The Impact of Comprehensive Agrarian Reform Program (CARP) on Farmer-Beneficiaries in the 3rd Congressional District of Iloilo, Philippines

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Abstract - *The study aims to assess the impact of the comprehensive agrarian reform program on farmer beneficiaries in the 3rd Congressional District of the province of Iloilo for the year 2014. The Network design was used as research design to obtain and provide useful information in judging decision alternatives involve in the impact of Comprehensive Agrarian Reform Program to the farmer-beneficiaries. The participants were the 386 farmer beneficiaries. Data were gathered using survey-checklist form and analyzed through frequency counts, percentages, mean and t-test of dependent/correlated means. The researcher observed ethical considerations in conducting the study. The results show that the comprehensive agrarian reform program has a positive impact on the lives of the farmer beneficiaries. It has contributed to higher income and led to reduced poverty incidence before and after the program. The beneficiaries tend to be better off in terms of wellbeing compared to before the implementation of the program. They have better access to sanitary toilet facilities and potable water, and have a propensity to have higher educational attainment. Support services became essential in enhancing food security and building infrastructures that uphold food production, enhance trade, and increase income of the household beneficiaries living in the rural community. Further, the household farmer beneficiaries have a propensity to boost the chances to reduce poverty.*

Key Words: *Agrarian Reform, Comprehensive Agrarian Reform Program, Farmer-Beneficiaries, Impact Assessment*

INTRODUCTION

Agrarian reform is a major reform measure meant to address rural poverty, as rural poverty has always has been highly linked to access to land. It is even a recurrent theme in the history of the different countries in the world. The Greek and Roman eras were filled with stories of struggles over a piece of land between the landowners and the landless individuals. It resulted to struggle for power, prestige and ownership.

In the Philippines, after the establishment of the Philippine Independence in 1946, the problems of land tenure remained. It was even most severe in certain areas of the country that resulted to peasants protest against the landowners. The peasants demanded for equitable access to the land they till which is the main source of livelihood and sustenance in the rural areas.

The Region VI- Western Visayas, it was implemented through the Department of Agrarian Reform (DAR) regional office of the province of Iloilo. The local DAR office was in-charge of identification of lands that will be subjected to the CARP. It sends all notices and information to the farmer-beneficiaries and the landowners. The said office transmits reports and records to the regional office on the updates of the program implementation.

In response to these social, economic, and political issues in the country, the Constitution of the Philippines made Agrarian Reform as the centerpiece program. Agrarian reform derives its mandate from basic principles enshrined in the Constitution. The Philippine Constitutions of 1935, 1973 and 1987 all attest to this. The 1935 Constitution mandated a policy of social justice to insure the well-being and economic security of the people. The 1973 Constitution provided that "*The State shall formulate and*

implement an agrarian reform program aimed at emancipating the tenant from the bondage of the soil." The 1987 Constitution contains more specific provisions on agrarian reform Article II, Declaration of Principles and State Policies, Section 21 — *"The State shall promote comprehensive rural development and agrarian reform*." Article XII, National Economy and Patrimony, Section 21 — *"State shall promote industrialization and full employment based on sound agricultural development and agrarian reform, . . .*" Article XIII, Social Justice and human rights, section 4 – "*The state shall, by law, undertake an agrarian reform program founded on the right of farmers and regular farm workers, who are landless, to own directly or collectively the lands they till or in the case of other farm workers, to receive a just share of fruits thereof*, [1].

In the study conducted on the analysis of the agrarian situation and implications of covering greater than 5 to 24-hectare lands under the Comprehensive Agrarian Reform Program (CARP) [2], wherein the study aimed to rationalize the coverage of lands greater than five (5) to 24 hectares under CARP. The study covered sample landowners who are engaged in farming specific crops such as: rice, corn, coconut, sugar, and banana/orchards. The study concludes that the landowners, even of medium-size lands, are generally wealthy and that the CARP coverage of medium-size lands will not adversely affect the landowners. Even among those landowners whose lands are highly commercial and productive, the implications would only be temporary. Generally, the landowners' asset base is huge that with their entrepreneurial skills, it would be relatively easy to re-channel proceeds of their land compensation into other productive enterprises. On the other hand, the estimated cost of covering the remaining balance of medium size lands under CARP is about PhP20 billion where the massive financial requirements remain one of the main constraints to the effective and speedy implementation of the Program. The study highlights the prioritization strategy in the CARP coverage of medium-size lands, i.e., by focusing on lands where the owners are less dependent on the income from the farmlands, the extent of tenancy is comparatively high, the average land size tends to be at the upper end of the distribution, and the expected land value is relatively low. The study cited that these prioritization parameters characterize the situation in coconut lands.

The findings of the study conducted in Barangay Balabag, La Carlota City, Negros Occidental (Sugarcane) [3], stated that to determine the changes that have transpired during the last five (5) years of its implementation, it shows that lease agreement between the 60 ARBs and the investor was terminated in 2006 and was not renewed or extended due to the ARBs' resistance on the automatic deduction of their land amortization payment from their lease rentals. However, majority (42 out of 60 ARBs) of them entered into individual lease agreement with different "financiers" on either half of the area of their lands or the entire area of their lands through verbal or informal arrangement for a period of one (1) to three (3) years. The other 18 ARBs are now engaged in individual farming operation. Most of the ARB-participants in the FGD claim that their current farm income is higher compared to when their lands were under lease agreement with the former investor. In addition, the ARB-participants who are engaged in individual farming perceive that the level of living of the ARBs has generally improved because the higher income derived from their farms. The study indicates that some ARBs who opted for individual farming operation and full take-over of the lands awarded to them under the CARP became empowered as they now experience being a landowner and manager of their own lands who make all the farm management decisions.

Another study conducted on the Economic Effects of the Comprehensive Agrarian Reform Program in the Philippines [4], stressed that using a panel data from a series of surveys (1990, 2000, and 2006), the economic impacts of the Program were evaluated. Using income, expressed in real terms, as the main economic indicator, the analyses showed that there have been significant positive changes to the economic well being of the beneficiaries of the Program using the first difference between the intervention and the control group. The first difference was also significant across time or on the before and after the program comparison. However, the double difference approach, which compared the control group before and the intervention group after revealed that the changes in economic benefits were no longer significant. One could argue that the changes on the economic attributes of the respondents are not necessarily attributable to CARP as an intervention. However, the Program needs to be given the benefit of the doubt. Hence, there is the need to look at further

refining analytical techniques to isolate the effects of the intervention and to develop analytical tools based on a more systematic study design. Further, the paper also examined the effect of the program using alternative indicators, such as the value of assets as well as level of expenditures. The results did not deviate from the findings with income as the main indicator, which indicate that these alternate indicators can also be explored in similar studies.

Further, the Comprehensive Agrarian Reform Program (CARP) is the centerpiece program of the Aquino Administration for economic growth and development. This program instituted through Proclamation No. 131 issued by President Corazon C. Aquino and implemented primarily through Republic Act No. 6657, CARP seeks the massive and rapid increase in agricultural productivity and improvement of access of the masses to resources particularly land. It features the redistribution of agricultural land, the education and organization of beneficiaries, and the delivery of support services-credit, infrastructure, technology, post harvest and marketing facilities, and the like. The law was signed by President Aquino on June 10, 1988 and took effect on June 15, 1988 [5].

Moreover, this study is significant to the local and national government officials as basis for a summative evaluation of the Comprehensive Agrarian Reform Program. The farmer-beneficiaries should also be aware that the program is granted to them to improve their being, to promote social justice, industrialization, economic growth and development. Lastly, it provides data as to the efficiency and effectiveness of the program operation to come up with an immediate action to further enhance the performance of the program after its expiration.

OBJECTIVES OF THE STUDY

This study sought to assess the impact of the Comprehensive Agrarian Reform Program (CARP) on farmer-beneficiaries in the 3rd Congressional District, Province of Iloilo, Philippines. Specifically, this study sought answers to the status of the farmer-beneficiaries, the changes in their lives, and how these changes improved the lives of the farmer-beneficiaries.

METHODS

This study was conducted to assess the impact of the Comprehensive Agrarian Reform Program on the lives of the farmer-beneficiaries in the 3rd Congressional Districts, Province of Iloilo, Philippines. The Network Design method was used in the study. Network design was used to obtain and provide useful information in judging decision alternatives involve in the project subject of assessment [6]. The project concept and design refers to the assumptions about the community needs and community responses as well as the labor availability. In addition, resource mobilization is all about the timeliness of fund disbursements. Further, service delivery is evaluated and monitored in terms of timeliness of delivery of inputs to the farmer-beneficiaries to evaluate the impact of the said program implemented.

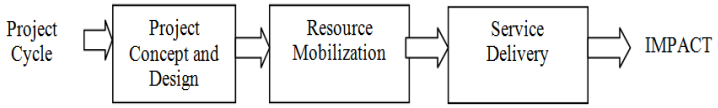

Figure 1. Network Design

The participants of the study were the three hundred eighty-six (386) active farmer-beneficiaries selected through stratified random sampling. In determining the sample size, the researchers used the Slovin's Formula [7]. The data needed in the study were gathered using the survey-checklist form to assess the status, changes and impact of the Comprehensive Agrarian reform Program on the lives of the farmer-beneficiaries. In addition, the said survey-checklist form was content validated by five jurors. Accordingly, descriptive data analyses were analyzed through frequency counts, percentages. Likewise, mean and t-test of dependent/correlated means were used to determine the rate of change in all variables included in the study of the farmer-beneficiaries.

The researchers observed ethical considerations in conducting the study with the beneficiaries of the program through giving of consent, wherein the respondents have agreed to be involved in the study. Likewise, informed consent was also addressed that the participants have all the right to know the purpose and contribution of the study. Further, the researchers establish confidentiality and anonymity to the results of the study to the utmost. Lastly, safety and protection of the respondents were also considered in conducting this research.

RESULTS AND DISCUSSION

Background of Farmer Beneficiaries

Household size

Table 1. Household size

Item	Before (mean)	After (mean)	Rate of Change
Number of Children/Household Size	4.85	4.69	-16.32%

To ascertain the data on the household size of farmer beneficiaries, the researchers obtained the mean and the rate of change. The farmer beneficiaries have average household size was with the mean of 4.85 before and 4.69 after the implementation of the program including the head of the family, his spouse, children and other members within the household. Further, the results revealed that there is a decrease in the rate of change in terms of number in the household members.

Table 2. Area awarded per municipality

Municipality	Area (ha)
Badiangan	36.8682
Bingawan	48.4603
Cabatuan	9.4098
Calinog	87.6603
Janiuay	63.7427
Lambunao	65.6071
Maasin	7.5298
Mina	35.4226
Pototan	54.8367
Total	409.5376

Table 2 presents the results across municipalities on the area awarded per hectare. There is a variation in terms of hectare granted to farmer beneficiaries from different municipalities. The most number of hectares is awarded to the municipality of Calinog with a total area of 87.6603ha. Next, are the municipalities of Lambunao and Janiuay with an area of 65.6071ha and 63.7427ha. While the municipalities of Cabatuan and Maasin have the least number of hectares with a total area of 9.4098ha and 7.5298ha.

Table 3 presents the ownership and tenurial status and category of land. The results revealed that there is an increase of 33.60% in the farm owned by the farmer beneficiaries. On the contrary, a decrease was observed in the farm rented and leased of the farmer beneficiaries.

Table 3. Ownership and tenurial status and category of land

Status of Farm Ownership	Before %	After %	Rate of Change
Owned	49.00%	82.60%	33.60%
Rent	18.70%	7.50%	-11.20%
Leased	32.40%	9.60%	-22.80%
Tenurial Status			
Tenant	51.00%	31.10%	-19.90%
Paid worker	9.80%	4.40%	-5.40%
Crop sharing	6.00%	2.60%	-3.40%
Owner	33.20%	61.90%	28.70%
Category of Land Ownership			
CLOA	75.90%	69.40%	-6.50%
Emancipation Patent	24.10%	30.60%	6.50%

As to the tenurial status the results revealed that there is an increase in the rate of change of 28.70% as owner of the land they till. On the other hand, there is a decrease in terms of tenant workers, paid workers and crop sharing. Further, there is a high rate decrease as tenant workers of the farm. In addition, a slight decrease was also recorded as paid workers and as crop sharing of yields. In addition, majority of the farmer beneficiaries are holders of Emancipation Patents (EP) with an increase of 6.50%. As to holders of the Certificate of Land Ownership and Awards (CLOA), the results revealed that there is a decrease.

Table 4 presents educational attainment of household head and members of farmer-beneficiaries. The results revealed that majority of the respondents were high school graduate (21.20%), high school level (21.00%), and elementary level with 20.70%. Likewise, 17.90% of the respondents are elementary graduate. In addition, 41 out of 386 respondents or 10.60% are college graduate. Lastly, 8.50% of the respondents are in the college level of education. The findings also revealed that there is a high negative rate of change was recorded in elementary level of education. A slight negative rate of change was also recorded in secondary level. In addition, a positive high rate of change was recorded in the enrolled children in tertiary level of education. Likewise, a slight positive rate of change was also recorded in vocational level.

Table 4. Educational attainment of household head and members of farmer-beneficiaries

Educational attainment of Household Head	f	%	
Elem. Level	80	20.70%	
Elem, Graduate	69	17.90%	
High School Level	81	21.00%	
High School Graduate	82	21.20%	
College Level	33	8.50%	
College Graduate	41	10.60%	
Education of Household Members	Before (mean)	After (mean)	Rate of Change
Number of children enrolled:			
Elementary	1.32	.83	-48.45%
Secondary	1.14	1.03	-11.14%
Vocational	.14	.17	3.89%
College	.46	.89	43.27%
Number of children graduated:			
Elementary	.97	.90	-7.25%
Secondary	.80	1.14	33.68%
Vocational	.10	.18	8.03%
College	.54	1.21	66.33%

The findings of the study supports in the study on the impact of agrarian reform on poverty [8], stated that in the year 2000, heads of ARB and non-ARB households commonly finished only primary education. Majority of the household members (43%) had no formal schooling. Elementary graduates were only 8.2%, while 11.5% were high school graduate. The proportion of college graduates among the household members was minimal at 6.9 percent. In addition, 14% of ARB and 9.5% of non-ARB household members were high school graduates. As for college graduates, only a slight difference between the ARBs and non-ARBs was noted. Among the ARB household members, 7 percent graduated from college. In comparison, 6.8 percent among the non-ARB household members were college graduates, [8].

Table 5 presents the socio-economic status of head and spouse, source of capital and income, credit marketing and housing structure. The results showed that there is an increase in the rate of change of 1.50% in the employed household head. On the contrary, there was a decrease recorded in the rate of change in the unemployed head of the family. On the part of the status of spouse, an increase was recorded of 4.60% employed and a decrease for unemployed spouse. Also, there was a high decrease on the income from farm.

Table 5. Status of head and spouse, source of capital and income, credit marketing and housing structure

Household Head	Before (%)	After (%)	Rate of Change
Employed	32.40%	33.90%	1.50%
Unemployed	67.60%	66.10%	-1.50%
Status of Spouse			
Employed	21.00%	25.60%	4.60%
Unemployed	79.00%	74.40%	-4.60%
Source of Income			
Farm	86.50%	25.80%	-60.70%
Non-Farm	13.50%	14.20%	0.70%
Source of Capital			
Personal	75.10%	65.30%	-9.80%
Government	12.70%	10.90%	-1.80%
Subsidy			
Loan	8.30%	13.50%	5.20%
Cooperative	0.50%	2.10%	1.60%
OFW	3.40%	8.30%	4.90%
Credit Marketing			
Middle Man	55.40%	55.20%	-0.20%
NFA	18.10%	18.70%	0.60%
Cooperative	26.40%	26.20%	-0.20%
Housing Structure			
Concrete	17.60%	42.00%	24.40%
Wood	33.70%	25.10%	-8.60%
Light	48.70%	32.90%	-15.80%

The source of income of the farmers was from farm before the implementation of the program with the 85.50% as compared to 25.80% after the implementation. On the contrary, very slight increase of 0.70% was noted on the income of non-farm from 13.50% to 14.20%. Likewise, on the source of capital of the farmer beneficiaries used in cultivation and production in the farm, loan or credit obtained from private individuals and from the contribution of Overseas Filipino Workers (OFW) members of the family were increased to 5.20% and 4.90%. A slight increase of 1.60% was also noted in cooperative as the source of capital of farmer beneficiaries. On the contrary, a moderate decrease was recorded in the personal as a source of capital of farmer beneficiaries. Likewise, a very slight decrease was also observed in the government subsidy. Further, on the credit marketing, there was a decrease in the rate of change of selling the products to middle man or commercial rice traders and cooperatives. On the other hand, the farmer beneficiaries have a very slight increase of 0.60% in the rate of change in selling the products to the NFA. Moreover, as to the housing structure of the farmer beneficiaries, an increase of 24.40% rate of change was recorded in the housing made of concrete

materials from 17.60% increased to 42.00% of the respondents. On the contrary, a decrease was observed in the rate of change in the housing made of wood from 33.70% decreased to 25.10%. While light materials were also decreased from 48.70% to 32.90%.

The results supported the study conducted on the impact of CARP to the household [8], 7.4 percent of the household heads were unemployed in 2000. ARB heads among poor and nonpoor households were most commonly employed, with 93 percent poor heads employed and 96 percent nonpoor heads employed. The average farm income of ARM was P67.761 as stated in the Philippine Journal of Development in the same year. Likewise, 61.5& or more than half of their income was sourced from the farm. In addition, ARB household's average income from farm has risen by 87% from 1990 to 2000, [8].

The findings of the study conducted under direct selling of farm products to households of both ARB and non-ARB had significant increase from 2000-2006, [9]. This indicates a lower dependence on traders and middlemen in the marketing of goods and possibly an opportunity to command a better price for the farmers' produce, [10]. Likewise, only 2.2% of the ARB relied on cooperatives in 2000 and even reduced in 2006 to 1.5%, In 2000, only 2.2 percent of the ARBs relied on cooperatives in selling their produce. The number was even reduced to 1.5 percent by 2006. Access to formal credit, however, remains few and far between. Most ARBs obtain credit from informal moneylenders or enter credit arrangements with traders and contract buyers [10]. Stringent credit policies of the banks discourage many of the farmer-beneficiaries, if not most of the farmers in general.

In support to the results of the study, the ARB families who used concrete materials comprised only of 18.2%, while 15.8% from non-ARB. Likewise, as to wood materials, ARB families were 35.8%, while the non-ARB was 36.5%. In addition, ARB families who used light materials was comprised of 37.6%, and the non-ARBs was 41.6%, [8].

Table 6 presents the estimated income of household head per municipality and type of expenditure. The results revealed that there is a variation of increase in the amount of peso in all municipalities. A high increase change in terms of was recorded in the municipalities of Cabatuan and Janiuay and least increase was noted in the municipality of Lambunao per household head.

Table 6. Estimated income of household head per municipality and type of expenditure

Municipality	Before (Peso)	After (Peso)	Change (Peso)
Badiangan	3,516.12	3,987.09	470.96
Bingawan	2,927.77	3,338.88	411.11
Cabatuan	2,430.76	3,038.46	607.69
Calinog	5,543.10	5,713.79	170.68
Janiuay	4,894.24	5,600.44	706.19
Lambunao	5,663.79	5,734.48	70.68
Maasin	2,327.27	2,727.27	400.00
Mina	4,261.90	4,740.95	479.04
Pototan	5,775.55	6,133.33	357.77
Total	7,878.36	11,418.52	3,540.15

Further, most of the income of the households were generally low and does not make the both ends meet. Household income is below the poverty threshold of the region and even the whole country. Further, the results also showed that households increased their expenditure on food to Php 20.98 per day. A change of Php 62.02 per day was recorded in education of children. An increase in the amount of Php 123.31 per month was noted in clothing. Lastly, health of the farmer beneficiaries increased to Php 100.00 per month. Further, the results confirmed that the farmer beneficiaries have a propensity to spend big amounts of money on food and other basic needs rather than on the area of education, health and clothing of the family.

The results of the study seemed to agree in a paper on the current state of ARBs found out that the average household income of the ARB households were low and generally just enough to meet the minimum basic needs of the household members. It also showed that more than half of their income already came from nonfarm sources, [11].

Results of the study seemed to support the study in which of the total expenditure of the ARB families in 1990, 52.1 percent was spent for food, or P13,798, while 53.1 percent was spent by the non-ARB families on food, or P12,052 [8].

Table 7 presents the household possession of farmer-beneficiaries. The findings of the study on the household possession of the farmer beneficiaries revealed that there was a high rate of increase was recorded in the household possession such as TV, refrigerator, DVD/VCD player and cell phones. In addition, a slight rate of increase was also recorded in mini component, washing machine, and karaoke of family households.

Table 7. Household possession of farmer-beneficiaries

Item	**Before f**	**%**	**After f**	**%**	**Rate of Change**
TV	285	73.80%	362	93.80%	20.00%
Refrigerator	81	21.00%	175	45.30%	24.30%
Transistor radio	168	43.80%	164	42.50%	-1.30%
Karaoke	43	11.10%	71	18.40%	7.30%
Mini component	23	6.00%	49	12.70%	6.70%
Washing machine	22	5.70%	47	12.20%	6.50%
DVD/VCD player	121	31.30%	219	56.70%	25.40%
Cell phone	213	55.20%	327	84.70%	29.50%

On the contrary, a decrease of -1.29% rate of change in the possession of transistor radio.

Ownership of assets is an indicator of a household's economic well-being, [8]. In particular, certain assets are highly correlated with poverty status. Another study, found out that ownership of refrigerator is very strongly correlated with being nonpoor, [12]. In 1990, the proportion of ARB families who owned a TV set was 27.2 percent, higher than the proportion of non-ARB families with a TV set. The proportion of households who were agrarian reform beneficiaries who owned a TV set is 53.7 percent in 2000.

Table 8. Access to sanitary toilet and water facilities

Item	Before %	After %	Rate of Change
Access to Sanitary Toilet			
Sanitary	79.30%	92.20%	12.90%
Non-sanitary	20.70%	7.80%	-12.90%
Access to Potable Water			
Potable	67.90%	75.90%	8.00%
Non- Potable	32.10%	24.10%	-8.00%

Table 8 shows the access to sanitary toilet and water facilities. The results show that there is an increase in the rate of change in terms of access to sanitary toilet facilities of 12.90% of household farmer beneficiaries, and a decrease of -12.90% in the rate of change was recorded in the access to non-sanitary toilet facilities of the household beneficiaries. The results revealed also that, there is an increase 8.00% from 67.90% raised to 75.90% and a decrease in the access of non potable from 32.10% decreased to 24.10%.

The results of the study supports the findings conducted wherein ARBs had greater access to sanitary toilet facilities than non-ARBs (75.7 percent vs. 72.1 percent). The proportion of households who were ARBs with access to sanitary toilet was 75 percent in 2000 and 64.2 percent in 1990, [8]. In addition, ARBs had greater access to potable water than non-ARBs (77.7 percent vs. 76.1 percent, respectively). The proportion of households who were agrarian reform beneficiaries with access to potable water in 2000 was 77.7 percent, compared to 74.6 percent with access to potable water in 1990 [8].

Table 9. Estimated crop yields (rice)

Municipality	First Cropping (cavans)		Second Cropping (cavans)		Rate of Change First Cropping (cavans)	Rate of Change Second Cropping (cavans)
	Before	After	Before	After	Before	After
Badiangan	783	860	523	600	77	77
Bingawan	1243	1287	1300	1318	44	18
Cabatuan	320	405	274	258	85	-16
Calinog	1212	1318	960	1082	106	122
Janiuay	3791	4126	3856	4115	335	259
Lambunao	2517	2556	2459	2494	39	35
Maasin	275	370	250	243	95	-7
Mina	1699	1783	1476	1525	84	49
Pototan	2106	2166	2002	2021	60	19
Total	13,946	14,871	13,100	13,656	925	556

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Table 10. Farm Cultural Practices of Farmer-Beneficiaries

	Before		After		Rate of Change
	f	%	f	%	
Animal Drawn Plot	171	44.30%	182	47.15%	2.85%
Power Tiller	44	11.40%	63	16.30%	4.90%
Four – Wheel Tractors	24	6.20%	42	10.90%	4.70%
Chem. Pest and Disease Control	92	23.80%	107	27.70%	3.90%
Contour plowing	385	99.70%	29	7.50%	-92.20%
Slash and burn	90.	23.30%	79	20.50%	-2.80%
Hedgerows	24	6.20%	24	6.20%	0.00%
Crop rotation	127	32.90%	132	34.20%	1.30%
Mulching	18	4.70%	32	8.30%	3.60%
Certified seeds	30	7.80%	66	17.10%	9.30%
Composting	71	18.40%	74	19.20%	0.80%
Terracing	134	34.70%	140	36.30%	1.60%
Chemical fertilizer	174	45.10%	216	56.00%	10.90%
Cover Cropping	41	10.60%	54	14.00%	3.40%
Traditional Varieties	124	32.10%	128	33.20%	1.10%

Table 9 shows the estimated crop yields (rice). The results revealed that there is a variation in terms of estimated crop yield per cropping among municipalities in the 3rd Congressional Districts in the province of Iloilo. First cropping had higher harvest in terms of cavans compare to the second cropping. The results also revealed that there is an increase of harvest of the farmers during the first cropping. A high rate of increase was recorded in the two municipalities such as Calinog and Janiuay. The rest of the municipalities have a moderate increase in the rate of change in terms of harvest during the first cropping. While seconds cropping, the results were varies per municipality. There is a decrease in the rate of change of harvest in the municipalities of Cabatuan and Maasin. The rest of the municipalities in the 3rd districts show the results of increase in harvest of the farmer beneficiaries. Likewise, high rate of change was recorded in the municipalities of Calinog and Janiuay. In addition, the municipalities of Badianga, Bingawan, Lambunao, Mina and Pototan showed a moderate increase of harvest during the second cropping.

Table 10 shows the farm cultural practices of farmer-beneficiaries. The results revealed that majority of the farmer beneficiaries are practicing animal drawn plot, crop rotation, terracing, and the use of chemical fertilizers and traditional varieties of seeds for planting. While the use of four-wheel tractors and mulching as farm cultural practices were the least number of farmer beneficiaries applied were recorded. In addition, there is a high decrease in the contour plowing method of farming was also recorded. Likewise, a very low decrease was noted in the slash and burn method of farming. On the contrary, the application of chemical fertilizers and the use certified seeds obtained a high rate of change in farm cultural practices of farmer beneficiaries. Lastly, no change was observed in the hedgerows farm cultural practices of the farmer beneficiaries.

In the study on the impact of agrarian reform on poverty, stressed that farmers commonly used chemical fertilizers to produce good and abundant crops. Almost three- fourths (74.1 percent) of farmers adopted the use of modern technology in improving yield. Of the total farmers engaged in the practice of using chemical fertilizers, more than half (55.9 percent) were agrarian reform beneficiaries. Also, among ARB farmers, almost 80 percent used chemical fertilizers while almost 70 percent of non- ARB farmers did the same, [8].

CONCLUSIONS

The results show that agrarian reform has had a positive impact on farmer-beneficiaries. It increases household income and reduced poverty incidence. The after implementation of the program tends to have higher income and reduced poverty incidence. The socio-economic status of the farmer beneficiaries has a slight increase due to the reduction in the area of farm size directly cultivated the farm; however, there is an increase in non-farm income. The non-farm income of the farmer beneficiaries and spouse contributed as a whole to the improved socio-

economic status of the households. Their additional income is supplemented by the assistance of employed household members in government and private offices and remittances of the OFW family members. They also tend to fare better in terms of the other indicators of well-being such as access to potable water and sanitation toilet facilities. It has also a positive impact on the children that obtained a higher educational attainment. The access to education is due to the proximity of the external campuses of the WVSU in the 3rd Congressional District which offers affordable tuition and miscellaneous fees. Credit marketing and government services also promote higher incomes.

RECOMMENDATION

The government should offer scholarship grants or discounts on tuition and miscellaneous expenses for the children of the farmer beneficiaries in the public SUCs. There is a need for the government to improve the services of the Department of Agriculture in the community in terms of technical assistance, subsidy for high yields varieties of rice and farm related inputs. Likewise, credit marketing and government services should be expanded and made accessible. In addition, infrastructure support like solar and mechanical rice drier and additional farm to market roads should be extended to farming communities. Moreover, well organized and stabilized irrigation system shall be constructed for the farmer beneficiaries to increase production. Lastly, the government should expand the program to benefit both farmer and non-farmer beneficiaries.

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