**BIBLIOGRAPHY**

AMANTE, MICHELLE L. APRIL 2010. Involvement of Women in the Sericulture Industry at Bacnotan, La Union. Benguet State University, La Trinidad, Benguet.

Adviser: Maria Ana C. Tanyag, M.Sc.

**ABSTRACT**

The study was conducted from December 2009 to January 2010 to identify the general profile of the women engaged in sericulture, sericulture activities women are engaged in women's corresponding output from sericulture and the sericulture problems encountered, and to obtain photo documents of the women's participation and processed outputs in sericulture activities.

Thirty respondents were randomly selected for the study. The data gathered were tabulated and analyzed using frequency and percentage.

Majority of the respondents are married (70%) and full time sericulturists (66%). The respondents were involved in all sericulture activities including mulberry production, cocoon production, filature operations, novelty item production and product marketing. Their primary product, the raw cocoons are further processed into high valued items such as raw silk, woven cloth and handicrafts.

The results indicated the chance of prosperity for the sericulture industry in the country. As women emerged as large working force and have the ability to handle fully a sericulture project, they can be in-charge or may take over the sericulture operation as more men at present favor jobs in another industries.

TABLE OF CONTENTS

BENGUET STATE UNIVERSITY
INSTRUCTION
EXTENSION
RESEARCH
PRODUCTION
1916

## INTRODUCTION

### Rationale

In many countries, including the Philippines, wives have the primary responsibility for both household substinence and child welfare. In decision-making, a woman's role is frequently perceived as mainly secondary. Earlier, the women's socio-economic contribution and potential resource seem to be unappreciated and unrecognized. However, Mancebo *et al*. (1997) stated that in recent years, some significant changes in the social status, roles, perceptions, attitudes and aspirations of women have taken place. Today that employment is viewed as a matter of economic necessity both in the two-adult household and in the large number of single-adult women households; gender inequality has started to diminish (Panopio and Santico-Rolda, 2000).

In Asia, sericulture has emerged as a profitable employment avenue for rural folk, particularly women. In India, women were given special preferences under various government schemes for sericulture, which includes growing of mulberry trees, rearing of silkworm, and unwounding the cocoons to silk thread. Likewise, in China where "men plow, women weave", men were responsible for rice production and women were responsible for raising silkworms in mulberry trees, harvesting the cocoons, spinning the silk thread, and weaving the silk cloth.

In the Philippines, sericulture is being developed by the government as an agro-based industry (Cosalan, 2001). The Sericulture Research and Development Institute (SRDI) located in Bacnotan, La Union was created to serve as the National Center for Sericulture. With countryside development as the focus of its extension program, SRDI

establishes cooperatives, sericulture center, pilot sites and medium scale filature units to showcase the viability of sericulture in the Philippines.

At present, Bacnotan, La Union has the highest number of sericulture adopters in Region I. Amongst the sericulturists were women who believe that sericulture industry will induce their potential and capabilities as a resource. The sericulture operations of women and all other sericulture farmers in the locality were fully supported by SRDI.

## Statement of the Problem

The study determined the extent of participation of women in the sericulture program and projects at Bacnotan, La Union. Systematic information of women's tasks in sericulture was made available through the study.

In this connection, the study was conducted to answer the following questions:

1. What is the general profile of the women engaged in sericulture?
2. What are the different sericulture activities done by women?
3. What are the different kinds of outputs produced from sericulture activities?
4. What are the sericulture problems encountered?

## Objectives of the Study

The study aimed to:

1. Describe the general profile of women engaged in sericulture;
2. Identify sericulture activities women are engaged in;
3. Determine women's corresponding output/product from sericulture;
4. Identify the sericulture problems encountered; and
5. Record their involvement in sericulture activities through photo documentation.

Importance of the Study

The results of the study are expected to provide ideas useful in the evaluation and improvement of gender-sensitive sericulture policies and programs. The results of the study could also serve as research material for future studies and documentation of sericulture.

Scope and Limitations of the Study

The study covered the roles of women in the sericulture industry in Bacnotan, La Union. The study was conducted from December 2009 to January 2010.

## REVIEW OF LITERATURE

Philippine Sericulture

Silk was introduced to the Philippines as one of the trade items from China as cited by Tantoco (2003). In the 19th century, large scale silk plantations and manufacture of silk cloth were encouraged as cash crops along with cotton and abaca. During the Japanese occupation, the silk industry offers a wide opportunity to Filipinos and Japanese migrants until the outbreak of World War II (Afable, 2004).

Sericulture and silk yarn processing thrive well in Central Mindanao, in Quezon, in Benguet, in Ilocos provinces of La Union and Ilocos Norte and in Ilo-ilo in the Visayas, among other areas (Tantoco, 2003).

Sericulture is one example of a no waste industry (Caccam and Libunao, n.d). Recently, all the cocoon products and the mulberry leaf, which is primarily a silkworm feed, are realized to have an economic importance.

The cocoons of good quality are processed into raw silk which is the main product of sericulture. Tantoco, in 2003 described the silk as versatile yarn material. Aklan and Ilo-ilo weavers utilize 10-100% silk on their products (Delfin, 2009). At present, raw silk is in great demand in the country due to the declaration of R.A 9242, an act requiring the use of tropical fibers in the uniforms of government officials.

Gaki (2007) found that the unreelable or waste cocoons are utilized in the production of handicrafts or the so-called novelty items, thus giving additional income both to the farmer and the crafter. According to Caccam and Libunao (n.d), waste cocoons are excellent raw material in novelty items production. In various shapes,

contours, designs, and colors these cocoons could be curved into various creative works as novelty item.

Changing Roles of Women

Mancebo *et al*. in 1997 cited that women before are often described as an underprivileged group characterized by inferior social status brought about by unequal treatment and less access to resources and opportunities. Although the importance of women's biological and social roles is clear, their input in all spheres of life often goes unacknowledged.

But according to Panopio and Santico-Rolda (2000), the development of third world countries into industrializing societies has brought about the emergence of a certain type of a family structure consistent with the demands of the time. Women have gradually inched their way towards equality in many aspects of human activity.

Today, the typical woman like the typical man is in the paid labor force and is working full time year round (Renzetti and Curran, 2003). Husbands no longer exclusively hold the wage earner; instead, women share this role with their husbands or occupy it themselves as the sole financial supporter of their families (Stewart *et al*., 2003).

Gaki (2007) reported the utilization of waste cocoons in making of handicraft/ novelty items due to economic potentials. Handicraft production along with other sericulture activities is now fully participated by women as stated by Donato (2009).

Definition of Terms

Denier. A unit to measure the thickness of the filament which is about 9,000 m long express in grams.

Doubling. The winding of two or more threads into single thread.

Filature. The building where the cocoons are being processed.

Lacing. The process of tying the hank across its length at 4 to 6 equidistant places to prevent entangling of the reeled silk when brought for winding process.

Mounting. Provision of good cocooning aids, rational management and preservation.

Raw silk. Silk thread produced after re-reeling.

Reeling. Unwinding of the silk filament of the cocoons through suitable techniques to form composite thread for weaving.

Re-reeling. The rewinding of silk from small size to standard reels,

Sericulture. Art and science of raising silkworms to produce economically valuable cocoons.

Silk yarn. Silk thread produced after twisting.

Silk filament testing. Unwinding and individual weighing of certain number of cocoons per batch to determine the number of cocoons to be reeled into single thread depending in the required denier.

Twisting. This is done to increase the strength and appearance of the yarn.

Warp. Lengthwise or vertical threads on a loam or any woven fabric.

Winding. The transfer of thread hanks to winding bobbins to eliminate imperfections and facilitate the subsequent processes.

## METHODOLOGY

### Locale and Time of the Study

The study was conducted from December 2009 to January 2010 at Bacnotan, La Union as it is the center of sericulture in the province. The map of the study area is shown in Figures 1 to 3.

### Respondents of the Study

Thirty respondents were selected through random sampling. The respondents were the SRDI female farmer cooperators of sericulture, filature workers and novelty item producers/cocoon handicrafters. The distribution of the respondents is as follows:

| | | |
|---|---|---|
| Sapilang - 15 | Ortega - 4 | San Martin - 1 |
| Casiaman - 3 | Oya-oy - 1 | Poblacion - 1 |
| Say-oan - 1 | Lacong - 4 | |

### Data Collection

The respondents were personally interviewed by the researcher with the aid of a structured questionnaire. Field visitations and observations were likewise done.

### Data Gathered

The data gathered were the general profile of the women engaged in sericulture; the activities women are engaged in; the women's corresponding output/product derived from sericulture; and the sericulture problems encountered. Photo documents were also obtained.

### Data Analysis

The data gathered were tabulated and analyzed using frequency and percentage.


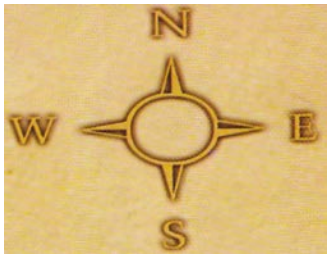


Figure 1. Philippine map


Figure 2. Region I map


Figure 3. Map of La Union showing the study area

## RESULTS AND DISCUSSION

General Profile of the Respondents

Table 1 shows the profile of the thirty respondents interviewed with regards to age, civil status, educational attainment, number of years in sericulture and type of involvement.

Age. The thirty respondents belonged to the age bracket of 21-60 years old. The respondents indicated that age does not limit them to be involved in sericulture activities.

Civil status. Majority (70%) of the respondents were married. All of them indicated that they ventured into sericulture because they have to be involved into income generating activities to share the financial responsibilities with their husband. In the same manner, all the other respondents, one was widow and the rest were single, pointed out that they adopted sericulture in able for them to earn for the financial needs of their families. This result conform to the study of Stewart *et al*. (2003), that women now share the wage earner role of their husband or become the sole financial supporter of their families.

Educational attainment. The respondents have formal education as 30% finished elementary; 6.67% finished high school; 30% reached college; 13.3%$ finished college; and 20% finished master studies. The respondents indicated that educational attainment does not play much role in their production skills as the sericulture activities are learned gradually through experience.

Number of years in sericulture. Majority of the respondents (56.7%) have sufficient practice in sericulture as they were involved for more than 10 years; 40% were involved for 1-3 years; and 3.3% or 1 was involved in sericulture for 4-6 years. It was

Table 1. General profile of the respondents

| PARTICULARS | FREQUENCY (F) | PERCENTAGE (%) |
|---|---|---|
| Age | | |
| 21-25 | 1 | 3.30 |
| 26-30 | 0 | 0 |
| 31-35 | 3 | 10.00 |
| 36-40 | 2 | 6.70 |
| 41-45 | 5 | 16.70 |
| 46-50 | 10 | 33.30 |
| 51-55 | 4 | 13.30 |
| 56-60 | 5 | 16.70 |
| TOTAL | 30 | 100.00 |
| Civil Status | | |
| Married | 21 | 70.00 |
| Single | 8 | 26.70 |
| Widow | 1 | 3.30 |
| TOTAL | 30 | 100.00 |
| Educational Attainment | 9 | 30.00 |
| Elementary Graduate | 2 | 6.67 |
| College Level | 9 | 30.00 |
| College Graduate | 4 | 13.30 |
| MS Graduate | 6 | 20.00 |
| TOTAL | 30 | 100.00 |
| Number of Years in Sericulture | | |
| 1-3 | 12 | 40.00 |
| 4-6 | 1 | 3.30 |
| 7-9 | 0 | 0 |
| 10 years or more | 17 | 56.70 |
| TOTAL | 30 | 100.00 |
| Type of Involvement | | |
| Part time | 10 | 33.30 |
| Full time | 20 | 66.70 |
| TOTAL | 30 | 100.00 |

observed that the number of years in sericulture has significance in the sericulture skills of the respondents. The women involved in sericulture for more than 10 years derived more output and worked faster in the weaving process and novelty items production. Cerila Dingle, SRDI weaver for 18 years weaves 2 meters of silk cloth a day compared to the average 1.2 meters cloth output of the other weavers with shorter weaving experience.

Type of involvement. Majority (66.7%) of the respondents practice sericulture full time and 33.3% practice sericulture part time. The respondents indicated that sericulture provides opportunity of employment to women. They also stated that the industry offers additional knowledge and interesting activities to be engaged in that stimulated creativity like the designing and making of silk cloth and handicrafts.

Participation in Pre-Operational Activities

Table 2 presents the participation of the women respondents as to decision-making and inputs purchasing (Figures 4-9).

Decision-making. As to deciding for sericulture operations, 20% solely made decisions while majority (80%) gave secondary opinions. This could be attributed to the fact that men are the head of the family, particularly in the decision-making.

Table 2. Involvement in pre-operational activities of the respondents

| PARTICULARS | FREQUENCY (F) | PERCENTAGE (%) |
|---|---|---|
| Decision-making | | |
| Primary opinion | 6 | 20.00 |
| Secondary opinion | 24 | 80.00 |
| TOTAL | 30 | 100.00 |
| Inputs Purchasing | | |
| Primarily involved | 5 | 16.70 |
| Seldom involved | 10 | 33.30 |
| Not involved | 15 | 50.00 |
| TOTAL | 30 | 100.00 |


Figure 4. Women harvesting mulberry leaves to be fed to the larvae, Sapilang, January 2010

Figure 5. Size filament testing of cocoons before reeling to determine the number of cocoons to be reeled into single thread of required denier, SRDI filature, January 2010

Figure 6. Reeling or the unwinding process of the silk filament from the cocoons, SRDI filature, January 2010


Figure 7. Transferring of raw silk into winding bobbins to facilitate the subsequent processes, SRDI filature, January 2010

Figure 8. Measuring the length of the warp to be used in weaving to minimize the waste of thread, SRDI filature, January 2010

Figure 9. Tying the loam warp ends before weaving, SRDI filature, January 2010

Figure 10. Production of novelty items chiefly done by women, SRDI filature, January 2010

Inputs purchasing. The result shows that 16.7% of the respondents were primarily involved; 30% were seldom involved; and 50% were not involved in inputs purchasing. Majority of the respondents leave the activity to their husband and other male members of their family. The respondents indicated that this activity is usually done by men because it requires physical strength particularly in the transportation of the heavy inputs like the fertilizers.

Participation in Sericulture Operation

Table 3 shows the participation of women in sericulture as to mulberry production, cocoon production, filature operations, handicraft/novelty item production, and product marketing. The results confirmed the statement of Donato (2009) that sericulture activities is now fully participated by women.

Mulberry plantation. The result shows that women can work along with men in the mulberry plantation. The respondents involved stated that mulberry production is not difficult probably because the sapling production, pruning and leaf harvesting were the only activities new to them. The other practices were similarly applied to their other crops.

Cocoon production. Among the respondents, 6.7% helped in the disinfection of the rearing house, tools and implements. Majority of the respondents leave disinfection to men because they indicated that this activity requires less labor as it can be done in only few hours. However, they participated in feeding and bed cleaning, mounting and cocoon harvesting probably because these activities are labor intensive.

Filature operation. With the presence of a filature unit in SRDI, the cocoon products of the sericulture farmers are further processed into items of higher economic

Table 3. Involvement of the respondents in Sericulture operation

| PARTICULARS | FREQUENCY (F) | PERCENTAGE (%) |
|---|---|---|
| Mulberry Production | | |
| Sapling production | 10 | 33.3 |
| Planting | 10 | 33.3 |
| Pruning | 11 | 36.7 |
| Fertilization | 8 | 26.7 |
| Leaf harvesting | 11 | 36.7 |
| Weeding | 8 | 26.7 |
| Cocoon Production | | |
| Disinfection | 2 | 6.7 |
| Feeding and bed cleaning | 11 | 36.7 |
| Mounting | 10 | 33.3 |
| Cocoon harvesting | 12 | 40.0 |
| Filature Operation | | |
| Cocoon Primary Processing | | |
| Reeling | 4 | 13.3 |
| Re-reeling | 4 | 13.3 |
| Winding | 8 | 26.7 |
| Doubling | 5 | 16.7 |
| Twisting | 5 | 16.7 |
| Silk Enhancement | | |
| Design planning | 2 | 6.7 |
| Weaving | 6 | 20.0 |
| Handicraft/Novelty Item Production | | |
| Sample Planning and Designing | 3 | 10.0 |
| Product Making | 6 | 20.0 |
| Product Marketing | | |
| Silk | | |
| Retailing | 5 | 16.7 |
| Wholesaling | 2 | 6.7 |
| Novelty Items | | |
| Retailing | 5 | 16.7 |
| Wholesaling | 2 | 6.7 |

*Multiple response

value. This finding correlates with the report of Tantoco (2003) that sericulture and silk yarn processing thrive in many areas of the country including La Union.

Result shows that among the thirty respondents, 13.3% were involved in reeling and re-reeling; 26.7% were involved in winding; 16.7% were involved in doubling; and 16.7% were involved in twisting.

For the silk enhancement, 6.7% of the respondents were involved in the design planning; and 20% were involved in the weaving process. The decorative patterns of the woven products can either be originally created by the designer or specified by the clients.

Handicraft/Novelty item production. Waste cocoon handicrafting is one of the profitable sericulture activity in Bacnotan. This correlates the study of Gaki (2007) that unreelable cocoons are utilized in the production of novelty items which gives additional income to both the farmer and crafter.

Product marketing. Among the respondents, 16.7% were retailers of silk and novelty items to one-stop shops and to walk-in clients. Only 6.7% were silk and novelty item wholesalers. The respondents indicated that related problems particularly lack of capital and product buyers bound them to venture into sericulture product marketing.

Outputs Produced

Table 4 shows the outputs derived by women from their sericulture operations. Among the thirty respondents, 40% produced only raw product or cocoons, and majority produced processed items. It was observed that the outputs produced by the respondents were dependent on their sericulture skills and to the equipment and facilities needed to process the products (Figures 11 to 24).

Table 4. Sericulture outputs produced by the respondents

| PARTICULARS | FREQUENCY (F) | PERCENTAGE (%) |
|---|---|---|
| Raw (cocoons) | 12 | 40 |
| Processed | | |
| Raw silk and silk yarn | 6 | 20 |
| Woven fabric | 6 | 20 |
| Novelty items | 6 | 20 |
| TOTAL | 30 | 100 |

Sericulture-Related Problems

Table 5 shows the constraints in the production and marketing experienced by the respondents.

Table 5. Sericulture-related problems encountered by the respondents

| PARTICULARS | FREQUENCY (F) | PERCENTAGE (%) |
|---|---|---|
| Production | | |
| Lack of equipment and facilities | 14 | 46.70 |
| Limited area of mulberry plantation | 9 | 30.00 |
| Lack of capital | 18 | 60.00 |
| Low output | 2 | 6.70 |
| Labor intensive | 14 | 46.70 |
| Lack of technical assistance | 2 | 6.70 |
| Lack of irrigation system | 12 | 40.00 |
| Unsuitable soil characteristics | 12 | 40.00 |
| Outbreak of diseases | 12 | 40.00 |
| Marketing | | |
| Lack of buyers | 6 | 20.00 |
| Lack of market outlet | 7 | 23.30 |
| Low profit | 2 | 6.70 |
| TOTAL | 30 | 100.00 |

*Multiple response

Figure 11. Cocoons which are the raw materials for the production of raw silk. White cocoons are from bivoltine races while colored cocoons are from multivoltine races.

Figure 12. Raw silk laced and hanged to be air dried. Raw silk will go through a series of operations which condition the thread before it is woven into fabric

Figure 13. Barong tagalong made from woven silk

Figure 14. Scarves made from woven silk

Figure 15. Mini basket designed with flowers and birds made of cocoons. Cocoons are combined with local materials to form attractive ornaments

Figure 16. Animated bird made of cocoons can be singly made into refrigerator magnets or used as accessory to other novelty items


Figure 17. Corsage made of cocoons. Combined with ribbons, cocoons are cut and arranged to form corsage that can be used in all occasions.

Figure 18. Lei made of cocoons

Figure 19. Long-stemmed individual flowers made of cocoons. Cut cocoons are made into leaves, sepals and petals composing a flower

Figure 20. Bridal bouquet composed of cocoon flower assemblages. Cocoon flowers are combined with other synthetic materials to form long lasting flower

Figure 21. Token accessorized with flowers made of cocoons. Cocoon flowers and other novelty items are used to adorn tokens of various forms that could represent the affair

Figure 22. Lotus flowers made of cocoons assembled on a mini jar

Figure 23. Cocoon flowers arranged on topiary in coral. Topiary bearing cocoon flowers, combined with mini jar and arranged in a coral, displays creativity and artistry

Figure 24. Cocoon flowers arranged on topiary. Carefully combined cocoon flowers with other materials presented a well-designed art work

Production. Majority of the respondents stated that insufficiency of capital limit them to operate and expand their sericulture projects which result to low production of cocoons and not continuous operation. In addition, they identified limited area of mulberry plantation, lack of irrigation system and unsuitable soil characteristics as their mulberry production problems. They further identified low output, labor intensive and outbreak of diseases during rainy days as their problems in the cocoon production. Lack of technical assistance was also claimed as one of the related problems.

Marketing. The respondents identified their marketing problems as follows: lack of buyers; lack of market outlet and low profit. These major marketing problems were encountered since the respondents only market their products to one-stop shops and walk-in clients. They do not have the capacity to market their products to bigger stores due to problems in supply and demand relationship. The respondents cannot produce large quantity because their sericulture production is on a limited scale.

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### Summary

The study was conducted at Bacnotan, La Union from December 2009 to January 2010 to identify the general profile of the women engaged in sericulture, sericulture activities women are engaged in, women's corresponding output from sericulture and the sericulture problems encountered and to record their involvement in sericulture through photo documentation.

Thirty respondents from the female farmer cooperators, filature workers and novelty item producers were randomly selected for the study. The data were gathered through personal interview aided with a structured questionnaire during field visitations and observations. The data gathered were tabulated and analyzed using frequency and percentage.

The respondents were at the age bracket of 21-60 years old, formally educated and mostly married. Majority of the respondents (56%) were engaged in sericulture for more than 10 years. Moreover, 66% of the respondents practice sericulture full time.

Majority of the respondents (80%) gave secondary opinions as to decision-making and 50% of the respondents were involved in the inputs purchasing. Women participated in all sericulture activities.

Most of the respondents (80%) produced processed cocoon products such as raw silk, silk yarn, woven cloth and novelty items.

The common problems encountered were: lack of capital, lack of equipment and facilities and labor intensive. A major marketing problem was also identified and it is the lack of market outlet.

Conclusions

Based on the results of the study, the following conclusions were made:

1. The women sericulturists at Bacnotan belonged to the age bracket of 21-60 years old, 70% were married and 66% were engaged full time.

2. Women participate in the whole sericulture operation from mulberry production to product marketing.

3. Forty percent of respondents produced raw cocoons and 60% derived processed products.

4. Most of the related problems were encountered in the cocoon production.

Recommendations

Based on the results and conclusions of the study, the following recommendations were made:

1. The government agencies involved in sericulture should provide continuous technical support to the sericulture farmers in order to increase cocoon production.

2. The government agencies involved in sericulture should establish lending cooperative to suffice the capital needed by the sericulture farmers.

3. The government should bridge the gap between the farmers and product buyers to establish demand and supply relationship.

4. The government should stabilize the market by promotion of sericulture and its products to encourage sericulture enthusiasts.

5. The government agencies involved should evaluate the existing sericulture policies and programs to come-up with projects that will foster and benefit both men and women adopters of sericulture.

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APPENDIX A

Communication Letter

December 19, 2009
College of Agriculture, BSU
La Trinidad, 2601 Benguet

DR. FLORENTINA S. DUMLAO
OIC University President
DMMMSU, Bacnotan, La Union

Thru:
Dr. RICARDO C. BRIONES
Director, SRDI-DMMMSU, Bacnotan, La Union

Sir:

I am a student of Benguet State University taking up Bachelor of Science in Agriculture, major in Sericulture. I am conducting my thesis entitled, "Involvement of Women in the Sericulture Industry in Bacnotan, La Union." The target respondents would be the female farmer cooperators, filature workers and cocoon handicrafters.

In relation to the research, may I ask permission from your good office to allow me to float questionnaires, conduct interviews and do photo documentation of their involvement in the sericulture activities. Rest assured that the gathered information would be used for the intended purpose.

Thank you very much!

Very truly yours,

MICHELLE L. AMANTE

Noted:

MARIA ANA C. TANYAG
Research Adviser

APPENDIX B

Letter to the Respondents

Benguet State University
COLLEGE OF AGRICULTURE
La Trinidad (2601), Benguet

December 19, 2009

Dear Respondents,

I am a student of Benguet State University taking up Bachelor of Science in Agriculture. I am conducting my thesis entitled “Involvement of Women in the Sericulture Industry at Bacnotan, La Union”.

In this connection, I am asking you to sincerely answer the attached survey questionnaire. I assure you that your answer will be kept confidential and would be used for the intended purpose.

The time and effort that you have invested for the success of this study is highly appreciated.

Respectfully yours,

MICHELLE L. AMANTE

Noted by:

MARIA ANA C. TANYAG
Research Adviser

APPENDIX C

Survey Questionnaire

INSTRUCTION: Please supply the needed information. Fill in your answers in the space provided and place a check before your chosen answers.

I. Involvement in Sericulture

II.

A. Adoption of Sericulture

1. Number of years
   _____ 0-3 years
   _____ 4-6 years
   _____ 7-9 years
   _____10 years or more

2. Type of employment

   a. Type
   _____ Part time
   _____ Full time

   b.Household Engagement
   _____ Sole sericulturist in the family
   _____Spouse is helping
   _____Children are helping
   _____Whole family is involved
   Others (Please Specify) _____

3. Reasons of engagement _____
   _____

A. Participation in Sericulture Activities

1. Decision- making
   _____ Primary Opinion
   _____ Secondary Opinion

2. Inputs purchasing
   _____ Primarily Involved
   _____Seldom Involved
   _____ Not involved
3. Mulberry Plantation
   _____ Planting

_____ Pruning
_____ Fertilization
_____ Leaf harvesting
_____ Others (Please Specify) _____

4. Rearing House
_____ Disinfection
_____ Feeding and Bed Cleaning
_____ Mounting
_____ Cocoon Harvesting
_____ Others (Please Specify) _____

5. Filature

a. Cocoon Primary Processing
_____ Reeling
_____ Re-reeling
_____ Winding
_____ Twisting

b. Silk Enhancement
_____ Dyeing
_____ Embroidery/Designing
_____ Weaving
_____ Others (please Specify) _____

6. Handicraft/ Novelty Item production
_____ Sample Planning and Designing
_____ Product Making
_____ Others (Please Specify) _____

7. Product Marketing
a. Silk
_____ Retailing
_____ Wholesaling

b. Novelty Items
_____Retailing
_____Wholesaling

II. OUTPUTS PRODUCED

A. Raw
_____Cocoons only

B. Processed

1. Good Cocoons
_____ Raw silk
_____ Silk yarn
_____Woven fabric
_____ Others (Please specify) _____

2. Waste Cocoons
a. Silk Threads
_____ Doupion
_____ Spun silk
_____ Others (Please specify) _____

b. Novelty Items
_____Single flower
_____Composite flowers
_____Boquet
_____Corsage
_____Lei
_____Token
_____Topiary
_____Animated series
_____Wall decors
_____ Others (Please specify) _____

III.SERICULTURE RELATED PROBLEMS

A. Production
_____ Lack of equipment and facilities
_____ Limited area of mulberry plantation
_____ Lack of capital
_____ Low output
_____ Labor intensiveness
_____ Lack of technical assistance
Others (Please Specify) _____

B. Marketing
_____ Lack of buyers
_____ Lack of market outlet
_____ Unstable market price
_____ Low Profit
Others (Please Specify) _____

C. Sericulture – Based Organizations
   1. Existence of Organizations
      _____ Absent
      _____ Present

   2. Membership
      _____ Non-member
      _____ Member
   3. Name of Organization _____