

## **COMPREHENSIVE AGRARIAN REFORM PROGRAM AND SOCIO-ECONOMIC CONDITIONS OF ITS BENEFICIARIES IN REGION X AND XI IN MINDANAO, PHILIPPINES**

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### **ABSTRACT**

This study was conducted to determine the further effect on the beneficiaries of the Comprehensive Agrarian Reform Program (CARP). With the intent to conduct interviews with selected beneficiaries in Barangays classified as Agrarian Reform Communities from 2 different cities in Mindanao, Cagayan de Oro City and Davao City. This study assessed and determined the socioeconomic conditions of the Agrarian Reform Beneficiaries in terms of their livelihood and income, access to health, and education. The study uses the KoboToolbox, a free and open online application source capable of a paperless household survey. Questionnaires for the survey are uploaded to the KoboToolbox server, which was derived from APIS (Annual Poverty Indicator Survey), and was slightly modified and enhanced to accommodate questions in relevance to the subject study. This online application tool will formulate an initial analysis from the field data in tables, graphs, and pies. Key informant interview with the select barangay officials and chairperson of the Agrarian Reform Beneficiaries' Organizations and Department of Agrarian Reform (DAR) offices in Cagayan de Oro and Davao City was undertaken for additional qualitative data. The survey was conducted simultaneously in 2 different areas, with 12 respondents for the two cities. The field interview results were compared and concluded accordingly. The results of the study revealed a positive correlation between landownership and household welfare. Households who own land through the agrarian reform have improved welfare and less probability of being poor and better access to healthcare and education. Increased income is evident among the agrarian reform beneficiaries shown in this study. Resulting in ensuring food security and improving nutrition, thus promoting the overall health of the household members. The support services facilitated by DAR-CARP play an integral part in transitioning land distribution to land productivity and viability.

**Keywords:** Comprehensive Agrarian Reform Program, Agrarian Reform Community, Agrarian Reform Beneficiaries, Socio-Economic Impact Analysis

### **INTRODUCTION**

Although similar, "land reform" and "agrarian reform" refer to slightly different concepts. The

term "agrarian reform" is commonly understood to encompass more than just changes to the way land is distributed. In addition to the redistribution of land, the provision of other types of capital, and in some cases an entire set of redistributive and democratic changes, all fall under the umbrella of "agrarian" reform. Redistribution of land to a smaller set of recipients is what is meant by the term "land" reform. However, in practice, the two are often used interchangeably. Jacobs claims that the traditional understandings of agrarian and land reform are products of the "moment" of developmental states. Many people, especially in the decades following World War II and decolonization, believed that the state and state policy could drive economic and social change. Some examples of such developmental programs are agrarian reforms. The underlying premise was that redistribution of income and property would lead to positive social outcomes. Classical examples include Japan, South Korea, and Taiwan, where land was dispersed freely alongside programs supported by agricultural science and technology to increase production and rural industries (IBON, 2017).

Over the past half-century, the Philippines has implemented numerous changes to its approach to rural development. According to Caringal, land reform has been the cornerstone of every administration in the Philippines, from President Manuel Quezon's program on crop sharing and leaseback to President Marcos' rice and corn program (PD 27) and President Aquino's CARP. The Comprehensive Agrarian Reform Law (CARL) was one of the most recent and far-reaching of these reforms. It established a comprehensive and integrated framework to eradicate centuries' worth of inequality and poverty and boost national industrialization by ensuring a fairer distribution of land.

The Comprehensive Agrarian Reform Law (CARL), also known as Republic Act No. 6657, was enacted by President Corazon C. Aquino on June 10, 1988, and serves as the legislative framework for the Comprehensive Agrarian Reform Program (CARP). It is a piece of legislation that, among other things, intends to advance the causes of social justice and industrialization while establishing the framework for its execution.

According to RA 6657, the Comprehensive Agrarian Reform Program, or CARP, is the transfer of public and private agricultural lands to landless farmers and farmworkers, regardless of tenure. CARP's objective is for beneficiaries of agrarian reform to have equitable land ownership and successfully manage their economic and social growth for a higher quality of life.

The Department of Agrarian Reform is crucial to carrying out the goals of the Comprehensive Agrarian Reform Program (DAR). Land Tenure Improvement (LTI), Program Beneficiary Development (PBD), and Agrarian Justice Delivery (AJD) are the three main focuses of the program, and the DAR is the primary agency in charge of implementing them.

Land Tenure Improvement is one of CARP's most important programs, and its major goal is to expedite the land distribution for landless farmers. Similarly, the Department of Defense offers Support Services, which include infrastructure facilities, marketing aid programs, credit assistance programs, and technical support programs. In addition, the department strives to provide agricultural justice and expedite case resolution (Leones et al., 2012)

Program Beneficiaries Development is a component of CARP's support service delivery. In

accordance with Section 14 of RA 9700 (Section 37 of RA 6657 as modified), it intends to assist beneficiaries of agrarian reform by providing them with the required support services to increase the productivity of their lands and by allowing them to engage in income-generating livelihood initiatives. Under the support service delivery programs, the Presidential Agrarian Reform Council (PARC) ensures that beneficiaries of agrarian reform receive support services such as land surveys and titling, infrastructure construction, marketing and production aid, loans, and training (Fruong et al., 2016)

Agrarian Justice Delivery controls the adjudication of cases and provides agrarian legal help. Under Section 19 of RA 97600 (amended Section 50 of RA 6657), the DAR is entrusted with the primary jurisdiction to determine and adjudicate agrarian reform matters and shall have exclusive original jurisdiction over all matters involving the execution of agrarian reform except those falling under the exclusive jurisdiction of the Department of Agriculture (DA) and the Department of Environment and Natural Resources (DENR).

Ultimately, the primary objective of CARP is to improve equity and increase productivity and growth in rural areas. These should work towards more economic and political empowerment of the farmers and improve their social positions, thus reducing poverty amongst the rural populace. After almost 35 years since the CARP was enacted, it is imperative to undertake a study to assess the socio-economic impact of the program after more than three decades of implementation as well as contribute to the results and analysis from the earlier studies related to the agrarian reform program in the country.

## **LITERATURE REVIEW**

The Philippines is an agricultural country, yet landlessness in rural areas remains widespread. Agrarian reform measure through Comprehensive Agrarian Reform Law is among the laws that seek to address the centuries-old rural poverty, as rural poverty has always been highly linked to access to land (Fruong et al., 2016). Moreover, access to land is a crucial factor in the eradication of food insecurity and rural poverty. Rural landlessness is often the best predictor of poverty and hunger. The poorest are usually landless or land-poor (Guardian, 2003).

For thirty-four (34) years now, the Department of Agrarian Reform (DAR) reported that the Comprehensive Agrarian Reform Program (CARP), which aims to distribute 8 million hectares of land, hasn't been completed. In addition, some studies also suggest that CARP has serious setbacks in its implementation. A certain percentage of CARP beneficiaries were unable to amortize the land granted to them under CARP and thus are at risk of losing their land (IBON Foundation, 2017). Also, access to land must translate into tangible improvements within a reasonably short period, or else there will be a great risk of so-called "beneficiary defection", in which farmer-beneficiaries abandon their stake in the land and mortgage or sell it. This could lead to the reconcentration of lands in the hands of new landowners and eventually in the conversion of these lands to other uses (Guardian, 2003)

On the other hand, despite the serious constraints on CARP's full implementation, several studies have examined the positive impacts of CARP and its significance to the rural population. Furthermore, consequential increased per capita incomes, reduced poverty incidence, higher

investments in physical capital, and greater household welfare and productivity were reported (Guardian, 2003).

In specific areas, findings also suggest that the socio-economic status of the farmer-beneficiaries in the 3<sup>rd</sup> Congressional District of Iloilo has a slight increase due to the reduction in the area of farm size directly cultivated the farm. Agrarian Reform Beneficiaries (ARBs) also tend to fare better in terms of well-being, such as access to potable water and sanitation toilet facilities (Frufonga et al., 2016). While during the 29<sup>th</sup> Session of the Committee on World Food Security in Rome in 2013, United Nation Food and Agriculture Organization presented that CARP has benefited farmer-beneficiaries through its various program intended to alleviate poverty and ensure food security.

Finally, a study using the theory of change to evaluate the performance of CARP notes that the accomplishment in terms of land reformed area and number of beneficiaries have been substantial however, there was no clear evidence of whether the objectives of CARP to increase investments in agriculture, increase access to formal credit of farmers and equity have been achieved (Ballesteros et al., 2017)

## **METHODOLOGY**

This study sought to assess the socio-economic conditions of agrarian reform beneficiaries in Brgy. Manuel Guinga, Davao City, Region XI, and in Brgy. Mambuaya, Cagayan de Oro City, Region X, data collection will be through a face-to-face household survey involving stratified random sampling of respondents composed of a combined twelve (12) agrarian reform beneficiaries (ARBs). The assessment tool was based on the Annual Poverty Indicator Survey (APIS) Tool with slight modifications to focus on the economic, health, and education aspect.

The KoboToolbox was utilized in conducting the household survey. It is an online suite of tools for data field collection using its KoboCollect Application. Sets of questions from the APIS tool are integrated into the KoboCollect Application for the paperless survey.

The number of respondents per area is as follows: a) Brgy. Mambuaya, Cagayan de Oro City, Region X = six (6) agrarian reform beneficiaries (ARB); b) Brgy. Manuel Guinga, Davao City, Region XI = six (6) agrarian reform beneficiaries (ARB). For additional qualitative data, key informant interviews were conducted among the barangay officials and chairpersons of the agrarian reform beneficiaries' organizations.

The sample size for the survey was arrived at using standard statistical calculations. Cluster sampling was applied to retain the selection within the Agrarian Reform Beneficiaries' Organization (ARBO) members. The sample size is around 20% of the total number of active members of the agrarian reform beneficiaries' organization to where the respective respondents belong.

## RESULTS AND DISCUSSIONS

### Socio-demographic Profile

The socio-demographic profile is composed of age, sex, and educational attainment.

**Age.** As shown in table 1, the majority of the respondents are between 61-70 years old, which is 42 percent or 5 out of the total respondents. This is followed by 4 respondents between the age of 51-60, or 33%. And two (2) respondents from the age range of 41-50, which is 17%. Moreover, the sole respondent is between 31-40 years old.

**Table 1.0. Distribution of respondents according to age**

Age Range (year)	Number of Respondents	Percentage
30 – 40	1	8%
41 – 50	2	17%
51 – 60	4	33%
61 – 70	5	42%
<b>Total</b>	<b>12</b>	<b>100%</b>

**Sex.** Table 2 shows a balance of the number of respondents according to sex.

**Table 2.0. Distribution of respondents according to sex**

Sex	Number of Respondents	Percentage
Female	6	50%
Male	6	50%
<b>Total</b>	<b>12</b>	<b>100%</b>

### Educational Attainment.

In Table 3, most of the respondents are college level, which is 42% or 5 of the total respondents. A combined six (6) respondents, which is 50% of the total respondents, are elementary level and elementary graduates. And one (1) respondent is a high school level. Meanwhile, there were no observed respondents that are high school or college graduates.

**Table 3.0. Distribution of respondents according to educational attainment**

Educational Attainment	Number of Respondents	Percentage
Elementary Level	3	25%
Elementary Graduate	3	25%
High School Level	1	8%
High School Graduate	0	0
College Level	5	42%
College Graduate	0	0
<b>Total</b>	<b>12</b>	<b>100%</b>

### Livelihood and Income

#### Before becoming an Agrarian Reform Beneficiary

As shown in Table 4.0, the predominant sources of income across all the subject barangays before they become agrarian reform beneficiaries is agriculture/farming, which is 92% or 11 of the total respondents, and only one (1) respondent is an employee, a school janitor. In Table 4.1, the majority of the respondents engaged in farming are tenants (73%) and some farm workers (27%).

**Table 4.0. Distribution of respondents' primary source of income before becoming an Agrarian Reform Beneficiary**

Barangay	Livelihood			
	Agriculture/Farming	Percentage	Employee	Percentage
Mambuaya	5	83%	1	17%
Manuel Guinga	6	100%	0	0
<b>Total</b>	<b>11</b>	<b>92%</b>	<b>1</b>	<b>8%</b>

**Table 4.1. Distribution of respondents in the Agriculture/Farming sector before becoming an Agrarian Reform Beneficiary**

Barangay	Livelihood			
	Tenant	Percentage	Farm worker	Percentage
Mambuaya	3	60%	2	40%
Manuel Guinga	5	83%	1	17
<b>Total</b>	<b>8</b>	<b>73%</b>	<b>3</b>	<b>27%</b>

Other sources of income are shown in Table 4.2. Most of the respondents are also engaged in the informal sector and trade/service, which are both 25% with a total of 6 respondents. These are owners of small neighborhood retail stores; meat, vegetable, and fruit vendors; firewood vendor; and an electrician. Two respondents were contractual employees (16.67%). Another 4 respondents represented labor (16.67%) and agriculture sectors (16.67%) which are construction and farm workers.

**Table 4.2. Distribution of respondents' other sources of income before becoming an Agrarian Reform Beneficiary**

Barangay	Livelihood				
	Informal Sector Worker	Trade/ Service	Employee	Labor	Agriculture/ Farming
Mambuaya	33% (2)	17% (1)	0	33% (2)	17% (1)
Manuel Guinga	17% (1)	33% (2)	33% (2)	0	17% (1)
<b>Average</b>	<b>25%</b>	<b>25%</b>	<b>16.67%</b>	<b>16.67%</b>	<b>16.67%</b>

Table 4.3 shows no significant difference between the two subject barangays according to the average total gross monthly income from their primary and other sources before becoming an Agrarian Reform Beneficiary. Respondents have an average of P6,125.00 monthly gross income from their primary livelihood and P2,250.00 from other livelihood activities. These total of around P8,375.00 average monthly gross income across the two subject barangays.

**Table 4.3. Respondents' average total gross monthly income before becoming an Agrarian Reform Beneficiary**

Barangay	Primary Source (average)	Other Sources (average)	Total
Mambuaya	P6,416.67	P1,800.00	P8,216.67
Manuel Guinga	P5,833.33	P2,700.00	P8,533.33
<b>Average</b>	<b>P6,125.00</b>	<b>P2,250.00</b>	<b>P8,375.00</b>

#### As an Agrarian Reform Beneficiary

An average of 2.5 hectares of land was awarded from the Department of Agrarian Reform-Comprehensive Agrarian Reform Program to the agrarian reform beneficiaries in the two subject barangays in 1993 and 1995.

**Table 5.0. Respondents' average number of hectares awarded by the DAR-CARP**

Barangay	Number of Hectares	Year Awarded
Mambuaya	2.3	1993
Manuel Guinga	2.7	1995
<b>Average</b>	<b>2.5</b>	

There are more diverse livelihood activities in Brgy. Mambuaya compared to Brgy. Manuel Guinga, as shown in Table 5.1. For both subject barangays, ARBs are heavily engaged in fruit production (91.67%), particularly banana and coconut farming (66.67%), especially in Brgy. Manuel Guinga. Meanwhile, in Brgy. Mambuaya, the combination of rice production (83.33%) and banana production (83.33%), is the dominant source of income. Vegetable production (25%) is practiced in both barangays to support food consumption and for additional income. Moreover, some ARBs in Brgy. Mambuaya engaged in livestock and poultry (33.33%), fishery (16.67%), corn (33.33%), and root crops (16.67%) production for consumption and as other sources of income which are not observed in Brgy. Manuel Guinga ARBs.

**Table 5.1. Distribution of respondents' usage of the awarded land from DAR-CARP**

Livelihood	Barangay		Average Percentage
	Mambuaya	Manuel Guinga	
Fruit Production	83.33% (5)	100% (6)	<b>91.67% (11)</b>
Coconut Farming	66.67% (4)	66.67% (4)	<b>66.67% (8)</b>
Rice Production	83.33% (5)	0	<b>41.67% (5)</b>
Vegetable Production	16.67% (1)	33.33% (2)	<b>25% (3)</b>
Livestock and Poultry	33.33% (2)	0	<b>16.67% (2)</b>
Corn Production	33.33% (2)	0	<b>16.67% (2)</b>
Fishery	16.67% (1)	0	<b>8.33% (1)</b>
Root Crops Production	16.67% (1)	0	<b>8.33% (1)</b>

As an ARB, the predominant source of income in both barangays is agriculture which is 83.33% or 11 of the total respondents, as shown in Table 5.2. The distribution of respondents in the agriculture/farming sector is shown in Table 5.1 above. Meanwhile, 2 ARBs from Brgy. Manuel Guinga, or 16.67% of the total respondents, are regular employees whose engagement in agriculture/farming is for their other sources of income, unlike Brgy. Mambuaya, 6 ARBs (100%) rely on making their awarded land more productive. Furthermore, no observed employee in Brgy. Mambuaya.

**Table 5.2. Distribution of respondents' primary source of income as an Agrarian Reform Beneficiary**

Barangay	Livelihood			
	Agriculture/Farming	Percentage	Employee	Percentage
Mambuaya	6	100%	0	0
Manuel Guinga	4	66.67%	2	33.33%
<b>Total</b>	<b>10</b>	<b>83.33%</b>	<b>2</b>	<b>16.67%</b>

The majority of ARBs in Brgy. Mambuaya is receiving their senior citizen pension (66.67%), with 1 respondent (16.67%) from Brgy. Manuel Guinga, as shown in Table 5.3, as an additional source of income. This is followed by the trade/service sector for both subject barangays, which is 33.33% of the total respondents that are meat, vegetable, and fruit vendors, small neighborhood retail stores, and a printing shop owner. Informal sector workers (25%) and labor (16.67%) are in

carpentry and farm work. Contractual employment (33.33%) in Brgy. Mambuaya is observed as a support income source for the household. There is no perceived agriculture/farming as secondary livelihood activity in Brgy. Mambuaya, since their primary source of income is agriculture, unlike the 2 ARBs in Brgy. Manuel Guinga, whose main livelihood is employment and engaged in agriculture (33.33%) for supplementary income.

**Table 5.3. Distribution of respondents' other sources of income as an Agrarian Reform Beneficiary**

Other sources of income	Barangay		Average Percentage
	Mambuaya	Manuel Guinga	
Pension	66.67% (4)	16.67% (1)	<b>41.67% (5)</b>
Trade/Service	33.33% (2)	33.33% (2)	<b>33.33% (4)</b>
Informal Sector Worker	16.67% (1)	33.33% (2)	<b>25% (3)</b>
Labor	16.67% (1)	16.67% (1)	<b>16.67% (2)</b>
Agriculture/Farming	0	33.33% (2)	<b>16.67% (2)</b>
Employee	33.33% (2)	0	<b>16.67% (2)</b>

Table 5.4 shows that ARBs in Brgy. Mambuaya has a slightly higher total monthly gross income compared to Brgy. Manuel Guinga. This is attributed to the diverse livelihood activities in Brgy. Mambuaya shown in Table 5.1, aside from rice, fruit, and coconut farming, ARBs also utilized the awarded land from DAR-CARP for root crops and vegetable production; others are raising livestock, poultry, and fishery.

**Table 5.4. Respondents' average total gross monthly income as an Agrarian Reform Beneficiary**

Barangay	Primary Source (average)	Other Sources (average)	Total
Mambuaya	P25,166.67	P5,000.00	P30,166.67
Manuel Guinga	P20,000.00	P7,500.00	P27,500.00
<b>Average</b>	<b>P22,583.33</b>	<b>P6,250.00</b>	<b>P28,833.33</b>

There is an exponential increase in the total gross monthly income of ARBs in the subject barangays, which is 244.28%, as shown in Table 5.5. More than 3 folds (267.14%) gradual increase in income in Brgy. Mambuaya in the span of 28 years after becoming an ARB in 1991. ARBs in Brgy. Manuel Guinga also shares an approximately similar increase (222.27%) when the Certificate of Land Ownership Award was given in 1995.

**Table 5.5. Respondents' average total gross monthly income before and as an Agrarian Reform Beneficiary**

Barangay	Before ARB	As an ARB	Percent Increase
Mambuaya	P8,216.67	P30,166.67	267.14%
Manuel Guinga	P8,533.33	P27,500.00	222.27%
<b>Average</b>	<b>P8,375.00</b>	<b>P28,833.33</b>	<b>244.28%</b>

In support of Table 5.5, respondents have three major arguments for how the DAR-CARP land distribution helps increase the household income of mostly tenants and farmworkers before they become agrarian reform beneficiaries, as shown in Table 5.6. Most of the respondent's arguments from both subject barangays are: a) regular and additional sources of income from diversified land use of awarded land through agriculture/farming, livestock and poultry, and fishery supports make up household expenses which are 91.67%; b) as reported, no more sharing of profits with their



previous landlords radically increases the household income of former tenants and farmworkers (91.67%); c) Around 7 ARBs or 58% of the total respondents accounts reduced food expenses; hence main necessary food items such as staples, vegetables, meat, and fish are farm-produced for household consumption. The land tenure, a benefit from DAR-CARP, provides the ARBs with the necessary productive resources needed to ensure their economic viability and productivity.

**Table 5.6. Distribution of respondents when asked how the DAR-CARP land distribution facilitates an increase in household income**

Argument	Barangay		Average Percentage
	Mambuaya	Manuel Guinga	
Reduced expenses in food – Staples, vegetables, livestock, poultry, and fishery products are farm-produced that can be utilized for household consumption.	66.67% (4)	50% (3)	<b>58% (7)</b>
Regular and additional source of income from agriculture/farming, livestock, poultry, and fishery helps cover household expenses.	100% (6)	83.33% (5)	<b>91.67% (11)</b>
No more sharing of profits with landlords, thus increasing household income.	83.33% (5)	100% (6)	<b>91.67% (11)</b>

After the ARBs reap the fruit of land tenure, and aside from increased income and reduced food expenses, the majority of the respondents are able to have monthly savings, that is, 83.33% or 10 of the total respondents, as shown in Table 5.7. This can be deduced from increased income in Tables 5.5 and 5.6. The savings are intended for emergency uses or household contingency funds mainly for the education, medical, or health-related expenses. Compared to before the respondents became ARBs, only 1 of the total respondents has a monthly saving (8.33%).

**Table 5.7. Distribution of respondents in terms of having monthly savings before and as an Agrarian Reform Beneficiary**

Barangay	Before ARB		As an ARB	
	Yes	No	Yes	No
Mambuaya	16.67% (1)	83.33% (5)	100% (6)	0
Manuel Guinga	0	100% (6)	66.67% (4)	33.33% (2)
<b>Average</b>	<b>8.33% (1)</b>	<b>91.67% (11)</b>	<b>83.33% (10)</b>	<b>16.67% (2)</b>

In addition, as a result of increased income, half of the ARBs are confident to access loans, as shown in Table 5.8, which are mostly from Brgy. Manuel Guinga and were able to pay their loan obligation on time. The borrowers, 5 respondents (83.33%) in Brgy. Manuel Guinga has accessed loans from banks, cooperatives, and microfinance institutions for additional livelihood capital (25%), house repair/improvement (25%), and payment for other household expenses except for food (16.67%), as shown in Table 5.9. On the other hand, in Brgy. Mambuaya, 5 households or 83.33% of the total respondents did not access financial loans; according to them, there is no immediate need when the study was conducted.

**Table 5.8. Distribution of respondents in terms of accessing loan**

Barangay	Yes	No
Mambuaya	16.67% (1)	83.33% (5)
Manuel Guinga	83.33% (5)	16.67% (1)
<b>Average</b>	<b>50% (6)</b>	<b>50% (6)</b>

**Table 5.9. Distribution of respondents' purpose of loan**

Purpose	Number of Respondents	Percentage
Livelihood Capital	3	25%
House Repair and/or Improvement	3	25%
Payment for household expenses (education, transportation, health, communication, clothing, bills, etc.)	2	16.67%
Purchase land lot	1	8.33%

In assessing the impact of DAR-CARP, the focus is always on the Agrarian Reform Beneficiaries Organizations (ARBO) thru the Agrarian Reform Communities (ARC) because it is the show window of the program. Most funds for support services have been invested in ARCs. The ARC strategy is a testimony to the fact that land distribution alone is not enough to liberate the small farmer from poverty and to ensure the success of the CARP. Support services are essential to the CARP. Without them, the CARP would destabilize and lose momentum (Guardian, 2003).

In Table 6.0 are the facilitating factors in the form of support services in improving the economic viability and productivity of the agrarian reform beneficiaries. Both ARBs in Brgy. Mambuaya and Manuel Guinga have undergone capacity-building activities, which is 100% of the total respondents. These training workshops include marketing and management; agricultural skills and practices; leadership and organizational management and development, community-based enterprise development; financial literacy; basic bookkeeping and accounting; values formation; and basic proposal writing. With these means, organizational capacities have improved, agricultural knowledge and skills are increased, accessed more livelihood assistance, and empowers the members of ARBO including behavioral transformation.

Around 91.67%, or 11 of the total respondents, have reported accessing livelihood inputs and capital in terms of seeds/seedlings, fingerlings, animal dispersal, fertilizer and pesticides, and livelihood seed capital, as shown in Table 6.0. According to the ARBs, livelihood support reduces their initial investment and expenses in crop cycles and increases agricultural productivity.

In addition, agrarian reform beneficiaries' organizations in Brgy Mambuaya benefited from handing over agricultural facilities and machinery as described by the respondents (100%) in Table 6.0. This increased organizational assets and improved the agricultural productivity of the members, thus increasing household income and ensuring food security, as supported in Table 5.6. Among the facilities and machinery are a walking-type tractor, field cultivator, harvester, dryer, thresher, and warehouse/storage.

Also, 6 respondents (100%) in Brgy Mambuaya recounted that the irrigation system is facilitated by the DAR-CARP together with the National Irrigation Administration (NIA) to improve the quality of agricultural products, increase capital value and income, and use areas that would otherwise be less productive, provided in Table 5.6. A proportion of 4 respondents (66.67%) have noted the installation of the water supply system in their Purok, which reduces the expenses for domestic use of water.

Furthermore, a farm-to-market road was constructed in Brgy. Mambuaya, as recalled by all 6 ARBs, which is 100% of the total respondents in the area, as shown in Table 5.6. The FMR

provides an accessible and safe road and reduces transportation costs for agricultural products, thus improving market value. In the same barangay, 3 ARBs which is 25% of the respondents in the area, have accessed vocational scholarships (Agricultural Machinery Operation NCII) under the educational support services facilitated by DAR-CARP as a compliment to the agricultural machinery assistance.

Concurrently, no observed support services, such as agricultural facilities and machinery, irrigation and/or water supply system, roads, and educational services in Brgy. Manuel Guinga.

**Table 6.0. Support services facilitated by DAR-CARP through the Agrarian Reform Beneficiaries Organization, according to the respondents**

Support services	Barangay		Percentage
	Mambuaya	Manuel Guinga	
Capacity Building (e.g., training, seminar workshops, etc.)	100% (6)	100% (6)	<b>100% (12)</b>
Livelihood Inputs and Capital	100% (6)	83.33% (5)	<b>91.67% (11)</b>
Agricultural Facilities and Machinery	100% (6)	0	<b>50% (6)</b>
Irrigation System	100% (6)	0	<b>50% (6)</b>
Roads (e.g., farm-to-market roads, etc.)	100% (6)	0	<b>50% (6)</b>
Water Supply System	66.67% (4)	0	<b>33.33% (4)</b>
Educational Services	50% (3)	0	<b>25% (3)</b>

## Health and Education

Agrarian reform beneficiaries' food security was ensured, as a result of increased household income and the availability of farm-produced products, such as staples, vegetables, meat, and fish, for household consumption. In effect, health and nutrition at the household level are improved, and by that, lesser expenses related to health were observed, as shown in Table 7.0. Around 91.67% or 11 of the total respondents spend less than 2000 pesos monthly expenses related to health, like medicines, vitamins, and consultation/checkups. In addition, the water supply system facilitated by DAR-CARP, as shown in Table 6.0 in Brgy Mambuaya, has improved the health of the residents served by the water system as recounted by the respondents, such as access to safe and clean potable water, promotes sanitation and hygiene, helps reduce open defecation and reduces water-borne diseases.

At the same time, the majority of the respondents (66.67%) from both subject barangays observed spending less than 2000 pesos a month on education-related expenses, as described in Table 7.0. And two ARBs, or 16.67% of the total respondents, have no education-related expenses since no schooling household members. In Table 7.1, around 13 household members, or 38.24% from both ARB barangays, are currently schooling at the college level with the same number and percentage for the high school level, and another 6, or 17.65% are at the elementary. Respondents aforementioned that those regular and additional sources of income, including their savings, as shown in Tables 5.4, 5.5, and 5.7, can cover the expenses related to education. Others access loans in Table 5.9 to support in case of deficit expenses in health and education.

**Table 7.0. Distribution of respondents' monthly expenses on health and education**

Barangay	Health		Education		
	Less than P2,000	More than P8,000	Less than P2,000	P2,001-P5,000	None
Mambuaya	100% (6)	0	66.67% (4)	16.67% (1)	(1)
Manuel Guinga	83.33% (5)	16.67% (1)	66.67% (4)	16.67% (1)	(1)
<b>Average</b>	<b>91.67% (11)</b>	<b>8.33% (1)</b>	<b>66.67% (10)</b>	<b>16.67% (2)</b>	<b>16.67% (2)</b>

**Table 7.1. Educational attainment of ARB's household members**

Level of education	Barangay		Percentage
	Mambuaya	Manuel Guinga	
Elementary level	18.75% (3)	16.67% (3)	<b>17.65% (6)</b>
Elementary graduate	0	0	<b>0</b>
High School level	50% (8)	27.78% (5)	<b>38.24% (13)</b>
High School graduate	0	0	<b>0</b>
College level	31.25% (5)	44.44% (8)	<b>38.24% (13)</b>
College graduate	0	11.11% (2)	<b>5.88% (2)</b>

## CONCLUSIONS

It has been widely held that the rural economy's underperformance, especially in terms of investment, productivity, income growth, and poverty, is engrained in the long-standing unfairness in land ownership and tenancy relation in the country (Barrios et al., 2015). Addressing these inequities is considered necessary to improve the prospects of agrarian households having access to and control agricultural land, thus enabling them to construct viable livelihoods and overcome rural poverty. Private property rights to land also provide the incentives to improve farm productivity and transform small farmers/tenants into efficient agricultural producers or entrepreneurs.

In this study, being an Agrarian Reform Beneficiary (ARB) has positive effects on total household incomes. This is attributed to better access to various factors related to production that generates an increase in total household income. There is also a positive association between landownership and household welfare – that is, households who own land through the agrarian reform have improved welfare and less probability of being poor and have improved access to health and education. Because of increased total household income, food security and nutrition are improved, thus promoting the overall health of the household members. Regular source of income from agriculture or farming covers the educational expenses of the household. Most ARBs in the study have higher educational attainment and are able to send their household members to school. In the case of deficit household spending, monthly savings and access to loans cover the expenses. ARBs have the confidence to access loans due to increased income and setting aside savings on a regular basis. The support services of DAR-CARP play a vital role in bridging land distribution to land productivity. These are capacity building, livelihood inputs and capital, distribution of agricultural facilities and machinery, construction of farm-to-market roads, and establishment of irrigation and water supply systems that make the awarded land viable and productive. The results, however, cannot be solely credited to CARP or being an ARB since there is no sufficient information gathered and the limited scope of this study. They represent the condition of selected Agrarian Reform Communities (ARCs) and do not necessarily reflect the general situation among ARCs.

The improvements mentioned were true only in representative ARCs, only in some ARCs. As of 2017, based on the ARC level of development assessment (ALDA) ratings developed by the DAR, a greater number of ARCs still produce below the national mean, and an equally significant number of ARB households have incomes below the poverty threshold.

According to IBON, after almost three decades of implementation, the Comprehensive Agrarian Reform Program (CARP) reported an 88% accomplishment rate. But 76% of CARP beneficiaries are unable to amortize the land granted to them under CARP and thus are at risk of losing their land. IBON added that the Philippines could learn from developed countries like Japan, South Korea, and Taiwan that did not require their agrarian reform beneficiaries to amortize and had the lands distributed freely.

Despite the tentativeness of the findings of this study and the serious challenges of the CARP implementation, there is no doubt that some improvements have occurred with positive and encouraging results. It has apparently benefited some portion of the rural population through its various programs to address poverty, ensure food security, better access to health and education, and empower people towards overall development.

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