

Effectiveness of the Mindanao Rural Development Program Community Fund for Agricultural Development (MRDP-CFAD) in Increasing Income and Achieving Food Security Among Bukidnon Women

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Abstract—Introduced in 2007, the Mindanao Rural Development Program Adaptable Program Loan 2-Community Fund for Agricultural Development (MRDP APL2 - CFAD) was implemented in the 12 municipalities of Bukidnon to give the disadvantaged and vulnerable sectors, including women, the opportunities for increased income from agriculture and fishery production, including allied value-adding activities using appropriate and sustainable technologies. Of the 12 municipalities in Bukidnon, Damulog and Don Carlos had the most number of sub-projects on crops particularly corn with the most number of women farmers engaged in corn production. Generally, this study was conducted to determine the effectiveness of the MRDP APL2-CFAD in improving income and achieving food security among the Bukidnon women. Specifically, this study aimed to describe the personal, socio-economic and psychological profiles of the women farmers and the implementers of the MRDP APL2 CFAD in Bukidnon; to evaluate the factors supportive of and related to the implementation of the MRDP-CFAD program; to determine the level of effectiveness of the MRDP APL2-CFAD in increasing income and attaining food security; to assess the degree of influence of personal, socio-economic, psychological, supportive and MRDP CFAD-related factors on the effectiveness of MRDP APL2 CFAD; and to identify the problems encountered by the women farmers and program implementers during program implementation.

Keywords—MRDP-CFAD, Income, food security, Mindanao woman, Bukidnon.

I. INTRODUCTION

A. Background of the Study

Women in rural areas produce half of the world's food. Among the developing countries in the world, Food Agricultural Organization (FAO) estimates that almost one-half of the total agriculture labor force in the developing countries consists of women (NAFC, 2003). On top of being mothers and wives, they are also farmers. Rural women fulfill many responsibilities in the farm and at home.

Food is essential in human life and its development. Household food security is an important measure of well-being. Although it may not encapsulate all dimensions of poverty, the inability of households to obtain access to enough food for an active, healthy life is an important component of poverty. A country like the Philippines should ensure adequate supply of staple food at affordable prices for its populace.

The implementation of Republic Act 8435, the Agriculture and Fisheries Modernization Act of 1997, empowers the state through the Department of Agriculture in coordination with other government agencies, local government units and non-government organizations in formulating medium and long term programs addressing food security and other concerns. But despite the government's intervention on food security, Philippines suffered heavy food shortage in 2008 which opened the mind of the Filipinos that the country does not have enough food stored for its people.

The National Statistical Coordination Board (NSCB) released a report stating that the poverty incidence in Bukidnon was at 38.8% in 2009 and 40.4% in 2006 according to the "First Semester Per Capita Poverty Threshold and Poverty Incidence among Families by Region and Province: 2006 and 2009". This ranked Bukidnon 18th in 2006 and 20th in 2009 among the country's 80 provinces in terms of poverty ranking.

To reduce high poverty incidence, the national government embarked on critical interventions that will ensure the delivery of social and economic investments to uplift the quality of life of the people. The Mindanao Rural Development Program Adaptable Program Loan 2-Community Fund for Agricultural Development (MRDP APL2 - CFAD) Program was introduced in 2007 and implemented in the 12 municipalities of Bukidnon to give disadvantaged and vulnerable sectors, including women, the opportunities for increased income from agriculture and fishery production, including allied value-adding activities,

that make use of appropriate and sustainable technologies preferred and selected by the target groups. CFAD has introduced eight (8) categories under the project: Agroforestry with 5 sub-projects, Integrated Farming System (61), Livestock Production (67), Small Infrastructure (23), Fishery Sub-project (0), Crop Production (50), Pre-and Post-harvest Facilities (16) and Other Livelihood Projects (9).

Of the twelve municipalities in Bukidnon, Damulog and Don Carlos had the most number of sub-projects on crop production particularly corn and had the most number of women farmers engaged in corn production. Up to the present, there has been no study conducted yet to assess the effectiveness of the MRDP CFAD program in Bukidnon; so then, this study is conceptualized. Hence, this study tried to assess the effectiveness of the MRDP-APL2 CFAD program in increasing income and attaining food security among Bukidnon women.

B. Statement of the Problem

This study generally aimed to evaluate the effectiveness of the MRDP APL2 CFAD program in increasing income and achieving food security among the women farmers in the province of Bukidnon.

Specifically, the study sought to answer the following questions:

1. What are the personal, socio-economic and psychological profiles of the women farmers and the implementers of the MRDP APL2 CFAD program in Bukidnon?
2. What are the factors supportive of and related to the implementation of the MRDP-CFAD program?
3. What is the level of effectiveness of the MRDP APL2 CFAD program in increasing income and attaining food security as perceived by Bukidnon women and program implementers?
4. What is the degree of influence of personal, socio-economic, psychological, supportive and MRDP CFAD-related factors on the effectiveness of MRDP APL2 CFAD program among women participants and program implementers in Bukidnon?
5. What are the problems encountered by the women participants and the program implementers during the program implementation?

C. Objectives of the Study

Generally, this study aimed to determine the effectiveness of the MRDP APL2-CFAD program in improving income and achieving food security among the Bukidnon women. Specifically, this study aimed to:

1. describe the personal, socio-economic and psychological profiles of the women farmers and the implementers of the MRDP APL2 CFAD program in Bukidnon;
2. evaluate the factors supportive of and related to the implementation of the MRDP CFAD program;
3. determine the level of effectiveness of the MRDP APL2 CFAD program in increasing income and attaining food

security as perceived by Bukidnon women and program implementers;

4. assess the degree of influence of personal, socio-economic, psychological, supportive and MRDP CFAD-related factors on the effectiveness of MRDP APL2 CFAD program among Bukidnon women and program implementers and;
5. identify the problems encountered by the women participants and program implementers during program implementation.

D. Significance of the Study

The significance of the study is inherent to the fact that the assessment of effectiveness can identify the positive and negative effects of the MRDP APL2 CFAD program among Bukidnon women. The results of this study could serve as reference for the Department of Agriculture to improve their policies, strengthen project procedures and determine support services needed to make the program efficient and effective. This could also provide insights whether to pursue the implementation of the Mindanao Rural Development Program- Phase 3.

The study would provide the Provincial Government of Bukidnon the baseline information on the effectiveness of the MRDP APL2 CFAD program which could be used as a guide in implementing other poverty alleviation projects. The findings would guide the local policy makers in identifying appropriate interventions for the sustainability of the projects being operated by their respective Peoples' Organization at the barangay level.

The outcome of this study would further enable the community to analyze the contribution of the program to their daily living, and thus, motivate them to participate and engage in the said program. The findings could also serve as reference for future studies on effectiveness of any government program.

E. Scope and Delimitation of the Study

This study was limited to the assessment of the effectiveness of MRDP APL2 CFAD program in increasing income and attaining food security among the women in the municipalities of Damulog and Don Carlos, Bukidnon. These municipalities had fully completed the implementation and had the most number of common sub-projects.

The respondents were restricted to the program implementers/focal persons and women who participated in the Crop Production sub-project category, specifically yellow corn production, from 2007-2012 and who were non-members of the indigenous community.

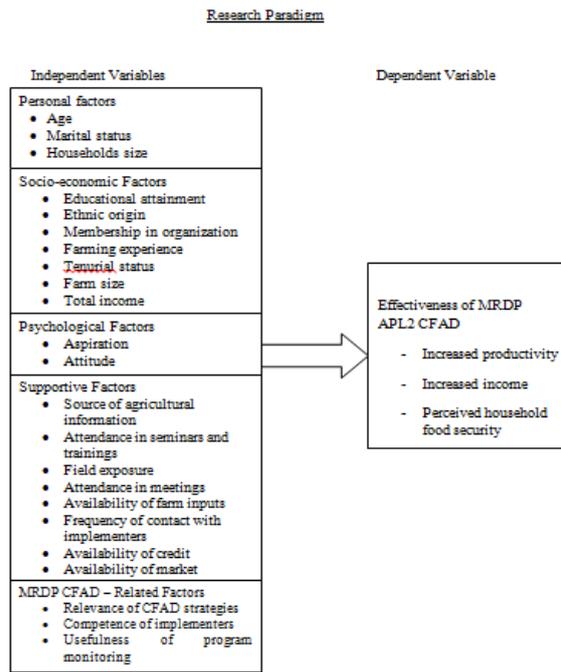


Figure 1. Schematic diagram showing the relationship between independent variables and effectiveness of the MRDP APL2 CFAD program in the Province of Bukidnon

II. METHODOLOGY

This chapter discusses the locale of the study, respondents, sampling design, instrumentation, data collection and analysis employed in the study.

A. Locale of the Study

The selection of the locale of the study was based on the following criteria: a) the municipalities must have the most number of rural women participants engaged in crop production, specifically corn, based on the MRDP DA-RFU X Accomplishment Report 2012; b) the municipalities have completed the implementation of the program; and c) majority of the women participants have planted similar crop. Based on the criteria, this study was conducted in the municipalities of Damulog and Don Carlos. The two municipalities are both located at the Southern part of Bukidnon.

Damulog is a 4th class municipality in the province of Bukidnon, Philippines. According to the 2010 census, it has a population of 25,538 people in 4,378 households. Damulog is politically subdivided into 17 barangays, namely: Aludas, Angga-an, Tangkulan (Jose Rizal), Kinapat, Kiraon, Kitingting, Lagandang, Macapari, Maican, Migcawayan, New Compostela, Old Damulog, Omonay, Poblacion (New Damulog), Pocopoco, Sampagar, San Isidro and Kibawe. The local government unit (LGU) of Damulog, Bukidnon was recognized by Department of Agriculture, Region 10 as best implementer of livelihood sub-projects under the Community Fund for Agricultural Development (CFAD) component of the DA's Mindanao Rural Development

Program (DA-MRDP) among the 44 municipalities implementing the program in the region. Though a late enrollee of MRDP, as they took the slot of a delisted non-performing LGU in Bukidnon sometime in 2009, Damulog

was able to cope with the requirements on time like provision of required equity and operational fund for staff and other involved committees in program implementation; and submission of required documents such as: Implementation Management Agreement (IMA), Certificate of Availability of Funds (CAF) request, request for fund release, liquidation and periodic reports, and provision of technical and support staff in the overall CFAD implementation through the Municipal Agriculture Office and concerned support units.

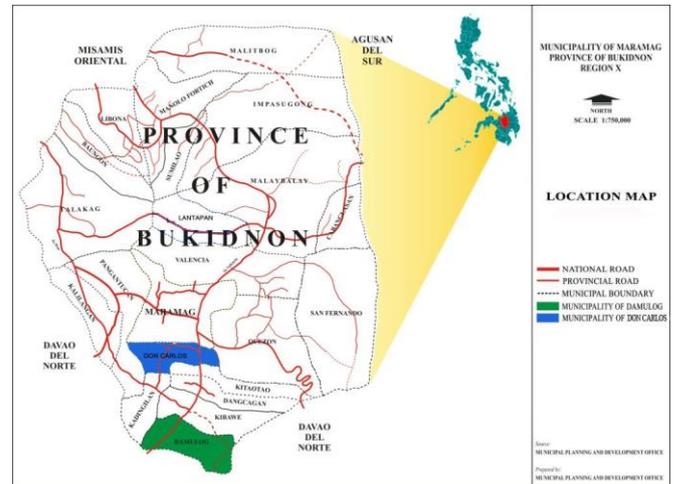


Figure 2. Map of the province of Bukidnon showing the Municipalities of Damulog and Don Carlos

Don Carlos is a first class and partially urban municipality. It is politically subdivided into 29 barangays, namely: Bismartz, Bocboc, Buyot, Cabadiangan, Calao-calao, Don Carlos Norte, Don Carlos Sur (Poblacion), Embayao, Kalubihon, Kasigkot, Kawilihan, Kiara, Kibatang, Mahayahay, Manlamunay, Maraymaray, Mauswagon, Minsilagan, New Nongnongan (Masimag), New Visayas, Old Nongnongan, Pinamaloy, Bualas, San Antonio East, San Antonio West, San Francisco, San Nicolas (Banban), San Roque, and Sinangguyan. Don Carlos is the third voting Congressional District of Bukidnon. According to Census 2010, it has a population of 64,334 people in 13, 845 households with an area of 213.7 sq. km.

Don Carlos is an agricultural municipality. It is endowed with vast tracts of fertile agricultural land and a favorable climate. Many people in the area are greatly dependent on the produce of the land being the main source of income of the municipality. Agriculture utilizes about 149.5894 sq. km. of land, representing 70% of the total land area of the municipality for the production of various crops. In terms of production, rice yielded 3,156.60 metric tons both in irrigated and rainfed farms in 1998. White and yellow corn production accounted to 39,086.10 metric tons covering 66.98 sq. km. representing 11.78% of the total agricultural area. Sugarcane production as second major crop next to corn, covers a physical area of 50 sq. km. representing 33.42% with a total production of 21,000 metric tons.

B. Respondents of the Study

There were two groups of respondents of the study. The first group of respondents comprised the women participants engaged in Corn Production of the MRDP APL2 CFAD program from 2007 to 2012. There were 115 women-members in Damulog and 70 in Don Carlos with a total of

185 women-members of MRDP APL2 CFAD from the two municipalities. The second group included the 13 implementers or focal persons of MRDP APL2 CFAD program in the municipalities of Damulog and Don Carlos. These implementers were from the Department of Agriculture Regional Field Unit 10 and those assigned in the Municipal Agriculture's Office in Damulog and Don Carlos.

C. Sampling Procedure

Eighty percent (80%) of the total number of women farmers served as respondents of this study with a total sample size of 148 women respondents of which 92 were from Damulog and 56 from Don Carlos. Nine (9) implementers/focal persons were identified as implementers of MRDP CFAD program from the Municipal Agriculture's Office of the two (2) municipalities and four (4) from the Department of Agriculture Regional Field Unit 10.

In general, there were 161 respondents of the study (Table 1). A total of 148 women participants in Damulog and Don Carlos were determined using a simple random sampling. Meanwhile, purposive sampling was used to determine the thirteen (13) implementers/focal persons from the two (2) municipalities and DA-RFU 10.

TABLE I. DISTRIBUTION OF RESPONDENT OF THE STUDY BY AREA

Municipality	Number of Women Members	Sample Size of Women	Implementers/ Focal Person	Total Sample Size
DAMULOG			6	6
1. Migcawayan (Women of Migcawayan)	16	13		13
2. Kiraon (Kiraon Salt Farmers Association)	2	1		1
3. Macapari (Macapari Women's Org.)	21	17		17
4. Kitingting (Kitingting Farmers' Assoc.)	4	3		3
5. Maican				
- Maican Kalinaw Farmers' Coop.	10	8		8
- Maican Women's Org.	32	26		26
6. Kinapat (Kababayan-an sa Kinapat)	30	24		24
Sub-Total	115	92		
DON CARLOS			3	3
1. San Antonio West (Bantay Dangan Farmers' Association)	10	8		8
2. San Roque (San Roque Farmers' Association)	11	9		9
3. Buyot (Buyot Livelihood & Farmers' Association)	10	8		8
4. Pualas (Pualas Farmers' Association)	18	14		14
5. Kiara (Kiara Farmers' Association)	21	17		17
Sub-Total	70	56		
DA-RFU 10			4	4
Total	185	148	13	161

D. Instrumentation and Data Collection

Two sets of questionnaires (1 set for women and 1 set for implementers) were developed to gather data and answer the problems and objectives of the study. These were subjected to content validity by the expert implementers of MRDP

APL2 CFAD program and pre-tested for reliability in other municipalities where MRDP APL2 CFAD was implemented. Cronbach's Alpha was used to test its reliability with a reliability coefficient of .818 interpreted as reliable. The two sets of questionnaires consisted of seven (7) main parts, namely: personal factors, socio-economic factors, psychological factors, supportive factors, MRDP CFAD-related factors, effectiveness of the MRDP APL2 CFAD program in increasing income and attaining food security and problems encountered.

When the instrument was found reliable, the next step was to secure permissions. A formal letter was sent requesting permission from the Municipal/Barangay officials to gather the necessary data. As soon as the permit was granted, actual interview was done in the houses of the respondents, in their farm or in the barangay hall.

The primary sources of data were obtained from the information provided by the respondents through the questionnaires and personal interview. Moreover, participant observation was done to gather relevant information for the study not covered in the questionnaires and/or to validate responses of the respondents. The secondary sources of data on MRDP CFAD program were obtained from government documents and internet references.

E. Data Analysis

The data and information collected from the respondents were collated, coded, tabulated, and analyzed in accordance with the objectives of the study.

Statistical calculations such as mean, variance, frequency, standard error of mean, correlation and regression analysis were done. Frequency, percentage, mean and rank were used to describe personal factors, socio-economic factors, psychological factors, supportive factors, MRDP CFAD-related factors, effectiveness of the MRDP APL2 CFAD in increasing income and attaining food security and problems encountered.

Correlation analysis was employed to measure the significant relationship between the dependent and selected independent variables. Multiple regression analysis was used to analyze the extent of contribution of the independent variables to the effectiveness of the MRDP APL2 CFAD program. Qualitative data were presented in terms of opinions in logical and systematic manner.

III. RESULT AND DISCUSSIONS

Results revealed that the MRDP CFAD women farmers are middle-aged, married, with large household and have attained basic education. They are mostly Cebuano who are members of farmers' and women's organization, tenants with small farm area earning low income from both corn production and other sources.

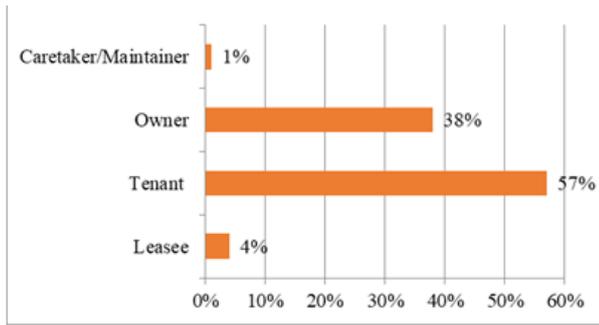


Figure 3. Distribution of women farmers according to tenurial status

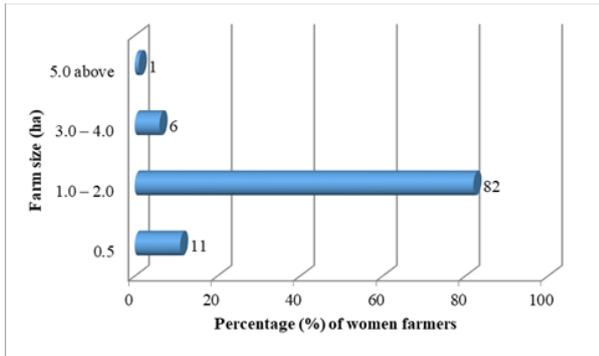


Figure 4. Distribution of women farmers according to the size of corn farms

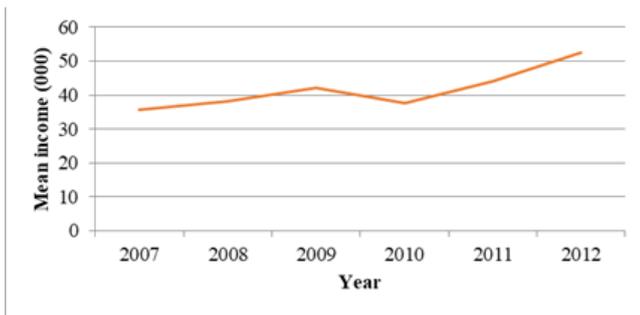


Figure 5. Distribution of women farmers according to their income from corn production

Legend:

Qualitative Description	Qualitative Interpretation (QI)
4.51-5	Very high aspiration (VHA)
3.51-4.5	High aspiration (HA)
2.51-3.5	Moderate Aspiration (MA)
1.51-2.5	Low aspiration (LA)
1.0-1.5	No aspiration (NA)

The women farmers have very high aspirations in life and exhibited very strong attitude towards the MRDP-CFAD program.

TABLE II. FARMERS' AND IMPLEMENTERS' ASPIRATION IN LIFE AS INFLUENCED BY THE MRDP-CFAD PROGRAM

Indicators for Aspiration	Farmers (n=148)		Implementers (n=13)	
	Mean	Q1	Mean	Q1
1. To increase my income to uplift the level of living of my family	4.82	VHA	4.85	VHA

2. To send my children to school	4.79	VHA	4.69	VHA
3. To buy appliances and vehicle	4.34	HA	3.85	HA
4. To become a participant in a government program	4.74	VHA	4.54	VHA
5. To gain confidence and self-reliance	4.57	VHA	4.69	VHA
6. To have available food for the family all the time	4.83	VHA	4.61	VHA
7. To be a leader in the community	4.40	HA	4.54	VHA
8. To become a model farmer	4.42	HA	4.61	VHA
9. To gain more knowledge and skills on farming	4.74	VHA	4.85	VHA
10. To establish camaraderie between and among the program participants and implementers	4.49	HA	4.61	VHA
Grand Mean	4.61	VHA	4.58	VHA

Legend:

Qualitative Description	Qualitative Interpretation (QI)
4.51-5	Very high aspiration (VHA)
3.51-4.5	High aspiration (HA)
2.51-3.5	Moderate Aspiration (MA)
1.51-2.5	Low aspiration (LA)
1.0-1.5	No aspiration (NA)

TABLE III. WOMEN FARMERS' ATTITUDE TOWARDS THE MRDP-CFAD PROGRAM

Items	Mean	Q1
a. I believe in the goals and objectives of the MRDP-CFAD	4.80	VS
b. I believe it can provide me an opportunity to increase income	4.79	VS
c. It could make me become part of the development of our organization	4.77	VS
d. Corn production can increase my income	4.62	VS
e. I can share my experiences on farming with other farmers	4.61	VS
f. I can participate in all activities called by CFAD implementers	4.67	VS
g. It could give me an opportunity to consult agricultural experts	4.67	VS
h. I can apply all learnings extended to us by the AEWs to my farming activities	4.56	VS
i. I believe that crop production is one of the best ways to uplift the lives of my family	4.80	VS
Grand Mean	4.66	VS

They are informed about the MRDP CFAD program by the agricultural extension workers through trainings, orientations and monthly meetings. Farmers and implementers interact regularly during program implementation. Women farmers avail farm inputs from local markets, accessed credit from women's and farmers' association and market their farm products locally. On the other hand, the program implementers are middle-aged, married professionals with permanent employment with

small household. They manifested a very high aspiration in life and very strong attitude towards the MRDP CFAD program. They regularly interacted with women farmers. The strategies adopted by the MRDP CFAD program are perceived as relevant by women farmers but perceived as most relevant by implementers.

Both the women farmers and implementers perceived the program implementers as competent focal person of MRDP CFAD program and found the conduct of monitoring as highly useful. Women farmers perceived the MRDP CFAD program as less effective in increasing productivity and income but very effective in securing food for their household.

TABLE IV. EFFECTIVENESS OF MRDP CFAD PROGRAM IN ATTAINING FOOD SECURITY AS PERCEIVED BY WOMEN AND IMPLEMENTERS

Indicators for Aspiration	Woman Farmers (n=148)		Implementers (n=13)	
	Mean	QD	Mean	QD
1. I worried whether my food would run out before I get money to buy more	4.49	E	4.46	E
2. The food that I bought just didn't last, and I didn't have money to get more	4.36	E	4.46	E
3. I couldn't afford to eat balanced meals	4.53	VE	4.85	VE
4. I relied on only a few kinds of low-cost foods to feed the children because I was running out of money to buy food	4.43	E	4.46	E
5. I couldn't feed the children balanced meal, because I couldn't afford it	4.41	E	4.77	VE
6. The children were not eating enough because we just couldn't afford enough food	4.47	E	4.61	VE
7. My family cannot eat a kind of food we want.	4.39	E	4.77	VE
8. In the last 12 months, since last month, did you or other adults in your household ever cut the size of your meals or skip meals before there wasn't enough food to eat?	4.57	VE	4.77	VE
9. In the last 12 months, since last month, did you ever eat less than you felt you should because there wasn't enough food to eat?	4.50	E	4.85	VE
10. In the last 12 months, since last month, where you ever hungry but didn't eat because you couldn't afford to buy food?	4.49	E	4.54	VE
11. In the last 12 months, since last month, did you lose weight because you didn't have enough food to eat?	4.56	VE	4.61	VE
12. In the last 12 months, since last month, did you or other adults in your household ever not eat for a whole day because there wasn't money to buy for food?	4.55	VE	4.61	VE
13. In the last 12 months, since last month, did you ever cut	4.60	VE	4.61	VE

the size of your child's/children's meals because there wasn't enough food available?				
14. In the last 12 months, since last month, did any of the children ever skip meals because there wasn't enough money to buy for food?	4.56	VE	4.69	VE
15. In the last 12 months, since last month, was your child/children ever hungry but you just couldn't afford more food?	4.56	VE	4.69	VE
16. In the last 12 months, since last month, did your child/children ever not eat for a whole day because there wasn't enough money to buy for food?	4.62	VE	4.85	VE
Grand Mean	4.61	VHA	4.58	VHA

Legend:

Scale	Qualitative Description	Qualitative Interpretation
4.51-5.0	Never or it happens once only	Very Effective (VE)
3.51-4.5	Rarely (it happens 2-3 times)	Effective (E)
2.51-3.5	Occasionally (it happens 2-3 time)	Moderately Effective (ME)
1.51-2.5	Often (it happens 4-5 times)	Less Effective (LE)
1.0-1.5	Always (it happens 8 or more times)	Ineffective (IE)

TABLE V. EFFECTIVENESS OF MRDP CFAD PROGRAM IN INCREASING PRODUCTIVITY

Indicator Ave. Yield for 2 cropping seasons/yr	Mean Yield (mt/ha)	Provincial Mean Yield/ha	Mean Score	Qualitive Description
2007	3.74	4.08	1	LE
2008	3.45	3.88	1	LE
2009	3.88	3.91	1	LE
2010	3.47	3.87	1	LE
2011	3.54	4.04	1	LE
2012	3.95	4.25	1	LE
Mean	3.67	4.01	1	LE

TABLE VI. EFFECTIVENESS OF MRDP CFAD PROGRAM IN INCREASING INCOME

Indicator Ave. Yield for 2 cropping seasons/yr	Mean Yield (mt/ha)	Provincial Mean Yield/ha	Mean Score	Qualitive Description
2007	35,615.67	39,372.00	1	LE
2008	38,118.77	40,468.40	1	LE
2009	42,202.43	39,960.20	3	E
2010	37,515.41	40,271.70	1	LE
2011	44,227.20	46,460.00	1	LE
2012	52,566.45	53,550.00	1	LE
2007	35,615.67	39,372.00	1	LE
Mean	42,035.05	43,347.05	1.33	LE

Legend:

Above mean	Qualitative Description
Mean	Effective (E)
Below mean	Moderately Effective (ME)
	Less Effective (LE)

TABLE VII. EFFECTIVENESS OF MRDP CFAD PROGRAM IN INCREASING INCOME

Indicator	Effectiveness Score	Qualitative Description
Increased Productivity	1.00	Less Effective
Increased Income	1.33	Less Effective
Household Food Security	4.51	Effective
Mean	42,035.05	43,347.05

Legend:

Above mean	Qualitative Description
Mean	Effective (E)
Below mean	Moderately Effective (ME)
	Less Effective (LE)

Age, household size, availability of farm inputs, relevance of program strategies, competence of implementers and usefulness of program monitoring are significantly related with the effectiveness of the MRDP-CFAD program in increasing income and achieving food security. Moreover, usefulness of program monitoring, competence of implementers, attendance in seminars and trainings, availability of farm inputs and household size influenced the effectiveness of the MRDP-CFAD program.

Women farmers and implementers encountered marketing problems, limited funding, less passable farm to market roads, unsupportive local officials and the lack of time to attend trainings/seminars, less dedicated farmer-leaders, weak linkage with program implementers, unavailability of farm inputs and no proper selection of participants.

IV. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of findings, relevant conclusions and recommendations based on the evidences gathered from the study.

A. Summary

This study was conducted to evaluate the effectiveness of the MRDP APL2 CFAD program in increasing income and achieving food security among the women participants in the province of Bukidnon.

Specifically, the study aimed to describe the personal, socio-economic and psychological profiles of the women farmers and the implementers of the MRDP APL2 CFAD program in Bukidnon; to evaluate the factors supportive of and related to the implementation of the MRDP CFAD program; to determine the level of effectiveness of the MRDP APL2 CFAD program in increasing income and attaining food security as perceived by Bukidnon women and program implementers; to assess the degree of influence of personal, socio-economic, psychological, supportive and MRDP CFAD-related factors on the effectiveness of MRDP APL2 CFAD program among Bukidnon women and

program implementers; and to identify the problems encountered by the women farmers and program implementers during program implementation.

Data were gathered from the 148 women farmers from Damulog and Don Carlos, nine (9) implementers/focal persons from the Municipal Agriculture’s Office of the two (2) municipalities and four (4) from the Department of Agriculture Regional Field Unit 10. Two sets of questionnaires (1 set for women and 1 set for implementers) were developed to gather data and answer the problems and objectives of the study. Frequency counts, percentage distribution, means, standard deviation, rank, correlation and regression were used to analyze personal factors, socio-economic factors, psychological factors, supportive factors, MRDP CFAD-related factors, effectiveness of the MRDP APL2 CFAD in increasing income and attaining food security and problems encountered.

Based on the findings, the youngest woman farmer is 27 years old and the oldest is 75 years old with the mean age of 44 years old, while the mean age of the program implementers is 45 years old. Majority (92%) of the women farmers and 77% of the implementers are married. The mean household size of the women farmers is five (5), while the implementers have four (4) members.

Almost one-half (49%) of the women farmers reached high school, while all (100%) program implementers have finished college. Both women farmers (95%) and program implementers (62%) are Cebuano. Women farmers are members of women’s organizations (62%) and farmers’ organizations (49%), while program implementers are members of farmers’ organizations (46%) and cooperatives (31%). Women farmers have a mean farming experience of 17 years, while program implementers served as technical persons on corn production with a mean experience of 8 years. More than one-half (57%) of the women farmers are tenant and 38% of them owned the land they tilled. A little more than one-half (54%) of the implementers have permanent employment status, while 31% of them are under contract service appointment. Most (82%) of the women farmers tilled an area of 1.0 - 2.0 hectares. The biggest farm size is 7.0 hectares while the smallest area is 0.5 hectares with a mean farm size of 1.3 hectares. The women farmers have attained an average income from corn production PhP35,615.67 in 2007 to PhP52,566.45 in 2012. They have also other sources of income where 39% of them worked as laborers in other farms and attained an average income of PhP26,293.00. The women farmers have earned a gross mean income of PhP34,213.36 per year per hectare from corn production and other sources where corn production contributes 62% of the total gross income.

Both the women farmers (4.61) and program implementers (4.58) had very high aspiration towards the MRDP CFAD program. Women farmers have an overall attitude mean score of 4.70, which means as having very strong attitude towards the MRDP CFAD program. The program implementers also exhibit very strong attitude towards MRDP CFAD program with an overall mean score of 4.57.

A little more than three-fourths (76%) of the women farmers and almost two-thirds (61%) of the implementers got information about the program from agricultural extension

workers. All women farmers (100%) have attended corn production training, while more than three-fourths (79%) of them have attended the MRDP orientation before availing the program. All the implementers have attended MRDP orientation and other trainings such as corn production (61%) and cattle raising (23%). Over three-fourths (79%) of the women farmers have not participated in any cross visit and 90% of them have not joined any fieldtrip. The program implementers (38%) have not conducted any cross visit and field trip (39%). Majority (90%) of the women farmers attended meetings once a month, which corresponds to 61% of the implementers who called a meeting once a month. Women farmers indicate that most of the inputs are available within the locality: organic fertilizer (57%), inorganic fertilizer (56%), chemicals (58%), seeds (56%) pest control (56%) and herbicides (57%). Implementers perceived the inputs as available within the locality: organic fertilizer (69%), inorganic fertilizer (85%), chemicals (77%), seeds (69%), pest control (77%) and herbicides (77%). Almost three-fourths (70%) of the women farmers met with the implementers monthly. Similarly, program implementers (62%) confirmed to have personal contact with farmers. Almost two-thirds (61%) of the women farmers availed credit from women's association. Most (85%) of the implementers introduced the farmers' association as a source of credit of the women farmers while 61% of them recommended women's association. Almost three-fourths (73%) of the women farmers marketed their corn products within their municipality and more than one-half (59%) of them marketed outside their locality. Meanwhile, 77% of the implementers suggested to market farmers' products within their locality and more than one-half (54%) of them advised to market farmers' produce outside their municipality.

On MRDP CFAD-related factors, women farmers obtained a grand mean score of 4.49 which means that the strategies employed for the MRDP CFAD program are relevant. The women farmers and program implementers show comparable ratings in the competence of program implementers with a grand mean score of 4.46 which means that both perceived the program implementers as competent focal person of MRDP CFAD. Both the women farmers and implementers found the conduct of monitoring as highly useful with a mean score of 4.53 and 4.69, respectively.

Both the women respondents (4.51) and program implementers (4.66) perceived the MRDP CFAD program as very effective in attaining food security. Result implies that the MRDP CFAD program is less effective in increasing production of the women farmers in Bukidnon. The mean yield of 3.67 metric tons per hectare is -8.48% lower than the average yield in corn production in Bukidnon, which is 4.01 from 2007 to 2012. Women farmers have obtained a lowest mean gross income of PhP35,615.67 and a highest mean gross income of PhP52,566.45 with a mean gross income of PhP42,035.05 per year. This shows that MRDP CFAD program on corn production is less effective in increasing income among women farmers in Bukidnon.

The result of correlation analysis shows that the effectiveness of MRDP CFAD program is significantly associated with age ($p < .05$), household size ($p < .05$), availability of farm inputs ($p < .01$), relevance of program strategies ($p < .01$), competence of implementers ($p < .01$) and usefulness of program monitoring ($p < .01$).

The result of the regression analysis shows five variables that significantly influence the effectiveness of the MRDP CFAD program: usefulness of program monitoring ($p < .01$), competence of implementers ($p < .01$), attendance in seminars and trainings ($p < .05$), availability of farm inputs ($p < .01$) and household size ($p < .05$) which contributed to 92.2% of the total variation on the effectiveness of the MRDP CFAD program.

The first five problems encountered by the women farmers include: market problem, limited funding, less passable farm-to-market road, unsupportive local officials and the lack of time to attend trainings/seminars. While the top problems encountered by the implementers are lukewarm attitude of local officials, less committed farmer leaders, lack of time to attend trainings/seminars, weak linkage with program implementers, unavailability of farm inputs and unclear selection of participants

B. Conclusions

The following conclusions were drawn based on the objectives and findings of the study:

The MRDP CFAD program women farmers are middle-aged, married, with large household and have attained basic education. They are mostly Cebuano who are members of farmers' and women's organization, tenants with small farm area earning low income both from corn production and other sources. The women farmers have very high aspirations in life and exhibited very strong attitude towards the MRDP-CFAD program. They are informed about the MRDP CFAD program by the agricultural extension workers through trainings, orientations and monthly meetings without field exposure such as cross visits and field trips. Farmers and implementers interact regularly during program implementation. Women farmers avail farm inputs from local markets, access credit from women's and farmers' association and market their farm products locally.

On the other hand, the program implementers are middle-aged, married professionals with permanent employment having small household. They have manifested a very high aspiration in life and very strong attitude towards the MRDP CFAD. They have regularly interacted with women farmers.

The strategies adopted by the MRDP CFAD program are perceived as relevant by women farmers but considered as most relevant by implementers. Both the women farmers and implementers recognized the competence of the program implementers as focal person of MRDP CFAD program and found the conduct of monitoring as highly useful.

Women farmers assessed the MRDP CFAD program as less effective in increasing productivity and income but perceived the program as very effective in securing food for the household.

Age, household size, availability of farm inputs, relevance of program strategies, competence of implementers and usefulness of program monitoring are significantly related with the effectiveness of the MRDP CFAD program in increasing income and achieving food security. Moreover, the usefulness of program monitoring, competence of implementers, attendance in seminars and trainings, availability of farm inputs and household size

influence effectiveness of the MRDP CFAD program among women farmers.

The implementation of the MRDP CFAD program is hampered by problems on marketing, limited funding, less passable farm-to-market road, unsupportive local officials, the lack of time to attend trainings/seminars, less committed farmer leaders, weak linkage with program implementers, unavailability of farm inputs and unclear selection of participants.

C. Recommendations

Based on the findings and conclusions presented, the following recommendations are given:

The women farmers have small farm area and obtained low income from corn production. The Local Government Units (LGU) could help the farmers by providing other livelihood program such as handicraft and food processing to increase their income and become self-sufficient.

The source of information of farmers and implementers on MRDP CFAD program may be broadened by utilizing the local media through School-on-the-air program and mass production of locally-translated Information, Education and Communication (IEC) campaign materials. Besides, the local officials may facilitate the conduct of benchmarking activities such as field trips and cross visits to provide farmers with ideas in good farming practices. The women's association may establish external marketing linkage for their corn product to get better prices. The women may establish a cooperative for the social and economic development of members.

The effective implementation of the MRDP CFAD program may need more cooperation and partnership of various stakeholders such as the Barangay Council, lending institutions, agri-business companies and other stakeholders to increase its impact on food security and income. It may also be necessary to re-orient the implementers about the program, re-assess its objectives and strengthen participatory planning among implementers and farmer-participants.

The Department of Agriculture needs to evaluate the program process applied in the MRDP CFAD implementation. There might be problems on the collaboration and linkage of implementers with the Local Government officials in Bukidnon to develop sense of ownership of the program and strengthen implementation of the program.

Further study may also be conducted by the future researchers using different evaluation measures not covered by this study. An assessment of farmers' adoption of government support program such as loan subsidy, technical training and extension services is necessary in determining critical factors that may influence effectiveness of the MRDP CFAD program. Actual measures of the biophysical factors to include land, water, air, and other biotic and abiotic factors are vital to quantitatively assess the contribution of the MRDP CFAD program in ensuring environmental safety in the community.

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