# Women Entrepreneurs and Poverty Alleviation in Floriculture of Colombo District in Sri Lanka

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#### **Abstract**

Floriculture is one of the highest-growing industries worldwide. It handles a wide range of floricultural outcomes, including fresh flowers, foliage plants, blossoming plants, pot plants, climbers, and grasses, to its customers. At present, it has become a high-income generating agribusiness. The intention of the study is to observe the floricultural influence and its success over poverty alleviation. Further, a wide emphasis is given to examine the motivational factors that led to the decision to startup the agribusiness, the socio-economic status of women floriculturists before and after, and the situation of entrepreneurs in the face of the corona pandemic. The district of Colombo was selected for the present study. Both mixed questionnaires and key informant interviews were adapted for data collection. A random sample of 65 women floriculture entrepreneurs was selected each representing the thirteen DSDs. Mixed content and discourse analyses were used to analyze data. Findings indicate that making money is the critical motivation behind the decision to engage in floriculture. Its contribution to Sri Lanka's socio-economic development is impressive. The Corona pandemic shows a less negative impact on the studied floriculture entrepreneurs and the results illustrated a weak negative correlation between the two variables, monthly income and the age of the venture. Unlike the clash between work and family, home-based floriculture production enabled the women to remain at home and focus on business and family responsibilities. As a poverty alleviation tool, women's contribution in floriculture is very much practical. Finally, the study has made efforts to bring forward the extent of women empowerment through floriculture, income generation and challenges associated with it. The findings can be utilized for policy developments, implementing institutional

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frameworks to expand the floriculture industry and empower women whilst eliminating poverty in other areas.

Keywords: Floriculture, Poverty Alleviation, Women Entrepreneurship

#### Introduction

Floriculture, a branch of horticulture is concerned with the commercial production of flowering and ornamental plants for gardens and for floristry. Floriculture crops include bedding plants<sup>1</sup>, hanging plants<sup>2</sup>, potted plants<sup>3</sup>, and fresh flowers<sup>4</sup>. Basically, nurseries are accountable for distributing plant products and it supplies varieties of plants and planting material, such as nursery seedlings or prepared plants of trees, shrubs, climbers, foliage plants, indoor plants, grasses, and so forth.

The emergence of flower and ornamental plant production is contemporary with agricultural crops. With the changes in lifestyles, living standards, and increased thriving conditions, floriculture has gained a commercial status in the present society. Soil, environment, manpower, transportation, and demand decide the scope of commercial floriculture. Along with the steady increase in population, it has created a huge domestic demand for floricultural products. In today's setting, a floriculture garden in the country yard serves as an ornamental apparatus.

Sri Lankan floriculture was started as an agri-business in the 1970s. Favorable temperature and climate have made Sri Lanka a highly reputed and one of the best quality floricultural producers in the world. Over the years, the local demand has increased and many growers started to earn an extra income by supplying to the local market. At present, floriculture has turned into a high-income generating

<sup>&</sup>lt;sup>1</sup> Annual plants that set into a garden bed or container when it is about to bloom.

<sup>&</sup>lt;sup>2</sup> A plant that grows downwards or hangs, often from a hanging basket or a high surface.

<sup>&</sup>lt;sup>3</sup> They are mainly foliage plants grown in pots, though some flowering plants are often used as potted plants.

<sup>&</sup>lt;sup>4</sup> Fresh flowers are blossoming flowers or flower buds that have been cut together with roots, branches, and leaves for use in bouquets or decorations.

agribusiness. Pal et al. (2014, p.1562) indicate that "floriculture has a greater annual growth potential of 25 to 30 % which is 25 to 30 times more than that of cereals or any other agricultural products". As it generates much employment in both rural and urban areas, it contributes to increasing family earnings. In a scenario where many women and senior citizens are involved in the floriculture industry, it has contributed to activating the underutilized labor resources in the country. Therefore, floriculture can potentially be practiced as a means of socio-economic development in Sri Lanka.

Colombo District is the administrative and commercial capital, located in the southwest of Sri Lanka, divided into 13 divisional secretary's divisions (DS Divisions). Being the highest populous district with a population of 2.3 million according to the census and statistics (2012, p.39), and being the main commercial hub, Colombo was recorded as the most expensive district for living in Sri Lanka (Gnanapragasam, 2020, p.92). Therefore, one needed to have a considerable household income<sup>5</sup> to get adjust to urban Colombo. Livelihood in Colombo is best evident from the view, that "money is the primary variable in all aspects of livelihood" (Gunetilleke et.al, 2004, p.31). But this doesn't mean that Colombo is completely free from poverty. Though the poverty headcount ratio (2016) of the Colombo District takes a lesser value of 4.1 (Economic & Social Statistics, 2021, p. 70), shanty settlers remain within the municipal limits and account approximately for 50% of Colombo's population. The decreasing trend in foreign migrations for employment in Colombo shows the satisfactoriness of the availability of incomegenerating opportunities (Economic and social statistics, 2021, p.136). As geographic and climatic conditions are in favor, and other inputs are easily available, floriculture has become an important source of income in Colombo. Colombo is a good trading place but mega-scale floriculture farming is not common in the city limits. The study basically pays its focus on both the medium-scale floriculture manufacturing and

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<sup>&</sup>lt;sup>5</sup> The household income includes wages and salaries, agricultural and non-agricultural activities, pensions, disability and relief payments, regular rental and remittance receipts, returns from businesses or ventures, investments, and other irregular gains such as compensations, lottery.

floriculture trading. A study from Nagaland shows how the floriculture sector has become one of the fastest growing segments of horticulture, which has opened ways or women and unemployed female youths to earn a living (Pusa & Giribabu, 2016, p.42). Further, another study from Himachal Pradesh, India shows how floriculture development works as a means of sustainable livelihood and income generation for women (Singh,2017). Therefore, it is important to highlight the importance of floriculture for women as an entrepreneurial career option in Sri Lanka.

#### Research Problem

"When women are inclined to earn an income, they appear to have not only greater access to resources but also enhanced health, education, awareness and social status (Sen, 1990 as cited in Agoramoorthy and Hsu, 2012, p. 70). As it provides a way to control or end up poverty, it has led to the development of income-generating activities for women on a large scale targeting developing nations. The floriculture industry is such income generating activity that has gained much attention from women, at present. With its rising interest worldwide, especially in the developing world, it shows a need to examine "how the women entrepreneurs in floriculture leads to alleviating poverty?" Among the vast literature on floriculture, it lacks the sources that exactly focus on women empowerment and poverty alleviation in the Colombo district. Colombo being a good market place to sell products, this study mainly focuses on small to medium-scale floriculture manufacturing and trading sector in the Colombo district.

# **Research Objectives**

The main objective of the study is to observe the importance of women entrepreneurship as a viable option to end poverty, particularly starting and running a business in the field of floriculture. Further, it aims to examine the socio-economic status of floriculture entrepreneurs, investigate the motivational factors to choose floriculture as a source of income, examine the situation of entrepreneurs in the face of the Corona pandemic and, suggest policy measures for the betterment of the floriculture business.

# **Research Methodology**

As floriculture has become a very common venture in Colombo, the Colombo District has been chosen as the study area. Human activities, interpretations, statements, and relations couldn't be measured through quantitative measures. As it increases overall understanding of the quality, characteristics and meanings of the research's topic, qualitative research strategy was the most applicable method for the research work. This study presents the findings which were gathered from survey methods and secondary sources. A questionnaire, interviews, and in-depth interviews were used to survey the data. The data were collected from 65 women entrepreneurs who are related to the floriculture industry, covering all the thirteen DSDs<sup>6</sup> of the Colombo District by randomly selecting five from each. The selected respondents were not new to the field and who they were matured in the field of floriculture for some time. The data were gathered by visiting mobile vendors, nurseries, and plant stalls at Diyatha Uyana, Battaramulla, as many vendors could be finding easily in the same place. A comprehensive questionnaire was developed by inclosing socio-personal and socioeconomic data. Key Informant Interviews with project officers of 'Saubhagya' Ornamental Flower Village-Kolonnawa (2021) were needed in gaining firsthand knowledge about the community. The qualitative variables were measured in a nominal scale. The secondary sources consisted of previous local and foreign research studies on floriculture.

Discourse analysis was used to analyze data as it helps in analyzing how people say things, its impact on the audience, and how it affects the society and further, content analysis was used to determine the presence of some concepts within qualitative data. As the research is analytical and exploratory in nature, data were tabulated and analyzed with pie charts, bar charts, and tables by using Excel, 2019 software. Correlation matrix was used to check relationships among the variables.

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<sup>&</sup>lt;sup>6</sup> Colombo, Dehiwala, Homagama, Kaduwela, Kesbewa, Kolonnawa, Kotte, Maharagama, Moratuwa, Padukka, Rathmalana, Seethawaka, Thimbirigasyaya

#### **Literature Review**

Entrepreneurship is an activity to bring about changes in the economies and societies of the entire world. The study of entrepreneurship runs back to the works of Richard Cantillon and Adam Smith in the late 17th and early 18th centuries. Entrepreneurship reasons the initiation of all types of human activities in society and, it is the sole human spirit and strength behind the great discoveries of the world. Due to its complexity, entrepreneurship has been defined differently by different scholars. Shane and Venkataraman (2000, p. 219) define entrepreneurship as "a process that includes discovery, evaluation, and exploitation of opportunities to introduce new products, services or markets". Gries and Naudé (2011, p. 217) consider it as "the resource, process, and state of being through and wherein individuals utilize positive opportunities in the market by creating and growing new business firms." Therefore, the most noticeable example of entrepreneurship is giving birth to a new enterprise and it is, therefore, a creative human process, which gathers resources from one level of productivity to another superior one.

A study identified female entrepreneurship as an important engine of economic growth for developing countries, due to its principal role in generating productive work, achieving gender equality, and reducing poverty (Lerner et.al., 1997). Therefore, entrepreneurship can be identified as the best opportunity for women to come forward and work with society all over the world. Food making, floriculture, beauty culture, candle and ornament making, sewing, and selling of garments are some prominent women's entrepreneurial activities. Although Sri Lanka has achieved gender equivalence in access to education, as per Aturupane et al. (2018, p.2) women's economic participation is well below its potential. According to the Labour Force Survey (2020, p.8) published by the Department of Census and Statistics in Sri Lanka indicates that the economically active population is about 8.5 million. Of which 66.1 % are males and 33.9 % are females. Furthermore, unemployment rates are significantly higher for women. The economically inactive population is about 8.3 million. Out of the economically inactive population, 26.5 % are males and 73.5 % are females. Women's ownership in small and medium-sized

enterprises (SMEs) is minimal in Sri Lanka. According to the Export Development Board (EDB) (2021), SMEs contribute 45% of Sri Lanka's gross domestic product (GDP) and provide about half of the country's jobs. But, only 25% of entrepreneurs are women. Limited access to finance, low business capacity, and inadequate policy, regulatory framework, and family bonds challenge the Sri Lankan entrepreneurial women.

In Sri Lanka, the total land area under floriculture is around 500 hectares at present and the majority of the land is in the Western Province (Sirimanna, 2018). Wei, et al. (2013, pp.84-93) highlight the potential of floriculture in empowering women. Similarly, Kiriveldeniya, et al. (2020, p.182) identify "floriculture as an industry that enables the empowerment of women in rural areas, especially the housewives". In Sri Lanka, there's a proneness to attract many women into the industry as the initial factors such as; simplicity in starting up from home, few expenses, and a low need for expensive resources are above all advantageous for the Sri Lankan women.

Poverty is one of the biggest social problems in the 20<sup>th</sup> century. In general, it can be expressed as deprivation of well-being. Sen (1999, as cited in Frediani, 2007, p.136) explains that "poverty must be seen as the deprivation of basic capabilities rather than merely as lowness of incomes". Therefore, poverty is multi-dimensional. It includes low incomes, low levels of health and education, poor access to clean water and sanitation, inadequate physical security, lack of voice, insufficient capacity and opportunity to enhance one's life, material deprivation, social isolation, exclusion, and powerlessness, and physical and psychological affliction.

In the study, Wagle (2002, p.155) identifies three dimensions of poverty including; economic well-being, capability, and social exclusion. The most widely used dimension of poverty is 'economic well-being' which deals with income, consumption, and welfare. It discusses poverty in absolute<sup>7</sup> and relative<sup>8</sup> terms. The

<sup>&</sup>lt;sup>7</sup> Absolute poverty refers to people's basic needs.

<sup>&</sup>lt;sup>8</sup> Relative poverty refers to income or consumption levels that are below a given percentage of the national average.

second dimension, 'capability' covers statuses of education, and health and produces stronger impacts on well-being. The last dimension, 'social exclusion according to Taylor (1999, as cited in Wagle, 2002, p.160) is "the access to services that enable people to engage fully in the economy and the society". One with adequate income and adequate capability to produce certain working may still be poor, if, s/he is excluded from the typical economic, political, civic, and cultural activities.

Over the past few decades, Sri Lanka has made significant improvements in its economy but, many serious issues still continue with regard to poverty. According to Asian Development Bank (ADB) (2021), 4.1% of the Sri Lankan population lived below the national poverty line<sup>9</sup> in 2016. The proportion of the employed population below \$1.90 purchasing power parity<sup>10</sup> a day in 2019 was recorded as 0.4%. Poverty in Sri Lanka is principally a rural phenomenon. A study investigated that 90% of the total poor residing in Sri Lanka are from rural areas (Jabbar and Senanayake, 2004, p.9). But Satterthwaite (1997, as cited in Gunetilleke, Cader, and Fernando, 2004, p.15) expresses that urban poverty especially in Colombo, has become a serious issue where "households who have incomes above the national poverty line (not categorized as poor) but live in very poor quality housing, with a severe lack of infrastructure and access to basic services".

Entrepreneurship as a solution to extreme poverty is often accepted in different ways by scholars (Christensen et al., 2014; see also Peredo and Chrisman, 2006; Tobias et al., 2013). Empowering women and enhancing women's status plays an ample role in the achievement of many development programs and at last, it helps to create a positive societal transformation (Gupta, 2006, as cited in Wei et.al, 2021, p.2) As women are the most vulnerable group that suffers due to poverty, empowering

<sup>&</sup>lt;sup>9</sup> The poverty threshold, poverty limit, poverty line or breadline is the minimum level of income deemed adequate in a particular country. It is usually calculated by finding the total cost of all the essential resources that an average human adult consumes in one year.

<sup>&</sup>lt;sup>10</sup> Purchasing power parity is the measurement of prices in different countries that uses the prices of specific goods to compare the absolute purchasing power of the countries' currencies, and, to some extent, their people's living standards.

women economically, especially through their involvement in trade, creates multiple opportunities for their livelihood and economic development.

# **Data Presentation and Analysis**

The results obtained, after analyzing the responses from the sample of 65 respondents, are organized under the following contents (see table 2 to view respondent's profile).

#### 1. Motivational factors behind floricultural decision

The respondents mentioned many factors that affected them to become entrepreneurs. Each expressed their motivational factors in a range of 1-5 and then, an analysis was done to identify the highest motivating factors of women floricultural entrepreneurs in the Colombo District (See graph 1).

Most of the entrepreneurs were motivated by financial reasons. 23 of the 65 respondents ranked making money the first. 1 of the respondents stated that their husbands' income was insufficient for their household expenses.9 of the respondents had no other option to make money. 5 stressed being a housewife making the time wasting. Therefore, they have joined with floriculture. 8 of the respondents mentioned that they were motivated to become entrepreneurs because of their joblessness for a long time. Loneliness was also a critical motivating factor to engage in entrepreneurship as one person has started the floriculture business because of loneliness. Additionally, self-satisfaction, desire for independence, interest in entrepreneurship, and owning the business from the family too has become motivational factors to start the floriculture business. The results revealed that, if women had money in their houses, the majority of them would not be motivated to become entrepreneurs. Therefore, making money is the critical motivating factor.

When considering the educational level of the entrepreneurs (see Table 3), only 34 (52.30 %) have passed the Advanced Level. Three graduates with a percentage of 4.6% can be identified within the sample. After their retirement or as leisure they have chosen this field. 22 (33.84%) of the respondents have passed only up to O/L and 6 (9.2 %) have passed only up to Grade 10. The ages of entrepreneurs show a

tendency of matured women to engage in entrepreneurial activities (see Table 4). There's no one engaging in entrepreneurship below 30 years. 10 (15.38 %) of the interviewees are the ages between 40 and 44 years. 19 (29.23%) and 13 (20%) are within the ages between 45 to 49 and 50 to 54 respectively. In total, women within the range of 40 to 54 years collectively contribute to the majority of 54.61%, from all age categories.

With age, marriage, and the struggle of life, women have started to feel the need for money. When families are growing one by one, they seek to earn money. According to their educational level, they are not entitled to get a better-paid job, or the paid job is insufficient to make their living. Among the respondents, 17 (26.07%) represent the single mother category, struggling to lift up their children (see Table 5). Therefore, they have finally moved to floriculture.

#### 2. Contribution to the socio-economic development

Though the social and economic contributions are interrelated, the ways of the contributions are mentioned under the following topics.

## a) Create employment opportunities

Women entrepreneurs have played an influential role in creating employment opportunities. 65 employment opportunities have been created by these 65 respondents (see Graph 2). Among the opportunities, 56 (86%) are permanent and 9 (14%) are part-time. As income increases over time, some respondents have started to hire employees for their support in floricultural activities. Therefore, floriculture has created 142 labor opportunities in the studied research area. So, it has contributed to reducing the unemployment problem by establishing small and medium ventures. Increased employment and higher income rates contribute to a better national income. By creating new wealth, it may improve themselves as well as the national income. The production is sufficient to cover most of the respondents' expenses of the production and to save a considerable amount in the banks. Therefore, it contributes to the socio-economic development of the region (See Table 6).

## b) Convert the unproductive resources in to productive resources

Responded women entrepreneurs carry on small and medium floriculture businesses that utilize low capital and local human and physical capital. They use wasteful resources that are readily available at a low cost. Following the interviews with them, I have identified their usage of unproductive raw materials like Coconut husks, Rice husks, and leaves of trees to make compost and fertilizer. Therefore, it is a good value addition to unproductive resources.

# c) Capital formation

Responded women entrepreneurs finance their businesses in several ways (see Graph 3). As stated by them, the sources identified are; savings, loans from different institutions, borrowings from the family (from husband, mother, father, or another family member), and other ways. 31 (47.69%) of respondents finance the business by obtaining loans from different institutions. They borrow loans mainly from community-based women's associations. As the interest rates are very low for the newly starting businesses, they have taken that advantage. Few of them have taken loans from small and medium loan schemes available in commercial banks. 11 (16.92%) of the respondents mentioned that they have used their savings to initiate businesses. As these are small and medium enterprises, the required capital is low. 21 (32.3%) of the respondents have financed the capital from their family members. The remaining 2 (3.07%) have found the capital in other means, by pawning the gold jewelry and selling their property.

#### 3. Situation of floriculture entrepreneurs in the face of pandemic

With the COVID-19 pandemic, the country entered a nationwide lockdown with no end date. Everything, including marketplaces, was closed to the public. One intention of the study was to find the situation of the respondents in the face of the Covid pandemic (see Graph 4). According to the graph, 19% of the respondents impacted negatively and 4% impacted very negatively. Some views of the floricultural respondents are;

"I had my two labors who were being paid but not having any work.

I was hard hit, to pay the land rental and labor wages,

I had to borrow from others".

(A Floriculture Entrepreneur - Kotte)

But, 31 (48%) had normal sales during the pandemic period. And, 23 (35%) had positive and 3 (4%) had very positive sales.

"During the covid period, I had more sales than ever before.

So, I started an online business and delivered orders to customer's doorsteps".

(A Floriculture entrepreneur - Homagama)

"My husband is a day worker and he lost his job.

I used to manage all household work from my earnings from floriculture.

That period made me better."

(A Floriculture entrepreneur - Seethawaka)

"I was initially hard hit through the pandemic.

I got together with my children and started to sell small cactus pots with painted designs.

Soon, I moved to deliver online services."
(A Floriculture Entrepreneur-Maharagama)

# 4. Relationship between the variables

According to the surveyed data, many growers continued their business for more than five years (see Table 7). From this sample, 38 (58.46%) represents the 6-15 age of venture category. Most entrepreneurs are in a stable position to continue their business without moving here and there. And, 95.37% of the entrepreneurs earn more than LKR 35,000.00 per month from floriculture businesses (see Table 7). Accordingly, a null hypothesis ( $H_0$ ) was developed that the age of the venture has no impact on the entrepreneur's income and an alternative hypothesis ( $H_1$ ) was

developed that the age of the venture has a positive impact on the entrepreneur's income.

When comparing the monthly income of the women floriculture entrepreneurs and their age of venture, (see Table 1) these two variables show a negative association. This relationship can be defined as a strong negative linear correlation. Consequently, there's no any relationship between income and the age of the venture. Therefore, the null hypothesis is accepted. Further, it shows a negative linear correlation between the financing method and the income and also with the income and the age. Alternatively, the correlation matrix shows a strong positive correlation between the age and the educational level and, the age and the age of the venture. It shows a positive linear correlation between the motivational factors and the age, the educational level and the motivational factors and further between the educational level and the age of the venture.

# 5. Role of floricultural entrepreneurship among women in alleviating poverty in Colombo District

The responded women entrepreneurs contributed to creating job opportunities for underprivileged people living in the region. Permanent and part-time jobs are produced by them for society. The identified 65 entrepreneurs have created employment for 142 people including themselves. These are the direct beneficiaries. Also, there are indirect beneficiaries and they get benefits from supplying raw materials, transporting, etc. All these income sources are generated in the region because of the floriculture entrepreneurs. Therefore, they help to lessen unemployment and reduce the poverty in the area.

Before starting the floricultural activities, the majority of the respondents were suffering from financial problems (see Table 9). Some of their views are given below.

"We have four children.

My husband is a laborer and his income varies from month to month.

And, it is not sufficient to make our living and it is not permanent.

Therefore, I couldn't depend on him for family expenses."

(A Floriculture Entrepreneur-Padukka)

"My husband is selling sweep tickets.

We couldn't cover our expenses with his income.

Therefore, we had to borrow money from outsiders."

(A Floriculture Entrepreneur-Colombo)

"I'm a single mother, my husband left us a few years back,
who was a government servant.

His pension is insufficient to make me and my two kids live.
So, I started this business."

(A Floriculture Entrepreneur-Kolonnawa)

Before starting their entrepreneurial activities, they suffered from financial problems. But with the business, their social and economic lives changed. Most of the respondents are satisfied with their earnings and, they use their income for their children's education, food, clothes, and other requirements. The increase in purchasing power has helped them to enhance their living standards (see Table 9).

Owning a business earns a moderate level of recognition within the society where the owner's participation in social activities was appreciated and valued within their villages (Baron, 2000, p.15). Therefore, the floricultural entrepreneurs' level of social competence which came with the success of the businesses, was very useful to strengthen their social lives. By creating job opportunities their society is economically empowered. Further, savings, enhanced skills, and experiences, leadership skills, physical wellness, hygiene, and education empower society. All of these enhance their self-confidence, self-esteem, and financial independence within them.

"I have money always with me.

I can make my own expenditures and expend for the children.

I don't want to ask for money from my husband always."

(A Floricultural Entrepreneur with financial independence and self-esteem - Seethawaka)

# 6. Multidimensional poverty situation

The classical income poverty approach is not sufficient to measure the complexities in poverty, as it focuses only of the monetary aspect of poverty. Therefore, the Multidimensional Poverty Approach was employed to investigate the households' deprivation in the poverty dimensions and their ability to meet basic needs.

A Multidimensional Poverty Index (MPI) creates a broad picture of poverty. It reveals who the poor are and how they are poor by focusing on a set of interlinked deprivations that the poor experience. According to the Census and Statistics (2019, p.2), the Multidimensional Poverty Index for Sri Lanka is 0.009 in 2016. This means the poor in Sri Lanka experience 0.9 % of the total possible deprivations the country could experience. It is reported that 0.2 % are severely multidimensional poor in Sri Lanka in 2016. The MPI includes 10 indicators in three dimensions, health, education, and living standards. The education dimension, it includes two indicators, i.e., school attendance of school-aged children and completion of five years of schooling of all household members. The health dimension, it includes nutrition<sup>11</sup> and child mortality as indicators. The standard of living was measured by considering the availability of electricity, sanitation facilities, drinking water sources, floor type, cooking fuel, and asset ownership etc.

Among the respondents, none of the under 18 children has died in the family in the five years preceding the survey and none of any adult or child of their family is undernourished. Therefore, all the respondents are not deprived in terms of health.

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<sup>&</sup>lt;sup>11</sup> Nutrition included the Body Mass Index (ratio of weight in kilograms and square of height in meters) for adults and weight-for-age for children.

Among the respondents, all have completed education beyond grade 10 and do not have any school-aged child (aged 5-16) who is not attending school. Therefore, all the respondents are not deprived in terms of education (see Table 10).

None of the respondents use only firewood, kerosene, dung, charcoal, or sawdust/paddy husk for cooking. 87.69% use only gas and 12.30% use both modes, gas, and firewood. None of the respondents have minimum sanitary facilities or share them with other households. All the respondents have the access to electricity and quality drinking water in their households. None of the respondent's housing uses natural or rudimentary materials for roofs, walls, or floors. All of the respondents own more than one of the assets such as; radio, TV, telephone, computer, bicycle, motorbike or refrigerator and car, or any other vehicle. No respondent was deprived of living standards. Therefore, none of the women floricultural entrepreneurs are in the multidimensional poor category.

# 7. Strengths, weaknesses, opportunities and threats for floriculture growers

The following internal and external factors which creates the direction of the future floriculture industry were identified from the field survey. The identified strategies can be developed and implemented to utilize the opportunities in the external environment while, eliminating or minimizing the threats to maximize the strengths and minimizing the weaknesses of small floriculture businesses in the Colombo district.

Being an owner operated business, possibility in startup with own experiences, requirement of less resources and production costs, continuous availability of raw materials from the internal environment and government and non-government programs (loans) to support the floriculture entrepreneurs and conducive climate, soil and to produce wider range of ornamental and flowering plants keeps the floriculture industry in high profit earning business category. But the unpredictable output due to climatic influence, lack of ability to explore the new market opportunities and, further, the absence of proper crop insurance for infrastructure and flowering crops, lack of coherent policies (both at national and Community level) create the threat to

the industry. Further, there's a major concern with many businessmen jumping into floriculture industry

#### **Discussion and Conclusion**

With the steady increase in population, it has created a huge demand for floricultural products and within the busy lifestyles, many have paid much attention to maintaining a garden within the available limited land area. Therefore, floriculture has become a high-income generating source, and its role in controlling poverty is a timely fact. As poverty has become a serious societal issue, this study aimed to answer, "How does the floricultural entrepreneurship among women growers in the Colombo District lead to alleviating poverty?"

92.30% of the entrepreneurs were motivated by financial reasons. Lack of a good education, good job, and a good income coupled with growing family weight have pushed them to floriculture. 43.04% of the respondents are at least without A/Ls. Basically, most of the responded women represent the 40-54 age category and, according to them, the marriage has let them identify that they are actually living. 17 (26.07%) single mothers who were struggling to lift up their children and 42 (64.61%) of married women whose family income is insufficient to cover children's educational needs and other household needs have finally, moved to floriculture. Therefore, making money is the critical motivation behind the decision to engage in floriculture. Women floriculture entrepreneurs have contributed to the socioeconomic development of the country by creating employment opportunities, converting unproductive resources into productive resources, by capital formation, and finally, contributing to improving the GDP. By creating multiple direct and indirect job opportunities (transporters, raw material suppliers, fertilizer suppliers, and other instrument suppliers i.e. pots) increased production, high income, and high savings may lead to improve the GDP of the country.

With the covid pandemic, most businesses were shut down or slowed down. Though with months of lockdowns, floriculture entrepreneurs have not been much affected negatively. 3 (5%) women were affected very negatively. 5 (8%) were affected

negatively and 31 (48%) remained normal. 23 (35%) made positive growth and 3(4%) made very positive growth than before. Some smart women have adopted online services and presented their productions in a creative way. This has made them make their position stable even in the face of a world pandemic. 62 (95.37%) respondents earn a monthly income not less than Rs.35, 000. Most of the time customers tend to buy items from their usual sellers and it's common for plants as well. An increased number of venture ages reveals their stability. And, with time, it gathers a set of usual customers. Further, it identified the null hypothesis, as the age of the venture has no impact on the entrepreneur's income, and, the alternative hypothesis as, the age of the venture has a positive impact on the entrepreneur's income. According to the study results, it shows a strong negative correlation between the monthly income and the age of the venture. So, it supports the null hypothesis.

Findings revealed that mature women who are married with young children are more likely to enter into floriculture than involved in waged work. Income and poverty are two interrelated components. Poverty can be eradicated completely or partially if one has a sufficient income. Floriculture has changed women's destiny. Before starting the business, 93.83% of respondents, had a normal (33.84%), negative (44.61%), and very negative (15.38%) lifestyle. Floriculture entrepreneurship has improved their social life to 99.99% (75.38% positive and 24.61% normal) and economic life to 100% (100% positive). Increased income has made them economically empowered and has earned them social recognition.

By analyzing the responses, the study identified the success of the women entrepreneurs in alleviating poverty. As poverty is multidimensional, it considers poverty in terms of health, education, and living standard. According to the survey analysis, none of the respondents were found deprived in terms of health, education, or living standard. The measure of household assets can be seen as a measure of economic status rather than a measure of income. Assets, such as radios, televisions, mobile phones, computers, bicycles, motorcycles, refrigerators, and cars, or any other vehicle, could improve an individual's health, peace of mind, and mental development. It further makes life more comfortable after a day's work. Women's

floriculture entrepreneurship has brought women not only an increased income but also a high living standard, social recognition, and self-satisfaction. Through employment generation, entrepreneurship development, socio-economic development, women empowerment, accessibility to markets, and infrastructural development have led to alleviating poverty among the studied floricultural women in the Colombo District. As poverty has become a serious issue in Sri Lanka, an investigation of this study is very relevant, timely, and highly appropriate. This research will equally add to the existing literature on poverty and entrepreneur-related issues.

"If you economically empower a woman, she represents enormous opportunity that can actually be transformative not only for her family and for her community, but at the aggregate level for the economy."

-Sheryl WuDunn-

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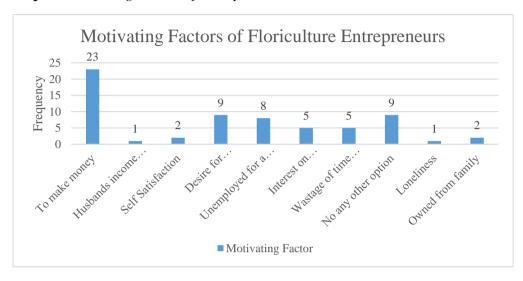
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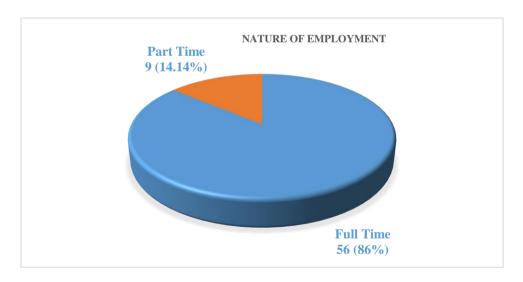
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# Annexure

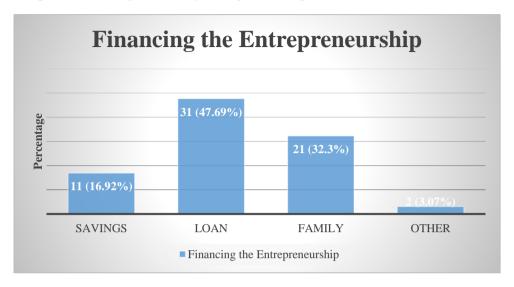
**Graph 1:** *Motivating Factors of Entrepreneurs* 



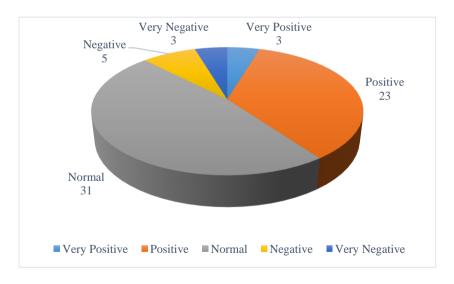
**Graph 2:** Nature of Employment



**Graph 3:** Financing methods of Entrepreneurship



Graph 4: Impact of Corona Pandemic on Floriculture Entrepreneurs



**Table 1:** Correlation Matrix on Variables

	Age	Marital Status	Educational Level	Motivational Factor	Nature	Financing Method	Age of venture	Income
Age	1							
Marital Status	0.181	1						
Educational Level	0.634	0.095	1					
Motivational Factor	0.372	0.009	0.365	1				
Nature	0.247	-0.074	0.202	0.145	1			
Financing Method	0.051	-0.061	0.009	0.187	0.173	1		
Age of venture	0.667	0.280	0.399	0.145	0.076	0.021	1	
Income	-0.153	0.147	-0.008	-0.013	0.139	-0.110	-0.150	1

 Table 2: Respondent's Profile

Demographic		Frequency (n)	Percentage (%)
Variables			
Gender	Female	65	100%
Age	< 35	4	6.15%
	35-39	6	9.23%
	40-44	10	15.38%
	45-49	19	29.23%
	50-54	13	20.00%
	55-59	4	6.15%
	60-64	4	6.15%
	65-69	3	4.61%
	>69	2	3.07%
Marital Status	Married	42	64.61%
	Unmarried	6	9.23%
	Single	17	26.07%
Educational	Degree	3	4.60%
Level			
	A/L	34	52.30%
	O/L	22	33.84%
	Up to 10	6	9.20%
Location	Colombo DSD	5	7.69%
	Dehiwala DSD	5	7.69%
	Homagama DSD	5	7.69%
	Kaduwela DSD	5	7.69%
	Kesbewa DSD	5	7.69%
	Kolonnawa DSD	5	7.69%
	Kotte DSD	5	7.69%

Maharagama	5	7.69%
DSD		
Moratuwa DSD	5	7.69%
Padukka DSD	5	7.69%
Rathmalana DSD	5	7.69%
Seethawaka DSD	5	7.69%
Thimbirigasyaya	5	
DSD		

 Table 3: Education Level of Entrepreneurs

No.	Education	Frequency	Percentage
1	Degree	3	4.60%
2	A/L	34	52.30%
3	O/L	22	33.84%
4	Up to 10	6	9.20%
	Total	65	99.94%

 Table 4: Age Composition of Entrepreneurs

	No.	Age Range	Frequency	Percentage
1		< 35	4	6.15%
2		35-39	6	9.23%
3		40-44	10	15.38%
4		45-49	19	29.23%
5		50-54	13	20.00%
6		55-59	4	6.15%
7		60-64	4	6.15%
8		65-69	3	4.61%
9		> 69	2	3.07%
		Total	65	99.97%

 Table 5: Marital Status of Entrepreneurs

No.	Civil Status	Frequency	Percentage
1	Married	42	64.61%
2	Not Married	6	9.23%
3	Single	17	26.07%
	Total	65	99.91%

 Table 6: Number of Labours

No.	Labour	No. of	Total No.
		Entrepreneurs	of Labour
1	Only Grower	16	16
2	Grower with an employee	27	54
3	Grower with two employees	17	51
4	Grower with three employees	4	16
5	Grower with four employees	1	5
	Total	65	142

 Table 7: Age of the Venture

No.	Age of the Venture	No. of	Percentage
		Entrepreneurs	
1	< 5	11	16.92%
2	between 6-15	38	58.46%
3	between 16-25	12	18.46%
4	between 26-35	3	4.61%
5	> 36	1	1.53%
	Total	65	99.98%

 Table 8: Monthly Income of the Entrepreneurs

No	Income	No. of Entrepreneurs	Percentage
1	< 35,000	3	4.61%
2	35,000-70,000	30	46.15%
3	70,000-105,000	23	35.38%
4	> 105,000	9	13.84%
'	Total	65	99.98%

 Table 9: Situation before and after starting the Entrepreneurship

No.	Rank	Before	Percentage	Social	Percentage	Economic	Percent
				Life		Life	age
1	Very	0	0%	0	-	0	-
	Positive						
2	Positive	4	6.15%	49	75.38%	65	100%
3	Normal	22	33.84%	16	24.61%	0	-
4	Negative	29	44.61%	0	-	0	-
5	Very	10	15.38%	0	-	0	-
	Negative						
	Total	65	99.98%	65	99.99%	65	100%

**Table 10:** Measurements of Multidimensional Poverty

				%	Assets		%	
Housing	Roof	Sheets	33	50.75%	TV	65	100%	
		Clay Tiles	32	49.23%				
	Floor	Cement	27	41.53%	Radio	54	83.07%	
		Tiles	38	58.46%				
					Telephone	65	100%	
Sanitation	Yes	65		100%				
	No	0			Computer	61	93.84%	
D:1:	37			1000/	— p	0	12 200/	
Drinking Water	Yes	65		100%	Bicycle	8	12.30%	
w ater	No	0						
					Motorbike	27	41.53%	
Electricity	Yes	65		100%				
	No	0			Refrigerator	47	72.30%	
Cooking	Gas	57		87.69%	Car	15	23.07%	
Fuel	Firewood	0						
	Both	8		12.30%	Other	38	58.46%	
	Other	0	0		vehicle			