Enhancing the Implementation of Common Service Facility (CSF) Under DAR-Agrarian Reform Community Connectivity and Economic Support Services (ARCCESS) Program in Ocampo, Camarines Sur, Philippines

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ABSTRACT

This study evaluated the implementation of the Common Service Facility (CSF) under the Department of Agrarian Reform–Agrarian Reform Community Connectivity and Economic Support Services (DAR-ARCCESS) Program in Ocampo, Camarines Sur. The CSF comprised farm machinery and equipment, including four-wheel-drive tractors, a hauling truck, and hand tractors, utilized by Agrarian Reform Beneficiaries Organizations (ARBOs) to enhance members' economic productivity. A descriptive-evaluative research design was employed, involving officers and members from selected ARBOs. Data were collected through structured questionnaires and focus group discussions.

Results indicated that the implementation of the CSF was generally perceived as highly acceptable in terms of ease of operation, cost-effectiveness, and accessibility. However, availability of units and policy implementation were rated as moderately acceptable. Key challenges identified included limited-service coverage, low rental competitiveness, scheduling constraints, inadequate financial record-keeping, insufficient maintenance practices, and lack of trained or permanent operators.

To address these issues, the study recommends strengthening promotional strategies, increasing member engagement, developing second-line operators, enforcing operational policies such as job order documentation, enhancing operator capacity through continuous training, and institutionalizing regular financial reporting. These measures are expected to improve the efficiency, sustainability, and overall impact of the CSF under the DAR-ARCCESS Program.

Keywords: Common Service Facility, DAR-ARCCESS Program, agrarian reform beneficiaries, farm mechanization, program implementation, rural development, Philippines

INTRODUCTION

The Common Service Facility (CSF) is one of the extension support service programs of the Department of Agrarian Reform (DAR) under the Agrarian Reform Community Connectivity and Economic Support Services purposely made to raise the farm productivity through increased yield and income and enhance their contribution to food sufficiency in the countryside (DAR-ARCCESS, 2013). The CSF is the provision to Agrarian Reform Beneficiaries Organizations (ARBOs) of farm machinery such as 4- wheel drive tractor, hand tractor, hauling truck, rice thresher, rice combine harvester, corn sheller and the like. According to Dizon (2018), mechanized farming equipment introduced to Agrarian Reform Beneficiaries (ARBs) will ensure farm productivity, thereby sustaining the ARBOs to become more productive and viable.

The CSF is in line with the farm mechanization program known as the Agriculture and Fisheries Mechanization Act (RA 10601). The program aims to increase the productivity and income of the farmers further while helping them become "Agri-preneurs" and less dependent on intensive labor in crop production. (DA-Ilocos Region,

2017) Agricultural mechanization plays an essential role in agricultural production in the Asia-Pacific region. It reduces drudgery, increases the safety and comfort of the working environment, enhances productivity, cropping intensity, and production. It increases income for agricultural workers and then improves social equality and, overall, uplifts their living conditions.

However, despite the perceived benefits of the farm mechanization program, it is hounded by social issues like the high cost of the machines and labor displacement, thereby affecting small farmers and farm workers become unproductive and idle (PhilMech, 2013). However, contrary to this, Bingabing (2013) stated that most young people are interested in new technologies and modern innovations. Most are also looking for less labor-intensive works.

By mechanizing farm work, drudgery could be significantly reduced, which would make it more attractive to the youth. Farmers realize that they can recover their investments in farm machinery since their production is enhanced, and post-harvest losses are reduced.

With the above-cited premises, this study assessed the Implementation of the Common Service Facility of the Department of Agrarian Reform in Ocampo, Camarines Sur.

Objectives of the Study

The general objective of the study was to assess the implementation of the Common Service Facility of the Department of Agrarian Reform in Ocampo, Camarines Sur. Specifically, the study aimed to:

1. Describe the socio-demographic profile of the farmer-beneficiaries;

2. Determine the Common Service Facilities provided;

3. Determine the level of acceptability of the CSF in terms of ease of operation, cost-effectiveness, accessibility, availability, and policy implementation;

4. Compare the differences in the implementation of CSF among the five ARBOs in terms of income generation, maintenance fund allocation, and policy formulation;

5. Determine the extent of utilization of CSF number of beneficiaries served, number of areas served, and the number of hours used per week;

6. Evaluate the different uses of CSFs during the pre-production, production, and post-production of farm enterprises among 5 ARBOs;

7. Identify problems encountered and solutions offered in the implementation of CSF, and;

8. Recommend policies to enhance the effective and efficient implementation of the CSF.

REVIEW OF RELATED LITERATURE

Aging of farmers is common to developing countries, where younger workers tend to opt for non-farm occupations (Moya et al. 2015). Since 2008, the age profile of agricultural workers has increased slightly, i.e., a higher proportion of older workers, and a smaller proportion of youngest workers. This is consistent with long term trends in farming, and workers in agriculture tend to be older and on average age faster than other workers (PSA-LFS, 2015).

Agriculture tends to have the least educated workforce among the primary sectors. The majority of workers in the Philippines have finished at least secondary school; however, better-educated workers tend to work outside agriculture (PSA-LFS, 2015).

Under the Philippine scenario, the efforts of mechanizing farming operations are hampered by several issues, foremost of which is the small and fragmented land holdings of farmers (Dela Cruz 2010; FTTC, 2006; Soni and Ou,n.d.). Japan, Taiwan, and Korea are among Asian countries with highly mechanized farming operations despite their small landholdings. These countries attained a high mechanization level because of strong political will and commitment and farmers' cooperation.

Sharma et al. (2006) reported that the composition of Indian farmers varies drastically. India has a large number of small farms with landholding of fewer than 2 hectares with very poor economic conditions. Single farm ownership and the use of tractors and machinery on these small farms are not economically viable. Nevertheless, through custom hiring of agricultural machinery, even small farmers have been able to get the benefit of agricultural mechanization.

FICCI (2007) reported that over the last few years, there had been considerable progress in agricultural mechanization. It is generally believed that the benefits of modern technology have been restricted to farmers with large landholdings. Yet the fact remains that even small farmers are adopting and utilizing selected farm equipment for efficient farm management through custom hiring. Mechanical equipment for various farm operations like tillage, sowing, irrigation, plant protection, and threshing are generally being used in the farming community.

Praweenwongwuthi et al. (2009) conducted a study on a combine harvester. Results of the study indicated that the impacts of Combine Harvester on economic and social of Tung Kula Ronghai region farmers concluded that the net benefit of combine harvesting was about 30.3% higher compared to manual harvesting and threshing. The rice yield was somewhat higher for farmers using Combine Harvesters than it was for those during manual harvesting. The average yield for combine harvesters is 0.35 ton/ha for manual harvesting.

Kumar (2010) reported that factors such as the size of landholding, irrigation, and access to institutional credits were found to have a positive significant bearing on the level of farm mechanization. The study also reveals that the younger generation is more opt for farm mechanization than the old block, i.e., age-old customs act as a hindrance to mechanize the farming practices.

Mohanty and Mohanty (2010) studied an assessment of yield using cono weeder in the SRI method of paddy cultivation. This study reveals that grain yield significantly increased under weeding by cono-weeder, i.e., 5674 kg/ha compared to manual weeding yield 4196 kg/ha. While the lowest grain yield, i.e., 3790 kg/ha recorded under no weeding or weed control by flooding water.

Chaudhary and Gangawar (2010) studied the effect of different types of machinery on rice cultivation. They reported that the drum seeder rice required 3.6% less input energy and gave 8.9% higher output energy, whereas direct-seeded required 2.6% less input energy and gave 8.2% higher output energy as compared to manually transplanted (puddle). The direct seeded (dry bed) and drum seeding (wetbed unpuddled) saved irrigation water by 13 to 19 % when compared to manual transplanting.

Dixit and Khan (2011) reported that the mechanical paddy transplanting by self-propelled transplanter has ensured proper crop stand has given a 6% increase yield compared to hand transplanting. The cost of transplanting was a little higher than hand transplanting, but it could be reduced by increasing the working hours of the machine. Hence mechanical paddy transplanter may be very useful during labor scarcity and also to enhance the timeliness of operation for large landholdings.

Kumar and Hugar (2011) studied that the total energy utilized for paddy cultivation by small farmers (6.237MJ)/acre) was significantly higher than that of medium (5.501MJ/acre) and large (5,303MJ/acre) farmers. The operation wise energy pattern in paddy cultivation showed that among all the operations, plowing consumed the highest amount of energy (308MJ)/acre), which accounted for 20.58 percent of the total energy utilized for all operations in paddy cultivation. The total cost incurred per unit of input energy was Rs. 2.98 per MJ in paddy cultivation.

Singh et al. (2011) reported that hand weeding, harvesting, and threshing were the primary operations performed predominantly by the women in the cultivation of direct seeding of paddy; while transplanting, weeding, harvesting and threshing were the essential operations of women involved in the cultivation of transplanted paddy. Women also played a role in many other farm activities, including the application of manure, fertilizers, and irrigation, but were excluded from activities that required operation of machinery in the operations like tillage, seeding by drum seeder, weeding by cono-weeder and harvesting by a combine.

Paman et al. (2012) studied that the main sources of farm power practiced by rice farmers were human labor and mechanical power, while drought animal was not used in rice farming operations anymore. Mechanical power is just used to perform land preparation, threshing, and milling operations, while other farm operations are still entirely done by manual. The total power required per hectare of rice farm operations was 418 kW (561 hp) on average. Although mechanized farm operations need more power, the total operation hours would decrease significantly.

According to the latest survey done by the Philippine Center for Mechanization and Postharvest Development, the level of farm mechanization in the country has risen to one horsepower per hectare (hp/ha) from 0.52 hp/ha in the 1990's making it possible for the country to catch up with the neighboring Southeast Asian countries by 2016. Based on the initial results of the survey, which was conducted this year, the current level of farm mechanization in the country is at least 1.0 hp/ha overall. For rice cultivation areas alone, the mechanization level is placed at 1.60 hp/ha.

The Philippine government has long been striving to achieve modernization of the rural sector. To date, the latest major enactment by the government is the Republic Act (R.A) 8435 of 1997, popularly known as the Agriculture and Fisheries Modernization Act (AFMA). It prescribes urgent related measures to modernize the agriculture and fisheries sectors of the country to enhance profitability and to prepare for the challenges brought about by globalization. Section 59 of this act gives priority to the development and promotion of appropriate agricultural machinery and other agricultural mechanization technologies to enhance agricultural mechanization in the countryside.

The government's effort to continuously improve the level of rice production leads to farm mechanization. Among the lead agencies that promote the system of farm mechanization, the Department of Agrarian Reform through the Provincial Program Beneficiaries Division (PBDD), which is a support service delivery component of the Agrarian Reform Project. It aims to strengthen and capacitate the Agrarian Reform Beneficiaries (ARBs) and the DAR assisted cooperatives and associations.

METHODOLOGY

This section presents the research design, study locale, respondents, research instruments, data gathering procedures, and methods of data analysis employed in the study.

Research Design

This study utilized a descriptive-evaluative research design to provide an accurate and systematic description of the variables relevant to the research objectives. Primary data were collected through scheduled interviews using a structured questionnaire. Secondary data were obtained from both published and unpublished documents relevant to the study.

Locale of the Study

The study was conducted in the Municipality of Ocampo, located in the Province of Camarines Sur in the Bicol Peninsula, Philippines. Ocampo is recognized as one of the rice granaries of the province, with approximately 1,905 hectares devoted to rice production. Other crops grown in the area include sugarcane and corn.

Geographically, Ocampo is situated at 13°33′41″ North latitude and 123°22′34″ East longitude. It lies approximately 445 kilometers south of Manila and is about 12 kilometers from Central Bicol State University

of Agriculture (CBSUA) in Pili. The municipality is bounded by Pili to the south, Goa, Tigaon, Baao, and Iriga City to the northeast, and Naga City to the northwest.

There are seven Agrarian Reform Beneficiaries Organizations (ARBOs) in Ocampo with a total membership of 784. However, this study focused on five selected ARBOs, namely: Ayugan-San Antonio Agrarian Reform Cooperative (ASAARCO), May-Ogob Agrarian Reform Cooperative (MOARC), Guinaban Multi-Purpose Cooperative (GMPC), Hibago Farmers Irrigators' Association (HFIA), and Gatbo-San Francisco Irrigators' Association (GSFIA).

ASAARCO, located in San Antonio, has 62 members (25 ARBs and 37 non-ARBs) and was organized on December 8, 2008, and registered with the Cooperative Development Authority (CDA) on January 22, 2002. MOARC, located in May-Ogob, has 116 members (74 ARBs and 42 non-ARBs) and was organized in January 2000 and registered with CDA in April 2000. GMPC, located in Guinaban, has 172 members (68 ARBs and 104 non-ARBs) and was organized in April 2004 and registered with CDA in July 2004. HFIA, located in Hibago, has 222 members (68 ARBs and 154 non-ARBs) and was organized in February 1984 and registered with the Securities and Exchange Commission (SEC) on September 29, 1989. GSFIA, located in Gatbo, has 89 members (87 ARBs and 2 non-ARBs) and was organized in January 2008 and registered with the SEC on December 10, 2008.

Respondents of the Study

A total of 96 Agrarian Reform Beneficiaries (ARBs) from the five selected ARBOs were included as respondents. Purposive sampling was employed to select respondents who had directly availed of the Common Service Facility (CSF). This ensured that participants could provide relevant and experience-based information regarding the utilization of the facilities.

Research Instrument

The primary data collection instrument was a structured questionnaire administered through scheduled interviews. The questionnaire was designed to capture information relevant to the objectives of the study. Secondary data were gathered from official records and documents obtained from the Department of Agrarian Reform (DAR), both at the provincial and municipal levels, as well as from ARBO offices and other related sources.

Data Gathering Procedure

Prior to data collection, coordination was conducted with the officers of the selected ARBOs to inform them of the purpose and significance of the study. A schedule for interviews was arranged for each ARBO, and respondents were interviewed on designated dates until all target participants were covered.

Secondary data were obtained from records maintained by the Department of Agrarian Reform, the Municipal Government of Ocampo, and the respective ARBO offices.

Data Analysis

The data collected were analyzed using descriptive statistical tools, including frequency counts, percentages, weighted mean, and ranking. These methods were used to summarize and interpret the data. Additionally, simple statistical analysis was applied to examine differences among selected variables.

To assess the level of acceptability of the implementation of Common Service Facilities (CSFs)**,** respondents' perceptions were measured across five dimensions: ease of operation, cost-effectiveness, availability, accessibility, and policy implementation. A four-point Likert scale was used to quantify responses, where: 4 = highly acceptable, 3 = moderately acceptable, 2 = fairly acceptable, and 1 = not acceptable. The computed weighted means were interpreted using the following ranges: 3.25–4.00 (highly acceptable), 2.50–3.24 (moderately acceptable), 1.75–2.49 (fairly acceptable), and 1.00–1.74 (not acceptable).

RESULTS AND DISCUSSION

This section discusses the results, analysis, and interpretation of data of the socio-economic profile of respondents; CSF provided; the level of acceptability of the CSF; differences in the implementation; extent of utilization; differences in the utilization; problems encountered and solutions offered; and policy recommendations.

Socio-Economic Profile Agrarian Reform Beneficiaries

The socio-economic profile included the age, gender, civil status, number of households, highest educational attainment, tenurial status, size of the farm, years in farming, crops commodities grown, monthly gross income, average yield per cropping of the respondents.

Age. The age of the respondents was categorized into young (21-35 years old), middle (36-50 years old), and old (51 years old and above).

The result showed that 69 % of the respondents were old, 24% were middle-aged, and 7 % were young. Based on the result, it was noted that the respondents involved in the implementation of the CSF- DAR-ARCCESS Project in Ocampo, Camarines Sur were mostly old. It can be surmised that the Filipino farmers today, including ARBs, even old already are still open to farm mechanization program. This may be because mechanized farming eases farming activities.

Gender. The result showed that 74% of the respondents were male, and 26% are female.

It is expected that most of the farmer-beneficiaries involve in the implementation of CSFs were male because CSFs comprise heavy farm equipment designed for men.

Civil Status. The study revealed that 73% were married, 22% were widows, 4% were single, and only 1% were separated.

The result implied that the respondents belong to a group that rear family and thus very important to consider as beneficiaries of the CSF.

Educational Attainment. The educational attainment of the respondents was categorized as no formal schooling (0), elementary (Grade 1-6), high school (1st year to 4th year), College Level (1st to 4th year -13) and post-college (masterate and doctorate)

Based on the results, 44% of the respondents finished elementary, 34% reached high school, and 22% reached college level.

With the result, it can be deduced that the respondents lack formal education. This could be attributed to the practice of the parents that are requiring children to help on the farm instead of sending them to school. The result further implicates the tendency of those who cannot afford to finish a degree in college just to cultivate the farm instead of going out of their home town for seeking jobs.

The number of Household Size. The number of the household was categorized into: small size family (1-3), medium-size family (4-6), big size family (7-9) and 10 and above huge size family.

The data showed that 48% of the respondents have a medium-sized family, 29% of the respondents have small-sized family, 19% with big size family and only 4% have very big size family.

The beneficiaries of CSF have either medium or small-sized families.

Years in Farming. The result showed that 26% of the respondents engaged themselves in farming for 11-20 years, 25% for 6-10 years, 24% for 21-30 years, 13% for 31-40 years, 8% for 41 years and above, and 4% for 1-5 years.

The number of years in farming is a numerical index for determining the experience and expertise of the farmers. The result showed that the respondents have vast experience in farming. Nevertheless, it is only at present they farmed using farm machinery.

Land Tenure Status. The tenurial status of the respondents was categorized into: amortizing owner with EP/CLOA, leaseholder, share-tenant, and owner/cultivator.

The result on tenurial status revealed that 50% of the respondents were Amortizing Owner with EP/CLOA, followed by 22% leaseholders. The owner/cultivator and share-tenant were 15% and 13%, respectively. This shows that the majority of the respondents had already received their respective Certificate of Land Ownership Award (CLOA). This certificate is issued upon the completion of payment by the farmer-beneficiary to the Department of Agrarian Reform.

Most of the Agrarian Reform Beneficiaries (ARBs) or farmer-beneficiaries of the CSFs project were awarded EP/CLOA because it is was the mandate of DAR that where the primary beneficiaries were ARBs.

Crops Grown. The result showed that 70% of the respondents planted rice, 25% planted sugarcane, and 5 % planted corn.

Most of the recipients of CSF were engaged in rice farming, and concomitantly, the farm machinery availed in the CSF program was designed mostly for rice production.

Monthly Gross Income. The monthly gross income of the farm families was categorized into: Php 5,000.00 and below; Php 5001–10,000; Php 10,001 – 15,000; Php 15,001 – 20,000; Php 20,001 – 25,000; Php 25,001 – 30,000; 30,001 – 35,000; Php 35,001- 40,000; Php 40,001 – 45,000; Php 45,001 – 50,000 and Php 50,000 and above.

Based from the result of the data gathered, 88% of the respondents gained monthly gross income of Php 5,000.00 and below, followed by 5% of the respondents with a monthly gross income of Php 5,001-10,000, and 3% of the respondents with a monthly gross income of Php 10,001-15,000 and Php 20,001-25,000 while 1% of the respondents with a monthly gross income of Php 25,001- 30,000 and Php 40,001-50,000, respectively.

Having a monthly gross income of 5,000.00 and below farmer-beneficiaries of the CSF was considered as the poorest of the poor; they were family with income per capita less than 10,000 pesos per month, i.e., poverty threshold level (NEDA, 2018). Table 1 shows the demographic profile of the agrarian reform beneficiaries.

Table 1. Demographic profile of the agrarian reform beneficiaries.

CHARACTERISTICS		**FREQUENCY (n=96)**	**PERCENTAGE**
Age			
	21-35(Young)	7	7
	36-50(Middle)	23	24
	51 & above	66	69
Gender			
	Female	25	26
	Male	71	74
Civil Status			

	Single	4	4
	Married	70	73
	Widow	21	22
	Separated	1	1
Educational Attainment			
	No Formal Schooling (0)	0	0
	Elementary Level (Grade 1-6)	42	44
	High School Level (1st to 4th year)	33	34
	College Level (11-13)	21	22
	Post-College Graduate (14)	0	0
Household Size			
	1-3 (Small Size)	31	32
	4-6 (Medium Size)	52	54
	7-9 (Big Size)	4	5
	10 and above (Very Big Size)	9	9
Monthly Gross Income			
	5000 & below	85	89
	5001 – 10,000	5	5
	10,001-15,000	2	2
	20,001-25,000	2	2
	25,001-30,000	1	1
	40,001-45,000	1	1

Farm size. The farm size of the respondents was classified into: below 1.0 ha; 1.1- 2.0 hectares; 2.1 – 3.0 hectares; 3.1 – 4.0hectares; 4.1 – 5.0 hectares; and 5.1 hectares and above.

The result showed that 52% of the respondents have below 1.0 ha farm area, followed by 39% with a farm area of 1.1-2.0 hectares, 4% of the respondents with farm areas of 2.1-3.0 hectares, and 3.1-4.0 hectares, respectively. Only 1% of respondents have 5.1 hectares and above the farm area.

The majority of the farmer-beneficiaries of the CSF program have small landholdings with an average of below 1 hectare. Significantly, farm mechanization is not appropriate to individual farmer-beneficiary. However, DAR has strategized a practical approach to adopting block farming suited for the mechanization program.

Average Yield. The average yield of rice, sugarcane, and corn being the major crops grown by the farmer-beneficiaries of the CSF was considered. Sugarcane generated 55 tons per season, 51-56 tons corn for two croppings, and 73-84 cavans per 3 croppings during dry and wet months.

The productivity yield of the respondents is above the regional average rice production of 72 cavans per hectare (DA-RFO 5 Report, 2014). The Sugar Regulatory Administration (SRA)-MDO reported that sugarcane block farm production is 46.23 TC/HA in 2016-2017 based on PENSUMIL data, which is higher than the production last 2017- 2018.

Hence, the farmers can meet the national average yield per cropping for rice, corn, and sugarcane, respectively. It means that the technologies introduced to the farmer-respondents are appropriate to increase a high yield and income to their farming. Table 2 shows the economic profile of the agrarian reform beneficiaries.

Table 2. Economic profile of the agrarian reform beneficiaries.

ECONOMIC ATTRIBUTES	**FREQUENCY (n=96)**	**PERCENTAGE**
Land Tenure Status		
Amortizing with EP/CLOA	51	53
Leaseholder	21	22
Share-tenant	13	14
Owner/cultivator	11	11
Crops grown		
Rice	67	70
Corn	5	5
Sugarcane	24	25
Monthly Gross Income		
5000 & below	85	89
5001 – 10,000	5	5
10,001-15,000	2	2
20,001-25,000	2	2
25,001-30,000	1	1
40,001-45,000	1	1
Farm Size		
Below 1.0 ha	50	52
1.1- 2.0 ha	37	39

	2.1- 3.0 ha	4	4
	3.1- 4.0 ha	4	4
	5.1 & above	1	1
No. of Years in Farming			
	1-5	4	4
	6-10	24	25
	11-20	25	26
	21-30	23	24
	31-40	12	13
Average yield per ha. (Cavans/Ha)			
	1st cropping	67	70
	2nd cropping	66	69
	3rd Cropping (Rice)	9	9
	1st Cropping (Corn)	5	5
	2nd Cropping (Corn)	5	5
	1st Cropping (Sugarcane)	24	25

Common Service Facilities Provided Among the ARBOs

The data in the provision of the CSF were obtained from the DAR Provincial Office and considered as secondary data. Based on the record, the HFIA has availed 1 unit 4-wd tractor and 3 hand tractors; 2 units of hand tractor by the GSFIA; 1 unit 4-wd tractor and 5 hand tractors by the MOARC; 3 unit hand tractor by the ASAARCO, and 1 unit truck by the GMPC. The 5 ARBOs has a total of 16 units CSF's that are operational for the sugarcane, rice production, and other crops**.** Table 3 shows the CSFs provided.

Table 3. Common service facilities provided among the 5 ARBOs

NAME OF ARBO's	**COMMON SERVICE FACILITIES (CSFs)**	**NO.**
Hibago Farmers Irrigators Association (HSFIA)	4 Wheel Drive Tractor	1
	Hand Tractor	3
Gatbo-San Francisco Irrigators Association	Hand Tractor	2
May-Ogob Agrarian Reform Cooperative (MOARC)	4 Wheel Drive Tractor	1
	Hand Tractor	5

Ayugan-San Antonio Agrarian Reform Cooperative (ASAARC))	Hand Tractor	3
Guinaban Multi-Purpose Cooperative (GMPC)	Hauling Truck	1
Total		**16**

Level of Acceptability of the Implementation of CSFs

The level of acceptability was based on the perception of the respondents in terms of ease of operation, cost-effectiveness, availability, accessibility, and policy implementation.

The degree of acceptability was categorized into: (4) - highly acceptable, (3) - moderately acceptable, (2) -fairly acceptable, and (1) not acceptable.

The results showed that in terms of operations and cost-effectiveness, the five ARBOs responded highly acceptable with an average weighted mean of 3.84 and 3.67, respectively. In terms of accessibility, all but one ARBO HFIA answered moderately acceptable with a weighted mean of 3.13. But speaking of availability, three ARBOs, namely: MOARC, GMPC, and ASAARCO claimed highly acceptable with an average weighted mean of 3.67, and HFIA and GSFIA answered moderately acceptable with an average weighted mean of 3.18.

In policy implementation, MOARC and GMPC replied highly acceptable with an average weighted mean of 3.76; however, HFIA, GSFIA, and ASAARCO answered moderately acceptable with an average weighted mean of 3.00.

Overall the results showed that the level of acceptability in the implementation of CSF 4 ARBOs is highly acceptable. Only HFIA revealed that CSF implementation is moderately acceptable.

The result implies that the process of implementation of the CSF in HFIA should be intensely monitored to level up their acceptability and satisfaction. Particular attention on the availability, accessibility, and adherence to the policy on the utilization of said CSF in the area. Table 4 shows the level of acceptability of the ARBOs. Table 4. Level of acceptability of common service facilities of the ARBOs.

ARBOs	**Ease of Operation**	**Cost-Effectiveness**	**Accessibility**	**Availability**	**Policy Implementation**	**General WTD Mean**	**LEVEL OF ACCEPTABILITY**
HFIA	3.4	3.3	3.2	3.3	3.3	3.0	Moderately Acceptable
GSFIA	3.9	3.3	3.6	3.1	3.1	3.4	Highly Acceptable
MOARC	3.2	3.9	3.8	3.9	3.7	3.7	Highly Acceptable
GMPC	3.9	3.6	3.7	3.6	3.7	3.7	Highly Acceptable
ASAARCO	3.3	3.7	3.7	3.4	3.8	3.6	Highly Acceptable
Legend:	Likert's Scale	***Mean Range***	***Interpretation***				

	4	*3.25-4.00*	*Highly Acceptable (HA)*			
	3	*2.50-3.24*	*Moderately Acceptable (MA)*			
	2	*1.75-2.49*	*Fairly Acceptable (FA)*			
	1	*1.00-1.74*	*Not Acceptable (NA)*			

Differences in the Implementation of Common Service Facilities

The differences in the implementation of CSFs were described in terms of income generation per year, maintenance fund allocation, and policy implementation. The data were obtained from records of the ARBOs in their respective offices, which were considered secondary data.

Income Generation. The highest income achiever was MOARC with an income of Php 583,385.00 per year, followed by GMPC with Php 105,000.00 per year, HFIA with Php 81, 940 per year, GSFIA with Php 34, 000.00 per year and the least income generator was ASAARCO with Php 16,000.00 per year. This is based on records.

The MOARC has achieved the highest income generated from CSFs implementation because their area of coverage was not only confined to their membership but in other areas adjacent to their area of jurisdiction. It was also noted that MOARC was strict in collecting payments. This ARBO also undertook promotional activities of their CSFs, thereby creating awareness and market of their facilities for rent to the farming communities. Furthermore, their members have manifested active patronage in the CSFs provided, as indicated in their financial statement submitted to the office of the DAR.

The other ARBOs have implemented CSFs with the same strategies but have less magnitude and impact. It was also noted in the income report that some members also have their units like hand tractors.

Maintenance Fund Allocation. An essential requirement in the maintenance of CSFs is fund allocation for its maintenance and repair to ensure sustainability and longevity. In terms of maintenance funds allocated, the data showed that MOARC has the highest fund allocation with Php 175,000.000 per year, followed by GMPC with Php 134,000.00 per year, HFIA with Php 76, 320.00 per year, GSFIA with Php 35,000.00 year and ASAARCO with the smallest fund with Php 25,000.00 per year.

The MOARC has attained the highest fund in the implementation of CSFs for the repair and maintenance of CSFs. Although the remaining ARBOs have fund allocation for the repair and maintenance of the CSFs, it varies to ARBOs awarded CSFs to maximize their funds' allocation.

Policy Implementation. In policy implementation, the results showed that MOARC and GMPC were strictly and adequately implementing the policies in the implementation of the CSFs. This is because of the strong leadership of the officers and the constant support of members to utilize the CSFs. This was evident in various commendations and awards of MOARC, and GMPC received regarding the implementation of CSFs.

With regards to the policy implementation of other ARBOs like HFIA, GSFIA, and ASAARCO, it is on records that there implementation and execution were very weak due to the abrupt change of the set of officers. Figure 5 and 6 shows the income generation and maintenance fund allocation of the ARBOs.

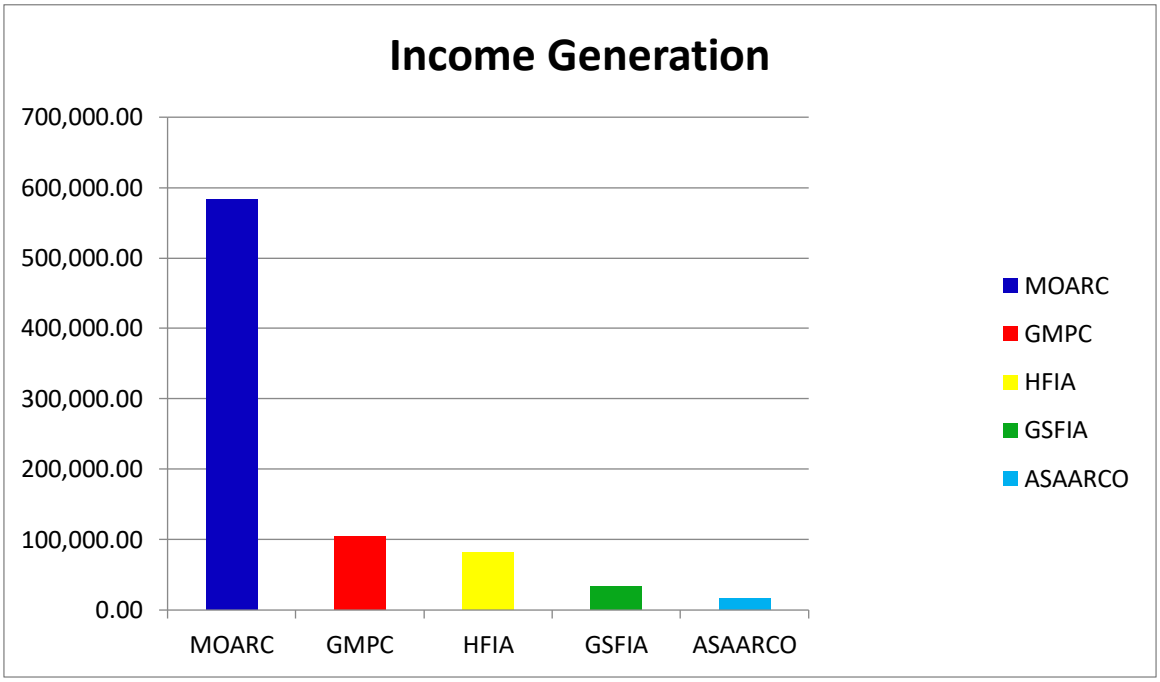

Figure 5. Income generation of the ARBOs

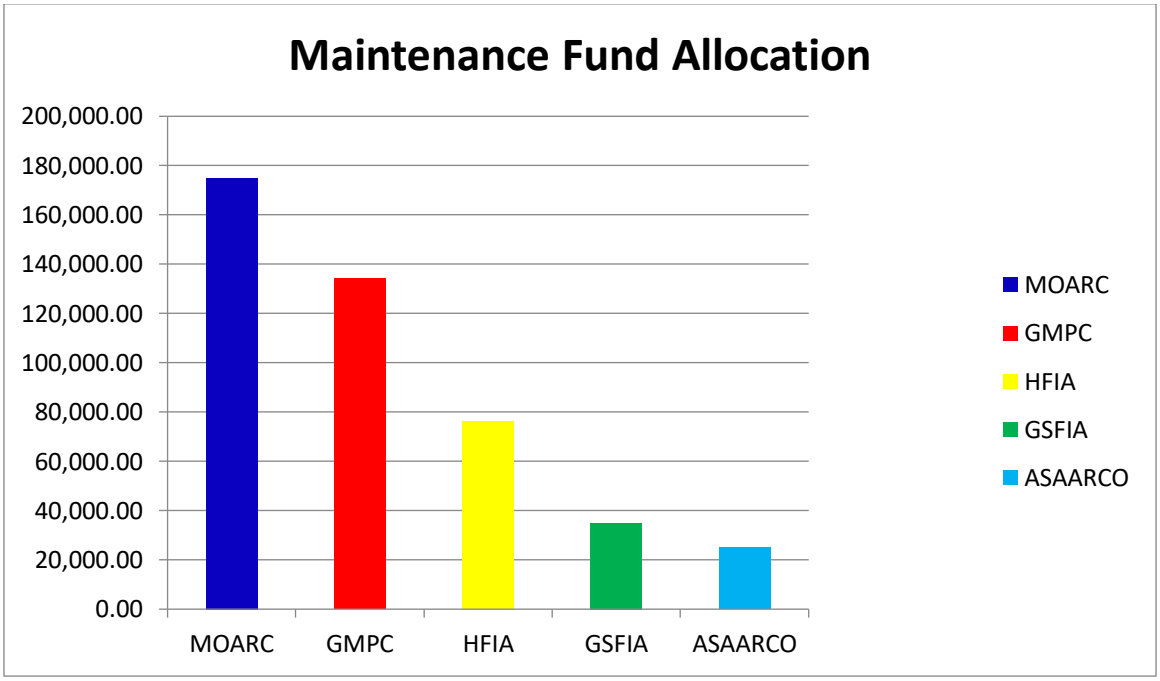

Figure 6. Maintenance fund allocation of the ARBOs

Extent of Utilization of Common Service Facilities

The extent of utilization of CSFs was determined in terms of the number of beneficiaries served, several areas served, and several hours used per week.

The data gathered in the utilization of CSFs were based on the secondary data submitted by the ARBOs to their respective offices.

The number of beneficiaries served. Based from the records, MOARC has the greatest number of beneficiaries served, with a total of 53 beneficiaries' members and non-members served, followed by GMPC with 32 beneficiaries served, HFIA with 25 beneficiaries served, GSFIA with beneficiaries served, and the least is

ASAARCO with 10 number of beneficiaries served. The MOARC has the best number of beneficiaries served because they served not only the members of the ARBOs but also the non-ARBs and non-members alike.

Though the members can avail of privilege discounts upon renting the units, the rental fees of non-members are still lower than the current rental fees from individual private owners. The number of beneficiaries and areas served depends on the existing policies on the area of operations (distance) and farm size.

The number of areas served. Based on the data, MOARC has the greatest number of areas served with a total of 106 hectares within the areas and nearby municipalities, followed by GMPC with 84 hectares areas served. HFIA has served a total of 52 hectares, while GSFIA and ASAARCO with a total of 24- and 15-hectares areas served, respectively.

To fully maximize the utilization of the CSFs, the ARBOs must widen the area of operations strategize by promoting the units and how it will aid the farmers and make a booking and the ARBOs' commitment to complement each other's units.

The number of hours used per week. Based on the records, MOARC has the greatest number of hours used with a total of 510 hours for 4wd-tractor and 73 hours for hand tractor. GMPC follows this with a total number of hours for hauling truck 105, HFIA with a total of 78 hours for 4 wd-tractor and 10 hours for hand tractor, GSFIA with a total number of hours of 85 for hand tractor while the ASAARCO has the minimum of 40 hours used for hand tractor.

With the use of CSFs, it will expedite farming activities through the full maximization of the farm machinery availed by the ARBOs. Furthermore, the beneficiaries served with the use of CSFs will maximize the cost of labor and time than using farmworkers. Figures 7 and 8 show the number of beneficiaries and areas served, respectively.

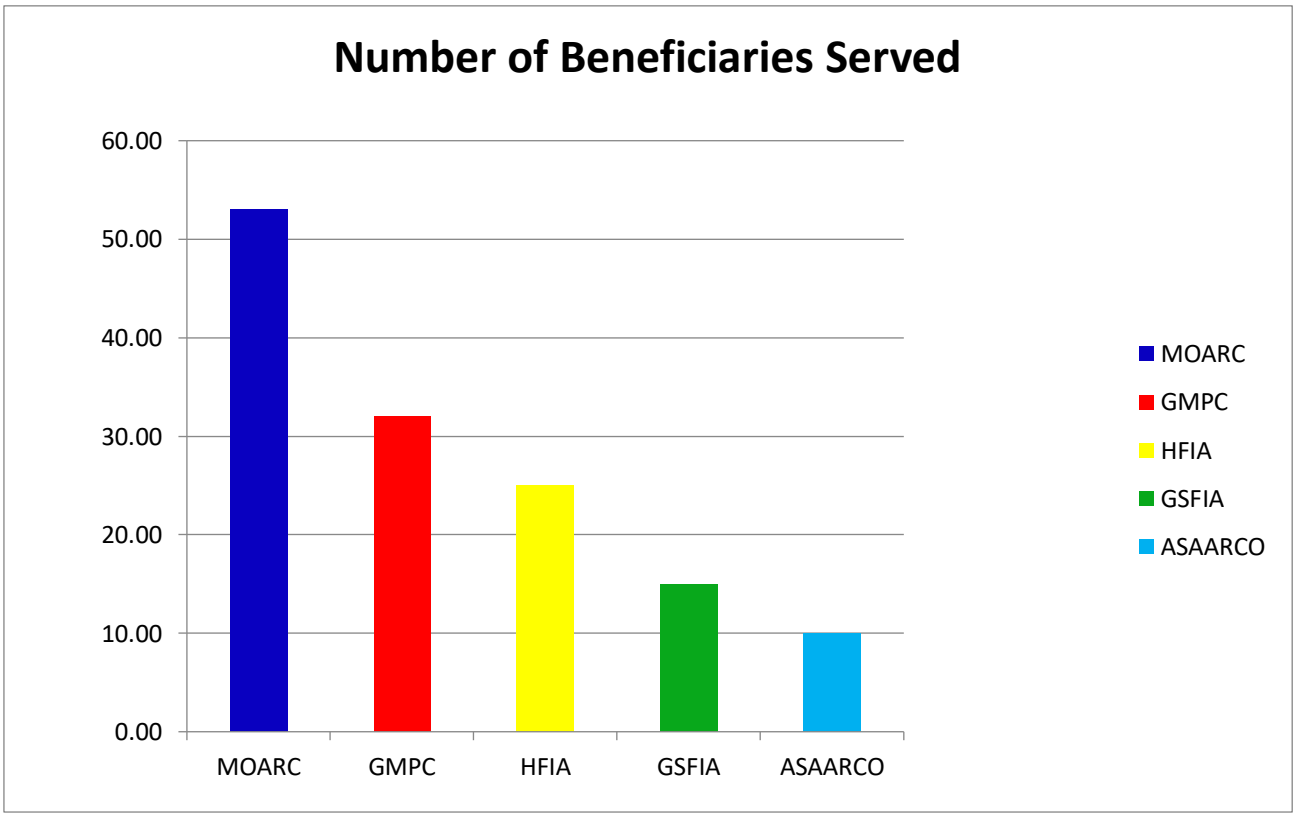

Figure 7. Number of beneficiaries served of the ARBOs

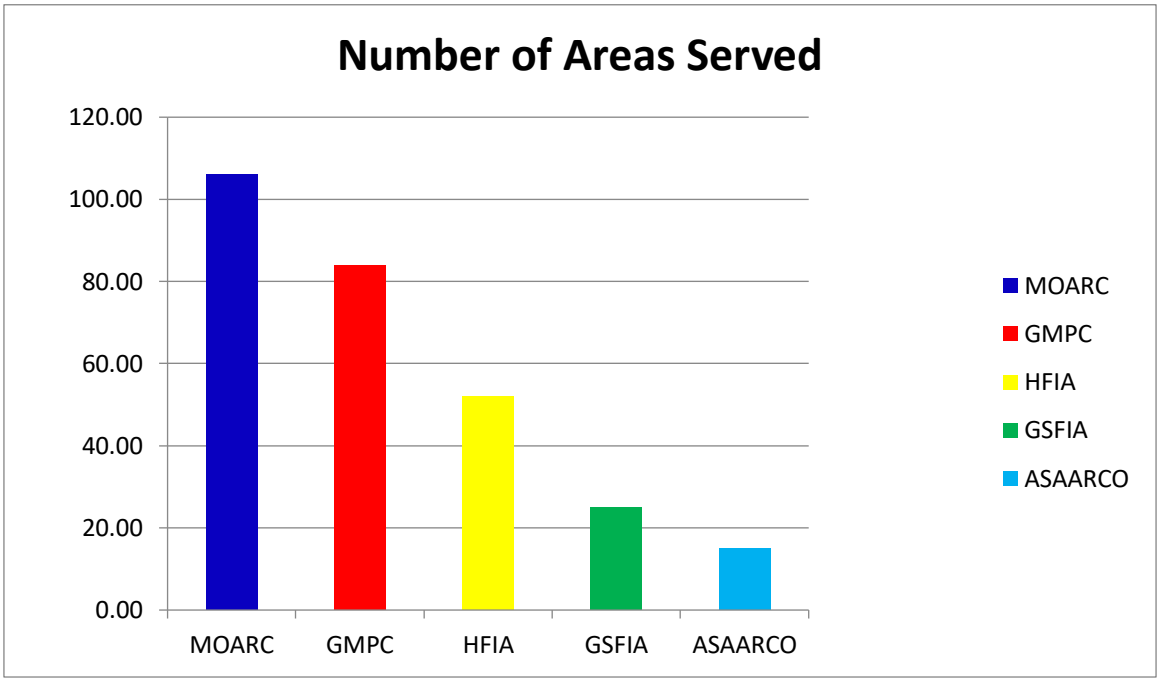

Figure 8. Number of areas served of the ARBOs

Differences in the Utilization of Common Service Facilities

The different uses of CSFs were described in terms of pre-production, production, and post-production.

The data of the different uses of CSFs were gathered from the respondents' responses.

The results showed that MOARC, GMPC, and HFIA utilized the CSFs in all phases of production (pre-production, production, and post-production). This was because the ARBOs, as mentioned earlier, have 4 wd-tractors, hand tractor, and hauling trucks that are needed in all phases of production. While ASAARCO and GSFIA have only utilized the CSFs during the production phase, particularly land preparation, this was because they only have hand tractor. Analysis of variance on the utilization of CSF on the Pre-production and Production process among 5 ARBOs was found significant. i.e., significant at a 5% level. However, the same analysis for Post-production utilization of CSF was found no significant difference among the five ARBOs.

From the preceding analysis, it could be concluded that CSF is being utilized differently among the five ARBO, except on Post Production activities, they use it similarly on its intended use. The implementing entities must have to seriously monitor the five ARBOs under study to ensure that the intended uses of the CSF are being observed in all phases of farming activities. Table 5 shows the different uses of CSFs.

Table 5. Different uses of common service facilities (CSFs) by ARBOs

FARM ACTIVITY/USES	**Number of Farmers**				
	MOARC	**GMPC**	**ASAARCO**	**GSFIA**	**HFIA**
Pre-production **					
• Hauling of planting materials	15	15	9	0	17
• Hauling of fertilizer	16	16	0	0	12
Sub-total	**31**	**31**	**9**	**0**	**29**
Production *					

• Land preparation	20	24	14	9	19
• Fertilizer application	15	24	0	14	13
• Harvesting	16	24	0	0	12
Sub-total	**51**	**72**	**14**	**23**	**44**
Post Production ns					
• Hauling to the storage area	7	0	0	0	15
• Hauling to market	12	24	0	0	12
Sub-total	**19**	**24**	**0**	**0**	**27**

Legend:

*****-*** *highly significant*

** - significant*

ns- not significant

Problems Encountered and Solutions in the Implementation of Common Service Facilities

The encountered problems. The sixth problem of the study is to identify what were the problems encountered and the solutions adopted concerning the common service facilities provided. According to the respondents, the common problems encountered in the utilization of CSFs were ranked as follows: (1) Lack of service areas, (2) Low rental price from the other unit owners, (3) non-availability of service facilities on the date preferred for operation (4) No available/proper financial records (5) Lack of facility maintenance and (6) Lack of permanent farm/unit operator.

The top 3 problems encountered of the ARBOs in the implementation of CSF is lack of service areas with total respondents of 38 followed by lower rental price from the other unit with a total of 16 respondents, while non-availability of service facilities on the date preferred for operation with 15 of the respondents.

The lack of service areas holds for the hand tractor units owned by the ARBOs due to the number of private individuals who have their units. These private individuals also offer their units at a much lower price; hence the ARBO finds it hard to command high rental fees because of competitions with private owners. Non-availability of the units on a preferred date means non-scheduling of operations, change of officers often affects the quality of financial records, change of operators also affects the proper maintenance of the units, and skills of operators affect the operations.

No available transaction records which will reveal the associated financial attribute for the utilization of CFS is also one serious problem that could be taken very seriously by the implementing entity. The sustainability of the CSF relies much on the aspect proper recording system that could be accessed once needed; else, this will be an avenue for dishonesty and financial loss due to no accountable person is the charge. Such a problem may also lead to corruption within the organization. Table 6 shows the problems encountered in the utilization of CSFs.

Table 6. Problems encountered by ARBOs in the utilization of CSFs**.**

PROBLEMS ENCOUNTERED	FREQUENCIES	RANK
Lack of Service Areas	38	1

Lower rental fees from private owners	16	2
Non-availability of service facilities at the time it is needed.	15	3
No available/proper financial records	12	4
Lack of maintenance facilities	8	5
Lack of permanent farm/unit operator	5	6

Solutions offered to address the Problems in the Utilization of Common Service Facilities

The solutions offered were ranked as follows (1) Adopt sound and more aggressive strategies for the promotion of service facilities (2) Encourage patronage of ARBs and ARBOs members (3) Observe weekly/monthly preparation of income report and (3) Train 2nd liner of farm operators (4) Enforce the policy on providing trip ticket/job order forms before the operation and (5) Provide opportunities to enhance the capability of farm operators for the continuous operation and maintenance of the CSFs.

Generally, the problems encountered by the ARBO beneficiaries could be considered not so serious since they come up with some measures that will solve those problems for its efficient and effective operation and management. Table 7 shows the solutions to problems encountered in the utilization of CSFs. Aside from the above solutions, the researcher implies the adoption of values formation among the ARBO members, particularly on the principles of cooperativism, which is intended to make them more productive and sustainable via the patronage of the members. It appears that the ARBOs are not loyal to the cooperative by resorting to private owners who could afford to require low rental fees for the same chattel or facilities. Another value formation among the members is the virtue of honesty and good faith in all forms of the undertaking. Even if management lacks recording systems of their service transactions, one must be honest in dealing with CSF transactions. These will enhance more loyalty among member-coop beneficiaries to patronize their cooperatives.

Table 7. Solutions to the problems encountered by the ARBOs in the utilization of common service facilities.

SOLUTIONS TO THE PROBLEMS	**FREQUENCIES**	**RANK**
Adopt sound and more aggressive strategies for the promotion of CSF	55	1.5
Encourage patronage of CSF among ARBOs	55	1.5
Train 2nd liner of farm operators	21	3.5
Compel the ARBOs to observe weekly/monthly preparation of income report	21	3.5
Enforce the policy of requiring an approved trip ticket/job order before an operation	10	5
Provide opportunities to enhance the capabilities of farm operators for the operation and maintenance of the CSF	8	6

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This section contains the summary, conclusion, and recommendations of the study.

Summary

The study was undertaken to (1) Describe the socio-demographic profile of the farmer-beneficiaries; (2) determine the Common Service Facilities provided; (3) determine the level of acceptability of the CSF in terms

of ease of operation, cost-effectiveness, accessibility, availability, and policy implementation; (4) compare the differences in the implementation of CSF among the five ARBOs in terms of income generation, maintenance, areas served and policy formulation;

(5) determine the extent of utilization of CSF number of beneficiaries served, number of areas served and number of hours used per week; (6) evaluate the different uses of CSFs during the pre-production, production, and post-production of farm enterprises among 5 ARBOs; (7) identify problems encountered, and solutions offered in the implementation of CSF, and (8) recommend policies to enhance effective and efficient implementation of the CSF.

The study focused on the Implementation of the Common Service Facility of the DAR in Ocampo, Camarines Sur. A total of 96 ARBs were considered as the respondents of the study from the five (5) ARBOs. Purposive sampling was adopted in identifying the respondents.

The research instrument used in this study was the structured questionnaire through the scheduled interview, which obtained the primary data. The secondary data were obtained from published and unpublished documents necessary in this study.

The 5 ARBOs has a total of 16 units CSF's that are operational for the sugarcane, rice production, and other crops**.** In the level of acceptability of the program implementation of the CSFs, it is showed that the program was either highly or moderately acceptable. Moreover, the differences in the implementation of CSFs the ARBOs were implemented the same management practices to achieve the target incomes.

The extent of utilization of CSFs resolves and accelerates farming activities through the full maximization of the farm machinery availed by the ARBOs. Furthermore, their different uses of CSFs started from 1) pre-production 2) production and 3) post-production.

The problems encountered in the implementation of Common Service Facilities (CSFs) were: (1) Lack of service areas, (2) Low rental price from the other unit owners, (3) non-availability of service facilities on the date preferred for operation (4) No available/proper financial records (5) Lack of facility maintenance and (6) Lack of permanent farm/unit operator.

Moreover, the solutions offered in the implementation of CSFs were (1) Adopt sound and more aggressive strategies for the promotion of service facilities (2) Encourage patronage of ARBs and ARBOs members (3) Observe weekly/monthly preparation of income report and (3) Train 2nd liner of farm operators (4) Enforce the policy on providing trip ticket/job order forms before the operation and (5) Provide opportunities to enhance the capability of farm operators for the continuous operation and maintenance of the CSFs.

Conclusions

Based on the objectives and analysis, the following conclusions were deduced:

1. The majority of the farmers were male (69%), belonging to the old age group, married (73%), and elementary graduate (44%). Likewise, farmers have a medium-sized family with (48%) and (50%) of the total respondents were considered ARBs of the farmland as Certificate of Land Ownership Award (CLOA) holders. Also, (88%) respondents have an average monthly income of Php 5,000.00 and below and have small landholdings with an average of below 1 hectare. Significantly, farm mechanization is not appropriate to individual farmer-beneficiary. The hectare, in cropping per year, most of the respondents have 2 cropping seasons for rice and corn crops and only 1 crop season for sugarcane crops with a total average yield of 73-84 cavans for rice. The average yield of sugarcane 50-55 ton cane per hectare (TC/HA) and for corn is 51-56 cavans;

2. Based on the study, the 5 ARBOs has a total of 16 units CSF's that are operational for the sugarcane, rice production, and other crops**.**

The HFIA has availed 1 unit 4-wd tractor and 3 hand tractors; 2 units hand tractors by the GSFIA; 1 unit 4-wd tractor and 5 hand tractors by the MOARC; 3 units hand tractors by the ASAARCO, and 1 unit truck by the GMPC.

3. For the level of acceptability, the result showed that the majority of the ARBOs highly accept the implementation of the CSFs program. This means the CSFs Program was very beneficial and advantageous to all ARBOs in Ocampo, Camarines Sur.

4. The differences in the CSFs implementation were found significant in the pre- and production activities of the farmers.

5. The extent of utilization of CSFs resolves and accelerates the farming activities through the full utilization of the farm machinery availed by the ARBOs. Moreover, the beneficiaries served get the best out of the cost of labor and time than using farmworkers.

6. The different uses of CSFs are 1) pre-production a. they were hauling of planting materials, and; b. hauling of fertilizers; 2) production, a. land preparation, b. application of fertilizers; and c. harvesting; 3) post-production a. hauling to the storage area and; hauling of products to market. The result showed that the utilization of CSFs varies significantly in all phases of production among the ARBOs.

7. According to the problems encountered in the implementation of CSFs, the top 3 problems of the ARBOs were (1) lack of service areas (2) lower rental offered by other privately owned farmers and; 3) non-availability of service facilities on the date preferred for operation.

8. The solutions offered in the implementation of CSFs were: (1) Adopt sound and more aggressive strategies for the promotion of service facilities (2)

9. Encourage patronage of ARBs and ARBOs members,

10. (3) Observe weekly/monthly preparation of income report

11. (4) Train 2nd liner of farm operators (5) Enforce the policy of requiring an approved trip ticket/job order forms before the operation and (6) Provide opportunities to enhance the capability of farm operators for the continuous operation and maintenance of the CSFs.

Recommendations

Based on the findings of this study, it is recommended to:

1. Develop coherent Policy, Systems, and Procedures (PSPs) in the utilization of CSFs.

2. Devise a system of Monitoring and Evaluation to ensure Financial Accountability and Transparency of Income Records in the Utilization of CSFs.

3. Establish and sustain farmer leaders and second liners for the continuity of the CSFs Program.

4. Campaign on awareness of the farm mechanization program to the smallholder farmers to grasp the support programs of the DAR and other government agencies.

5. Conduct immense recruitment of Agrarian Reform Beneficiaries (ARBs) in the Agrarian Reform Community for the importance of the membership to the ARBOs, which will be served by the CSFs.

6. Do capacity building and cooperative strengthening of the ARBOs in managing and supervising the implementation of the CSFs program.

7. Reorient the values of the ARBOs to enhance cooperativism, honesty, and good faith, a high degree of accountability to public trusts, and common fund for sustainable cooperativism.

Recommendations for Future Studies and Community Engagement

The researcher recommends to conduct a study on Impact Evaluation to the same ARBOs after three to five years of implementation of the project and to come up with recommendations for replication and dissemination of best practices along this program.

The study shall be conducted by external entities, not part of the project, to ensure free and unbiased results and analysis of findings.

A community outreach project is likewise recommended concentrating on values reformation, financial management, and result-based monitoring and evaluation.

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