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

Abstract. *Differentiating the role of male and female ornamental crop growers in Silang, Cavite is the main objective of this study. Specifically, it aimed to: determine the socio-demographic profile of the ornamental crop growers and their households; determined the gender role in reproductive, productive, and community activities; identified the access to and control over resource and benefits of male and female ornamental crop growers; and identified the decision makers in the reproductive and productive activities 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 are more female ornamental crop growers than males. Their age varies and ranges from 21-82 years old. They have 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 averages at 33 years old. Reproductive activities among ornamental crop growers are 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 are both performed by both female and male, however, a considerable number of females are also engaged hence making productive activities still female-dominated. Community activities among ornamental crop growers have both engaged male and female adults but more mothers participate mostly 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*

I. Introduction

Ornamentals are plants which are cultivated with the main aim of being marketed and used for decorative purposes, rather than as food or raw material (ISAAA, 2014). 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 (PSA, 2004). 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 (Office of the Provincial Agriculturist, Trece Martires City, 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, there were more female non-operators engaged in farming activities (PSA,2002). 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 (FAO,2011). In order to take into account these gender-specific gaps, disadvantages, needs and potentials, it is important to collect gender-disaggregated data. This study aims 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.

II. Literature Review

Gender roles refer to the socially defined tasks and responsibilities that are considered appropriate for males and females (Manfre & Rubin, 2012). According to Doss (2001), 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 (Mahat, 2003). Knowing how males and females participate in the household energy system and how they benefit is important and needs to be analyzed. Eder (2006) 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 (2015) 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.

III. 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 the181 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.

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
Total	181

The study questionnaire was adapted from the study of Mojica (2015). It underwent expert validation to suit the research questions with the research respondents and the research locale. The research questionnaire was consisted of eights parts, to namely; 1) demographic and socio-economic characteristics, 2) reproductive activities, 3) productive activities, 4) leisure activities, 5) seasonal calender of ornamental growers during productive activities, 6) access and control, 7) decision making, and 8) training needs. To calculate the reliability of the research tools, the researchers piloted the questionnaire to thirty (30) ornamental growers 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.

IV. Results and Discussion

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 (Table 2).

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 :	21 – 82		
	Average :	52		
Civil Status	Single		12	6.63
	Married		144	79.56
	Separated		4	2.21
	Widowed		19	10.50
Educational attainment	No formal education		1	.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
	College graduate		42	23.20
Major	Employment in public organization		7	3.87

Occupation	Employment in private organization	7	3.87
	Own business	112	61.88
	Ornamental	165	-
	Farming	78	43.09
Crop Produce	Banana	7	3.78
	Coffee	5	2.76
	Papaya	3	1.66
	Root crops	2	1.1
	Pineapple	9	4.97
	Others	81	46.40
	No Answer	74	40.88
Animal Produce	Cow	1	.55
	Chicken	4	4.66
	None	176	97.79
Tenurial Status	Owner	137	75.69
	Tenant	11	6.08
	Lease	12	6.63
	No answer	21	11.60

Sex. As shown in Table 2, the participants were composed of Sixty-three (63) male (34.81%) and one hundred-eighteen (118) female (65.19%). Age. Shown in Table 2, the participants' age ranged from 21 to 82 with a mean of 52.84 years and a standard deviation of 12.69. Civil status. 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%). Educational attainment. The educational attainment of the participants was varied. Overall, the highest percentage of the participants are high school graduates (35.91%) followed by college graduates (23.30%). Participants who attended but did not finish high school or college are 7.18 % and 14.36%, respectively. Eighteen (18) are elementary graduates (9.94%) and eleven (11) attended but did not finish (6.08%) elementary education. One (1) participant has no formal education (0.55%). Major occupation. More than half (62%) of the participants are owners of their ornamental enterprise and/or farm while the remaining (38%) are either farmers or employed in public or private organizations. Most of the participants that produce crops grow pineapple, banana, coffee, papaya, and root crops. Some raise chicken (4.66%) or cattle (0.55%). Tenurial status. Overall, most of the participants are farm owners (75.69%) while a small percentage are either tenants (6.08%) or lessors (6.63%).

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 (Table 3).

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

Household Characteristic		F (n=181)	%	Mean (n=181)
Type of family	Nuclear	122	67.77	
	Extended	58	32.22	
	Childless	1	.55	
Average household size				4.66
Average age of household members				33.35
Number of male and Female in a Household	Male	326		2.296
	Female	291		2.124
Householdmembers with occupation	Domestic (within the country)	110	27.38	2.973
	Abroad	9	2.26	1.286
	Local	270	67.84	2.368
Household members with Pension / NA (Still studying)	With pension			1
	Still studying			
Household monthly Income (excluding the participant)				Php 43,017
Type of housing (Materials Used)	Wood	8	4.42	
	Concrete	72	39.78	
	Mix (wood and cement)	98	54.14	
	Bamboo	3	1.66	
Level of structure (storey)	One	171	94.5	
	Two	10	5.5	
	Three	0	0	
Household Equipment / Facilities / Utilities	Iron	173	95.58	
	Fan	174	96.13	
	TV	174	96.13	
	Refrigerator	160	88.4	
	Washing Machine	163	90.05	
	Rice Cooker	171	94.48	
	Microwave	52	28.72	
	Stove	25	13.81	
	Water Dispenser	11	6.08	
	Desktop	84	46.41	
	Car	121	66.85	
	Gas stove	166	91.71	
Water source for drinking	Local water	48	26.52	
	Water [illegible]	138	76.24	
	Water pump	1	0.55	

	Deep well	3	1.66	
	Others	1	0.55	
Water source for washing	Local water	173	95.58	
	Water [illegible]	2	1.11	
	Water pump	3	1.66	
	Deep well	0	0	
	Others	0	0	
Water source for ornamentals	Local water	170	93.92	
	Water [illegible]	5	2.76	
	Water pump	3	1.66	
	Deep well	0	0	
	Others	0	0	
Energy source for cooking	Meralco	15	8.29	
	Wood	85	46.96	
	Gas	161	88.95	
Energy source for ironing	Meralco	174	96.13	
	Wood	0	0	
	Gas	1	0.55	
Energy source for the whole house	Meralco	175	96.68	
	Wood	1	0.55	
	Gas	1	0.55	

Type of Family. As shown in Table 3, most of the families have a nuclear family units (67.77%) while 33.3%have extended family units. One (1) family is childless. Average household size. The average household size of the participants is 4.66 members per household. Average age of household members. Overall, the average age of the members for each household is 33 years old (33.35%). Number of males and females in a household. In all households, the total number of male and female are 326 and 291, respectively. The average number of male per household is 2.296 and 2.124 for female. Household members with occupation. Overall, household members with occupation mostly work within the locale (67.84%), 27.38%works in the country, and 2.26% works abroad. Household members with pension. On average, one person within each household that has a pension. Household monthly income. The average monthly income per household is Php 43,017.00. Type of housing. 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 of bamboo (1.66%). Overall, majority of these houses are one-storey type (94.5%) and ten (10) are two-storey high (5.5%). Household equipment, facilities, and utilities. In total, majority of the participants have basic household equipment/appliances like flat iron (95.58%), electric fan (96.13%), TV (96.13%), refrigerator (88.4%), 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%). Water source. The participants' drinking water is mostly from purified water (76.24%) and from the local water company (26.53%). There are three (3) who source drinking water 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%). Energy source. The highest percentage of participants use gas as fuel for their cooking (88.95%)followed by wood (36.96%).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.

Gender Roles

Gender roles in this study were analyzed through their reproductive, productive, and community activities.

Reproductive activities. 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 checkup (53.04%), caring of sick children (56.91%), bringing children to the doctor for medical checkup (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 checkup (15%), buying vegetables/fish and tutoring children (11.6%), and bringing adult members to the doctor for medical check-up(11%).

	MOTHER	FATHER	CHILDREN (F)	CHILDREN (M)	OTHERS

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

REPRODUCTIVE ACTIVITY	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	3	1	4	2	2	1	7	3	3	1	1	1	1	2	1	0	0	1		
1.2 Buying drinking water	8	4	5	2	7	2	5	2	1	5	3	1	6.	3	1	1	1	.		
2. Fuel related																				
2.1 Collecting woods	2	1	7	3	4	2	0	0	1	.	1	.	4.	3	1	3	1	0		
2.2 Buying gas	8	4	2	1	5	3	5	2	9	5	2	1	6.	3	1	2	1	0		
3. Health related																				
3.1 Bringing children to doctor for check-up	1 07	5 9.1	1	0 .5	3 9	2 2	4	2 .2	2 8	1 5	1 .6	0 5	8. 3	4	2 .2	6	3 .3	0		
3.2 Bringing adult member to doctor for check-up	9 6	5 3.0 4	1	0 .5 5	4 4	2	1	0 .55	2 0	1 1	0	0	5	1	0 .55	5	2 .8	1	.	5
3.3 Generally taking care of children at home	1 13	6 2.4 3	3	1 .6 6	3 8	2 0.9	2	1 .11	1 4	7 .74	1	. 55	3. 87	2	1 .11	4	2 .2	1	5	5
3.4 Taking care of seniors at home	9 3	5 1.3	3	1 .6	3 6	1 9.8	1	0 .55	1 4	7 .74	0	0	5	1	0 .55	5	2 .8	0		
3.5 Taking care of sick																				
3.5 a. children	1	5	1	0.	3	1	3	1	1	0	0	0	3	1	0	4	1	0		
3.5 b. Senior	7	4	2	1.	2	1	3	1	1	9	0	0	4	1	0	3	1	0		
4. Food related																				
4.1 Preparing foods	1	7	8	4	3	2	1	6	1	7	8	4	3.	2	1	3	1	0		
4.2 Cooking	1	7	6	3	4	2	9	4	1	9	1	5	5.	4	2	2	1	0		
5.	1	7	4	2	3	1	3	1	3	1	1	7	1	4	2	5	2	1		
6.	1	7	4	2	2	1	3	1	3	1	8	4	7.	4	2	1	9	1		
7.	1	7	3	1	2	1	2	1	2	1	1	7	6.	4	2	1	5	2		
8. Buying vegetable/fish	1	8	3	1	5	2	7	3	2	1	6	3	3.	3	1	4	2	0		
9.Buying	1	8	1	4	26.52		5	2	1		4.		5.	2	1	5	2	0		
10. Cleaning the house	1	7	2	3	17.68		3	1	2		4.		1	6	3	8	4	2		
11. House repair	3	2	.	1	59.12			.55	6	4	2		7		1.66		12.71			
12. Tutoring children	8 0	4 4.2	1 .1	1 7	9.39		1	1.66	1 1	1.6	1 .5	0	. 55	1	0		1.11			

Male children also bring children to the doctor for checkup (8.3%) and wash dishes (11.6%). On the other hand, other family members buy drinking water and gas (15%), and also perform house repairs (12.7%).

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 checkup (0.55%), taking care of children home (1.11%), taking care of sick seniors and children and tutoring children (1.66%), bringing children to the doctor for medical checkup (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 home (1.11%).

Productive activities. These 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 (Table 5). 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 of 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 dominate in performing of production activities, fathers also 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 (30%), pruning and trimming (31%), watering poly-bagged ornamentals(35%), fertilizer application(32%), prevention and control of pests(32%), pruning and trimming (31%) 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 include 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,

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

PRODUCTIVE ACTIVITY	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			
Agriculture																				
1.Choice of plant species/variety to grow	126	69.61	4	2.21	57	31.49	7	3.9	8		1	.6	6	3.	1	.6	8	4.	1	.6
2.Preparation of rooting medium	111	61.33	3	1.66	54	30	6	3.32	4	2.	2	1.1	7	3.	1	.6	13	7.	2	1.1
3.Preparation of propagation beds	96	53.04	4	2.21	48	27	4	2.2	4	2.	1	.6	6	3.	1	.6	10	5.	1	.6
4.Gathering of seeds/ planting materials	111	61.33	4	2.21	53	29	5	2.8	4	2.	1	.6	6	3.	1	.6	15	8.	1	.6
5.Seeding/rooting of planting materials	113	62.43	3	1.66	52	29	4	2.2	4	.2	2	1.1	7	3.	1	.6	16	8.	1	.6
6.Planting of mother trees/shrubs/plants	114	62.98	4	2.21	53	29	5	2.8	4	2.	1	.6	7	3.	2	1.1	16	8.	1	.6
7.Care and maintenance of mother plants																				
7.1.Watering	12	66.3	5	2.7	59	33	6	3.3	4	2	2	1.1	6	3	2	1.	10	5	2	1.1
7.2.Fertilizer application	11	61.8	5	2.7	55	30	7	3.9	4	2	1	.6	8	4	2	1.	12	6	2	1.1
7.3.Prevention and control of pests and diseases	107	59.12	2	1.11	53	29	3	1.7	4	2.	1	.6	7	3.	1	.6	10	5.	2	1.1
7.4.Pruning and trimming	116	64.1	4	2.21	57	31	6	3.3	4	2.	1	.6	6	3.	1	.6	13	7.	1	.6
8.Bagging of potting medium	113	62.4	3	1.66	53	29	4	2.2	5	2.	1	.6	6	3.	1	.6	14	7.	2	1.1
9.Transplanting of rooted planting materials	110	60.77	3	1.66	51	28	4	2.2	4	2.	1	.6	6	3.	1	.6	12	6.	2	1.1
10.Care and maintenance of polybaggedornamentals																				
10.1.Watering	13	74.5	6	3.3	64	35	7	3.9	6	3	2	1.1	8	4	2	1.	12	6	2	1.1
10.2.Fertilizer application	108	59.67	7	3.87	58	32	7	3.9	6	3.	1	.6	4	2.	1	.6	14	7.	2	1.1
10.3 Prevention and control of pests	107	59.1	5	2.8	57	31	4	2.2	6	3.	1	.6	4	2.	1	.6	12	6.	2	1.1
10.4 Prunning and trimming	109	60.22	1	0.55	56	31	3	1.7	4	2.	1	0.6	5	2.	1	0.6	15	8.	1	0.6
10.5 Re-bagging	106	58.56	4	2.21	54	30	3	1.7	3	1	1	.6	5	2	1	.6	16	8	2	1.1

11.Hauling of merchandise	54	29.83	5	2.76	50	28	1	.6	2	1.1	1	.6	8	4.4	1	.6	47	26	2	1.1
12.Transport of merchandise	65	35.9	2	1.11	48	27	1	.6	2	1.1	1	.6	5	2.8	0	0	56	31	2	1.1
13.Procurement of supplies and materials	109	60.2	3	1.66	59	33	2	1.1	6	3.3	1	.6	4	2.2	1	.6	9	5	1	.6
14.Inventory of resources and supplies	52	28.7	2	1.1	31	17	1	.6	5	2.8	0	0	3	1.7	0	0	3	1.7	0	0
Income-generating																				
1.Direct contact/negotiation with buyers	137	75.7	3	1.66	52	29	5	2.8	5	2.8	0	0	4	2.2	0	0	5	2.8	1	.6
2.Pricing and promotion	135	74.0	5	2.76	50	28	2	1.1	5	2.8	0	0	4	2.2	0	0	2	1.1	2	1.1
3.Handling of sales and payments	127	70.17	4	2.21	46	25	2	1.1	8	4.4	0	0	2	1.1	0	0	3	1.7	1	.6
4.Record keeping and financial management	48	26.52	2	1.11	28	15	1	.6	3	1.7	1	.6	2	1.1	0	0	2	1.1	1	.6
Employment																				
1.Interview and hiring of job applicants	55	30.4	2	1.1	38	21	1	.6	4	2.2	0	0	3	1.7	0	0	1	.6	1	.6
2.Training of workers	52	28.7	2	1.1	37	20	1	0.6	4	2	1	0.6	3	1.7	0	0	2	1.1	0	0
3.Supervision of workers	53	29.3	1	0.55	36	20	1	0.6	4	2	1	0.6	3	1.7	0	0	2	1.1	1	0.6
4.Promotion/termination of workers	50	27.62	2	1.1	35	19	1	0.6	4	2.2	1	0.6	3	1.7	0	0	1	.6	1	0.55

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.

Community activities. 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 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. Alongside them were male members with an average of 3.52 hours minimum amount of participation.

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 are involved in the mentioned community managing activities. Mothers participation in community managing activities are as follows as 45.86 percent (clean and green projects), 30.39 percent (feeding programs), and 36.46 percent (peace and order).

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	3.90
4. Surfing the Internet	5	50	1.8	5	50	5.8
5. Listening to Radio	4	0.4	0.3	6	0.6	4.08
6. Going to Salon	0	0	0	1	100	1
7. Sleeping	2	25	8	6	75	7.71
GRAND MEAN			3.52			3.8

MOTHER	FATHER	CHILDREN (F)	CHILDREN (M)	OTHERS

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

	COMMUNITY ACTIVITY	Primary		Sometimes done		Primary		Sometimes done		Primary		Sometimes done		Primary		Sometimes done		Primary		Sometimes done	
		F	**%**	**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	1.10	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

Fathers participation are as follows 22.65 percent (clean and green projects0, 30.39 percent (feeding programs), and 36.46 percent (peace and order).Other household members, male, and female children have little participation in community managing activities with not more than 3 percent.

Access To and Control Over Resources and Benefits

This part presents the ornamental crop growers' access to and control over resources and benefits. The resources were composed of land, farm equipment, money, credit/loan, transport vehicles, skills enhancement, and social support services (Table 8.)

Access. 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 (55.8%), 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 (30.9%). 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%)

Control. 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%).

Benefits. 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 benefitted significantly more in money (54.70%), land (53.59%), and credit/loan (52.49%). Female children also benefitted 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 8).

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

	F N=181	MOTHER		FATHER		CHILDREN (F)		CHILDREN (M)		OTHERS	
		F	%	F	%	f	%	f	%		%
ACCESS											
1. Land	285	143	79.01	106	58.56	16	8.84	13	7.18		3.86
2. Farm Equipment	261	136	75.14	102	56.35	9	4.97	8	4.42		3.31
3. Money	260	148	81.77	87	48.07	13	7.18	7	3.86		2.76
4. Credit/ Loan	195	110	60.77	60	33.15	14	7.73	7	3.86		2.21
5. Transport Vehicles	213	101	55.8	89	49.17	9	4.97	11	6.07		1.65
6. Skills Enhancement	214	128	70.72	65	35.91	8	4.42	7	3.86		4.42
7. Social Support Services	199	121	66.85	56	30.94	9	3	6	3.31		3.86
CONTROL											
1. Land	264	135	74.58	101	55.80	13	7.18	7	3.87	8	4.42
2. Farm Equipment	257	140	77.35	95	52.49	8	4.42	6	3.32	8	4.42
3. Money	248	144	79.56	82	45.30	12	6.63	6	3.32	4	2.21
4. Credit/ Loan	195	117	64.64	56	30.94	12	6.63	6	3.32	4	2 0.21
5. Transport Vehicles	207	105	58.01	85	46.96	7	3.87	7	3.87	3	1.65
6. Skills Enhancement	214	130	71.82	63	34.81	6	3.32	7	3.87	8	4.42
7. Social Support Services	202	125	69.06	60	33.15	7	3.87	6	3.32	4	2.21
BENEFITS											
1. Land	446	118	65.19	97	53.59	10	6 0.77	105	58 .01	16	8.84
2. Farm Equipment	425	118	65.19	94	51.93	01	5 5.80	96	53 .04	16	8.84
3. Money	44	11	65.	9	5	1	5	1	56	1	1

		6	9	75	9	4.70	07	9.12	02	.35	9	0.50
Decision Making	4. Credit/ Loan	448	1119	65.75	95	2.49	08	5 9.67	1 05	58 .01	1	1 1.60
	5. Transport Vehicles	405	103	56.91	88	4 8.62	00	5 5.25	1 00	55 .25	4	7. 74
	6. Skills Enhancement	416	114	62.98	91	5 0.28	7	5 3.39	9 5	52 .49	9	1 0.50
	7. Social Support Services	402	114	62.98	87	4 8.07	1	5 0.28	9 2	50 .83	8	9. 94

This part presents the decision makers among male and female ornamental crop growers when performing reproductive and productive activities

Decision makers in reproductive activities. 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 (Table 10).

Decision makers in productive activities. This part shows the primary and non-primary decision makers among the participants in performing productive activities. These involved the activities 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 weredecided largely by mothers. These activities include selection of plant species and varieties to grow (6.3%), preparation of rooting medium(62.43%),preparation of propagation beds(62.43%),gathering of planting materials (62.98%), selecting children have lesser contribution in decision making on these productive related activities.

Table 9. Decision Making (Primary) – 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	23.20	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	22.1	82	45.3	69	38.12	2	1.10

Table 10. Decision Making (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	23.20	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	22.1	82	45.3	69	38.12	2	1.10

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%). The fathers, females, and male

Table 11. Decision Making (Primary) – Productive Related

PRODUCTIVE ACTIVITIES	Mother		Father		Children (F)		Children (M)		Others	
	F	%	F	%		%		%	F	%
AGRICULTURAL										
1. Selection of plants species variety to grow	120	66.3	61	33.7	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 ofmother 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	32.6	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	32.6	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 andmaterials	118	65.19	53	29.28	3	1.66	1	0.55	4	2.21
14. Conducting inventory and purchasing ofresources and supplies	67	37.02	33	18.23	1	0.55	0	0	2	1.10

INCOME GENERATING										
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 Management	59	32.6	29	16.02	4	2.21	0	0	2	1.10
EMPLOYMENT										
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

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 andpayments(75.14%); and record keeping and financial management (32.6%). Thus, these are 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 11)

Table 12. Decision Making (Sometimes done) – Productive Related

PRODUCTIVE ACTIVITIES	Mother	Father	Children (F)	Children (M)	Others

	F	%	F	%	F	%		%	F	%
AGRICULTURAL										
1. Selection of plants species variety to grow	2	1.10	2	1.10	1	0.55	2	1.10	0	0
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
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 andmaterials	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	2	1.10	1	0.55
INCOME GENERATING										
5. Contacting and negotiating with buyers	1	0.55	3	1.66	0	0	2	1.10	1	0.55

6.	Pricing and promoting of products	0	0	2	1.10	0	0	2	1.10	1	0.55
7.	Handling of sales an payments	0	0	2	1.10	0	0	2	1.10	1	0.55
8.	Record keeping and financial Management	0	0	1	0.55	0	0	2	1.10	1	0.55
	EMPLOYMENT										
6.	Hiring of job applicants	0	0	2	1.10	1	0.55	2	1.10	1	0.55
7.	Training of workers	0	0	1	0.55	0	0	3	1.66	2	1.10
8.	Supervising workers	1	0.55	1	0.55	0	0	1	0.55	1	0.55
9.	Promoting and terminating workers	0	0	2	1.10	1	0.55	2	1.10	1	0.55
10.	Expanding the business	0	0	1	0.55	0	0	3	1.66	2	1.10

Table 12 shows productive activities that are sometimes performed were 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, and selecting schools for children activities (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 an 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, selection of plants species or varieties to grow, and selecting course for children activities (1.10%);expanding the business, training of workers, and hauling activities (1.66%)

V. Conclusion and Recommendations

Based on the results of the study, the following conclusions are drawn: first, there are more female ornamental crop growers than males. Their age varies and ranges from 21-82 years old. They have varied level of educational attainment; but majority are high school and college graduates. Most of the participants are engaged only in farming and have their own ornamental crop business and/or farm. They are also engaged in on farming other commodities or employed. Second, most ornamental crop growers 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 averages at 33 years old. Majority of the houses where ornamental crop growers are one-storey and made with wood and concrete. The participants own several appliances, equipment and utilities. Drinking water is mostly from water purifiers and the water used in the house and irrigating the ornamental plants came from the local water connection. Gas is used as fuel for cooking and most of them have and uses electricity for their houses. Third, Reproductive activities among ornamental crop growers are 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. Fourth, productive activities among ornamental crop growers are both performed by both female and male, however, a considerable number of females are also engaged hence making productive activities still female-dominated. Fifth, community activities among ornamental crop growers have both engaged male and female adults but more mothers participate mostly in community managing activities like Clean and Green Projects, Feeding Programs, and Peace and Order Committees. Participation of other household members, male and female children is little to none. Sixth, mothers have more access and control over resources and benefits. Fathers have the same access but mothers are more engaged. And lastly, decision making in reproductive activities are mostly handled by mothers. Also, mothers have greater roles in the decision making in the agricultural, income-generating, and employment productive activities in their ornamental crop business. Since the results revealed that most of the gender roles among ornamental crop growers are performed by the females, 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 participation of the male members of the household in the productive and community activities.

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