

**PRODUCTIVITY OF AGRARIAN REFORM BENEFICIARIES (ARB)
IN AGRARIAN REFORM COMMUNITIES (ARC)
IN SAMAR**

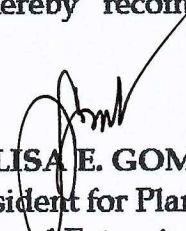
**A Dissertation
Presented to
The Faculty of the College of Graduate Studies
Samar State University
Catbalogan City, Samar**

**In Partial Fulfilment
of the Requirements for the Degree
Doctor in Management (D.M.)
Major in Human Resource Management**

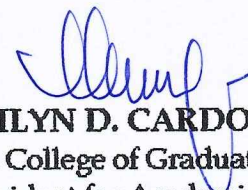
**AIDA MACARIOLA-GAMBA
February, 2016**

APPROVAL SHEET


This dissertation entitled "PRODUCTIVITY OF AGRARIAN REFORM BENEFICIARIES (ARB) IN AGRARIAN REFORM COMMUNITIES (ARC) IN SAMAR", has been prepared and submitted by AIDA M. GAMBA, who having passed the comprehensive examination, is hereby recommended for oral examination.

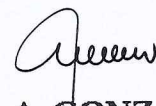

FELISA E. GOMBA, Ph.D.
Vice President for Planning, Research
and Extension, SSU
Adviser


Approved by the Committee on Oral Examination on February 21, 2016
with a rating of PASSED.


MARILYN D. CARDOSO, Ph.D.
Dean, College of Graduate Studies/
Vice President for Academic Affairs, SSU
Chairman


EUSEBIO T. PACOLOR, Ph.D.
University President, SSU
Member

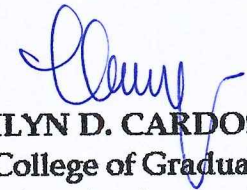

RONALD L. ORALE, Ph.D.
Director, Research and Extension
Services, SSU
Member


LYDIA A. GONZALES, D.M.
Administrative Officer V/
Budget Officer III, SSU
Member


DEBORAH T. MARCO, Ph. D., C.E.S.O.
Affiliate Faculty, SSU-CGS
Member

Accepted and approved in partial fulfillment of the requirements for the
Degree, Doctor in Management (D.M.) major in Human Resource Management
(H.R.M.).

February 21, 2016
Date of Oral Defense


MARILYN D. CARDOSO, Ph.D.
Dean, College of Graduate Studies/
Vice President for Academic Affairs, SSU

ACKNOWLEDGMENT

The researcher would like to express her deepest appreciation and sincerest gratitude to the people who in one way or another had helped much in making this undertaking a success:

To Dr. Marilyn D. Cardoso, the Dean of the College of Graduate Studies and at the same time the Vice President for Academic Affairs of Samar State University, for her moral assistance extended;

Her adviser, Dr. Felisa E. Gomba, Vice President for Planning, Research and Extension, for her invaluable encouragement to pursue this post-graduate studies, her suggestions and comments to improve this undertaking;

To dissertation examination panel members, namely: Dr. Eusebio T. Pacolor, SSU President, Dr. Ronald L. Orale, Director, Research and Extension Services, Dr. Deborah T. Marco, Retired SB Secretary, and Dr. Lydia A. Gonzales, Budget Officer for sharing their ideas to improve and enhance this study;

To the people of the Department of Agrarian Reform, Provincial Office, the BDCD and LTI Division for allowing her to use their MIs and computer;

To her husband, Rufo Rene and children, Marc Ian, Andrew, Carmi Rose, Newmill and Airen, grandchildren, Bitsy and Zion, other friends for their understanding and moral support. And above all the Almighty God, for the countless blessings, spiritual courage and challenges given to her all throughout the years and for making all her endeavor successful;

Lastly, she wants to express her indebtedness to all Development Facilitators and Municipal Agrarian Reform Officers in the Province of Samar, who assisted the researcher in the conduct of interview-questionnaire and focused group dialogue, and

Specially, to the Agrarian Reform Beneficiaries, for serving as respondents of the study, whose support and cooperation in this endeavor counts a lot, and made this study a successful one.

AIDA M. GAMBA
Researcher



DEDICATION

*This dissertation
is dedicated first and foremost to myself.
I never expected in a million years
that I would arrive at this juncture of my life.*

*I also dedicate this to
GOD
and to my parents
for all their love, patience and kindness and support.*

*And finally,
to my **HUSBAND and CHILDREN**
who has always been my inspiration,
coz in this **FAMILY...**
it is where **LIFE** begins
and **LOVE** never ends.*

Aida

ABSTRACT

This study aimed to evaluate the productivity, sustainability and feasibility of the strategies used, on the different projects and programs of Agrarian Reform Beneficiaries (ARB) in Agrarian Reform Communities (ARC) in Samar, from 2000 to 2012. The research also employed other data gathering instruments such as unstructured interviews, documentary analysis and actual observations. These methods were used to describe, record, analyze, interpret and certain some facts in order to come up with a substantial and meaningful study. The first five problems encountered by the ARBs relative to the Comprehensive Agrarian Reform Program were: Rank 1, lack of financial farm capital; Rank 2, lack of farm inputs (fertilizers, insecticide, pesticides, etc.); rank 3, lack of farm machineries (hand tractor, thresher); Rank 4, lack of water pump in areas with no irrigation - Calbiga, Gandara; Rank 5; lack of farm to market road (from Sitio Galutan to Gandara proper). the productivity of the ARBs in terms of income was influenced by the locally funded projects in an inverse relationship. On the other hand, the locally funded projects did not significantly influence the productivity of ARBs along off-farm and non-farm endeavors. The productivity of the ARBs in terms of income influenced by the foreign funded projects did not significantly influence the productivity of ARBs along off-farm and non-farm endeavors. Thhe ARBs encountered problems relative to Comprehensive Agrarian Reform Program which need to be addressed by the implementers and other concerned. For the

recommendation, a sequel study may be conducted considering other areas to assess the implementation of the program and the productivity of the ARBs.

TABLE OF CONTENTS

	Page
TITLE PAGE	i
APPROVAL SHEET	ii
ACKNOWLEDGMENT	iii
DEDICATION	v
ABSTRACT	vi
TABLE OF CONTENTS	viii
 Chapter	
1 THE PROBLEM AND ITS SETTING	1
Introduction	1
Statement of the Problem	7
Hypotheses	9
Theoretical Framework	9
Conceptual Framework	11
Significance of the Study	13
Scope and Delimitation	14
Definition of Terms	15
2 REVIEW OF RELATED LITERATURE AND STUDIES	24
Related Literature	24
Related Studies	61
3 METHODOLOGY	78
Research Design	78
Instrumentation	80

Validation of Instrument	80
Local Time of the Study	81
Sampling Procedure	81
Research Instrument	82
Data Gathering Procedure	84
Statistical Treatment of Data	84
4 PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA	86
Family Profile of ARBs	86
Status of ARBs in Terms of Title of Land	105
Projects Implemented in ARCs	106
Productivity of ARBs in Terms of Income	109
Relationship in the Productivity of the ARBs and the Identified Factors	112
Problems Encountered by ARBs	158
5 SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION	161
Summary of Findings	161
Conclusions	164
Recommendations	167
6 PROPOSED SUSTAINABILITY PLAN	168
Rationale	168
Problems Encountered by ARBs and the Proposed Solution	169
BIBLIOGRAPHY	176
APPENDICES	180

CURRICULUM VITAE	195
LIST OF TABLES	198
LIST OF FIGURES	202

Chapter 1

THE PROBLEM AND ITS SETTING

Introduction

The economic growth of a nation depends on the productivity of the people and their strong involvement in the government economic programs (BARBD-DAR,1995:21). The Comprehensive Agrarian Reform Law of 1988 was implemented to increase productivity of farmers in rural areas and spin off rural industrialization (BARBD-DAR,1995:21).

The birth of the Comprehensive Agrarian Reform Program (CARP) in 1988 created the Agrarian Reform Community (ARC) which is composed of barangays or cluster of barangays where there are empowered agrarian reform beneficiaries who are effectively managing their land thereby contributing to the nation's economic and social development (BARBD-DAR,1995:21).

The CARP program was launched in most disadvantaged communities in the Philippines, both in terms of income and living standards, which includes the following factors: lack of agriculture support services, and rural infrastructure development, and poor implementation of policy reforms (R.A. 6657).

The Agrarian Reform Community (ARC) concept is largely a resource-maximization, resource allocation and resource mobilization strategy for program beneficiaries' development. The ARCs were identified from barangays with highest concentration of Agrarian Reform Beneficiaries (ARBs) and

distributed lands. Resources were pooled and channeled to where they could have the greatest impact. The ARC became the common area where CARP funds for support services were channeled. By using the ARC as a working unit or convergence point, it is possible to more effectively synchronize the delivery of support services to a defined area or target group.

With a specific barangay (or cluster of barangays) to focus on, it became easier for the Department of Agrarian Reform (DAR) to encourage other agencies to provide easier services in the ARCs, even from their regular funds. There were also attempts to mainstream the ARCs in programs and priorities of the government. Foremost of these was the inclusion of ARCs in the priority areas under the Social Reform Agenda of the Ramos administration and making the presence of an ARC in an area of the criteria in identifying the strategic areas for development (BARBD-DAR, 1995:19).

In Agrarian Reform Community (ARC) development, DAR promotes social entrepreneurship and enterprise development. Social benefits are of equal importance with the tangible output such as income derived from the business enterprises in the ARCs. Thus, a new social structure based on a more equitable sharing of wealth can be showcased through the ARC development. Furthermore, it is in the ARCs that empowered Agrarian Reform beneficiaries (ARBs) shall operate social enterprises to proposed modernization and industrialization, contributing to the well-being of the entire community (BARDB-DAR, 1995:19).

Poverty in Samar Island is high, in fact our province belongs to the ten top poorest Provinces in the country. The dominant causes are lack of education, lack of jobs, corruption, natural calamities, culture and many others. Despite all hardships, the Province is still blessed because of the rich natural resources (PIA).

In Samar Province, there are 27 Agrarian Reform Community (ARC) with 13,824 ARBs distributed in 20 selected Municipalities from 1993 to 2012. Ten ARCs in District 1, and 17 ARCs in District 2 (see, Appendix C). Basically, the ARBs are active farmers in agriculture based ARCs (BD-CD-DARPO, 2000).

These Agrarian Reform Beneficiaries (ARBs) were landless farmers and farmworkers and recipients of the DAR major program, the land acquisition and distribution which means that the private property that was acquired by DAR and paid by the Land Bank of the Philippines (LBP) was distributed to the qualified beneficiaries who could effectively manage, cultivate and make them productive for a better quality of life.

There were ARCs that had the opportunity to access projects thru local and foreign funds.

The Agrarian Reform Community Project 2 (ARCP 2) was a foreign funded program. The Farm-to-Market-Road Infrastructure projects were implemented in the Municipality of Tarangnan (Cambatutay ARC), Gandara, San Jorge, Pagsanghan, Calbiga and Villareal ARC to name a few. However, the regulatory and monitoring of the projects were with the Local Government Unit and ARBs concerned.

The Agrarian Reform Community Connectivity and Economic Support Services (ARCCCESS) was also a foreign funded program. Projects like the Pre and Post Harvest Facilities (PHF) were granted to the registered ARB organizations in Calbayog City (specifically in Panoypoy and Roxas 2 ARC), Daram, in Sta Rita (Samar Settlement Project (SSP- ARC) in Basey, in the Calbiga-Pinabacdao Settlement (CALPINSET), in Jiabong (Macaparican ARC and Marabut ARC. These Agrarian Reform Communities (ARCs) are the most disadvantaged communities that needed urgent assistance through support services delivery in support to land acquisition and distribution activity of the DAR. With the launching of ARC , the identified communities had availed and had access to the different programs and projects that the Department of Agrarian Reform (DAR) and Foreign funded projects, implemented such as the Irrigation Project, the farm to market road and other livelihood projects.

In 1995, Gandara ARC was the recipient of 10 units of water pump for the irrigation of rice farms. It was funded by the Department of Agrarian Reform (DAR)- Asian Development Bank (ADB) through grant. But due to non-compliance of Municipal LGUs counterpart the last tranche was not released that resulted to the project failure.

In the year 2000, another foreign funded project by DAR-ADB was implemented in the Municipality of Tarangnan, the farm to market Road (FMR) Rehabilitation of the Old Mahayag-Majacob FMR. The project failed because during the monitoring and inspection by the National Project coordinator, it was

found out that the road canal was not maintained and during heavy rains the water passed thru the center of the road that resulted to mud flow making the road impassable.

Another Foreign Funded project was The Agrarian Reform Community Project 2 (ARCP2), the Rural Infrastructure (R.I.) component. It was implemented in the Municipalities of Pagsanghan, Tarangnan, Calbiga and Daram. One of the completed projects that was successful was turned over to the Local Government Unit and ARBs in the ARC. In Pagsanghan, Rehabilitation of Pagsanghan-San Agustin (Gandara) Farm-to-Market-Road was turned over last July 2014. The total project cost was Php 26.9 million pesos, covering 15.17 kilometers. For Tarangnan, Rehabilitation of Dapdap-Lahong Farm-to-Market-Road, amounting to Php 9.4 million pesos project cost, covering 5.0 kilometers was turned over last June 26, 2014. In Daram, the Construction of Mabini-Mayabay-San Roque FMR, amounting to Php 19.2 million pesos with 3.68 kilometers was turned over last September 2014. In Calbiga, the Calbiga-Pinabacdao Settlement (CALPINSET) had completed the construction of Bacyaran-Bulao- Canbagic and Junction Bulao-San Mauricio FMR. With Php 34.4 million pesos project cost that covers 7.8 kilometers and was turned over last Dec. 2014 (PDB-DARPO, 2015).

These Farm to market road projects benefited almost everyone in their respective ARCs. The easy to transport farm products to market was realized. The mode of transportation is now better especially to students who now can walk to

school not worrying about the mud and because of this improved road, almost all residents are striving to own vehicles.

In 2012, PAMANA-ARA program was implemented in San Jorge ARC. It was a grant project worth P3.9 Million pesos by the Office of the Presidential Adviser on the Peace Process (OPAPP) the PAMANA-ARA program (PAYapa at MASaganang pamayaNAn or Peaceful and Resilient Communities) which was the national government's peace and development framework PAMANA -Agrarian Reform Area (ARA) Project (OPAPP, 2012).

There were 13 barangays, identified by OPAPP which received Php300,000 pesos each, and was turned over to the Barangay officials and ARB organization that same year. The projects are: potable water system project that was implemented in seven barangays, namely: Anquiana, Aurora, Cantaguic, Rawis, Rosalim, San Isidro, Sapinit; second, the Rehabilitation of Multi Purpose Hall in Barangay Quezon, Mabuhay and Bay-ang.; third, the Mechanical Dryer project in Barangay Canyaki; fourth, Corn mill in Barangay Moboob and the Carabao project in Barangay Tomogbong.

With these number of ARBs in selected Agrarian Reform Community, there is a question on how could the beneficiaries sustain the projects awarded and extended to them. Thus, this study is conducted to assess their productivity and to find out the sustainability of the programs and feasibility of the strategies used. The study hopes to provide inputs to ARBs for comfortable lifelong

livelihood in ARCs. Moreover, the study hopes to come up to a sustainable plan and program for Agrarian Reform Communities (ARCs).

Statement of the Problem

This study aimed to evaluate the productivity, sustainability and feasibility of the strategies used, on the different projects and programs of Agrarian Reform Beneficiaries (ARB) in Agrarian Reform Communities (ARC) in Samar, from 2000, to 2012.

Specifically, this study seeks to answer the following questions:

1. What is the family profile of the Agrarian Reform Beneficiaries (ARB) in terms of:

- 1.1 age;
- 1.2 gender;
- 1.2. educational background;
- 1.3 family size;
- 1.4 number of years as beneficiary;
- 1.5 hectares of awarded land;
- 1.6 accessibility, and
- 1.7 work attitude?

2. What is the status of the Agrarian Reform Beneficiaries in terms of title to the land:

- 2.1 EP holder;
- 2.2 CLOA Holder, and
- 2.3 Leaseholder?

3. What are the projects implemented in the Agrarian Reform Communities (ARCs) in terms of:

- 3.1 locally funded projects;
- 3.2 foreign Funded projects, and
- 3.3 other projects?

4. What is the productivity in terms of income of the Agrarian Reform Beneficiaries (ARBs):

- 4.1 on farm;
- 4.2 off farm, and
- 4.3 non-farm endeavors?

5. Are there significant relationships in the productivity of the Agrarian Reform Beneficiaries and the following:

- 5.1 family profile;
- 5.2 status of ARBs, and
- 5.3 projects implemented?

6. What are the problems encountered by the Agrarian Reform Beneficiaries?

7. What sustainable plan and program maybe formulated based on the findings of the study?

Hypotheses

From the afore-cited specific questions, the major hypothesis was tested in this study:

1. There are no significant relationships in the productivity of the Agrarian Reform Beneficiaries and the following:

- 1.1 family profile;
- 1.2 status of ARBs, and
- 1.3 projects implemented.

Theoretical Framework

The study was anchored on two theories of productivity, namely: the marginal productivity (Clark and Wicksteed, 1938; Currie, 1981), and the growth of total factor productivity of Bates (2001) as cited by Diewert (2004). The marginal productivity theory applies to the study on the argument that the business or enterprise is willing to pay to the productivity agent that adds up to the output. As applied to the agricultural land tenure, farmer's productivity is affected by some productivity agents like ownership of the land, availability of capital investment, and functional farm implements and infrastructure. The theory of total factor productivity growth as explained by Bates (2001) on determinants of

output growth are input growth-the growth of capital and labor inputs plus the growth of total factor productivity.

These theories explained further that resource discoveries and the exploitation of resources are important factors with agriculture, forest, fishery and other resources. These also acknowledged that the changes in the terms of trade, labor inputs, changes in domestic saving rates, changes in the educational composition of the labor force, entrepreneurial capacity, and the role of government in facilitating competition and development of efficient markets are other important factors to total productivity (Diewert,2004:8).

Productivity is the relationship between the output generated by a production or service system and the input provided to create this output (Prokopenko, 1987).

Productivity measurement is a prerequisite for improving productivity. As Peter Drucker who is widely regarded as the pioneer of modern management theory, said: Without productivity objectives, a business does not have direction. Without productivity measurement, a business does not have control (Drucker, 2005).

It is clear, then, that the vicious circle of poverty, unemployment and low productivity can be broken only by increasing productivity. Increased national productivity not only means optimal use of resources, but also helps to create a better balance between economic, social and political structures in the society. Social goals and government policy largely decline the distribution and utilization

of national income. This in turn influences the social, political, cultural, educational and motivational work environment which affects the productivity of the individual and the society (Prokopenko, 1987).

This study is anchored on the theory and principles for Philippine agrarian reform of Mulry's (Bernard, 2006:110). The principles for agrarian according to Mulry's are as follows: that the person who tills the land should own the land he tills and to achieve this goal, a gradual process of education is required, which is the dissemination and the inculcation of ideas. Furthermore, Mulry's further stated that the land ownership requires maturity and skill, and both must be acquired gradually. If achieved, productivity is attained by the beneficiaries of agrarian reform program.

Conceptual Framework

Figure 1 reflects the conceptual framework of the study. It depicts the working process to be undertaken in order to answer the specific questions and to test the hypothesis drawn in this study.

The base represents the locale of the study and the subjects that will be involved in this study, the Agrarian Reform Beneficiaries (ARBs) in the Province of Samar.

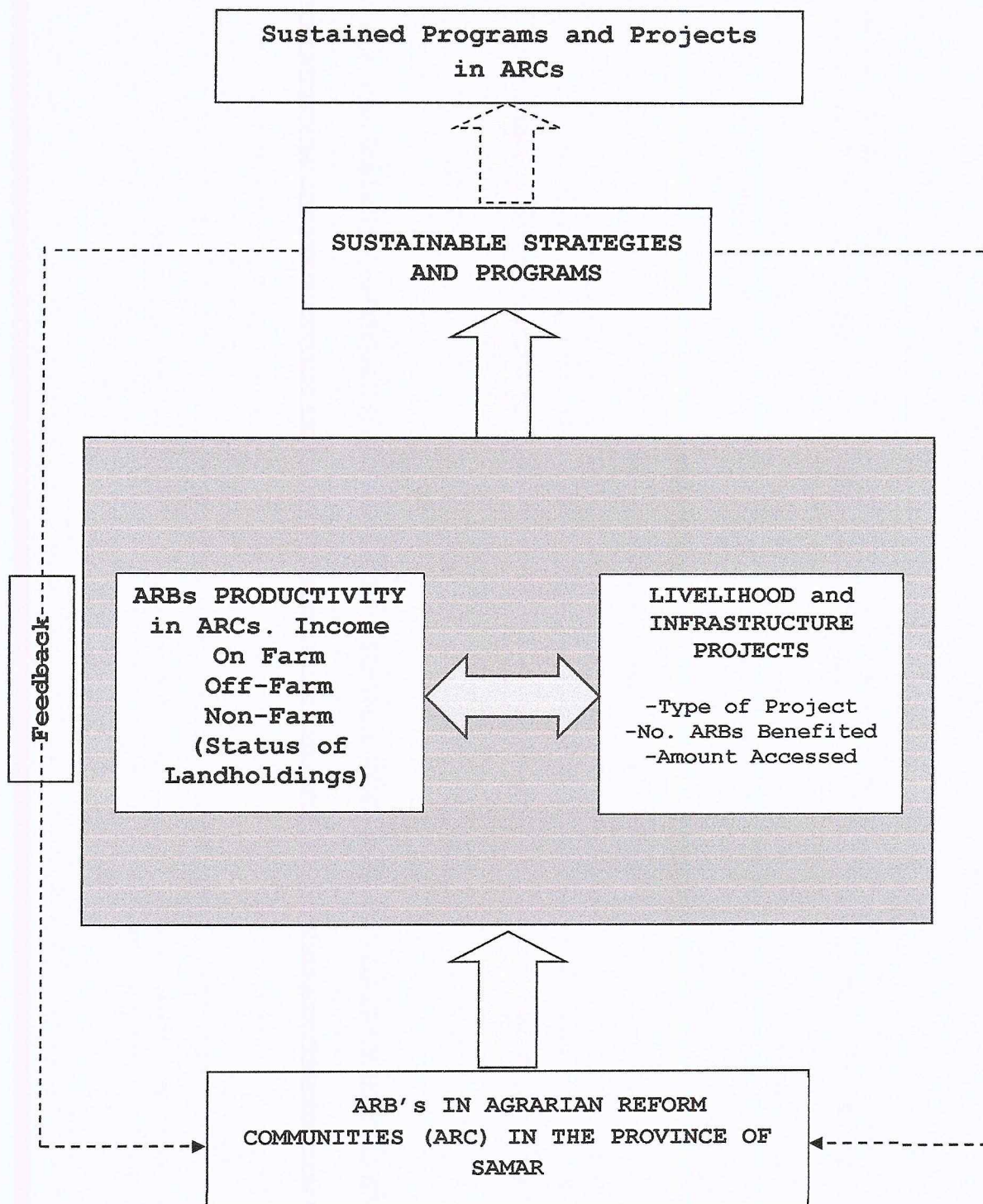


Figure 1. Conceptual Framework of the Study

Significance of the Study

The results of the study will benefit the following:

To the Agrarian Reform beneficiaries. The findings of this study will increase the economic condition of the agrarian reform Beneficiaries in terms of the projects they received. However, people's empowerment and the implementers' paradigm shift are necessary to ensure that rural infrastructure becomes a means to connect communities and people and change the lives of ordinary agrarian reform farmers for the better.

The Agrarian Reform community. The results of this study will give the community leaders the picture of the benefit in terms of project that the agrarian reform Beneficiaries had to improve the economic condition of the constituents who are CARP beneficiaries.

The local government unit. The findings of this study will give the Local government leaders the prestige and honor that the Agrarian Reform Community (ARC) received thru projects that were implemented in their respective area.

The national government. The findings of this study will give the National government leaders the timely and comprehensive decision whether the projects that were implemented in the ARC are in accordance with the plans and programs set through the monitoring strategy of their field coordinator in the respective ARC area.

The partners–line agencies. The findings of this study will be used by the line agencies to decide if the assistance to the community will be beneficial to the ARBs .

The planners, administrators, PARO, MARO. The findings of this study will be of help to the DAR management in planning for the assistance suitable to the selected and empowered agrarian reform beneficiaries in the Agrarian Reform Community (ARC).

The future researcher. The present study could be a ready source of reference to other researchers. The research design and instrument may also help in the task of formulating their own. In addition, this will hopefully serve as motivation for other researchers conducting similar studies in the future, specifically on productivity of farmers and other beneficiaries within the Agrarian Reform Community.

The funding agencies. The completed projects implemented in the community will be evaluated and monitored, to check whether the completed project was done according to the approved program of work of the implementing agency and be turned over to the recipient particularly to the ARBs in Agrarian Reform Community.

Scope and Delimitation

This study focused on the Productivity of Agrarian Reform Beneficiaries (ARBs) within the Agrarian Reform Communities in the Province of Samar. It will

cover 27 launched Agrarian Reform Community (ARCs), from year 2000 – 2012. This includes 290 ARBs in 27 ARCs in the Province of Samar. For Congressional District 1, there are seven municipalities that covers eight ARCs and for District 2, 19 Agrarian Reform Community (ARCs) in seven Municipalities.

Out of 27 Agrarian Reform Communities (ARCs), 13 ARCs are Foreign assisted under Agrarian Reform Community Project 2 (ARCP) 2, five ARCs are under "Agrarian Reform Community Connectivity and Economic Support Services (ARCCCESS), program while nine ARC are under Non ARCCCESS . This study will focus further on the projects the beneficiaries benefited whether Infrastructure projects, livelihood and credit assistance, whether foreign funded projects and Agrarian Reform funded ARCs in Western Samar.

Likewise, this study will be conducted on the perception of the respondents relative to the poverty alleviation or reducing poverty problem of ARBS in Agrarian Reform Community.

This study was conducted during the school year 2014 to 2016.

Definition of Terms

For the better understanding of this study, the following terms are defined conceptually and operationally.

Accessibility. Is defined as, easy to approach, reach, enter, speak with, or use (www.dictionary.com/browse/accessibility). As used in this study, it refers

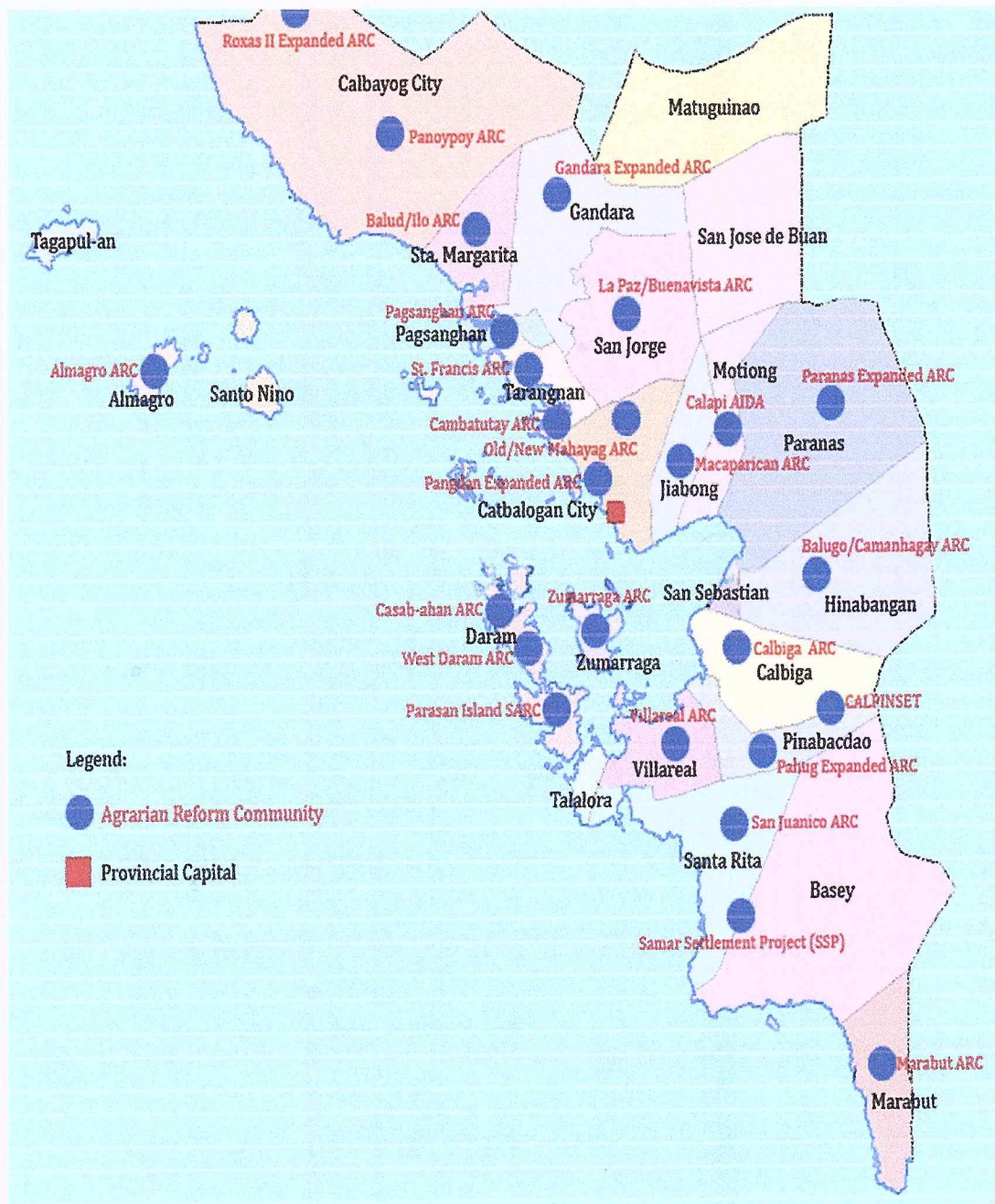


Figure 2. The Research Environment of the Study Showing the Agrarian Reform Community

to the mode of transportation, the ARB respondent uses in going to his farmlot, either, by bus, motorboat, motorcycle, tricycle or hike.

ADB. It refers to Asian Development Bank.

Age. It is the length of time that a person has lived or a thing has existed. (Synonyms: number of years, length of life; <https://en.wikipedia.org/wiki/Age>). It refers to the present age of the Agrarian Reform beneficiary as the main respondent of the study.

Agrarian reform. This refers to the re distribution of land to landless farmer and farmworkers along with the other resources pertaining to agriculture.

Agrarian Reform Beneficiary (ARB). It refers to farmers who were granted lands under Presidential Decree No. 27 and Republic Act (R.A.) No. 6657, as amended, and regular farmworkers who are landless, irrespective of tenurial arrangement, who benefited from the redistribution of lands, as evidenced by an Emancipation Patent(EP) or a Certificate of Land Ownership Award (CLOA) (A.O.7 2014,Article 1, section 3). In this study, Agrarian Reform Beneficiary (ARB) are the main subject and served as the respondents.

Agrarian Reform Community (ARC). It refers to a barangay at the minimum or a cluster of contiguous barangays where there is a critical mass of farmers and farmworkers awaiting the full implementation of agrarian reform.

Agrarian Reform Community Connectivity and Economic Support Services (ARCESS). It is DAR's strategic intervention to retain the awarded lands of agrarian reform beneficiaries (ARBs) through increased production and

engagement in agri-based and related enterprises. It aims to increase farm Productivity, improve net income, and sustain the livelihood of agrarian reform beneficiaries ARBs.

ARCP. It refers to the Agrarian Reform Community Project.

ARISP. It refers to Agrarian Reform Infrastructure Support Project.

CARL. It refers to the Comprehensive Agrarian Reform Law.

CARP. It refers to the Comprehensive Agrarian Reform Program.

Certificate of Land Ownership Award (CLOA). It refers to a title of the land as an evidence of landownership of the beneficiary of the CARP.

Certificate of Land Ownership Award (CLOA) holder. It refers to the landless farmers and farmworkers who are recipient of title (CLOA) holders for other crops like coco, high valued crops etc.

Comprehensive Agrarian Reform Program (CARP). It refers the redistribution of public and private agricultural lands to farmers and farmworkers who are landless, irrespective of tenurial arrangement. CARP's vision is to have an equitable land ownership with empowered agrarian reform beneficiaries who can effectively manage their economic and social development to have a better quality of life(RA.6657).

Emancipation Patent (E.P.). It refers to the title to a land issued to the tenant upon compliance with all requirements of the government. It represents the full emancipation of the tiller from the bondage of tenancy. Under Presidential Decree (PD) No. 27 Operation Land Transfer (OLT).

Emancipation Patent (EP Holder). It refers to the landless farmers and farmworkers who were recipient of titles the (EP) Emancipation Patent for rice and corn area .

Educational background. It refers to the educational level or grade level that the respondent Agrarian Reform beneficiary had achieved.

Emancipation Patent (EP) Holder. It refers to the landless farmers and farmworkers who were recipient of titles the Emancipation Patent (EP) for rice and corn area .

Family size. It is a fundamental social group in society typically consisting of one or two parents and their children; parents and their children, considered as a group, whether dwelling together or not (www.dictionary.com). In this study, it refers to the number of dependents the Agrarian Reform beneficiary had within his household.

Farmer. A farmer (also called an agriculturer) is a person engaged in agriculture, raising living organisms for food or raw materials. The term usually applies to people who do some combination of raising field crops, orchards, vineyards, poultry, or other livestock. A farmer might own the farmed land or might work as a labourer on land owned by others, but in advanced economies, a farmer is usually a farm owner, while employees of the farm are known as farm workers, or farmhands. However, in the not so distant past a farmer was a person who promotes or improves the growth of (a plant, crop, etc.) by labor and

attention, land or crops or raises animals (as livestock or fish) (Wikipedia, the free encyclopedia).

Farmworker. It refers to a natural person employed by a landowner (LO) to perform in the subject landholding the cultivation of the soil, planting of crops, growing of fruit trees, harvesting of farm products, or other similar activities and practices (A.O.7, series 2011: 9).

Foreign Funded Projects. It refers to the projects that the Agrarian Reform beneficiary (ARC) respondent had availed. Those projects are funded by the Foreign donors and implemented in the Arcs. Like farm to market road, irrigation projects and Pre -Post harvest facilities.

Gender. Either the male or female division of a species, especially as differentiated by social and cultural roles and behavior: the feminine gender. ... a similar category of human beings that is outside the male/female binary classification and is based on the individual's personal awareness (www.dictionary.com/browse/gender). It Refers to the Agrarian Reform beneficiary category whether male or female as used in the study.

Hectares of awarded land. It refers to the area of farmland the ARB respondent had applied with the DAR, and awarded to him, either by Operation Land Transfer (OLT), CLOA and Leasehold.

Locally funded projects. It refers to the project that the Agrarian Reform beneficiary (ARB) respondent had availed as recipient. Funds are coming from

Barangay Internal Revenue Allotment (IRA) and local government unit at Municipal level.

Leaseholder. It refers to landless farmers and farmworkers who enter into contract on lease rental between landowner and tenant. The sharing of rental is 75-25. Seventy five percent to farmer and 25.00 percent to the landowner.

Non-farm endeavors. It refers to the non farm activity that ARB respondent do, in order to augment his family expenses, like carpentry, buy and sell, sari-sari store owner, driver etc.

Non- farm income. It refers to the farm household income obtained off the farm activities. It comprises non -farm wages and salaries. Example sari-sari store, pensions, and interest income earned by farm families.

NPCO. It refers to the National Project Coordinating Office.

NSAC. It refers to National Sub-Project Approval Committee.

Number of years as beneficiary. It refers to the number of years, the respondent Agrarian Reform beneficiary had, from the time he or she applied for the farmlot and make it productive;

On Farm income. It refers to the income of the Agrarian Reform beneficiary (ARB) derived from the land awarded to him by the CARP program.

Off-farm income. It refers to the labor income of the Agrarian Reform beneficiary (ARB) derived from the farmland of his co- farmer such as land clearing and planting of palay, etc.

PARC. It refers to the Presidential Agrarian Reform Council.

RA 6657. It refers to the Republic Act 6657 or CARL.

Regular farmworker. It refers to a farmworker who is employed on a permanent basis by an LO to do functions that are actually necessary and desirable in the farm operations (A.O.7,series 2011: 10).

RSAC. It refers to Regional Sub-Project Approval Committee.

Seasonal farmworker. It refers to a farmworker who is employed on a recurrent, periodic, or intermittent basis by an agricultural enterprise or farm, whether as a permanent or a non-permanent laborer, such as “dumaan”, “sacada’, and the like (A.O.7,series 2011: 10).

Special Agrarian Reform Community (SARC). It refers to the land-reform areas under special or distinct settings with limited or dismal development interventions and which would require customized development assistance considering its land scope, Agrarian Reform beneficiary (ARB) density, and poverty incidence.

Productivity. It refers to the relationship between the output generated by a production or service system and the input provided to create this output (Prokopenko, 1987). In this study, this is the main goal, it refers to the income of ARBs derived from their on-farm , off-farm and non- farm endeavors.

Work attitude. It refers to the personal values and attitude of the Agrarian Reform beneficiary (ARB) respondent, and his strategy to increase the farm productivity in the farm, non- farm and off farm activities, example attending Farmer Field School (FFS) training, being industrious in farm activities and

applying proper farm technology. Tiklos (also called "pintakasi") is the Waray equivalent to the "bayanihan". Groups of people work for somebody without hoping for anything in return. They work odd jobs like clearing forests, digging the earth for wells, moving a nipa hut to a new location or even building a house (internet google).

Chapter 2

REVIEW OF RELATED LITERATURE AND STUDIES

This chapter presents studies and literature which helped the researcher in conceptualizing the study. Studies in relation to productivity on farm, off-farm and non-farm. Most of the literature came from the internet books, manuals, journals and other sources on projects implemented in the Agrarian Reform Communities, local, regional and national levels.

Related Literature

Productivity is the relationship between the output generated by a production or service system and the input provided to create this output.(Prokopenko.1987). Thus, Productivity is defined as the efficient use of resources- labour, capital, land, materials, energy, information – in the production of various goods and services.

Higher productivity means accomplishing more with the same amount of resources or achieving higher output in terms of volume and quality for the same input.

Productivity is also the relationship between results and the time it takes to accomplish them. Time is often a good denominator since it is a universal measurement, and it is beyond human control. The less time taken to achieve the desired result, the more productive the system (source).

The amount of output per unit of input (labor, equipment, and capital). There are many different ways of measuring productivity. For example, in a factory productivity might be measured based on the number of hours it takes to produce a good, while in the service sector productivity might be measured based on the revenue generated by an employee divided by his/her salary (Prokopenko,1987).

Productivity measurement is a prerequisite for improving productivity. As Peter Drucker, who is widely regarded as the pioneer of modern management theory, said: "Without productivity objectives, a business does not have direction. Without productivity measurement, a business does not have control (Drucker, 1999).

Productivity is the relationship between the quantity of output and the quantity of input used to generate that output. It is basically a measure of the effectiveness and efficiency of your organization in generating output with the resources available (Drucker, 1999).

Essentially, productivity measurement is the identification and estimation of the appropriate output and input measures.

The significance of productivity in increasing national welfare is now universally recognized. There is no human activity that does not benefit from improved productivity. This is more important because more of the increase in gross national income or GNP, is produced by improving the effectiveness and quality of manpower than by using additional labour and capital. In other words,

national income or GNP, grows faster than the input factors when productivity is improved (Prokopenko, 1978).

Productivity improvement, therefore, results in direct increases in the standard of living under conditions of distribution of productivity gains according to contribution. At present, it would not be wrong to state that productivity is the only important world-wide source of real economic growth, social progress and improved standard of living (Prokopenko, 1987).

The report of the Singapore National Productivity Board on a Productivity Survey in 1984 says that more than half of the contributions to the increase in per capita gross domestic product (GDP) in Singapore is attributed to labour productivity for the period 1966-83. This means that labour productivity has been the main factor in the rise in Singapore's standard of living, as attested by a fourfold increase over the past 17 years" (source).

At the same time, we can easily see the effect of low productivity in the Philippines. The vast majority of increases in the country's total output (97.7 percent) from 1900 to 1960 are due to increases in the extensive factors of production (that is, the use of more resources) and only 2.3 percent can be attributed to productivity. This highlights a key defect in the process of long-term economic growth in the Philippines – the fact that it has been input-intensive (Prokopenko, 1987).

Thus, changes in productivity are recognized as a major influence on many social and economic phenomena, such as rapid economic growth, higher standard

of living, improvements in a nation's balance of payments, inflation control and even the amount and quality of leisure. These changes influence wage levels, cost/price relationship, capital investment needs and employment (Prokopenko, 1987).

Productivity also largely determines how competitive a country's products are internationally. If labour productivity in one country declines in relation to productivity in other countries producing the same goods, a competitive imbalance is created. If the higher cost of production are passed on, the country's industries will lose sales as customers turn to the lower cost supplier. But if the higher costs are absorbed by industries, their profit will decrease. This means that they have to decrease production or keep production costs stable by lowering real wages (source).

Thus, low productivity results in inflation, an adverse balance of trade, poor growth rate and unemployment. Figure 1.1 presents a simplified causal relationship between many variables and factors affecting productivity.

It is clear, then, that the vicious circle of poverty, unemployment and low productivity can be broken only by increasing productivity. Increased national productivity not only means optimal use of resources, but also helps to create a better balance between economic, social and political structures in the society. Social goals and government policy largely decline the distribution and utilization of national income. This in turn influences the social, political,

cultural, educational and motivational work environment which affects the productivity of the individual and the society (Prokopenko,1987).

Department of Agrarian Reform is the lead agency of CARP. Its Vision states: "A Nation where there is equitable land ownership with empowered agrarian reform beneficiaries who are effectively managing their economic and social development for a better quality of life" (Ponce,2002).

Land is essential to the Filipino. This was understood fully by our Filipino ancestors who treated land as communal property. Land was the means to provide food for the family and the community (Borjal, 1981: 25).

Agrarian Reform is considered wider than land reform. The term comprises not only land reform (such as the reform of tenure, production and supporting services structures) but also the reform and development of complementary institutional framework such as the administrative agencies of the national government, rural educational and social welfare institutions and not limited simply to the question of the relationships of the farmers to the land.

It encompasses all programs designed to bring about improvement in all the institutions surrounding farm life, as well as companion measures necessary to make the work of the tenant, farm worker, and owner cultivator successful. It means remedying not only the defect in the distribution and use of land but also and especially, the accompanying human relations regarding land, including economic, social and political relations. It is concerned not only with the farmer and the land he tills but also with the community he lives in (Borjal,1981:26).

In the Comprehensive Agrarian Reform Law of 1988 (RA 6657), agrarian reform is defined to mean the redistribution of lands, regardless of crops or fruits produced, to farmers and regular farm workers who are landless, irrespective of tenurial arrangement, to include the totality of factors and support services designed to lift the economic status of the beneficiaries and all other arrangements alternative to the physical redistribution of lands, such as production or profit sharing, labor administration, and the distribution of shares of stocks, which will allow beneficiaries to receive a just share of the fruits of the lands they work (Ponce, 2002).

Republic Act 6657, or the Comprehensive Agrarian Reform Law of 1988, is the legal basis for the implementation of the Comprehensive Agrarian Reform Program (CARP). This law embodies the State policy of pursuing CARP aimed at liberating the vast potential wealth of Philippine Agriculture by giving the majority of the Filipinos the real and rightful stake of the land. Today, under Pres. Gloria Macapagal Arroyo, CARP is being implemented from the perspective of directly contributing to the administration's social equity agenda as the foundation of growth and development of the countryside(Ponce,2002).

The Comprehensive Agrarian Reform Program (CARP) is the redistribution of public and private agricultural lands to farmers and farmworkers who are landless, irrespective of tenurial arrangement. CARP's vision is to have an equitable land ownership with empowered agrarian reform beneficiaries who

can effectively manage their economic and social development to have a better quality of life (Ponce,2002).

One of the major programs of CARP is Land Tenure Improvement, which seeks to hasten distribution of lands to landless farmers. Similarly, the Department offers Support Services to the beneficiaries such as infrastructure facilities, marketing assistance program, credit assistance program, and technical support programs. Furthermore, the department seeks to facilitate, resolve cases and deliver Agrarian Justice (Ponce,2002).

The legal basis for CARP is the Republic Act No. 6657 otherwise known as Comprehensive Agrarian Reform Law (CARL) signed by President Corazon C. Aquino on June 10, 1988. It is an act which aims to promote social justice and industrialization, providing the mechanism for its implementation, and for other purposes.

The Department of Agrarian Reform (DAR) was created by virtue of Republic Act (RA) No. 6389, with the authority and responsibility to implement the policies of the State on agrarian reform. It was mandated under RA 6657 or the Comprehensive Agrarian Reform Law (CARL) of 1988, in coordination with the Presidential Agrarian Reform Council (PARC), to plan and program the acquisition and distribution of all agricultural lands. It vested DAR with the quasi-judicial powers to determine and adjudicate agrarian reform matters.

It is mandated by law to: a) complete land acquisition and distribution (LAD) within the timeframe of the Comprehensive Agrarian Reform Program

(CARP); b) develop social capital resources of the farming communities toward attaining food security, self-sufficiency in the basic needs, and competence in area-based management; c) build sustainable, area-based rural enterprise toward establishing dynamic agrarian reform communities (ARCs); and d) fast-track the delivery of agrarian reform justice.

The Department has two major sources of funds to implement its activities for agrarian reform. The first comes from its own General Appropriations Act (GAA)-authorized budget, consisting of Fund 101 or the general fund and Fund 102 for foreign-assisted

This study is focus on Agrarian Reform Communities. The ARC strategy was thus developed and adopted by Department of Agrarian Reform (DAR). It was largely a resource-maximization, resource allocation and resource-mobilization strategy for program beneficiaries development. By identifying barangays or clusters of barangays with highest concentration of ARBs and distributed lands, resources were pooled and channeled to where they could have the greatest impact. The ARC became the common area where CARP FUNDS for support services were channeled. By using the ARC as a working unit or convergence point, it was possible to more effectively synchronize the delivery of support services to a defined area or target group.

It is within this context that the Comprehensive Agrarian Reform Law (CARL) or Republic Act (RA) 6657 was passed in June 10, 1988. CARL was a social Justice measure anchored on the constitutional provision that it is the

policy of the State " to recognize the rights of farmers and regular farm workers, who are landless to own directly or collectively the lands they till."

As a matter of fact, distance education has proved as a catalyst behind rural development. The distance learning and educating models and practices must be more adapted to the social, cultural, political and economic circumstances of the learners and their environment. It is also worth suggesting that there must be an integration of gender analysis into the planning and implementations of distant learning initiatives.

Poverty is the state of human beings who are poor. That is, they have little or no material means of surviving—little or no food, shelter, clothes, healthcare, education, and other physical means of living and improving one's life. Some definitions of poverty, are relative, rather than absolute, poverty reduction would not be considered to apply to measures which resulted in absolute decreases in living standards, but technically lifted people out of poverty. Attitudes to poverty reduction differ in different nations.

Poverty reduction measures, like those promoted by Henry George in his economics classic *Progress and Poverty* are those that raise, or are intended to raise, enabling the poor to create wealth for themselves as a means for ending poverty forever. In modern times, various economists within the georgism movement propose measures like the land value tax to enhance access by all to the natural world.

Some people undertake voluntary poverty due to religious or philosophical beliefs. For example, Christian monks and nuns take a "vow of poverty" by which they renounce luxury. Poverty reduction measures have no role in regard to voluntary poverty.

Poverty occurs in both developing countries and developed countries. While poverty is much more widespread in developing countries, both types of countries undertake poverty reduction measures.

Today, continued economic development is constrained by the lack of economic freedoms. Economic liberalization requires extending property rights to the poor, especially to land. Services, notably savings, can be made accessible to the poor through technology, such as mobile banking. Inefficient institutions, corruption and political instability can also discourage investment. Aid and government support in health, education and infrastructure helps growth by increasing human and physical capital.

Poverty alleviation also involves improving the living conditions of people who are already poor. Aid, particularly in medical and scientific areas, is essential in providing better lives, such as the Green Revolution and the eradication of smallpox. Problems with today's development aid include the high proportion of tied aid, which mandates receiving nations to buy products, often more expensive, originating only from donor countries.^[14] Nevertheless, some believe (Peter Singer in his book *The Life You Can Save*) that small changes in the way each of us in affluent nations lives our lives could solve world poverty.

Multi-million infra projects boost ARB's livelihood activities. Farmers living in Brgy. Agnaga and Calamigan – Agrarian Reform Community (AGCA-ARC) received a big boost for their on-going community projects with the government's commitment to set aside funds for the rehabilitation and concreting of their farm-to-market roads and construction of their overflowing bridge.

During her recent trip here in the province, President Gloria Macapagal-Arroyo turned-over the newly completed P13.5 million Sitio proper Agnaga – Sitio Belen Calamigan Farm-to-Market Road to local government unit of Concepcion. This road project is 3.74 kms. Long and provides better access to Barangays Agnaga and Calamigan which are about six kilometers away from the town proper of Concepcion.

President Arroyo also led the groundbreaking of 1.373 kms. Sitio III. Brgy. Agnaga Farm-to-Market road and the construction of an overflow bridge that cost more than P6.6 million.

These projects were funded by Asian Development Bank (ADB) and implement by the Department of Agrarian Reform (DAR) through its Agrarian Reform communities Projects (ARCP).

Agrarian Reform Secretary Nasser Pangandaman who was with President Arroyo in Concepcion during her visit said that more projects like these are being readied for implementation nationwide to help the Agrarian Reform Beneficiaries (ARBs) improve their farm productivity.

The Comprehensive Agrarian Reform Program's (CARP) mandate is to provide the necessary support service to make less developed areas more productive. This thrust is vigorously pursued by the present administrator to raise the productivity and income level of farmers and consequently contribute to the over all growth of the country's economy. (PIA)

Sustainable development is a way for people to use resources without the resources running out . The term used by the Brundtland Commission defined it as development with sustainability that "meets the needs of the present without compromising the ability of future generations to meet their own needs (Tevet, 2010: 347).

Everyone wants a better place to live. Some people want better homes and housing, while other people want better schools, more jobs, better shops, or cleaner and safer streets. Others may want all these things. Whatever the problems in any neighborhood, they can usually be grouped into three issues. People need: a better environment – that means green spaces, play areas, no litter, nice gardens, decent houses, less noise and pollution. The resources used should renew over generations a better economy – that means jobs, reasonable prices, cheaper heat and light, no loan sharks ;a better social conditions – that means good leisure facilities, lots of community groups offering sports and arts, friendly neighbors.

But many people now realize that if we are to tackle one issue, then we all probably have to tackle the others as well. For instance, new shops are unlikely to open in an area where crime and poverty levels are very high. Similarly crime is

unlikely to fall in an area where the housing has been improved unless there are jobs available. People may move into an area where housing and jobs are available, but if the surroundings are run-down and public transport is poor, they may well not want to stay. This is not just a local issue. The same problems are faced at a national level. If the governments of the world are to deal with poverty, they do not just need to provide money and food aid, they need to help local people get educated and get jobs. People also need a safe environment with adequate homes and drinking water. To make these things work, governments also need to make sure that people have an effective voice in deciding what happens where they live.

This approach is called sustainable development. While this phrase can be confusing, it's now used in many government documents and in funding programmes. Sustainable development has three parts: environmental sustainability, economic sustainability and sociopolitical sustainability.

At the core of this idea is the matter of meeting people's needs – for a home, for a decent job, for education for their children, for good health care, and for a safe and healthy neighborhood to live in.

Most people in the rich nations have most of these needs, but there are still many people living in poverty and in poor quality homes. Even if these basic needs are met there are still plenty of ways in which their 'quality of life' is under threat: from crime, from pollution, or from living in neighborhoods where no-one in authority seems to care. Many areas have programmes to promote 'local

sustainability': many are called 'Local Agenda 21' plans, named after the international Agenda 21 action plan for sustainable development agreed at the United Nations Earth Summit held in 1992.

Poverty is usually defined as the inability to meet one's basic economic needs. Currently, an estimated 1.3 billion people (70.00 percent of them women) in developing countries—one of every five people on the planet—have an annual income of less than 370 per year, with many of them living in urban slums.

Poverty causes premature deaths and preventable health problems. It also tends to increase birth rates and often pushes people to use potentially renewable resources unsustainably in order to survive (Ponce, 2002).

Most economists believe that a growing economy is the best way to help the poor. This is the so-called trickle-down hypothesis: Economic growth creates more jobs, enables more of the increased wealth to reach workers, and provides greater tax revenues that can be used to help the poor help themselves.

Analysts point out that reducing poverty requires the governments of most developing countries to make policy changes, including shifting more of the national budget to help the rural and urban poor work their way out of poverty and giving villages, villagers and the urban poor title to common lands and to crops and trees they plant on them.

Agriculture is a financially risky business. Whether farmers have a good year or bad year is determined by factors over which they have little control: weather, crop prices, crop pests and diseases, interest rates, and the

global market. Because of the need for reliable food supplies despite fluctuations in these factors, most governments provide various forms of assistance to farmers and consumers.

One approach is to keep food prices artificially low. This makes consumers happy BUT means that farmers may not be able to make a living. Many governments in developing countries keep food prices in cities lower than in the countryside to prevent political unrest. With food prices lower in the cities, more rural people migrate to urban areas, aggravating urban problems and unemployment and increasing the chances of political unrest.

Second approach is to give farmers subsidies to keep them in business and to encourage them to increase food production.

Third policy is to *eliminate most or all price controls and subsidies*, allowing market competition to be the primary factor determining food prices and thus the amount of food produced. Some analysts call for phasing out all government price controls and subsidies over, say five to 10 years and letting the farmers respond to market demand.

Many environmentalists believe that instead of eliminating all subsidies, they should be used only to reward farmers and ranchers who protect soil, conserve water, reforest degraded land, protect and restore watershed and conserve wildlife.

Some analysts believe that land distribution reform is an important factor in reducing world hunger, malnutrition, poverty and environmental

degradation. Such reform usually involves giving the landless rural poor in developing countries either ownership or free use of enough land to produce their own food and, ideally enough surplus to provide some income.

Proponents argue that such reform would increase agricultural productivity in developing countries and reduce the need to farm and degrade marginal land. It would also help reduce migration of poor people to overcrowded urban areas by creating employment in rural areas.

To cite an example is the life of a farmer who became a CLOA holder, turned merchant, in San Jorge Samar. Before this farmer (Joel Biñar) became an ARB, he was living with his parents and he helped manage his family's three hectares, ancestral coco and rice lands. It was difficult to depend on the coco product considering there were six of them alternately getting the kuchicha. Besides, growing mainly rice meant a large capital outlay but the yield is a pittance. His wife gives birth until they raised a total of nine children. Years after, their children had grown up and gone to school but their life remained tough.

Until in 1988, Joel was identified and was awarded by DAR with a hectare of agricultural land. In support to the land he received, he was sent to attend weeklong training on Farming System Development at Cebu City, sponsored by DAR-FAO TSSARD.

By applying the new knowledge on farming and inter-cropping, he became open to the idea of planting high value crops. His farm lands produced 20 kilos of ampalaya every four days. Harvest was twice a week, thus income was

also twice a week . The couple started to stand their own feet. In a few months, Joel was able to save enough money from the brisk sales of ampalaya and other high value crops. Through years of hardwork, slowly, their house was filled with appliances and had already acquired his own tractor. A motorboat that would transport their produce to the market. Joels farm was located across the stream, so that he thought it wise to acquire a row boat that would transport the folks especially school children in the area to the other side of the village in exchange for piso or two.

Inspired by this turn out, he shared his new learning to his fellow ARBs and non-ARB, small farmers in nearby barangay. His mission is to help his fellow ARB attain a better productivity and better income (PIA).

Productivity is a measure of the efficiency with which a country combines capital and labour to produce more with the same level of factor inputs. We commonly focus on labour productivity measured by output per person employed or output per person hour.

A better measure of underlying productivity growth is total factor productivity which takes into account changes in the amount of capital available for each worker to use and also changes in the size of the labour force.

Although China's productivity improvements are impressive, the process of productivity catch-up with advanced nations still has a long way to go. China's labour productivity is about 12 per cent of that of the USA. The two charts below

taken from data produced by the International Labour Office show relative labour productivity levels for different regions of the world.

For China to make the leap from being a middle-income to a high-income country it will have to achieve further big strides in lifting productivity. Capital investment and the size of the labour force is set to have less impact on output per person; attention is focusing on improving the stock of human capital, competition and managerial standards in raising factor efficiency.

Agricultural productivity is measured as the ratio of agricultural outputs to agricultural inputs. While individual products are usually measured by weight, their varying densities make measuring overall agricultural output difficult. Therefore, output is usually measured as the market value of final output, which excludes intermediate products such as corn feed used in the meat industry. This output value may be compared to many different types of inputs such as labour and land (yield). These are called partial measures of productivity. Agricultural productivity may also be measured by what is termed total factor productivity (TFP). This method of calculating agricultural productivity compares an index of agricultural inputs to an index of outputs. This measure of agricultural productivity was established to remedy the shortcomings of the partial measures of productivity; notably that it is often hard to identify the factors cause them to change. Changes in TFP are usually attributed to technological improvements (Prokopenko,1978).

Farm to market road project in Samar starts. DARAM, SAMAR. The construction of the P19-million worth farm-to-market road in West Daram agrarian reform community (ARC) in this island- municipality is finally in full swing after the ground breaking ceremony on May 27, 2011.

Regional Director Eliasem Castillo of the Department of Agrarian Reform (DAR) disclosed that this 3.68-kilometer all-weather road stretching from Barangay Mayabay to Barangay San Roque and implemented under the second phase of the Agrarian Reform Community Project (ARCP-2) is part of the Program beneficiaries Development (PBD) component OF THE Comprehensive Agrarian Reform Program (CARP).

Mayor Lucia Astorga expressed her gratitude to DAR particularly to the National Project Director of the ARCP-2, Homer Tobias, who led in the ground breaking rites.

Astorga, in her message, recalled that Tobias was then the regional director of DAR here when this ARC was launched in 2009(PIA).

Homer Tobias was also instrumental in the inclusion of her municipality under the ARCP-2, which is funded by the Asian Development Bank (ADB), Astorga added.

According to her, with Tobias strong representation, DARAM ARC was considered at the last minute of the deliberation. However, her municipality's project proposal was the first to be approved, funded and now to be implemented soon from a bunch of project proposals submitted nationwide. In

response, Tobias gave credit to the perseverance and selfless commitment of the lady mayor to her constituents and the apparent teamwork between DAR and the local government unit.

The crowd applauded when he announced that the proposed 2.2 kilometer Poblacion- Talisay farm-to-market road is also in the offing.

Tobias said that for as long as the Local Government Unit (LGU) is ready to shoulder the required equity, more projects will be realized. He explained that the equity can be sourced out also from partner non-government organizations (NGOs) and the provincial LGU.

Aside from infrastructure projects, ARCP-2 likewise finance various trainings for the agrarian reform beneficiaries under its agricultural enterprise development component to make sure that farmers' production and income will increase.

Astorga said the ARCP-2 is a BREAKTHROUGH towards what she envisions of Daram- An economically vibrant community in the province of Samar where one can find the best tourists diving spot and the center of the best agricultural and marine products (PIA, Samar).

The Department of Agrarian Reform (DAR) in Bicol now leads the entire country as the most 'time efficient' region in matters of fund disbursements necessary to expedite construction of approved sub projects of the Agrarian Reform Communities Projects II (ARCP II), according to an agency's top official.

DAR ARCP II National Project deputy director Herman Ongkiko said to date, the total fund amounted to Php1,082,280,888 for 161 sub projects spread in the three ARCP II-covered provinces in Bicol, Camarines Norte getting the biggest allocation amounting to Php 446,345,799.06 for its 64 sub projects, Camarines Sur with Php 395,918,230.49 for 77 sub projects and Sorsogon getting 240,016,858.45 for 20 sub projects.

ARCP II is funded mainly through loan assistance from the Asian Development Bank (ADB) with the support from the national government through its National Government Assistance for Local Government Units or NGALGU.

Leading this male-dominated job is not a toughie macho but a persuasive lady who is DAR regional director and ARCP II regional project manager Maria Celestina Manlagñit-Tam, fondly called as RD Waying.

"When ARCP II started in 2009, it was neither attractive nor palatable to the local government units (LGUs) due to substantial equity required from them," Tam said.

Notable among the three provinces was Camarines Norte since they will be having for the first time foreign assisted projects (FAPs) in their agrarian reform communities (ARCs). Without any previous experience on FAPs, the initial five identified LGUs in Camarines Norte, mostly fifth class municipalities, were earlier reluctant to be involved with ARCP II.

This is where the provincial government of Camarines Norte came in headed by Governor Edgardo Tallado, who shouldered all the equities required from the covered municipalities composed of Labo, Paracale, San Lorenzo Ruiz, Basud and Jose Panganiban. After Governor Tallado's commitment, ARCP II was in full throttle in Camarines Norte.

The equity share for a first and second class municipality is 70 percent, 60 percent for the third and fourth class, and 50 percent for the fifth and sixth class.

On the other hand, Camarines Sur was very receptive to the project. This can be linked to the success of previous projects implemented like the Agrarian Reform Infrastructure Support Project (ARISP) and other FAPs that gained the confidence of local chief executives (LCEs) in the province.

Further, DAR's development facilitators (DFs) were personally involved in the grassroots and have positive relations with the LGUs that facilitated the strong partnerships between DAR and the municipalities.

"This personal linkaging really proved effective that enhanced our partnerships with local decision-makers," Tam said.

Worth commending is the strategy of the provincial project manager and Provincial Agrarian Reform Officer (PARO) Rodrigo Realubit who organized constant meetings of all LGU-beneficiaries with every LGU having a chance to host meetings in its locality. Realubit was also instrumental in Governor Tallado's support to ARCP II by laying the foundation for the partnership during his

previous tenure as PARO for Camarines Norte. Templates of designs were also shared among LGUs living up to the local tradition of Bayanihan.

The Bayanihan Spirit is necessary to synergize the efforts of 12 LGU-beneficiaries composed of the municipalities of Sipocot, Del Gallego, Libmanan, Milaor, Ocampo, Garchitorena, Tigaon, Buhi, Baao, Bula, Pili and Sangay. Write shops were conducted for one week under one venue to prepare all technical documents required by the ARCP II, a strategy that proved very effective with the output of complete set of technical documents of the sub-projects.

Meanwhile in Sorsogon, the LGUs were initially hesitant on the project. The DAR provincial office doubled its efforts to catch up with the pace of the two other provinces.

"The province now is in high spirit with the sudden surge of approved sub-projects," Tam said.

As of this writing, six irrigation projects and one farm-to-market road have been approved for implementation. Sorsogon has seven municipalities under ARCP II composed of the towns of Castilla, Matnog, Irosin, Juban, Casiguran, Gubat and Bulan.

Personal linkaging was also Tam's strategy in managing the regional sub project approval committee (RSAC) which is responsible in authorizing projects not exceeding P3.5 million in total cost.

"We don't simply give invitation but we use personal persuasion in encouraging our partners and line agencies to be active in the project to expedite approvals," Tam said.

Aside from DAR, the RSAC is composed of the Department of Agriculture (DA), Department of Public Works and Highways (DPWH), Department of Environment and Natural Resources (DENR), Department of the Interior and Local Government (DILG), National Commission on Indigenous Peoples (NCIP), National Irrigation Administration (NIA) and the Bureau of Government Finance under the Department of Finance (DOF).

It also pays off that the lady director is an active member of the Regional Directors Association (REDIRAS). To date, RSAC has approved 55 sub projects representing 30.00 percent of the 161 subprojects in seven meetings that they convened within the span of a year and a half. "We always have a quorum since the regional directors usually personally attend the meetings," Tam said. The remaining balances of the grand total of 161 subprojects which amounted more than P3.5 million each were approved by the national sub project approval committee (NSAC).

ARCP II implementation follows the bottom-up approach wherein sub projects are identified by the beneficiary communities themselves. The personnel of Asean Development Bank (ADB) and the National Project Coordinating Office (NPCO) immerse themselves in the grassroots to consult, confirm and validate the proposed projects.

"A mere presence of a NPCO staff excites the community and local officials which make them feel important resulting to gaining full cooperation and trust from them for the project implementation," Tam said. The agrarian reform beneficiaries (ARBs) through their organizations actively participated in barangay workshops and consultations giving us vital information for the projects, she added.

One significant lift in ARCP II implementation is the provision of support fund through NGALGU which covers 25 percent of the LGUs' equity for every sub project. NGALGU basically resolves the LGUs' problem on fund scarcity.

"Another 20.00 percent support fund from the performance-based grant system (PBGS) can also be availed that can result to a possible 45.00 percent total national government share," Tam said. Vital requirement to avail said 20.00 percent is by achieving the DILG's Seal of Good Governance which was introduced by the late DILG Secretary Jessie Robredo. Luckily, the LGU-beneficiaries were conferred with such award.

The approved 161 subprojects range from farm-to-market-roads, irrigation systems, multi-purpose buildings and post harvest facilities such as solar dryers, and social infrastructures such as school buildings, health centers, day care centers and level II potable water system. "We also give equal importance to agri-enterprise development component of the project to eventually transform our farmers as entrepreneurs," Tam said.

Ongkiko lauded DAR Bicol for its noteworthy performance and said he believes Region V has set the pace and momentum that need to be emulated by other regions in order to bring the benefits of the subprojects to the end users as fast as possible.

Tam said that the infrastructure projects aim to stimulate the economic activities in the ARCs especially with those numerous farm-to-market-roads and post harvest facilities.

Alex Robles, an agrarian reform beneficiary from Barangay Aslong in Libmanan, Camarines Sur said, "The road has a great impact to us especially that I own a tricycle. It is now very easy for me to transport products and there is no need for me to look for an alternative route which I did previously to evade the previously muddy road."

More than 50.00 percent of the 161 sub projects are either on the ground breaking phase or on-going in terms of construction, Tam said.

"We already completed 20.00 percent of the total sub projects and some of these are already turned over to the community-beneficiaries," she added.

As long Barangay Captian and ARB Eduardo Borromeo reflects on the significance of the ARCP II in his community; "Almost everybody benefited from the farm-to-market road project of ARCP II here in Aslong. Various mode of transportation now ply in our community giving better mode of transportation especially to the students who previously ride on "hilada" or carabao sleigh."

"It is now easier to transport our products. The students can now walk conveniently to school not worrying about mud. Because of this better road, almost all residents are striving to own vehicles."

Indeed, time is gold in Bicol as it expects fields of golden grains to be harvested in due time (MAL/JJJP-PIA5/Albay).

The ARCESS project of the Department of Agrarian Reform (DAR) aims to increase farm Productivity, improve net income, and sustain the livelihood of agrarian reform beneficiaries or ARBs. To achieve these objectives, the project will tap professional service providers like agri-extension providers and business development service (BDS) providers to coach ARB Organizations on farm technology and enterprise development. In particular, the project will tap BDS providers to enhance the capacity of ARBOs on business management and to incubate their agri-enterprise until such time that they can already effectively and sustainably manage it. Likewise, the ARCESS project provides common service facilities (CSF) or farm equipment, machineries, and implements to ARB organizations. The ARCESS project, and in particular the CSF, will be provided to ARB organizations that are willing and ready to pay user fees for the CSF so these become their business asset.

Led by the DAR, this inter-sectoral partnership intends to improve the organizational capacities of ARBs in enterprise development. As such, the main interventions of the project are towards the ARB organizations or ARBOs. The project is initially designed to be implemented for a maximum period of two (2)

years where DAR will tap professional service providers from state universities and colleges (SUCs), civil Society organizations (CSOs), and private institutions. At present, around 197 sub-projects are undergoing third party needs assessment and design assessment. These sub-projects were developed by DAR Provincial Offices in consultation with the ARB organizations and other stakeholders like local government units.

The project, “Agrarian Reform Community Connectivity and Economic Support Services (ARCCCESS)”, is DAR’s strategic intervention to retain the awarded lands of agrarian reform beneficiaries (ARBs) through increased production and engagement in agri-based and related enterprises. The project has five major components which include provision on common service facilities (CSFs) for production and processing, agri-technology and agri-extension services, business development services, credit facilitation, and land tenure improvement. The project aims to strengthen the ARB organizations by building them as hubs of support services in the community which are expected to contribute to increasing ARB household incomes and improve resiliency of ARB households.

The Department of Agrarian Reform (DAR) through the Agrarian Reform Community Connectivity and Economic Support Services Project (ARCCCESS Project), provides support services in favor of the farmer beneficiaries purposely to support the general objective of reducing poverty in the Agrarian Reform Areas (ARAs).

The ARCESS project is lined up with the Philippine Development Plan (PDP 2011-2016) which considers the Comprehensive Agrarian Reform Program Extension with Reform (CARPER/Republic Act No. 9700) as not only a social justice program but also a plan or strategy to achieve a developed agriculture and fisheries sector.

ARCESS also aims to teach farmers agri-business technologies to help them establish farm enterprises and gain access to credit, better markets and participate in economies of scale. Another important goal of the ARCESS program is to enhance organization management, i.e., strengthen farmers' organizations where a lot of Agrarian Reform Beneficiaries (ARBs) are members.

There are two strategies of implementation of ARCESS which will be the focus of investments or funding: (1) the provision of business development services (BDS) to assist the business units composed of Agrarian Reform Beneficiaries Organizations (ARBOs) in managing the Common Service Facilities (CSFs) effectively and profitably and (2) provision of equipment/machineries as CSFs (tractors, threshers, harvesters, water pumps, etc) of business units.

The implementation of these two components will be based on a favorably appraised business plan and in conjunction with other required components to realize the business of the ARB organizations. Projects to be proposed and funded under this program should also be based on earlier proposals prepared by the different field offices where and when deemed appropriate.

ARCESS will be provided to support the production, post-production, post-harvest and post-processing of the following crops: (1) first priority crops - rice, corn, sugar cane and coconut; (2) second priority crops - vegetable, cassava, coffee, cacao and abacca, and (3) third priority crops - palm oil and rubber.

As to the site/location of ARCESS projects, priority shall be given to agrarian reform areas (ARAs) which shall be screened according to the following criteria: (1) Must criteria- (1.a) with available development plans and project proposals compatible or congruent to ARCESS; (1.b) ARBOs or small holder farmers are willing to form into Business Units and participate in the program; (1.c) which have available contiguous land area which can be developed for agribusiness clusters for economies of scale; (1.d) with existing facilities such as operational irrigation system, post-harvest facilities, and easy access to farm areas; and (1.e) presence of complimentary assistance and/or ready access to agri extension, credit, etc.; (2) Want criteria- (2.a) at least 75.00 percent of the proposed project area has been covered by CARP (distributed or leasehold); (2.b) with existing business partnership with private sector and/or market and with potentials for expansion; (2.c) at a future time, can be scaled up within the value chain; and (2.d) with high market demand.

As to what organizations may participate, the following ARBOs must have the following qualifications: (1) eligible ARBOs are organizations where majority of active members are ARBs (50.00 percent plus 1 of total members currently are ARBs/small holder farmers; (2) currently registered with either SEC, CDA under

RA 9520 or BRW-DOLE and must not be (a) de-listed/candidate for delisting by DAR; (b) dissolved by CDA, SEC, BRW-DOLE; or (c) written-off by any lending institution; (3) willing to be assisted and formed into Business Units with other ARBOs; (4) without past due account with DAR.

ARBs and small holder farmers who are not yet organized but who want to participate in the program may join existing registered ARBOs or organize themselves and register as an organization with appropriate government agencies. Participating organizations may be cooperatives, producer's organizations, irrigators associations, federation or network of people's organizations or farmer's associations.

Under the ARCESS Project, the following types of business activities are eligible for equipment/machinery grant: (a) production (1st priority); (b) post-production/post-harvest (2nd priority); (c) processing (3rd priority).

Proposals for equipment grant may be selected from, but not limited to, the following menu/sample of eligible equipment/machinery: (a) Palay: hand tractor, mechanical planter, mechanized reaper, mechanical dryer, thresher, sprayer; (b) Corn: mechanical dryer, planter, sheller, tractor, truck; (c) Sugarcane: tractor and accessories, hauling truck; (d) Coconut and value added products: fiber extractor, coco coir baling machine, coir tumble dryer, mechanical dryer, coco sugar pulveriser, hauling truck, virgin coconut oil extractor; (e) Vegetables: regular or vacuum packing equipment, truck, tramline; (f) Coffee: dryer, roaster, crusher.

Functions of the Business Development Service (BDS) Provider. Under the ARCESS project, the BDS shall: (1) provide capacity development services and assign and deploy a business coach with experience in managing agri-based enterprises and who will be assigned as community-based enterprise organizer (CBEO). The CBEO shall perform the following tasks - (a) prepare business plans for the common service facilities; (b) ensure that all licenses, legal requirements and other business related requirements are obtained and in place for the enterprise start-up; (c) organize among the ARBOs membership, capable members to compose the workforce complement for the smooth running of the enterprise; (d) identify and implement strategies to achieve revenue goals of the enterprise; (e) identify other users of the equipment in the locality to expand the market for the CSF enterprise; and (f) put in place appropriate control systems for the enterprises, including prudent budgeting, timely recording/accounting, fair incentives, etc.; (g) mentor the ARBOs who were given the CSF enterprise for them to be able to take over the management of the enterprise; (h) in cases of common service processing facilities, facilitate the adoption of technology requirements and preparation of documentary requirements of certifying organizations applicable to the ARBOs enterprises; and (i) advice ARB households and farm cashflow and coach ARBOs on marketing.

Other functions of BDS provider: (2) monitor the progress of the services of the consultant/specialists it has assigned as CBEO to specific group of ARBOs; (3) provide back-up consultants/specialists who can assist the CBEO where necessary

without additional cost to DAR in the field of agri-extension, rural finance and/or marketing and could integrate the specific ancillary service to enhance the competitiveness of the ARBO's farm enterprises; (4) prepare and submit monthly reports on the results of work of its CBEO and other consultant-specialist, including completed activities, achievements, outcomes, if any, and constraints encountered, as well as agreements reached in meetings and consultations with DARROs and DARPOs and other assisting government and private sector organizations.

Procurement for Business Development Service will be in accordance with Republic Act No. 9184 or the Government Procurement Act and its Implementing Rules and Regulations pertaining to services and Commission on Audit Circular No. 2007-001 dated October 25, 2007 pertaining to the Revised Guidelines in granting, utilization, accounting and auditing of the funds released to NGOs/POs. /c/s

The Agrarian Reform Community Connectivity Economic Support Services Program or the ARCESS Program is a government initiative for an inter-sectoral partnership to help improve the organizational capabilities of participating agrarian reform beneficiaries' organizations (ARBOs) in agri-enterprise development.

The program was implemented by Department of Agrarian Reform (DAR) to increase farm productivity, improve the net income of agrarian reform beneficiaries (ARBs) and sustain their livelihood through provision of professional

services. Business development services (BDS) are also covered by the program in order to enhance ARBs' capacities for sustainable farm enterprises including the operation of common service facilities (CSF). Furthermore, provision of common services facilities (CSF) on farm machineries and equipment to ARBs organization will be utilized for a fee by ARBs and Non-ARBs.

The turn-over of the Common Services Facilities (CSF) and signing of the certificate of turn-over and acceptance was done at Dapa Municipal Hall with PARO II Teresita E. Depeñoso, MSBA and Honorable Mayor Peter P. Ruaya last April 29, 2013, as witnessed by the ARBOs, DARPO-BDCD Staffs and DAR Central BARBD Staff.

The Common Service Facilities (CSF) is awarded to vegetable raisers from different Agrarian Reform Beneficiaries Organizations (ARBOs) in the municipality of Dapa, Surigao del Norte and are as follows: Union Agro-aqua Credit Cooperative, Don Paulino United Farmers and Fishermen Credit Cooperative, Osmeña Farmers Credit Cooperative, Brgy. Uno Poblacion Credit Organization and Sta. Fe Credit Association.

The CSF turn-over were included three units of Cultivator/Power Tillers which costs P 449,811.00 and two units of Water Pumps that costs P 115,874.00.

Another huge development project in Mindanao , financed by Japan is designed to enhance the productivity of its farmers, thereby ensuring food security and self-sufficiency for the country. The Japan Information and Cultural Center (JICC) said Tokyo, through its Japan International Cooperation Agency

(JICA), is extending to the Philippines a 6.063-billion-yen (P2.75-billion) loan package to finance a project called Mindanao Sustainable Agrarian Reform and Agriculture Development (MinSAAD). The five-year project was launched on September 3, 2013, in Davao City.

The MinSAAD project will provide small-scale agricultural infrastructure, including irrigation facilities, post-harvest facilities, farm-to-market roads, and capacity-building support in 12 selected settlement areas in three regions in Mindanao covering 205 barangays and 25 towns. Around 70,000 agrarian reform beneficiaries are expected to directly benefit from the project. The undertaking is expected to cause a beneficial ripple effect on the more than 400,000 residents of the 12 settlement areas.

The JICA loan is complemented with R1.1-billion counterpart fund from the Philippine government. The Department of Agrarian Reform (DAR) serves as the lead implementing agency, along with the Department of Public Works and Highways (DPWH), the National Irrigation Administration (NIA), and other government agencies.

The Japanese government is the leading donor in Mindanao. Bound by its basic principle of "human resources development, nation-building, and heart-to-heart communication," JICA has undertaken various development and humanitarian projects all over the country that have greatly benefited the Filipino people since 1962.

The Manila Bulletin, led by its Chairman of the Board of Directors Dr. Emilio T. Yap, President and Publisher Atty. Hermogenes P. Pobre, Executive Vice President Dr. Emilio C. Yap III, Editor-in-Chief Dr. Cris J. Icban Jr. Business Editor Loreto D. Cabañes, Officers and Employees, congratulate people and government of Japan headed by Their Excellencies, Prime Minister Shinzo Abe and through its Embassy in Manila led by Ambassador Toshinao Urabe for their generosity, kindness, and nobility of spirit of Japan in the Republic of the Philippines.

P411-M Infra Projects To Boost CARP Farmers' Lives. Efforts by the Department of Agrarian Reform (DAR) to uplift the standard of living of the farmers shift to high gear as the Agrarian Reform Communities Project (ARCP) has approved 19 irrigation and farm-to-market road projects worth Php 411.1-million to be implemented in various agrarian reform communities (ARCs) nationwide.

Agrarian Reform Assistant Secretary Dennis Barrantes, who chaired the National Sub-Project Approval Committee (NSAC), said they gave emphasis on the economic value of the projects towards the farmers particularly those in areas covered by the Comprehensive Agrarian Reform Program (CARP).

"The body realized that these projects are badly needed by the farmers in rural areas to improve the quality of their lives. For instance, the San Isidro ARC's rice fields are heavily dependent on rain and the road leading to their farms is hardly passable by vehicles," Barrantes said.

Regional Director Eliasem Castillo said the regions that will benefit from the infrastructure projects, consisting of 11 irrigation facilities and eight (8) farm-to-market roads, are Regions 4-B, 5, 8 and 9 to be funded by Asian Development Bank (ADB).

Irrigation projects that are approved for implementation in Region-8 are the construction of the Bunacan Communal Irrigation Project in San Isidro, Leyte, and of the Cagnocot Communal Irrigation Project in Villaba, Leyte; and the rehabilitation of Tabunok and the Tagbawto Communal Irrigation Systems both in Hilongos, Leyte. The total cost for these projects is P135.2-million.

Meanwhile, three farm-to-market road projects are for implementation in two Leyte towns and one in Eastern Samar with combined cost of P49.7-million. Barrantes said the town of San Isidro got two projects, an irrigation project and the rehabilitation of the 1.74-kilometer Bawod-Paril farm-to-market road.

He added that two more farm-to-market road projects are approved. There are construction of the 2.8-kilometer Capirawan-Gacao-Canhidoc-Arado road in Palo, Leyte and the Concreting of the 4.4-kilometer Cagaut-Cantomoja-Camanga-Carapdapan road in Salcedo, Eastern Samar.

Other members of NSAC include DAR Assistant Secretary Herminia Fe San Juan and representatives from the Departments of Agriculture, Public Works and Highways, Environment and Natural Resources, Budget and Management, Finance, National Irrigation Administration, National Commission on Indigenous

People, Municipal Development Fund Office and the National Economic Development Authority.

Related Studies

In 2012, Bacurio conducted a study entitled - the Rural Development Model in the First District of Samar.

The study was conducted to develop a performance model for the Development Facilitators (DFs) in the First District of Samar, using a descriptive-correlative research method on their personality, attitudes towards work, and performance.

The DFs' attitudes towards work revealed that 12 of 14 DFs possessed Factor B, "tendency to be ineffective in jobs requiring thinking skills"; eight have Factor A, "like working alone"; one possessed Factor C, "usually react immaturely when reprimanded, would self-pity, and ends up with his jobs affected"; also one possessed factor G, "not conforming to rules and regulations, tend not to follow deadlines", and finally, one possessed Factor Q2, "ineffective working in situations that help is unavailable, dependent from instructions/directions, have less initiative, although a team player"(Bacurio,2012).

In correlating the level of performance of the DFs and their profile in terms of "maintaining farmers' organization and their profile", only in "personality" and "average monthly income" which posted significant correlation, which means that only "personality" and "average monthly income" influenced the performance of

the DFs; while no significant correlations in the other aspects. In terms of conducting relevant farmers training and their profile, it showed no significant relationship which means that none of the variables used influenced the performance of the DFs.

Having a positive correlation along “implementing relevant farmers’ training”, specifically, in the “average monthly income”, the data signified, that the higher the average monthly income of the DFs, the better is the performance in farmers’ training.

In terms of supervising IGP and their profile, only the “average monthly income” of the DFs showed direct relationship, which finding signified that the higher the average monthly income of the DFs the better is the supervision of IGP (Bacurio, 2012).

The study of Bacurio is similar to the present study since both are on Assessment or evaluation of program implementation. However, Bacurio’s study was on DFs’ attitudes towards work and performance in the first District of Samar, while the present study covers the Productivity of ARBs in twenty seven Agrarian Reform Communities along on-farm, off-farm and non-farm activities in the Province of Western Samar .

In 2011, a closely related study conducted by Gamini Batuwitige on farmer companies shows that Agrarian reforms promise desirable change in the development of agrarian communities. Such reforms address issues obstructing development and attempt to create new conditions for farming community to

operate. Farmer companies came to prominence in Sri Lanka in 1996 with the initial successful operations of Huruluwewa, farmer company in the North Central province, and the Nilwala, farmer company in the Southern province, operating on watershed resource management pilot projects. The two companies introduced a new mode of economic organization for farmer communities (Gamini, 2011).

Impressed with the performance of farmer companies, the political leadership of the Ministry of Agriculture directed their expansion to all the districts. This paper describes the concept, its translation to action, its expansion and the outcome of promotional works during the past four years. The purpose of this exercise is to see if the farmer companies can stand up to the expectations of stakeholders as useful mode of operation in the changing economy.

Several diverse groups showed interest as stakeholders to promote farmer companies in view of their potential and excellent initial results. A careful analysis of different expectations and interests would reveal that the stakeholders have different and sometimes competing personal interests while looking for gains from the common interest, the stakeholders would be working together to the extent that such work ensured mutual interests, the stakeholders may withdraw when they see no desirable benefits or when they feel that cost of involvement is likely to exceed the benefits, the above interrelationships clearly show the presence of strong nexus of relationships among the stakeholders, this means if stakeholders withdraw from obligations it is most likely that the business

providing mutual benefits could collapse, Such a nexus of relationships then reflects a model of interdependencies rather than a model of independent organization as farmers independent business venture. The conceptual model for managing overlapping interests to create space for farmer companies confirms the above observations. The stakeholders are organized into three major groups viz. interests of political and bureaucratic leadership, interests of farming community and interests of the organized private sector.

The paper explains the process of growth and expansion of farmer companies in Sri Lanka with data on formation of farmer interest groups, registered farmer companies and distribution of operating farmer companies. It also highlights characteristics of the agrarian communities who expect change in development but are confronted with undesirable outcomes. Also, it shows a direction of efforts to benefit from the production environment if stakeholder interests are addressed in a collaborative process.

The local agrarian community demands reforms for change. Its internal forces are motivated by competition for accumulation and survival while it is exposed to external forces coming from the national government policy. The high agricultural productivity cannot be achieved without the involvement of agrarian communities, technology, organizational policy support, and above all development of other sectors for absorbing the excess population from agriculture.

Looking back at the stakeholder expectations, the strong interrelationships and interdependencies suggest a collaborative approach to economic

development. The farmer companies are most likely to fail in satisfying stakeholders development if the stakeholders interests are not recognized, if interdependencies are not considered, if collaboration among stakeholders is not promoted, if facts of uneven intervention are not given due weight and current political interest is ignored (Gamini, 2011).

In 2007, a related study on The Attitude of Farmers in a Selected Area of Shimane Prefecture, in Japan., shows that the attitude of farmers towards environment and sustainability issues of agricultural development is low due to use of agro chemicals. Field work was conducted in Nakano block of Iwami town, Shimane prefecture and data were collected from the farmers through personal interviews. Findings revealed that most of the farmers confronted low levels of environmental problems. The issues mostly confronted were the reduction of necessary aquatic life and beneficial insects in nature due to the use of agro-chemicals. Cultivation of high yielding varieties of crops with proper management practices, use of low toxicity pesticides and care in handling were the matters mostly suggested by farmers to combat environmental degradation. Most of the farmers possessed a highly favorable attitude towards the above issues. Significant positive correlation was found only between the farmers' attitude and their formal education and newspaper exposure.

This study is somehow related to the present study since the present study cited the work attitude of ARBs in relation to their productivity in agrarian reform community.

In 2008, a related study in Southern Africa, the User Acceptability of Sustainable Soil Fertility Technologies: Lessons from Farmers' Knowledge, Attitude and Practice in Southern Africa. A Low soil fertility is one of the greatest biophysical constraints to agricultural production in sub-Saharan Africa. "Improved fallow," an agroforestry-based soil fertility replenishment technology was developed in response to the depletion of soil fertility and increasing difficulty of small-scale farmers to afford mineral fertilizers. The biophysical performance of the technology to improve soil fertility and increase crop yield has been well demonstrated and efforts are being made to enhance the adoption its adoption by farmers. There is relatively little information and systematic feedback regarding farmers' perception and knowledge of the technology. Using data collected from a stratified sample of 302 farmers in Zambia, this study analyzed farmers' knowledge, attitudes, and perceptions of soil fertility and food security problems, highlighting implications for user acceptability and the development of sustainable soil fertility management technologies. Results show that farmers have good understanding of soil fertility issues, its linkage to food security and household welfare indicators. They appreciate improved fallow because it responds to the critical problems of low soil fertility and provides additional benefits to the household. However, there are some challenges to the widespread uptake of the technology including land constraints, property rights availability of seeds, and knowledge-intensive nature of the technology. Farmer acceptability and improved adoption of the technology will be influenced by the extent to which

efforts are taken to meet these challenges. Farmers' response on knowledge, attitude, and perception provides valuable inputs for further development and modification of the technology. Beyond technology development, an understanding of farmers' preference and other contextual issues-within which the technology is expected to be adopted-will enable researchers to develop appropriate sustainable technologies and enhance user acceptability of the same. The study shows that technical characteristics are important but not exclusive conditions for farmers' acceptability and adoption of good agricultural technologies by farmers.

In 2008, a related study was conducted by Mr. J. Alwis and Mr. R. D. Wanigaratne on Agrarian Reforms and Agricultural Productivity: A Status Review of Sri Lanka's Experience shows that Due to widespread poverty in the population, a strategy was adopted to reduce absolute poverty and ensure minimum standard of living through the introduction of free education, free health services and food ration subsidy. These measures were further supplemented by increased investments for the expansion of agriculture settlement programs and agriculture subsidy schemes. Overtime the levels of social development achieved were closer to these attained in industrial economies. As a result of these policies, Sri Lanka was ranked 82nd among 175 countries for purchasing power parity and placed 91st in the UNDP Human Development Index. Absolute poverty has been reduced within a decade from 31 percent in 1985/86 to 19 percent. However, widening income disparities are a major concern.

With low population growth rate of 1.2 percent in 1998, the country is on the average of completing a demographic transition with an increasing aging population. Despite several national poverty alleviation programs, sustainable development is yet to be achieved.

Social development programs targeted at the poor included land alienation programs, transfer of population from congested areas of the wet zone to the dry zone for irrigated agriculture, tenancy laws, rent regulation for land, producer subsidies and state-sponsored guaranteed purchasing schemes. In response to an insurrection by the unemployed education youth, a five-year plan of investment and a land reform program with land ceiling were implemented in the 1970s vesting 563,411 acres of private lands and 417,957 acres of plantation lands. Lands given for the settlement of people were subject to protective tenurial conditions, which militated against the flow of investments to agriculture from outside. Besides the protective conditions were circumvented by informal transactions and the settlers were trapped by the failure of the policy to rationalize the development potential of the land. Ultra poverty, malnourishment and rural indebtedness were widespread in the settlement schemes, which affected their production potential.

Measures taken to redress these negative features included special projects to increase crop yield, rehabilitation and modernization of irrigation infrastructure, implementation of water management and strategies to create new partnership among officials and farmers, priority to operation and management

aspects and pursuit of intensive cropping and crop diversification to increase farm incomes.

Despite all these measures, poverty programs have only helped in containing ultra poverty conditions. In 1995/96, 35 percent of the rural poor were receiving very little of trickle down effects of distributive benefits. Over the last four decades income disparities have not changed significantly. A stalemate in income distribution and absolute poverty seems to have pervaded despite considerable variations in growth performance over the years.

Promotion of social welfare program at the expense of economic growth did not alleviate poverty. Increase in mobility of poor through infrastructure development, decentralized planning and local level development may provide some avenues for the poor to move out of their constrained environment. A higher level of empowerment of the poor to strengthen their social and economic positions appears to be urgent. An effort to reverse the negative terms of trade experienced by the food agricultural hinterland of the dry zone through the promotion of food processing and rural regional development with government investment and private sector participation appears to be feasible (Alwis, 2011).

In Zambia, is a third world country like the Philippines. The Technical Vocational and Education Training (TEVET) sector is committed to adequately prepare its citizens for the ever-changing occupational world. In doing so, it has put Education and training on its priority list for this is a pillar to an individual's personal development and improvement in terms of productivity and income.

What is sustainable development? According to Our Common Future, also known as the Brundtland Report, Sustainable development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: The concept of NEEDS, in particular the essential needs of the world's poor. To which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs" (World Commission on Environment and Development, 1987: 43).

According to Maureen Hart, a sustainable community is one in which the economic, social and environmental systems that make up the community provide a healthy, productive, meaningful life for all community residents, present and future. Sustainable communities acknowledge that there are limits to the natural, social and built systems upon which we depend.

Education for sustainable development enables people to develop the knowledge, values and skills to participate in decisions about the ways we do things, individually and collectively, both locally and globally, that will improve the quality of life now without damaging the planet for the future.

At this level, achieving sustainable development means achieving the targets in the Millennium Development Goals agreed by all countries in the world at the special September 2000 session of the General Assembly of the United Nations.

Another related studies in Thailand, the Assessment of Farmers' Knowledge and Attitudes Towards the Commercialisation of Tailor-made Fertilisers.

In Thailand, chemical fertilisers provide nutrients that are essential for increasing agricultural productivity but they are expensive, often representing 25.00 percent of the crop production cost. Tailor-made fertiliser technology is a new fertiliser application technology that is being promoted to help farmers reduce fertiliser costs. This study aims to investigate and clarify sugarcane farmers' knowledge and attitudes towards tailor-made-fertiliser. This study also attempts to provide a better understanding of the effect of farm size on farmers' beliefs and attitudes towards tailor-made-fertiliser. Moreover, the findings suggest that further extension of tailor-made-fertiliser practices should include training services for smallholders to improve their knowledge of relevant practices.

In Tanzania, Modelling the relationship between farmer attitude towards farming, and on farm practice a case study of smallholder farmers.

Different models have been used in analysing agricultural data to establish level of agricultural productivity given various factors including land size, use of inputs, use of extension and modern technology, labour, capital etc. A few researchers have tried to understand farmers' attitudes towards farming and how this affects their on-farm practice. A TNS Global farmers' study in Tanzania funded by Bill and Melinda Gates 2011- focused on farmer agricultural

productivity using a mix of Simple Regression and descriptive analysis based on the various factors of production. Findings showed that the more the farmers spent resources appropriately on factors that affect productivity; correct use of inputs, timeliness in land preparation, planting and input application etc, the better there land productivity. But those who actually improved on-farm practice were less than 50.00 percent of the target population, yet the entire population was exposed to the same treatment by the project. This is definitely an interesting result. One would wish to understand why the success rate is that low. In this study, I have used the TNS data to try and understand if farmers' attitude towards farming has a relation with their positive change in practice which would likely increase production. I attempted extraction of attitudinal constructs using factor analysis. Factor analysis on 43 likert-scale questions about farmer's attitudes was performed in order to obtain farmers' attitudinal segments. Six factors corresponding to different themes of farmer attitudes were obtained. These are Information focus, Negative-don't tell me to change, status quo is safer", Change orientation, Passive dependence, Heritage-„Farming is my destiny", Resigned unhappiness- „No hope to improve so would prefer to be something else". Then used regression analysis to assess the impact of various other observable variables on the attitudinal segmentation, which revealed a positive relationship between farmer attitudes and their level of agricultural productivity with the more positive, information focused farmers showing energies to perform well while the negative ones who have somewhat not very good attitude not performing very

well. On average an increase in the covariates studied here reinforced positive attitudes and lowered scores for the negative attitudes. The analysis presented in this thesis forms a basis for further research into the impact different attitudes have on farmers' productivity.

In US, a case study, on Increase Agricultural Productivity by Conserving and Enhancing Soil, Water, and Habitat. Farmers and ranchers across the U.S. recognize that healthy soils and watersheds are critical to the productivity and profitability of agricultural systems, as well as to rural communities and wildlife. Innovative producers are demonstrating the potential of a diversity of high-performance agricultural ecosystems to produce food, return profits, and conserve and enhance natural resources.

Working with partners, they also are pioneering and refining solutions that cut across farm boundaries to address environmental challenges across the landscape. Yet, in too many areas, despite these efforts, loss of nutrients to air and water, depletion of organic matter, mining of groundwater, and production on sensitive lands threaten to undermine the natural systems on which agricultural productivity, communities, and wildlife all depend over the long term. A growing population, increased demand for agriculturally-based fuel and other products, changing climate, increasing water scarcity in many areas, and loss of agriculturally productive lands to development will only increase pressure on natural resources in coming decades. In order to secure future agricultural productivity, the nation needs both to conserve and enhance soil, water supplies,

and other natural resources and to adapt to changing conditions. Addressing these challenges at home also will contribute to agricultural development and resource conservation abroad through knowledge and technology transfer.

Here is farm story, the selling of farm products the I.T. way. Selling farm products has been a Filipino farmer's Waterloo. Farmers often find their hearts crushed when the efforts, resources and time spent are not compensated well (Gallardo, 2015).

Selling their produce by themselves is not a good proposition. The high cost of transportation is discouraging so that many of them prefer to deal with visiting traders even if it meant selling their harvests at bargained price rather than seeing them rot in the backyard. While traders are having a hearty laugh as they count their profits, the farmers are grumbling over crumbs.

The reality of exerting more efforts and spending more resources and time, yet getting less in return may have triggered the wrong notion that farming is no fun.

Filipino farmers might have just found the way to earn decently by showcasing their farm products, using the latest fad in town- social media- as their Japanese counterparts do.

This came into fruition after the DAR, through the Japan International Cooperation Agency (JICA), linked arms with the E-Support Link, a Japan-based company that builds the system that ensures the efficient distribution of

agricultural products and promotes the system infrastructure of fresh products. Its battlecry: "Create safety food distribution"(Gallardo, 2015: 16).

A pilot survey for disseminating small medium enterprises' technologies on the introduction of information technology (IT) for agricultural products distribution was conducted in five member-cooperatives of the Federation of Patriotic Farmers Cooperative of Nueva Ecija (FPFCNE):the Bantug Agricultural Multipurpose Cooperative (BAMC),Bagong Buhay ng Mabini Multipurpose Cooperative (BBMMPC),the Valle Primary Multipurpose Cooperative (VPMPC),the Kawanggawa Primary Multipurpose Cooperative (KPMPC)and the Barangay Aquino Development Cooperative (BADC).

The concept revolves around close monitoring and data gathering of farming activities, from land preparation to planting, nurturing and harvesting. These data are consolidated, analysed, interpreted and developed into what is called a farm story (Gallardo, 2015: 16).

The farm story provide prospective customers and consumers information of the farmer's cultivation method and harvesting schedule apparently for transparency purposes. This should help develop confidence both ways, the customers/consumers relishing their money's worth, fully aware of how the farm products they are taking in were produced and their freshness, having been just harvested straight from the farm. The farmers for their part, enjoy cost-efficient direct transactions with farm inputs suppliers.

The farm story follows a step-by-step process. The first step starts with registration for the systematic enlisting of members of the farmers' cooperative to the data base. The second step- cultivation recording, which is subdivided into crop registration, the last step work registration.

Crop registration is being conducted for proper identification of the farmer-member, the crop being cultivated and the location of the farm. On the other hand, work registration is meant to determine the farm management, from land preparation to planting, nurturing up to harvesting. Through the cultivation record, everybody is given an idea the character of the farmer, the proximity of the farm, when cropping season started, how crops were nurtured and when and what farm inputs-pesticide and fertilizer-were applied to ensure the safety of crop cultivation. It also offers a clue as to when the crop is ripe for harvesting.

With these data, the customer and consumers are in great position to determine when and where they should go to acquire safe and fresh farm products they prefer by merely surfing the website of the controlling network, the E-Supportlink, Ltd., and looking at the cultivation schedule. This is tailored-fit for supermarkets seeking a steady flow of supply in advance directly from the farmer-producers.

Farm inputs suppliers can also take the farm story as a guide on which groups of farmers are in need of farm inputs and technical assistance as part of their corporate social responsibility by going through the cultivation schedule. So,

move over unscrupulous traders. Welcome E-Supportlink, the farmers' newfound marketing patron that helps sell farm products the IT way.

Chapter 3

METHODOLOGY

In this chapter, the research methodology used in this study is described. The geographical area where the study was conducted, the study design and the population and sample are described. The instrument used to collect the data, including methods implemented to maintain validity and reliability of the instrument are described.

Research Design

A descriptive research design using quantitative and qualitative approach will be used (Burns and Grove, 1993: 777). The research also employed other data gathering instruments such as unstructured interviews, documentary analysis and actual observation. These methods were used to describe, record, analyze, interpret and ascertain some facts in order to come up with a substantial and meaningful study.

The survey questionnaire was used to have a clear view of the present status of the Agrarian Reform Beneficiaries who are recipient of the projects implemented in the ARCs.

The statistical tool used in these study were mean, Standard deviation and analysis of variance (ANOVA).

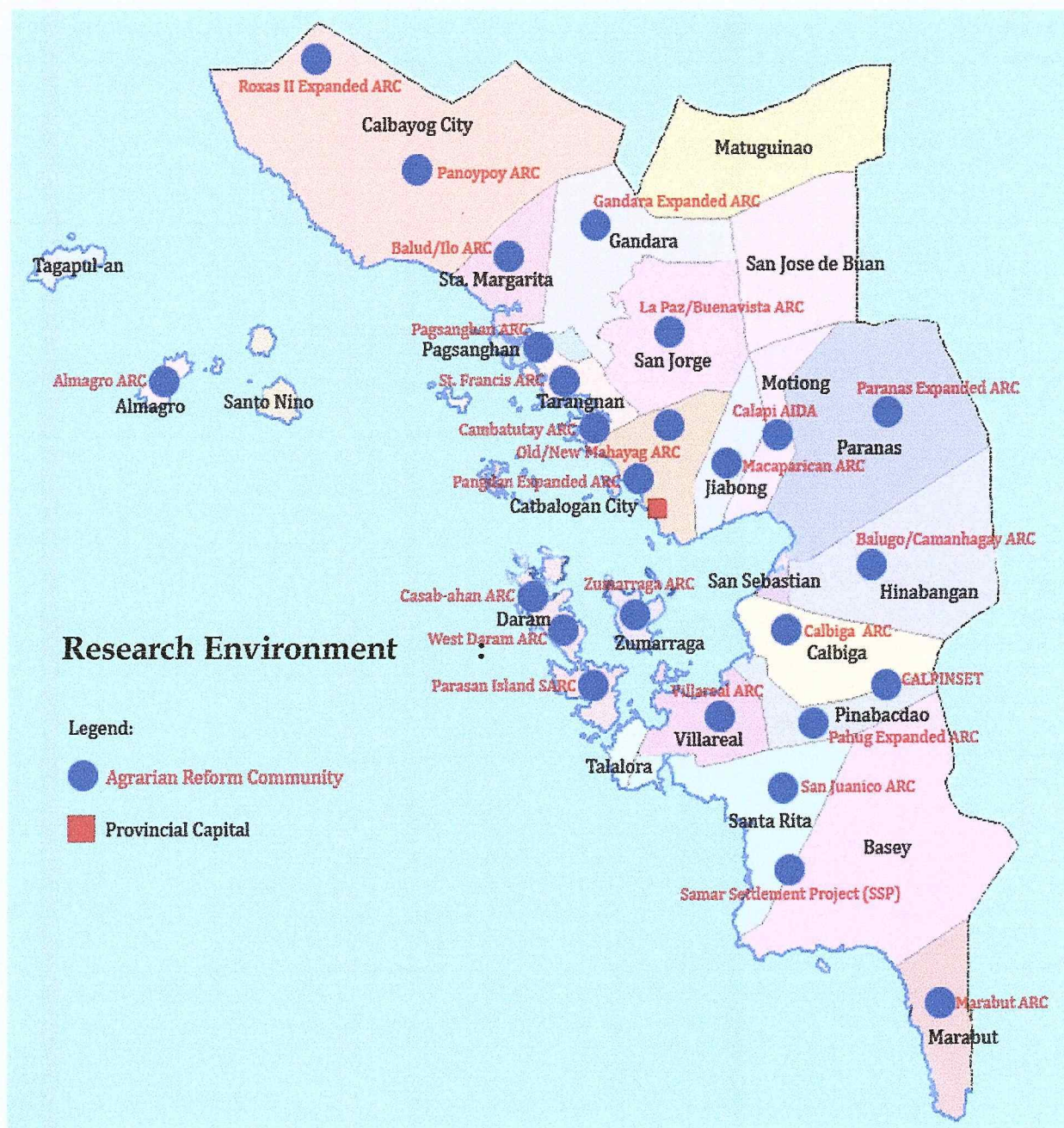


Figure 3. ARCs in Western Samar (ARC Map)

Instrumentation

As previously mentioned, the researcher employed structured questionnaire, documentary analysis, actual observations, checklist for quantifiable variables and unstructured interviews of some respondents in obtaining the desired data and information.

Validation of Instrument

The researcher made instrument-questionnaire initially formulated was subjected to a dry run to test the validity and reliability.

The validation of the instrument was conducted in Northern Samar last October 9 and 10 2015, particularly in Catarman I Agrarian Reform Community (ARC). It covered eight barangays namely barangay Washington, Macagtas, Libjo, Galutan, Hinatad, Mc kinly, Imelda, Doña Pulquiria. The researcher selected Barangay Galutan and Hinatad. These 2 barangay were adjacent and recipient of ARCP II project specifically Farm to Market road.

The researcher proceeded to the Barangay Captain and explained the purpose. She invited 10 Arbs to the Barangay Hall with the help of the Barangay kagawad. The interview was done smoothly because the questionnaire was translated in waray-waray a local dialect in the area. These area was chosen by the researcher because the Infrastructure Project of Barangay Galutan and Hinatad was the only road accessible to their barangay and the Municipal Road to the Municipality of Catarman proper. It also served as vehicle to transport

their farm products during market day and it was maintained by the Local government unit in Catarman. The activity was successful because of the proper coordination with the local barangay officials in the Municipality of Catarman.

The questionnaire was revised and submitted to the adviser for final validation and approval.

Locale and Time of the Study

The study will be conducted within 27 launched Agrarian Reform Communities in the Province of Samar. Majority of the ARBs are recipients of EP and CLOA.

The researcher will ask permission from the Provincial Head or PARPO in formal letter, stating the purpose. The questionnaire will be given to the Development Facilitator assigned to the ARC. The researcher will give the DF one month to conduct the survey. Then the survey questionnaire will be collected from the DF by the researcher with complete information needed.

Sampling Procedure

The study was conducted within the 27 launched Agrarian Reform Communities in the Province of Samar. Majority of the respondents are Agrarian Reform Beneficiaries and recipient of EP and CLOA.

The researcher utilized random sampling by lottery using the Slovin's formula. From 1995 to 2010 launched ARCs, she got 290 ARBs per 1000 as respondents per maturity level. Based on ARC Level development Assessment

(ALDA) of maturity , Level 5 was the highest level of maturity, level 4 second in rank. Level 3, level 2, developing stage and level 1 newly launched.

Using Slovin's formula, the researcher required to survey $n = N / (1 + N E^2)$ people: $1,000 / (1 + 1000 * 0.05 * 0.05) = 286$. There are 13,824 ARBs in the ARCs. The total population for survey will be 3,718 ($286 \times 13,000$).

Instrumentation

As previously mentioned, the researcher employed structured questionnaire, documentary analysis, actual observations, checklist for quantifiable variables and unstructured interviews of some respondents in obtaining the desired data and information.

Research Instrument

The questionnaire will be used because it gathers data faster than any other method. The respondents could read and answer the questionnaire with ease. The researcher utilized two sets of constructed questionnaire. One was for the client Agrarian Reform Beneficiaries and the another set for the Agrarian Reform Communities (ARC).

Part A, pertains to the respondents profile as an Agrarian Reform Beneficiary. The respondent will provide the information like the name, age, gender and address; the civil status whether single, married , separated and widow/widower; their economic status: low , middle and high income; the

average monthly income and the source of income, whether on- farm, off-farm and non-farm.

On the other hand, the other set of questionnaire is to be answered by the respondents in the ARC. The ARC profile in terms of population; monthly income and its source; the status of the ARBs in terms of title; either E.P.; CLOA; LEASEHOLD.

The projects received by the ARC, whether local or foreign funded projects; and the projects on Infrastructure or livelihood.

Interview. The unstructured interview was employed as one of the instruments to ascertain understanding of respondents on unclear and seemingly ambiguous questions in the questionnaire that needed clarification.

Documentary analysis. Secondary data was used . The data base of Beneficiary Development and Coordinating Division (BDGD) monitoring information system, particularly the list of ARC in Samar, was tapped by the researcher.

Validation of Instrument

The research instruments initially formulated will be subjected to a dry run to test the validity and reliability of the questionnaire.

The validation of the instrument was conducted in Northern Samar last October 9 and 10 2015, particularly in Catarman I ARC. It covered eight barangays namely barangay Washington, Macagtas, Libjo, Galutan, Hinatad, Mc

kinly, Imelda, Doña Pulquiria. The researcher selected Barangay Galutan and Hinatad. These two barangays are adjacent and recipients of ARCP II project specifically Farm to Market road. The researcher proceeded to the Barangay Captain and explained the purpose. She invited 10 Arbs to the Brgy Hall with the help of the Brgy Kagawad. The interview was done smoothly because the questionnaire was in their dialect. These areas were chosen by the researcher because the Infrastructure Project of Brgy. Galutan and Hinatad was the only road accessible to their barangay and the Municipal Road to Catarman proper. It also serves as vehicle to transport their farm products during market day and it was maintained by the Local government unit in Catarman. The activity was successful because of the proper coordination with the local officials in Catarman.

Data Gathering Procedure

The researcher asked permission from the Provincial Head or PARPO in a formal letter, stating the purpose. The questionnaire were given to the Development Facilitator assigned to the ARC. The researcher gave the DF one month to conduct the survey. Then the survey questionnaire were collected from the DF by the researcher with complete information needed.

Statistical Treatment of Data

The data gathered were tallied, organized, interpreted and presented in tabular form.

The study utilized percentage, mean, t-test, correlation and ANOVA.

Chapter 4

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This chapter presents the data as the results of this study with the corresponding analysis and interpretation. Included in this chapter are the following: family profile of the ARBs, status of the agrarian reform beneficiaries, projects implemented in the agrarian reform communities, productivity in terms of income of the agrarian reform beneficiaries, relationship between the productivity of ARBs and the identified factors, and problem encountered by the ARBs.

Family Profile of ARBs

The family profile of agrarian reform beneficiaries (ARBs) in terms of age, sex, educational background, family size, number of years as beneficiary, hectares of awarded land, accessibility, and work attitude had been deemed imperative in this study to give their background information. Tables 1 to 18 contain the foregoing information.

Age. Table 1 presents the age of agrarian reform beneficiaries (ARBs).

It can be gleaned from the table that the ARBs range from 15 to 89 years old whereby a number of them, that is, 57 or 19.66 percent were aged 45 – 49 years old. Fifty-three or 18.28 percent were aged 55 – 59 years old while another

Table 1
Age of Agrarian Reform Beneficiaries (ARBs)

Age Bracket	Present		Baseline	
	f	%	f	%
85 – 89	1	0.34	0	0.00
80 – 84	0	0.00	0	0.00
75 – 79	5	1.72	0	0.00
70 – 74	6	2.07	0	0.00
65 – 69	18	6.21	0	0.00
60 – 64	19	6.55	1	0.34
55 – 59	53	18.28	0	0.00
50 – 54	53	18.28	5	1.72
45 – 49	57	19.66	6	2.07
40 – 44	35	12.07	18	6.21
35 – 39	11	3.79	19	6.55
30 – 34	13	4.48	53	18.28
25 – 29	5	1.72	53	18.28
20 – 24	4	1.38	57	19.66
15 – 19	10	3.45	78	26.90
Total	290	100.00	290	100.00
Mean	49.17 years old		26.79 years old	
S. D.	14.18 years		8.97 years	

53 or 18.28 percent were aged 55 – 59 years old, another 53 or 18.28 percent were aged 50 – 54 years old, 35 of them or 12.07 percent were aged 40 – 44 years old, 19 or 6.55 percent were aged 60 – 64 years old, 18 or 6.21 percent were aged 65 – 69 years old, 13 or 4.48 percent, 30 – 34 years old, 11 or 3.79 percent, 35 – 39 years old, and the rest were thinly distributed to the other age brackets identified in this study. The mean age of the ARBs was posted at 49.17 years old with a

standard deviation of 14.18 years which denoted that the ARBs were on their late 40s and at the prime of their age.

From the baseline information, it can be gleaned that of the 290 ARBs, 78 or 26.90 percent were aged 15 – 19 years old while 57 or 19.66 percent were aged 20 – 24 years old, 53 or 18.28 percent were aged 30 – 34 years old, another 53 or 18.28 percent, 25 – 29 years old, 19 or 6.55 percent and 18 or 6.21 percent were aged 35 – 39 years old and 40 – 44 years old, respectively, and the rest were slimly distributed to the other identified age brackets. Based on the foregoing data, the mean age of the original ARBs was posted at 26.79 years old with a S. D. of 8.97 years.

In comparing the present and the baseline information it can be noted that differences in age could be noted whereby the present registered older ages already than the baseline data which obviously indicated that the ARBs had grown older from 1988, the year where CARP was implemented, to the present which is more than 20 years already.

Sex. Table 2 shows the sex distribution of the ARBs.

Table 2 shows that majority of the ARB-respondents were males accounting for 216 or 74.48 percent. The female counterpart accounted for 74 or 25.52 percent only which indicated that male dominance existed among ARB beneficiaries. This could be attributed to the fact that this group is composed of farmers whereby most of them are male.

The same accounting could be noted in the baseline information which indicated that the original ARBs during the 1988 implementation were still the present ARBs.

Table 2
Sex of Agrarian Reform Beneficiaries (ARBs)

Sex	Present		Baseline	
	f	%	f	%
Male	216	74.48	216	74.48
Female	74	25.52	74	25.52
Total	290	100.00	290	100.00

Educational background. Table 3 reveals the educational background of ARBs.

As presented in Table 3, 88 or 30.34 percent of the ARB-respondents were elementary graduates while 57 or 19.66 percent of them had reached the high school level, 43 or 14.83 percent reached the intermediate level, 41 or 14.14 percent reached the primary level, 30 or 10.34 percent were high school graduates, and the rest were thinly distributed to the other identified educational level.

The foregoing information denoted that the ARB-respondents were functional literates, that is, they had the capability to write, read, and understand simple message including simple calculation which was an advantage for them particularly on the enhanced implementation of the program as well as its status.

Table 3
Educational Background of Agrarian Reform
Beneficiaries (ARBs)

Educational Level	Present		Baseline	
	f	%	f	%
Post Graduate	1	0.34	0	0.00
Graduate	14	4.83	0	0.00
College Graduate	4	1.38	0	0.00
College Level	11	3.79	4	1.38
Vocational	1	0.34	1	0.34
High School Graduate	30	10.34	5	1.72
High School Level	57	19.66	57	19.66
Elementary Graduate	88	30.34	88	30.34
Intermediate Level (5-6)	43	14.83	81	27.93
Primary (1-4)	41	14.14	54	18.62
Total	290	100.00	290	100.00

The baseline information presents that 88 or 30.34 percent of the ARBs were elementary graduates while 81 or 27.93 percent reached intermediate level, 57 or 19.66 percent reached the high school level, 54 or 18.62 percent reached the primary level, and the rest of the ARB beneficiaries were slimly distributed to the other identified educational level. The data manifested that there was a positive difference in the present information as compared with the baseline information which signified that the ARBs updated their educational level to the advantage of their being in the program for the sustenance and development of their entitled farm areas.

Family size. Table 4 depicts the family size of the ARB-respondents.

Table 4
Family Size of Agrarian Reform Beneficiaries (ARBs)

Family Size	Present		Baseline	
	f	%	f	%
10 – 12	12	4.14	0	0.00
7 – 9	68	23.45	18	6.21
4 – 6	168	57.93	19	6.55
1 – 3	41	14.14	203	70.00
None	1	0.34	50	17.24
Total	290	100.00	290	100.00
Mean	6 family members		2 family members	
S. D.	2 family members		2 family members	

From the table, it can be noted that the family members of the ARB-respondents at present ranged from none to 12 members whereby majority of them, that is, 168 or 57.93 percent had 4 – 6 family members while 68 or 23.45 percent had 7 – 9 family members, 41 or 14.14 percent had 1 – 3 family members, 12 or 4.14 percent had 10 – 12 family members, and one or 0.34 percent had no family members or a one-man household. The mean number of family members of ARB-respondents was six with a SD of two family members which indicated that the ARB-respondents' family were composed of the ideal family set by the

National Economic Development Authority (NEDA) in the calculation of the poverty threshold.

The baseline data showed that majority of the ARBs registered a family member of 1 – 3 while 50 or 17.24 percent averred to have none or one-man households, 19 or 6.55 percent had 4 – 6 family members and 18 or 6.21 percent, 7 – 9 family members. From these, the baseline mean family members were two with a SD of two family members, also.

Again, in comparing the present and baseline information, changes can be noted also in favor of the present status which indicated that the increase in family members could be attributed to marriage or child-bearing. This implied that the ARBs need to sustain their CARP entitlement and eventually develop their awarded land for sustainability and alleviation.

Number of years as ARB. Table 5 provides the data on the number of years of the ARB-respondents as agrarian reform beneficiaries.

It is shown in the aforesaid table that the ARB-respondents had been ARBs from 1 to 55 years. A number of them had been ARBs for 11 – 15 years accounting for 82 or 28.28 percent while 73 of them or 25.17 percent had been ARBs for 16 – 20 years, 60 or 20.69 percent for 6 – 10 years, 22 or 7.59 percent had been ARBs for 21 – 25 years, 19 or 6.55 percent for 26 – 30 years, and 15 or 5.17 percent for 1 – 5 years, and the rest of the ARB-respondents were thinly distributed to the other number of year bracket as ARBs. The mean number of

years of the ARB-respondent as ARBs was pegged at 16.12 years with a SD of 8.78 years.

Table 5
Number of Years of Agrarian Reform Beneficiaries (ARBs)
as Beneficiaries

No. of Years as Beneficiaries	Present		Baseline	
	f	%	f	%
51 – 55	1	0.34	0	0.00
46 – 50	3	1.03	0	0.00
41 – 45	3	1.03	0	0.00
36 – 40	5	1.72	0	0.00
31 – 35	7	2.41	1	0.34
26 – 30	19	6.55	3	1.03
21 – 25	22	7.59	3	1.03
16 – 20	73	25.17	7	2.41
11 – 15	82	28.28	19	6.55
6 – 10	60	20.69	22	7.59
1 – 5	15	5.17	73	25.17
0	0	0.00	162	55.86
Total	290	100.00	290	100.00
Mean	16.17 years		3.29 years	
S. D.	8.78 years		5.71 years	

The foregoing data suggested that the ARB-respondents, when the baseline information is considered, had been ARBs for quite a number of years which denoted that they had already enjoyed the benefits of the Comprehensive Agrarian Reform Program (CARP) for more than 20 years being one of the ARBs.

Hectares of awarded land. Table 6 presents the hectares of awarded land of ARBs.

It can be gleaned from the table that the hectares of awarded land of ARBs ranged from <1 to >5 square meters. A number of them had been awarded with 2.00 – 2.99 square meters, accounting for 123 or 42.41 percent while 111 or 36.28 percent had been awarded with 1.00 – 1.99 square meters, 26 or 8.67 percent with 3.00 – 3.99 square meters, 25 or 8.62 percent with <1.00 square meters, three or 1.03 percent with 5.00 square meters or more, and two or 0.69 percent with 4.00 – 4.99 square meters.

Table 6

**Hectares Awarded to Agrarian Reform
Beneficiaries (ARBs)**

Hectares Awarded (in sq.m.)	Present		Baseline	
	f	%	f	%
5.00 or more	3	1.03	3	1.03
4.00 – 4.99	2	0.69	2	0.69
3.00 – 3.99	26	8.97	26	8.97
2.00 – 2.99	123	42.41	123	42.41
1.00 – 1.99	111	36.28	111	36.28
< 1.00	25	8.62	25	8.62
Total	290	100.00	290	100.00

Likewise, the same entitlement could be seen in the baseline information which indicated that the land area awarded to the ARBs was the same from 1988 to the present based on the applications the ARBs signed in 1972.

Accessibility. Table 7 provides the data on the accessibility of the ARB-respondents by bus, by motorcycle, by hike, and by sea.

Bus. Table 7 shows that of the 28 ARCs, nine (32.14 percent) are accessible by bus or jeep. These ARCs are mostly accessed through the national highway, municipal road, or barangay road.

This implies that transporting the production of these ARCs is somewhat easy and the transportation is regular and flies frequently within a day with an average distance of 12.44 kilometers from the municipality.

Motorcycle. Table 7 also provides the data on the accessibility of the ARB-respondents by motorcycle.

From the table, it can be noted that none of the ARCs are accessed by motorcycle alone however, there were 12 ARCs or 42.86 percent which are accessed by bus (jeep) and by motorcycle (habal-habal) which indicated that these ARCs are passed through a national highway then through municipal road which was through bus or jeep and from the municipal road they are accessed by motorcycle (habal-habal) through a barangay road which could be a farm to market road that needs development and not passable by jeep yet.

Table 7
Accessibility of Agrarian Reform Beneficiaries (ARBs)

ARC	Area Category	Distance from Municipality to ARC (in km.)		Mode of Transportation	Fare	Route
Roxas II Expanded	Road	51		Jeep	50	Direct
Panoypoy	Road	30		Jeep	40	Direct
Balud/Ilo	Road	2		Jeep	20	Direct
Pagsanghan	Road/	5		Jeep/ Habal-habal Boat	10	Via San Agustin
	Sea	3			30	Direct
Gandara Expanded	Road/ Sea	5	3	Jeep Boat	30 20	Direct
St. Francis	Road	7		Jeep/ Habal-habal	20	Via Balugo Direct
	Road/	4			50 30	Via New Mahayag
Cambatutay				Jeep/ Habal-habal Boat		
Almagro	Sea	2			30	Direct
	Sea	5		Boat	100	Direct
Paranas	Road	5		Jeep/ Habal-habal	25	Via Buray
					20	
Old/New Mahayag	Road	31		Jeep/ Habal-habal	45	Direct
San Jorge	Road	6		Jeep/ Habal-habal	40	Direct
La Paz/ Buena-vista	Road	6		Jeep/ Habal-habal	50	Via San Jorge
Pangdan Expanded	Road & Hike/ Sea	8	3	Jeep Boat	50 20	Direct
Macaparican	Road	10		Jeep/ Habal-habal	30	Via Jiabong

Table 7 continued

ARC	Area Category	Distance from Municipality to ARC (in km.)	Mode of Transportation	Fare	Route
Calapi	Road	10	Jeep/ Habal-habal	50	Direct
Villareal	Road	6	Jeep/ Habal-habal	15	Direct
Balugo/ Caman-hagay	Road	3	Jeep	10	Direct
Calbiga	Road	17	Jeep/ Habal-habal	50	Direct
Calpinset	Road	5	Jeep/ Habal-habal	10	Direct
Pahug	Road	5	Jeep	20	Direct
Expanded	Road	5	Jeep	30	Direct
SSP - Sta. Rita	Road	10	Jeep	15	Via Cantaba
Basey	Road	2	Jeep	20	Direct
San Juanico	Road	4	Jeep	40	Direct
Marabut	Sea	3	Boat	50	Direct
Zumarraga	Sea	5	Boat	60	Direct
West Daram	Sea	5	Boat	10	Direct
Parasan Island	Sea	4	Boat	10	Direct
Casab-ahan Daram	Sea				
Summary:					
Mode of Accession		No. of ARCs		%	
Bus/Jeep		11		39.29	
Motorcycle/ Habal-habal		0		0.00	
Bus & Motorcycle		12		42.86	
Bus/Jeep & Hike		1		3.57	
Sea		9		32.14	

Hike. Table 7 reflects that only one ARC or 3.57 percent could be accessed by hike which could be done after passing through the national highway by jeep or bus. This indicated that this ARC is situated along the coast of the City of Catbalogan.

Sea. Table 7, further, presents that nine ARCs or 32.14 percent could be accessed by sea indicating that these ARCs are situated in an island municipality or along the coast. The regularity of the transportation is only once a day.

The foregoing data signified that all the ARCs as well as the ARBs could be easily accessed for the main reason that there are regular trips plying to and from the ARBs.

Work attitude. Tables 8 to 13 reveal the work attitude of ARB-respondents in terms of hours of work and kind of work in the on-farm, off-farm, and non-farm activities.

On-farm. Tables 8 to 11 provide the data on the work attitude of ARB-respondents in the on-farm activities in terms of hours of work and kind of work.

Table 8
Work Attitude as to Hours of Work
in the Morning

Hours of Work	f	%
3-5 Hours	260	89.65
1-2 Hours	16	5.52
Not Stated	14	4.83
Total	290	100.00

Table 8 presents the work attitude of the ARB- respondents in the on-farm activities in the morning in terms of hours of work.

As presented in the table, majority of the ARB-respondents usually worked in their on-farm activities in the morning for 3 – 5 hours accounting for 260 or 89.65 percent while 16 or 5.52 percent worked for 1 – 2 hours only and 14 or 4.83 did not state the number of hours they worked in the morning in their on-farm activities.

Furthermore, Table 9 presents the kind of work the ARB-respondents worked in the morning in their on-farm activities.

It can be noted from the table that most of the ARB-respondents did the weeding and planting in the morning while 61 or 21.03 percent did the weeding only, 23 or 7.93 percent did the planting only, and 35 or 12.07 percent did not give any information as to the kind of work they usually did in the morning.

Table 9
Work Attitude as to Kind of Work
in the Morning

Kind of Work	f	%
Weeding	61	21.03
Planting	23	7.93
Weeding and Planting	171	58.97
Not Stated	35	12.07
Total	290	100.00

On the other hand, Table 10 shows the work attitude of ARB-respondents in the on-farm activities in the afternoon in terms of the hours of work.

Table 10
Work Attitude as to Hours of Work
in the Afternoon

Hours of Work	f	%
3-5 Hours	194	66.90
1-2 Hours	29	10.00
Not Stated	67	23.10
Total	290	100.00

Table 10 further shows that majority of the ARB-respondents revealed that they worked for 3 – 5 hours in the afternoon in the on-farm activities accounting for 194 or 66.90 percent while 29 or 10.00 percent disclosed that they worked for 1 – 2 hours in the afternoon in their on-farm activities, and a number of them, that is, 67 or 23.10 percent invoked their anonymity regarding this data.

Moreover, Table 11 provides the data on the work attitude of the ARB-respondents in the on-farm activities, particularly in the afternoon in terms of the kind of work.

The table provided that a number of the ARB-respondents, that is, 115 or 39.66 percent disclosed that they usually did the weeding and planting in the afternoon while 58 or 20.00 percent did the weeding only, 31 or 10.69 percent the

planting only and 86 or 29.65 percent did not give any information regarding this.

Table 11

**Work Attitude as to Kind of Work
in the Afternoon**

Kind of Work	f	%
Weeding	58	20.00
Planting	31	10.69
Weeding and Planting	115	39.66
Not Stated	86	29.65
Total	290	100.00

Non-farm. Tables 12 to 13 depict the work attitude of ARB-respondents in the non-farm activities in terms of the kind of work they usually did in the morning and in the afternoon.

Table 12 presents the kind of work usually done by the ARB-respondents in the non-farm activities in the morning.

It can be seen from the table that a number of them, that is, 40 or 13.80 percent did buy and sell while 36 or 12.41 percent of them were sari-sari store owners, 34 or 11.72 percent did fishing, 12 or 4.14 percent did fishing and the rest of the ARB-respondents were thinly distributed to the other identified kind of work they usually did in the non-farm activities. But still, there were 94 or 32.41 percent who never disclosed information regarding this.

Table 12
Work Attitude as to Non-Farm Work
in the Morning

Kind of Work	f	%
Brgy Official	9	3.10
Business	1	0.34
Buy & Sell	40	13.80
Coco Lumber Trading	1	0.34
Coop BOD	1	0.34
Copra Trading	3	1.03
Corn Trading	1	0.34
Crab Dealer	5	1.72
Driving	12	4.14
Fish Trading	3	1.03
Fishing	34	11.72
Food Processing	4	1.40
Food Vending	2	0.70
Furniture Business	1	0.34
Govt Employee	2	0.70
Hog Raising	2	0.70
Keseo Making	1	0.34
Lettering	1	0.34
MC Operation	3	1.03
Poultry	1	0.34
Rice Milling	1	0.34
Rice Trading	7	2.41
Sari-Sari Store	36	12.41
Security Guard	1	0.34
Tahong Trading	11	3.79
Teacher	1	0.34
Tuba Vending	1	0.34
Vege Trading	3	1.03
None	8	2.80
Not Stated	94	32.41
Total	290	100.00

Table 13 reflects the information regarding the work attitude of ARB-respondents in the non-farm activities usually they did in the afternoon.

Table 13

**Work Attitude as to Non-Farm Work
in the Afternoon**

Kind of Work	f	%
Brgy Official	1	0.34
Buy & Sell	3	1.03
Copra Trading	1	0.34
Driving	1	0.34
Fish Cage	1	0.34
Goat Dispersal	1	0.34
Lettering	1	0.34
None	7	2.41
Not Stated	274	94.52
Total	290	100.00

It can be noted in Table 13 that three or 1.03 percent of the ARB-respondents did the buy and sell in the afternoon while one or 0.34 percent each did copra trading, driving, fish cage, goat dispersal, lettering and a barangay official. Seven or 2.41 percent of them disclosed to have no work in the afternoon and majority of them, that is, 274 or 94.52 percent did not give any information.

Off-farm. Tables 14 and 15 provide the data on the time for off-farm activities and the kind of work of off-farm activities, respectively.

Table 14
Work Attitude as to Time for Off-Farm Work

Time for Off-Farm Work	f	%
Yes	49	16.90
No	224	77.24
Not Applicable	1	0.34
Not Stated	16	5.52
Total	290	100.00

It can be gleaned in Table 14 that only few of the ARBs signified that they still have time for off-farm activities accounting for 49 or 16.90 percent. Majority of them, that is, 224 or 77.24 percent disclosed to have no time for off-farm activities while 16 or 5.52 percent did not give any information and one or 0.34 percent was not applicable.

The foregoing information suggested that most of the ARBs devoted their time for on-farm and off-farm activities which they disclosed that they have no more time for non-farm activities. However, a few ARBs signified to be visibly underemployed thus they still indulged in non-farm activities.

It can be noted also from Table 15 that of the 49 ARBs who signified as visibly underemployed or those who signified to still have time for non-farm activities, 30 or 61.22 percent were farm laborers while seven or 14.29 percent were threshers, three or 6.12 percent were barangay officials, two or 4.08 percent

were coconut farmers, one or 2.04 percent was a vegetable farmer, and another one or 2.04 percent was a carpenter. Five of these ARBs did not state the kind of work they indulged in.

Table 15
Work Attitude as to Kind of Off-Farm Work

Kind of Off-Farm Work	F	%
Coconut Farmer	2	4.08
Vegetable Farmer	1	2.04
Carpenter	1	2.04
Thresher	7	14.29
Farm Laborer	30	61.22
Barangay Official	3	6.12
Not Stated	5	10.21
Total	49	100.00

The data presented above suggested that there were ARBs who indulged in non-farm activities probably to augment their monthly income to defray their basic needs and some of them probably just had the passion to work.

Status of ARBs in Terms of Title of Land

Table 16 reveals the status of ARBs in terms of the title of the land.

From the table, it can be gleaned that more than half of the ARB-respondents were CLOA holders accounting for 182 or 62.76 percent while 62 or

21.38 percent were lease holders, 25 or 8.62 percent were EP Holders, 15 or 5.17 percent were private owners, two or 0.69 percent were both CLOA and lease holders, and another two or 0.69 percent were EP and CLOA holders. Two or 0.69 percent of the ARB-respondents did not categorically disclose their status as ARBs in terms of their land title.

Table 16

Status of the ARBs in Terms of Title of the Land

ARB Status	f	%
EP Holder	25	8.62
CLOA	182	62.76
Lease Holder	62	21.38
CLOA & Lease Holder	2	0.69
EP Holder & CLOA	2	0.69
Privately Owned	15	5.17
Not Stated	2	0.69
Total	290	100.00

The data presented suggested that most of the ARBs were in owner-like possessions of the land awarded to them by the CARP.

Projects Implemented in ARCs

Tables 17 and 18 present the projects implemented in ARCs in terms of locally funded projects, foreign funded projects, and other projects.

Locally funded projects. Table 17 presents the projects implemented in ARCs in terms of locally funded projects.

Table 17
Projects Implemented in ARCs in Terms of
Locally Funded Projects

Project Implemented	f	%
Infrastructure	15	5.17
Livelihood	14	4.83
Infrastructure and Livelihood	260	89.66
Not Stated	1	0.34
Total	290	100.00

From the table, it can be perceived that 260 or 89.66 percent of the ARB-respondents disclosed that both infrastructure and livelihood projects were implemented in the ARCs which were locally funded while 15 or 5.17 percent informed that infrastructure projects were implemented only and 14 or 4.83 percent of them said that livelihood projects were the ones implemented in the ARCs which were funded locally. One ARB or 0.34 percent did not give disclosure regarding this.

The data suggested that the concerned agencies were active in the implementation of projects which were both physical improvement of the ARCs and sustainable development of the ARBs.

Foreign funded projects. Table 18 shows the projects implemented in ARCs in terms of foreign assisted projects.

Table 18
Projects Implemented in ARC in Terms of
Foreign Funded Projects

Project Implemented	f	%
Infrastructure	53	18.28
Livelihood	13	4.48
Infrastructure and Livelihood	209	72.07
Not Stated	15	5.17
Total	290	100.00

From the table, it can be noted that 209 or 72.07 percent of the ARB-respondents averred that foreign assisted projects that were implemented in ARCs were both infrastructure and livelihood projects. Fifty-three of them or 18.28 percent declared that only infrastructure projects were implemented being assisted by foreigners while 13 or 4.48 percent of them disclosed that only livelihood projects were implemented and 15 or 5.17 percent had no information regarding this.

The data signified that partner agencies of the program from foreign countries actively involved themselves for the welfare both of the ARCs and of the ARBs.

Productivity of ARBs in Terms of Income

Tables 19 to 21 present the productivity of ARBs which was measured in terms of income along on-farm, off-farm and non-farm activities.

On-farm productivity. Table 19 present the productivity of the ARBs in terms of income along on-farm activities.

Table 19
Productivity of ARBs in Terms of Income
along On-Farm Activities

Income Bracket	f	%
200,000 – 249,999	2	0.69
150,000 – 199,999	1	0.34
100,000 – 149,999	8	2.76
50,000 – 99,999	22	7.59
10,000 – 49,999	174	60.00
<10,000	78	26.90
Not Stated	5	1.72
Total	290	100.00
Mean	Php 25,773.33	
S. D.	Php 29,683.08	

It can be gleaned from the afore-mentioned table that more than half of the ARB-respondents earned on-farm activities of Php10,000 – Php49,999 accounting for 174 or 60.00 percent while 78 or 26.90 percent earned less than Php10,000, 22 or 7.59 percent earned Php50,000 – Php99,999, eight or 2.76 percent

earned Php100,000 – Php149,999, two or 0.69 percent earned Php200,000 – Php249,999, and only one or 0.34 percent earned Php150,000 – Php199,999. Still there were five or 1.72 percent who held their anonymity regarding their income on on-farm endeavors.

Off-farm productivity. Table 20 provides the data on the productivity of the ARBs in terms of income along off-farm activities.

Table 20
Productivity of ARBs in Terms of Income
along Off-Farm Activities

Income Bracket	f	%
50,000 or more	2	0.69
10,000 – 49,999	23	7.93
5,000 – 9,999	11	3.79
<5,000	33	11.38
None	47	16.21
Not Stated	174	60.00
Total	290	100.00

The table presents that a number of the ARB- respondents, that is, 33 or 11.38 percent disclosed that they earned an income of less than Php5,000 along off-farm activities while 23 or 7.93 percent earned Php10,000 – Php49,999, 11 or 3.79 percent earned Php5,000 – Php9,999 and two or 0.69 percent earned Php50,000 or more. However, there were 47 or 16.21 percent who declared that

they had no income on off-farm activities and more than half, that is, 174 or 60.00 percent did not give any information regarding this.

Non-farm productivity. Table 21 depicts the productivity of ARBs in terms of income along non-farm activities.

Table 21
Productivity of ARBs in Terms of Income
along Non-Farm Activities

Income Bracket	f	%
250,000 or more	3	1.03
200,000 – 249,999	2	0.69
150,000 – 199,999	1	0.34
100,000 – 149,999	9	3.10
50,000 – 99,999	48	16.55
10,000 – 49,999	109	37.60
<10,000	76	26.21
None	17	5.86
Not Stated	25	8.62
Total	290	100.00

As depicted in Table 21, a number of the ARB-respondents, that is, 109 or 37.60 percent informed that they earned an income of Php10,000 – Php49,999 while 76 or 26.21 percent earned an income less than Php10,000, 48 or 16.55 percent, an income of Php50,000 – Php99,999, nine or 3.10 percent disclosed an income of Php100,000 – Php149,999, three or 1.03 percent with an income of Php250,000 or more, and only one or 0.34 percent averred that he earned an

income of Php150,000 – Php199,999. But there were still 17 or 5.86 percent ARB-respondents who expressed to have no income at all and 25 or 8.62 percent did not state their productivity in terms of income along non-farm activities.

In summary, the ARB-respondents signified that they had regular monthly income earned to defray their basic nutritional needs including educational needs of their children which they derived from on-farm, off-farm, and non-farm endeavors.

Relationships in the Productivity of the ARBs and the Identified Factors

This section presents the relationship in the productivity of the ARBs and the identified factors, namely: family profile; status of ARBs; and projects implemented. Tables 22 to 30 contain the result of the correlation analysis.

Family profile. Table 22 presents the relationship between the productivity of ARBs along on-farm endeavors and their family profile in terms of age, sex, educational background, number of family members, number of years as between the productivity of ARBs along on-farm endeavors and their family profile in terms of age, sex, educational background, number of family members, number of years as beneficiaries, hectares of land awarded, accessibility, and work attitude.

In associating relationship between the productivity of ARBs along on-farm endeavors and their age, the coefficient of correlation was posted at 0.085

being interpreted as “negligible correlation.” To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher’s t-test was employed whereby the computed value was pegged at 1.448 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.161 with $\alpha = .05$.

Table 22

**Relationship Between the Productivity of ARBs
along On-Farm Endeavors and Their
Family Profile**

Family Profile	Coefficient of Correlation	Fisher’s t-value	p-value	Evaluation/ Decision
Age	0.085	1.448	0.161	Not Significant/ Accept Ho
Sex	0.083	1.413	0.162	Not Significant/ Accept Ho
Educational Background	0.307	5.474	0.000	Significant/ Reject Ho
Family Size	0.078	1.328	0.191	Not Significant/ Accept Ho
Number of Years as Beneficiary	0.117	1.999	0.050	Significant/ Reject Ho
Hectares of Awarded Land	0.157	2.698	0.008	Significant/ Reject Ho
Accessibility	0.066	1.123	0.267	Not Significant/ Accept Ho
Work Attitude	0.347	6.279	0.000	Significant/ Reject Ho

Fisher’s t-critical = ± 1.960

$df = 288$

$\alpha = .05$

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned greater than the critical value and the p-value turned lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along on-farm endeavors and their age, the computed value of 1.448 turned lesser than the critical value of 1.960 and the p-value of 0.161 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along on-farm endeavors and their age," was accepted. Meaning, the productivity of the ARBs along on-farm endeavors was not significantly influenced by their age.

In associating relationship between the productivity of ARBs along on-farm endeavors and their sex, the coefficient of correlation was posted at 0.083 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 1.413 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.162 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned greater than the critical value and the p-value turned lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along on-farm endeavors and their sex, the computed value of 1.413 turned lesser than the critical value of 1.960 and the p-value of 0.162 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along on-farm endeavors and their sex," was accepted. Meaning, the productivity of the ARBs along on-farm endeavors was not significantly influenced by their sex.

In associating relationship between the productivity of ARBs along on-farm endeavors and their educational background, the coefficient of correlation was posted at 0.307 being interpreted as "slight correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 5.474 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.000 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned greater than the critical value and the p-value turned lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along on-farm endeavors and their educational background, the computed value of 5.474 turned greater than the critical value of 1.960 and the p-value of 0.000 turned lesser than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along on-farm endeavors and their educational background," was rejected. Meaning, the productivity of the ARBs along on-farm endeavors was significantly influenced by their educational background.

The correlation being positive suggested a direct proportional correlation which denoted that the higher the educational background of the ARBs, the higher was their productivity along on-farm endeavor in terms of its income.

In associating relationship between the productivity of ARBs along on-farm endeavors and the number of their family members, the coefficient of correlation was posted at 0.078 being interpreted as "negligible correlation." To

test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 1.328 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.191 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned greater than the critical value and the p-value turned lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along on-farm endeavors and the number of their family members, the computed value of 1.328 turned lesser than the critical value of 1.960 and the p-value of 0.191 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along on-farm endeavors and the number of their family members," was accepted. Meaning, the productivity of the ARBs along on-farm endeavors was not significantly influenced by the number of their family members.

In associating relationship between the productivity of ARBs along on-farm endeavors and number of years of being beneficiaries, the coefficient of

correlation was posted at 0.117 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 1.999 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.050 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned equal or greater than the critical value and the p-value turned equal or lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along on-farm endeavors and the number of years as beneficiaries, the computed value of 1.999 turned greater than the critical value of 1.960 and the p-value of 0.050 turned equal to the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along on-farm endeavors and the number of years as beneficiaries," was rejected. Meaning, the productivity of the ARBs along on-farm endeavors was significantly influenced by the number of years as beneficiaries.

The correlation being positive suggested a direct proportional correlation which denoted that the longer the ARBs had been beneficiaries, the higher was their productivity along on-farm endeavor in terms of its income.

In associating relationship between the productivity of ARBs along on-farm endeavors and the number of their family members, the coefficient of correlation was posted at 0.078 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 1.328 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.191 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned greater than the critical value and the p-value turned lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along on-farm endeavors and the number of their family members, the computed value of 1.328 turned lesser than the critical value of 1.960 and the p-value of 0.191 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship

between the productivity of ARBs along on-farm endeavors and the number of their family members," was accepted. Meaning, the productivity of the ARBs along on-farm endeavors was not significantly influenced by the number of their family members.

In associating relationship between the productivity of ARBs along on-farm endeavors and number of hectares awarded to them, the coefficient of correlation was posted at 0.157 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 2.698 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.050 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned equal or greater than the critical value and the p-value turned equal or lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along on-farm endeavors and the number of hectares awarded to them, the computed value of 2.698 turned greater than the critical value of 1.960 and the p-value of 0.008 turned equal to the $\alpha = .05$,

therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along on-farm endeavors and the number of hectares awarded to them," was rejected. Meaning, the productivity of the ARBs along on-farm endeavors was significantly influenced by the number of hectares of land awarded to them.

The correlation being positive suggested a direct proportional correlation which denoted that the bigger the hectares awarded to them, the higher was their productivity along on-farm endeavor in terms of its income.

In associating relationship between the productivity of ARBs along on-farm endeavors and their accessibility, the coefficient of correlation was posted at 0.066 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 1.123 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.267 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned greater than the critical value and the p-value turned lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along on-farm endeavors and their accessibility, the computed value of 1.123 turned lesser than the critical value of 1.960 and the p-value of 0.267 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along on-farm endeavors and their accessibility," was accepted. Meaning, the productivity of the ARBs along on-farm endeavors was not significantly influenced by their accessibility.

In associating relationship between the productivity of ARBs along on-farm endeavors and their work attitude, the coefficient of correlation was posted at 0.347 being interpreted as "slight correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 6.279 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.000 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned equal or greater than the critical value and the p-value turned equal or lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along on-farm endeavors and their work attitude, the computed value of 6.279 turned greater than the critical value of 1.960 and the p-value of 0.000 turned lesser than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along on-farm endeavors and the number of years as beneficiaries," was rejected. Meaning, the productivity of the ARBs along on-farm endeavors was significantly influenced by the number of years as beneficiaries.

The correlation being positive suggested a direct proportional correlation which denoted that the higher the work attitude of the ARBs, the higher was their productivity along on-farm endeavor in terms of its income.

In summary, of the family profile of the ARBs only age posed significant influence to their productivity along off-farm endeavors while sex, educational background, number of family members, number of years as beneficiary, number of hectares of land awarded, accessibility, and work attitude had nothing to do with it.

Table 23 presents the relationship between the productivity of ARBs along off-farm endeavors and their family profile in terms of age, sex, educational background, number of family members, number of years as beneficiaries, hectares of land awarded, accessibility, and work attitude.

Table 23

**Relationship Between the Productivity of ARBs
along Off-Farm Endeavors and Their
Family Profile**

Family Profile	Coefficient of Correlation	Fisher's t-value	p-value	Evaluation/ Decision
Age	0.218	3.791	0.021	Significant/ Reject Ho Not
Sex	-0.040	0.679	0.135	Significant/ Accept Ho Not
Educational Background	-0.074	1.259	0.062	Significant/ Accept Ho Not
Family Size	0.061	1.037	0.514	Significant/ Accept Ho Not
Number of Years as Beneficiary	-0.079	1.345	0.404	Significant/ Accept Ho Not
Hectares of Awarded Land	0.086	1.465	0.359	Significant/ Accept Ho Not
Accessibility	0.061	1.037	0.085	Significant/ Accept Ho Not
Work Attitude	-0.089	1.516	0.340	Significant/ Accept Ho

Fisher's t-critical = ± 1.960

df = 288

$\alpha = .05$

In associating relationship between the productivity of ARBs along off-farm endeavors and their age, the coefficient of correlation was posted at 0.218 being interpreted as "slight correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient

value, the Fisher's t-test was employed whereby the computed value was pegged at 3.791 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.021 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned equal or greater than the critical value and the p-value turned equal or lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along off-farm endeavors and their age, the computed value of 3.791 turned greater than the critical value of 1.960 and the p-value of 0.021 turned lesser than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along off-farm endeavors and their age," was rejected. Meaning, the productivity of the ARBs along off-farm endeavors was significantly influenced by their age.

The correlation being positive suggested a direct proportional correlation denoting that the older the ARBs were, the more productive they were along off-farm endeavors as measured by the income they earned.

In associating relationship between the productivity of ARBs along off-farm endeavors and their sex, the coefficient of correlation was posted at -0.040 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 0.679 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.135 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned greater than the critical value and the p-value turned lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along off-farm endeavors and their sex, the computed value of 0.679 turned lesser than the critical value of 1.960 and the p-value of 0.135 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along off-farm endeavors and their sex," was accepted. Meaning, the productivity of the ARBs along off-farm endeavors was not significantly influenced by their sex.

In associating relationship between the productivity of ARBs along off-farm endeavors and their educational background, the coefficient of correlation was posted at 0.-0.074 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 1.259 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.062 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned greater than the critical value and the p-value turned lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along off-farm endeavors and their educational background, the computed value of 1.259 turned lesser than the critical value of 1.960 and the p-value of 0.062 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along off-farm endeavors and their educational background," was accepted. Meaning, the productivity of the

ARBs along off-farm endeavors was not significantly influenced by their educational background.

In associating relationship between the productivity of ARBs along off-farm endeavors and the number of their family members, the coefficient of correlation was posted at 0.061 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 1.037 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.514 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned greater than the critical value and the p-value turned lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along off-farm endeavors and the number of their family members, the computed value of 1.037 turned lesser than the critical value of 1.960 and the p-value of 0.514 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along off-farm endeavors and the number of

their family members," was accepted. Meaning, the productivity of the ARBs along off-farm endeavors was not significantly influenced by the number of their family members.

In associating relationship between the productivity of ARBs along off-farm endeavors and number of years of being beneficiaries, the coefficient of correlation was posted at -0.079 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 1.345 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.404 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned equal or greater than the critical value and the p-value turned equal or lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along off-farm endeavors and the number of years as beneficiaries, the computed value of 1.345 turned lesser than the critical value of 1.960 and the p-value of 0.404 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship

between the productivity of ARBs along off-farm endeavors and the number of years as beneficiaries," was accepted. Meaning, the productivity of the ARBs along off-farm endeavors was not significantly influenced by the number of years as beneficiaries.

In associating relationship between the productivity of ARBs along off-farm endeavors and the number of hectares of land awarded, the coefficient of correlation was posted at 0.086 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 1.465 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.359 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned greater than the critical value and the p-value turned lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along off-farm endeavors and the number of hectares of land awarded, the computed value of 1.465 turned lesser than the critical value of 1.960 and the p-value of 0.359 turned greater than the $\alpha = .05$,

therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along off-farm endeavors and the number of hectares of land awarded," was accepted. Meaning, the productivity of the ARBs along off-farm endeavors was not significantly influenced by the number of hectares awarded to them.

In associating relationship between the productivity of ARBs along off-farm endeavors and their accessibility, the coefficient of correlation was posted at 0.067 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 1.037 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.085 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned greater than the critical value and the p-value turned lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along off-farm endeavors and their accessibility, the computed value of 1.037 turned lesser than the critical value of

1.960 and the p-value of 0.085 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along off-farm endeavors and their accessibility," was accepted. Meaning, the productivity of the ARBs along off-farm endeavors was not significantly influenced by their accessibility.

In associating relationship between the productivity of ARBs along off-farm endeavors and their work attitude, the coefficient of correlation was posted at -0.089 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 1.516 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.340 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned equal or greater than the critical value and the p-value turned equal or lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along on-farm endeavors and their work attitude, the computed value of 1.516 turned lesser than the critical value of 1.960

and the p-value of 0.340 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along off-farm endeavors and their work attitude," was accepted. Meaning, the productivity of the ARBs along off-farm endeavors was not significantly influenced by their work attitude.

In summary, of the family profile of the ARBs only age posed significant influence to their productivity along off-farm endeavors while sex, educational background, number of family members, number of years as beneficiary, number of hectares of land awarded, accessibility, and work attitude had nothing to do with it.

Table 24 presents the relationship between the productivity of ARBs along non-farm endeavors and their family profile in terms of age, sex, educational background, number of family members, number of years as beneficiaries, hectares of land awarded, accessibility, and work attitude.

In associating relationship between the productivity of ARBs along non-farm endeavors and their age, the coefficient of correlation was posted at -0.015 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 0.255 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.086 with $\alpha = .05$.

Table 24

**Relationship Between the Productivity of ARBs
along Non-Farm Endeavors and Their
Family Profile**

Family Profile	Coefficient of Correlation	Fisher's t-value	p-value	Evaluation/ Decision
Age	-0.015	0.255	0.086	Not Significant/ Accept Ho
Sex	0.149	2.557	0.016	Significant/ Reject Ho
Educational Background	0.137	2.347	0.025	Significant/ Reject Ho
Family Size	-0.064	1.088	0.296	Not Significant/ Accept Ho
Number of Years as Beneficiary	-0.086	1.465	0.165	Not Significant/ Accept Ho
Hectares of Awarded Land	0.026	0.441	0.675	Not Significant/ Accept Ho
Accessibility	0.121	2.069	0.049	Significant/ Reject Ho
Work Attitude	-0.081	1.379	0.191	Not Significant/ Accept Ho

Fisher's t-critical = ± 1.960

df = 288

$\alpha = .05$

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value

turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned equal or greater than the critical value and the p-value turned equal or lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along off-farm endeavors and their age, the computed value of 0.255 turned lesser than the critical value of 1.960 and the p-value of 0.086 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along non-farm endeavors and their age," was accepted. Meaning, the productivity of the ARBs along non-farm endeavors was not significantly influenced by their age.

In associating relationship between the productivity of ARBs along non-farm endeavors and their sex, the coefficient of correlation was posted at 0.149 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 2.557 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.016 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value

turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned greater than the critical value and the p-value turned lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along non-farm endeavors and their sex, the computed value of 2.557 turned greater than the critical value of 1.960 and the p-value of 0.016 turned lesser than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along non-farm endeavors and their sex," was rejected. Meaning, the productivity of the ARBs along non-farm endeavors was significantly influenced by their sex.

The correlation being positive suggested a direct proportional correlation denoting that the female ARB beneficiaries earn higher along non-farm endeavors than their male counterpart.

In associating relationship between the productivity of ARBs along non-farm endeavors and number of their family members, the coefficient of correlation was posted at -0.064 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 1.088 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.296 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned greater than the critical value and the p-value turned lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along non-farm endeavors and number of their family members, the computed value of 2.347 turned greater than the critical value of 1.960 and the p-value of 0.025 turned lesser than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along non-farm endeavors and their educational background," was rejected. Meaning, the productivity of the ARBs along non-farm endeavors was significantly influenced by their educational background.

The correlation being positive suggested a direct proportional correlation denoting that the ARBs with higher educational background earn higher along non-farm endeavors than those ARBs with lower educational background.

In associating relationship between the productivity of ARBs along non-farm endeavors and the number of their family members, the coefficient of correlation was posted at -0.064 being interpreted as "negligible correlation." To

test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 1.088 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.296 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned greater than the critical value and the p-value turned lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along off-farm endeavors and the number of their family members, the computed value of 1.088 turned lesser than the critical value of 1.960 and the p-value of 0.296 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along non-farm endeavors and the number of their family members," was accepted. Meaning, the productivity of the ARBs along non-farm endeavors was not significantly influenced by the number of their family members.

In associating relationship between the productivity of ARBs along non-farm endeavors and number of years of being beneficiaries, the coefficient of

correlation was posted at -0.086 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 1.465 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.165 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned equal or greater than the critical value and the p-value turned equal or lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along off-farm endeavors and the number of years as beneficiaries, the computed value of 1.465 turned lesser than the critical value of 1.960 and the p-value of 0.165 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along non-farm endeavors and the number of years as beneficiaries," was accepted. Meaning, the productivity of the ARBs along non-farm endeavors was not significantly influenced by the number of years as beneficiaries.

In associating relationship between the productivity of ARBs along non-farm endeavors and the number of hectares of land awarded, the coefficient of correlation was posted at 0.026 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 0.441 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.675 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned greater than the critical value and the p-value turned lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along off-farm endeavors and the number of hectares of land awarded, the computed value of 0.441 turned lesser than the critical value of 1.960 and the p-value of 0.675 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along non-farm endeavors and the number of hectares of land awarded," was accepted. Meaning, the

productivity of the ARBs along non-farm endeavors was not significantly influenced by the number of hectares awarded to them.

In associating relationship between the productivity of ARBs along non-farm endeavors and their accessibility, the coefficient of correlation was posted at 0.121 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 2.069 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.049 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned greater than the critical value and the p-value turned lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along off-farm endeavors and their accessibility, the computed value of 2.069 turned greater than the critical value of 1.960 and the p-value of 0.049 turned lesser than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along non-farm endeavors and their

accessibility," was rejected. Meaning, the productivity of the ARBs along non-farm endeavors was significantly influenced by their accessibility.

The correlation being positive suggested a direct proportional correlation which signified that the more accessible the ARBs were, the higher were their productivity along non-farm endeavors in terms of income they earned.

In associating relationship between the productivity of ARBs along non-farm endeavors and their work attitude, the coefficient of correlation was posted at -0.081 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 1.379 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.191 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned equal or greater than the critical value and the p-value turned equal or lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along on-farm endeavors and their work attitude, the computed value of 1.379 turned lesser than the critical value of 1.960

and the p-value of 0.191 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along non-farm endeavors and their work attitude," was accepted. Meaning, the productivity of the ARBs along non-farm endeavors was not significantly influenced by their work attitude.

In summary, of the family profile of the ARBs only sex, educational background and accessibility non-farm endeavors while age, number of family members, number of years as beneficiary, number of hectares of land awarded, and work attitude had nothing to do with it.

Status as beneficiaries. This section presents the relationship between the productivity of the ARBs along on-farm, off-farm, and non-farm endeavors and their status as beneficiaries.

Table 25 presents the relationship between the productivity of ARBs along on-farm endeavors and their status as beneficiaries.

Table 25

**Relationship Between the Productivity of ARBs
along On-Farm Endeavors and Their
Status as Beneficiaries**

Coefficient of Correlation	Fisher's t-value	p-value	Evaluation/ Decision
0.049	0.833	0.408	Not Significant/ Accept Ho

Fisher's t-critical = ± 1.960

df = 288

$\alpha = .05$

In associating relationship between the productivity of ARBs along on-farm endeavors and their status as beneficiaries, the coefficient of correlation was posted at 0.049 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 0.833 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.408 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned equal or greater than the critical value and the p-value turned equal or lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along on-farm endeavors and their work attitude, the computed value of 0.833 turned lesser than the critical value of 1.960 and the p-value of 0.408 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along on-farm endeavors and their status as beneficiaries," was accepted. Meaning, the productivity of the ARBs along on-farm endeavors was not significantly influenced by their status as beneficiaries.

Table 26 presents the relationship between the productivity of ARBs along off-farm endeavors and their status as beneficiaries.

Table 26

**Relationship Between the Productivity of ARBs
along Off-Farm Endeavors and Their
Status as Beneficiaries**

Coefficient of Correlation	Fisher's t-value	p-value	Evaluation/ Decision
0.109	1.861	0.244	Not Significant/ Accept Ho

Fisher's t-critical = ± 1.960

df = 288

$\alpha = .05$

In associating relationship between the productivity of ARBs along off-farm endeavors and their status as beneficiaries, the coefficient of correlation was posted at 0.109 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 1.861 at df = 288 with a critical value of ± 1.960 and the p-value was 0.244 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value

turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned equal or greater than the critical value and the p-value turned equal or lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along on-farm endeavors and their work attitude, the computed value of 1.861 turned lesser than the critical value of 1.960 and the p-value of 0.244 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along off-farm endeavors and their status as beneficiaries," was accepted. Meaning, the productivity of the ARBs along off-farm endeavors was not significantly influenced by their status as beneficiaries.

Table 27 presents the relationship between the productivity of ARBs along non-farm endeavors and their status as beneficiaries.

Table 27

**Relationship Between the Productivity of ARBs
along Non-Farm Endeavors and Their
Status as Beneficiaries**

Coefficient of Correlation	Fisher's t-value	p-value	Evaluation/ Decision
0.060	1.020	0.333	Not Significant/ Accept Ho

Fisher's t-critical = ± 1.960

df = 288

$\alpha = .05$

In associating relationship between the productivity of ARBs along non-farm endeavors and their status as beneficiaries, the coefficient of correlation was posted at 0.060 being interpreted as "negligible correlation." To was pegged at 1.020 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.333 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned equal or greater than the critical value and the p-value turned equal or lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along non-farm endeavors and their work attitude, the computed value of 1.861 turned lesser than the critical value of 1.020 and the p-value of 0.333 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along non-farm endeavors and their status as beneficiaries," was accepted. Meaning, the productivity of the ARBs along non-farm endeavors was not significantly influenced by their status as beneficiaries.

In summary, the status of ARBs as beneficiaries had no influence to their productivity along on-farm, off-farm, and non-farm endeavors in terms of the income they earned from each endeavor.

Projects implemented. Tables 28 to 30 present the relationship between the productivity of ARBs and the locally funded projects along on-farm, off-farm, and non-farm endeavors. On the other hand, Tables 31 to 33 contain the relationship between the productivity of ARBs and the foreign funded projects along on-farm, off-farm, and non-farm endeavors.

Table 28 presents the relationship between the productivity of ARBs and the locally funded projects along on-farm endeavors.

Table 28

**Relationship Between the Productivity of ARBs
along On-Farm Endeavors and the Locally
Funded Projects**

Coefficient of Correlation	Fisher's t-value	p-value	Evaluation/ Decision
-0.123	2.103	0.038	Significant/ Reject Ho

Fisher's t-critical = ± 1.960

df = 288

$\alpha = .05$

In associating relationship between the productivity of ARBs along on-farm endeavors and the locally funded projects, the coefficient of correlation was posted at -0.123 being interpreted as "negligible correlation." To test the

corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 2.103 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.038 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned equal or greater than the critical value and the p-value turned equal or lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along non-farm endeavors and their work attitude, the computed value of 2.103 turned greater than the critical value of 1.960 and the p-value of 0.038 turned lesser than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along on-farm endeavors and the locally funded projects," was rejected. Meaning, the productivity of the ARBs along on-farm endeavors was significantly influenced by the locally funded projects.

The correlation being negative suggested an inverse correlation denoting that when locally funded projects was more on infrastructure, the productivity of the ARBs on on-farm endeavors tend to be higher.

Table 29 presents the relationship between the productivity of ARBs and the locally funded projects along off-farm endeavors.

Table 29
Relationship Between the Productivity of ARBs
along Off-Farm Endeavors and the Locally
Funded Projects

Coefficient of Correlation	Fisher's t-value	p-value	Evaluation/ Decision
0.069	1.174	0.460	Not Significant/ Accept Ho

Fisher's t-critical = ± 1.960

df = 288

$\alpha = .05$

In associating relationship between the productivity of ARBs along off-farm endeavors and the locally funded projects, the coefficient of correlation was posted at 0.069 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 1.174 at df = 288 with a critical value of ± 1.960 and the p-value was 0.460 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value

turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned equal or greater than the critical value and the p-value turned equal or lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along non-farm endeavors and their work attitude, the computed value of 1.174 turned lesser than the critical value of 1.960 and the p-value of 0.460 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along off-farm endeavors and the locally funded projects," was accepted. Meaning, the productivity of the ARBs along off-farm endeavors was not significantly influenced by the locally funded projects.

Table 30 presents the relationship between the productivity of ARBs and the locally funded projects along non-farm endeavors.

Table 30

**Relationship Between the Productivity of ARBs
along Non-Farm Endeavors and the Locally
Funded Projects**

Coefficient of Correlation	Fisher's t-value	p-value	Evaluation/ Decision
-0.073	1.242	0.240	Not Significant/ Accept Ho

Fisher's t-critical = ± 1.960

df = 288

$\alpha = .05$

In associating relationship between the productivity of ARBs along non-farm endeavors and the locally funded projects, the coefficient of correlation was posted at -0.073 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 1.242 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.240 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned equal or greater than the critical value and the p-value turned equal or lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along non-farm endeavors and their work attitude, the computed value of 1.242 turned lesser than the critical value of 1.960 and the p-value of 0.240 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along non-farm endeavors and the locally funded projects," was accepted. Meaning, the productivity of the ARBs along

non-farm endeavors was not significantly influenced by the locally funded projects.

In summary, the productivity of the ARBs in terms of income was influenced by the locally funded projects in an inverse relationship. On the other hand, the locally funded projects did not significantly influence the productivity of ARBs along off-farm and non-farm endeavors.

Table 31 presents the relationship between the productivity of ARBs and the foreign funded projects along on-farm endeavors.

Table 31
Relationship Between the Productivity of ARBs
along On-Farm Endeavors and the Foreign
Funded Projects

Coefficient of Correlation	Fisher's t-value	p-value	Evaluation/ Decision
-0.329	5.912	0.000	Significant/ Reject Ho

Fisher's t-critical = ± 1.960

df = 288

$\alpha = .05$

In associating relationship between the productivity of ARBs along on-farm endeavors and the foreign funded projects, the coefficient of correlation was posted at -0.329 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed

value was pegged at 5.912 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.000 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned equal or greater than the critical value and the p-value turned equal or lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along non-farm endeavors and their work attitude, the computed value of 5.912 turned greater than the critical value of 1.960 and the p-value of 0.000 turned lesser than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along on-farm endeavors and the foreign funded projects," was rejected. Meaning, the productivity of the ARBs along on-farm endeavors was significantly influenced by the foreign funded projects.

The correlation being negative suggested an inverse correlation denoting that when foreign funded projects was more on infrastructure, the productivity of the ARBs on on-farm endeavors tend to be higher.

Table 32 presents the relationship between the productivity of ARBs and the foreign funded projects along off-farm endeavors.

In associating relationship between the productivity of ARBs along off-farm endeavors and the foreign funded projects, the coefficient of correlation was posted at 0.044 being interpreted as “negligible correlation.” To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher’s t-test was employed whereby the computed value was pegged at 0.747 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.636 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and

Table 32

**Relationship Between the Productivity of ARBs
along Off-Farm Endeavors and the Foreign
Funded Projects**

Coefficient of Correlation	Fisher’s t-value	p-value	Evaluation/ Decision
0.044	0.747	0.636	Not Significant/ Accept H_0

Fisher’s t-critical = ± 1.960

$df = 288$

$\alpha = .05$

when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if

and when the computed value turned equal or greater than the critical value and the p-value turned equal or lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along non-farm endeavors and their work attitude, the computed value of 0.747 turned lesser than the critical value of 1.960 and the p-value of 0.636 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along off-farm endeavors and the foreign funded projects," was accepted. Meaning, the productivity of the ARBs along off-farm endeavors was not significantly influenced by the foreign funded projects.

Table 33 presents the relationship between the productivity of ARBs and the foreign funded projects along non-farm endeavors.

In associating relationship between the productivity of ARBs along non-farm endeavors and the foreign funded projects, the coefficient of correlation was posted at -0.060 being interpreted as "negligible correlation." To test the corresponding null hypothesis to this effect and to further test the significance of the coefficient value, the Fisher's t-test was employed whereby the computed value was pegged at 1.020 at $df = 288$ with a critical value of ± 1.960 and the p-value was 0.341 with $\alpha = .05$.

Furthermore, to ascertain whether the null hypothesis was accepted or rejected, the computed value was compared with the critical value and the p-value was compared with the α following the following decision rule, if and

when the computed value turned lesser than the critical value and the p-value turned greater than the α , the null hypothesis was accepted. On the other hand, if and when the computed value turned equal or greater than the critical value and

Table 33

**Relationship Between the Productivity of ARBs
along Non-Farm Endeavors and the Foreign
Funded Projects**

Coefficient of Correlation	Fisher's t-value	p-value	Evaluation/ Decision
-0.060	1.020	0.341	Not Significant/ Accept Ho

Fisher's t-critical = ± 1.960

df = 288

$\alpha = .05$

the p-value turned equal or lesser than the α , the null hypothesis was rejected.

In the comparison of the aforementioned values in associating relationship between the productivity of ARBs along non-farm endeavors and their work attitude, the computed value of 1.020 turned lesser than the critical value of 1.960 and the p-value of 0.341 turned greater than the $\alpha = .05$, therefore the corresponding null hypothesis stating, "there is no significant relationship between the productivity of ARBs along non-farm endeavors and the foreign funded projects," was accepted. Meaning, the productivity of the ARBs along

non-farm endeavors was not significantly influenced by the foreign funded projects.

In summary, the productivity of the ARBs in terms of income was influenced by the foreign funded projects in an inverse relationship. On the other hand, the foreign funded projects did not significantly influence the productivity of ARBs along off-farm and non-farm endeavors.

Problems Encountered by ARBs

Table 34 presents the problems encountered by the ARBs.

As presented in Table 34 the following are the problems encountered by the ARB-respondents relative to the program of agrarian reform, to wit: Rank 1, lack of financial farm capital; Rank 2, lack of farm inputs (fertilizers, insecticide, pesticides, etc.); Rank 3, lack of farm machineries (hand tractor, thresher); Rank 4, lack of water pump in areas with no irrigation – Calbiga, Gandara; Rank 5, lack of farm to market road (from Sitio Galutan to Gandara proper); Rank 6, high Cost of farm labor to transport farm products; Rank 7, No sufficient flood control (Gandara and San Jorge); Rank 8, Presence of loan shark (high loan interest); Rank 9, Low rice production; Rank 10, No price control (rice Gandara and San Jorge; Rank 11, Flood Prone Area; Rank 12, Unresponsive support services providers on the impending drainage problem in the rice area of San Jorge; Rank 13, Prevailing schistosomiasis infestation in various barangays in San Jorge and Gandara (Canyake, Aurora, Sapinit, Mancol, Quezon, San Agustin);

Table 34

Problems Encountered by ARBs

Problems	Rank
1. Lack of FINANCIAL FARM CAPITAL.	1
2. Lack of farm inputs (fertilizers, insecticide, pesticides , etc.).	2
3. Lack of farm machineries (Hand tractor, thresher).	3
4. Lack of Water Pump in areas with no Irrigation-Calbiga,Gandara, Pagasanghan).	4
5. Lack of farm to market road (FROM SITIO GALUTAN TO Gandara Proper.	5
6. High Cost of farm labor to transport farm products.	6
7. No sufficient flood control (GANDARA AND San Jorge).	7
8. Presence of loan shark (high loan interest).	8
9. Low rice production.	9
10. No price control (rice Gandara and San Jorge.	10
11. Flood Prone Area.	11
12. Unresponsive support services providers on the impending drainage problem in the rice area of San Jorge.	12
13. Prevailing schistosomiasis infestation in various barangays in San Jorge and Gandara.(Canyake,Aurora,Sapinit, Mancol, Quezon, San Agustin).	13
14. Unsustained project services in La Paz, particularly ricemill- funded by ARCP.	14
15. Unfair treatment of local executive leader (Mayor) over the delivery of support services to some barangays.	15
16. ARB-Rampant selling of awarded lands with title EP/CLOA.	16

Rank 14, Unsustained project services in La Paz, particularly ricemill- funded by ARCP; Rank 15, Unfair treatment of local executive leader (Mayor) over the

delivery of support services to some barangays; and Rank 16, ARB-Rampant selling of awarded lands with title EP/CLOA.

The foregoing data suggested that the ARBs encountered problems which need to be addressed by the program implementers.

Chapter 5

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

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

Summary of Findings

The following were the salient findings of the study:

1. The ARBs ranged from 20 to 89 years old whereby their mean age was posted at 49.17 years old with a standard deviation of 14.18 years.
2. Majority of the ARB-respondents were males accounting for 216 or 74.48 percent. The female counterpart accounted for 73 or 25.17 percent only and one or 0.35 percent of them did not give disclose as to his sex for unknown reason.
3. More than half of the ARBs were schooled from elementary level to high school graduate with a number of them had reached collegiate level or even graduated in college.
4. The family members of the ARB-respondents ranged from one to 12 members whereby the mean number of family members was posted at six with a SD of two family members.

5. The ARB-respondents had been ARBs from 1 to 55 years. Their mean number of years as ARBs was pegged at 16.12 years with a SD of 8.87 years.
6. The hectares of awarded land of ARBs ranged from <1 to >5 square meters.
7. Majority of the ARB-respondents usually worked in their on-farm activities in the morning for 3 – 5 hours accounting for 260 or 89.65 percent usually in weeding and planting.
8. Majority of the ARB-respondents revealed that they worked for 3 – 5 hours in the afternoon in the on-farm activities accounting for 194 or 66.90 percent usually in weeding and planting.
9. More than half of the ARB-respondents were CLOA holders accounting for 182 or 62.76 percent.
10. Most of the ARB-respondents, that is, 260 or 89.66 percent disclosed that both infrastructure and livelihood projects were implemented in the ARCs which were locally funded.
11. Majority of the ARB-respondents averred that foreign assisted projects that were implemented in ARCs were both infrastructure and livelihood projects accounting for 209 or 72.07 percent.
12. More than half of the ARB-respondents earned on-farm activities of Php10,000 – Php49,999 accounting for 174 or 60.00 percent.

13. A number of the ARB-respondents, that is, 33 or 11.38 percent disclosed that they earned an income of less than Php5,000 along off-farm activities.

14. A number of the ARB-respondents, that is, 109 or 37.60 percent informed that they earned an income of Php10,000 – Php49,999 along non-farm endeavors.

15. In associating relationship between the productivity of ARBs along on-farm endeavors and their family profile, the following evaluation was arrived at: age, not significant; sex, not significant; educational background, significant; number of family members, not significant; number of years as beneficiary, significant; number of hectare of land awarded, not significant; accessibility, not significant; and work attitude, significant.

16. In associating relationship between the productivity of ARBs along off-farm endeavors and their family profile, the following evaluation was arrived at: age, significant; sex, not significant; educational background, not significant; number of family members, not significant; number of years as beneficiary, not significant; number of hectare of land awarded, not significant; accessibility, not significant; and work attitude, not significant.

17. In associating relationship between the productivity of ARBs along non-farm endeavors and their family profile, the following evaluation was arrived at: age, not significant; sex, significant; educational background, significant; number of family members, not significant; number of years as

beneficiary, not significant; number of hectare of land awarded, not significant; accessibility, significant; and work attitude, not significant.

18. In associating relationship between the status of ARBs and their productivity, the following evaluation was arrived at: on-farm endeavor, not significant; off-farm endeavor, not significant; and non-farm endeavor, not significant.

19. In associating relationship between the locally funded projects, the following evaluation was arrived at: on-farm endeavor, significant; off-farm endeavor, not significant; and non-farm endeavor, not significant.

20. In associating relationship between the foreign funded projects, the following evaluation was arrived at: on-farm endeavor, significant; off-farm endeavor, not significant; and non-farm endeavor, not significant.

21. The first five problems encountered by the ARBs relative to the Comprehensive Agrarian Reform Program were: Rank 1, lack of financial farm capital; Rank 2, lack of farm inputs (fertilizers, insecticide, pesticides, etc.); Rank 3, lack of farm machineries (hand tractor, thresher); Rank 4, lack of water pump in areas with no irrigation – Calbiga, Gandara; Rank 5, lack of farm to market road (from Sitio Galutan to Gandara proper).

Conclusions

From the findings of the study, the following conclusions were drawn:

1. The ARBs were on their late 40s and at the prime of their age.

2. The husband was the head the family served as the beneficiary of the agrarian reform however, because they were busy being the bread winner of the family was represented by the housewife sometimes.

3. The ARB-respondents were functional literates, that is, they had the capability to write, read, and understand simple message including simple calculation.

4. The ARB-respondents' family were composed of the ideal family set by the National Economic Development Authority (NEDA) in the calculation of the poverty threshold.

5. The ARB-respondents had been ARBs for quite sometimes which denoted that they had already enjoyed the benefits of the Comprehensive Agrarian Reform Program (CARP) being one of the ARBs.

6. The ARBs had availed already the land apportionment through the Comprehensive Agrarian Reform Program (CARP).

7. The ARBs were industrious that they manifested remarkable work attitude and indulging themselves in on-farm, off-farm, and non-farm endeavors.

8. Most of the ARBs were in owner-like possessions of the land awarded to them by the CARP.

9. Concerned agencies were active in the implementation of projects which were both physical improvement of the ARCs and sustainable development of the ARBs.

10. Partner agencies of the program from foreign countries actively involved themselves for the welfare both of the ARCs and of the ARBs.

11. The ARB-respondents signified that they had regular monthly income earned to defray their basic nutritional needs including educational needs of their children which they derived from on-farm, off-farm, and non-farm endeavors.

12. Of the family profile of the ARBs educational background, number of years as beneficiaries, number of hectares of land awarded, and work attitude posed significant influence to their productivity along on-farm endeavors while age, sex, number of family members, and accessibility had nothing to do with it.

13. Of the family profile of the ARBs only age posed significant influence to their productivity along off-farm endeavors while sex, educational background, number of family members, number of years as beneficiary, number of hectares of land awarded, accessibility, and work attitude had nothing to do with it.

14. Of the family profile of the ARBs only sex, educational background and accessibility non-farm endeavors while age, number of family members, number of years as beneficiary, number of hectares of land awarded, and work attitude had nothing to do with it.

15. The status of ARBs as beneficiaries had no influence to their productivity along on-farm, off-farm, and non-farm endeavors in terms of the income they earned from each endeavor.

16. The productivity of the ARBs in terms of income was influenced by the locally funded projects in an inverse relationship. On the other hand, the locally funded projects did not significantly influence the productivity of ARBs along off-farm and non-farm endeavors.

17. The productivity of the ARBs in terms of income was influenced by the foreign funded projects in an inverse relationship. On the other hand, the foreign funded projects did not significantly influence the productivity of ARBs along off-farm and non-farm endeavors.

18. The ARBs encountered problems relative to Comprehensive Agrarian Reform Program which need to be addressed by the implementers and other concerned.

Recommendations

Based on the conclusions drawn from the findings of the study, the following are recommended:

1. Inasmuch as there were problems encountered by the ARBs relative to the Comprehensive Agrarian Reform Program, there is a need to implement a sustainable plan and program to address the identified problems.

2. A similar study may be conducted in other provinces to validate the findings of this study.

3. A sequel study may be conducted considering other areas to assess the implementation of the program and the productivity of the ARBs.

Chapter 6

PROPOSED SUSTAINABILITY PLAN

Rationale

In the lives of farmer-beneficiaries their problems may not be given outright solution but along the way there can be some projects that will address their plight. Projects may have limited time or durations and implementing office want to make it happened within a given period of time. It is imperative that sustainability plan should be made clear so that each stakeholders will be aware of their involvement in the entire process of the realization of the projects.

Objectives

1. To be able to Access to the following:
 - 1.1 Capitalization;
 - 1.2 Continue Information and Education to ARB;
 - 1.3 Empowered Agrarian Reform Beneficiaries Association;
 - 1.4 Farm inputs ,Irrigation and Farm to Market Road;
 - 1.5 Pre and Post Harvest facilities, and
 - 1.6 Greening Program of DENR/Reforestation.
2. To minimize and eradicate the following:
 - 2.1 Selling OF Title (EP,CLOA);
 - 2.2 Flood problem;

2.3 Favoritism on the delivery of support services projects, and

2.4 Schistosomiasis problem.

3. To establish an ordinance in the Municipality for Price control on Rice. For Gandara and San Jorge.

Problems Encountered by ARBs and the Proposed Solution

I-Fund Related problems

It is always a common problem by ARB-Farmers having lack of fund for use in their farming operation; Financial problems includes, lack of capital which resort to borrow capital from loan sharks with a high interest rate. Having no funds, purchasing of farm inputs like fertilizer, insecticides, and pesticides is severely affected.

In this problem, clear identification of areas with such kind of problem must be properly identified. The Municipal Agriculture Office must tapped in the distribution of farm inputs and come up with a priority plan especially in the provision of low interest loan package to farmers.

II-Lack of Pre and Post-Harvest Facilities

Pre Harvest Facilities includes hand tractors, threshers, while Post harvest facilities comprises of rice mill and dryers. There is one particular project in La Paz, San Jorge; the rice mill and drying pavement but it is poorly managed by end users by now. With the rest of the areas covered by this study, lack of farm machineries had created a problem in the farming life of the ARBs.

The Department of Agriculture through its local office in the municipality must be coordinated in these area with lack of pre and post-harvest facilities. Close coordination must done in asmuch as they are the concerned agency who can support areas with such a problem.

In La Paz, San Jorge, a coordinative efforts with the National Irrigation Administration (NIA) must be facilitated as they are the agency who is assisting the group being an Agrarian Reform Infrastructure Support Program,(ARISP) funded project.

III- Lack of Farm to Market Road and Irrigation Facility

Absence of irrigation facility resulted in low rice production and lack of farm to market road is brought about by high cost of farm labor to transport farm products from the farm to its market outlet.

Low rice production is mainly because farmers cannot plant rice to a minimum degree. A water dependent rice cannot thrive in areas where there is no water that's why irrigation facility must be made available. The Department of Agriculture have programs on Small water impounding Project or SWIP which is available at the Municipal level. Coordination with this agency must worked out so that areas with problems on irrigation will be properly addressed.

Lack of farm to market road can be channeled to DPWH or to the DAR; there is a need of proper consultation among the local people in the barangay; a focused group dialogue must be conducted so that such problem will be

identified. Result of focused group dialogue will become an integral part in the formulation of resolution that is to be channel to agencies concerned.

IV- Selling of Awarded lands by CLOA and EP holders

An illegal practice of ARBs over the land awarded to them; it is provided in RA 6657 that awarded land covered by CLOA and EP can only be conveyed through hereditary succession. Selling can only be done if encumbrances from the government has already been cleared.

Values clarification Seminars must be conducted to ARBs in ARCs, topics must include the avoidance of selling of awarded titles to them as the action is illegal and it has some legal implications on it once the action continues.

V-No price Control

Gandara and San Jorge are rice producing municipality in the province but farmers could not substantially benefit from the proceeds of their labor as rice producers because of lack of price control. Prices generally fluctuates so seriously that when production is high the price is too low and when the production is scarce, the price is generally too high.

This problem can be endorsed to NFA for verification and validation. Price support program and purchasing of rice at a price favorable top farmers had been one of the program of the NFA; so that for farmers with that kind of problem, the NFA might find solution over it.

VI-Flood Problem

Terrain problem can never be corrected as it is a natural occurrence. Since Gandara and San Jorge are low lying municipalities the problem on flood go unresolved. Climate change is responsible for this problem.

The result brings people to plant rice is an area where drainage is poor and schistosomiasis infestation is prevalent.

There is a need to re-visit the Comprehensive Development Plan of each Municipality. It is expected that such program has been incorporated in that plan only that by now no solutions had been made. Since the problem is perennial in nature; there is a need for the intervention of the National government over that matters.

On the schistosomiasis infestation, there is a need to coordinate with the local DOH to verify the status of their assistance in terms of prevention and monitoring.

VII- Practice of Political Favoritism

Unfair treatment of local executive leaders particularly the Mayor over the provision of support services to the barangays. This issue had resulted clamors of discontent because farmers are selectively brush away in terms of distribution of farm inputs.

A consultation with farmers affected in such problem must be done in the field and come up with a resolution from the local unit in the barangay

expressing their need for support from the municipal executive. There must be a concrete list of farmers who are in need of support like the need for provision of farm inputs which the MAO also has the control in the distribution.

Table 35

Proposed Plan and Programs and Implementation

PROGRAM/PROJECT DESCRIPTION	IMPLEM ENTING OFFICE	SCHEDULE OF IMPLEMENTATION					Funding Source	('000) Amount
		2016	2017	2018	2019	2020		
1. Animal/livestock dispensal No. of ARC	MAO	6/1/2016 5	12/1/2017 5	12/31/2018 5	12/31/2019 6	12/31/2020 6	DA,MLGU	3,000
2. PROCUREMENT Farm inputs (Certified seeds, fertilizers, pesticides) No. of ARC	MAO	6/1/2016 5	12/31/2017 5	12/31/2018 5	12/31/2019 6	12/31/2020 6	DA	3,000
3. Information and Education Campaign on Modern Technique Farming(Demo Farm &Farmers class) No. of ARC	MAO	6/1/2016 5	12/31/2017 5	12/31/2018 5	12/31/2019 6	12/31/2020 6	DA	600
4. BAGSAKAN Center operationalization No. of ARC	MAO	6/1/2016 5	12/31/2017 5	12/31/2018 5	12/31/2019 6	12/31/2020 6	DA	500
5.Coconut/Pili-mnt/fruit trees Intercropping 5-1 PLANTING trees a sustainable greening problem No. of ARC	MAO MLGU	6/1/2016 5	12/31/2017 5	12/31/2018 5	12/31/2019 6	12/31/2020 6	PCA MLGU	3,000 500
6. Rice sufficiency program No. of ARC	MAO	6/1/2016 5	12/31/2017 5	12/31/2018 5	12/31/2019 6	12/31/2020 6	DA	1,500

PROGRAM/PROJECT DESCRIPTION	IMPLEM ENTING OFFICE	SCHEDULE OF IMPLEMENTATION					Funding Source	(000) Amount
		2016	2017	2018	2019	2020		
7. Skills training on Agricultural production & livelihood SME/ Alternative	MAO DOLE/M AU	6/1/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	DA	1,200
7-1 Skills training Cum Livelihood No. of ARC		5	5	5	6	6	DOLE/DTI	1,000
8. Irrigation System No. of ARC	MAO	6/1/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	NIA	50,000
9. Agrarian Reform Community Program No. of ARC	DAR/LG U	6/1/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	DAR	500,000
10. Cooperative strengthening & institutionalization No. of ARC	MAO	6/1/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	DA, CDA, D OLE	300
10- Increase participation & Literacy rate No. of ARC	DEPED	6/1/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	DEPED	60
11. ROAD/FMR to the barangay No. of ARC	MAO	6/1/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	DA, CDA, D OLE	250,000
12. Advocacy campaign for schistosomiasis No. of ARC	MHO	6/1/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	DOH	30
		5	5	5	6	6		

BIBLIOGRAPHY

A. BOOKS

Innovative Approaches and Success Stories on Agrarian Reform Development

p. 5.6 author. Jose Mari Ponce. Copyright 2002.

Living in the Environment. Principles Connections and Solutions, 11th Edition.

G. Tyler Miller, Jr. P. 767-768

Miguel A. Bernard, S.J. "Joseph A. Mulry: Foundation of Social Justice Movement" in Unusual and Ordinary: Biographical Sketches of Some Philippine Jesuits (Jesuit Communications Foundation, Quezon City, 2006).

Joseph Propenko, Improving Productivity in developing countries, Management Development Working Paper No. 16 (Geneva, ILO, 1978).

Borjal, Artemio A., The Philippines: Struggle for Tenants Emancipation, 1st ed., Manila: DAR, 1981.

HANDTOOLS "A MANUAL on Agrarian Reform Community Planning and Development," Food and Agriculture Organization of the United Nations Technical Support to Agrarian Reform and Rural Development (FAO-TSARRD) and the Department of Agrarian Reform.

Blumin, I. G. *Kritika burzhuaznoi politicheskoi ekonomii*, vol. 1. Moscow, 1962.

Nikitin, S. M. *Teorii stoimosti I ikh evoliutsii*. Moscow, 1970

Bates, W. (2001), *How Much Government? The Effect of High Government Spending on Economic Performance*. New Zealand Business Roundtable, Wllington, August 2001.

EDUCATION FOR SUSTAINABLE DEVELOPMENT in TEVET Teechnical
and vocational Education and Training Nov. 3-5, 2010 p. 347-348

Diewert, W.E., 2004. *Index Number Concepts, Measures and Decomposition of Productivity Growth.*, Journal of productivity Analysis 19, pp. 8

Gilberto M. Llanto, 2012. The Impact of Infrastructure on Agricultural Productivity. *Philippine Institute for Development Studies*. DISCUSSION PAPER SERIES NO. 2012-12

APO, 2003. Agrarian Reforms and Agricultural Productivity. Report of the APO Study Meeting on Agrarian Reforms and Agricultural Productivity Sri Lanka, 28 May-2 June 2001

B. UNPULISHED MATERIALS

Bacurio, Bernanrdino A. *"The Rural Development Model in the First District of SAMAR."* Unpublished Thesis, SSPC, March 2012.

C. JOURNALS/MAGAZINES/PERIODICALS

Gallardo, Richard B. 2015. *"Selling Farm Products the I.T. Way. "* *Agrarian BIZ Magazine*. Vol. 1.1 No. 3 May-June 2015

PIA SAMAR Monitor p. 5

D. ELECTRONIC AND OTHER SOURCES

Administrative Order No. 4, Section 3 b. Series of 2014.

(A. O. 7, Series 2011: 9) Administrative Order (A.O.) No.7, Series of 2011
(Revised Rules and Procedures Governing the Cancellation of
Registered Eps (R.A.) No. 6657 as amended).

(A.O. 7, Series 2011: 10) Farmworker.

(A.O. 7, 2014, Article 1, Section 3) Agrarian Reform Beneficiary.

Internet. Dar arccess

Internet google. Work Atitude

<https://answer.yahoo.com>

<https://en.wikipedia.org/wiki/Age>

M. Zulficar Rahmana, H. Mikunib & M. Mostafizar Pahmanc. PDF. DOI. Page
19-33. "Towards Sustainable Farming Development: The Attitude of Farmers
in a Selected Area of Shimane Prefecture, Japan." Published online: 22 Oct
2008

N. C. Ajayia. PDF. DOI: "User Acceptability of Sustainable Soil Fertility
Technologies: " Lessons from Farmers' Knowledge, Attitude and Practice in
Southern Africa. Pages 21-40. Oct. 17, 2008

Saowanee Norkaew, Corporate Author: Chulalongkorn. PDF. "Knowledge,
attitude, and practice (KAP) of using personal protective equipment (PPE) for
chilli-growing farmers in Huarua sub-district, Mueang district,
Ubonrachathani province, Thailand, 2009.

(Wikipedia, the free encyclopedia). Farmer

www.dictionary.com/browse/accessibility

A P P E N D I C E S

APPENDIX A

APPROVAL OF DISSERTATION TITLE

Republic of the Philippines
 SAMAR STATE UNIVERSITY
COLLEGE OF GRADUATE STUDIES
 Catbalogan City
 Telephone Numbers: (055)-543-8394/(055)-251-2130
 Website: www.ssu.edu.ph



October 29, 2014

DR. MARILYN D. CARDOSO
 Vice-President for Academic Affairs/
 Dean, College of Graduate Studies
 Samar State University
 Catbalogan City

Madam:

I have the honor to submit the following titles for my Dissertation Proposal.

It is my earnest desire to study one of these titles for my Dissertation:

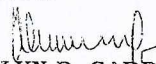
1. Foreign Assistance Project in Selected Agrarian Reform Community (ARC): Inputs for Improving Poverty Alleviation Program in the Province of Samar
2. Productivity of Agrarian Reform Beneficiaries (ARB) in Agrarian Reform Communities ARC in Samar
3. Projects in Selected Agrarian Reform Community (ARC): Inputs for Improving Poverty in Samar

I hope for your favorable action regarding this matter.

Respectfully yours,


AIDA M. GAMBA
 Researcher

Approved:


MARILYN D. CARDOSO, Ph.D.
 Vice-President for Academic Affairs/
 Dean, College of Graduate Studies



Republic of the Philippines
SAMAR STATE UNIVERSITY
COLLEGE OF GRADUATE STUDIES

Catbalogan, Samar
Telephone Numbers: (055)-543-8394/(055)-251-2139
Website: www.ssu.edu.ph



October 29, 2014

TO:

Dr. Felisa E. Gomba

Dr. Eusebio T. Pacolor

Dr. Ronald L. Orale

Dr. Victoria M. Tafalla

May I ask you to be a member of the committee to evaluate the attached Thesis/Dissertation title.

Please give your comments and suggestions which you will discuss with the proponent.

Thank you for your cooperation.

Very truly yours,


MARILYN D. CARDOSO, Ph.D.
Dean, College of Graduate Studies

EVALUATION/RECOMMENDATIONS

#2 title

#2 but try to incorporate looking into factors affecting productivity. A good input is effectively addressing priority in ARCS

#2 be specific on what productivity/production, after identifying the factors what?

#2 determine the factors directly related to productivity + find the extent of influence to ARB in order to ... ~~as basis~~ ^{or} for Policy Recommendation. etc

APPENDIX B

ASSIGNMENT OF ADVISER

Republic of the Philippines
SAMAR STATE UNIVERSITY
COLLEGE OF GRADUATE STUDIES
Catbalogan City, Samar
Telephone Numbers: (053)-543-8394 / (055)-251-2139
Website: www.ssu.edu.ph

CGS Form 13



ASSIGNMENT OF ADVISER

October 18, 2010

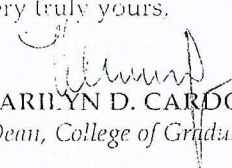
DR. FELISA E. GOMBA
Vice President for Planning, Research & Extension
This University
Catbalogan, Samar

Sir:

Please be informed that you have been designated as adviser of Ms. Aida M. Gamba candidate for the degree in Doctor in Management major in Human Resource Management, who proposes to write a dissertation entitled "PRODUCTIVITY OF AGRARIAN REFORM BENEFICIARIES (ARB) IN AGRARIAN REFORM COMMUNITIES (ARC) IN SAMAR".

Thank you for your cooperation.

Very truly yours.


MARILYN D. CARDOSO, Ph. D.
Dean, College of Graduate Studies

CONFORME:


FELISA E. GOMBA, Ph.D.
Adviser

APPENDIX C

LIST OF ARC

ARCS IN SAMAR
AS OF DECEMBER 2012

NAME OF ARC	NO. OF ARBS	BARANGAY	NO. OF BGY COVERED	MUNICIPALITY
1. Roxas II Expanded ARC	719	Roxas	6	Calbayog
2. Panoypoy ARC	62	Panoypoy	1	Calbayog
3. Balud Ilo ARC	222	Balud, Ilo	2	Sta Margarita
4.Pagsanghan ARC	160	Calanyugan,	3	Pagsanghan
5. Gandara Expanded ARC	777	Casandig, gerali	15	Gandara
6.St. Francis	306	Pajo, Dapdap	2	Tarangnan
7. Almagro ARC	357	Veloso, Costa Rica	23	Almagro
8. Paranas ARC	1,035	Casandig, Lawaan I & II	10	Paranas
9. Old/ New Mahayag ARC	322	Old Mahayag, New Mahayag	2	Catbalogan
10.CALPINSET	1,773	Borong, Macaalan etc	18	Calbiga/Pinabacdao
11.Pahug Expanded ARC	652	Pahug, Parasanaon, etc	5	Pinabacdao
12. Pangdan Expanded	362	Pangdan, San Andres	4	Catbalogan
13.Villareal ARC	707	Nagkaduha, conant	6	Villareal
14. Marabut Expanded	897	Canyoyo	11	Marabut
15.Balugo/Camanhagay ARC	115	Balugo, Camanhagay	2	Hinabangan

NAME OF ARC	NO. OF ARBS	BARANGAY	NO. OF BGY COVERED	MUNICIPALITY
16.Macaparican ARC	235	Camarubuan,Parina	4	Jiabong
17. Calapi ARC	246	Calapi.Hinicaan	3	Motiong
18.Zumarraga ARC	314	Arteche, Bioso	5	Zumarraga
19.WEST DARAM ARC	353	San Roque, Saugan	4	Daram
20.PARASAN IS. SARC	165	Parasan	1	Daram
21. CALBIGA ARC	1,239	Polangi, Canticum	15	Calbiga
22.CASAB-AHAN,arc(Daram)	102	Casab-ahan	1	Daram
23.Samar Settlement Project -SSP	1,780	Maligaya, Tominamos	3	Sta Rita
24.San Juanico ARC	437	Pagsulhogon	4	Sta Rita
25.San Jorge ARC	248	Aurora, Quezon	2	San Jorge
26.Lapaz/ Buenavista	190	Lapaz, Buenavista	2	San Jorge
27.Cambatutay ARC	759	Majacob, Sta Cruz	17	Tarangnan
	13,824		171	

APPENDIX D

Dear Respondent,

I am a Doctor of Management (DM) student at Samar State University currently conducting research for the degree, entitled “PRODUCTIVITY OF AGRARIAN REFORM BENEFICIARIES (ARB) IN AGRARIAN REFORM COMMUNITY (ARC) IN THE PROVINCE OF SAMAR”, as such I would like to request you to answer the following questions. Rest assured that all responses and answers will be treated with full confidentiality and will be used solely for my dissertation.

QUESTIONNAIRE

“PRODUCTIVITY OF AGRARIAN REFORM BENEFICIARIES ARB IN
AGRARIAN REFORM COMMUNITIES ARC IN THE PROVINCE OF
SAMAR”

Direction: Answer honestly the questions that follow.

Part A. Respondent's Profile

1. Name (Optional) _____
2. Age: years old Gender male Female
3. Home Address _____
4. Civil Status : single married widower separated

No. of Children	MALE	FEMALE
1 - 2		

5. N0. Of Children/ dependent(Check)

3 - 4		
5 - 6		
7 - UP		

6. EDUCATIONAL BACKGROUND

Elementary level	
Elementary Graduate	
High School level	
High School Graduate	
Vocational	
College Level	
College Graduate	
Others	

7. FARM size (has.) _____

Farm size (has.)	E.P.	CLOA	LEASEHOLDER	PRIVATELY OWNED	NO. OF YEARS
LESS 1.0					
1.1-2.0					
2.1-3.0					

8. Accessibility .km.(check)- a. land __

LAND	_Brgy road # km 1-3	Brgy road # km 1-3	Municipal road 1-3 km	Municipal road 1-3 km	National road 1-5.km	National road 6-10.km

BUS/JEEP						
MOTORCYCLE						
HIKE						
SEA/HRS TRAVEL						

Part II. SOURCE OF ANNUAL ARB HOUSEHOLD INCOME

1. ON FARM

1. OFF- FARM (Income derived from working in other farms or service sector providing labor)

Job/work	RATE/DAY 200-500 Php	RATE/DAY 500-1000 Php	NO. DAYS/WEEK)	TOTAL
CLEARING				
PLANTING				
HARVESTING				
OTHERS				

1.1 SOURCE	Derive from (EP/CLOA)Php	DERive from other landholding(PhP)	Annual gross income(Php)	REMARKS
Crop (major & minor)				

Livestock & Poultry				
Fishery/Fishpond				

3. NON- FARM. (INCOME derive from non-farm activities)

SOURCE	AMOUNT /AMOUNT RANGE				Others
	Less 1,000	1001- 5,000	5001- 10,000	10,001- 15,000	Specify
SALARY/HONORARIUM					
SARI-SARI STORE					
DRIVER					
SUPPORT/ ASSISTANCE					
OTHERS Please specify					

4. ACCESS TO SUPPORT SERVICES

I. LOCALLY ASSISTED PROJECTS IN TERMS OF:

PROJECT	NO. OF heads availed	Source fund/agency	LOAN/ GRANT	NO. OF ARBS with ACCESS
Swine Production				
Goat/Carabao				
Others/ specify				

PROJECT	NO. OF KM	SOURCE	AMOUNT (Php)	GRANT/ LOAN	DATE COMPLETED	NO. OF ARBS with ACCESS
FARM TO MARKET ROAD						
SCHOOL BLDG						
IRRIGATION						
OTHERS						

b. LIVELIHOOD / CREDIT PROJECTS

B. FOREIGN FUNDED PROJECTS

A.INFRA STRUCTURE

b. LIVELIHOOD / CREDIT PROJECTS

PROJECT	NO. OF KM	SOURCE	AMOUNT (PhP)	GRANT/ LOAN	DATE COMPLETED	NO. OF ARBS with ACCESS
FARM TO MARKET ROAD						
SCHOOL BLDG						
IRRIGATION						
OTHERS						

PROJECT	NO. OF heads availed	Source fund/agency	LOAN/ GRANT	NO. OF ARBS with ACCESS
Swine Production				
Goat/Carabao				
Others/specify				

C. What are the problems encountered by the ARBs along:

a. on- Farm activities

b. Off - Farm

c. Non -Farm

WORK ATTITUDE:

1.

2.

C. PROBLEMS ENCOUNTERED BY ARBS.

1. Lack of FINANCIAL FARM CAPITAL
2. Lack of farm inputs (fertilizers, insecticide, pesticides ,etc.)
3. Lack of farm machineries. (Hand tractor, thresher)
4. Lack of Water Pump . Areas with no Irrigation-Calbiga,Gandara, Pagasanghan).
5. Lack of Farm to Road (FROM SITIO GALUTAN TO Gandara Proper
6. High Cost Of Farm Labor To Transport Farm products.
7. Flood Prone Area. Insufficient flood control (GANDARA AND San Jorge)
8. Presence of loan shark (high loan interest)
9. Low rice PRODUCTION
10. No price control (rice Gandara and San Jorge

11. Unresponsive support services providers on the impending drainage problem in the rice area of San Jorge.
12. Prevailing schistosomiasis infestation in various barangays in San Jorge and Gandara. (Canyake, Aurora, Sapinit, Mancol, Quezon, San Agustin)
13. Unsustained project services in La Paz, particularly rice mill- funded by ARCP
14. Unfair treatment of local executive leader (Mayor) over the delivery of support services.to some barangays.
15. ARB-Rampant selling of awarded lands with title. EP/CLOA

C U R R I C U L U M V I T A E

CURRICULUM VITAE

Name : AIDA MACARIOLA GAMBA

Home Address : PUROK 7, CANLAPUAS,
CATBALOGAN CITY, SAMAR

Place of Birth : CALBIGA, SAMAR

Date of Birth : APRIL 14, 1962

Work : DEPARTMENT OF AGRARIAN REFORM

Position : MUNICIPAL AGRARIAN REFORM
PROGRAM OFFICER. OIC. ASSIGNED AT
GANDARA SAMAR

Civil Status : MARRIED

EDUCATIONAL BACKGROUND

Elementary : Catbalogan II Central Elementary School
Catbalogan, Samar
Honor: SALUTATORIAN

Secondary : Samar National School,
Catbalogan, Samar

College : Divine Word University
Tacloban City
Bachelor of Science in Commerce
Major in Accounting
Honor: CUM LAUDE

Post Graduate : Samar State University
Master of Arts in Public Management
Plan B
Catbalogan City, Samar

CIVIL SERVICE ELIGIBILITY

Professional: Certificate No. 0089 P.D. 907

Tacloban City

April 26, 1988

Sub Professional Career

Tacloban City

December 1981

POSITIONS HELD

Senior Agrarian Reform Program Technologist

Department of Agrarian Reform

Detailed at BENEFICIARY DEVELOPMENT AND

COORDINATING DIVISION (BDGD)

2000- 2014

MUNICIPAL AGRARIAN REFORM PROGRAM OFFICER.

Officer-in-Charge

FEBRUARY 2014

LIST OF TABLES

LIST OF TABLES

Table	Page
1 Age of Agrarian Reform Beneficiaries (ARBs)	87
2 Sex of Agrarian Reform Beneficiaries (ARBs).....	89
3 Educational Background of Agrarian Reform Beneficiaries (ARBs)	90
4 Family Size of Agrarian Reform Beneficiaries (ARBs).....	91
5 Number of Years of Agrarian Reform Beneficiaries (ARBs)	93
6 Hectares Awarded to Agrarian Reform Beneficiaries (ARBs)	94
7 Accessibility of Agrarian Reform Beneficiaries (ARBs).....	96
8 Work Attitude as to Hours of Work in the Morning	98
9 Work Attitude as to Kind of Work in the Morning	99
10 Work Attitude as to Hours of Work in the Afternoon.....	100
11 Work Attitude as to Kind of Work in the Afternoon.....	101
12 Work Attitude as to Non-Farm Work in the Morning	102
13 Work Attitude as to Non-Farm Work in the Afternoon.....	103

Table	Page
14 Work Attitude as to Time for Off-Farm Work.....	104
15 Work Attitude as to Kind of Off-Farm Work	105
16 Status of the ARBs in Terms of Title of the Land	106
17 Projects Implemented in ARCs in Terms of Locally Funded Projects.....	107
18 Projects Implemented in ARCs in Terms of Foreign Funded Projects	108
19 Productivity of ARBs in Terms of Income Along On-Farm Activities	109
20 Productivity of ARBs in Terms of Income Along Off-Farm Activities	110
21 Productivity of ARBs in Terms of Income Along Non-Farm Activities	111
22 Relationship Between the Productivity of ARBs Along On-Farm Endeavors and Their Family Profile.....	113
23 Relationship Between the Productivity of ARBs Along Off-Farm Endeavors and Their Family Profile.....	124
24 Relationship Between the Productivity of ARBs Along Non-Farm Endeavors and Their Family Profile.....	134
25 Relationship Between the Productivity of ARBs Along On-Farm Endeavors and Their Status as Beneficiaries.....	143

Table	Page
26 Relationship Between the Productivity of ARBs Along Off-Farm Endeavors and Their Status as Beneficiaries.....	145
27 Relationship Between the Productivity of ARBs Along Non-Farm Endeavors and Their Status as Beneficiaries.....	146
28 Relationship Between the Productivity of ARBs Along On-Farm Endeavors and The Locally-Funded Projects.....	148
29 Relationship Between the Productivity of ARBs Along Off-Farm Endeavors and The Locally-Funded Projects.....	150
30 Relationship Between the Productivity of ARBs Along Non-Farm Endeavors and The Locally-Funded Projects.....	151
31 Relationship Between the Productivity of ARBs Along On-Farm Endeavors and The Foreign-Funded Projects.....	153
32 Relationship Between the Productivity of ARBs Along Off-Farm Endeavors and The Foreign-Funded Projects.....	155
33 Relationship Between the Productivity of ARBs Along Non-Farm Endeavors and The Foreign-Funded Projects.....	157
34 Problems Encountered by ARBs.....	159
35 Proposed Plan and Programs and Implementation.....	174

LIST OF FIGURES

LIST OF FIGURES

Figure	Page
1 Conceptual Framework of the Study	12
2 The Research Environment of the Study Showing the Agrarian Reform Community	16
3 ARCs in Western Samar (ARC Map)	79