

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

Adolfo C. Manuel Jr., Analita dM. Magsino, Cereneo S. Santiago Jr., Renzo Kyle V. Onella  
Cavite State University, Cavite, Philippines

**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*

## I. Introduction

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 noting 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 (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. 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 (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 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.

### 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 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.

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

Barangay	Number of Ornamental Crop Growers
Iba	19
Mataas na Buro	30
Paligawan	35
Pulong Bunga	24
Tatiao	20
Tubuan	32
Ulat	21
Total	181

The study questionnaire was adapted from the study of March et al. (2005). 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.

#### 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 are stated in 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	n/a	n/a
	Average	52.84	n/a	n/a
Civil Status	Single		12	6.63
	Married		144	79.56
	Separated		4	2.21
	Widowed		19	10.50
Educational attainment	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
	College graduate		42	23.20
Major Occupation	Employment in public organization		7	3.87
	Employment in private organization		7	3.87
	Own business		112	61.88
	Ornamental		165	91.16
	Farming		78	43.09
Crop Produce	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
	No Answer		74	40.88
Animal Produce	Cow		1	0.55
	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

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%).

### **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.

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

Household Characteristic		F (n=181)	%	Mean
Type of family	Nuclear	122	67.77	n/a
	Extended	58	32.22	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		2.30
	Female	291	n/a	2.12
Household members with occupation	Domestic (within the country)	110	27.38	2.97
	Abroad	9	2.26	1.29
	Local	270	67.84	2.37
Household members with Pension / Still Studying	With pension	n/a	n/a	1
	Still studying	0	0	0
Household monthly Income in Philippine peso (excluding the participant)				Php 43,017
Type of housing (Materials Used)	Wood	8	4.42	n/a
	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
	Gas 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

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.** 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	0	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	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	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	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	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	0	0
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	0	0
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	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	0	0
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	0	0
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	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	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	0	0
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	0	0
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	0	0
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	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	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	0	0
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	0	0
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	0	0

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%).

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%).

**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		
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	
<b>Agricultural</b>																					
1.Choice of plant species/variety to grow	126	69.61	4	2.21	57	31.49	7	3.90	8	4.40	1	0.60	6	3.30	1	0.60	8	4.40	1	0.60	
2.Preparation of rooting medium	111	61.33	3	1.66	54	30.00	6	3.32	4	2.20	2	1.10	7	3.90	1	0.60	13	7.20	2	1.10	
3.Preparation of propagation beds	96	53.04	4	2.21	48	27.00	4	2.20	4	2.20	1	0.60	6	3.30	1	0.60	10	5.50	1	0.60	
4.Gathering of seeds/ planting materials	111	61.33	4	2.21	53	29.00	5	2.80	4	2.20	1	0.60	6	3.30	1	0.60	15	8.30	1	0.60	
5.Seeding/rooting of planting materials	113	62.43	3	1.66	52	29.00	4	2.20	4	2.2	2	1.10	7	3.90	1	0.60	16	8.80	1	0.60	
6.Planting of mother trees/shrubs/plants	114	62.98	4	2.21	53	29.00	5	2.80	4	2.20	1	0.60	7	3.90	2	1.10	16	8.80	1	0.60	
7.Care and maintenance of mother plants																					
7.1.Watering	120	66.30	5	2.76	59	33.00	6	3.30	4	2.20	2	1.10	6	3.30	2	1.10	10	5.50	2	1.10	
7.2.Fertilizer application	112	61.88	5	2.76	55	30.00	7	3.90	4	2.20	1	0.60	8	4.40	2	1.10	12	6.60	2	1.10	
7.3.Prevention and control of pests and diseases (including chemical pests and pesticides)	107	59.12	2	1.11	53	29.00	3	1.70	4	2.20	1	0.60	7	3.90	1	0.60	10	5.50	2	1.10	
7.4.Pruning and trimming	116	64.10	4	2.21	57	31.00	6	3.30	4	2.20	1	0.60	6	3.30	1	0.60	13	7.20	1	0.60	
8.Bagging of potting medium	113	62.40	3	1.66	53	29.00	4	2.20	5	2.80	1	0.60	6	3.30	1	0.60	14	7.70	2	1.10	
9.Transplanting of rooted planting materials	110	60.77	3	1.66	51	28.00	4	2.20	4	2.20	1	0.60	6	3.30	1	0.60	12	6.60	2	1.10	
10.Care and maintenance of polybaggedornamentals																					
10.1.Watering	135	74.59	6	3.31	64	35.00	7	3.90	6	3.30	2	1.10	8	4.40	2	1.10	12	6.60	2	1.10	
10.2.Fertilizer application of chemical fertilizers	108	59.67	7	3.87	58	32.00	7	3.90	6	3.30	1	0.60	4	2.20	1	0.60	14	7.70	2	1.10	
10.3.Prevents and controls pests (including handling of chemical pesticides)	107	59.10	5	2.80	57	31.00	4	2.20	6	3.30	1	0.60	4	2.20	1	0.60	12	6.60	2	1.10	
10.4.Pruning and trimming	109	60.22	1	0.55	56	31.00	3	1.70	4	2.20	1	0.60	5	2.80	1	0.60	15	8.30	1	0.60	
10.5.Re-bagging	106	58.56	4	2.21	54	30.00	3	1.70	3	1.70	1	0.60	5	2.80	1	0.60	16	8.80	2	1.10	
11.Hauling of merchandise	54	29.83	5	2.76	50	28.00	1	0.60	2	1.10	1	0.60	8	4.40	1	0.60	47	26.00	2	1.10	
12.Transport of merchandise	65	35.90	2	1.11	48	27.00	1	0.60	2	1.10	1	0.60	5	2.80	0	0.00	56	31.00	2	1.10	
13.Procurement of supplies and materials	109	60.20	3	1.66	59	33.00	2	1.10	6	3.30	1	0.60	4	2.20	1	0.60	9	5.00	1	0.60	
14.Inventory of resources and supplies	52	28.70	2	1.10	31	17.00	1	0.60	5	2.80	0	0.00	3	1.70	0	0.00	3	1.70	0	0.00	
<b>Income-generating</b>																					
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	
<b>Employment</b>																					
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	

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 planting 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. 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	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

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. 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		Primary		Sometimes done	
	F	%	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	1.1	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

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. 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

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%)

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. 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 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 Making (Primary Done) – Productive Related**

PRODUCTIVE ACTIVITIES	Mother		Father		Children (F)		Children (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 Management	59	32.60	29	16.02	4	2.21	0	0.00	2	1.10
<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

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

PRODUCTIVE ACTIVITIES	Mother		Father		Children (F)		Children (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 and 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%).

## V. 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.

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