/ assistance to be given to the AMIA sites. AMIA should be mainstreamed into Banner programs. Banner programs may consider the established AMIA sites as one of the target beneficiaries of their programs/projects.
- AMIA Association/Cooperatives shall identify all their priority needs/requests in the form of a resolution or letter of intent to be endorsed by the LGU to the DA Regional Office.
- AMAD plays a big role in market matching of farms produced. They also provide training on enterprise development, hauling trucks, and market support to associations/cooperatives through start-up kits. Regional AMIA team can seek the support services they are offering to farmers' associations/cooperatives.
- The organic agriculture program can be tapped for trainings on Good Agricultural Practices (GAP), and the provision of input assistance.
- The road going to the AMIA villages is steep, mostly tire path, and one way. AMIA team can coordinate with Regional Agricultural Engineering Division (RAED) for the construction of Farm to Market Road (FMR). A letter request for FMR and irrigation system from the LGU could be submitted to DA-CAR for their consideration or AMIA Coordinator could invite RAED staff to validate the area for FMR and water irrigation system in the site.
- AMIA coordinator to strengthen the AMIA FCAs when it comes to institutional
 development and enterprise development. Motivate and push further the AMIA
 beneficiaries to be enterprise-driven. They can apply for an interest-free loan
 to ACPC or Land Bank that can be used as start-up capital in enterprise
 activities. This fund can also be used to buy the products of all their AMIA
 beneficiaries and the coop/association will be the one to directly sell the farm
 produce to the market.
- They could also tap the DA Regional research and development division to conduct research activities in the AMIA sites. The output of their previous research could be implemented in the AMIA production area.
- Agricultural Training Institute (ATI), BPI, DTI, and other bureaus and agencies can assist the AMIA beneficiaries to expand their enterprises to a bigger scale.
- In the selection of AMIA site, it is very important to solicit the commitment of the Provincial Local Government Unit (PLGU) and or the Municipal Local Government Unit (MLGU).

b) Mentoring of Regional AMIA Focal/Team and AMIA Monitoring in Region 7

The Project Team from UPLBFI and representatives from DA-CRAO visited Tagbilaran, Bohol last October 24-26, 2022 to conduct an initial assessment of selected AMIA sites. The team also met with the AMIA Regional Team and AMIA farmer cooperators/beneficiaries for an open discussion on how they are progressing in establishing their AMIA Villages.

On the first day, the provincial AMIA Team Leaders presented the status of implementation in their respective areas. For AMIA Cebu, Mr. Antonio Tangayan presented the project accomplishments in the three AMIA Villages, namely Bagay, Daanbantayan, Bitoon, Daanbantayan, and Mantalongon, Dalaguete. For AMIA

Negros Oriental, Mr. Benjie Melanio Jr. presented the highlights of project implementation in Sitio Egang, Carol-an, municipality of Ayungon. Provincial Team Leader for Siquijor, Mr. Rodolfo Anulacion presented the project status in Tubod, San Juan while Mr. Felix Tubiano of AMIA Bohol presented the initial outputs of AMIA Villages in Brgy. Buenos Aires, Carmen, Brgy. Paraiso, Mabini, and Brgy. Taming in the municipality of Danao (Figure 9).



Figure 9. Presentation of AMIA Team Leaders: Mr. Antonio Tangaya of AMIA Cebu, Mr. Benjie Melanio, Jr. of AMIA Negros Oriental AMIA, Mr. Felix Tubiano of AMIA Bohol, and Mr. Rodolfo Anulacion of AMIA Siquijor (from top left to right)

The summary of the status of the project implementation in the four provinces is shown in the table below.

Table 3. Status of AMIA Villages in the Development Pathways (Region 7)							
PROJECT LOCATION	AREA COVERED (ha)	NO. OF BENEFIC IARIES	ACTIVITIES DONE	CRA INTERVENTIONS	DEVELOPMENT PHASE		
CEBU		T					
Bagay, Daanbantay an Bitoon, Daanbantay an Mantalongo n, Dalaguete		118 (27M,91 F) 121 (22M,99 F) 230 (111M,1 19F)	 PCRVA conduct of trainings establishme nt of field trials meeting with LGUs orientation of cooperators 	 improved farming systems technical assistance provision of farm inputs supplies, and animal stocks marketing assistance 	Phase 1		
NEGROS OR		0.4	DOD! (4				
Carol-an, Ayungon	36.25	64 (16M,48 F)	- PCRVA - Farmers' interview and data gathering - Techno demo - Trainings - FFD and Harvest Festival - CIS Training	CIS, improved farming system, provision of inputs and supplies	Phase 1		
SIQUIJOR			,				
Tobod, San Juan			 PCRVA Project launching Capacity- building and graduation Social Values Formation Training Field tour 	Spring development project, improved farming system, provision of farm inputs and supplies	Phase 1		
BOHOL		T	T				
Buenos Aires, Carmen		30	- PCRVA - FGD - PAR - Techno	Provision of fertilizer applicator, light hue, water drums	Phase 1		
Paraiso, Mabini		30	demo - CRFS - Baseline/Vill age Profiling	Provision of fertilizer applicator, light hue, water drums			
Taming, Danao		35		Provision of fertilizer applicator, light hue, water drums, corn sheller			

Dr. Saturnina Halos, DA-CRAO Technical Consultant, provided some insights as to how to further improve the project implementation in the four provinces. Amona the interventions she recommended is the change in planting calendar, in order not to coincide the harvest season with the peak months when typhoons visit the Region, hence damages to crops could be reduced. The institutionalization of the CRAO as a requirement was also mentioned for the release of the second tranche of funds allotted for projects on climate change as well as the allocation of higher budget through legislative action. Also, the plan for the industry development in Bohol which includes the timber project of Dr. Bonita highlighted. A revision of the ordinance banning GMOs in the province is eyed and proposed co-existence of organic and conventional farms considering to the participants



Figure 10. Dr. Saturnina Halos, DA-CRAO Consultant sharing insights and recommendation to the participants

the high yields of GMO corn compared to organic production, by identifying organic hubs, and producing GMOs outside the organic hub.

In the same way, Dr. Mary Jane Alcedo also commended the efforts of the AMIA Regional Team. As per the report, all AMIA sites are in Phase 1 under the development pathways, implementing technology demonstrations. The AMIA sites were found to be on the right track considering that their basis for providing CRA technologies/interventions is the results of the Participatory Climate-Risk Vulnerability Assessment (PCRVA). One of the identified hazards is soil erosion, hence, she recommended the inclusion of interventions to address soil erosion such as the sloping agricultural land technology (SALT), and plantation of legume crops such as *cadios*. At the same time, it was observed that huge areas in the region are planted with coconut. To maximize the area, goats or cattle under the coconut tree can be a feasible enterprise. They could also explore the potential of crop-livestock integration focusing on goat or feedlot cattle fattening. Moreover, to increase the interventions in their AMIA sites, lobbying or close coordination with program coordinators in the regions should be done by the AMIA Team. The importance of LGU and farmers' participation was also reiterated in the success of the project.

Dr. Alcedo also presented the AMIA Village Framework and the step-by-step process on how to establish an AMIA village to assess if they have accomplished each step of the process. An open discussion was conducted after the presentation to clarify some issues and concerns by the AMIA Regional & Provincial Team, this approach ensures that the respective teams fully understand the process of establishing an AMIA Village.

Furthermore, Ms. Carmelita Fantilanan graced the activity and shared the best practices in AMIA Region 6. Her recommendations include the possible participatory establishment of technology development trials of different CRA interventions, and the CRA, yielding the best results will be showcased through technology demonstrations. These technologies are thought to be readily adopted since the farmers themselves have tested the feasibility of the particular CRA technology.

It was emphasized that the area requirement of the project and one probable strategy to meet this minimum is to prerequisite involve more communities Farmers/Cooperatives/Associations (FCAs) to compose the 100 ha of an AMIA Village. Success is more likely, if the chosen FCAs are already involved in enterprises and the choice of from the FCAs since they knew what Project



Figure 11. Dr. Manuel Bonita, BAFID Director, also presenting the recent status of their Bohol enterprise to be pursued should come Agro-Forest Industry Development (BAFID)

enterprise is likely to prosper based on their own experiences, this can be done with proper guidance and assistance from DA AMIA Regional Team.

She pointed out the importance of collaboration with other institutions just like what Region 6 is doing with state colleges and universities (SUCs). This is one way of preparing and training the youth towards farming considering the challenge of aging farmers that is being felt in the country today.

She commended the hard work and significant outputs of the young focal persons and team members and encouraged them to continue working together and that partners from UPLBFI and CRAO can be readily tapped to provide technical assistance whenever the need arises under this project.

The group was further reminded to tap the assistance of the provincial and local government units (LGUs) in determining the AMIA site which has primarily vulnerable to climate hazards. The strong support of LGU officials is essential in attaining the success of the project. Expansion to other communities and involvement of more FCAs is also recommended to meet the 100-ha requirement of the project.

On the second day (October 25, 2022), the team went to Danao, Bohol, and met one of the partner-FCAs in the area, the Danao Agrarian Reform Cooperative (DARC). Dr. Manuel Bonita, Bohol Agro-Forest Industry Development (BAFID) Project Director and Varrons Federation of Peoples' Organizations, Inc. presented the recent status of the BAFID project. According to Dr. Bonita, the project is very promising to become an AMIA village and further expand to AMIA CREATE since they have more than 100ha of land for the purpose. Interventions identified by the project are more on trees and crops such as coconut, coffee, cacao, timber, and corn.

During the open discussion, Dr. Alcedo recommended the team to have SMART objectives given their enormous vision, very detailed project proposals indicating their workplan over the years would be of great help in realizing their vision.

The role of the identified seven People's Organizations (POs) present during the meeting was highlighted. Their commitment to the project was stressed because the bulk of the success of the project depends on them. It was also recommended by Ms. Alcedo to include the production of ruminant animals such as goats and cattle as climate resilient intervention in their project aside from timber, coffee, and cacao. It was also cited that the Provincial AMIA team could identify training priorities for the POs such as institutional, leadership training, and entrepreneurial mind-setting to prepare them for a bigger role in society and become drivers of change.

The AMIA concept was also discussed with the group. AMIA villages are model communities that will serve as a lighthouse for other communities to learn from and emulate, and where technological and institutional innovations are introduced and promoted for utilization and adoption so that these villages may have access to timely, responsive support services. There are protocols to follow to build a solid foundation by meeting the required features of what an AMIA village is. Baseline data and indicators must be determined to have a full measure of the impacts of the interventions and innovations provided to the AMIA village. The proponent groups must understand these concepts for the AMIA village to be successful.



Figure 12. Day-3 DA CRAO and UPLBFI representatives with AMIA beneficiaries and farmers in Buenos Aires, Carmen, Bohol

On the third day of the activity (October 26, 2022), DA-CRAO and UPLBFI representatives together with DA-RFO 7 team visited one of the AMIA Villages in Buenos Aires, Carmen, Bohol. During the discussion, farmers conveyed that the high cost of fertilizer was one of the major reasons why some of them are shifting from rice to vegetable farming for better and higher income and rice is being produced for consumption only. Fertilizers and seeds are among the inputs they still would want to receive as immediate assistance.

c) Monitoring and Mentoring of Region 8 Regional AMIA Focal/Team

The UPLBFI Team led by the Mentoring and Monitoring component leader, Dr. Mary Jane Alcedo, visited Region 8 on November 28-29, 2022 for a monitoring and mentoring activity in selected AMIA sites in Samar and Leyte provinces.

The project team made a courtesy call to the Office of the Regional Technical Director (RTD) for Research and Regulations, RTD Elvira C. Torres, who had expressed her gratitude for the team's visit and appreciated in advance the assistance they would extend to the AMIA Regional Team to align the activities according to the approved framework for establishing AMIA Villages. The visit was also an opportune time to further assist Region 8 in enhancing its project implementation in the AMIA Villages.

Consequently, a meeting with the regional implementers followed immediately wherein focal persons presented the initial accomplishments of both AMIA and BP2 Programs. The Regional AMIA Focal Person, Ms. Ferlynn V. Basañez, presented the AMIA project accomplishments including the issues and challenges encountered in the establishment of AMIA Villages in the provinces of Samar, Leyte, and Biliran.



Figure 13. (A) Courtesy call with RTD Torres, (B) Project Team with AMIA Region 8 Staff

Ms. Basañez shared that after attending the previous assessment in Coron, Palawan, and learning about the framework and development pathways, she realized that the AMIA program should not only revolve around the AMIA communal area in each selected site or community, but it should include more communities for expansion to reach the 100-ha target for an AMIA Village.

She also mentioned that the existing AMIA villages are under Phases 1 and 2 of the development pathways, with flourishing startup agri-based enterprises identified by farmer-cooperators themselves during the conduct of Participatory Rural Appraisal (PRA) and FGD, coupled with the active extension of technical assistance, capacity development, and empowerment, and the provision of production support services by the AMIA program. However, the documents to support the activities are yet to be completed particularly on the Cost and Benefit Analysis (CBA) to present the increase in productivity and household income.

Ms. Rufelie Gula, Supervising Agriculturist, raised her query as to how the Regional AMIA Team identified the CRA technologies introduced and how the interventions addressed the hazards and vulnerabilities identified in the project areas. She suggested that the interventions should focus on the existing commodities in the

project sites. Dr. Alcedo recommended the use of drought-tolerant varieties of rice in areas where drought is prevalent as CRA technology, while Ms. Pastor suggested that areas frequented by tropical cyclones should consider adjustments in their planting calendar to avoid coinciding the harvest season to months when strong typhoons occur. Further, Ms. Pastor added that the AMIA team should secure copies of tenancy agreements from most of the farmer-cooperators who happened to be tenants (70-85%) as this would greatly affect the sustainability plan of the AMIA projects.

Another concern raised during the meeting was the delay in the fund utilization which is attributed to the strict compliance of implementers to the designed framework of AMIA Village establishment because they adopted the AMIA approach in the identification and provision of interventions in the selected project sites.

Moreover, the team conducted a site visit in Cahayagan, San Vicente Samar, and met some of the members of the farmer association. The association has two hectares of communal area owned by the Barangay Captain who is also a member and has provided the area to the FCA for 10 years. The area was planted with various vegetables and root crops and also houses their swine for piglet production and fattening. According to the members, revenues from selling harvested crops are used to purchase feeds for the swine.

The issues discussed are as follows:

- The price ceiling for swine at its live weight middlemen buy their animals at a very cheap price of 120 to 150 per kg which is actually causing them losses against the amount they invested;
- Politics are getting in the way when they are to obtain subsidized inputs from the LGU-San Vicente; felt the delay in receiving the inputs that are supposed to be given to RSBSA-registered farmers that include the members of the FA;
- 3) They are yet to reorganize their association, their President acts as treasurer and bookkeeper as well;
- 4) Their machinery must be a source of income; however, their operators do not allow 3 to 2 splits of revenues from rendering tractor services;
- 5) The FCA is losing its members because it is perceived that when the member cannot receive any benefit from the association, they move out; and
- 6) The communal area was used for documentation purposes to access financial support from funding institutions. However, they were unable to receive any or part of the financial support received.







Figure 14. Site Visit in AMIA Village in Cahayagan, San Vicente Samar

It was recommended to members to have their own marketing plan. The association must have an inventory and production data of all its members. This will be their basis for planning their marketing strategy. They can rent a space or have their own display area to sell their products to avoid dependency on middlemen. KADIWA of DA-AMAD can also be a big help to sell their produce. Despite these challenges, Dr. Alcedo

encouraged the group to carry on and never feel disheartened, instead, they need to strive harder, make their mark in the community, and prosper and become a successful FCA with members ten times bigger than its current membership.

On the second day, the group composed of the Regional AMIA Team and UPLBFI representatives visited the BP2P Agri-Village in Brgy Ulhay Javier, Leyte. The group was warmly welcomed by the Barangay Captain, Hon. Nilo Moreno, who lent the communal area to the association. The area is planted with pinakbet vegetables but withered due to hot temperatures, so they were replaced with sweet potatoes and upland kangkong.

The DA-BP2P also provided the association with poultry housing, layer chickens, and feeds for the egg production project, employing the Balik-Probinsya adopted member, Ms. Cleofas Barquin as an animal caretaker. She worked as a house helper in Mandaluyong City, Metro Manila, and decided to go back to the province and stayed with the help of the BP2P.

They shared that revenues in layer production are easy. They have no problem marketing their eggs because they have a local buyer requiring 100 trays of eggs per week. However, the caretaker observed a remarkable decline in the production of eggs which was attributed to the stress experienced by the birds during the transfer from their temporary housing to their current housing, as well as the shifting of climate from hot temperatures to frequent rainy days. Mortality of stocks and decline in egg production were the reasons why they could only supply half of the buyer's requirement. They also plan to buy additional stocks from the funds collected from sales to satisfy the market demand and hope that the members would be able to receive dividends in the coming year.

It was recommended to the members to become more observant of the stocks. Those stocks that no longer lay eggs need to be culled and replaced immediately. Also, those birds that are sick need to be separated from the healthy ones, and the periodic visit by a veterinarian should be requested to check on the overall health status of the birds. Cleanliness and orderliness in the poultry housing need to be kept regularly and the provision of supplements is encouraged to keep the birds healthy and to secure the poultry housing from potential biological hazards.

The group also visited the BP2P Climate-resilient village in Brgy. Castilla, Palo, Leyte. The Palo Agri-business Enterprise Farmers Association has a communal area of 2.0 hectares owned by the President who was in Usufructuary with the association for 10 years. They engage in integrated farming which includes vegetables, poultry production, and tilapia culture. Their harvests are disposed of through the assistance of the Kadiwa program of the DA-AMAD by joining product exhibits and trade fairs.

Lastly, the group visited Brgy. Uban Women's Association in Babatngon, Leyte. The area was a former SAAD project site and due to the positive attributes of the association, the AMIA Team considered sustaining it as one of their project cooperators. The association, on the other hand, utilized the 1.5 hectares of communal area for vegetable and egg production. They are maintaining 480 birds with a daily average egg drop of 360 or 12 trays. The project team advised the association to propagate plant feed sources to supplement commercial feeds to reduce the cost of production.

Also, the project team did a courtesy call to the Office of the RTD for Operations, RTD Larry Sultan, and shared a summary of what has transpired during the two-day project visits. RTD Sultan expressed his gratitude for the group's visit and signified

his full support but lamented that very few staff can be tapped/assigned, as well as the low utilization of the project fund.

Dr. Alcedo informed RTD Sultan that as far as project implementation is concerned, Region 8 is on track as to the project protocol, although some improvements must be done to be at par with the program requirements.

The status of the AMIA Villages in Region 8 in relation to the development pathways is presented in **Table 4**.

Table 4. Status of AMIA Villages in the Development Pathways (Region 8)

PROJECT LOCATION	AREA COVERED (ha)	NO. OF BENEFICIARIES	ACTIVITIES DONE	CRA INTERVENTIONS	DEVELOPMENT PHASE	
BILIRAN						
Brgy. Manlabang, Caibiran, Biliran	15	25 (6M, 19F)	AMIA Project orientation, PCRVA, presentation of CRVA results and validation, conduct of trainings on CIS, CRA Concepts, Effective Data Collection, Storage, Simple Analysis and Utilization including AWS Troubleshooting, Start-up meetings	Intercropping and Crop Diversification, Multistory Cropping under coconut, Strip Cropping (Peanut, Pineapple), Mulching, Water Harvesting, Planting of Resilient Crops/Indigenous Crop Species	Phase 1	
SAMAR						
Brgy. Camanhagay, San Sebastian, Samar	20	28 (11M, 17F)	AMIA Project orientation, PCRVA, presentation of CRVA results and validation, conduct of trainings on CIS, CRA Concepts, Effective Data Collection, Storage, Simple Analysis and Utilization including AWS Troubleshooting, Start-up meetings	Native Chicken Production, Water Harvesting, Crop-Poultry Integration, Agroforestry (jackfruit and calamansi), Contour Farming using A-Frame, Strip Cropping (peanut, corn), and Pineapple as Hedgerows, Vermibed construction for the production of organic fertilizer, Insect trap installation	Phase 1	
LEYTE						
Brgy. Uban, Babatngon, Leyte	15	30 (6M, 24F)	AMIA Project orientation, PCRVA, presentation of CRVA results and validation, conduct of trainings on CIS, CRA Concepts, Effective Data Collection, Storage, Simple Analysis and Utilization including AWS Troubleshooting, Start-up meetings	Crop Diversification, Rice-Duck Integration, Native Chicken production, Crop-Livestock Integration, Agroforestry (jackfruit and calamansi), Contour Farming – pineapples as hedgerows and strip cropping (peanut, corn), Water Harvesting	Phase 1	

a) Project Visit to AMIA Villages in CAR

The project team had its second round of project monitoring and mentoring in the AMIA Villages of CAR on March 2-3, 2023. The visit started with a meeting at the Municipal Agriculture Office of Buguias, Benguet. The activity was attended by Mr. Delfin Rufino, the Municipal Agriculturist of Buguias, and selected members of FCA beneficiaries particularly the Macascasa Farmers Association and Northern Hill Farmers Association.

The group mentioned their major concern in marketing their vegetable products and asked if there are market matching opportunities that the project could offer to the group. Dr. Alcedo pointed out the potential of linking the group to lowland vegetable farmers in La Union through a "barter" scheme as the group is also interested in buying lowland vegetables, salt, onion, fish sauce, and other fishery products, and bringing these to the highlands.

They shared that some traders from Narvacan and Candon City, Ilocos Sur visit their area to buy their vegetables on Fridays but at a relatively low price. Vegetables from their GAP-certified farms are also bought and fetched by buyers from Graceland.

AMIA beneficiaries expressed their gratitude that through the project, they were able to avail of free hauling services using Kadiwa trucks from the municipality and the DA-CAR Regional Office to bring their products to the trading post, to the Kadiwa stores in DA-CAR and DA-Central Office in Quezon City. They find this scheme to be feasible and profitable because the products they bring to Kadiwa stores are easily sold at reasonable prices. However, this opportunity does not come regularly since there are other FCAs that the hauling trucks are serving.

As such, they were proposing for a hauling truck to be awarded exclusively for FCAs of AMIA beneficiaries. In addition, they need greenhouses to support their plan of year-round production of vegetables as well as rechargeable sprayers and grass cutters. Dr. Alcedo advised their associations to acquire accreditation from DA-CAR the soonest possible as this is one of the requirements for acquiring such assistance.



Figure 15. Second Visit to Buguias, Benguet together with Mr. Delfin Rufino

Another concern raised was the pricing scheme of their farm products, GAP-certified Farms were supposed to have a P5.00 premium price per crate of GAP vegetables over the non-GAP products, but this is not being practiced, the same price are being given to GAP-certified and non-GAP products.

They also observed that sorting vegetables according to size is imposed in the trading post. On the other hand, they realized that they can sell their products directly in Kadiwa stores even without sorting because there are customers who prefer small sizes and others prefer big ones. Considering this case, expenses and time spent on sorting will be saved and will add to farmers' profit.

During the visit to AMIA in Tublay Benguet, the project team met with Municipal Agriculturist, Mr. Jeffrey Sotera, and representatives from the five FCA beneficiaries. At that time, the group is undergoing orientation by Mr. Lesley Dale Umayat from Benguet State University (BSU). He was tapped by Tublay MAO for the preparation of a proposal for a livelihood program on product development and processing, particularly on vegetable chips, vegetable-enriched noodles, and bread which were found to be very sellable. The municipal processing center was offered to the group to utilize the space and equipment for their vegetable processing and other value-adding activities.

Dr. Alcedo recommended to the group identify specific commodities to be processed. Since the Municipality has its agri-product development center as a common service facility, they can make use of it to develop their IGP through the assistance of BSU.

Forming a federated association was also recommended at that time. However, Ms. Manilyn, AMIA Facilitator, discussed with them the pros and cons of forming a federation at this juncture of project implementation, more particularly on the processing of applications for CSO accreditation. One of the requirements for CSO accreditation is the audited financial report for the past three years. Considering this, they would need to wait for a couple of years to be established before they could come up with the document requirements for CSO accreditation.

On the other hand, two FCA beneficiaries are ready for CSO accreditation: (1) Togoy Multi-purpose Cooperative and (2) Baayan Farmers Association. It was suggested that one of these associations shall become the FCA representative of the AMIA beneficiaries and the possibility to adopt their fellow AMIA farmers who are non-

members of the association. However, Ms. Juanita Ocbos of the Baayan FA shared that while they have submitted their accreditation papers, she cannot decide alone on the suggestion as such matter must be presented first to the officers and members of the Baayan FA especially that part of their Constitution and By-laws only allows Baayan residents as qualified members of the Association. Instead, she suggested that the Togoy MPC be the AMIA FCA representative since it welcomes all potential members from the province of Benguet. Just the same, the matter shall be discussed first with the officials and members of the cooperative.

Since there are issues raised by members of the association regarding inactive members and "free riders" in the association, Dr. Alcedo discussed the importance of leadership in the association. Members must know the goals of their association and know their roles to achieve the goals. The officers play a vital role in making the association active and economically thriving.

As a result, the group was scheduled to convene again on March 30, 2023 to finally decide on this issue of whether to organize themselves into a federation or if Baayan FA or Togoy MPC would be willing to serve as the AMIA FCA representative.



Figure 16. Second Visit in Tublay, Benguet

The status of the AMIA Villages in DA-CAR in relation to the development pathways is presented in **Table 5**.

Table 5. Status of the AMIA Villages in the Development Pathways (DA-CAR)							
PROJECT LOCATION	AREA COVERED (ha)	NO. OF BENEFICIARIES	ACTIVITIES DONE	CRA INTERVENTIONS	DEVELOPMENT PHASE		
Tublay, Ben	guet						
	110 ha	Total of 125 AMIA farmer beneficiaries	PCRVA conducted; inception meeting conducted with LGU and beneficiaries; participatory identification of CRA interventions; trainings on CRA technologies	Provision of windbreaker; integrated farming system; small water harvesting with tilapia fingerling production; cattle production project; organic foliar production thru mukusako production; vermicomposting project; training on product development	Phase 1		
Buguias, Be	nguet						
	112 ha	Total of 135 AMIA farmer beneficiaries	PCRVA conducted; inception meeting conducted with LGU and beneficiaries; participatory identification of CRA interventions; trainings on CRA technologies	FMR project proposed to Engineering Department; construction of small water impounding or diversified dam; provision of water tanks, irrigation hose, livestock/poultry projects; croplivestock farming system; provision of a greenhouse; support to nurseries; trainings on product development; promoted climate information system	Phase 2		

b) Attendance to the CY 2022 Mid-Year Assessment of BP2 & AMIA Program cum Capacity Building on Climate Resilient Village Establishment

On 19-24 July 2022, the Mentoring and Monitoring component leader, Dr. Alcedo, attended the CY 2022 Mid-Year Assessment of BP2 & AMIA Program Cum Capacity Building on Climate Resilient Village Establishment spearheaded by the DA-CRAO. The workshop was conducted to identify the concerns and recommendations on how to address issues regarding the establishment of AMIA Village. Good practices were also identified during the workshop.

On the second day, the guidelines for the establishment of AMIA Village were presented. Questions and clarifications from the participants were discussed and addressed. Mr. Mark Amor, DA-CRAO Consultant, was also present and gave his comments and recommendations. He commended the clear process flow on how to establish an AMIA village and emphasized the importance of comprehensive data in planning and policy formulation. AMIA has established data profiling from the very start which was observed by Mr. Amor. One of his key recommendations is that a clear exit plan should be included in the guidelines. A clear time frame and criteria of a village should also be considered for a village to graduate as AMIA CREATE. All other comments and suggestions were also noted to further enhance the guidelines.

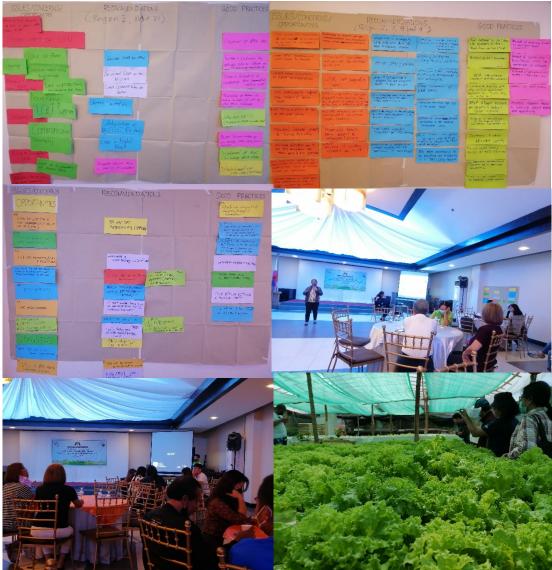


Figure 17. Photo-documentation of the Mid-Year Assessment of BP2 & AMIA Program Cum Capacity Building

c) Training Module for the Mentoring of DA-AMIA Regional Team in DA-RFO 7

An online meeting via Zoom was held last 25 August 2022. It was participated by the DA-CRAO team headed by Director Alicia G. Ilaga and UPLBFI team led by Ms. Dorcas V. Trinidad. The meeting primarily discussed the urgent necessity of mentoring the AMIA regional team in DA-Region 7. The mentoring activity is expected to review the progress status of their AMIA Villages specifically in Bohol and Cebu, the technical team will also present the recently developed guidelines in establishing an AMIA Village for immediate reference.

The activity aimed to discuss the possible partnerships of DA-RFO 7 with the LGUs and the UP Varrons on how they can work together to assist some of the AMIA Villages. Given that, the technical team (Dr. Alcedo and Ms. Pastor) met on 3-4 September 2022 in San Fernando City, La Union to develop the training module for Region 7. The draft module was reviewed by Ms. Perla Baltazar (DA-CRAO, Senior Technical Adviser) and communicated to Region 7 focal persons. To further guide

the DA-RFO 7 AMIA Regional Team in the monitoring and mentoring activity, a checklist was also presented to them to identify their current status, gaps, and ways forward.

The technical team has closely coordinated with the DA RFO 7 AMIA Regional Team headed by Dr. Fabio G. Enriquez through the assistance of DA-CRAO in finalizing the program and logistics for the conduct of this activity.

d) Assisted in mentoring and monitoring of selected AMIA Villages in Region 1 together with CRAO Staff

The monitoring and mentoring team was invited by the DA-CRAO to assist in monitoring and evaluating six (6) program sites in the Ilocos Region, of which were four (4) AMIA sites and two (2) were Balik Probinsiya (BP2) sites last October 11-13, 2022. Municipalities visited and monitored were Bani, San Jacinto, and Sison in Pangasinan; Badoc and Solsona in Ilocos Norte, and San Emilio in the province of Ilocos Sur.

Senior Technical personnel from DA-CRAO, Ms. Perla Baltazar and Mr. Rae Michael Barbosa (Project Development Officer III) led the monitoring and evaluation activity to assess the status of these AMIA sites. The DA-CRAO and the mentoring team also provided guidance on how to improve their farming systems and respond to some issues and concerns in the implementation of AMIA program and its projects. This monitoring and evaluation activity served as an avenue to showcase the best practices of these AMIA sites which they have adopted and acquired from the various trainings and seminars they have attended. It was also notable that the AMIA Coordinators and farmers' participation in various trainings and seminars immensely contributed to the improved yield and production of the program sites.

AMIA villages that created their enterprises indeed provided better income opportunities for the villagers. The hard work and dedication of the officers and members were commended since they have demonstrated the possible integration of the BP2 or Balik Probinsiya, Bagong Pag-asa Program with AMIA Program.

Making use of the AMIA approaches in the existing and future BP2 projects, the CRAO will be establishing BP2 re-integration sites, thus ensuring an improved yield and income for both AMIA and BP2 beneficiaries amidst climate change.

During the monitoring, the DA awarded various interventions such as farm inputs and farm machinery and equipment worth 2.4 million for the two (2) farmer associations of San Jacinto, Pangasinan. In AMIA-Badoc, former Municipal Agriculturist, Ms. Leonara Escarda, a supporter of the AMIA village expressed gratitude to the DA for the opportunity to serve the villagers in Madupayas through the provision of livelihood projects as well as making them a diversified farmer and agri-entrepreneurs by processing products from peanut (peanut butter) and cultured mushroom (fried chicharon mushroom).

With all these developments in the AMIA and BP2 projects, Dr. Alcedo shared the programs and projects of the City of San Fernando with other MAOs for possible adoption to further strengthen their farmer's association. The entrepreneurial mind setting of farmers was one of the pinpointed priorities for the upscaling of the livelihood of the farmers. Ms. Maybelyn Libong, AMIA Focal Person and BP2 Alternate Focal Person together with Dean Mark Gacutan, AMIA Technical Staff, and

Jahnella Faith Bonilla, BP2 Staff, also encouraged the farmer-beneficiaries to give their best in their selected agri-enterprise so that they could increase their potential to be successful entrepreneurs and give inspiration to all those who wanted to venture in farming.



Figure 18. Visitation of selected AMIA sites in Region 1 together with DA-CRAO staff

e) Capacity building of AMIA Regional Coordinators

In partnership with DA-RFO 6 and DA-CRAO, UPLBFI successfully organized a capacity-building for the AMIA Regional Coordinators on 22-24 March 2023 at the Splash Mountain Resort, Lalakay, Los Baños, Laguna. This activity was based on the results of the training needs assessment to capacitate the AMIA coordinators from Regions 6,7, 8, and CAR. It was designed to equip the AMIA Coordinators with the necessary skills in establishing and managing AMIA villages in their respective regions. The training workshop focused on topics about Project Proposal Development, Enterprise Development, and Cost-Benefit Analysis (CBA). AMIA Coordinators from Regions 6, 7, 8, and CAR and the AMIA program monitoring team from DA-CRAO attended the training. Dr. Mary Jane Alcedo served as the lead mentor, while Ms. Cathy Pastor stood as the lead facilitator.



Figure 19. Capacity-building of AMIA Regional Coordinators

On the first day of the training, DA-CRAO Director Alicia Ilaga graced the event with an opening message. She emphasized the importance of capacitating the AMIA Regional Coordinators as they lead the establishment of more climate-resilient and sustainable agricultural communities in the country. She also mentioned how the AMIA program reached the different corners of the country in helping communities adapt to climate hazards by introducing climate-resilient interventions. AMIA has improved the lives of many farm families in all regions. In fact, AMIA which originally means 'Adaptation and Mitigation Initiatives on Agriculture,' is now tagged as "Ang Makabagong Imahe ng Agrikultura" (*The innovative/new image of agriculture*.)

Meanwhile, Dr. Alcedo provided the project overview and training activities as the program started. She shared the initial results of the mentorship activities and gave recommendations on how to further strengthen AMIA Villages and facilitate the transition of these villages into sustainable enterprises. Afterward, Mr. Jonathan Austria, UPLBFI's Junior Gender Specialist, presented the initial accomplishments of the project's gender component, which is the pilot intervention of the AMIA Program to promote women empowerment and gender equality.

On the morning session of the second day, Ms. Chrystal Jane Almendralejo, DA RFO 6 Project Development Officer I, led the training on project proposal development. Ms. Almendralejo shared her knowledge and experiences in project conceptualization and proposal writing. This topic was identified to aid the regional coordinators in developing their technical writing skills. After the lecture, an exercise on proposal writing was given to the participants. Each region presented its proposed project proposal. Dr. Alcedo and Ms. Julie Ann U. Barril, UPLBFI Documentation Specialist, provided their comments and feedback to further guide the coordinators in developing their project proposals.

Asst. Professor Fitz Jimenez from the College of Economics and Management (CEM) of UPLB discussed the topic of enterprise development in the afternoon session. He focused on the marketing and financial aspects of agri-enterprise products and also shared the various critical success factors to consider to achieve sustainable agrienterprises. Mr. Jimenez also provided team exercises in between his lectures to encourage the coordinators to provide solutions to the existing issues and concerns in their regions. He also helped them conceptualize how to turn these issues and concerns into business opportunities. In this way, they could easily guide the farmers and fisherfolks in developing agri-enterprises.

On the last day of the activity, Mr. Arvin Jay Carandang, an Economist, trained the participants on the importance, uses, and application of the CBA. In an exercise, the participants were given the task of solving basic CBA problems. Mr. Carandang also provided the basic steps of CBA and how to interpret and present the results. Understanding CBA will help the AMIA Coordinators to guide the beneficiaries of AMIA Villages to prioritize and select the most appropriate and cost-efficient technologies and support services to pursue.

The activity was concluded with a closing remark from Ms. Dorcas Trinidad, UPLBFI's Project Management Specialist. She extended UPLBFI's gratitude to DA-CRAO and DA-RFO 6 for the opportunity to share FI's capacities and services to support the development and strengthening of AMIA Villages, she also thanked the participants who have participated actively during the entire duration of the activity.

B.3. Gender Component

a) Baseline Surveys

Banga, Aklan

Socio-demographic Profile

The AMIA Village in Banga, Aklan was established in 2019 and is composed of three barangays – Mambog, Muguing, and Linabuan Sur.

From the baseline survey, it was shown that the average age of FBs in the area is 58 years old (57 yrs. old for men and 58 yrs. old for women), and some of them are senior citizens (26, 38% for men and 20, 40% for women). Majority of the FB's are college graduates (21, 31% for men and 18, 37% for women). Most of them are Roman Catholic and can speak and understand Hiligaynon and Tagalog. Farming is the major source of income in Banga and the FB's average years of doing farm work is 27 years (26 years for men and 28 years for women). Lastly, the average monthly household income of the FB's surveyed is P10,000.00.

Farm Profile

The average area of agricultural land being cultivated by the FBs surveyed is 1.9 ha. The average distance from the farm to the owner's house is 0.8 km. Meanwhile, the average distances of the farm to the water source, paved road, and market are 1.2 km, 0.90 km, and 2.28 km, respectively. In terms of land ownership, 25 (37%) for men and 24 (49%) for women, privately own theifarmlandsds while 40 (59%) of men and 24 (39%) of women are tenants. Majority of the farmers are involved in crop and livestock production. Crops being produced are rice and vegetables while animals being raised are swine and poultry. Lastly, the estimated average income per cropping is P17, 113.45 (P19, 847.45 for men and P14, 379.48 for women).

Perception on climate change

Majority of the farmers (60, 88% for men and 44, 90% for women) believe that the temperature has increased over the past 20-30 years. On the other hand, 19 (28%) of men and 14 (29%) of women respondents said that the amount of rainfall has decreased while 42 (62%) for men and 32 (65%) for women said that it has increased. Aside from climate-related events, the farmers also believe that the occurrence of pests and diseases in crops and livestock, flooding, low crop and livestock production, and high crop losses during typhoons are major problems in the area. On the other hand, among the adaptation measures being practiced by farmers include: availing crop insurance, use of organic fertilizers

Table 6. Summary of major							
Parameters	Banga, Aklan (n=117)		Sibunag, Guimaras (n=58)		Pontevedra, Negros Occidental (n=73)		
	Male (n=68)	Female (n=49)	Male (n=18)	Female (n=40)	Male (n=30)	Female (n=43)	
Age (yrs)	57	58	52	55	56	56	
Senior citizens	26, 38%	20, 40%	3, 17%	13, 33%	8, 27%	17, 40%	
Education							
Elementary	19, 28%	12, 24%	4, 22%	19, 48%	7, 23%	15, 35%	
High School	23, 34%	13, 27%	7, 39%	11, 28%	15, 50%	15, 35%	
College	21,31%	18, 37%	6, 33%	7, 18%	5, 17%	8, 19%	
Vocational	4, 6%	5, 10%	1, 6%	0, 0%	3, 10%	5, 12%	
Others	0, 0%	0, 0%	0, 0%	2, 5%	0, 0%	0, 0%	
Average years of farming	26	28	25	29	28	21	
Religion	Roman Catholic	Roman Catholic	Roman Catholic, Iglesia Filipina Independent (IFI), UPC, Aglipay, Baptist	Roman Catholic, Aglipay, Iglesia Filipina Independent (IFI), Baptist,	Roman Cathloic, Aglipay, IRM	Roman Catholic, Aglipayan, Born Again Christian, Baptist, Dating Daan	
Dialect	Aklanon, Tagalog, Bisaya, Ilocano, Hiligaynon & English	Aklanon, Bisaya, Tagalog, Hiligaynon & English	Hiligaynon, Tagalog, Cebuano, English, Spanish	Hilligaynon, Tagalog, Kinaray-a, English	Hiligaynon, Tagalog, Cebuano, English	Hiligaynon, Tagalog, Bisaya, English	
Average monthly household income (PhP)	<10,000	<10,000	<10,000	<10,000	<10,000	<10,000	
Farm data							
Average land area (ha)	2.3	1.5	1.11	1.2	1.2	0.1	

Parameters	Banga, Aklan (n=117)		Sibunag, Guimaras (n=58)		Pontevedra, Negros Occidental (n=73)		
	Male (n=68)	Female (n=49)	Male (n=18)	Female (n=40)	Male (n=30)	Female (n=43)	
Distance from house (km)	1.5	0.1	0.6	0.4	0.9	1.2	
Distance from water source (km)	0.8	1.6	0.13	0.61	0.65	1.27	
Distance from paved road (km)	1.29	0.5	0.64	1.18	0.90	0.95	
Distance from market (km)	2.28	2. 27	3.52	3.92	5.69	5.33	
Source of water							
Rainfed	17, 25%	24, 49%	15, 83%	25, 63%	10, 33%	19, 44%	
With Irrigation	52, 76%	28, 57%	1, 6%	6, 15%	3, 10%	3, 7%	
Others	3, 4%	1, 2%	6, 33%	14, 35%	17, 57%	26, 60%	
Land ownership							
Privately owned	25, 37%	20, 41%	9, 50%	18, 45%	15, 50%	9, 21%	
Tenancy	40, 59%	24, 49%	9, 50%	17, 43%	2, 7%	10, 23%	
State Ownership	0, 0%	2, 4%	0, 0%	5, 13%	13, 43%	13, 30%	
Average income per cropping (PhP)	P19, 847.45	P14, 379. 48	P29, 461. 53	P28, 495.71	P38, 230. 76	P28, 190. 54	
Perception on climate change							
Change in temperature, increased	60, 88%	44, 90%	14, 78%	35, 88%	27, 90%	39, 91%	
Change in rainfall							
Increased	42, 62%	32, 65%	13, 72%	18, 45%	9, 30%	13, 30%	
Decreased	19, 28%	14, 29%	5, 28%	16, 40%	20, 67%	26, 60%	

Parameters	Banga, Aklan (n=117)		Sibunag, Guimaras (n=58)		Pontevedra, Negros Occidental (n=73)	
	Male (n=68)	Female (n=49)	Male (n=18)	Female (n=40)	Male (n=30)	Female (n=43)
Major climate- related problems	Flooding, High crops losses during typhoon, Low crop production, Access to high quality seeds, Low livestock production, Soil erosion, Occurrence of pest and diseases in crops and livestock, Low farm gate price, Insufficient technical knowledge,		Flooding, High crop losses during typhoon, Access to high quality seeds, Malfunction irrigation, Low crop and livestock production, Occurrence of pest and diseases in crops and livestock		Flooding, High crop losses during typhoon, Access to high quality seeds, Low crop and livestock production, Low farm gate price, Malfunction irrigation	
Adaptation practices	Availing crop insurance, Use of organic fertilizer, planting unconventional food sources, following early warning system, Practicing backyard gardening,		Use of organic fertilizers, availing crop insurance, Use of alternative feeding for animals, Practicing backyard gardening, Use of climate-and weather-informed advisories as guide in farm/fishing practices, Planting of unconventional food sources, Use of different varieties and crop types, Use of organic fertilizer, Use of alternate wetting and drying irrigation		Planting of unconventional food sources, availing of crop insurance, Use of organic fertilizer, Use of alternative feeding for animals, following early warning system, practicing backyard gardening, Use of water harvesting technologies, Use of drip irrigation	
Most beneficial support received	Infrastructure support (machinery, rice dryer), Extension services (trainings), Financial (cash) and material support (seeds and fertilizers)		Extension services (trainings), Infrastructure support (processing equipment/machinery), Financial (cash and insurance) and material support (seeds, fertilizers, livestock)		support (seeds, fertilizers, livestock)	

of organic fertilizer, planting unconventional food sources, use of alternative feeding for animals, following early warning system and practicing backyard gardening. In terms of external support being received, they consider infrastructure support (machinery/rice dryer), financial and material support (seeds and fertilizer), and extension services as the most beneficial.

Sibunag, Guimaras

Socio-demographic Profile

The AMIA Village in Sibunag, Guimaras was established in 2019 and is composed of three barangays – Sebaste, Sabang and Bubog.

From the baseline survey, it was shown that the average age of FBs in the area is 54 years old (52 years old for men and 55 years old for women), and some of them are senior citizens (3, 17% for men and 13, 33% for women). Majority of the FBs are elementary graduates (4, 22% for men and 19, 48% for women). Most of them are Roman Catholic and speak and understand Hiligaynon and Tagalog. Farming is the major source of income in Sibunag and the FBs' average years of doing farm work is 27 years (25 years for men and 29 years for women). Lastly, the average monthly household income of the FBs surveyed is less than P10,000.00.

Farm Profile

The average area of agricultural land being cultivated by the FBs surveyed is 1.16 ha. The average distance from the farm to the owner's house is 0.5 km. Meanwhile, the average distances of the farm to the water source, paved road, and market are 0.37 km, 0.91 km, and 3.72 km, respectively. In terms of land ownership, 9 (50%) of men and 18 (45%) of women privately own their farmlands while 9 (50%) of men and 17 (43%) of women FBs are tenants. Majority of the farmers are involved in crop and livestock production. Crops being produced are rice and vegetables while animals being raised are swine and poultry. Lastly, the estimated average income per cropping is P28, 978.62 (P29, 461. 53 for men and P28, 495.71 for women).

Perception on climate change

Majority of the farmers (14, 78% for men and 35, 88% for women) believe that the temperature has increased over the past 20-30 years. On the other hand, 5 (28%) of men and 16 (40%) of women respondents said that the amount of rainfall has decreased while 13 (72%) of men and 18 (45%) of women said that it has increased. Aside from climate-related events, the farmers also believe that flooding, high crop losses during typhoons, access to high-quality seeds, malfunctioning irrigation, low crop, and livestock production, and the occurrence of pests and diseases in crops and livestock are major problems in the area. On the other hand, among the adaptation measures being practiced by farmers include the use of organic fertilizers, availing crop insurance, use of alternative feeding for animals, practicing backyard gardening, use of climate and weather-informed advisories as a guide in farm/fishing practices, planting of unconventional food sources, use of different varieties and crop types, use of organic fertilizer, use of alternate wetting and drying irrigation. In terms of external support being received, they consider extension services (trainings), infrastructure support (processing equipment/machinery), financial (cash and insurance) and material support (seeds, fertilizers & livestock) as the most beneficial.

Pontevedra, Negros Occidental

Socio-demographic Profile

The AMIA Village in Pontevedra, Negros Occidental was established in 2017 and is composed of two barangays – San Isidro and General Malvar.

From the baseline survey, it was shown that the average age of FBs in the area is 56 years old for both men and women, and some of them are senior citizens (8, 27% for men and 17, 40% for women). Majority of the FBs are high school graduates (15, 50% for men and 15, 35% for women). Most of them are Roman Catholic and can speak and understand Hiligaynon and Tagalog. Farming is the major source of income in Pontevedra and the FB's average years of doing farm work are 25 years (28 years for men and 21 years for women). Lastly, the average monthly household income of the FB's surveyed is P10,000.00.

Farm Profile

The average area of agricultural land being cultivated by the FBs surveyed is 0.65 ha. The average distance from the farm to the owner's house is 1.05 km. Meanwhile, the average distances of the farm to the water source, paved road, and market are 0.96 km, 0.93 km, and 5.51 km, respectively. In terms of land ownership, 15 (50%) of men and 9 (21%) of women privately own their farm lands while 2 (7%) of men and 10 (23%) of women are tenants. Majority of the farmers are involved in crop and livestock production. Crops being produced are rice and vegetables while animals being raised are swine and poultry. Lastly, the estimated average income per cropping is P33, 210.65 (P38, 230. 76 for men and P28, 190. 54 for women).

Perception on climate change

Majority of the farmers (27, 90% for men and 39, 91% for women) believe that the temperature has increased over the past 20-30 years. On the other hand, 20 (67%) of men and 26 (60%) of women said that the amount of rainfall has decreased while 9 (30%) of men and 13 (30%) of women said that it has increased. Aside from climate-related events, the farmers also believe that flooding, high crop losses during typhoons, access to high-quality seeds, low crop and livestock production, low farm gate price and malfunction irrigation are major problems in the area. On the other hand, among the adaptation measures being practiced by farmers include planting of unconventional food sources, availing of crop insurance, use of organic fertilizer, use of alternative feeding for animals, following an early warning system, practicing backyard gardening, use of water harvesting technologies and use of drip irrigation. In terms of external support being received, they consider extension services, farm inputs, financial (cash &insurance) and material support (seeds, fertilizers, and livestock) as the most beneficial.

ANALYSIS OF RESULTS

Based on the gathered data, there are more women members of the organizations as compared to men, particularly in Sibunag, Guimaras, and Pontevedra, Negros Occidental. This shows that there is an equal opportunity for women to participate and organize themselves as part of associations in their respective communities.

The average age of both the men and women farmers ranges from 52-58 years. This is consistent with the 2015 Agriculture Census of the Philippine Statistics Authority (PSA) which revealed that most of the farmers belong to the age bracket of 25-54. Similar to the long-term trends in the agriculture sector, aging of farmers is common in developing countries. This calls for DA Region 6 to develop innovations to attract younger workers to be more involved in farming.

In terms of education, men tend to reach a relatively higher level as compared to women. Only 25% of the total number of the women farmers interviewed have reached the tertiary level and 30% to the secondary level as compared to men with 28% and 39%, respectively. Moreover, it is also worth noting that a higher percentage of women farmers (39%) are elementary graduates, higher than the 25% in men. The same findings were found in the study of Tapia et. al. (2018) in the province of Albay wherein about 42% of males were able to reach high school and college level education and only about 27% of the female respondents. Such a result may be attributed to the low priority in educating women as compared to men in the past.

On the other hand, farm data showed that men farmers manage about 1.5 hectares of farmland while women manage only less than a hectare. While other information such as the distance of their farm from their house, paved road, and market are almost comparable among men and women, data on distance from the water source shows that women travel a longer distance (1.6 km) as compared to men (0.5 km). Moreover, 48% of the men farmers work on irrigated farms while most of the women farmers manage rainfed land areas (20% irrigated).

Data on the average income of the farmers in the three AMIA villages reveal that men generate higher amount (P29,179.91) as compared to women (P23,688.58). This may be attributed to the total area of the farm land being managed by these farmers in which men farmers work on bigger farms as compared to women.

These information suggest that while women are already significantly taking up space and involvement in agricultural works, several improvements are still recommended to help them generate more income from farming. The provision of women-friendly agricultural equipment and machineries, as well as water-sourcing facilities, will help women farmers minimize hard labor while increasing productivity and income.

b) Focus Group Discussions

The FGD aimed to identify the Activity, and Access and Control profiles of the AMIA beneficiaries. The Activity Profile illustrates the 24-hour schedule of the farmers including the productive and reproductive activities and their community involvement. On the other hand, the Access and Control Profile demonstrates the various resources related to farm and household management disaggregated into gender. Consequently, the activity sought to solicit the issues and concerns of the FBs to be used in determining the appropriate interventions that will be deployed in the targeted area eventually.

Activities were conducted in separate groups of men and women to minimize conflict of thoughts and ideas. To provide the participants with a comfortable venue to voice out their opinion, it is also important that the facilitator of each group is of the same gender. During the conduct of the activities, everyone was given an equal opportunity to share their experiences to capture the immediate and vital needs of the group that they represent.

Activity Profile

During the FGD, participants were asked to list down their daily activities as well as their responsibilities in both productive (farm work) and reproductive (household chores) work. The template of the matrix for the activity profile is attached in **Annex 7** while the consolidated results are attached in **Annex 8**.

Gender norms remain traditional when it comes to reproductive work in the three project sites. Women are in charge of cleaning the house, of home care of family members, doing the laundry, and washing, dressing and bringing children to school. On the other hand, productive works such as farming activities (i.e., land preparation, water management, farm maintenance, and harvesting) are considered as the responsibilities of men. Meanwhile, backyard gardening and processing and marketing of products are mainly assigned to women.

Access and Control Profile

Access and control to various agriculture-related resources such as land, water, seeds, farm machineries and equipment, credits/loans, and support services such as trainings were also assessed. *Access* refers to the opportunity to make use of the resources while *control* refers to the power to decide how a resource is used and who has access to it. The template of the matrix for the access and control profile is attached as **Annex 9** while the consolidated results are attached as **Annex 10**.

Based on the results, both men and women benefit from the available resources in their respective areas. However, since women are more involved in doing household activities, men tend to have more control over how to manage land and water resources as well as farm machineries and equipment. Farming decisions such as the variety of seeds to plant, choice of fertilizers, management of water, and operation of farm equipment and machineries are predominantly determined by men.

On the other hand, it is also notable that in terms of managing household expenses, women mostly took charge. Decision-making in relation to household activities and management is predominantly determined by women, which is due to the fact that they spend more time in their household as compared to men who are mainly focused on income-generating activities.

Nevertheless, there were no issues raised during the FGD regarding women discrimination, gender-based violence, or issues on women's participation and leadership.

Needs and Requirements of the FBs

After the two workshops, the FBs were also consulted on the projects/programs that they consider to be beneficial for them and their association. This approach will ensure that the projects/programs to be deployed will be tailor-fitted to their needs and interests, as well as to ensure buy-in and sustainability. These projects/programs are listed in **Table 7**.

Table 7. Needs of the FBs and the potential	
Needs	Potential Benefits for Women
SIBUNAG, GUIMARAS	
Feed pelletizer	Increased production and income; Will
	save time in feed preparation
Trainings (character development,	Increased farmer participation
feeds development)	
Clean source of potable water for	Increased livelihood and income
potential ecotourism development	
Agriculture machineries	Will save time in land preparation and other
	farm activities
Additional cattle/carabao	Additional livelihood and income
Mobile vehicle	For improved logistics and transportation of products
BANGA, AKLAN	
Additional livelihood and technical	Increased income
assistance (pinya cloth weaving,	
soap making)	
Water source / Irrigation for	Increased production and income
vegetable production	
Market / Bagsakan	Will help minimize production loss and will
	ensure
Greenhouse for vegetable	Increased production and income
production	
Processing area and facilities	Increased production and income
Mobile vehicle	For improved logistics and transportation of
	products
PONTEVEDRA, NEGROS OCCIDEN	
Additional livelihood and technical	Increased income
assistance (squash noodles	
production)	
Solar powered irrigation	Increased production and income
Additional livelihood (pigs)	Increased income
Agriculture machineries	Will save time in land preparation and other
	farm activities
Mobile vehicle	For improved logistics and transportation of products
Processing area and facilities	Increased production and income
Additional livelihood and technical	Increased income
assistance (squash noodles	
production)	

c) **Gender Analysis**

While women's capacity in doing productive works is significantly recognized as seen in the three project sites, most of them still focus on reproductive works which are often the less valued type of work, mainly because it is normally unpaid and is often associated with women's innate characteristic - doing tasks because of love and affection rather than thinking of economic benefits.

Assessment of the results showed that across the three sites, women are performing multiple roles as compared to men who are focused generally on managing and doing farm-related activities. While women are not hindered to participate in managing their farms (particularly rice farms) —land preparation, plowing, planting, harvesting, etc., women in the three project sites are normally involved in managing the household taking care of children and the elderly, preparing meals, and doing other household chores. Moreover, most of the women are also involved and in-charged in livestock and poultry raising, as well as vegetable farming. Though vegetable and backyard gardening are the domain of women, their productivity is often constrained by the lack of water. Generally, women are also engaged in doing off-farm works to provide extra income to their families resulting to lesser time for rest and recreation, as supported by previous studies.

Women still take on very traditional gender roles but results of FGDs showed that both women and men participate in livelihood activities and decide together on some key issues and tasks (e.g. household finances). However, looking at the access and control profiles, men still decide on land use which appears to be a main barrier to women's access to income-generating activities as farming is the main source of income in the project sites.

These information suggest that while women are already significantly taking up space and involvement in agricultural works, several improvements are still recommended to help them generate more income from farming.

Considering the results of the baseline survey, FGDs, and the identified "wishlist" of the farmer beneficiaries, the potential projects to be given to the three project sites were determined and subjected to the aforementioned Gender Checklist. Three key staff from the DA RFO 6 were chosen to assess the identified potential projects. The results of the assessment were shown in **Tables 8-10**.

Table 8. Assessment of the potential gender-sensitive projects in Sibunag, Guimaras

Projects		Average		
Frojects	Respondent 1	Respondent 2	Respondent 3	Avelage
Sibunag, Guimaras				
Provision of feed pelletizer for improved poultry and livestock raising	14.5	6	13	11.2
2. Training on vegetable production and packaging	13	14	9.5	12.2
3. Provision of clean source of potable water for potential ecotourism development	9	4	5.5	6.2
Provision of additional agriculture machineries	7	5	8	6.7
5. Provision of additional cattle/carabao	9.5	5.5	8	7.7
6. Provision of AMIA Mobile	14.5	14	14	14.2

Table 9. Assessment of the potential gender-sensitive projects in Banga, Aklan

Projects		Points			
Projects	Respondent 1	Respondent 2	Respondent 3	Average	
Banga, Aklan					
1. Provision of additional livelihood sources through pinya cloth weaving and soap making	15	6	5.5	8.8	
2. Provision of water source for vegetable production	15	13.5	8.5	12.3	
3. Construction of greenhouse for vegetable production	14	8.5	8.5	10.3	
4. Provision of processing area and facilities for meat production	15	12.5	8.5	12.0	
5. Development of market/"bagsakan" to minimize production loss and increase income	15	7.5	8	10.2	
6. Provision of AMIA Mobile	14.5	14	14	14.2	

Table 10. Assessment of the potential gender-sensitive projects in Pontevedra, Negros Occidental

Projects		Average		
Projects	Respondent 1	Respondent 2	Respondent 3	Average
Pontevedra, Negros Occidental				
1. Provision of additional livelihood support and technical assistance on squash noodle p	14	8.5	9	10.5
2. Provision of solar-powered irrigation	14	7.5	7	9.5
3. Provision feed pelletizer for improved poultry and livestock raising	14	6	14	11.3
Provision of additional agriculture machineries	8	6	14	9.3
5. Provision of AMIA Mobile	14.5	14	14	14.2
6. Provision of processing area and facilities for meat production	14	13.5	14	13.8

Across the three project sites, the provision of an AMIA mobile was determined to be the most gender-sensitive intervention that would likely address the lack of an efficient mode of transportation for marketing their products outside of their villages. In consultation with the AMIA regional staff in DA RFO 6, additional support through the provision of women-friendly agricultural equipment (Mini Rotary Tiller) was also suggested. Attached in **Annexes 11-13** are the proposals for the gender-sensitive projects mentioned above.

Provision of AMIA mobile vehicle

Studies have shown that there is a potential to further increase agricultural production as long as transportation to markets outside the community is available (ActionAid, 2015). In the case of the three project sites, women were found to be responsible for marketing their products. However, lack of transport options and bargaining of consumers at lower prices affect both their income and efficiency which have implications not only for their organization but for their households as well. Related to this, Chiang and Khan of ADB (2022) said that gender-inclusive and diverse options for vulnerable users including transport services enhance connections between lower-income and disadvantaged areas and economic centers, as well as give people better access to employment, livelihood, and services. The AMIA Mobile project is the first intervention in the AMIA Villages in the Western Visayas that can potentially help farmers, women in particular, to have better access to the market and reach more buyers outside their villages.



Figure 20. The three women presidents of the recipient organizations with the AMIA Mobile Vehicles distributed during the turnover ceremony in the DA-WESVIARC, Hamungaya, Iloilo City last 17 March 2023.

Women-friendly farm equipment

Productive works, specifically farming activities, are found to be generally limited to men in the three project sites. One of the main reasons is that agricultural tools, equipment, and machineries are either lacking or not suitable for women. This is supported by researchers showing that farmers who benefit from farm mechanization are usually men despite women's strong interest (CGIAR, n.d.). Therefore, to expand women's access to mechanization, there is a need to identify and provide gendersensitive technologies. Light-weight but powerful mini-rotary tiller was recommended by the staff from DA RFO 6 in support of women's Organic Vegetable Production, particularly during land preparation.



Figure 21. One unit of women-friendly mini-rotary tiller was provided to each of the three AMIA Villages during the turnover ceremony in DA-WESVIARC, Hamungaya, Iloilo City last 17 March 2023

C. HIGHLIGHTS OF ACCOMPLISHMENTS

C.1. Mentoring and Monitoring Component

- AMIA profiling/database instrument was reviewed/updated, to be used as one of the tools in conducting PCRVA.
- The protocol for establishing the AMIA Village was finalized through a series of meetings, consultations, and mentoring with Regional AMIA Coordinators.
- A total of four (4) project monitoring activities were conducted. The issues and other concerns of Regional AMIA Coordinators on project implementation were gathered.
- Capacity building on project proposal development, enterprise development, and CBA were conducted based on the TNA results from the participating regions.
- Guidelines and framework for the establishment of AMIA Village were formulated to facilitate the effective implementation of AMIA Programs in the regions.
- One (1) checklist on the recommended activities in the establishment of the AMIA Village and one (1) checklist to determine the status or progress of the AMIA Village based on the AMIA Development Pathways was formulated to simplify the status assessment of the AMIA village.

 A total of 16 Regional AMIA Coordinators and BP2 Coordinators have been oriented on the formulated guide and monitoring instruments.

C.2. Gender Component

- Gender analysis in three AMIA Villages in Western Visayas Sibunag, Guimaras, Banga, Aklan, and Pontevedra, Negros Occidental, were conducted among 116 male and 132 female farmer-beneficiaries.
- A Gender Action Plan for integrating gender into the development of projects for AMIA beneficiaries was developed. Likewise, the matrices and guidelines for AMIA establishment were reviewed and further improved to incorporate gender lens and other social considerations.
- A participatory approach in identifying sex- and gender-disaggregated data related to the activity, access and control, and socio-economic profiles of the AMIA beneficiaries was demonstrated.
- A Gender Checklist that includes specific indicators linking gender and climate change was developed to facilitate the prioritization of gender-sensitive interventions.
- One unit of mobile vehicle and women-friendly mini-rotary tiller were distributed to each AMIA Village (1. Sibunag, Guimaras; 2. Banga, Aklan; and, 3. Pontevedra, Negros Occidental) as gender-sensitive projects that could uplift farmers, especially women, and empower them to improve their livelihood and income.

D. RECOMMENDATIONS AND WAY FORWARD

D.1. Mentoring and Monitoring Component

After series of meetings and monitoring visits with the three (3) Regional AMIA Teams (CAR, Regions 7 and 8) and members of the AMIA cooperatives/associations, the research team recommended the following measures to consider in establishing AMIA Villages and to further enhance the implementation of selected interventions.

- **Site selection.** Setting the criteria for the selection of the AMIA site is very important. Thus, it is necessary to secure the commitment of the PLGU and MLGU in the selection stage of the AMIA sites.
- Staff shortage. For the municipality of Buguias, the implementation and monitoring of projects are reported to be difficult by the AMIA Coordinator because they lack staff in the MAO. This makes the monitoring and data gathering in the AMIA sites quite challenging according to the experience of the AMIA facilitator. This is also true for Region 8 since they have more than 30 AMIA sites to cover. Regional Team can allocate funds to hire additional staff to monitor the projects.

Partnerships. Close coordination between the AMIA Focal and Banner Coordinators for projects/assistance should be considered and strengthened. Through the partnership, AMIA program can be mainstreamed into banner programs. The established AMIA villages can also serve as target beneficiaries of the various banner programs/projects.

Programs and projects assistance of other bureaus and agencies such as ATI, BPI, and DTI can be tapped to assist the AMIA beneficiaries in expanding their livelihoods and small enterprises into a larger scale. DA Research and development division can also be engaged to conduct research activities in the AMIA sites or apply and/or implement the results/outputs of previous research studies that are relevant to the AMIA Villages and its beneficiaries.

Specifically for DA-CAR, it was observed that the roads to the AMIA villages are mostly steep, tire paths, and one-way. AMIA team should constantly coordinate with DA-RAED for the construction of FMR. A letter request for FMR and irrigation system from the LGU can be submitted to DA-CAR for their consideration or AMIA Coordinator could invite RAED staff to validate the area and to target FMR and water irrigation system in the site.

- Matching markets. DA-AMAD plays a big role in the market matching of farm produce. KADIWA will also enable the farmers to find institutional buyers that could eventually be their regular market. AMAD can also provide training on enterprise development, hauling trucks, and market support to associations/cooperatives through start-up kits. The regional AMIA team can seek the support services they are offering to farmers' associations/cooperatives.
- **Financial source.** An interest-free loan can be accessed from financial institutions such as Agriculture Credit Policy Council (ACPC) or Land Bank of the Philippines (LBP), as start-up capital in their agro-enterprises. The funds can also be used to buy the products of AMIA members and sell them directly to the market. There are also other investors or lending institutions that offer financial assistance to start-up enterprises that AMIA could tie up with.
- Capacity-building. Training courses on CBA of CRA technologies and Enterprise
 Development are some of the training needs that could be given to AMIA Regional
 Implementers. Additionally, various trainings being offered by ATI that are relevant
 to the strengthening of AMIA Villages should be maximized. Furthermore, the
 Organic Agriculture Program can be tapped for the trainings on GAP.

Through the continuous capacity building of AMIA Coordinators and AMIA FCAs, the extra skills and capacities that will be gained can motivate the AMIA beneficiaries to be enterprise-driven.

Tailor-fitted interventions. In reference to the assessment conducted in the three
regions, FCAs can be strengthened through the provision of interventions that can
directly address their issues and concerns in and around the agricultural value
chains. FCAs must likewise understand how the value chain works. Identifying their
strengths and weaknesses can eventually address critical bottlenecks in the value
chains that can help them capture market opportunities and get fair deals.

 Organizational mobilization. One of the major factors to consider in establishing AMIA Villages and leveling it up to AMIA CREATE is organizational mobilization. It is necessary for the individual small-scale farmers to get organized because they lack capital, skills and experience and can do little to improve their livelihoods, thus, the importance and benefits of being in an organization must be explained thoroughly to its possible members.

Mobilizing and managing groups of farmers entail a lot of resources (time, human and capital). They need to be taught on how to use their resources in a sustainable way, learn how to market their produce profitably and effectively, further, they need to learn how to access credit and manage their finances. Full support services must be in place while they are trying to build and manage their organizations and at the same time, while they are still identifying, testing, and adopting the various innovations being introduced to them. Moreover, by working together, they become stronger, they can learn from each other and build their skills as a group, more minds can better analyze problems and find solutions. Together as a group, they can identify better opportunities that can provide higher income for their organizations.

The coverage of mentoring component was limited to three (3) regions only, however, now that the guidelines and checklist for the establishment of AMIA Village are already available, DA-CRAO can use and administer these tools to other remaining regions to assess the status of its respective AMIA Villages and track their progress vis-à-vis the DA-AMIA Development Pathways. This approach will also help them identify the various challenges being met by AMIA implementers and be able to provide the necessary solutions.

D.1. Gender Component

Capacitating AMIA Coordinators, planners, and extension workers in operationalizing the AMIA Gender Checklist and Gender Action Plan is deemed necessary in support to the development of their localized Gender and Social Inclusion Plans. This will help them to better integrate gender considerations and ensure that a participatory process is realized in the project development cycle.

Furthermore, the following insights and strategies are recommended to empower more women and ensure equality in agricultural communities:

• Provide women-friendly agricultural equipment and machineries, as well as watersourcing facilities that will help women farmers minimize hard labor while increasing productivity and income.

One of the main constraints that hinder women to be more productive in agriculture is that existing machineries are not very much suitable for them. Thus, the provision of lightweight, portable, and ergonomic farm tools and equipment is recommended to empower more women in their farming activities.

 Support women farmers in improving communication and marketing channels and strategies.

Women farmers in the three AMIA Villages are proactive in the development of products out of the existing resources in their respective communities. However, financial literacy

and digital skills are lacking among them to scale up sustainable agricultural production methods and market access. Introducing and capacitating women to use online portals and social media, linking them with potential markets, and providing more efficient modes of transporting products can help women boost their livelihood and income.

• Develop innovations to attract younger workers to be more involved in farming.

Aging farmers is one of the main problems in agriculture, particularly in developing countries like the Philippines. The use of social media and other information and communication technologies can be utilized to promote and inform the youth of the importance of agriculture. Additionally, as younger children, especially girls, are also considered vulnerable to climate change, it is also crucial to support them through proper information dissemination to raise awareness on climate change impacts, even at their early age.

• Provide sustainable support services and technologies to unburden women of their multiple roles in their respective communities.

Reproductive works including household chores and home care are the domains of women. Since these tasks are generally unpaid, providing them with support to save more time that can be utilized for more productive activities, is also recommended.

 Strengthen sex- and gender-disaggregated data collection and mixing of existing data on other climate change-related indicators (Disaster Risk Reduction and Management, indigenous knowledge on sustainable agriculture, etc.)

Sex- and gender-disaggregated databases are essential to measure differences in various social and economic dimensions and are one of the requirements to obtain gender statistics. These will help identify the most appropriate interventions given the existing conditions of the beneficiaries, this will also serve as a basis and indicator of quantitative or qualitative changes that may occur due to the intervention deployed.

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IV. ANNEXES

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