



## Gender-Based Differentiation among Ornamental Crop Growers in Silang, Cavite

Adolfo C. Manuel Jr. <sup>a</sup>, Analita dM. Magsino <sup>a</sup>, Cereneo S. Santiago Jr. <sup>a\*</sup>  
and Renzo Kyle V. Onella <sup>a</sup>

<sup>a</sup> Cavite State University, Cavite, Philippines.

### **Authors' contributions**

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

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### **ABSTRACT**

The difference between men and women is still a social issue of how and why men and women are different and what this means for their roles in society. The study aimed to determine the different roles of men and women in reproductive, productive, community activities, and access to and control over resource and benefits among ornamental crop growers. Data were gathered through interview with the selected 181 ornamental crop growers from 7 barangays in Silang, Cavite using a semi-structured questionnaire. Frequency counts, percentage, range, and mean were used to analyze the data. There were more female ornamental crop growers than males. Their age varied between 21-82 years old. They had varied level of educational attainment, but majority are high school and college graduates. Most of the participants belong to a nuclear type of family with an average household size of four (4) members which in average, have two (2) males and two (2) females per household and their age average was 33 years old. Reproductive activities among ornamental crop growers were female-dominated. Among the reproductive activities, 60 percent are being performed mostly by mothers while only few are more or less equally done by fathers and mothers or in partnership. Productive activities among ornamental crop growers were performed by both female and male, however, a considerable number of females were also engaged hence making productive activities still female-dominated. Community activities among ornamental crop

growers engaged both male and female adults but mothers participate the most in community managing activities like Clean and Green Projects, Feeding Programs, and Peace and Order Committee.

*Keywords: Ornamental growers; gender roles; productive and reproductive activities; decision making, access and control.*

## 1. INTRODUCTION

Gender roles refer to the socially defined tasks and responsibilities that are considered appropriate for males and females [1]. According to Doss [2] they are context specific and can change over time, within households and even communities. Gender dimensions become particularly important when energy is a part of the household system [3]. Knowing how males and females participate in the household energy system and how they benefit is important and needs to be analyzed. Eder [4] stated that the prominent role of females in daily economic and social life in Southeast Asia has been much commented on, and the observation that gender roles are relatively egalitarian is a frequent touchstone in the ethnographic literature on the region. Certainly with regards to the Philippines, a long and distinguished tradition of empirical research attests to the prominent role of females in the household economy, both by direct involvement in income-earning activities and as managers of household economic resources. More is at stake here, furthermore, than control over the family 'purse strings'; egalitarianism in domestic relations and democratic consultation between spouses on matters of labor allocation and expenditure are frequent themes in the literature on Philippine households and gender relations. Kiptot [5] added that it is worth nothing that gender roles and relations are dynamic; they evolve over time in response to changing circumstances, needs and interests. Just as agroforestry systems grow, shrink, change and shift, gender roles and relations also undergo constant renegotiation. Failure to capture the complexity of gender roles and social relations results in failure to see opportunities for improving agroforestry research and development (R&D) and the possibilities for building greater equity. Drawing the lines of the different roles between males and females becomes critical to understanding the context of agroforestry R&D.

Ornamental crops are plants which are cultivated with the main aim of being marketed and used for decorative purposes, rather than as food or

raw material [6]. In the Philippines, ornamental crop production has become a trend because the country's climate is suitable for growing ornamentals and the high profit and demand for the plants is viable. In Region 4-A, among the other agricultural activities such as bee culture, vermiculture, sericulture, and mushroom production, ornamentals and cutflower production has the highest number of farms. It is also the leading agricultural activity in the province of Cavite [7]. The municipality of Silang is the center of the industry and the province's major producer of cutflowers and ornamental crops. It accounted for 93.5 and 99 percent, respectively, of the province's total yield in 2018. In 2002, 85.9 percent of the total agricultural operators in the region were males, although there are more male growers involved in production operations, but most female non-operators are engaged in farming activities [7]. Female operators can be farmers, workers, and entrepreneurs. But they face more serious constraints than their male counterparts in terms of access to production resources, markets, and services. This "gender gap" hinders their productivity, limiting their contributions to the agricultural sector and achieving wider targets for economic and social development. The closure of gender disparities in agriculture will generate substantial social benefits by increasing agricultural productivity, reducing poverty and hunger, and boosting economic growth [8].

In order to take into account these gender-specific gaps, disadvantages, needs and potentials, it is important to collect gender-disaggregated data. This study aimed to generate gender disaggregated data by describing the gender-based differentiation among the ornamental plant growers in Silang, Cavite in order to provide initial information and address the aforementioned needs and problems.

## 2. METHODOLOGY

This study involved ornamental crop growers in Silang, Cavite who were from seven (7) out of the eleven (11) identified barangays based on

the secondary data from the Licensing Office of the Municipality of Silang, The respondents in this study were selected using total purposive sampling which was the 181 ornamental plant growers from every identified barangays. Table 1 shows the data from the Municipality of Silang which consists of the list of identified barangays and the number of ornamental plant growers.

The study questionnaire was adapted from the study of March et al. [9]. It underwent expert validation to suit the research questions with the research respondents and the research locale. The research questionnaire was consisted of six parts, namely; 1) demographic and socio-economic characteristics, 2) reproductive activities, 3) productive activities, 4) community related and leisure activities, 5) access to and control over resources and benefits, and 6) decision making in productive and reproductive related activities. To calculate the reliability of the research tools, the researchers piloted the questionnaire to thirty (30) ornamental growers who are not part of the official list and they were not subjected to the final data gathering of the study. The questionnaire was distributed to 7 barangays targeted the 181 ornamental growers for a period of three months. Data were collected, tabulated and employed the identified statistical tools such as mean, range, frequency, and percentage were used to analyze the collected data from the survey. For data analysis and interpretation of results, simple descriptive statistics were used. Spread sheet application was used to obtain the data result [10].

### 3. RESULTS AND DISCUSSION

#### 3.1 Characteristics of the Participants

The socio-demographic characteristics of the ornamental crop growers including their sex, age, civil status, educational attainment, major occupation, and tenurial status of the farm of the ornamental crop growers are stated in Table 2.

As shown in Table 2, the participants were composed of sixty-three (63) male (34.81%) and one hundred-eighteen (118) female (65.19%). The participants' age ranged from 21 to 82 with a mean of 52.84 years old. Among the participants, twelve (12) are single (6.63%), one hundred forty-four (144) are married (79.56%), four (4) are separated (2.21%), and nineteen (19) are widows/widowers (10.50%). The educational attainment of the participants was varied. The highest percentage of the participants were high

school graduates (35.91%) followed by college graduates (23.20%), and college level (14.36%), A few were recorded for elementary graduate (9.94%), high school level (7.18%), elementary level (6.08%) and only 1 (0.55%) with no formal education. Majority of the participants (91.16%) reported ornamentals as their major occupation. They also own a business (61.88%), engaged into farming (43.09%), and a few were recorded for employment in public (3.87%) and private (3.87%) organizations, respectively. Most of the participants that produce crops grow pineapple, banana, coffee, papaya, and root crops. Some raise chicken (4.66%) or cattle (0.55%). And most of the participants are farm owners (75.69%) while a small percentage are either tenants (6.08%) or leasers (6.63%).

#### 3.2 Household Characteristic

The participants' household structure were composed of demographic and economic information such as type of family, household size, average age of household members, number of male and female in a household, household members with occupation, household members with pension, household monthly income, type of housing, and household equipment, facilities and utilities, water and energy source are stated in Table 3.

As shown in Table 3, most of the families are nuclear (67.77%) while 32.22% have extended family units. One (1) family is childless. The average household size of the participants is 4.66 members per household. The average age of the members for each household is 33 years old. In all households, the total number of male and female are 326 and 291, respectively. The average number of male per household is 2.30 and 2.12 for female. The household members with occupation mostly work within the locale (67.84%), 27.38% works in the country, and 2.26% works abroad. On average, one person within each household has a pension. The average monthly income per household is Php 43,017.00. More than half (54.14%) of the participants' houses are made of cement and wood. Seventy-two (72) are made of concrete (39.78%), eight (8) are made of wood (4.42%), and three (3) are made of bamboo materials (1.66%). The majority of these houses are one-storey type (94.50%) and ten (10) are two-storey high (5.50%). In total, majority of the participants have basic household equipment / appliances like flat iron (95.58%), electric fan (96.13%), TV (96.13%), refrigerator (88.40%), washing machine (90.05%), rice cooker (94.48%), and

gas stove (91.71%). More than half of the participants have vehicle (66.85%). Some have desktop computer (46.41%), microwave oven (28.72%), and electric stove (13.81%) Only few have a water dispenser (6.08%). The participants' drinking water is mostly from purified water (76.24%) and from the local water company (26.52%). There are three (3) whose source drinking water were from deep well (1.66%) and one (1) uses a water pump (.55%). For washing, almost all participants use local water (95.58%), three (3) participants use water from water pumps (1.66%), and two (2) used purified water (1.11%). Majority of the water they use for watering ornamental crops come from the local water supply (93.92%), five (5) use purified water (2.76%), and three (3) are from water pumps (1.66%). The highest percentage of participants use gas as fuel for their cooking (88.95%) followed by wood (46.96%). Only 8.29% uses electricity. For ironing clothes, all participants use electricity except for one (1) who uses gas. As for the general source of energy for the whole house, electricity was mostly used by the participants (96.68%) while only one (1) relies on wood and one (1) uses gas.

Table 4 shows the 12 major reproductive activities that are performed by the participants and their household. The reproductive activities primarily performed by mothers (60% or more ), in ascending order, are fetching water (18.2%), caring for sick seniors (42.54%), buying drinking water (44%), tutoring children (44.20%), taking

care of seniors at home (51.38%), bringing adult family members to the doctor for medical check-up (53.04%), caring of sick children (56.91%), bringing children to the doctor for medical check-up (59.12%), generally taking care of children at home (62.43%), ironing clothes (71.82%), washing clothes (74.59%), washing dishes (75.14%), preparing food (76.80%), cleaning the house and cooking (77.34%), buying vegetables / fish (80.66%), and buying groceries (82.87%).

The reproductive activities primarily performed by fathers are house repairs (59.12%), buying gas (33%), and collecting firewood (25%). Data shown in Table 4 shows that mothers performed substantially more reproductive activities than fathers. Hence, reproductive activities are female-dominated.

Female children also perform tasks that mothers primarily perform, namely: cleaning the house (23.2%), washing dishes (18.2%), washing and ironing clothes (17.6% and 16%, respectively), buying groceries, and bringing younger children to the doctor for medical check-up (15%), buying vegetables / fish and tutoring children (11.6%), and bringing adult members to the doctor for medical check-up (11%).

As part of the reproductive role of male children in the family, they bring their siblings to the doctor for check-up (8.3%) and washing the dishes (11.6%) were notable. On the other hand, other family members buy drinking water and gas (15%), and perform house repairs (12.7%).

**Table 1. List of barangays in Silang, Cavite and number of ornamental crop growers**

| Barangay        | Number of Ornamental Crop Growers |
|-----------------|-----------------------------------|
| Iba             | 19                                |
| Mataas na Burol | 30                                |
| Paligawan       | 35                                |
| Pulong Bunga    | 24                                |
| Tatiao          | 20                                |
| Tubuan          | 32                                |
| Ulat            | 21                                |
| <b>Total</b>    | <b>181</b>                        |

**Table 2. Socio-demographic characteristics of the ornamental crop growers**

| Participants Characteristics |         | F     | %     |
|------------------------------|---------|-------|-------|
|                              |         | N=181 |       |
| Sex                          | Male    | 63    | 34.81 |
|                              | Female  | 118   | 65.19 |
| Age                          | Range   | n/a   | n/a   |
|                              | Average | 52.84 | n/a   |
| Civil Status                 | Single  | 12    | 6.63  |
|                              | Married | 144   | 79.56 |

| Participants Characteristics |                                    | F     | %     |
|------------------------------|------------------------------------|-------|-------|
|                              |                                    | N=181 |       |
| Educational attainment       | Separated                          | 4     | 2.21  |
|                              | Widowed                            | 19    | 10.50 |
|                              | No formal education                | 1     | 0.55  |
|                              | Elementary level                   | 11    | 6.08  |
|                              | Elementary graduate                | 18    | 9.94  |
|                              | High school level                  | 13    | 7.18  |
|                              | High school graduate               | 65    | 35.91 |
|                              | College level                      | 26    | 14.36 |
| Major Occupation             | College graduate                   | 42    | 23.20 |
|                              | Employment in public organization  | 7     | 3.87  |
|                              | Employment in private organization | 7     | 3.87  |
|                              | Own business                       | 112   | 61.88 |
| Crop Produce                 | Ornamental                         | 165   | 91.16 |
|                              | Farming                            | 78    | 43.09 |
|                              | Banana                             | 7     | 3.78  |
|                              | Coffee                             | 5     | 2.76  |
|                              | Papaya                             | 3     | 1.66  |
|                              | Root crops                         | 2     | 1.10  |
|                              | Pineapple                          | 9     | 4.97  |
|                              | Others                             | 81    | 46.40 |
| Animal Produce               | No Answer                          | 74    | 40.88 |
|                              | Cow                                | 1     | 0.55  |
|                              | Chicken                            | 4     | 4.66  |
| Tenurial Status              | None                               | 176   | 97.79 |
|                              | Owner                              | 137   | 75.69 |
|                              | Tenant                             | 11    | 6.08  |
|                              | Lease                              | 12    | 6.63  |
|                              | No answer                          | 21    | 11.60 |

**Table 3. Demographic and socio-economic characteristics of the household**

| Household characteristic  |                               | (n=181) | %    | Mean          |
|---|-------------------------------|---------|------|---------------|
| Type of family  | Nuclear                       | 122     | 67.7 | n/a           |
|   | Extended                      | 58      | 32.2 | n/a           |
|   | Childless                     | 1       | 0.55 | n/a           |
| Average household size  |                               | n/a     | n/a  | 4.66          |
| Average age of household members  |                               | n/a     | n/a  | 33.35         |
| Number of male and Female in a Household                                | Male                          | 326     | n/a  | 2.30          |
|   | Female                        | 291     | n/a  | 2.12          |
| Household members with occupation                                       | Domestic (within the country) | 110     | 27.3 | 2.97          |
|   | Abroad                        | 9       | 2.26 | 1.29          |
|   | Local                         | 270     | 67.8 | 2.37          |
| Household members with Pension / NA (Still studying)                    | With pension                  | n/a     | n/a  | 1             |
|   | Still studying                | 0       | 0    | 0             |
| Household monthly Income in Philippine peso (excluding the participant) |                               |         |      | Php<br>43,017 |
| Type of housing (Materials Used)  | Wood                          | 8       | 4.42 | n/a           |

| Household characteristic                     |                       | (n=181) | %     | Mean |
|--|-----------------------|---------|-------|------|
| Level of structure (storey)                  | Concrete              | 72      | 39.78 | n/a  |
|  | Mix (wood and cement) | 98      | 54.14 | n/a  |
|  | Bamboo                | 3       | 1.66  | n/a  |
| Level of structure (storey)                  | One                   | 171     | 94.50 | n/a  |
|  | Two                   | 10      | 5.50  | n/a  |
|  | Three                 | 0       | 0     | n/a  |
| Household Equipment / Facilities / Utilities | Iron                  | 173     | 95.58 | n/a  |
|  | Fan                   | 174     | 96.13 | n/a  |
|  | TV                    | 174     | 96.13 | n/a  |
|  | Refrigerator          | 160     | 88.40 | n/a  |
|  | Washing Machine       | 163     | 90.05 | n/a  |
|  | Rice Cooker           | 171     | 94.48 | n/a  |
|  | Microwave             | 52      | 28.72 | n/a  |
|  | Electric stove        | 25      | 13.81 | n/a  |
|  | Water Dispenser       | 11      | 6.08  | n/a  |
|  | Desktop               | 84      | 46.41 | n/a  |
| Car  | 121                   | 66.85   | n/a   |      |
| Gas stove                                    | 166                   | 91.71   | n/a   |      |

**Table 3. (Cont'd...). Demographic and socio-economic characteristics of the household**

|                                   |                |     |       |     |
|-----------------------------------|----------------|-----|-------|-----|
| Water source for drinking         | Local water    | 48  | 26.52 | n/a |
|                                   | Water purifier | 138 | 76.24 | n/a |
|                                   | Water pump     | 1   | 0.55  | n/a |
|                                   | Deep well      | 3   | 1.66  | n/a |
|                                   | Others         | 1   | 0.55  | n/a |
| Water source for washing          | Local water    | 173 | 95.58 | n/a |
|                                   | Water purifier | 2   | 1.11  | n/a |
|                                   | Water pump     | 3   | 1.66  | n/a |
|                                   | Deep well      | 0   | 0     | n/a |
|                                   | Others         | 0   | 0     | n/a |
| Water source for ornamentals      | Local water    | 170 | 93.92 | n/a |
|                                   | Water purifier | 5   | 2.76  | n/a |
|                                   | Water pump     | 3   | 1.66  | n/a |
|                                   | Deep well      | 0   | 0     | n/a |
|                                   | Others         | 0   | 0     | n/a |
| Energy source for cooking         | Meralco        | 15  | 8.29  | n/a |
|                                   | Wood           | 85  | 46.96 | n/a |
|                                   | Gas            | 161 | 88.95 | n/a |
| Energy source for ironing         | Meralco        | 174 | 96.13 | n/a |
|                                   | Wood           | 0   | 0     | n/a |
|                                   | Gas            | 1   | 0.55  | n/a |
| Energy source for the whole house | Meralco        | 175 | 96.68 | n/a |
|                                   | Wood           | 1   | 0.55  | n/a |
|                                   | Gas            | 1   | 0.55  | n/a |

**Table 4. Reproductive activities of ornamental crop growers and their household members**

| Reproductive Activities                          | MOTHER  |       |                |      | FATHER  |       |                |      | CHILDREN (F) |       |                |      | CHILDREN (M) |       |                |      | OTHERS  |       |                |      |  |
|--|---------|-------|----------------|------|---------|-------|----------------|------|--------------|-------|----------------|------|--------------|-------|----------------|------|---------|-------|----------------|------|--|
|  | Primary |       | Sometimes Done |      | Primary |       | Sometimes Done |      | Primary      |       | Sometimes Done |      | Primary      |       | Sometimes done |      | Primary |       | Sometimes done |      |  |
|  | F       | %     | F              | %    | F       | %     | F              | %    | F            | %     | F              | %    | F            | %     | F              | %    | F       | %     | F              | %    |  |
| 1. Water related                                 |         |       |                |      |         |       |                |      |              |       |                |      |              |       |                |      |         |       |                |      |  |
| 1.1 Fetching Water                               | 33      | 18.20 | 4              | 2.20 | 25      | 13.8  | 7              | 3.9  | 3            | 1.67  | 1              | 1    | 2            | 1     | 2              | 1.1  | 0       | 0     | 1              | 0    |  |
| 1.2 Buying drinking water                        | 80      | 44.00 | 5              | 2.80 | 74      | 23    | 5              | 2.8  | 110          | 5.5   | 3              | 1.7  | 212          | 6.6   | 3              | 1.7  | 127     | 15    | 0              | 0    |  |
| 2. Fuel related                                  |         |       |                |      |         |       |                |      |              |       |                |      |              |       |                |      |         |       |                |      |  |
| 2.1 Collecting woods                             | 29      | 16.06 | 7              | 3.87 | 45      | 25    | 0              | 0    | 1            | 0.6   | 1              | 0.6  | 8            | 4.4   | 3              | 1.7  | 3       | 1.7   | 0              | 0    |  |
| 2.2 Buying gas                                   | 80      | 44.20 | 2              | 1.10 | 59      | 33    | 5              | 2.8  | 9            | 5     | 2              | 1.1  | 12           | 6.6   | 3              | 1.7  | 28      | 15    | 0              | 0    |  |
| 3. Health related                                |         |       |                |      |         |       |                |      |              |       |                |      |              |       |                |      |         |       |                |      |  |
| 3.1 Bringing children to doctor for check-up     | 107     | 59.12 | 1              | 0.55 | 39      | 22    | 4              | 2.2  | 28           | 15    | 1              | 0.6  | 15           | 8.3   | 4              | 2.2  | 6       | 3.3   | 0              | 0    |  |
| 3.2 Bringing adult member to doctor for check-up | 96      | 53.04 | 1              | 0.55 | 44      | 24    | 1              | 0.55 | 20           | 11    | 0              | 0    | 9            | 5     | 1              | 0.55 | 5       | 2.8   | 1              | 0.55 |  |
| 3.3 Generally taking care of children at home    | 113     | 62.43 | 3              | 1.66 | 38      | 20.9  | 2              | 1.11 | 14           | 7.74  | 1              | 0.55 | 7            | 3.87  | 2              | 1.11 | 4       | 2.2   | 1              | 0.55 |  |
| 3.4 Taking care of seniors at home               | 93      | 51.38 | 3              | 1.66 | 36      | 19.89 | 1              | 0.55 | 14           | 7.74  | 0              | 0    | 9            | 5     | 1              | 0.55 | 5       | 2.8   | 0              | 0    |  |
| 3.5 Taking care of sick                          |         |       |                |      |         |       |                |      |              |       |                |      |              |       |                |      |         |       |                |      |  |
| 3.5a.children                                    | 103     | 56.91 | 1              | 0.55 | 31      | 17.13 | 3              | 1.66 | 12           | 6.63  | 0              | 0    | 1            | 6     | 3.32           | 0.55 | 4       | 2.21  | 1              | 0.55 |  |
| 3.5 b. Senior                                    | 77      | 42.54 | 2              | 1.11 | 29      | 16.02 | 3              | 1.66 | 17           | 9.39  | 0              | 0    | 1            | 8     | 4.42           | 0.55 | 3       | 1.66  | 1              | 0.55 |  |
| 4. Food related                                  |         |       |                |      |         |       |                |      |              |       |                |      |              |       |                |      |         |       |                |      |  |
| 4.1 Preparing foods                              | 139     | 76.80 | 8              | 4.42 | 38      | 20.99 | 11             | 6.01 | 14           | 7.74  | 8              | 4.42 | 6            | 3.31  | 2              | 1.11 | 3       | 1.66  | 0              | 0    |  |
| 4.2 Cooking                                      | 140     | 77.34 | 6              | 3.31 | 40      | 22.1  | 9              | 4.97 | 18           | 9.95  | 10             | 5.53 | 10           | 5.53  | 4              | 2.21 | 2       | 1.11  | 0              | 0    |  |
| 5. Washing dishes                                | 136     | 75.14 | 4              | 2.21 | 34      | 18.78 | 3              | 1.66 | 33           | 18.23 | 13             | 7.18 | 21           | 11.6  | 4              | 2.21 | 5       | 2.76  | 1              | 0.55 |  |
| 6. Washing clothes                               | 135     | 74.59 | 4              | 2.21 | 23      | 12.71 | 3              | 1.66 | 32           | 17.68 | 8              | 4.42 | 13           | 7.18  | 4              | 2.21 | 18      | 9.95  | 1              | 0.55 |  |
| 7. Ironing clothes                               | 130     | 71.82 | 3              | 1.66 | 22      | 12.15 | 2              | 1.11 | 29           | 16.02 | 14             | 7.74 | 11           | 6.08  | 4              | 2.21 | 10      | 5.53  | 2              | 1.11 |  |
| 8. Buying vegetable/fish                         | 146     | 80.66 | 3              | 1.66 | 50      | 27.62 | 7              | 3.87 | 21           | 11.6  | 6              | 3.31 | 26           | 3.32  | 3              | 1.66 | 4       | 2.21  | 0              | 0    |  |
| 9. Buying groceries                              | 150     | 82.87 | 3              | 1.66 | 48      | 26.52 | 5              | 2.76 | 28           | 15.47 | 8              | 4.42 | 10           | 5.53  | 2              | 1.11 | 5       | 2.76  | 0              | 0    |  |
| 10. Cleaning the house                           | 140     | 77.34 | 4              | 2.21 | 32      | 17.68 | 3              | 1.66 | 42           | 23.2  | 9              | 4.98 | 25           | 13.81 | 6              | 3.31 | 8       | 4.42  | 2              | 1.11 |  |
| 11. House repair                                 | 37      | 20.44 | 1              | 0.55 | 107     | 59.12 | 1              | 0.55 | 12           | 6.63  | 4              | 2.21 | 14           | 7.74  | 3              | 1.66 | 23      | 12.71 | 2              | 1.11 |  |
| 12. Tutoring children                            | 80      | 44.20 | 2              | 1.10 | 17      | 9.39  | 3              | 1.66 | 21           | 11.6  | 1              | 0.55 | 1            | 0.55  | 0              | 0    | 2       | 1.11  | 0              | 0    |  |

**Table 5. Productive activities of ornamental crop growers and their household members**

| Productive Activities  | MOTHER  |                | FATHER  |                | CHILDREN (F) |                |         |                | CHILDREN (M) |                | OTHERS  |                |   |     |   |      |   |     |   |      |
|--|---------|----------------|---------|----------------|--------------|----------------|---------|----------------|--------------|----------------|---------|----------------|---|-----|---|------|---|-----|---|------|
|  | Primary | Sometimes Done | Primary | Sometimes Done | Primary      | Sometimes Done | Primary | Sometimes Done | Primary      | Sometimes done | Primary | Sometimes done |   |     |   |      |   |     |   |      |
| <b>Agricultural</b>  | F       | %              | F       | %              | F            | %              | F       | %              | F            | %              | F       | %              | F | %   | F | %    |   |     |   |      |
| 1.Choice of plant species/variety to grow  | 12      | 69.            | 4       | 2.21           | 5            | 31.            | 7       | 3.9            | 8            | 4.4            | 1       | 0.60           | 6 | 3.3 | 1 | 0.60 | 8 | 4.4 | 1 | 0.60 |
|  | 6       | 61             |         |                | 7            | 49             |         | 0              |              | 0              |         |                |   |     |   |      |   |     |   |      |
| 2.Preparation of rooting medium  | 11      | 61.            | 3       | 1.66           | 5            | 30.            | 6       | 3.3            | 4            | 2.2            | 2       | 1.10           | 7 | 3.9 | 1 | 0.60 | 1 | 7.2 | 2 | 1.10 |
|  | 1       | 33             |         |                | 4            | 00             |         | 2              |              | 0              |         |                |   |     |   |      |   |     |   |      |
| 3.Preparation of propagation beds  | 96      | 53.            | 4       | 2.21           | 4            | 27.            | 4       | 2.2            | 4            | 2.2            | 1       | 0.60           | 6 | 3.3 | 1 | 0.60 | 1 | 5.5 | 1 | 0.60 |
|  |         | 04             |         |                | 8            | 00             |         | 0              |              | 0              |         |                |   |     |   |      |   |     |   |      |
| 4.Gathering of seeds/ planting materials   | 11      | 61.            | 4       | 2.21           | 5            | 29.            | 5       | 2.8            | 4            | 2.2            | 1       | 0.60           | 6 | 3.3 | 1 | 0.60 | 1 | 8.3 | 1 | 0.60 |
|  | 1       | 33             |         |                | 3            | 00             |         | 0              |              | 0              |         |                |   |     |   |      |   |     |   |      |
| 5.Seeding/rooting of planting materials  | 11      | 62.            | 3       | 1.66           | 5            | 29.            | 4       | 2.2            | 4            | .2.            | 2       | 1.10           | 7 | 3.9 | 1 | 0.60 | 1 | 8.8 | 1 | 0.60 |
|  | 3       | 43             |         |                | 2            | 00             |         | 0              |              | 2              |         |                |   |     |   |      |   |     |   |      |
| 6.Planting of mother trees/shrubs/plants   | 11      | 62.            | 4       | 2.21           | 5            | 29.            | 5       | 2.8            | 4            | 2.2            | 1       | 0.60           | 7 | 3.9 | 2 | 1.10 | 1 | 8.8 | 1 | 0.60 |
|  | 4       | 98             |         |                | 3            | 00             |         | 0              |              | 0              |         |                |   |     |   |      |   |     |   |      |
| 7.Care and maintenance of mother plants  |         |                |         |                |              |                |         |                |              |                |         |                |   |     |   |      |   |     |   |      |
| 7.1.Watering   | 12      | 66.            | 5       | 2.76           | 5            | 33.            | 6       | 3.3            | 4            | 2.2            | 2       | 1.10           | 6 | 3.3 | 2 | 1.10 | 1 | 5.5 | 2 | 1.10 |
|  | 0       | 30             |         |                | 9            | 00             |         | 0              |              | 0              |         |                |   |     |   |      |   |     |   |      |
| 7.2.Fertilizer application   | 11      | 61.            | 5       | 2.76           | 5            | 30.            | 7       | 3.9            | 4            | 2.2            | 1       | 0.60           | 8 | 4.4 | 2 | 1.10 | 1 | 6.6 | 2 | 1.10 |
|  | 2       | 88             |         |                | 5            | 00             |         | 0              |              | 0              |         |                |   |     |   |      |   |     |   |      |
| 7.3.Prevention and control of pests and diseases (including chemical pests and pesticides) | 10      | 59.            | 2       | 1.11           | 5            | 29.            | 3       | 1.7            | 4            | 2.2            | 1       | 0.60           | 7 | 3.9 | 1 | 0.60 | 1 | 5.5 | 2 | 1.10 |
|  | 7       | 12             |         |                | 3            | 00             |         | 0              |              | 0              |         |                |   |     |   |      |   |     |   |      |
| 7.4.Pruning and trimming   | 11      | 64.            | 4       | 2.21           | 5            | 31.            | 6       | 3.3            | 4            | 2.2            | 1       | 0.60           | 6 | 3.3 | 1 | 0.60 | 1 | 7.2 | 1 | 0.60 |
|  | 6       | 10             |         |                | 7            | 00             |         | 0              |              | 0              |         |                |   |     |   |      |   |     |   |      |
| 8.Bagging of potting medium  | 11      | 62.            | 3       | 1.66           | 5            | 29.            | 4       | 2.2            | 5            | 2.8            | 1       | 0.60           | 6 | 3.3 | 1 | 0.60 | 1 | 7.7 | 2 | 1.10 |
|  | 3       | 40             |         |                | 3            | 00             |         | 0              |              | 0              |         |                |   |     |   |      |   |     |   |      |
| 9.Transplanting of rooted planting materials   | 11      | 60.            | 3       | 1.66           | 5            | 28.            | 4       | 2.2            | 4            | 2.2            | 1       | 0.60           | 6 | 3.3 | 1 | 0.60 | 1 | 6.6 | 2 | 1.10 |
|  | 0       | 77             |         |                | 1            | 00             |         | 0              |              | 0              |         |                |   |     |   |      |   |     |   |      |
| 10.Care and maintenance of polybagged ornamentals  |         |                |         |                |              |                |         |                |              |                |         |                |   |     |   |      |   |     |   |      |
| 10.1.Watering  | 13      | 74.            | 6       | 3.31           | 6            | 35.            | 7       | 3.9            | 6            | 3.3            | 2       | 1.10           | 8 | 4.4 | 2 | 1.10 | 1 | 6.6 | 2 | 1.10 |
|  | 5       | 59             |         |                | 4            | 00             |         | 0              |              | 0              |         |                |   |     |   |      |   |     |   |      |
| 10.2.Fertilizer application of chemical fertilizers  | 10      | 59.            | 7       | 3.87           | 5            | 32.            | 7       | 3.9            | 6            | 3.3            | 1       | 0.60           | 4 | 2.2 | 1 | 0.60 | 1 | 7.7 | 2 | 1.10 |
|  | 8       | 67             |         |                | 8            | 00             |         | 0              |              | 0              |         |                |   |     |   |      |   |     |   |      |
| 10.3.Prevents and controls pests (including handling of chemical                           | 10      | 59.            | 5       | 2.80           | 5            | 31.            | 4       | 2.2            | 6            | 3.3            | 1       | 0.60           | 4 | 2.2 | 1 | 0.60 | 1 | 6.6 | 2 | 1.10 |



| Productive Activities                    | MOTHER  |     |                |      | FATHER  |     |                |     | CHILDREN (F) |     |                |      | CHILDREN (M) |     |                |      | OTHERS  |     |                |      |
|--|---------|-----|----------------|------|---------|-----|----------------|-----|--------------|-----|----------------|------|--------------|-----|----------------|------|---------|-----|----------------|------|
|  | Primary |     | Sometimes Done |      | Primary |     | Sometimes Done |     | Primary      |     | Sometimes Done |      | Primary      |     | Sometimes done |      | Primary |     | Sometimes done |      |
| Agricultural                             | F       | %   | F              | %    | F       | %   | F              | %   | F            | %   | F              | %    | F            | %   | F              | %    | F       | %   | F              | %    |
| pesticides)                              | 7       | 10  |                |      | 7       | 00  |                |     | 0            |     | 0              |      |              | 0   |                |      |         |     | 2              | 0    |
| 10.4 Pruning and trimming                | 10      | 60. | 1              | 0.55 | 5       | 31. | 3              | 1.7 | 4            | 2.2 | 1              | 0.60 | 5            | 2.8 | 1              | 0.60 | 1       | 8.3 | 1              | 0.60 |
| 10.5 Re-bagging                          | 9       | 22  |                |      | 6       | 00  |                |     | 0            |     | 0              |      | 0            |     |                |      |         | 5   | 0              |      |
|  | 10      | 58. | 4              | 2.21 | 5       | 30. | 3              | 1.7 | 3            | 1.7 | 1              | 0.60 | 5            | 2.8 | 1              | 0.60 | 1       | 8.8 | 2              | 1.10 |
|  | 6       | 56  |                |      | 4       | 00  |                |     | 0            |     | 0              |      | 0            |     |                |      |         | 6   | 0              |      |
| 11.Hauling of merchandise                | 54      | 29. | 5              | 2.76 | 5       | 28. | 1              | 0.6 | 2            | 1.1 | 1              | 0.60 | 8            | 4.4 | 1              | 0.60 | 4       | 26. | 2              | 1.10 |
|  |         | 83  |                |      | 0       | 00  |                |     | 0            |     | 0              |      | 0            |     |                |      |         | 7   | 00             |      |
| 12.Transport of merchandise              | 65      | 35. | 2              | 1.11 | 4       | 27. | 1              | 0.6 | 2            | 1.1 | 1              | 0.60 | 5            | 2.8 | 0              | 0.00 | 5       | 31. | 2              | 1.10 |
|  |         | 90  |                |      | 8       | 00  |                |     | 0            |     | 0              |      | 0            |     |                |      |         | 6   | 00             |      |
| 13.Procurement of supplies and materials | 10      | 60. | 3              | 1.66 | 5       | 33. | 2              | 1.1 | 6            | 3.3 | 1              | 0.60 | 4            | 2.2 | 1              | 0.60 | 9       | 5.0 | 1              | 0.60 |
|  | 9       | 20  |                |      | 9       | 00  |                |     | 0            |     | 0              |      | 0            |     |                |      |         | 0   |                |      |
| 14.Inventory of resources and supplies   | 52      | 28. | 2              | 1.10 | 3       | 17. | 1              | 0.6 | 5            | 2.8 | 0              | 0.00 | 3            | 1.7 | 0              | 0.00 | 3       | 1.7 | 0              | 0.00 |
|  |         | 70  |                |      | 1       | 00  |                |     | 0            |     | 0              |      | 0            |     |                |      |         | 0   |                |      |

Table 5. Cont'd...). Productive activities of ornamental crop growers and their household members

| Income-generating                         |     |       |   |      |    |       |   |      |   |      |   |      |   |      |   |      |   |      |   |      |
|---|-----|-------|---|------|----|-------|---|------|---|------|---|------|---|------|---|------|---|------|---|------|
| 1.Direct contact/negotiation with buyers  | 137 | 75.70 | 3 | 1.66 | 52 | 29.00 | 5 | 2.80 | 5 | 2.80 | 0 | 0.00 | 4 | 2.20 | 0 | 0.00 | 5 | 2.80 | 1 | 0.60 |
| 2.Pricing and promotion                   | 134 | 74.03 | 5 | 2.77 | 50 | 28.00 | 2 | 1.10 | 5 | 2.80 | 0 | 0.00 | 4 | 2.20 | 0 | 0.00 | 2 | 1.10 | 2 | 1.10 |
| 3.Handling of sales and payments          | 127 | 70.17 | 4 | 2.21 | 46 | 25.00 | 2 | 1.10 | 8 | 4.40 | 0 | 0.00 | 2 | 1.10 | 0 | 0.00 | 3 | 1.70 | 1 | 0.60 |
| 4.Record keeping and financial management | 48  | 26.52 | 2 | 1.11 | 28 | 15.00 | 1 | 0.60 | 3 | 1.70 | 1 | 0.60 | 2 | 1.10 | 0 | 0.00 | 2 | 1.10 | 1 | 0.60 |
| Employment                                |     |       |   |      |    |       |   |      |   |      |   |      |   |      |   |      |   |      |   |      |
| 1.Interview and hiring of job applicants  | 55  | 30.40 | 2 | 1.10 | 38 | 21.00 | 1 | 0.60 | 4 | 2.20 | 0 | 0.00 | 3 | 1.70 | 0 | 0.00 | 1 | 0.60 | 1 | 0.60 |
| 2.Training of workers                     | 52  | 28.70 | 2 | 1.10 | 37 | 20.00 | 1 | 0.60 | 4 | 2.20 | 1 | 0.60 | 3 | 1.70 | 0 | 0.00 | 2 | 1.10 | 0 | 0.00 |
| 3.Supervision of workers                  | 53  | 29.30 | 1 | 0.55 | 36 | 20.00 | 1 | 0.60 | 4 | 2.20 | 1 | 0.60 | 3 | 1.70 | 0 | 0.00 | 2 | 1.10 | 1 | 0.60 |
| 4.Promotion/termination of workers        | 50  | 27.62 | 2 | 1.10 | 35 | 19.00 | 1 | 0.60 | 4 | 2.20 | 1 | 0.60 | 3 | 1.70 | 0 | 0.00 | 1 | 0.60 | 1 | 0.55 |

**Table 6. Leisure activities of ornamental crop growers**

| LEISURE ACTIVITY        | MALE |       |                | FEMALE |       |                |
|-------------------------|------|-------|----------------|--------|-------|----------------|
|                         | F    | %     | Mean Hrs Spent | F      | %     | Mean Hrs Spent |
| 1. Watching television  | 15   | 27.27 | 2.73           | 40     | 72.73 | 3.05           |
| 2. Watching movies      | 2    | 66.67 | 6              | 1      | 33.33 | 1              |
| 3. Playing Gadgets      | 6    | 35.29 | 5.83           | 11     | 64.71 | 3.9            |
| 4. Surfing the Internet | 5    | 0.50  | 1.8            | 5      | 50    | 5.8            |
| 5. Listening to Radio   | 4    | 0.40  | 0.3            | 6      | 0.6   | 4.08           |
| 6. Going to Salon       | 0    | 0.00  | 0              | 1      | 100   | 1              |
| 7. Sleeping             | 2    | 25.00 | 8              | 6      | 75    | 7.71           |
| GRAND MEAN              |      |       | 3.52           |        |       | 3.8            |

**Table 7. Community activities of ornamental crop growers and their household members**

| COMMUNITY ACTIVITY           | MOTHER  |       | FATHER         |      | CHILDREN (F) |       |                |      | CHILDREN (M) |      |                |      | OTHERS  |      |                |      |   |      |   |      |
|------------------------------|---------|-------|----------------|------|--------------|-------|----------------|------|--------------|------|----------------|------|---------|------|----------------|------|---|------|---|------|
|                              | Primary |       | Sometimes done |      | Primary      |       | Sometimes done |      | Primary      |      | Sometimes done |      | Primary |      | Sometimes done |      |   |      |   |      |
|                              | F       | %     | F              | %    | F            | %     | F              | %    | F            | %    | F              | %    | F       | %    | F              | %    |   |      |   |      |
| 1. Clean and Green Projects  | 83      | 45.86 | 4              | 2.21 | 41           | 22.65 | 7              | 3.86 | 2            | 1.10 | 3              | 1.65 | 6       | 3.31 | 1              | 0.55 | 1 | 0.55 | 1 | 0.55 |
| 2. Feeding Programs          | 55      | 30.39 | 4              | 2.21 | 32           | 17.68 | 4              | 2.21 | 2            | 1.10 | 2              | 1.1  | 5       | 2.76 | 2              | 0.55 | 2 | 1.10 | 1 | 0.55 |
| 3. Peace and Order Committee | 66      | 36.46 | 3              | 1.55 | 37           | 20.44 | 5              | 1.65 | 2            | 1.10 | 1              | 2.76 | 4       | 2.21 | 1              | 0.55 | 1 | 0.55 | 0 | 0    |

The reproductive activities sometimes performed by the mothers are buying distilled/ purified water (2.8%) and collecting firewood (3.87%). Reproductive activities sometimes performed by fathers include taking care of seniors at home and bringing adult members to the doctor for medical check-up (0.55%), taking care of children at home (1.11%), taking care of sick seniors and children and tutoring children (1.66%), bringing children to the doctor for medical check-up (2.2%), buying gas (2.8%), buying vegetables / fish (3.87%), fetching water (3.9%), and preparing food (6.01%). The reproductive activities sometimes performed by female children are doing house repair (2.21%), buying groceries and washing clothes (4.42%), cleaning the house (4.98%), cooking (5.53%), washing dishes (7.18%), and ironing clothes (7.74%). The male children sometimes take care of seniors at home (0.55%) and generally take care of children at home (1.11%).

As seen in Table 5, productive activities involved the activities done by the male and female participants in the production of the ornamental crops which includes the agricultural, income generating, and employment aspects. Among the list of productive activities, all are primarily performed by mothers namely, in ascending order: record keeping and financial management (26.52%), promotion / termination of workers (27.62%), training of worker (28.7%), hauling of merchandize (29.83%), interview and hiring of job applicants (30.4%), transport of merchandize (35.9%), preparation of propagation beds (53.04%), re-bagging of poly-bagged ornamentals (58.56%), prevention and control of pests in poly-bagged ornamentals (59.1%), prevention and control of pests and diseases in mother trees / shrubs / plants (59.12%), fertilizer application in poly-bagged ornamentals (59.67%), procurement of supplies and materials (60.2%), pruning and trimming of poly-bagged ornamentals (60.22%), transplanting of rooted planning materials (60.77%), preparation of rooting medium and gathering of seeds / planting materials (61.33%), fertilizer application in mother trees / shrubs / plants (61.88%), bagging of potting medium (62.4%), seeding / rooting of planting materials (62.43%), pruning and trimming of mother trees / shrubs / plants (64.1%), watering of mother trees/shrubs/plants (66.3%), selecting the plant species / variety to grow (69.61%), handling of sales and payments (70.17%), pricing and promotion (74.03%), watering of poly-bagged ornamentals (74.59%), and direct contact / negotiation (75.7%).

Although mothers dominated performing productive activities, the fathers performed primarily in the selection of the plant species/variety to grow (31.4%), procurement of supplies and materials (33%), watering mother plants (33%), fertilizer application (32%), pruning and trimming (31%), watering poly-bagged ornamentals (35%), prevention and control of pests (32%), and re-bagging (30%). Findings also showed that other household members are involved primarily in hauling (26%) and transport (31%) of merchandize.

Other productive activities sometimes performed by mothers included supervision of workers, promotion / termination of workers, training of worker, interviewing and hiring of job applicants, record keeping and financial management, and inventory of resources and supplies activities (0.6%), handling of sales and payments, pricing and promotion, procurement of supplies and materials activities (1.1%), re-bagging, pruning and trimming, and prevention and control of pests and diseases of mother trees / shrubs / plants (1.7%), prevention and control of pests and diseases of poly-bagged ornamentals, transplanting of rooted planning materials, bagging of potting medium, and preparation of propagation beds activities (2.2%), direct-contact / negotiation, planting of mother trees / shrubs plants and gathering of seeds / planting materials activities (2.8%), preparation of rooting medium (3.32%), watering and pruning and trimming of mother trees / shrubs / plants (3.3%), and fertilizer application in mother trees / shrubs / plants (fertilizer application) and watering of poly-bagged ornamentals (3.9%), record keeping and financial management, interview and hiring of job applicants, supervision of workers, and promotion / termination of workers activities (0.6%), record keeping and financial management, interview and hiring of job applicants, and supervision of workers activities (0.6%), and hauling and transport of merchandize and pricing and promotion activities (1.1%), were only performed by fathers, female children, and others, respectively.

Table 6 presents the community leisure activities of the participants. The community activities identified were mostly watching television, watching movies, playing with gadgets, surfing the Internet, listening to the radio, going to the salon, and sleeping. The longest hours spent by male and female sleeping are 8 hours and 7.71 hours, respectively. In general, those with longest time spent for all the community activities were evident among the female participants with

an average of 3.8 hours. Males on the other hand recorded a 3.52 minimum hour's participation in community related activities.

Table 7 shows the community managing activities performed by the participants and their family members. Three community activities were recognized in this study, namely: clean and green projects, feeding programs, and peace and order. Generally, all participants were involved in the mentioned community managing activities. Mothers participation in community managing activities were 45.86% clean and green projects, 30.39% feeding programs, and 36.46% peace and order.

Fathers' participation are as follows 22.65% clean and green projects, 17.68% feeding programs, and 20.44% peace and order. Other

household members, male, and female children have little participation in community managing activities with not more than 3 percent.

Table 8 shows that majority of the mothers had access to land (79.01%), farm equipment (75.14%), money (81.77%), credit/loan (60.77%), transport vehicles (55.80%), skills enhancement (70.72%), and social support services (66.85%). Followed by the fathers' percentages on their access to land (58.56%), farm equipment (56.35%), money (48.07%), credit/loan (33.15%), transport vehicles (49.17%), skills enhancement (35.91%), and social support services (30.94%). The female children were primarily concerned with access to social support services (30.97%) whilst male children were busy with access to land (7.18%). Others were focused on access to skills enhancement (4.42%)

**Table 8. Access to and control over resources and benefits of the ornamental crop growers**

|                            | MOTHER |       | FATHER |       | CHILDREN (F) |       | CHILDREN (M) |       | OTHERS |       |
|----------------------------|--------|-------|--------|-------|--------------|-------|--------------|-------|--------|-------|
|                            | F      | %     | F      | %     | f            | %     | f            | %     | F      | %     |
| <b>Access</b>              |        |       |        |       |              |       |              |       |        |       |
| 1. Land                    | 143    | 79.01 | 106    | 58.56 | 16           | 8.84  | 13           | 7.18  | 7      | 3.86  |
| 2. Farm Equipment          | 136    | 75.14 | 102    | 56.35 | 9            | 4.97  | 8            | 4.42  | 6      | 3.31  |
| 3. Money                   | 148    | 81.77 | 87     | 48.07 | 13           | 7.18  | 7            | 3.86  | 5      | 2.76  |
| 4. Credit/ Loan            | 110    | 60.77 | 60     | 33.15 | 14           | 7.73  | 7            | 3.86  | 4      | 2.21  |
| 5. Transport Vehicles      | 101    | 55.80 | 89     | 49.17 | 9            | 4.97  | 11           | 6.07  | 3      | 1.65  |
| 6. Skills Enhancement      | 128    | 70.72 | 65     | 35.91 | 8            | 4.42  | 7            | 3.86  | 6      | 4.42  |
| 7. Social Support Services | 121    | 66.85 | 56     | 30.94 | 9            | 30.97 | 6            | 3.31  | 7      | 3.86  |
| <b>Control</b>             |        |       |        |       |              |       |              |       |        |       |
| 1. Land                    | 135    | 74.58 | 101    | 55.80 | 13           | 7.18  | 7            | 3.87  | 8      | 4.42  |
| 2. Farm Equipment          | 140    | 77.35 | 95     | 52.49 | 8            | 4.42  | 6            | 3.32  | 8      | 4.42  |
| 3. Money                   | 144    | 79.56 | 82     | 45.30 | 12           | 6.63  | 6            | 3.32  | 4      | 2.21  |
| 4. Credit/ Loan            | 117    | 64.64 | 56     | 30.94 | 12           | 6.63  | 6            | 3.32  | 4      | 20.21 |
| 5. Transport Vehicles      | 105    | 58.01 | 85     | 46.96 | 7            | 3.87  | 7            | 3.87  | 3      | 1.65  |
| 6. Skills Enhancement      | 130    | 71.82 | 63     | 34.81 | 6            | 3.32  | 7            | 3.87  | 8      | 4.42  |
| 7. Social Support Services | 125    | 69.06 | 60     | 33.15 | 7            | 3.87  | 6            | 3.32  | 4      | 2.21  |
| <b>Benefits</b>            |        |       |        |       |              |       |              |       |        |       |
| 1. Land                    | 118    | 65.19 | 97     | 53.59 | 110          | 60.77 | 105          | 58.01 | 16     | 8.84  |
| 2. Farm Equipment          | 118    | 65.19 | 94     | 51.93 | 101          | 55.80 | 96           | 53.04 | 16     | 8.84  |
| 3. Money                   | 119    | 65.75 | 99     | 54.70 | 107          | 59.12 | 102          | 56.35 | 19     | 10.50 |
| 4. Credit/ Loan            | 119    | 65.75 | 95     | 52.49 | 108          | 59.67 | 105          | 58.01 | 21     | 11.60 |
| 5. Transport Vehicles      | 103    | 56.91 | 88     | 48.62 | 100          | 55.25 | 100          | 55.25 | 14     | 7.74  |
| 6. Skills Enhancement      | 114    | 62.98 | 91     | 50.28 | 97           | 53.39 | 95           | 52.49 | 19     | 10.50 |
| 7. Social Support Services | 114    | 62.98 | 87     | 48.07 | 91           | 50.28 | 92           | 50.83 | 18     | 9.94  |

Mothers still had more control and authority over land (74.58%), farm equipment (77.35%), money (79.56%), credit/loan (64.64%), transport vehicles (58.01%), skills enhancement (71.82%), and social support services (69.06%) compared to the fathers. Female children have more control over land (7.18%) than male children's control over land, transport vehicle, and skills enhancement (3.87%), others were concerned with control over credit / loan (20.21%).

Mothers accessed benefits from land and farm equipment (65.19%), money and credit/loan (65.75%) and, skills enhancement and social support services (62.98%). Fathers benefited significantly more in money (54.70%), land (53.59%), and credit/loan (52.49%). Female children also benefited mostly from land (60.77%), credit/loan (59.67%), and money (59.12%), male children took benefit from credit / loan and land (58.01%), money (56.35%), and transport vehicles (55.25%). Generally, other members of the household received benefits from credit / loan (11.60%), both money and skills enhancement (10.50%), and social support services (9.94%) respectively.

Table 9 shows that among the household members, the mothers decide more on reproductive-related activities such as buying gadgets (49.72%), selecting school for children (32.04%), and selecting course for children (23.76%). On the other hand, the fathers, male and female children had smaller contribution to these compared to other reproductive activities. On the other hand, fathers sometimes decide on a few reproductive related activities.

The primary and non-primary decision makers among the participants in performing productive activities were done by the male and female participants in the production of the ornamental crops which is the agricultural, income generating, and employment aspects. On

matters related to productive activities, these were decided largely by mothers. These activities include selection of plant species and varieties to grow (66.3%), preparation of rooting medium (62.43%), preparation of propagation beds (62.43%), gathering of planting materials (62.98%), selecting the propagation method (62.98%), and planting of mother plants (61.88%). Generally, children have lesser contribution in decision making on these productive related activities.

Decision making in productive related activities in Table 10 also shows that the propagation method (62.98%), planting of mother plants (61.88%), care and maintenance of mother plants such water management (64.09%), fertilizer management (58.01%), pest management (54.14%), and pruning and trimming (62.98%), bagging of growing medium (61.33%), transplanting of rooted materials (61.33%), water management of plants in poly-bags (69.61%), fertilizer management (61.88%), pest management (59.67%), and pruning and trimming (68.51%), hauling (46.41%), transporting the merchandise (44.75%), procuring supplies and materials (65.19%), and conducting inventory and purchasing of resources and supplies (37.02%).

Matters pertaining to income generating activities are mostly decided by mothers. These activities include contacting and negotiating with buyers (75.14%), pricing and promoting of products (74.59%), handling of sales and payments (75.14%), and record keeping and financial management (32.6%). Thus, these were seldom the responsibility of the fathers. Lastly, matters pertaining to employment are decided by mothers. These are hiring of job applicants (28.18%), training of workers (27.62%), supervising workers (25.97%), promoting and terminating workers (27.62%), and expanding the business (30.94%).

**Table 9. Decision Making (Both Primary and Sometimes Done) – Reproductive Related**

| REPRODUCTIVE ACTIVITIES       | Mother |       | Father |       | Children (F) |       | Children (M) |       | Others |      |
|-------------------------------|--------|-------|--------|-------|--------------|-------|--------------|-------|--------|------|
|                               | F      | %     | F      | %     | F            | %     | F            | %     | F      | %    |
| Buying gadgets for children   | 90     | 49.72 | 48     | 26.52 | 42           | 23.2  | 35           | 19.34 | 0      | -    |
| Selecting course for children | 43     | 23.76 | 26     | 14.36 | 92           | 50.83 | 74           | 40.88 | 3      | 1.66 |
| Selecting school for children | 58     | 32.04 | 40     | 22.10 | 82           | 45.30 | 69           | 38.12 | 2      | 1.10 |

Table 10. Decision making (primary done) – productive related

| PRODUCTIVE ACTIVITIES   | Mother |       | Father |       | Children<br>(F) |      | Children<br>(M) |      | Others |       |
|---|--------|-------|--------|-------|-----------------|------|-----------------|------|--------|-------|
|   | F      | %     | F      | %     | F               | %    | F               | %    | F      | %     |
| <b>Agricultural</b>   |        |       |        |       |                 |      |                 |      |        |       |
| 1. Selection of plants species variety to grow                    | 120    | 66.30 | 61     | 33.70 | 4               | 2.21 | 3               | 1.66 | 3      | 1.66  |
| 2. Preparation of rooting medium                                  | 113    | 62.43 | 65     | 35.91 | 3               | 1.66 | 2               | 1.10 | 3      | 1.66  |
| 3. Preparation of propagation breeds                              | 113    | 62.43 | 66     | 36.46 | 3               | 1.66 | 3               | 1.66 | 3      | 1.66  |
| 4. Gathering of planting materials                                | 114    | 62.98 | 66     | 36.46 | 3               | 1.65 | 2               | 1.10 | 3      | 1.65  |
| 5. Selecting the propagation method                               | 114    | 62.98 | 65     | 35.91 | 3               | 1.66 | 4               | 2.21 | 3      | 1.66  |
| 6. Planting of mother plants                                      | 112    | 61.88 | 64     | 35.36 | 3               | 1.66 | 2               | 1.10 | 3      | 1.66  |
| 7. Care and maintenance of mother plants                          |        |       |        |       |                 |      |                 |      |        |       |
| 7.1 Water management  | 116    | 64.09 | 64     | 35.36 | 3               | 1.66 | 2               | 1.10 | 3      | 1.66  |
| 7.2 fertilizer management   | 105    | 58.01 | 60     | 33.15 | 3               | 1.66 | 3               | 1.66 | 3      | 1.66  |
| 7.3 pest management   | 98     | 54.14 | 54     | 29.83 | 3               | 1.66 | 2               | 1.10 | 3      | 1.66  |
| 7.4 pruning and trimming  | 114    | 62.98 | 58     | 32.04 | 3               | 1.66 | 3               | 1.66 | 3      | 1.66  |
| 8. Bagging of growing medium                                      | 111    | 61.33 | 59     | 32.60 | 4               | 2.21 | 3               | 1.66 | 3      | 1.66  |
| 9. Transplanting of rooted materials                              | 111    | 61.33 | 58     | 32.04 | 3               | 1.66 | 2               | 1.10 | 4      | 2.21  |
| 10. Care and management of poly bags                              |        |       |        |       |                 |      |                 |      |        |       |
| 10.1 Water Management   | 126    | 69.61 | 66     | 36.46 | 3               | 1.66 | 5               | 2.76 | 4      | 2.21  |
| 10.2 Fertilizer Management  | 112    | 61.88 | 59     | 32.60 | 3               | 1.66 | 3               | 1.66 | 5      | 2.76  |
| 10.3 pest management  | 108    | 59.67 | 57     | 31.49 | 3               | 1.66 | 3               | 1.66 | 5      | 2.76  |
| 10.4 pruning and trimming   | 124    | 68.51 | 65     | 35.91 | 3               | 1.66 | 5               | 2.76 | 5      | 2.76  |
| 11. Hauling   | 84     | 46.41 | 48     | 26.52 | 4               | 2.21 | 2               | 1.10 | 23     | 12.71 |
| 12. Transporting the merchandise                                  | 81     | 44.75 | 49     | 27.07 | 3               | 1.66 | 1               | 0.55 | 26     | 14.36 |
| 13. Procuring of the supplies and materials                       | 118    | 65.19 | 53     | 29.28 | 3               | 1.66 | 1               | 0.55 | 4      | 2.21  |
| 14. Conducting inventory and purchasing of resources and supplies | 67     | 37.02 | 33     | 18.23 | 1               | 0.55 | 0               | 0.00 | 2      | 1.10  |
| <b>Income Generating</b>  |        |       |        |       |                 |      |                 |      |        |       |
| 1. Contacting and negotiating with buyers                         | 136    | 75.14 | 44     | 24.13 | 4               | 2.21 | 2               | 1.10 | 5      | 2.76  |
| 2. Pricing and promoting of products                              | 135    | 74.59 | 44     | 24.31 | 5               | 2.76 | 2               | 1.10 | 4      | 2.21  |
| 3. Handling of sales an payments                                  | 136    | 75.14 | 46     | 25.41 | 5               | 2.76 | 2               | 1.10 | 4      | 2.21  |
| 4. Record keeping and financial                                   | 59     | 32.60 | 29     | 16.02 | 4               | 2.21 | 0               | 0.00 | 2      | 1.10  |

| PRODUCTIVE ACTIVITIES                | Mother |       | Father |       | Children |      | Children |      | Others |      |
|--------------------------------------|--------|-------|--------|-------|----------|------|----------|------|--------|------|
|                                      | F      | %     | F      | %     | (F)      | %    | (M)      | %    | F      | %    |
|                                      |        |       |        |       | F        |      | F        |      |        |      |
| Management                           |        |       |        |       |          |      |          |      |        |      |
| <b>Employment</b>                    |        |       |        |       |          |      |          |      |        |      |
| 1. Hiring of job applicants          | 51     | 28.18 | 32     | 17.68 | 4        | 2.21 | 3        | 1.66 | 2      | 1.10 |
| 2. Training of workers               | 50     | 27.62 | 31     | 17.13 | 5        | 2.76 | 4        | 2.21 | 2      | 1.10 |
| 3. Supervising workers               | 47     | 25.97 | 30     | 16.57 | 5        | 2.76 | 2        | 1.10 | 3      | 1.66 |
| 4. Promoting and terminating workers | 50     | 27.62 | 32     | 17.68 | 4        | 2.21 | 3        | 1.66 | 2      | 1.10 |
| 5. Expanding the business            | 56     | 30.94 | 32     | 17.68 | 5        | 2.76 | 4        | 2.21 | 2      | 1.10 |

**Table 10. (Cont'd...). Decision Making (Sometimes Done) – Productive Related**

| PRODUCTIVE ACTIVITIES   | Mother |      | Father |      | Children<br>(F) |       | Children<br>(M) |      | Others |      |
|---|--------|------|--------|------|-----------------|-------|-----------------|------|--------|------|
|   | F      | %    | F      | %    | F               | %     | F               | %    | F      | %    |
| <b>Agricultural</b>   |        |      |        |      |                 |       |                 |      |        |      |
| 1. Selection of plants species variety to grow                    | 2      | 1.10 | 2      | 1.10 | 1               | 0.55  | 2               | 1.10 | 0      | 0.00 |
| 2. Preparation of rooting medium                                  | 4      | 2.21 | 2      | 1.10 | 1               | 0.55  | 2               | 1.10 | 1      | 0.55 |
| 3. Preparation of propagation breeds                              | 3      | 1.66 | 2      | 1.10 | 1               | 0.55  | 2               | 1.10 | 1      | 0.55 |
| 4. Gathering of planting materials                                | 3      | 1.66 | 3      | 1.66 | 1               | 0.55  | 2               | 1.10 | 1      | 0.55 |
| 5. Selecting the propagation method                               | 4      | 2.21 | 3      | 1.66 | 1               | 0.55  | 1               | 0.55 | 1      | 0.55 |
| 6. Planting of mother plants                                      | 3      | 1.66 | 2      | 1.10 | 1               | 0.55  | 1               | 0.55 | 0      | 0.00 |
| 7. Care and maintenance of mother plants                          |        |      |        |      |                 |       |                 |      |        |      |
| 7.1 Water management  | 3      | 1.66 | 4      | 2.21 | 1               | 0.55  | 2               | 1.10 | 1      | 0.55 |
| 7.2 fertilizer management   | 4      | 2.21 | 2      | 1.10 | 1               | 0.55  | 2               | 1.10 | 1      | 0.55 |
| 7.3 pest management   | 1      | 0.55 | 3      | 1.66 | 1               | 0.55  | 2               | 1.10 | 1      | 0.55 |
| 7.4 pruning and trimming  | 3      | 1.66 | 4      | 2.21 | 1               | 0.55  | 2               | 1.10 | 1      | 0.55 |
| 8. Bagging of growing medium                                      | 3      | 1.66 | 3      | 1.66 | 1               | 0.55  | 2               | 1.10 | 1      | 0.55 |
| 9. Transplanting of rooted materials                              | 2      | 1.10 | 3      | 1.66 | 1               | 0.55  | 2               | 1.10 | 1      | 0.55 |
| 10. Care and management of poly bags                              |        |      |        |      |                 |       |                 |      |        |      |
| 10.1 Water Management   | 3      | 1.66 | 3      | 1.66 | 1               | 0.55  | 2               | 1.10 | 1      | 0.55 |
| 10.2 Fertilizer Management  | 2      | 1.10 | 3      | 1.66 | 1               | 0.55  | 2               | 1.10 | 1      | 0.55 |
| 10.3 pest management  | 1      | 0.55 | 3      | 1.66 | 90              | 49.72 | 2               | 1.10 | 1      | 0.55 |
| 10.4 pruning and trimming   | 1      | 0.55 | 2      | 1.10 | 1               | 0.55  | 2               | 1.10 | 1      | 0.55 |
| 11. Hauling   | 1      | 0.55 | 2      | 1.10 | 1               | 0.55  | 3               | 1.66 | 3      | 1.66 |
| 12. Transporting the merchandise                                  | 1      | 0.55 | 2      | 1.10 | 1               | 0.55  | 2               | 1.10 | 3      | 1.66 |
| 13. Procuring of the supplies and materials                       | 2      | 1.10 | 1      | 0.55 | 1               | 0.55  | 2               | 1.10 | 1      | 1.10 |
| 14. Conducting inventory and purchasing of resources and supplies | 1      | 0.55 | 2      | 1.10 | 0               | 0.00  | 2               | 1.10 | 1      | 0.55 |
| <b>Income Generating</b>  |        |      |        |      |                 |       |                 |      |        |      |
| 1. Contacting and negotiating with buyers                         | 1      | 0.55 | 3      | 1.66 | 0               | 0.00  | 2               | 1.10 | 1      | 0.55 |
| 2. Pricing and promoting of products                              | 0      | 0.00 | 2      | 1.10 | 0               | 0.00  | 2               | 1.10 | 1      | 0.55 |
| 3. Handling of sales an payments                                  | 0      | 0.00 | 2      | 1.10 | 0               | 0.00  | 2               | 1.10 | 1      | 0.55 |
| 4. Record keeping and financial Management                        | 0      | 0.00 | 1      | 0.55 | 0               | 0.00  | 2               | 1.10 | 1      | 0.55 |
| <b>Employment</b>   |        |      |        |      |                 |       |                 |      |        |      |
| 1. Hiring of job applicants                                       | 0      | 0.00 | 2      | 1.10 | 1               | 0.55  | 2               | 1.10 | 1      | 0.55 |
| 2. Training of workers  | 0      | 0.00 | 1      | 0.55 | 0               | 0.00  | 3               | 1.66 | 2      | 1.10 |
| 3. Supervising workers  | 1      | 0.55 | 1      | 0.55 | 0               | 0.00  | 1               | 0.55 | 1      | 0.55 |
| 4. Promoting and terminating workers                              | 0      | 0.00 | 2      | 1.10 | 1               | 0.55  | 2               | 1.10 | 1      | 0.55 |
| 5. Expanding the business   | 0      | 0.00 | 1      | 0.55 | 0               | 0.00  | 3               | 1.66 | 2      | 1.10 |

Table 10 shows productive activities were sometimes performed mostly handled by fathers like supervising workers (0.55%), promoting and terminating workers, hiring of job applicants,

handling of sales an payments, pricing and promoting of products, conducting inventory and purchasing of resources and supplies, transporting the merchandise, pruning and



trimming, fertilizer management; quantity and kind, planting of mother plants, preparation of propagation beds, preparation of rooting medium, and selection of plants species variety to grow activities (1.10%), all contacting and negotiating with buyers, pest management including chemicals and kind of control measures, fertilizer management; quantity and kind, water management, transplanting of rooted materials, bagging of growing medium, pest management including chemicals and kind of control measures, selecting the propagation method, gathering of planting materials (1.66%), and lastly, all pruning, trimming, and water management. Male children also sometimes perform supervising workers (0.55%), promoting and terminating workers, hiring of job applicants, record keeping and financial management, handling of sales and payments, pricing and promoting of products, conducting inventory and purchasing of resources and supplies, procuring supplies and materials, transporting the merchandise, fertilizer management, quantity and kind, preparation of propagation beds, preparation of rooting medium, and selection of plants species or varieties to grow (1.10%).

#### 4. CONCLUSION AND RECOMMENDATIONS

The gender roles of male and female through their reproductive, productive, community related and leisure activities, access to and control over resources and benefits, and decision making in reproductive and productive related activities were analysed. Generally, the ornamental growing industry is female-dominated, with closed-support by males. Gender roles on productive activities and community related activities are both performed by both female and male with a little participation of other household members and male and female children. Recognizing the contribution of women and men to socio-economic activities like ornamental growing boost the livelihood of the household and the local community to which it belongs.

It can be recommended to request from the LGU or the Office of the Municipal Agriculturists of Silang to conduct training and seminars that also encourages male members of the ornamental plant grower's households to attend, as that may contribute to the increase of males'

participation in the productive and community activities.

#### CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

#### COMPETING INTERESTS

Authors have declared that no competing interests exist.

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