CORRELATES OF FARMERS PARTICIPATION IN SEED PRODUCTION AND DISTRIBUTION PROGRAM IN THE PROVINCE OF SAMAR

A Thesis

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Master of Arts in Public Management

ASELA A. CABAÑAS

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APPROVAL SHEET

This thesis entitled **"Correlates of Farmers Participation in Seed Production and Distribution Program in the Province of Samar"**, has been prepared and submitted by Asela A. Cabañas, who having passed the comprehensive examination, is hereby recommended for oral examination.

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Date

MARILYN D. CARDOSO, MTE
Adviser

Approved by the Committee on Oral Examination on March 13, 1994 with a rating of **PASSED**.

RIZALINA M. URBIZTONDO, Ed.D.
Chairman

TERSITO A. ALIPOSA, Ph.D./Ed.D.
Member

CRESCENCIA A. MABINI, Ed.D.
Member

NESTOR B. DASIG, MAPM
Member

Accepted and approved in partial fulfillment of the requirements for the degree of Master of Arts in Public Management.

RIZALINA M. URBIZTONDO, Ed.D.
Dean, Graduate and Post Graduate Studies

Date of Oral Examination
March 13, 1994

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"A farmer went out to sow his seed. As he was scattering the seed, some fell along the path, and the birds came and ate it up. Some fell on rocky places, where it did not have much soil. It sprang up quickly, because the soil was shallow. But when the sun came up, the plants were scorched, and they withered because they had no root. Other seed fell among thorns, which grew up and choked the plants. Still other seed fell on good soil, where it produced a crop-a hundred, sixty or thirty times what was sown. He who has ears, let him hear".

-Matthew 13: 3-9

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ASELA A. CABAÑAS

Department of Agriculture
Catbalogan, Samar

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D E D I C A T I O N

This humble work is
dedicated to the success of
the Seed Growers In Seed Production
And Distribution Program in the
Province of Western Samar.

The Author

ABSTRACT

This study intended to find out the farmers degree of participation in the rice Seed Production and Distribution. The normative-descriptive method of research was employed in this using questionnaire-checklist as the principal instrument used in data gathering. This was supplemented by documentary analysis and actual observation. The questionnaire was validated by research experts. The SSGA members are already in their prime years, and are considered experienced in terms of certified seeds production, Distribution and Marketing. There is no significant relationship between farmers extent of participation in marketing and distribution and the following variables: 1) Educational attainment, 2) Size of Seed Farm, 3) Family Gross Income, Per Annum, and 4) Level of Training attended while there is a significant and direct relationship between farmers extent of participation in marketing and distribution and: 1) Tenurial status, and 2) Technical assistance. This implies that owners tend to participate more than non-owners or tenants and that the more technical assistance is provided to the farmers, the more likely they participate actively in the Distribution and Marketing. Farmers extent participation in Seed Production is independent of the Six factors identified, vis-à-vis: 1) Educational Attainment, 2) Tenurial Status 3) Size of Seed Farm 4) Family Gross Income Per Annum, 5) Level of Training Attended and 6) Technical Assistance. The most pressing problem encountered by the SSGA members is the high cost of farm inputs like fertilizers, pesticides, herbicides, and the like. Other problems encountered like credit assistance, strong competition and the like.

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Chapter 1

THE PROBLEM AND ITS BACKGROUND

Introduction

Samar is one of the provinces whose main staple crop is rice. According to recent statistics, about 96% of the population in Samar are rice eaters. In the Philippines, rice production is one of the major sources of income and livelihood of the rural farmers.

Rice production at present has gained more attention especially from the national government because of the rapidly increasing population. Otherwise, lack of food supply may add to the more economic problem that besets the country.[1]

Increasing rice production is, therefore, imperative. Improvement of rice technology requires the use of high quality seeds that are high yielding and free from pests and diseases. The use of quality seeds has been a part of the adoption of improve practices to increase rice production. During the implementation of the Masagana 99 Program, use of certified seeds became one

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[1]Bureau of Agricultural Statistic Record, Catbalogan, Samar, 1992, p. 6.

of the requirements.

The implementation of the Masagana 99 Program, use of certified seeds became one of the requirements. On the other hand, production of high quality seeds though more expensive as compared with commercial rice production can be a rewarding venture if the guidelines set for seed production are strictly followed.

On the frontlines of the unremitting campaign to increase the country's food supply is the National Food and Agriculture Council (NFAC) which was responsible for the formation of the Masagana 99 Program. The NFAC is the agency that formulates, coordinates, and oversees the different food production program of the Philippine government. One of the important programs that NFAC formulates was the Masagana 99. According to the Former Executive Director Domingo F. Panganiban said:

> M-99 gave us an overview of the problems of the rice industry. It gave us the opportunity to harness local government resources and manpower in identifying areas yet to be developed, and in providing credit and sound technical expertise to the farmers. To make the program truly effective, we have also institutionalized linkage between the government and the private sectors and between the national and local government. We have learned how a program and the scope and

magnify of M-99 could best be implemented[2].

According to the former Secretary of Agriculture Tanco, Jr. the following objectives of the M-99 are First to boost rice production by encouraging farmers in the target provinces to adopt a modern package of technology. Second to establish agricultural extension programs in its province to be adopted by extension workers, local leaders, and farmers. Third, to establish applied research projects on rainfed rice culture that will serve both as demonstration plots and as a basis for recommended practices.[3]

In order to accomplish these objectives, the program will provide farmers with credit support for the purchase of input like fertilizers and agricultural chemicals. In fact, the emphasis of the program will be placed on those areas that are serviced by Rural Banks, Philippine

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[2]Taken from the Greenfield Magazine on the Personal interview of Domingo Panganiban, former executive Director, NFAC, by the editor, Greenfields Magazine, Vol. 4, No. 1, Jan/Feb Issue 1975, p.4.

[3]Taken from the speech of Arturo R. Tanco, Jr. former Secretary of the Department of Agriculture, entitled Paunlarin and Palayan sa Makabagong Paraan "Masagana 99", published at the Greenfields Magazine Special Issue on Masagana 99, September, 1975, pp. 4-5.

National Banks Branches, and the ACA(Agricultural Credit Administration). The program will also launch a massive educational campaign to convince farmers of the value of modern technology and persuade them to adopt recommended practices including the use of high yielding varieties, or HYV's. In addition, the program will provide price of inputs support to farmers through a tie-up between the National Grains Authority (now NFA), Rural Banks, PNB Branches, and Farmers Cooperatives, as well as other participating credit institutions.

How will be the program implemented?

A National Management Committee headed by the National Food and Agriculture Council (NFAC) supervised Masagana 99. The members of the Management Committee included representatives from the Bureau of Plant Industry, Bureau of Agriculture Extension, the Central Bank Department of Rural Banks, the National Grains Authority (now NFA), the Philippine National Bank, the Agricultural Credit Administration, the International Rice research Institute, the U.P. College of Agriculture, the Fertilizers Institute of the Philippines (now Fertilizers and Pesticides Authority), and the United States Agency for International Development (USAID). The National Management Committee will plan, review, and evaluate the progress of the program. It

will identify bottlenecks and seek solutions and will assist field personnel in planning and implementation.

Under the National Management Committee are the Provincial Action Committees with the Provincial Governor as Chairman and the Provincial Rice Program Officer as Executive Vice-Chairman. The member of the Provincial Action Committee are the Provincial Heads of the BPI, BAEX, the PNB, the ACA, the NGA (now NFA), and the President of the Provincial Federation of Rural Banks. The Provincial Action Committee will set targets and follow up field implementation, coordinate implementation at the local level, and conduct promotions.

Under the Provincial Action Committee are the Municipal Action Teams with the Town Mayor as Chairman and the Production Technician Team Leader as Vice-Chairman. The members of the Municipal Action Teams are the Barrio Captains and the Leaders of the Farmer Production Groups. The Municipal Action Team will conduct local promotions and implement the program at the municipal field level. What are the respective functions of these participating agencies?

The NFAC coordinates and supervise the program. The Bureau of Agricultural Extension provides technicians,

spearheads the agricultural extension drive, and conduct farm trials and demonstrations.

The Bureau of Plant provides technicians, distributes high-quality seeds, spearheads pest and disease control, and conducts applied research with IRRI.

The Central Bank Department of Rural Banks provides credit technicians, supervises participating rural banks, and provides loans to farmers through the rural banks.

The rural banks, the PNB branches, and the ACA provide credit technicians, and extend loan to farmers.

The National Grains Authority arranges for the purchase of farmers product with the rural bank, provide the list of eligible warehouses and supplies price support funds.

The private sector, on the other hand, presented by the Fertilizer Institute of the Philippines (now Fertilizer and Pesticide Authority) will supply fertilizers and agricultural chemicals to farmers through accredited dealers.

The program will begin with an informational and educational drive that will be carried out in key areas. The objectives will be to get the awareness of the farmers and convince them to adopt modern agricultural practices

through the support of all sectors. To do this, the municipal action teams will implement the following:

First, conduct meetings about Masagana 99 at the municipal and barrio levels.

Second, distribute leaflets and other promotional materials to farmers.

Third, conduct classes for farmers on modern rice culture. Farmers will be taught the recommended practices in Masagana 99 rice culture, for example, proper application of recommended insecticides and the use of recommended tungro resistant high yielding varieties.

Fourth, organize production groups or seldas in each barrio, composed of 10 or more farmers per group. A production leader will head each group, while the Barrio Captain or the President of existing farmers' association will serve as the overall leader.

Fifth, the technician will help production leaders get the assistance of the local credit institution, usually the rural bank, the PNB branch, or the ACA.

Sixth, demonstrate to farmers every step of modern rice culture.

Seventh, constant follow-up by the local production technicians with each production groups.

Eight, the technician and the production leaders will make regular inspection trips to identify field problems. To facilitate communication, flags will be used.

Ninth, educational tours will be organized to both problem areas and successful farms.

Tenth, field days will be organized to arouse the interest of other farmers (See Appendix D).

Samar Seed Growers is an Association which Samar farmers should be grateful owing to the great endeavor in terms of helping farmers increase their income through the use of high yielding varieties. Samar Seed Growers Association is the one authorized by the government to purchase and plant high yielding varieties such as foundation, Registered and Certified Seeds for further production of seeds before it could be disseminated to the farmers in general for food production as well.

However, before this organization was made, many things had been done according to the former Provincial In-charge of the Bureau of Plant Industry in this province (Samar), first, there was a memorandum by Regional Director of the Bureau of Plant Industry dated January 5, 1977 instructing the Provincial In-charge of the same office (BPI) to organize Seed Grower Association(See Appendix E) without much ado, the Provincial In-charge

called a conference of his Seed Inspector and field Technicians whom he seek help in choosing the appropriate farmers who will really attend meeting and the formation of the Seed Growers Association, the provincial In-charge added.

On January 13, 1977, letter of individual to the 50 farmers sent through the said inspector and Field Technician (see attached Appendix F) then, one week before the scheduled meeting a personal follow up was made by the Provincial In-charge, Seed Inspector and Field Technician so as to have good attendance during the said meeting, the Provincial In-charge added.

Further, according the Provincial In-charge, Pablo C. Cabañas, Jr. On February 25, 1977, the meeting was formed with the attendance of 35 farmers out of 50 being invited. The Regional Director together with the Chief of Crop Production was present during the meeting. Short program was made and both were given the following topics in the importance in forming the Seed Growers association and its linkage to Masagan 99 Program was discussed by the former BPI Regional Director Agapito C. Tauro, and the Chief of the Production Section of the same office talked on the guidelines in the selections of Seed Growers Association. While the BPI Provincial Incharged talked on the role of

the BPI Provincial office and the advantages of forming the Seed Growers Associations. While the Provincial Seed Inspector talked on Seed Certification and Distribution Program.

Immediately after the short program, the farmers who were willing to join in forming the association which they called it the "Samar Seed Grower Association". Among the officers elected were the President, Vice-president, the Secretary, Treasurer, Auditor, Business Managers and Sergeant-At-Arms. Out of 35 farmers who attended the meeting, 25 had signified as members. The ten farmers remained as non-members for unknown reasons. However, even if they are not a seed grower members, they are also planting high yielding varieties.

SSGA had newly changed its name. According to Brazil, Chairman of the SSGMPCI, last February 23, 1993 the SSGA had changed its name into a "Samar Seed Growers Multi-Purpose Cooperative Inc. " and was registered by the Cooperative Development Authority, a registering agency. The purpose why they changed its name so the SSGMPCI would have juridical personality and as such they could already undergo any economic activities like availing credit from any lending institution, extending credit to Coop members, marketing and any other matters the SSGMPCI would want to

avail from the Cooperative Development Authority (CDA), for Certificate of Registration, Cooperative Profile, Organizational Structure, Articles of Cooperation and by-laws.

Statement of the Problem

This study aims to determine as to what factors contributes to the farmers' participation in seed production and distribution program in the Province of Samar. Specifically, this study sought to answer the following questions:

1. What is the profile of the SSGA Members according to the following:

    1.1 Age;

    1.2 Sex;

    1.3 Educational Qualification;

    1.4 Tenurial Status;

    1.5 Size and Seed Farm;

    1.6 Gross Family Income;

    1.7 Trainings attended; and

    1.8 Technicians/Seed Inspector Assistance?

2. What is the extent of participation of the SSGA in terms of the following:

    2.1 Seed Production;

2.2 Distribution; and

2.3 Marketing?

3. Is there a significant relationship between the extent of participation of the SSGA, vis-a-vis;

3.1 Educational Qualification;

3.2 Tenurial Status;

3.3 Size of Seed Farm;

3.4 Gross Family Income;

3.5 Training Attended;and

3.6 Technicians/Seed Inspectors Assistance?

4. What are the problems encountered by the farmers and the seed growers in terms of;

4.1 Seed Production;

4.2 Distribution; and

4.3 Marketing?

Hypothesis

The farmers participation in the seed production and distribution program is not related to their educational attainment. Tenurial status, size of seed farm, gross family income. Trainings attended, seed inspectors assistance.

Theoretical Framework

A Farmer in the rural area lives in and contends with a complex of farming situations some of which he had little or no control at all. Human and physical factors are interwoven into a web uncertainty, which constitutes the fabric of his daily life. While he may be aware of these personal and external forces that impede the pursuits of his aspirations and goals, he appears like a reed in a rushing current of water and before a strong wind related to the elements but powerless to control or influence the direction of the forces. "He is unable to control his inventory in a manner comparable to that of a shopkeeper"[4]. He cannot predict the kind of weather which may occur on a day, the prices in the market and the labor when he needs it most. Salient to these situations are a nexus of variables intertwined in a farmer's habit, ways of thinking and doing things, and outlook that restrain his progress towards his goal.

A Farmer's Psychological World

In a farmers psychological world his life revolves around the farm and his family. Beyond this fringe of

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[4]Edward Gross, Work and Society, (New York; the Thomas Y, Crowell Company, 1958), p. 27.

contemporaneous situation his life holds no psychological involvement. His physical and social environment with which he is psychologically involved represents definable range of possible perceptions and actions. It is in this psychological world of isolation that customs and habits are strengthened, reverence for the past is firmly held, novelty is feared, ignorance is nurtured, and farming becomes a way of life. This is the "life space"[5] of the farmer which represents the functional and symbolic relationships-a psychological world of presently perceived objects, language, myth, art, anticipation, and religion.

All these elements in the farmers' contemporaneous situation could maintain the status quo or could serve as barriers to change are harbingers of the farmers' stagnation, frustration and conflicts.

This study is anchored on Kurt Lewin's Field Theory or Topological Psychology. The theory holds "that behavior does not depend on the organism alone or on the environment alone, but on what goes on between the two"[6]. Using

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[5] Morris L. Bigge and Maurice P. Hunt, **Psychological Foundation of Education**. (New York: Harper and Row Publishers, 1958), p. 381.

[6]Edwin G. Borring (ed), **Foundation of Psychology**. (New York: John and Wilcy and Sons Inc. 1948), p. 523.

topology and vector concepts, he pictured psychological reality in terms of field relationships of a person and his environment. This topology represents the position of a person in reference to his functional goals and barriers to their achievement, while a vector represents a force which influences the psychological movement of a person towards or away from a goal.[7] This theory applies to this particular study. Considering that farmers' participation is basically centered on the behavior of the farmers. In other words, in studying the farmer one must have a basic understanding on the structure and dynamics of the life space of this person. Paraphrasing Bigge, thus: To understand the behavior of a farmer, one must determine the psychological position of the farmers person in reference to his aspirations in his life space: This entails knowing the farmers social position within and outside various groups, his position in relation to various ideas and activities, and the role of physical objects in his life space. The related region of a life space in which a farmer is located determines the qualities of his immediate surroundings. Thus, a change

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[7]Ernest R. Hilgard, **Theories of Learning**, (New York: Apleton-Century-Croffs, Inc, 1956), p. 266.

agent or a researcher must see the relationship between the regions or parts of the farmers life space, and outside its boundary. He must assess the degree of permeability of the boundaries of the various regions of a farmer's life space: How susceptible the farmers is to change[8].

A change agent sometimes perceive situations which have no relevance of functional meaning in the perceptual world of the farmer being studied. Hence, knowing the facts about the "foreign hull of life space" helps a change agent determining what is possible and what is not, and what might happen and what might not.

Conceptual Framework

By nature, man is a social animal. He is basically motivated by social needs and obtains his sense of identity through relationships with others[9]. Through constant intervention two or more persons form a group. The members of a group exist through consistent, coordinated action directed toward the achievement of some common objective, some kind of satisfaction to all the

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[8]Bigge, op. cit., p. 417.

[9]Isabel S. Panopio, Felicidad V. Codero. And Adelina A. Raymundo, "**General Sociology Focus on the Philippines**" (Quezon City, KEN Incorporated, 1979), p. 89.

participants. However, if a group is to function it must motivate people to participate. As Calhoun puts it; "There must be some kind of link or hookup, between the energies pushing within human beings and the opportunities the group affords for expressing and gratifying those energies"[10]. For example, a marital union between two persons may be dictated by commonality of reasons: sexual gratification, mutual dependence for security, sharing of personal interest and parental bliss. In the same manner, highly politicalized individuals who share the same orientation and goal seek each other's company and build up a potent force strong enough to create pressure and engage in political bargaining.[11] In the same manner we ask, " Why do farmers join farm groups and organizations? What motivates them to stay with or leave the group of organization? Many concepts and theories on human motivation to group affiliation have been formulated. The social exchange concept of motivation proposed by several authors has gained some degree of acceptance among social psychologist and organizational

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[10]Donald W. Calhoun, "**Person-in Groups: Humanistic Social Psychology**", (New York: Harper and Row, Publishers, 1976), pp. 31-32.

[11]Ibid.

behavior scientists.

Mars and Simon's social exchange concept considers the interaction between the individual and organization as both a two-dimentional type of exchange process and situation involving a sense of mutual obligation[12].

That interaction involves exchange between an individual contribution to the organization and the benefit received from the organization. This exchange concept is referred to as the inducements-contribution theory of motivations. A member continues to participate in or belong to the organization for as long as the inducements are maintained by personally acceptable balance between rewards and cost with respect to organizational membership. Huse and Bowditch[13] referred to the social exchange concept as "psychological contract" which is the mutual exchange between the individual and the organization.

Some authorities theorized that maintenance of group membership is assured so long as the needs being

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[12]James J. March and Herbert A. Simon, **Organizations**, (New York: John Wiley and Sons Inc. 1958), p. 84. As cited in William A. Shrode and Dan Voich, Jr. **Organization and Management**, (Homewood, Illinois: Richard D. Irwin, Inc. 1974), p. 335.

[13]Edgar F. Huse and James L. Bowditch, **Behavior in the Organizations**, 2nd ed; (Reading, Massachusets: Addison-Wesley Publishing Company, Inc., 1977), p. 66.

satisfied by that group or organization are more important than the work or expenditure of efforts and money necessary to remain within the group.[14] Dropouts are the results of dissatisfaction.

Warner and Hefferman call social exchange concept as "benefit-participation contingency", providing some lead to explain the differential participation contingency is "an aspect of exchange between the benefit and individual receives from the organization and the contribution he makes to it"[15].

The benefit-contingency in the organization has three(3) broad categories of benefits, namely:

1. No contingency. Goods are available to members and members alike.

2. Moderate contingency. The rewards are available only to members but are not very dependent upon the amount of participation or contribution to organization.

3. A high degree of contingency. Individual rewards are available only to members in relation to their

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[14]Ibid.

[15]W. Keith Warner and W.D. Hefferman, **The Benefit-Participation Contengency in Voluntary Farm Organization.** Rural Sociology, Vol. 32, June 19.67, pp. 139-153. Cited in Castillo, **All in Grain of Rice**. Op. Cit, pp. 378-379.

participation in or contribution to the organization.

On the basis of the foregoing discussions it is assumed that farmer seed growers participates in the seed production program because of some personal needs, motivates and expectations. A farmer will continue to remain an active member of the seed growers association so long as he believes that the benefits or rewards he gets from his membership is worth his effort, time and money expended.

Since the focus of this study is on the degree of participation of seed growers it is hypothesized that their participation behavior is due to the level of satisfaction that they derived from their affiliation with the seed growers association and/or their involvement in the seed production program. However, level of satisfaction is seen as being influenced by certain factors inherent in the farmers themselves and to a certain extent in the environment whereby they operate. These factors includes educational attainment of members, tenurial status, size of seed farm, family income, trainings attended, and technician assistance, market outlets and problems encountered.

It takes into account the significant role of the different recommendation/redirection of the program. On

other hand, a horizontal rectangle is of which could best help explain the program. Followed by another horizontal rectangle indicating increased farmers participation in SSGA then followed by another horizontal rectangle which indicates the increased production of certified seeds, while the apex rectangle shows the end result of this study which would eventually lead an increase rice production in the Province of Samar.

Figure 1 shows the conceptual framework of this study.

Importance of the Study

The results obtained maybe of value in increasing our knowledge and understanding of this particular group of rice farmers who helped the government increased the prodution of our staple food. On the other basis of this increased, knowledge and understanding of the rice seed growers, their characteristics, needs and problems, effective policies and strategies would be formulated to solve a host of problems. Thus, the farmers particularly the seed growers in the Province of Western Samar are the direct beneficiaries of the program and will find fulfillment through the use of high yielding and pest resistant rice seed varieties to increase rice production and uplift the farmers' social and economic status.

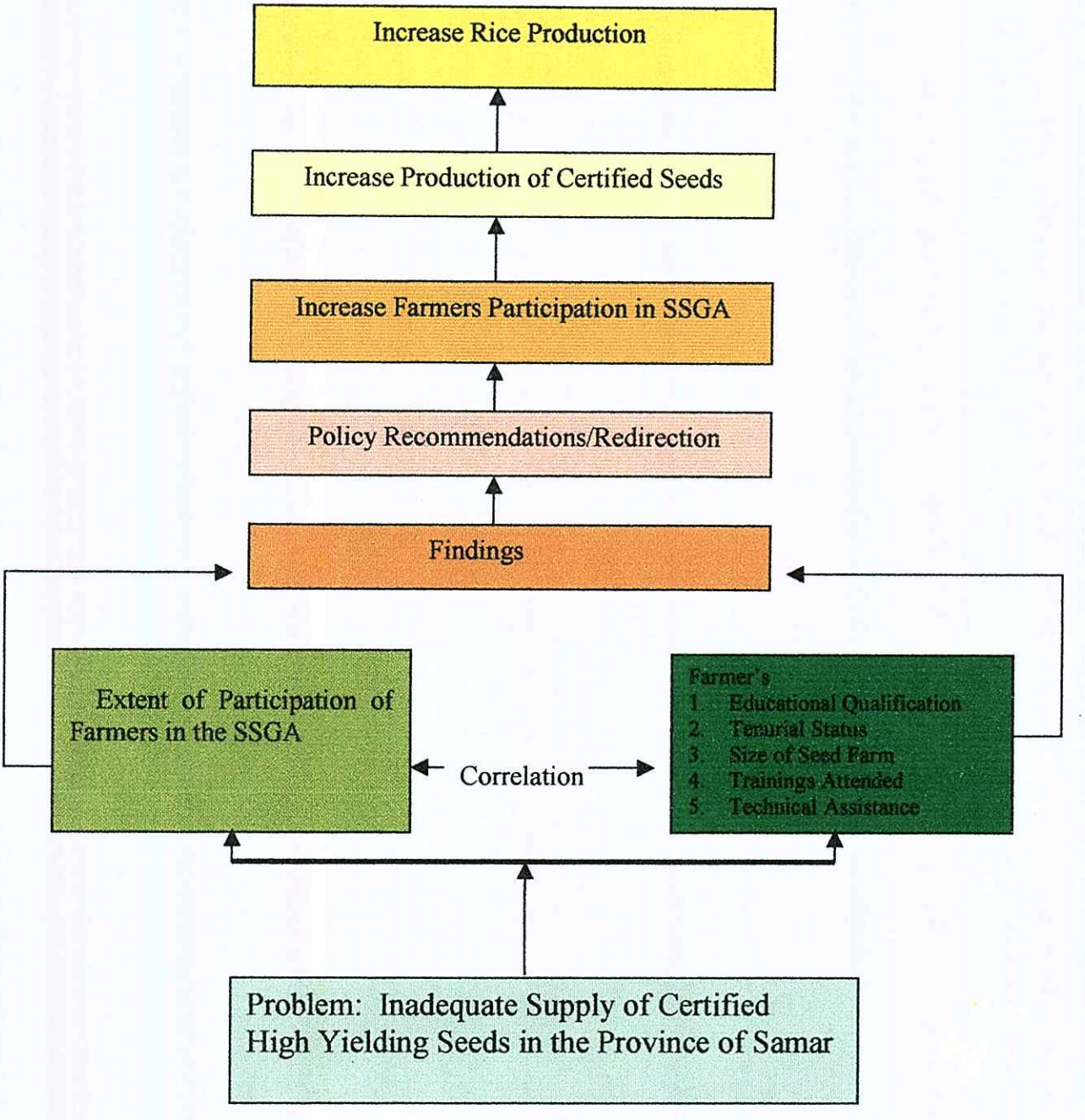

Figure 1 **Conceptual Framework of the Study Showing the Research Environment and the Variables Involved Therein.**

The community members which constitute the ordinary farmers in general will be benefited from the association (SSGA) out of high yielding rice varieties which will be adopted to plant by the ordinary farmers. By planting the high yielding varieties, it is expected that the farmers in the community will double or even triple their rice production than those using ordinary varieties.

The implementing agencies, managers/decision makers may obtain data that could serve as basis for policy making and designing for the improvement of the rice seed industry in general and the SSGA in particular. Likewise, the result of this study may also be useful to other seed growers association having similar problems.

Furthermore, future researchers who may conduct similar research in seed production will have this study as their guide and reference. Thus, our policy makers and program planners would be provided with a broad basis for the formulation of sound policies for the improvement of our seed industry in general and the rice farmers in particular.

The findings of the study shall be able to help identify strengths and weaknesses of the SSGA and by this, appropriate solutions and recommendations to remedy the problems can be formulated by those concerned.

Finally, the implementing agencies shall be able to modify, improve and use appropriate technology or strategies or techniques to strengthen seed production program and to meet the seed requirements of the farmers in the province.

Scope and Delimitation of the Study

To determine the contribution made by the seed growers to the rice production program in Samar, the researcher simply based the conclusion and/or observations on the responses made to specific questions in the questionnaire by the farmer-respondents.

The respondents included those rice farmers in Samar who had participated in the seed production program for at least two cropping seasons from January 1991 until March 1992. However, out of the twenty-five (25) prospective farmers-respondents, only twelve (12) or fifty(50%) percent were interviewed; some farmers could not be located having transferred their residences, and two(2) members were already dead.

This study made use one of the most powerful and useful tools in obtaining information in social science survey research through the personal interview. It attempted to determine some of the factors which influence

the degree of participation of rice farmers in the seed production program, although objective measurement of one's aspiration, attitude, thoughts and feelings is rather difficult to conduct.

Because data collected greatly depended upon the respondents answers, the investigator exercise outmost care in verifying for accuracy. Being an *ex post facto* research, this study relied so much on the recall method. It therefore, required the use of reliable references and records on seed production available at the Department of Agriculture, Crop Section, Provincial Office, Catbalogan, Samar to check the veracity of the respondents supplied information.

Figure 2 is the Map of the Province of Western Samar showing the location of the seed growers and the number in each location.

Definition of Terms

In order to provide the readers a common reference, the following terms are defined as used in this study.

Attitude towards farming. Refers to the seed growers' opinion, feelings or predisposition towards farming in general.

MAP OF SAMAR PROVINCE

Showing the Location of the Respondent

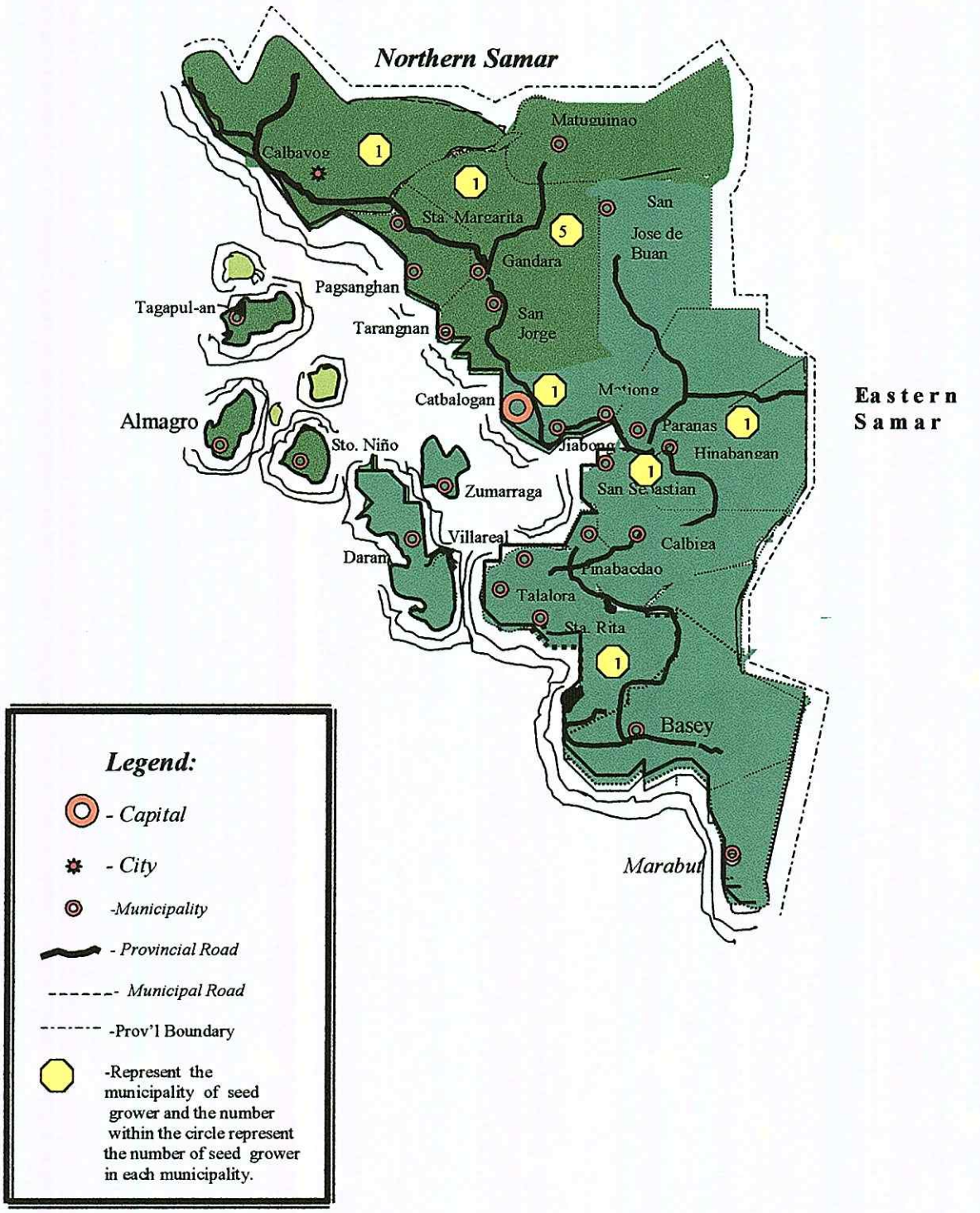

Figure 2 Showing the Samar Seed Growers Association

Average area devoted to seed production. Means the average .area in hectares devoted to seed production since membership in the seed growers association up to the time of survey.

Communication and educational factors. Refers to the respondents sources of information and training's related to farming attended.

Common Farmers. Are farmers to plant rice and other crop commodities but do not exactly follow the modern methods of planting.

Like the use of fertilizers, insecticides and other inputs. Sometimes they use fertilizers and other inputs but not always.

Demographic characteristics. Are the seed growers personal characteristics such as: Age, sex, Educational Attainment and Number of Dependents to Support.

Educational Attainment. Is the highest grade finished by the respondents in the formal school system.

Gross Family Income. Means the total income of the family derived from both farm and-farm sources.

High Yielding Varieties. Are varieties of the rice that had been developed by plant breeders for many years of research and recommended to the seed board committee by the plant breeders after it has been found out that such strain

has desirable characteristics such as high yielder, resistant to plant pest and diseases and other criteria's required by the plant breeders.

Major Occupation. Refers to the respondents jobs, business or source of income other than seed farming.

Market Outlets. Refers to the different agencies, groups and organizations or individual persons who purchase the certified seeds product by the respondents.

Membership Status. Refers to the farmers membership in the seed growers association from 1977 to 1992 cropping seasons.

Participation. Refers to the extent to which a rice farmers is involved in activities related to the rice seed production program. The degree of farmers' participation was determined based on the following measures: Educational qualification, Tenurial Status, Size of Seed /farm, Gross Family Income and Technical Assistance.

Payment of dues/fee. Refers to the remittance of fees or dues required of the member of the association such as registration fee. Seed growers association.

Problem encountered or perceived as a seed grower. Refers to the various conditions, situations or other such similar factors that prevent the seed grower from getting

or achieving his expectation from the rice seed production program.

Recommended practices. Refers to the various farming activities followed in the production of certified seeds. These includes selection of variety to plant, raising of seedlings, land preparation, transplanting, fertilizer application, water management, replanting and weed control, protecting plants from insect pests and diseases, rouging, harvesting, threshing, and processing seed storage and treatment.

Satisfaction. Refers to the level or degree to which a seed growers needs, expectations and motivations for membership in the seed growers association were actually fulfilled.

Seed Production Program. Refers to the package of technology in the production of certified seeds of improved rice varieties with the intention of replacing the rice farmers traditional low-yielding varieties as a way of increasing production.

Samar Seed Grower Association. Refers to the rice farmer in Samar whose aim is to produce high quality rice seeds such as foundation seeds, Registered Seeds and Certified Seeds for Distribution to the farmers. Most often, he is a farmer of good standing and is selected

based on prescribed criteria set by the Bureau of Plant Industry-the seed-certifying agency.

Seed Farm Productivity. Refers to the average yield in cavans per hectare of land devoted to seed production for the last two cropping seasons of seed farming.

Training Attended. Are the different educational activities attended by the respondents such as farmers classes, seminars, symposiums and other similar activities.

Chapter 2

REVIEW OF RELATED LITERATURE AND STUDIES

A review of related literature and studies were conducted through readings from articles, periodicals, journals and theses in the Philippines and other countries which gave ideas and directions or insights to this study.

Related Literature

The program for the improvement, multiplication and distribution of rice and corn seed in the Philippines was started in 1953 as a cooperative undertaking between the Bureau of Plant Industry, the UP College of Agriculture and the Bureau of Agricultural Extension[16]. This joint undertaking on the seed improvement had been bolstered with the establishment of the International Rice Research Institute (IRRI) at Los Baños, Laguna, in 1962, which contributed substantially to increased rice production in the country.

The main objectives of the program are to breed

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[16]Bureau of Plant Industry, Minimum Seed Certification Standard for Rice and Corn and other Crops in the Philippines (Malate, Manila, 1971).

superior varieties of rice and corn and other field crops, to maintain their genetic identity and varietal purity and to multiply them for distribution to farmers.

Under the program, the Bureau of Plant Industry, the UP College of Agriculture and later the International Rice Research Institute conducted the breeding and selection work. Varietal trials, including genetical and regional tests of local and foreign varieties were conducted in the different regions of the country to determine the most outstanding varieties. The selected varieties were recommended to the Seed Board for Approval for Commercial planting. The Seed Board is a body created for the purpose of deliberating and approving superior varieties for commercial adoption by farmers. Varieties approved by the Seed Board and subsequently increased for foundation seeds are multiplied in the different experiment stations of the BPI to produce the registered seeds for distribution to seed growers and selected farmer-cooperators for the production of certified seeds.

According to the same article, the Bureau of Agricultural Extension conducts demonstration trial of oustanding varieties in the different regions of the country and assists in the distribution and dissemination

of such varieties. It also assists in selecting seed cooperators for production of certified seeds.

Under this joint venture, seed certification is entrusted to the BPI as the seed certifying agency. Seed testing laboratories have been established throughout the country by the BPI through the aid of the National Economic Council and the United States Aid for International Development (NEC-USAID). Seeds intended for certification are produced under the guidance of trained BPI seed inspectors. These certified seeds including breeder, foundation and registered seeds are first tested and analyzed in the seed testing laboratory in accordance with the prescribed minimum standards before they are labeled and tagged as such.

The report by Bautista[17] mentioned that production of certified seeds of superior rice varieties is intended to replace the low yielding interior ones used by farmers as a means of increasing production. It involved the use of three classes of seeds, namely: the breeders seeds, the foundation seeds and the registered seeds.

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[17]Paper Presented by Mrs. Rustica S. Bautista, Chief, Crop Production Division during the training for Seed Inspectors under GPEP held at Farmers Training Center, Bohol Agricultural College, Bilar, Bohol on July 6-10, 1993.

Breeder seeds were produced by either the BPI, the UPCA and the IRRI. Breeder seeds are planted multiplied to produce what is called the foundation seeds for multiplication in the different experiment stations of the BPI in succeeding crop seasons. The progeny of foundation seeds, called registered seeds, was distributed to selected farmers-cooperators all over the country for the ultimate production of certified seeds on their private farms.

All this different classes of seeds were first tested and analyzed in the seed-testing laboratory of the BPI for purity, moisture content, germination, mixture of other varieties, etc. Not until they passed the standard requirement will they be tagged as foundation, registered or certified seeds.

According to the same report, the ungent demand for seeds. Good seeds belong to an emergency class used when stock of known genetic quality suitable for certification is not available. This emergency class may include the progeny of certified seed, or even of registered or foundation seeds.

In view of facilities of the goverinment to meet all the certified seed needs of the country, cooperation of

selected farmer-cooperators was encouraged in the production of certified seeds. Registered and/or certified seeds produced by these seed growers and/or farmer-cooperators procured by the government subject to the needs and availability of funds are deposited in bonded and secured warehouses ready for distribution for seed purposes.

Criteria used in the selection of farmer-cooperators as follows:

1. Must have a minimum area of two hectares of irrigated rice field and,

2. Must have the necessary inputs to follow the recommendation of the BPI Seed Inspector.

Bautista reported that the purpose of seed certification is to maintain and make available to the public adequate supply of high-quality seeds of superior varieties grown and distributed to ensure genetic identity, varietal and physical purity. Only those varieties approved by the Seed Board are eligible for certification. Some factors to be considered for a seed variety to qualify for certification are high yield, resistance to lodging, good milling recovery, disease resistance and good eating quality.

Seed certification constitutes two main phases of activities, namely: the field certification under the main responsibility of the seed inspector and the laboratory seed certification under the concern of the seed-testing laboratory.

Field certification is a prerequisite to laboratory certification. It requires adequate survey of the producing areas to ensure relative freedom from undesirable types. The inspection of the field by the seed inspectors is to find out if the field intended for seed certification is free from off-types, volunteer plants, weeds, etc.

Laboratory seed certification includes testing of the samples to determine the specific standard for purity, germination, moisture content, mixture with other varieties, red rice, weed seeds, etc. Samples not meeting the specific standard are rejected.

More rice farmers in Nueva Ecija are becoming interested in rice seed production, presumably because of higher selling price as mandated by the Department of Agriculture (DA).

The Number of Nueva Ecija seed producers registered in the Department of Agriculture (DA) has increased tremendously by over six times. There were only 36 of

them in 1988 [18].

Some 227 farmers in this province devoted a total of 1,031 hectares in the previous dry season for the production of seeds of rice varieties released by the Philippine Seed Board for farmers use.

An analysis of the dry season raw data provided by the DA seed quality control laboratory services in Region three to the Philippine Rice Research Institute (PhilRice) showed that Cabanatuan /city had the highest number of seed producers almost one-half (49 percent). Likewise, almost one-third (321 hectares of 31 percent) of the seed production area was in this city. (The seed quality control laboratory services of DA Region three are based at PhilRice Maligaya).

Technicians of DA seed quality control service conduct preliminary and final inspections of farmer's seed production field. The town of Sta Rosa and Muñoz were only a poor second and third to Cabanatuan City. Sta. Rosa had only 58 rice seed producers with a total area of 218 hectares or 21 percent of the total area in the

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[18]PhilRice Newsletter, Philippine Rice Research Institute, Maligaya, Muñoz, Nueva Ecija, 1990, pp. 6-7.

province. On the other hand, Muñoz had 22 seed producers cultivating 137 hectares or 13 percent of the provincial area. Other producers came from Guimba (eight), Gen Natividad (five), Talavera, Lanera and Gapan (four each), San Leonardo (three), Cuyapo (two), Nampicuan, Sto Domingo, Zaragosa, Peñaranda, Gen Tinio, Palayan City, Laur. Gabaldon and Bongabong (one each). However, there could be more seed producers in the province, said an informed source. He added that unregistered seed producers may have the capability to certify on the quality of their seeds.

In general, Nueva Ecija rice seed growers are small-scale producers. Over three-fourths (78 percent) used one to five hectares for seed production. Two out of (43 percent) planted one to three hectares, while about one third (32 percent) planted 3.1 to five hectares for seed production.

Only 28 farmers (12 percent) devoted nine hectares or more each for this purpose. Among six then, one used 27 hectares and another produce seeds in 21 hectares. Two used 17 hectares each.

Over three-fourths(79 percent)of the seed producers planted only one variety, using 488 hectares or 47 percent of the provincial seed production area. Fifteen farmers

(7 percent) planted two varieties, but they used 115 hectares or 11 percent of the provincial seed production area.

Although only 12 farmers planted four varieties, they used a wider area (118 hectares) than those who planted two varieties, Still six farmers planted five varieties in 101 hectares.

Amazingly enough, three farmers planted either seven, eight or 10 varieties. (See Appendix N page 143)

IR74, the last of IRRI-released varieties, was the most popular variety planted for seed production last season. Almost two-thirds of the producers (61 percent) planted this variety in 331 hectares or 32 percent of the provincial area.

This was followed by IR72, BPI-R110, IR36, IR66, IR70, BPI-112. IR42, IR60, BPI-RI-1, IR-22, IR30, IR68 and BPI RI-3 in that order.

IR72 was planted by 54 hectares; IR64,35 farmers in 160 hectares; and IR36, 26 farmers in 68 hectares. The remaining areas was planted to the other varieties.

Most of the farmers (81.1 percent) preferred to plant registered seeds, the seed type which normally produces certified seeds. Over one eight (15 percent) planted both

foundation and registered seeds. The rest planted only foundation seeds.

Foundation seeds normally produce registered seeds.

The Department of Agriculture (DA) recently ordered a uniform pricing for good quality seeds that are certified by the Department's seed quality control services. Much higher than ordinary palay, prices per 45 kilograms of good quality seeds are as follows. Registered Seeds – P405.00; Certified Seeds –P375.00.

Among those who devoted one to five hectares for seed production, more than two-thirds (69 percent) planted registered seeds. On the other hand, among those who used nine hectares or more, only 12 farmers (5 percent) planted registered seeds while 16(7percent) planted both foundation and registered seeds.

It can only be assumed, however, that these farmers produce good quality seeds. This stems from the fact that only 54 farmers (24 percent) had both preliminary and final inspections of their seed production fields last season.

Some 164 farmers (72 percent) had only a preliminary inspection of their fields, while nine farmers had only a final inspection. If only these seeds producers are properly trained and guided, Nueva Ecija can become a major source of good quality seeds at least for Luzon.

PhilRice already started to train farmers to grow good quality seeds. This is especially true among the farmers covered by non-government organizations like the Alay Tangkilik Foundation, Incorporated (ATFI) in Cabiao, Nueva Ecija, Pangasinan Peoples's Development Foundation Incorporated (PPDFI) in Pangasinan, Peoples' Institute and Technology (BIDTECH) in Camarines Norte, Agriculture, Livestock and Livelihood Movement (ALL MOVE). Foundation in San Miguel, Bulacan and Dante Buscayno People's Livelihood Foundation (PLF) in Tarlac.

The curriculum of the training courses for farmers conducted by PhilRice always includes a session on the production of good quality seeds. This is to encourage the farmers to grow their own seeds and discourage them from depending on large scale producers in many instances, farmers trainers are given two kilograms of good quality seeds to begin with.

With the area devoted to seed production in the province and at a conservative average yield of 5.0t/ha, Nueva Ecija can easily produce 5,156 tons of good quality seeds every season.

At price mandated by DA, the income of small producers could dramatically increase, thereby uplifting their quality of life.

Related Studies

For both dry and wet season of 1977, the Eastern Visayas Region (Region VIII) comprising the three provinces of Samar, the two provinces of Leyte and the Sub-Province of Biliran had a gross production of palay seed of 11,268 cavans harvested from an area of 105.56 hectares out of 263.89 hectares planted. The gross production consisted of 3,589 cavans of foundation seed, 5,250 cavans of registered seed and 2,429 cavans of certified seed. The average yield was 107 cavans per hectare[19].

Castillo and de la Trinidad cited by Dabuet (1980) conducted a study on Seed Production and Certification and they indicated that the purpose of seed certification is to maintain and make available to the public adequate supply of superior quality seed varieties grown and distributed to insure genetic identity and varietal and physical purity.

The study of Castillo and dela Trinidad as cited to Dabuet on Seed Production and Certification is related to the present study in terms of respondents and subject. Both studies are on Seed Production Program and both respondents are farmers.

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[19]BPI Crop Production Division, "MIS Annual Report for Fiscal Year 1977" cited in BPI Financing Progam for Seed Production; op. Cit.

In 1987, Ramos a study on "Seed Production Testing and Handling" their findings revealed that seed growers have to follow certain standards of operation set by BPI before they are entitled to participate and practice seed production, distribution and marketing procedures.

According to Ramos in the Philippines, The National Seed Board, through the Seed Certification and Standard Groups, specify the standard required for each class or grade of rice seeds.

The studies of Ramos identified the standard operation procedures set by BPI before they can be called seed growers. This is related the present study in the sense that both studies use questionnaires as the data-gathering instrument.

Dabuet[20] studied "Farmers' Participation in the Rice Seed Production in Leyte". He reported that a better educated person possesses better and improved problem-solving and decision-making skills and abilities that one with limited educational background. The study revealed that the higher the educational attainment of a farmer, the greater is his degree of participation in the seed production program.

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[20]Dabuet, B. "Farmers' Participation ...," (Unpublished Master's thesis, UPLB, Los Baños, Laguna, 1980).

The study of Dabuet on farmer' Particiaption also tried to identify the participation of farmers on the seed production program. It also utilizes the questionnaires as a data-gathering instrument.

Ramos[21] cited that non-formal training activity like workshops, seminars, demonstration and field trips are important complements of formal education. These activities help the individual enrich his knowledge and acquire new information that maybe important to his work.

The study of Ramos is related to the present study in the sense that both studies tried to identify the participation of the farmers in rice production program. His study also deals with an association and the diagnostic results of the questionnaires were made as a data of the study.

Dalagan[22] revealed in his study that owner-operators and families, take more active part in group activities than tenants and farm laborers. Generally, owner operators and families are the most active participants in any group activities like attending meetings, farmers classes

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[21]Ramos, D.G. "The PhilRice Seed..., " (Unpublished Master's thesis, UPLB, Los Baños, Laguna, 1991).

[22]Dalagan,D.D. "The Integration of..., " (Unpublished Master's thesis, UPLB,Los Baños, Laguna, 1998).

compared to those tenants and farm laborers because of their status symbols.

The study of Dalagan is related to the present study in the sense that both studies used rice farmers as subjects and both utilized questionnaires to gather data.

In 1983, Rossel and Benwick Kelly made a survey on "Seed Campaign Guidelines for Promotion and Use of Quality Seeds in Developing Countries". They cited that proper distribution and marketing are of great importance. They have mentioned that the seed campaign focused on production and processing of seeds and neglected factors that contribute to seed use. They further indicated that this is especially so when the target is the subsistence farmers has to be convinced that the new variety performs just as well or better than the traditional variety with out more fertilizer or attention. On the other hand, seed growers who disposed their seeds through a number of outlets tended to participate more than those who sold their seeds through a single outlet.

The study of Rossel and Benwick Kelly on Seed Campaign Guidelines for Promotion and Use of Quality Seeds is related to the present study in the sense that promoting the use of quality seeds is one of the subject areas being considered in this study.

Malabuyoc[23] stated that both public agencies and private seed enterprises need information about the performance of potential varieties. Materials from abroad as well as locally bred varieties should be tested. The kind of tests to be performed and the use to be made of the information are related to policy decisions that can have strong impact on the development of the commercial seed industry. There is a government policy in the Philippines that varieties should pass rigid testing before they can be recommended for approval for seed increase and distribution. This policy started with rice. There are two groups of testing: general and advance trials. The general trial usually include such more experimental varieties that are tested in few location in the country. Whereas, advanced trial includes fewer experimental varieties that excel or show promise in the general trial. The promising varieties are tested in more locations for adaptation. The test are conducted at research stations of the Bureau of Plant Industry(BPI), agricultural universities, colleges, and schools and in some private farms.

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[23]Malabuyoc, Marilyn M. "Farm , Labor Patterns. .." (Unpublished Master's thesis, UPLB, Los Baños, Laguna, 1985), pp. 77-78.

Chapter 3

METHODOLOGY

This chapter presents how the study was undertaken such as: the methods, techniques and procedures used in this research, the instruments employed in gathering the data, the sources of data, and the statistical tools used in the treatment of the data gathered.

Research Design

This study employed a descriptive-normative research method using the questionnaires as the principal instruments in gathering the needed data. The researcher also employed other data gathering instruments such as documentary analysis and actual observation. These methods were used so as to describe, record, analyze, interpret and ascertain the facts in order to come up with a more substantial and meaningful research.

The survey questionnaire was used to obtain the needed data for the study. Validity and reliability of instrument as well as clarity and appropriateness in gathering desired information had to be ensured following the right pre-testing procedure.

The respondents of this study were the rice farmers who are the members of the Samar Seed Growers Association.

No sampling method was employed by the researcher. Inasmuch as all members of the SSGA were taken as respondents. A list of the members was taken from the provincial office of the Department of Agriculture in Western Samar.

The population was composed of rice farmers who are members of SSGA and who have participated in the Seed Production program for at least two cropping seasons. Based on the documentary analysis done, there were 25 farmer members of the SSGA and twelve of 50% are available as subjects of this research since the other have either transferred or have passed away.

Instrumentation

As mentioned earlier, the researcher employed questionnaires, documentary analysis of some vital documents, actual observation, of the respondents in obtaining the desired data and information.

Questionnaire. One set of questionnaire was prepared by the researcher, it was designed for the farmer beneficiaries and was written in the vernacular to suit the educational level of the respondents. It consisted of four

parts: Part 1 Socio demographic characteristics of the rice seed growers, Part 11 – Farmers Existing Practices and Strategies Involved in Seed production, Distribution and Marketing of Seeds; Part 111 – obtain information on factors that relate to farmers degree of participation; and Part 1V information on problems encountered by farmers.

Documentary Analysis. Vital documentation from the University of the Philippines, Los Baños (UPLB), Institute of Plant Breeding (IPB), International Rice Research Institute (IRRI), Department of Agriculture (DA), Bureau of Plant Industry (BPI), Bureau of Agricultural Statistics (BAS) Leyte Seed Testing Laboratory (LSTI) and other government agencies involved in the program were reviewed and analyzed. The data gathered from those agencies were added to the text of this particular study.

Validation of the Instrument

The first draft of the questionnaires was shown to the researcher adviser and professors in research for their comments and suggestions for improvement. After incorporating all their suggestions and comments, the improved version of the questionnaire checklist for the seed growers were tried with some ordinary farmers in

Pinabacdao and Gandara who were not members of the association for clarity of instructions and readability. Some minor revisions were made considering their suggestions and comments.

Treatment of Data

Educational attainment of SSGA members were classified into three categories, as follows: Elementary Level to Elementary Graduate, High School level to high school Graduate, College level to College Graduate. Respondents whose educational attainment fall in Elementary Level-Elementary graduate the score is "1" and those belong to High school level-High school Graduate was "2" and those College level College Graduate score "3".

Likewise, the same number of categories was also used for tenurial status, vis-à-vis: for tenant the score was "1", part-owner score was "2" and "3" for an owner.

No categorization for size of seed farm was used. The data collected for size of seed farm was in terms of hectarege as well as for gross family income per year in terms of pesos were directly used to correlate these variables to the extent of participation of SSGA members for both the marketing and distribution as well as seed production.

On the other hand the trainings attended were categorized into three namely:

0 – did not attend any training

1 – Provincial level training

2 – Regional level training

3 – National level training

Technical assistance was categorized into four scales in forms of adequacy. If the contacts between the respondents and the technicians/seed inspectors were made five to six times during the entire cropping season the assistance was considered as "3" or "adequate". On the other hand, if the contacts made were more than six times during the entire cropping season, then the technical assistance was considered "4" or "very adequate". If the contacts made were between 3-4 was considered "2" or "inadequate", and less than "3" contacts were considered "1 " or "very inadequate". The summary of the scale used is illustrated below:

1- very inadequate (less than three contacts)

2- inadequate (3-4 contacts)

3- adequate (5-6 contacts)

4- very adequate (more than 6 contacts)

Problems encountered was categorized into "major and Minor" problems. Major problems included those responses as "always a problem" and "usually a problem" by less than half of the respondents and those responses as "sometimes a problem" by more than half of those interviewed.

A farmer was categorized as one with major problems if majority of his reported problems were rated as major by the entire group. If the reported problems was rated as minor by the majority of the respondents he was categorized as one with minor problems.

The degree of participation was categorized into two (2) indicators namely: 1) Marketing and distributions 2) Seed production. Corresponding score points were assigned according to their position in the different categories.

Individual scores were summed up and be made as a basis for determining their participation score.

The assessments used for the participation scores are as follows:

Marketing and Distribution

TOTAL Score	Evaluation
4 and below	"Low Extent of Participation"
5 and above	"High Extent of Participation"

Seed Production

TOTAL Score	Evaluation
2 and below	"Low Extentof Participation"
3 and above	"High Extent of Participation"

Statistical Treatment

This study is mostly descriptive in nature. The data were tabulated and analyzed in terms of their statistical meaning. Frequency counts, percentage, rank and means was used in analyzing the socio-demographic characteristics of the respondents and data obtained using open-ended questions.

To test null hypothesis of this research, the Pearson r will be used as follows.[24]

$$r = \frac{n \sum_{i=1}^{n} x_i y_i - \left[\sum_{i=1}^{n} x_i\right]\left[\sum_{i=1}^{n} y_i\right]}{\sqrt{\left[n\sum_{i=1}^{n} x_i^2 - \left[\sum_{i=1}^{n} x_i\right]^2\right]\left[n\sum_{i=1}^{n} - y_i^2\left[\sum_{i=1}^{n} y_i\right]^2\right]}}$$

WHERE:

n = No. of pairs /cases for each group of data

Σxy = The sum of the products of x and y pairs

Σx = Sum of the X values

Σy = Sum of the y values

Σx^2 = Sum of the squared values of x

Σy^2 = Sum of the squared values of y

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[24]Ronald E. Walpole, **Introduction to Statistics** (New York: McMillan Publishing Co., Inc, 1982), pp. 375-376.

Chapter 4

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This chapter presents the data in tabular form for easy reference in analysis and interpretation. The discussion focuses on the respondents' perception on the extent of participation in Seed Production Program, the various problems they encountered and the corresponding suggested solutions the data gathered in accordance with specific questions posed in the study are presented in tabular form accompanied by statistical analysis with corresponding interpretation.

Profile of the Respondents

Age. Table 1 shows the age and sex profile of the respondents which ranged from 36 to 70. Of the 12 respondents, majority of the respondents belong to the 41-45 years old age bracket where five or 45 percent of the respondents fall. This is followed by the age bracket 51-55 years old with two out of 12 or 15 percent of the SSGA members belonged.

The rest are scattered from 36-70 years of age. It can be gleaned from the said table that these SSGA members are already mature enough or are already in their senior.

Table 1

Profile of Respondents by Age and Sex

	Respondents			Percentage		
Age Range	Male	Female	Total	Male	Female	Total
36-40	1	0	1	8	0	8
41-45	5	0	5	45	0	45
46-50	1	0	1	8	0	8
51-55	2	0	2	15	0	15
56-60	1	0	1	8	0	8
61-65	1	0	1	8	0	8
66-70	1	0	1	8	0	0
T o t a l	12	0	2	100	0	100

Table 2

Profile of Respondents in Terms of Educational Attainment

Educational Attainment	Number	Percent
7-6 Elementary	1	8
7-11 High School	5	42
12 and above College	6	50
T o t a l	12	100

Educational Attainment. Table 2 presents the profile of respondents in terms of educational attainment. All the respondents had formal schooling. One-half reached college. There were five college graduates and only one was in second year college. Forty two percent reached secondary level and only eight percent were in the elementary grades.

Tenurial Status. The profile of the respondents by tenurial status is indicated in Table 3. The majority, 67 percent or eight (8) out of twelve of the respondents were part-owners, tenants, and lease holders of the seed

Table 3

Profile of Respondents by Tenurial Status

Tenurial Status	Number	Percent
Owner	4	33
Part-Owner (5)	8	67
Tenants (2)	-	-
Lessee (1)	-	-
T o t a l	12	100

farm they cultivated. Only one-third, 33 percent or four (4) out of 12 were owner operator.

Size of Seed Farm. Table four shows the profile of respondents with regard to the size of seed farms they cultivated by which the size of the farm ranged from one to six hectares. A significant number, that is seven out of 12 SSGA members are small farm area owners while only five five or 42 percent are large farm area-owners.

Table 4

Profile of Respondents by Size of Seed Farm

Total Farm Area	Number	Percent
Small (2 has or more)	7	58
Large (more than 2 has.)	5	42
T o t a l	12	100

Gross Family Income. The annual gross family income per annum is presented in Table 5 where it can be gleaned that the annual gross family income ranged from P15,000 to P125,996 with an average of P39,779. Out of the twelve respondents only five had on above average annual gross family income. The rest were found below the average.

Trainings Attended. Table 6 Shows the profile of respondents by Trainings Attended. It was found out that 92 percent of the respondents had attended various levels of trainings in Seed production. One attended in the provincial level and ten of the respondents attended in the

Table 5

Profile of Respondents by Gross Family Income per Annum

Gross FamilyIncome/Annun (Pesos)	Number
15,000	1
20,000	3
25,000	1
31,152	1
32,000	1
37,000	1
40,000	1
40,600	1
45,000	1
45,600	1
125,996	1
T o t a l	12

Table 6

Profile of Respondents by Trainings Attended

Trainings Attended	Number	Percent
Did not attend	1	8
Have attended	11	92
Provincial Level	(1)	(8)
Regional/National	(10)	(84)
T o t a l		

regional/national level. Only one of therespondents had not attended any of the sponsored trainings on seed production and distribution.

Technicians/Seed Inspectors Assistance. The stablishment stablishment of the Samar Seed Growers Associations made it possible that quality seeds were provided and made available to the farmers. This, however requires that respondents should be visited more often of the government field technicians and seed inspectors during seed production and distribution. Technician/Seed Inspectors'

Table 7

Profile of Respondents by Technician/Seed Inspector Assistance

Technician/SeedInspector	Number	Percent
Adequate	8	67
Inadequate	4	33
T o t a l	12	100

Assistance on the SSGA members is presented in Table 7 where sixty-seven percent of the respondents were adequately assisted for the entire cropping season. Only 33 percent claimed that they had inadequate assistance extended by the Technician/Seed Inspector.

Correlates Farmers Extent of Participation Distribution and Marketing

Educational Qualification. Table 8 reflects the extent of participation of the SSGA members in Distribution and Marketing as compared to their Educational

Table 8

Extent of Participation of the SSGA members in Distribution and Marketing as Compared to their Educational Qualifications

Respondent	Extentof Participation		Educational Qualifications	
	Score	Descriptive Score	Score	Descriptive Score
1	6	High	3	College Graduate
2	6	High	3	College Graduate
3	5	High	2	High School
4	5	High	2	High School
5	4	Low	3	College Graduate
6	5	High	3	College Graduate
7	6	High	3	2nd Year College
8	6	High	1	Elementary
9	6	High	2	High School
10	4	Low	2	High School
11	4	low	2	High School
12	4	Low	3	College Graduate

Computed r= 0.062929

Critical r= 0.5324 at £= 0.05 and N= 12

Qualifications. It can be noted that four farmers have low extent of participation with a score of "4", three got a score of "5" and five got a score of "6" which are evaluated as "high extent of participation" of the SSGA members who got a high extent of participation, five of them are college graduates while the other five are high school graduates. All of those who got low extent of participation are elementary graduates and 2nd Year College. The computed correlation coefficient r for these two independent variables, *vis-a-vis*, extent of participation in Distribution and Marketing and Educational Qualification is 0.062929. Comparing this value with the tabular on critical r value at N=12 and £=.05 which is 0.5324 it can be seen that the computed r is lesser than the critical r and thus the hypothesis that "there is no relationship between educational qualifications and extent of participation of the SSGA members in Marketing and Distribution, and their Educational Qualification" is accepted. Thus farmers extent of participation is not related to educational qualifications which means that those with high educational attainment farmers may have low or high extent of participation. One possible explanation for this is the fact that farmers with high educational

attainment might be busy in other aspects than concentrating on farming alone.

Tenurial Status. The extent of participation of the SSGA members in Distribution and Marketing as compared to their Tenurial Status is presented in Table 9. As can be gleaned from the table, four farmers have low extent of participation with a score of "four". Three got a score of "5" and five got a score of "6" which are evaluated as "high extent of participation". Of the eight SSGA members who got a high extent of participation, one half or four of them are owners while the other half or four are part-owners. All those who got low extent of participation, are tenants. The computed correlation coefficient r for these two independent variables, vis-a-vis, extent of participation in distribution and Marketing and Tenurial Status is 0.753403.

Comparing this value with tabular of critical r values at N=12 and £=0.5 which is 0.5323 it can be seen that the computed r is greater than the critical r and thus the hypothesis that "there is no significant relationship between the extent of participation of the SSGA members in Marketing and Distribution, and their tenurial status" is rejected. Thus, farmers extent of participation is

Table 9

Extent of Participation of SSGA Members in Distribution and Marketing as compared to their Tenurial Status

Extent of Participation			Tenurial Status	
Respondents	Score	Descriptive Score	Score	Descriptive Score
1	6	High	3	Owner
2	7	High	2	Part-owners
3	5	High	3	Owner
4	5	High	2	Part-owners
5	6	High	2	Part-owners
6	6	High	3	Owner
7	6	High	3	Owner
8	4	Low	1	Tenant
9	4	Low	1	Tenant
10	4	Low	1	Tenant
11	4	Low	1	Tenant
12	4	Low	1	Tenant

Computed r = 0.753403

Critical r = 0.5323 at £ = 0.05 and N = 12

directly related to tenurial status which means that owners tend to participate more than part-owners and tenants.

This might be explained with fact that owners are more committted to their farming activities than non-owners.

Size of Seed Farm. Table 10 shows the extent of participation of the SSGA members in Distribution and Marketing as compared to their Size of Seed Farm. The said table showed that four farmers have low participation with a score "4", three got a score of "5" and five got a score of "6" which are evaluated as "high extent of participation". Out of participation, one of them has an area of six hectares, the other one have five hectares, three of them has an area of three hectares while the remaining seven farmers had an area of two hectares.

All those who got low extent of participation are those who have an area of two hectares. The computed coefficient (r) for these two independent variables, vis-a-vis, extent of participation in Distribution and Marketing and Size of Seed Farm is 0.314645. Comparing this value with the tabular or critical r value at N=12 and £=.05 which is 0.5324 it can be seen that the computed r is lesser than the critical r and thus the hypothesis that "there is no relationship between size of seed farm and

Table 10

Extent of Participation of SSGA Members in Distribution and Marketing as Compared to their Size of Seed Farm

Respondents (no)	Extent of Participation		Size of Seed Farm	
	Score	Descriptive Score	Score	Descriptive Score
1	6	High	3	3
2	6	High	3	3
3	5	High	6	6
4	5	High	2	2
5	4	Low	2	2
6	5	High	3	3
7	6	High	2	2
8	6	High	5	5
9	6	High	2	2
10	4	Low	2	2
11	4	Low	2	2
12	4	Low	2	2

Computed r = 0.314645

Critical r = 0.5324 at £= 0.05 and N = 12

extent of participation of the SSGA members in Marketing and Distribution is accepted.. Thus, farmers extent of participation is not related to the size of seed farm they cultivated.

Gross Family Income. Table 11 shows that the extent of participation of the SSGA members in Distribution and Marketing as computed to their Gross Family Income. It can be gleaned from the table that the Gross Annual Family Income ranged from P15,000.00 to P125,996 with an average of P39,779.00. Out of the 12 respondents, only five had an above average annual gross family income. The rest were found below the average.

The computed correlation coefficient r for these two independent variables, namely extent of participation in Distribution and Marketing and Gross Family Income is 0.203391. Comparing this value with the tabular on critical value at N=12 and £=.05 which is 0.5324 it can be seen in the computed r is lesser than the critical r and thus the hypothesis that "there is no significant relationship between Gross Family income and Extent of Participation of SSGA members in Marketing and Distribution is accepted. Thus, farmers' extent of particiaption in marketing and distribution is not related to their gross family income.

Table 11

Extent of Participation of SSGA Members in Distribution and Marketing as compared to their Gross Family Income

Respondents (no)	Extent of Participation		Gross Family Income/Per Annum (in Pesos)
	Score	Descriptive Score	
1	6	High	P 40,600.00
2	6	High	37,000.00
3	5	High	125,996.00
4	5	High	31,152.00
5	4	Low	20,000.00
6	5	High	32,000.00
7	6	High	25,000.00
8	6	High	45,600.00
9	6	High	45,000.00
10	4	Low	20,000.00
11	4	Low	40,000.00
12	4	Low	15,000.00

Computed r = 0.203391

Critical r = 0.5324 at £ = 0.05 and N = 12

Training Attended. Table 12 presents the extent of participation of the SSGA members in Distribution and Marketing as compared to their level of Training Attended. As shown by the said table four farmers have low extent of participation with a score "4", three got a score of "5"and five got a score of "6" which are evaluated as "high extent of participation". Of the eight SSGA members who got a high extent of participation, three of them attended training at the National Level while the other five attended training at the regional level and provincial level as well. For those who got low participation one did not attend any training and the other attended also regional level training. For those two independent variables, that is, the extent of participation in Distribution and Marketing and Training attended the computed r is 0.473602. Comparing this value with the tabular or critical r value at N=12 and £=.05 which is 0.5324 it can be seen that the omputed r is lesser than the critical r and thus the hypothesis that "there is no relationship between training attended and extent of participation of the SSGA members in Marketing and Distribution" is accepted. Thus, farmers extent of

Table 12

Extent of Participation of SSGA Members in Distribution and Marketing as compared to their Training Attended

Respondents (no)	Extent of Participation		Training Attended	
	Score	Descriptive Score	Score	Descriptive Score
1	6	High	3	National Level
2	6	High	2	Regional Level
3	5	High	2	Regional Level
4	5	High	2	Regional Level
5	4	Low	2	Regional Level
6	5	High	2	Regional Level
7	6	High	1	Provincial Level
8	6	High	3	National Level
9	6	High	3	National Level
10	4	Low	2	Regional Level
11	4	Low	2	Regional Level
12	4	Low	0	Did not attend any training

Computed r = 0.473602

Critical r = 0.5022 at £ = 0.05 and N = 12

Technical Assistance. Table 13 shows the extent of participation of the SSGA members in Distribution and Marketing as compared to their technical assistance. It can be noted from the table that four farmers have low extent of participation with a score "4", three got a score of "5" and five got a score of "6" which are evaluated as "high extent of participation".

Of the eight SSGA members who got a high extent of participation, five of them were very adequately assisted for the entire cropping season. While four were adequately assisted. Only three claimed that they had inadequate assistance extended by the technician/seed inspector.

The computed correlation coefficient r for these two independent variables, *vis-a-vis*, extent of participation in distribution and marketing and Technical Assistance is 0.705524. Comparing this value with the tabular or critical r value at N=12 and £=0.5 which is 0.5324 it is noted that the computed r is greater than the critical r and thus the hypothesis that "there is no significant relationship between Technical Assistance and Extent of Participation of the SSGA members in Marketing and Distribution" is rejected. Thus, farmers extent of participation is directly related to technical assistance

Table 13

Extent of Participation of SSGA Members in Distribution and Marketing As Compared to Adequacy of Technical Assistance

Respondents (no)	Extent of Participation		Technical Assistance	
	Score	Descriptive Score	Score	Descriptive Score
1	6	High	4	Very Adequate
2	6	High	4	Very Adequate
3	5	High	2	Inadequate
4	5	High	2	Inadequate
5	4	Low	3	Adequate
6	5	High	3	Adequate
7	6	High	4	Very Adequate
8	6	High	4	Very Adequate
9	6	High	4	Very Adequate
10	4	Low	2	Inadequate
11	4	Low	3	Adequate
12	4	Low	3	Adequate

Computed r = 0.705524

Critical r = 0.5324 at £ = 0.05 and N = 12

which means that the more frequent technical assistance is .given to SSGA members by the Seed Inspector, the higher is the corresponding extent of participation of the SSGA members. This can be attributed to the fact that frequent visit of SSGA members by the said inspectors and/or technicians somehow encourage them to participate more actively in marketing and distribution of certified seeds.

Summary of the Correlates to the Extent of Participation of SSGA Members in Marketing and Distributionof Certified Seeds

The summarized relationship between farmers' extent of participation in Marketing and distribution and the six identified factors is reflected in Table 14. Of the six factors, two were found to be directly related to farmers' extent of participation, namely: Tenurial Status and Technical Assistance. Owners are more inclined to participate more actively than part-owners or tenants. Likewise, frequent visits by seed inspectors base on the data gathered showed a higher extent of participation by farmers and marketing and distribution.

Table 14

Computed r Between Farmers' Participation and the Six Factors Identified as Correlates in Terms of Distribution and Marketing

Factors	Computed r	Critical r	Evaluation
1. Educational Qualification	-0.062729	0.5324	Not significant
2. Tenurial Status	+0.753403	0.5324	Significant
3. Size of Seed Farm	+0.314645	0.5324	Not significant
4. Gross Family Income	+0.203391	0.5324	Not significant
5. Training Attended	+0.473602	0.5324	Not significant
6. Technical Assistance	+0.705524	0.5324	Significant

Correlates of Farmers' Participation in Seed Production

Educational Qualification. Table 15 gives a clear picture on the extent of participation of SSGA members on Seed Production as compared to their Educational Qualifications. It can be gleaned from the table that four farmers have low extent of participation with a score of "2", and eight got a score of "3" which are evaluated as "high extent of participation". Of the eight SSGA members who got high extent of participation, five of them are college graduate while the others are high school graduates. All those who got low extent of participation are elemtary graduate. The corresponding correlation coefficient r for these two groups of data is 0.092057. Comparing this value with the tabular or critical r value at N=12 and £=.05 is 0.5323 it can be seen that the computed r is lesser than the critical r and thus, the hypothesis that " there is no relationship between educational qualification and the extent of participation of the SSGA members in seed production " is accepted. Thus, educational qualification does not affect farmers' participation in the seed production.

Table 15

Extent of Participation of SSGA Members in Seed Production as Compared to their Educational Qualifications

Respondents (no)	Extent of Participation		Educational Qualification	
	Score	Descriptive Score	Score	Descriptive Score
1	3	High	3	College Graduate
2	2	Low	3	College Graduate
3	3	High	2	High School
4	2	Low	2	High School
5	3	High	3	College Graduate
6	2	Low	3	College Graduate
7	3	High	3	2nd year College
8	3	High	1	Elementary
9	3	High	2	High School
10	3	High	2	High School
11	2	Low	2	High School
12	3	High	3	College Graduate

Computed r = 0.092057

Critical r = 0.5324 at £ = 0.05 and N = 12

Tenurial Status. Table 16 shows the extent of participation of SSGA members in Seed production as related to their tenurial status. It is noted that four farmers have low extent of participation with a score "2", and eight got a score of "3" which are evaluated as "high extent of participation". But of the eight SSGA who got high extent of participation, onehalf or four of them are owners while the other half of four are part owners. All those who got low extent of participation are tenants. The computed correlation coefficient r are for extent of participation in seed production and tenurial status is 0.310460. Comparing this value with the tabular or critical r value at N=12 and £=.05 which is 0.5323, it can be seen that computed r is lesser than the critical r and thus, the hypothesis that " there is no relationhip between tenurial status and extent of participation of the SSGA members in seed production" is accepted.

Size of Seed Farm. The extent of participation of SSGA members in Seed Production as related to their size of Seed Farm is presented in Table 17. It can be gleaned that four farmers have low extent of participation with a score

Table 16

Extent of Participation of SSGA Members in Seed Production as Compared to their Tenurial Status

Respondents (no)	Extent of Participation		Tenurial Status	
	Score	Descriptive Score	Score	Descriptive Score
1	3	High	3	Owner
2	2	Low	2	Part-Owner
3	3	High	3	Owner
4	2	Low	2	Part-Owner
5	3	High	2	Part-Owner
6	2	Low	2	Part-Owner
7	3	High	2	Part-Owner
8	3	High	3	Owner
9	3	High	3	Tenants
10	3	High	1	Tenants
11	2	Low	1	Tenants
12	3	High	1	Tenants

Computed r = 0.310460

Critical r = 0.5324 at £ = 0.05 and N = 12

Table 17

Extent of Participation of SSGA Members in Seed Production as Compared their Size of Seed Farm

Respondents (no)	Extent of Participation		Size of Seed Farm	
	Score	Descriptive Score	Score	Descriptive Score
1	3	High	3	3
2	2	Low	3	3
3	3	High	6	6
4	2	Low	2	2
5	3	High	1	2
6	2	Low	3	3
7	3	High	2	2
8	3	High	5	5
9	3	High	2	2
10	3	High	2	2
11	2	Low	2	2
12	3	High	2	2

Computed r = 0.129822

Critical r = 0.5324 at £ = 0.05 and N = 12

of "2" and eight got a score of "3" which are evaluated as "high extent of participation". Out of the eight SSGA members who got a high extent of participation, one of them has an area of six hectares, the other one is five hectares, three of them had an area of three hectares.

All those who got extent of participation are those who have an area of two hectares. The corresponding computed correlation coefficient r is 0.129822. Comparing this value with the tabular or critical r value at N=12 and £=0.05 which is 0.5324, it can be seen that the computed r is lesser than the critical r and thus the hypothesis that "there is no significant relationship between the size of seed farm and the extent of participation of the SSGA members in seed production" is accepted. This implies that the extent of farmers participation in seed production and tenurial status have no relationship.

Gross Family Income. Table 18 shows the extent of participation of SSGA members in Seed Production as compared to their Gross Family Income. It can be reflected from the table that the annual gross family income ranges from P15,000.00 to P125,996.00 with an average of P39,779,00. Out of the above 12 respondents, only five had an above average gross family income. The rest were found below the average.

Table 18

Extent of Participation of SSGA Members in Seed Production as Compared to their Gross Family Income Per Annum

Respondents (no)	Extent of Participation		Gross Family Income Per Annum (*Pesos*)
	Score	Descriptive Score	
1	3	High	40,600.00
2	2	Low	37,000.00
3	3	High	125,996.00
4	2	Low	31,152.00
5	3	High	20,000.00
6	2	Low	32,000.00
7	3	High	25,000.00
8	3	High	45,600.00
9	3	High	45,000.00
10	3	High	20,000.00
11	2	Low	40,000.00
12	3	High	15,000.00

Computed r = 0.120728

Critical r = 0.5324 at £ = 0.05 and N = 12

The computed correlation coefficient r for these two independent variables, vis-à-vis, extent of participation in seed production and gross family income is 0.120728. Comparing this value with the tabular or critical r value at N=12 and £=0.05 which is 0.5324. It is noted that the computed r is lesser than the critical r and thus, the hypothesis that, "there is no significant relationship between gross family income and the extent of particpation of the SSGA members in seed production" is accepted. Thus, family income does not affect farmers' participation in seed production.

Levels of Trainings Attended. Table 19 described the extent of participation of SSGA members in Seed Production as compared to their trainings attended. It can be seen from the table that four farmers have low extent of participation with score of "2" and eight got score of "3" which are evaluated as "high extent of participation". Of the eight SSGA members who got a high extent of participation, three of them attended trainings at the national level while the other attended both regional/Provincial level training. There is also one who did not attend any training.

Table 19

Extent of Participation of SSGA Members in Seed Production as Compared to their Level of Trainings Attended

Respondents (no)	Extentof articipation		Level of Training Attended	
	Score	Descriptive Score	Score	Descriptive Score
1	3	High	3	National Level
2	2	Low	2	Regional Level
3	3	High	2	Regional Level
4	2	Low	2	Regional Level
5	3	High	2	Regional Level
6	2	Low	2	Regional Level
7	3	High	1	Provincial Level
8	3	High	3	National Level
9	3	High	3	National Level
10	3	High	2	Regional Level
11	2	Low	2	Regional Level
12	3	High	0	Did not attend any training

Computed r = 0.0

Critical r = 0.5324 at £ = 0.05 and N = 12

The computed correlation coefficient r for these two independent variables, that is, extent of participation in Seed Production and Trainings Attended is 0. Comparing this value to the tabular or critical r value at n =12 and £= .05 which is 0.5323, it can be seen that the computed r is lesser than the critical r and thus the hypothesis that "there is no relationship between level of trainings attended and extent of participation of the SSGA members in Seed Production" is accepted. This implies that the level of training attended does not affect in any way, the extent of farmers' participation in seed production.

Technical Assistance. Table 20 gives a clear picture on the extent of participation of SSGA members in Seed Production as compared to adequacy of Technical Assistance. It is reflected from said table that four farmers have low extent of participation with the score of "2", and eight got the score of "3" which are evaluated as "high extent of participation". Of the eight SSGA members who got a high extent of participation, five of them were very adequately assisted for the entire cropping season. While four were adequately assisted. Only three claimed that they had adequate assistance extended by the technical/Seed Inspector.

Table 20

Extent of Participation of SSGA Members in Seed Production As Compared to Adequacy of Technical Assistance

Respondents (no)	Extent of Participation		Technical Assistance	
	Score	DescriptiveScore	Score	Descriptive Score
1	3	High	4	Very Adequate
2	2	Low	4	Very Adequate
3	3	High	2	Inadequate
4	2	Low	2	Inadequate
5	3	High	3	Adequate
6	2	Low	3	Adequate
7	3	High	4	Very Adequate
8	3	High	4	Very Adequate
9	3	High	4	Very Adequate
10	3	High	2	Inadequate
11	2	Low	3	Adequate
12	3	High	3	Adequate

Computed r = 0.14744

Critical r = 0.5324 at £= 0.05 and N = 12

The corresponding correlation coefficient r for these two groupsof data is 0.14744. Comparing this value with the tabular critical r value at N=12 and L=0.05 which is 0.5324 it is reflected that the computed r is lesser than the critical r and thus the hypothesis that "there is no Significant relationship between the Technical Assistance and the extent of participation of SSGA members in Seed Production is accepted. Likewise, technical assistance has no significant effect on farmers activity on seed production.

Summary on the Correlates on Farmers' Extent of Participation in Seed Production and the Six Identified Factors

The summarized relationship of farmers' extent of participation and the six factors namely: 1. Educational Qualification; 2. Tenurial Status; 3. Size of Seed Farms; 4. Gross Family Income; 5. Level of Trainings Attended; and 6. Technical Assistance is shown in Table 21. The data collected show that farmers' participated in seed production is independent of the six identified factors, unlike that of Distribution and Marketing where it is affected by Tenurial

Table 21

Computed r Between Farmers' Participation and the Six Factors Identified as Correlates in Terms of Seed Production

Factors	Computed r	Critical r	Evaluation
1. Educational Qualification	0.092057	0.5324	Not Significant
2. Tenurial Status	0.310460	0.5324	Not Significant
3. Size of Seed Farm	0.129822	0.5324	Not Significant
4. Gross Family Income	0.120728	0.5324	Not Significant
5. Trainings Attended	0	0.5324	Not Significant
6.Technical Assistance	0.147441	0.5324	Not Significant

Table 22

Problems Encountered by SSGA Members

Problems	Score	Descriptive Score
1. Strong competition from non-accredited seed growers	3	Usually a problem
2. High cost of farm inputs such as Fertilizers, pesticides, herbicides, etc.	4	Always a problem
3. Operation Capital	2	Usually a problem
4. Lack of facilities for seed processing	3	Usually a problem
5. Credit Assistance	3	Usually a problem
6. Difficulty in organizing a strong and united association such as holding meetings and conferences	3	Usually a problem
7. Marketing of seeds	2	Usually a problem
8. Unfavorable weather condition	2	Usually a problem

Status and Technical Assistance. The possible reasons for these will be given after the problems encountered of the SSGA members are presented.

Problems Encountered by the Farmers and the Seed Growers in Terms of Seed Production, Distribution, and Marketing

Most of the SSGA members claimed that their problem was strong competition from non-accredited seed growers, high cost of farm inputs such as fertilizers, pesticides and herbicides, operation capital, lack of facilities for seed processing, credit assistance, difficulty in organizing a strong and united association such as holding a meeting, conferences, marketing of seeds and unfavorable weather condition.

In view of so many problems encountered among seed growers it had been determined that sixty(60%) percent had major problems and only forty (40%) percent were observed to have minor problems in their participation.

Chapter 5

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of findings, conclusions and recommendations of the study.

Summary of Findings

The study revealed the following findings relative to specific questions and null hypothesis stated. Profile of Respondents by Age, Sex, Educational Qualifications, Tenurial Status, Size of Seed Farm, Gross Family Income, Trainings Attended, and Technicians/Seed Inspectors Assistance.

Findings of the study showed that all the SSGA members are physically able and capable of doing farming business. Majority (67 percent)of the respondents were part-owners of the farms they cultivated. Only one-third (33 percent) were owner operators. All respondents had formal schooling. One-half reached college, five were college graduates and only one was in second year college. All respondents had farming as their major occupation and their average size of seed farm was 2.0 hectares. The respondents annual gross income ranged from P15,000.00 to P125,996.00, with an average of P39,779.00 almost all (92

percent) of the respondents attended training in various levels of seed production and distribution.

The majority claimed that the seed inspectors were readily available for assistance(5 times or more)during the entire cropping seasons.

The respondents level of satisfaction with the program was generally high. Most of their objectives in participating in the program were achieved and they were satisfied with the manner their objectives were attained. Likewise the respondents had high degrees of participation in the program based on the scores of the participation scales used.

Of the selected independent variables studied, only tenurial status, and technical assistance were significantly related to the degree of participation in terms of distribution and marketing. On the other hand, none of the selected variables was significantly related to level of satisfaction.

Conclusions

Based on the findings of the study the following conclusions were drawn:

1. The SSGA members are already in their prime years, and are considered experienced in terms of Certified Seeds Production, Distribution and Marketing.

2. There is no significant relationship between farmers extent of participation in marketing and distribution and the following variables: 1) Educational Attainment; 2) Size of Seed Farm; 3) Family Gross Income Per Annum; and 4) Level of Training Attended; while there is a significant and direct relationship between farmers extent of participation in marketing and distribution and: 1) Tenurial Status; and 2) Technical Assistance. This implies that owners tend to participate more than non-owners or tenants and that the more-technical assistance is provided to the farmers, the more likely they participate actively in Distribution and Marketing.

3. Farmers' extent of participation in seed production is independent of the six (6) factors identified, vis-à-vis: 1) Educational Attainment; 2) Tenurial Status; 3) Size of Seed Farm; 4) Family Gross Income Per Annum. 5) Level of Trainings Attended; and 6) Technical Assistance.

4. The most significant problem encountered by the SSGA members is high cost of farm inputs like fertilizers, pesticides, herbicides, and the like. Other problems

encountered are credit assistance, strong competition and the like.

Recommendations

On the basis of the conclusions drawn from the findings of this study, the following are the recommendations:

1. To improve the Seed Industry in Samar

The improvement of the seed industry in Samar is a concern of public and private sectors. The government agency is expected to make the initial steps which would redound to the improvement of this important agricultural undertaking. Of course the private sector, particularly the seed growers through their associations , is also expected to contribute its share to realize the goal. If both sectors will work together, could be the cherished goal of improving the seed industry be realized.

Here are some important suggestions:

A. Concerning Government and Seed Certifying Agency:

1. Stop non- accredited farmers from engaging in the production and distribution of certified seeds.

2. Prevent unfair competition in seed disposal between government owned farms and experimental stations and seed

growers' private farms especially in terms of seed exportation.

3. Involve government -

a. Providing government support through soft long-term loans to seed growers to buy or established needed facilities such as crop drier, seed bodega, etc.

b. Providing substantial production loans for seed growers operating capital.

c. Sustaining concerted efforts by all agencies in the promotions of the use of certified seeds.

4. Ask the NFA to expedite the procurement, sale and distribution of certified seeds to seed users.

5. Put more teeth to the "No. seeds, no loan" policy to create a bigger demand for certified seeds.

6. Request agencies involved in the production and multiplication of breeders/foundation seeds to exercise some restraint in the distribution so that these classes of seeds should not go to the hands of unscrupulous people, such as non-accredited farmers who would grow then for commercial distribution.

7. Subsidize price of farm inputs so that prices would not go beyond the reach of ordinary farmers.

8. Improve the dissemination of information so that seed growers would know what and when to plant to meet demand for seeds for export purposes.

B. Concerning Seed Growers and Seed Grower Associations

1. Strengthen Seed Growers Association

a. Better cooperation and avoidance of unfair competition among members.

b. Regular meeting and dialogues among members.

2. Invest money of SSGA Members in Worthwhile and productive type venture or enterprises managed and operated by the association with the members as stock holders and consumers at the same time.

3. Work with other agencies in the promotion of the use of certified seeds.

4. Observed strictly in the adoption of cultural practices required in seed production in order to produce high quality seeds needed to increase the rice farmers' crop yield.

C. On future researches to be conducted –

1. Other factors that may affect farmers' extent of participation in the aspects of Marketing and Distribution as well as Seed Productions' may be considered like:

1.1 Age;

1.2 Family Size;

1.3 Distance of Farm to Marketing Area; and

1.4 Variety of Seeds Produced

2. A comparative study between CARP Farmers who are not producers of certified seeds and those who are may be conducted to give a more in depth analysis of why farmers should participate and became members of the SSGA.

BIBLIOGRAPHY

A. BOOKS

Aquino, Gaudencio V. Essential of Research and Thesis Writing. Quezon City: A Lemar-Phoenix Publishing House, Inc., 1984.

Back, K. W. An Introduction to Sociology. 3rd ed. Englewood Cliffs, New Jersey: Prentice Hall, Inc. 1951.

Bertrand, A.L. (Ed.) Rural Sociology: An Analysis of Contemporary Rural Life. New York: McGraw Hill Book Company. 1958.

Bigge, Morris L. and Hunt, Maurice P. Psychological Foundations of Education. New: Harper & Row Publishers, 1958.

Boring, Edwin G. Foundation of Psychology, New York: John Wiley and Sons, Inc. 1948.

Calhoun, Donald W. "Persons-in-Groups: Humanistic Social Psychology". New York: Harper & Row, Publishers, 1976.

Campbell, William G. Form and Styles in Thesis Writing. 3rd Edition, Boston: Houghton Mefflin Co., 1969.

Castillo, Gelia T. Beyond Manila (Philippine Rural Problems in Perspective).

Castillo, P.S. and A.P. Mejico. Seed Production Testing and Handling Rice Production Manual Philippines Revised Ed. Compl. by UPLB, IRRI, PCRRD, MA, BAR, 1983.

DR. Datta, Surajit, Principles & Practices of Rice Production. A Wiley Interscience Publication, 1981.

Good, Carter V. and Scates, Douglas E. Methods of Research. New York: Appleton-Century-Crafts, Inc. 1954.

Hilgard, Ernest R. Theories of Learning, New York: Appleton Century-Crafts, Inc., 1956.

Huse, Edgar F. and James L. Bowditch, "Behavior in Organization" 2nd ed. REading, Massachusetts: Addison-Wesley Publishing Company, Inc. 1977.

March, James G. and Simon, Herbert A. "Organizations", New York: John Wiley and Sons, Inc., 1958. Cited in William A. Shrode and Dan Voich, Jr., "Organization Management", Illinois: Richard V. Irwin, Inc., 1974.

Panopio, Isabel S. Cordero, Felicidad V. and Raymundo, Adelina A., General Sociology: Focus on the Philippines, Quezon City: Ken Incorporated, 1979.

Warner, Keith W. and Hefferman, W.D. "The Benefit Participation Contingency in Voluntary Farm Organization" Rural Sociology Vol. 32, June 1967. Cited in Castillo All in a Grain of Rice.

B. PERIODICALS/JOURNALS

Agricultural Information Division (AID-DA-NFAC). Guidelines on Palay Seed Production, Certification and Distribution, DA-NFAC, Elliptical Road, Diliman, Quezon City.

Greenfields Magazine, Makati: Planters Products Publishing Co. Inc. 1975.

PhilRice Newsletter, Philippine Rice Research Institute, Maligaya, Muñoz, Nueva Ecija. 1990.

Rossel, C. M. and Benweck Kelly, Seed Campaign Guidelines for Promotion and Use of Quality Seeds Developing Countries, FAo-Un: Rome, 1983.

Sevilla, E.P. The Advances in Seed Technology in the Philippines BPI-MA, Manila, 1982.

C. DOCUMENTS

Bautista, Rustica S. "Paper Presented during the Training for Seed Inspectors under GPEP held at Farmers Training Center, Bohol Agricultural College, Bilar, Bohol on July 6-10, 1993.

D. UNPUBLISHED MATERIALS

Dabuet, B. "Farmers' Participation in the Rice Seed Production in Leyte, Unpublished M.S. Thesis, UPLB at Los Baños, Laguna, 1980.

Dalagan, D. D. The Integration of a New Rice Technology in a Mindanao Village. Unpublished M.S. Thesis, UPLB at Los Baños, Laguna, 1988.

Dayaratne, P.M.N. Sociological Analysis of the Level of Participation and Effectiveness of Dila and San Benito Communal Irrigators' Association in Laguna. 1992.

Ramos, D.G. The PhilRice Seed Dispersal Program in Palawan and Zamboanga del Sur: An Evaluation. Unpublished M.S. Thesis, UPLB at Los Baños, Laguna, 1991.

Gascon, Fe B. Womens' Technical Knowledge and Their Participation in Rice Farming, 1989.

Malabuyoc, Marilyn M. Farm Labor Patterns of Rice Farmers in Selected Areas in Laguna. Unpublished M.S. Thesis, UPLB at Los Baños, Laguna, 1985.

APPENDICES

APPENDIX A

Republic of the Philippines
SAMAR STATE POLYTECHNIC COLLEGE
Catbalogan, Samar

June 21, 1993

Dr. Dominador Q. Cabanganan
Dean, Graduate & Post Graduate Studies
Samar State Polytechnic College
Catbalogan, Samar

S I r :

In my desire to start writing my Thesis proposal, I have the honor to request approval of one of the following topics, for my Thesis, particularly Topic No. one (1):

1. **THE IMPACT OF FARMERS PARTICIPATION IN SEED PRODUCTION AND DISTRIBUTION PROGRAM IN THE PROVINCE OF SAMAR.**

2. FARMER'S PARTICIPATION IN THE RICE SEED PRODUCTION AND DISTRIBUTION PROGRAM IN WESTERN SAMAR.

3. SOCIO-ECONOMIC IMPACT OF THE LIVELIHOOD ENHANCEMENT FOR AGRICULTURAL DEVELOPMENT (LEAD) PROGRAM IN SAMAR.

I hope for your favorable action in this regard.

Very truly yours,

(SGD.) ASELA A. CABAÑAS
Graduate Student

APPROVED:

(SGD.) DOMINADOR Q. CABANGANAN, Ed.D.
Dean, Graduate Studies

APPENDIX B

Republic of the Philippines
SAMAR STATE POLYTECHNIC COLLEGE
Catbalogan, Samar

SCHOOL OF GRADUATE STUDIES

APPLICATION FOR ASSIGNMENT OF ADVISER

NAME: **CABAÑAS,** **ASELA** **ABAINZA**
(Surname) (First Name) (Middle Name)

CANDIDATE FOR DEGREE: MASTER OF ARTS IN PUBLIC MANAGEMENT

AREA OF SPECIALIZATION: _____

TITLE OF PROPOSED THESIS/DISSERTATION: _____

THE IMPACT OF FARMERS PARTICIPATION IN SEED PRODUCTION AND DISTRIBUTION PROGRAM IN THE PROVINCE OF SAMAR

ASELA A. CABAÑAS
Applicant

MARILYN D. CARDOSO
Name of Designated Adviser

APPROVED:

(SGD.) DOMINADOR Q. CABANGANAN, Ed.D.
Dean

CONFORME:

(SGD.) MARILYN D. CARDOSO
Adviser

In 3 copies: 1st copy – for the Dean
2nd copy – for the Adviser
3rd copy – for Applicant

APPENDIX C

THE QUESTIONNAIRE

Sir:

Please be informed that you have been chosen as respondent of my study entitled "THE IMPACT OF FARMERS PARTICIPATION IN SEED PRODUCTION AND DISTRIBUTION PROGRAM IN THE PROVINCE OF SAMAR" Hence, kindly give your honest and sincere answer to the questions to make the study a reliable one. Thank you very much.

Very Truly yours,

ASELA A. CABAÑAS
Researcher

General Direction:

Please write the information being asked from you in the space provided and a checkmark(/)when necessary.

Part 1:

Profile of Respondents

1. Name_____Age_____Sex _____

2. Educational Attainment.
   _____ Elementary (1-6)
   _____ Secondary (7-11)
   _____ College (12-and above)

3. Major Occupation of Respondent. _____

   Annual Income P _____

   Other Sources of Income P _____

   _____ _____
   _____ _____

4. Occupation of Spouse: _____
   Annual Income P _____

5. Total annual gross income P _____

6. Size of seed farm _____ha.

7. Tenure status:

_____ Owner-operator
_____ Part owner
_____ Lessee
_____ Tenant

8. Organizational affiliation(including seed growers association)

Name of Organization	Position
_____	_____
_____	_____
_____	_____

9. Source of farm information
   a. Where do you obtain information regarding the seed production program? Check and rank them according to their effectiveness as source of communication.

Source (Check)	Rank According to effectiveness (Check 1-5 with 5 as highest rank)
1) Personal source	
____a. Gov't. extension Worker (includes field tech. and Seed inspector)	_____
____b. Fellow farmer	_____
____c. Fellow seed growers	_____
____d. Others (specify)	_____
2) Mass Media	
_____a. Radio	_____
_____b. Printed Materials	_____
_____c. Others (specify)	_____

a. Whom do you consult when seeking assistance concerning seed production and distribution or when you meet some problems affecting the seed farm?

Person Consulted (check)

_____ 1) Spouse _____
_____ 2) Farmer neighbor _____
_____ 3) Seed Inspector _____
_____ 4) Other Ext. Worker _____
_____ 5) Others (specify) _____

10. Training attended

a) Have you attended training on seed production and distribution?

( ) Yes ( ) No

If no, why? _____

_____

b) If yes, what training activities have you attended?

Type	Duration	Place and level of training
_____	_____	_____
_____	_____	_____
_____	_____	_____

c) By attending those trainings do you gain additional knowledge about seed farming?

( ) Yes ( ) No

If no, why? _____

_____

11. Technician/seed inspector assistance

a) Did the DA technician/seed inspector visit you during the last cropping season as part of the seed production program?

( ) Yes ( ) No

If no, why? _____

_____

b) If yes, is the number of visits during the entire cropping season adequate or inadequate?

_____ Adequate (visit contact made 4 or more

times during the entire cropping season)
_____ Inadequate (less than 4 times during the entire cropping season)

b.1 Should the seed inspector need to visit you?
More often _____ (___ times)
Less? _____ (___ times)

II. Practices and Strategies of Seed Growers

12. Production aspect

a.) Are you aware of the requirements for seed certification standard set by DA/BPI?
( ) Yes ( ) No
If not, why? _____
_____

b. Where did you secure the seed for planting on your seed farm?

Source	Address
_____	_____
_____	_____
_____	_____

c. What requirements in the production of certified seeds which makes it different from the ordinary growing of palay?
_____
_____

d. Seed production requires capital. During the last two cropping seasons for seed protection that you participated in, did you apply for crop insurance protection from calamities?
( ) Yes ( ) No
If not, why? _____
_____

e. During the last two cropping seasons you participated in, was there a calamity that destroyed your rice crop for seed purposes?
( ) Yes ( ) No

f. If yes, were you able to recover your expenses incurred in the operation?
( ) Yes ( ) No

If no, why? _____

_____

g. What class of seeds did you plant on your seed farm last two cropping seasons?

	Wet	Dry
_____ Foundation	_____	_____
_____ Registered	_____	_____

h. Did the seed inspector notify you about the available seed stock for planting in your seed farm?

( ) Yes ( ) No

If no, why? _____

_____

i. How do you practice your planting schedule of your Rice crop for seed purposes? Please check only one.

_____ Ahead of the regular planting season

_____ Within the regular planting season

j. Are the seeds produced on your farm available to the farmers on time for the regular season?

( ) Yes ( ) No

If not, why? _____

_____

13. Marketing and Distribution Aspect

a. Are the seeds intended for marketing and distribution to farmer-users approved and passed laboratory analysis?

( )Yes ( ) No

If not, why? _____

_____

b. If yes, do you have market outlet? Who are your buyers?

_____ a. Government agency, such as DA, DAR, etc.

_____ b. Groups and private associations such as Samahang Nayon, Farmers Association, others

_____ c. Farmers-to-farmers basis

_____ d. Combination of outlets

_____ e. Others (specify)

c. Were you able to sell all your seed stock for the last two cropping seasons you participated in?

( ) Yes ( ) No

If not, why? _____

_____

d. Are the farmer aware of the advantages in using certified seeds?

( ) Yes ( ) No

e. Do the farmers from your neighboring farms know that there is a seed grower in the area?
( ) Yes ( ) No

f. Is the price of certified seeds at present low that small farmer can afford to buy at a price being stated?
( ) Yes ( ) No

g. If not what are your possible solutions to the problems? Please state them.

_____
_____
_____

h. Can you recall from your previous buyers of seeds if they bought the seeds every cropping season?
( ) Yes ( ) No

i. If no, what could be their possible reasons for not buying every cropping seasons? Please state their reasons.

_____
_____
_____

III. Farmer-member's degree of participation in the seed growers association

14. How long have you participated in the production of certified seeds? _____ years
15. In what year did you become a member
16. How did you become a member? Check
_____ Volunteered to become a seed grower
_____ Influenced or convinced by somebody
17. If you did not volunteer, who influenced or convinced you to become a member? _____
18. Why did you decide to join the seed growers association? Please arrange to order, 1, 2, 3, 4, etc.

19. Were your expectations for joining the association met? ( ) Yes ( )No If not, why?

_____
_____

20. Seed farm productivity

a. How many cavans of certified seeds did you produce for the last two cropping seasons?

	Wet	Dry
a.1 Total production from the entire seed farm in cavans at 45 Kg.	_____	_____
a.2 Total number of cavans at 45 Kg. Submitted for analysis	_____	_____
a.3 Percentage devoted to certified seeds	_____	_____

21. As of now, indicate your membership status in the association since 1977 or from the time you join it up to the present.

NOTE: For membership status, use the following code: "P" for persistent (has continuously participated in the association activities since the beginning); "NP" non-persistent (irregular participation in the seed growing activities); "D" for drop-out.

Year	Code
1977	_____
1978	_____
1979	_____
1980	_____
1981	_____
1982	_____
1983	_____
1984	_____
1985	_____

22. As a farmer-member, what position are you holding in the association?

_____ Officer
_____ Member

23. What is the average area have you devoted to seed production?

_____ hectares

24. How often do you attend meetings, conference, symposia and other activities related to the seed production? Please check only one.

_____ 100% attendance (have attended all meetings, conferences, symposia since you

become a member)
_____ Over 50% attendance (have missed two times)
_____ 50% or less (have missed at least 3-4 times)
_____ Never attended at all.

25.Being a member, have you paid contribution to the seed growers association? ( ) Yes ( ) No

26.If yes, indicate the kind of payment you have given, the amount paid and the nature of payment made whether full payment, partial payment, and no payment at all.

Kind of Payment	Amount Given	Nature of Payment
____Registration	_____	_____
____Membership	_____	_____

lV. Problems Encountered by the Farmers

27.As a farmer member, have you encountered any problem in relation with your participation in the production and distribution of certified seeds?
( ) Yes ( ) No

28.If yes, indicate the source and frequency Of the problems encountered?

Code	Frequency of Occurrence
4	Always a problem
3	Usually a problem
2	Sometimes a problem
1	Never a problem

Seed growers problem encountered

____1. As a farmer-member, do you have problem following the standard set by DA/BPI?
____2. Is operating capital a problem for seed production and distribution program?
____3. Does procurement of new seed stock for the next planting become a problem among members?
____4. Is individual seed allocation of new seed stock for the next planting season a problem among members?

____5. Do you think that lack of follow up by DA/BPI seed inspector is a problem in seed production and distribution?
____6.Could you consider delay in obtaining laboratory results for complete analysis of sample submitted a problem for seed growers like you?
____7. Would it be difficult to organized a strong and united seed growers association?
____8. Is holding meetings, conferences and other activities related to seed growing difficult considering the distance of members from each other?
____9. Is marketing of certified seeds very difficult?

_____10. Is competition from non-accredited farmers growing rice for seed purposes a problem?
_____11. Is high cost of farm inputs such as fertilizer, insecticides, etc., a problem?
_____12. Is lack of facilities or equipment, such as dryer and thresher a problem among seed growers.
_____13. Is inability of credit assistance for seed production purposes a problem?
_____14. Is farm labor shortage a problem?
_____15. Is unfavorable weather condition such as drought, flood, typhoon, and too much rain a problem?

29.Impression on or reaction to the seed production program.

a. Is seed growing rewarding and profitable? Is it a losing venture not worth the effort and money? Why?

_____
_____
_____

b. Do you have any other comments about your participation in the seed production and distribution? Please state them.

_____
_____
_____

c. Finally, do you have any suggestions to improve the rice seed industry in Western Samar? Please state them.

_____
_____
_____

Mga Pakiana Ngadto Han Mga Seed Growers
(Paragtanom Gahi nga Humay)

Tinahud ko nga Igkasi Parauma:

Osa ko ikaw nga napili nga mabaton unta hini nga mga pakiana mahitungod han Seed Grower, association dinhi ha Samar partikularminti dinhi nga lugar. Nakikialayon konta ako nga imo tagan hin gutiay nga panahon han paghatag han imo kinasingkasing nga mga pagbaton hit mga sumusunod nga mga pakiana.

Nag a-antisipar ako nga da-an hini nga imo tambulig ha akon.

Damo nala nga salamat.

An matinalahuron,

ASELA A. CABAÑAS
Tagapakiana/Researcher

Pangkabug-osan nga Direksyon

Alayon kita pagsurat han mga inpormasyon nga pinanga-ngaro ngan baqisi han bakante nga lugar an mga pakiana nga angay mo batonon.

Una nga Parte:

Mahiunong hin impormasyon personal han mga parag-uma:

1. Ngaran han parag-uma:_____Idad____Sex__

2. An guihi-hita-asi nga pag-aradman nga imo na-abot

   _____ Elementarya (1-6)
   _____ Sekondarya
   _____ Kolehiyo

3. Numero uno nga pakabuhi: _____
   An kita kada tuig P_____
   Iba nga kinikita-an nga pakabuhi P_____

   _____ _____
   _____ _____
   _____ _____

4. Pakabuhi han asawa nga babaye: P_____
   An kita kada tuig: P_____

5. An osa katuig nga kita han mag-asawa: P _____
6. An sukol/kadako han guin o-omhan para gahi nga humay _____ has.
7. Tinure nga Estado:
   _____ An tag-iya mismo an nag-uuma
   _____ Part-owner
   _____ naplete la han tuna
   _____ Saop
8. Mga Organisasyon nga Ina-apihan

Ngaran han Organisasyon	Katungdanan
_____	_____
_____	_____
_____	_____
_____	_____

9. An tinikangan han inpormasyon
   a. Di-in ka kumuha han inpormasyon hiunong han programa han produksiyon han pag-gahi? Tseki og igranggo hira ipina-agi han ira ka epektibo nga kinokoha-an han inpormasyon.

Kinukuha-an han Inpormasyon (Tseki)	Igrang-go Ipina agi han ka ipektibo
1. Personal nga Kinukuha-an	
_____ a. Mga trabahador han gobyerno nga guinbubutang ha magkadi-rudi-lain nga lugar (api an mga field technician ngan Seed Inspector)	_____
_____ b. Igkasi parag-uma	_____
_____ c. Igkasi Seed Growers	_____
_____ d. An iba pa nga kinukuhaan han inpormasyon ngan igtul-id.	_____
2. Mass Media	
_____ a. Radio	
_____ b. Mga barasahon	
_____ c. Iba pa nga kinukuha-an(igsurat)	_____

3. Hain ka nakonsulta kon naaro ka hin tambulig parte hin Seed produksyon ngan distribusyon o di ngani kon mayada ka problema parte hit imo pag-uma?

Mga Tawo nga kinokonsulta (Tseki)

_____ 1. Asawa _____
_____ 2. Anyaw nga parag-uma _____
_____ 3. Seed Inspector _____
_____ 4. Mga trabahador ha gobyerno _____
_____ 5. Iba pa nga kinokunsultahan (Igsurat) _____

10. Mga guin atendiran nga Training

a. Nag atendir ka ba han training hionong han produksyon han gahi ngan distribusyon?
( ) OO ( ) Waray
Kon waray, kay ano? _____
_____

b. Kon OO, ano nga mga aktibidades han training nga imo na-atendiran?

Klase han Training	Kamaiha han Training	Lugar ngan Level han Training
_____	_____	_____
_____	_____	_____
_____	_____	_____

c. Han imo pag inatendir han mga Training nakakoha ka ba hin mga kaopayan sumpay han imo nahibaruan han pag uma han gahi:
( ) OO ( ) Waray
Kon waray, kay ano? _____
_____

11. Mga ayuda/tambulig han Technician/Seed Inspector

a. Nagbisita ba an Technician/Seed Inspector han DA(Department of Agriculture) hadto nga urhe nga panahon kaparte han program pagpadukwag han gahi?
( ) OO ( ) Waray

Kon waray, kay ano? _____
_____

b. Kon OO, an iya kadamo-on pagbisita han bog-os nga orhi nga panahon eksakto ba o diri?

_____ Eksakto nga pagbisita(an pagbisita o pagkikita han paraguma kinahanglan upat o subra upat ka beses durante han panahon)
_____ Diri iksakto nga pagbisita(kulang

han upat ka beses durante han panahon)

b.1 Kinahanglan ba an Seed Inspector bumisita ha imo?

Perme _____ (____sigui an bisita)
Diri perme___ (____kulang bisita)

12. Mga Paagui nga Stratehiya han mga Seed Growers

1. Hionong han produksyon

a. Maaram ka ba han mga rekositos hionong han pagsertipikar han gahi nga guin imponer han DA(Department of Agriculture) og BPI(Bureau of Plant Industry)?

( ) OO ( ) Diri

Kon diri, kay ano? _____

b. Diin ka nakuha hin gahi nga imo guin tatanom han imo uma.?

Paralitan/Kinukuhaan han gahi	An lugar/address
_____	_____
_____	_____
_____	_____

c. Ano-ano an rekositos han pagtanom han sertipikado nga gahi kontra hin pagtanom han ordinaryo nga gahi nga humay?

_____
_____

d. An pagtanom han para gahi nagkikinahanglan hin kapital o puhunan. Han imo duha kabeses nga urhe nga pagtanom nag aplikar ka ba ha Crop Insurance para han tidara-on nga kalamidad?

( ) OO ( ) Waray

Kon waray, Kay ano? _____
_____

e. Hadton urhe nga duha katuig nga naglabay nga imo inapihan pagtanom mayada ba kalamidad nga nag perdi han imo tanom nga humay nga an tuyo para pag gahi? ( )OO ( ) Waray

f. Kon OO, nabawi mo ba an imo mga gastos? ( )OO ( )Waray Kon waray, kay ano? _____
_____

g. Ano nga klase nga gahi an imo guin tanom hadton duha katuig nga naglabay?

	Kat-huraw	Kat-ooran
_____ Foundation nga gahi	_____	_____
_____ Rehistrado nga gahi	_____	_____

h. Guin notipikahan ka ba han Seed Inspector hiunong han abilable nga gahi nga para igtatanom mo ha imo umhanan?

( ) OO ( ) Waray

Kon waray, kay ano? _____

_____

i. Guin ano mo an pag eskedyol han imo pagtanom han humay nga imo garamiton para pag gahi? Alayon pag tseki hin usa la.

_____ una han regular nga panahon
_____ ha sulod han regular nga panahon

j. An gahi nga imo na-aro ha imo umhanan abilable ba para han mga parag-uma kon tiempo panahon han regular nga panahon?

( ) OO ( ) Diri

Kon diri, kay ano? _____

_____

13. Pagbaligya Ngan Pagdistribwer nga Aspeto

a. An mga gahi nga igbaraligya ngadto han mga paraguma aprubado ba ngan napasar ha laboratoryo?

( ) OO ( ) Diri

Kon diri, kay ano? _____

b. Kon OO, mayada ka ba baligyaan? Hino an mga namalit?

_____ a. Ahensiya han gobyierno sugad han Departamento han Agrikultura, Departamento han Agrarian Reform, o iba pa.
_____ b. Grupo ngan pribado nga mga asosasyon sugad han Samahan Nayon, Asosasyon han mga Paraguma, ngan iba pa.
_____ c. Paraguma ngadto ha igkasi paraguma.
_____ d. Kombinasyon nga paagui pag distribuer
_____ e. Iba pa nga paagui pagbaligya(Klaroha kon ano nga paagui) _____

c. Nakabaligya ka ba han imo ngatanan gahi durante han duha katuig nga naglabay nga panahon nga imo guin partisiparan.

( ) OO ( ) Waray

d. An mga paraguma ba maaram han kaupayan han Sertipikado nga gahi?

( ) OO ( ) Diri

e. An mga paraguma ba nga imo hiragne maaram nga may seed growers hiton nga lugar? ( ) OO ( ) Diri

f. An presyo ba han Sertipikado nga gahi yana nga panahon hibubo ba nga puede makapalit an pobre nga parag-uma? ( ) OO ( ) Diri

g. Kon diri, ano an posible nga solusyon han problema? Alayon la pagsurat han imo baton._____

_____

_____

h. Nahinumduman pa ba nimo an mga una nga pinalit han imo gahi kon napalit kada pagtatanom?

( ) OO ( ) Diri

i. Kon diri, ano an ira posible nga mga rasones nga diri hira napalit kada pagtatanom? Ipahayag an ira mga rason. _____

_____

III. An kalidad han pagpartisipar han mga miembro nga parag-uma Han Seed Growers Association.

14. Pira kana katuig an imo pag-api han pag produser han Certificado nga gahi? _____ tuig.
15. Ano nga tuig nga naging membro ka?
16. Guin paano mo nga naging membro ka?

_____ nag bu-luntad pag-api ha seed grower
_____ na empluwensya o nakumbenser la han iba nga tawo.

17. Kon waray ka magbuluntad pag-api, hino man an nag impluwensya o nagkonbinser pagpa membro?

_____

18 Kay ano an pag desider mo pagapi han asosasyon han seed grower? Alayon pagayos tikang 1,2,3,4, ngadto han kataposan han imo baton.

_____ Agud ako magkamayada hin bag-o nga aprobado nga mga gahi.
_____ Pagbulig han ig kasi ko parag-uma hin pagkamayada han Certifikado nga gahi.
_____ Personal nga akon pagkaruyag.
_____ Pagka may-ada hin maupay nga pag-katawo.
_____ Pag paumento han produkto ngan pag ka may-ada hin dako nga gana.
_____ Agud maka-gamit og maka-tagamtam han mga tam-

bulig tiknikal tikang ha DA(Department of Agriculture) BPI (Bureau of Plant Industry) Seed Inspector ngan mga Field Technicians.

_____ Basi magkamay-ada hin negosyo ngadto han parag-uma o iba pa.

19. An imo ba mga guin-huna-huna pag-api han asosayon natuman ba? ( ) OO ( ) Waray
Kon waray? Kay ano? _____
_____

20 Produkto Han Paguma Para Gahi

a. Pira kasako an imo na-ani han duha katuig nga naglabay nga imo paginoma?

	Tag-uran	Tag-huraw
a.1 An ngatanan nga produkto nga na-ani nga gahi han imo oma nga sinako nga an timbang 45 kilos	_____	_____
a.2 An kadamo han sinako nga humay nga natimbang 45 kilos kada sako nga guin-padara para analisaron ha laboratoryo.	_____	_____
a.3 Pira ka porsyento an para gahi nga Certificado	_____	_____

21. Ngada yana, igpakita an imo estado han pagka miembro han asosasyon tikang 1977 O tikang han tiempo han pagapi mo hasta yana.

Panigamnan: Para estados han mga miembro, gamita ini nga sumusunod nga pangilal-an: Pangilal-an " P" nga Perme ka ug sigue an imo pagpartisipar ha asosasyon tikang han tinikangan; " NP" diri perme regular an pag-api han aktibidades han pag humayan han gahi; "D" waray na pag sige pag-api.

Tuig	Panigamnan
1977	_____
1978	_____
1979	_____
1980	_____
1981	_____
1982	_____
1983	_____
1984	_____
1985	_____

22. Han imo ka membro, ano an ranggo nga imo guin ka-kaptan ha asosasyon?
    _____ Opisyales
    _____ Membro
23. Ano an kadako han tuna nga imo ginagamit para taramnan han gahi? _____ hektarya
24. Ano an kaag-sub han imo pag-atinder han mga katitirok, konperensya, semposiya, ngan iba pa nga aktibidades nga mayda kalabotan han produksyon han gahi? Alayon pag tseki, maosa la.
    _____ Sien porsyento(nagatender han ngatanan nga katitirok, konperensya, semposiya, tikang han imo pagka miembro.
    _____ sobra 50 porsiento an pagatinder(nag kulang la hin tulo o upat ka beses).
    _____ Waray gud mag atinder.
25. Han imo pagka miembro, nagbayad ka ba hin kontribusyon ngadto han asosasyon han seed grower?
    ( ) OO ( ) Waray
26. Kon OO, igsumat kon pira an imo guin bayad, an kantidad nga imo guin bayaran, ngan an sestima han imo pagbayad kon guin baydan ba ngatanan, kon guin talagudti la an pagbayad, o waray ka magbayad.

Klase han Pagbayad	Kantidad nga Guin bayad	Pama-agui han Pagbayad
____Pagrehistro	_____	_____
____Bayad pagpa miembro	_____	_____

lV. Mga Problema nga nasurapo han mga parag-uma

27. Bilang membro nga parag-uma mayada ka ba nasurapo nga mga problema nga may relasyon han Sertipikado nga gahi?
    ( ) OO ( ) Waray
    Kon oo, igsumat an tinikangan ngan ka-agsub han pagabot han problema?

Panigam-nan	An ka-agsuban han problema
4	Pirme nga problema
3	Agsub nga problema
2	Danay/usahay nga problema
1	Waray problema

28. Mga problema nga nasurapo han Seed Growers
____ 1. Han imo pagka miembro, mayada ka ba problema

hiunong han mga paagui nga guin hatag han departamento han Agrikultura o Bureau of Plant Industry?

____ 2. An kakulang han puhunan, nagiging problema mo ba an pag produser han gahi ngan program han distribusyon han imo gahi?

____ 3. An pamalit ba han bag-o nga gahi para han tidara-on nga kat tanom problema ba han mga kada membro nga parag uma?

____ 4. An kada osa nga miembro nag pro-problema ba hin katagi hin bag-o nga gahi ha sunod nga pagtanom?

____ 5. An imo kasabot problema ba kon kulang an pagdu aw han taga Departamento han Agrikultura og Seed Inspector hionong han produksiyon han gahi ngan an pagdistribwer han gahi?

____ 6. Kinokonsiderar mo ba an ka-atrasar han kompleto nga resulta han seed sample nga imo guinpadara ha laboratoryo para pag pa analisar nga nagiging problema han mga seed growers nga sugad ha imo?

____ 7. Makuri ba an pag organisar hin mabaskug ngan nagkakaurusa nga asosasyon han mga seed growers.

____ 8. An pagka may-ada hin katitirok, konperensiya nga iba nga aktibidades nga may relasyon han pagtanom han gahi nagiging makori tungod la han distansiya han ka osa-osa nga membro?

____ 9. An pag baligya ba han Sertipikado nga gahi makuri?

____ 10. An pagkompetensiya ba han diri akredited nga parag-uma nga nagtatanum hin humay nga an tuyo para han pag-gahi problema ba?

____ 11. An higtag-as nga presyo han abuno, ig paratay han mga peste, igpuro-o han mga banwa, ngan iba pa problema ba?

____ 12. An pagkulang ba hin mga pacilidades o garamiton sugad han bularan, ngan garamiton pag gui-ok problema ba han mga seed growers?

____ 13. An pagkulang ba han ayuda pagpautang para produksyon han gahi problema ba?

____ 14. An kulang ba magtatrabaho ha uma problema?

____ 15. An maraut ba nga panahon sugad han huraw, baha, bagyo ngan sobra nga oran problema ba?

29. An imo masisiring hiunong han pag produser han gahi.

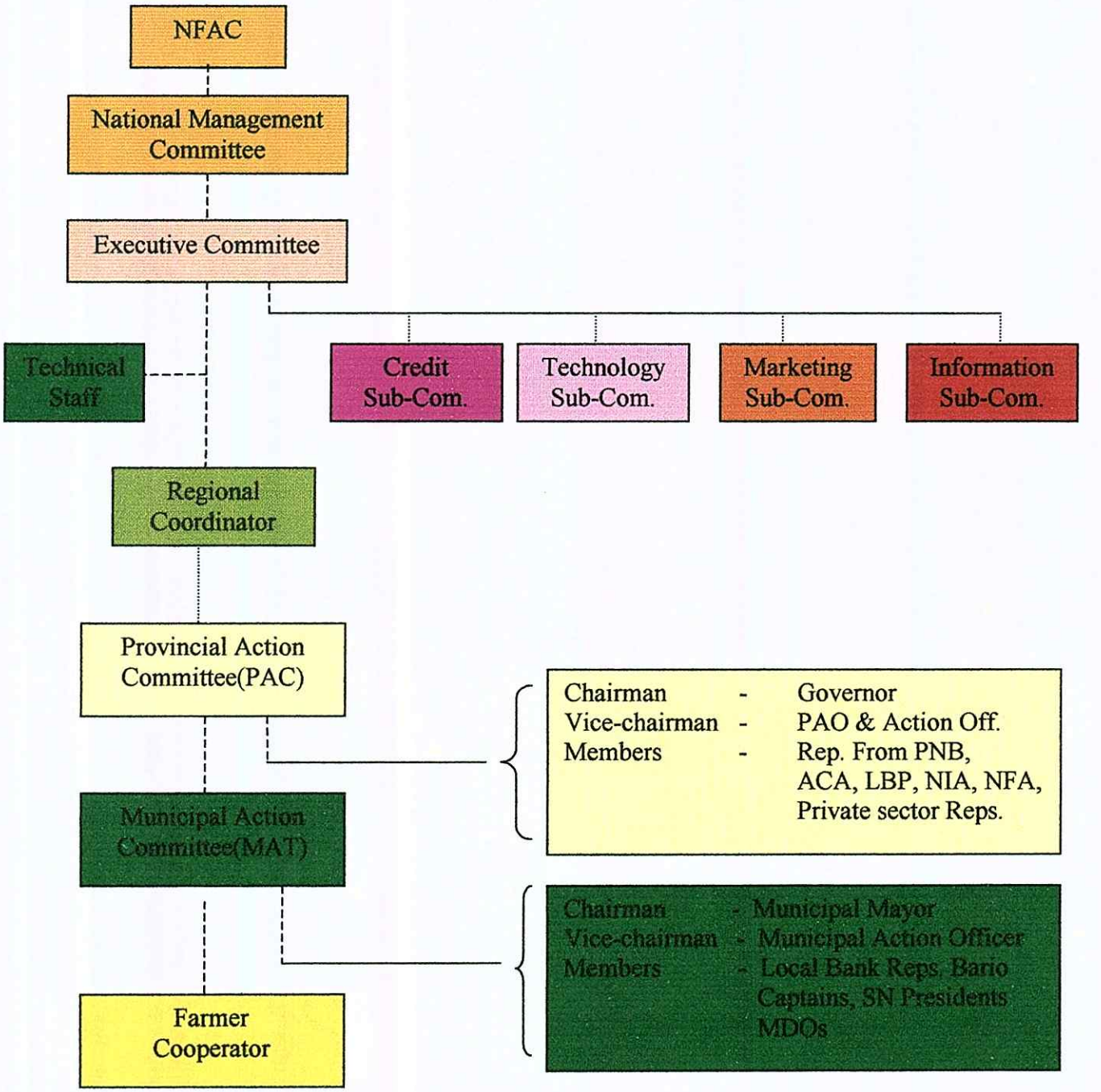
a. An pagtanom ba han para gahi mayda ba naihatag nga kalipayan ngan daku nga gana? Lugui ba ini nga klase nga pag pakabuhi nga diri ngani tumbas an imo mga kapagalan og kuarta nga imo nagastos? Kay ano?

b. Mayada ka ba iba nga pag susun hi-unong han imo pag-api han pagproduser hin gahi og pag distribwer? Alayon paghatag han imo masisiring.

c. Han ultimo nga mga pakiana., mayda mo ba suhistiyon o rekomendasyon nga makakaupay han produksiyon han pagtaga gahi dinhi ha Weste hinin Samar? Alayon paghatag han imo masisiring.

APPENDIX D

Masagana 99 Management Structure



APPENDIX E

Republic of the Philippines
Bureau of Plant Industry
Region 8
Tacloban City

January 3, 1977

Memorandun to:

Mr. Pablo C. Cabanas, Jr.
Provincial Incharge
Bureau of Plant Industry
Catbalogan, Samar

Subject : Instructing the BPI Provincial Incharge to Organize Seed Growers Association in Samar.

- -

In order that the province of Western Samar will have available supply of rice seeds, you are hereby instructed to form a Seed Growers Association. Please instruct also Mr. Felipe Verdeflor, Jr. Seed Inspector to assist you in forming said association.

Compliance is hereby desired.

(SGD.) AGAPITO C. TAURO
Regional Director

APPENDIX F

Republic of the Philippines
BUREAU OF PLANT INDUSTRY
Provincial Office
Catbalogan, Samar

January 13, 1977

Higugmaon ko nga Igkasi Parauma:

Guin mamalipay ko nga pagsumat ha iyo nga probinsiya han Samar kaapi han National Food & Agriculture Council (NFAC). Ini programa National han gobierno diin nabulig han mga parauma mga magtatanom han humay ipina-agui han pag utang basi mabuligan hin ayuda han pan gastos para pag-uma.

Pero denhi han aton probinsiya may gutiay nga problema tungod nga guingagamit papatanom nga gahi amo an Sertipikado han gobierno nga higta-as an produksiyon. An aton gahi natikang pa ha iba nga lugar kay waray man kita Seed Grower pareho ha Leyte. Sanglit agud masalbar ta ine nga problema pag taga gahi, han ngaran han Bureau of Plant Industry, nagtatawag konta kami hin osa nga katitirok diin osa ka nga amon nahingaranan hin pag-imbitar agud maka organisar han Seed Growers Association agud ha orhe nga mga adlaw agud an aton mga parag-uma diri magkuri pamiling hin gahi.

An katitirok yana nga Pebrero 25, ha Boy Scout Building alas Nuebe ha aga (9:00A.M.)denhe ha Catbalogan, Samar.

Naglalaom kami han sien porsiento (100%) nga iyo pagtambong agud mahisgutan naton an iba nga importante nga butang para han aton popormahon nga asosasyon.

An matinalahuron,

(SGD.) PABLO C. CABANAS, JR.
Provincial Incharge, BPI

Appendix G

LIST OF 50 FARMERS WHO WERE SERVED AN INVITATION TO ATTEND IN THE FORMATION OF SEED GROWERS ASSOCIATION

NAME OF FARMERS		ADDRESS
1. De Guia, Beatriz	–	Brgy. Poyog, San Jorge
2. De Guia, Vicente	–	San Jorge
3. De Guia, Victoria	–	San Jorge
4. Clodualdo, Llanto	–	Pinabacdao, Samar
5. Antonio, Sablad	–	Bangon, Pinabacdao
6. Betty Zartiga	–	Mambog, Pinabacdao
7. Esteban, Badenas	–	Villareal, Samar
8. Dadbe, Pedro	–	Buray, Wright
9. Jaba-an, Renato	–	Paco, Wright
10. Labine, Cecilio	–	Tutubigan, Wright
11. Sapetin, Domingo	–	Paco, Wright
12. Abawag, Antonio	–	Lawa-an, Wright
13. Baclayon, Jose	–	Lawa-an, Wright
14. Bagacay, Pedro	–	Hinabangan, Samar
15. Ballos, Uldarico	–	Hinabangan, Samar
16. Cedron, Eugenio	–	Sta. Rita, Samar
17. Canabe, Rosaleo	–	Sta. Rita, Samar
18. Nabaunag, Joaquin	–	Tarangnan, Samar
19. Pabello, Salvacion	–	Tarangnan, Samar

20. Martinez, Conrado – Tagnao, Gandara
21. Martin, Jaime – Casab-ahan, Gandara
22. Tagra, Bernardo – Gandara, Samar
23. Tagra, Catalino – Gandara, Samar
24. Brazil, Procopio – San Sebastian, Samar
25. Padilla, Elpedio – Solsogon, Sta. Margarita
26. Curco, Adolfo – San Sebastian
27. Corsiga, Felipe – Oquendo, Calbayog, City
28. Macairan, Miguel – Calbiga, Samar
29. Longara, Leo – San Jorge, Samar
30. Martin, Edwin – Casab-ahan, Gandara
31. Corsiga, Felipe – Begaho, Oquendo Dist. Cal. City
32. Jaropojop, Billy – Tagnao, Gandara, Samar
33. Antipatia, Mauricio – Catbalogan, Samar
34. Cinco, Antonio – Gandara, Samar
35. Cinco, Adolfo – Concepcion, Gandara
36. Aban, Miguel, Jr. – Hinabangan, Samar
37. Cajife, Herecleo – Anibongon, Sta. Rita
38. Yu, Romeo – Basey, Samar
39. Delima, Constancia – Sta. Margarita, Samar
40. Versosa, Romeo – Basey, Samar
41. Martugo, Fernando – Basey, Samar
42. Bolco, Vicente – Calbiga, Samar

43. Gabiana, Diosdado – Basey, Samar

44. Martugo, Fernando – Basey, Samar

45. Montances, Primitivo – Sapinit, San Jorge

46. Pabello, Salvacion – Motiong, Samar

47. Sonio, Bartolome – Mahacob, Tarangnan

48. Canabe, Rosaleo – Mahacob, Tarangnan

49. Xeras, Antonieto – Bangon, Pinabacdao

50. Solano, Dondoy – Mambog, Pinabacdao, Samar

Appendix H

Republic of the Philippines
Office of the President
Cooperative Development Authority

Registration No. TAC – 335

CERTIFICATE OF REGISTRATION

TO ALL TO WHOM THESE PRESENTS MAY COME, GREETINGS:

WHEREAS, Articles of Cooperation and By-Laws duly signed and acknowledge for the organization of the Samar Seed Growers Multi-Purpose Cooperative Catbalogan, Samar under and in accordance with the provisions of Republic Act Numbered Six Thousand Nine Hundred Thirty Eight were presented for registration in the authority on February 23, 1993; and

WHEREAS, The said Article of Cooperation and By-Laws, a copy each of which is hereto attached, have complied with the provisions of the said Republic Act Six Thousand Nine Hundred Thirty Eight;

Now, Therefore, by virtue of the powers and duties vested in me by law. I do hereby certify that the said Articles of Cooperation and By-laws were, after due examination to determine whether they are in accordance with law, duly registered in this office on the 23rd day of February, Nineteen Hundred and Ninety-Three.

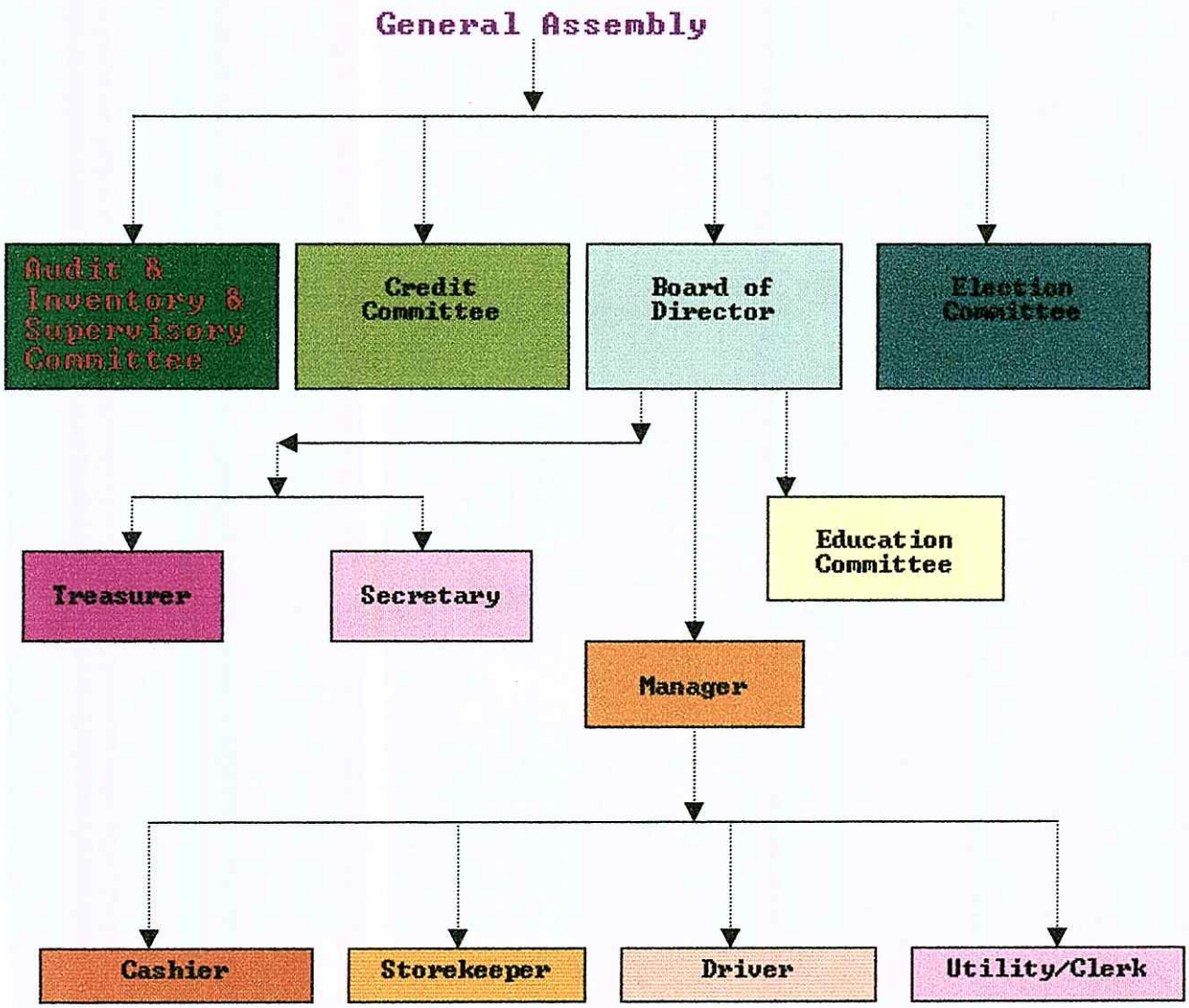
IN TESTIMONY WHEREOF, I have hereunder set my hand and caused the seal of this authority to be affixed at Tacloban City, Philippines, this 23rd day of February, in the Year of our Lord Nineteen Hundred and Ninety Three and 94th Anniversary of Republic of the Philippines.

ENDA E. ABERILLA
Chairman

By: ALFONSO M. CADIGOY
Director, Extension Office

Appendix I

ORGANIZATIONAL STRUCTURE



Appendix J

COOPERATIVE PROFILE

Name of Cooperative	:	Samar Seed Growers Multi-Cooperative
Address	:	Catbalogan, Samar
Registration No.	:	TAC - 335
Date Registered	:	2-23-93
Type of Cooperative	:	Multi-Purpose
Paid Up Capital	:	P3,360.00
Subscribed Capital	:	P13,440.00
Authorized Capital	:	P53,760.00
Par Value/Share	:	P210.00
Economic Survey	:	
Total Asset	:	P184,160.00
Total Liability	:	P168,160.00
Total Members' Equity	:	P16,000.00
Gross Income	:	P1,203,368.00
Net Surplus	:	P717,981.00
Present Business/ Eco. Activity	:	Palay Seed Growing/Supplier to rice Farmers
Area of Operation	:	Samar Province
Total No.of Members	:	16
Male	:	16
Female	:	0
Total No. of BOD	:	6
Chairman	:	Procopio Brazil
Vice-Chairman	:	Bernardo Tagro
BOD Members	:	Elpedio Padilla
	:	Jaime Martin
	:	Adolfo Curco
	:	Felipe Carsiga
Secretary	:	Miguel Macairan
Treasurer	:	Conrado M. Martinez
Date of Annual General Assembly Meeting	:	2nd Monday of February

Appendix K

Republika ng Pilipinas
Kagawaran ng Pagsasaka
Pambansang Pangasiwaan ng Pagkain at Pagsasaka
(National Food and Agriculture Council)
Diliman, Lungsod ng Quezon

May 12, 1976

Memorandum No. 25
Series of 1976

To: All Regional Coordinators
Regional Seed Coordinators
Provincial Program Officers
PNB/RB/ACA Managers
Production Technicians

Subject: Use of Certified Seeds Under the Masagana 99 Program.

****

In line with our policy to intensify the use of certified seeds as a means of increasing yield, you are hereby directed not to extend credit to farmers under the Masagana 99 Program who will not use the certified seeds.

However, if certified seeds are not available in the province, credit maybe extended to farmers using ordinary varieties provided a certification from the seed inspector assigned in the area as to the non-availability of the same is attached to the loan application.

Strict compliance to this memo is hereby enjoined.

(SGD.) DOMINGO F. PANGANIBAN
Executive Director

Appendix L

DEPARTMENT OF AGRICULTURAL EDUCATION AND RURAL STUDIES
College of Agriculture
University of the Philippines
Los Baños, Laguna

January 24, 1994
STM 94-11

Ms. Leonor B. Gregorio
University Librarian
UP, Los Baños
College, Laguna

Dear Ms. Gregorio,

The bearer of this letter is Mrs. Asela Abainza Cabañas, a masteral student of Samar State Polytechnic College, Catbalogan, Samar. She was referred by the graduate school to do some more review of literature to her master's thesis.

Since our department may not have enough literature to satisfy her research. I am recommending that she avail of the university facilities for a wider selection of literature. She could also be interested to visit the library of the institute of plant breeding for the technical aspect of her thesis.

I hope you would be able to grant her permit to use our library even if she has no letter from her school.

Thank you for your usual support.

Very truly yours,

(SGD.) SAMUEL T. MANCEBO
Chairman

Appendix M

Common Plants Pests and Diseases that Cause Damage to Rice Plant

Pests	Diseases
1. Rice stemborers	1. Tungro
2. Whorl maggot	2. Orrange Leaf
3. Rice bugs	3. Grassy Stunt
4. Rats	4. Stem Rot
5. Birds	5. Rice Blast
6. Army worms	

The above mentioned pests and diseases are sometimes observed in most rice fields attracting our rice crop. However, there are also other pests and diseases in rice but the most being always observed were those mentioned above according to the former BPI Provincial In-charge.

Herewith are the description on the mode of attacked of each pests and diseases.

1. Rice Stemborer – Damaged results from larvae feeding with in the stem severing the vascular system. Deadheart is damaged to the tiller before flowering. When damaged occurs before maximum tillering, the plant partially compensates by producing additional tillers.

Deadheart damaged is easily pulled from the tillers. Feeding damaged can be seen at the base of the pulled leaf. "Whitehead" is damaged caused after flowering. It causes the entire panicle to dry.

If the cult is not completely cut before the maturity, damaged is restricted to leaf sheaths and a small portion of the stem at ground level. Some spikelets in the lower portion of the panicle will be sterile.

2. Whorl Maggot – Hydrella Philippina – typical damaged is deginerated tissue along the inner margin of emerging leaves. As leaves expand, yellow damaged areas becomes conspicuously visible. Tillering is reduced and maturity maybe delayed. Damaged occurs from seedling through maximum tillering stages. Whorl Maggot attacked field with standing water.

The adult fly, 2 mm. Long, lay single egg on the leaf surface. Larvae moved to the center of the plant and seed on inner margin of the developing leaves. Greenish yellow larvae in the center of a leaf whorl are the same color as the young leaf. Pupae are found outside the stem. The insect has a 4-week life cycle.

3. Rice Bug – Liptororisa Oratorious– one of several species of the time bug that seed owned the ripening rice grains.

Both adults and nymphs pierce rice grains between limma and palae feeding during milk stage result in empty grains. Feeding during the soft dosage result in lower grain quality and broken grains.

Adults are brown and slender with long legs and antennae. Eggs are deposited in rows on leaves and panicle both grain nymphs and adults have characteristics foul odor.

4. Army Worm – Mythinna Separata – The several species of Army Worm give their names from their habit appearing in large number. As feed supplier are exhausted, they move in search of fresh fields. Army Worm feed on many grass species. Damage is caused by lava feeding on leaves. They feed from the edges, leaving only the midribs and stem. Mythinna Separata also cut the panicle at the base and is known as an airhead cutting caterpillar.
5. Rat – eat rice plant at any stage but do the greatest damaged after panicle initiation. When they may eat the base of the young panicle shoot or completely cut off the stem to the grains. Signs of feeding at the base of the plant distinguish rat damage from stem damage.

Rat range wildly across rice field and may completely destroy a crop except around the edges of the field. If damage occurs early, affected plant may

produce new tillers, so that a field has young panicle in the center and mature panicle at the edges. Plants may not recover from damaged late in the growing season.

6. Birds - Can damaged rice shortly after flowering, but damaged most severely between the milk and late dough stages. They squeeze the milky grains and feed on the content so that grains are partially covered with a milky white substance. Empty grains result. Near maturity, birds remove entire grain. Bird damage in the milky stage is distinguishable from the whitehead cause by stemborers because usually not all the grains in the panicle are chaffy. In stemborer damage panicles, all grains in the panicle are chaffy and the panicle can be pulled out easily.

DISEASES

1. TUNGRO - Infected plants are stunted and the number of tillers is slightly reduced. Both leaf sheath and leaf blade are shortened. The young, unfolded leaf blade is clasped by the outer leaf sheaths and the leaves twist or roll slightly. Leaf color charges from green to light yellow to orange - yellow to brown - yellow, starting from the tips of older leaves. Young leaves often are motted or have pale green to white stripes of

different lengths running parallel to the veins. Leaf yellowing varies during the growth period. Infected plants usually live until maturity. Delayed flowering may delay maturity. Panicles often are small, sterile, and incompletely exserted. Dark brown blotches cover the grains, which weigh less than those from healthy plants. Low yields result mainly from fewer filled grains per plant. Plants infected late may not develop symptoms before harvest but ratooned regenerated growth may show symptoms.

The younger the plant and the more susceptible the variety, the more severe infection. Tungro is the most important virus disease of rice in tropical Asia. Outbreaks destroy plants in a large area in a short time.

2. ORANGE LEAF - Infected plants are slightly stunted with reduced tillering. Leaves are golden yellow to deep orange. Initial symptoms appear near the tip of the leaf blade. Well-defined stripes run parallel to the veins. As the disease progresses, discolored leaves roll inward and dry starting from the tip. Infected plants die quickly, especially when infected at early growth stages. Plants infected later may develop

panicles but they are not completely exserted and one mostly sterile.

This disease is self-eliminating because infected plants die prematurily. Dead plants are not inoculum sources for the vector insect.

The infective agent is transmitted by the zigzag leaf hopper.

3. GRASSY STUNT - Infected plants are severely stunted with excessive tillering, producing a grassy or rosette appearance. Leaves are narrow, short, stiff, pale green to green, and sometimes have rusty spots. Infected plants usually live until maturity, but produce few panicles. Panicles produced are small with dark "brown" unfilled grains.

When infection occurs late in plant growth, symptoms may not develop before harvest, but may occur on regenerated growth of ratooned plant-hooper.

4. STEM ROT - caused by Helminthosporium Sigmoideum. Infection usually occurs near the waterline, entring through wounds and injuries. It starts as blackish, dark, irregular lesions on the outer leaf sheath and gradually enlarges. Eventually, the fungus penetrates into the culm and weakens the stems and leads to lodging.

5. RICE BLAST - caused by Pyricularia Oryzae Cav. This fungus can infect rice plants at any growth stage. Typical leaf lesions are spindle-shaped-wide in the center and pointed toward either end. Large lesions usually develop gray centers. Leaves of susceptible varieties maybe killed. Pinhead-size brown lesions, indicating a resistant reaction, may be difficult to distinguish from the symptoms of brown spot.

Rice blast may attack the stem at the nodes. The sheath pulvinus rots, turns blackish, and breaks easily. Lesions may occur on the panicle neck. Infected necks turn blackish and break over. When neck rot occurs, few or no seeds in the panicle fill. High nitrogen levels and wet leaves favor infection.

SOURCE : Field Problems of Tropical Rice
Revised Edition, International Rice Research Institute, Los Baños, Laguna, 1983

Appendix N

Major Characteristics of Philippine Seed Board-released irrigated lowland rice varieties (1968-92)

Variety	Year Released	Yield (kg/ha)	Growth Duration (da)	Height (cm)	Amylose Content	Gelatini-zation Temperature	Grain Size/Shape
IR 5	1968	3920	140	130	High	Interm	Md-Lg/HdIR
IR 8	1968	3337	130	100	High	Low	Lg/Hd
S4-63	1968	3800	130	100	Interm	-	Md-Lg/S1
BPI-76	1968	4170	130	-	Interm	-	Md-Lg/Si
IR 20	1969	4139	125	110	High	Interm	MdLg/S1
C4-137	1969	4370	139	110	Interm	-	Md-Lg/S1
IR 22	1970	4380	125	90	High	Low	Lg/S1
IR 24	1971	3771	120	90	Low	Low	LG/S1
IR 26	1973	4892	130	100	High	Low	Md-Lg/S1
BPI-3-2	1973	-	130	-	-	-	Md-Lg/S1
IR 28	1975	4326	105	100	High	Low	Lg/S1
IR 30	1975	-	110	100	High	Interm	Md-Lg/S1
IR32	1975	-	140	105	High	Interm	Md-Lg/S1
BPIRi-2	1975	-	115	-	-	-	Md-Lg/S1
IR 34	1976	3939	130	125	High	Low	Lg/S1
IR 36	1976	4856	110	85	High	Interm	Lg/S1
IR 38	1976	-	125	100	High	Interm	Lg/S1
IR 40	1977	3600	120	100	High	Interm	Md-Lg/S1
IR 42	1977	5044	135	110	High	Low	LG/S1
IR 44	1978	4950	130	110	High	Low	Lg/S1
BPIRi-4	1978	5600	112	-	-	-	Md-Lg/S1
IR 48	1979	4420	140	120	Interm	Low	Lg/S1
IR 50	1980	4558	105	90	High	Interm	Lg/S1
IR 54	1980	4319	120	95	High	Low	Lg/S1
IR 56	1982	4568	110	90	High	Low	Lg/S1
UPIRi-4	1982	4762	111	82	High	High	Lg/S1
IR 58	1983	4155	100	76	High	Low	Md-Lg/S1
IR 60	1983	4750	107	86	Hugh	Low	Lg/S1
BPIRi-10	1983	4657	108	84	Interm	-	Lg/S1
IR 62	1984	4770	115	100	High	Interm	Md-Lg/S1
IR 64	1985	5307	113	105	Interm	Interm	Lg/S1
IR 66	1987	5194	108	88	High	Interm	Lg/S1
BPIRi-12	1987	4892	119	96	-	Interm	Lg/S1
IR 68	1988	4479	121	100	High	Interm	Lg/S1
IR 70	1988	4816	129	90	Interm	Md	Lg/S1
IR 72	1988	5004	112	88	High	Low	Lg/S1
IR 74	1988	4710	131	88	High	High	Lg/S1
PSB Rc2	1991	4943	123	99	High	Interm	Lg/S1
PSB Rc4	1991	4585	104	81	Interm	Interm	Lg/S1
PSB Rc6	1992	5739	112	84	High	Low	Md/Interm
PSB Rc8	1992	5391	108	82	High	Low	Lg/S1
PSB Rc10	1992	5074	106	77	High	Interm	Md/Interm

Interm - Intermediate S1 - Slender Lg - Long Md - Medium Bd - Bold

Source: Rice Production Technoguide, Second Printing Advanced English Edition, PhilRice, Muñoz, Nueva Ecija, 1992.

CURRICULUM VITAE

CURRICULUM VITAE

NAME	:	ASELA ABAINZA CABAÑAS
ADDRESS	:	BPI Compound, Catbalogan, Samar
PLACE OF BIRTH	:	Bangon, Pinabacdao, Samar
DATE OF BIRTH	:	December 6, 1960
HEIGHT	:	1.65 meters
WEIGHT	:	50 Kilos
CIVIL STATUS	:	Married
RELIGION	:	Catholic
PRESENT POSITION	:	Agriculturist 1
OFFICE/AGENCY	:	Department of Agriculture

EDUCATIONAL BACKGROUND

Elementary	:	Bangon Elementary School Pinabacdao, Samar 1966-1972
Secondary	:	Pinabacdao Community High School Pinabacdao, Samar 1972-1977
College	:	Bachelor of Science in Agribusiness University of Eastern Philippines Catarman, Northern Samar 1977-1981
Graduate	:	Master of Arts in Public Management Samar State Polytechnic College 1990 to Date

CIVIL SERVICE ELIGIBILITIES

Agricultural Officer(Qualifying)Examination - Tacloban City April 17, 1983

HONORS RECEIVED

With Honors	:	Grade VI Bangon Elementary School 1972

1st Honorable Mention : Fourth Year
Pinabacdao Comm. High School
1977

AWARDS RECEIVED

Certificate of Recognition : As Guest Speaker to the 19th Annual Commencement Exercises
Pinabacdao, Samar
March 28, 1990

Certificate of Appreciation : As Resource Person on Training on Agribusiness Management and Marketing for CARP Beneficiaries
SSPC Recreational Hall
Catbalogan, Samar
May 9-11, 1990

Certificate of Appreciation : As Resource Person on Training On Agribusiness Management and Marketing, Tony's Kitchen Hotel & Restaurant, Catbalogan,Samar
September 11-12, 1991

Certificate of Appreciation : As Resource Person on Training on Livestock Oksyon Market, Gandara, Samar
July 25, 1992

SEMINARS AND TRAININGS ATTENDED

Management Information System Seminar Workshop : Department of Agriculture
Regional Office-Cebu City
February 16-18, 1982

Package of Applicable Technology Training for Corn Farmers (as Consultant) : Farmers Training Center for Rural Development(FTC-RD) Sab-a Basin, Leyte
April 28- May 4, 1982

Refresher Course on Corn Production : Regional Development Training Center,
Alang-Alang, Leyte
June 28-July 2, 1982

Performance Appraisal System Seminar Workshop : Civil Service Commision
Catbalogan, Samar
September 23-24, 1982

Agro-Pesticide Dealers Trng.	: Fertilizer & Pesticide Authority, Tacloban City June 13, 1983
Corn Production Tech. Trng.	: Barugo, Leyte April 15-19, 1985
Integrated Pest Management Training	: Ministry of Agriculture & Food, Tacloban City
Planning and Extension Trng. Workshop	: Department of Agriculture Catbalogan, Samar June 2-5, 1987
Institutional Capability Development on Community Based Planning	: Regional Development Trng. Center, San Vicente, Alang-Alang, Leyte October 12-16, 1987
Training On Soil Testing	: Department of Agriculture Catbalogan, samar April 28, 1988
Project Management With Emphasis On Project Proposal Preparation	: Department of Agriculture Catbalogan, Samar December 12-15, 1988
Seminar Workshop on Financing And Guarantee Programs for Agro-Industrial Projects in Samar	: San Bartolome Hotel Catbalogan, Samar March 10-11, 1989
National Agribusiness Development Seminar Workshop	: Montevello Villa Hotel Cebu City June 26-28, 1989
Seminar/Workshop on Agri-Business Project Dev't.	: Development Academy of the Philippines, Conference Center, Tagaytay City October 2-6, 1989
Inter Regional(Zonal) Agri-Business Planning Workshop	: Aklan Agricultural College Banga, Aklan July 2-6, 1990
Training On Agribusiness Market Development	: Development Academy of the Philippines, Pasig Metro Manila, July 30 - August 3, 1990
Training/Workshop On Marketing Strategies for	: NEDA-LRM,COA Regional Training Center, Candahug

Rural Enterprises	Palo Leyte,Oct. 15-29,1990
Launching Program for the "Search for the 1991 Outstanding Awards" and Sectoral Congress for Women.	: Department of Agriculture Tacloban City, August 28-30, 1991
Values Education Seminar	: Provincial Library Catbalogan, Samar September 2-3, 1992
Basic Record Keeping Seminar	: VICTO, Catbalogan, Samar July 28-30, 1993
LDAP Experience Sharing Seminar Workshop w/s in Local Governance	: VICTO, Training Center Lahug, Cebu City August 18-19, 1993

DESIGNATIONS HELD

Maisagana Report Analyst	: Department of Agriculture Catbalogan, Samar 1981-1991
Acting Coop. Dev. Officer	: Department of Agriculture Catbalogan, Samar January 25, - July 5, 1989
Member, Technical Working Group for Livelihood Enhancement Agricultural Project (LEAD)	: Department of Agriculture Provincial Office Catbalogan, Samar March 6, 1989 - March 17, 1993
Chief, Market Dev't. Section	: Department of Agriculture Provincial Office Catbalogan, Samar July 5, 1989-March 17,1993

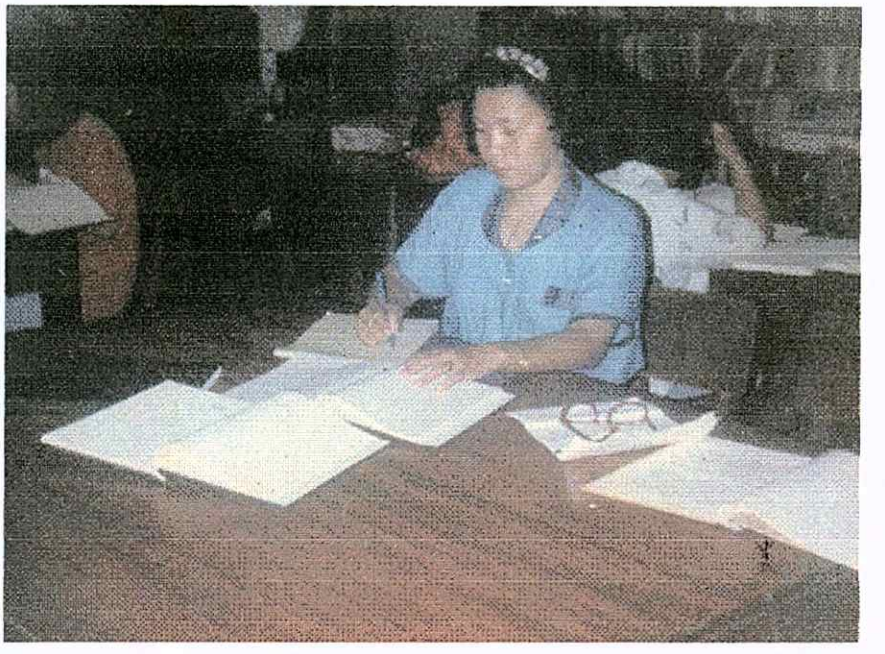
CO-CURRICULAR ACTIVITIES

Board of Director	: Pinabacdao Comm. Alumni Asso. Pinabacdao, Samar 1990 to the present
Chairman, Credit Committee	: Department of Agriculture Employees Credit Coop. 1993 to the present
President	: Immaculate Conception Asso. Bangon, Pinabacdao, Samar

1) The author with her respondents (Samar Seed Growers MPCI members) at Barangay Cal-apog, Catbalogan, Samar

2) The author at the UP Los Baños for further investigation of the research.

3) International Rice Research Institute (IRRI) as reference for the conduct of the research



4) Conducting research at UPLB Library with her beloved husband.

5) Dr. Manuel Mancebo, Chairman of Agricultural Education and Rural Studies, UPLB as reference consultant.

6) The Author on data processing at International Rice Research Institute (IRRI) Library.

List of Tables

LIST OF FIGURES