CHAPTER 2 - LITERATURE REVIEW

This chapter relates to the survey of literature. It reviews the important studies relating to the topic. Literature survey is classified under following subheadings:

2.1 Challenges and Obstacles in Floriculture

The Floriculture Industry of India with a production of 2,33,000 hectare stands second in the world in production after China but our share in world trade was only 0.61% in 2014 and in 2015, the share was 0.89 (Kalmegh, S. 2016). In India in recent years, Floriculture has received substantial consideration from the policymakers, researchers, agricultural and horticultural planners. International flower trade has amplified ominously due to the huge demand of floriculture products in the world (Gupta, S. 2016). The economic meltdown of 2008 crisis affected the floriculture industry significantly worldwide with demand for floricultural products significantly deteriorating in all the major consuming regions such as Europe, the USA and Japan (Muthukumaran, C. 2009). There are 170 plus countries practicing floriculture and India occupies the 51st position in terms of exports and contributes Rs. 455 crores which are 0.06% of global trade. In India, Essential inputs like progressive technology, credit and transportation facilities, manures, insecticides, farm implements, and tools and irrigations are not easily accessible to the growers at a realistic price (De, L. C., 2016). Due to perishable nature of flowers, Post-harvest, there is a huge loss from 30-35 percent of flowers due to its perishable nature. It is very difficult to assess qualitative losses like consumer acceptability of fresh produce are much than quantifiable losses (Senapati, A. K, at el, 2016).

Perishability, the most visible feature in relation to agricultural Supply Chain Network (SCN). Perishability is only incorporated in network control problems, likely due to its dynamic nature (Ahumada and Villalobos, 2011a; Amorim et al., 2012), undeviating or sudden decay (Bottani et al., 2009; Lodree and Uzochukwu, 2008; Shukla and Jharkharia, 2013; Wee et al., 2011), or decay based on natural
models, (Ahumada and Villalobos, 2011b; Amorim et al., 2012; Pathumnakul et al., 2009).

A proper information intelligence system present in a supply chain can really help the perishable life of flowers improve by right harvesting, cooling and then transporting (Bottani, E., et al, 2009). The producers have to plan ahead very well to save the harvests from rotting if the products are of quick-consumable nature (Lodree, E.J. and B.M. Uzochukwu, 2008). In the last 20 years, private enterprises are trying to reprocess the used harvests to decrease the adverse impact on the environment. This results in the need for reverse supply chain model, especially for deteriorating items (Wee, H.-M, et al, 2011).

These days, horticultural supply chains feature large central storing facilities that contain numerous batches of the same product, with each batch having a different yet unknown storage lifetime. Optimally, flowers with low storability should be sold as quickly as potential to reduce losses. (East, A. R. (2011).

Literature Gap: It is obvious that to make the endeavour of the cymbidium-based enterprise before undertaking a research work on Sikkim orchids a need is felt to determine the status and make a macro study of the factors that influence the success in this respect, their respective importance as also their mutual relationship.

2.2 Government Support

The government needs to improve the life of the rural people by giving them into Capacity Building programs. (Ballabh, V., & Batra, P. 2015). India, in recent years the livelihoods of small and marginal farmers are increasingly becoming unjustifiable since their land-living has not been able to sustenance the family’s food requirements and feedstuff for their cattle. Changing socio-economic and ecological drifts including declining crop prices, swelling labour forces, relocation and urbanization increased the demand for alternative employment and out-of-the-rural livelihood opportunities. (Anantha et al, 2010). Young farmers in India can play an important role in ensuring food security if they are motivated to involve in agri-business or farming and the challenges, they face are taken care of by the Government to an extent. There is a massive skills deficit in India today compared
to the incredible demand generated within all segments of the economy. (Sohani, 2013).

The investment in youth in agriculture is still negligible, as there are only a few youth-focused plans and thus, there are not many success stories. (Chander, 2013). Nonetheless, the ICAR and Departments of Agriculture in many states are recognizing the farmers with the young and pioneering ones for the ground-breaking and varied farming schemes taken up by them. (Hegde, M. R., & Venkattakumar, R, 2016).

The economic involvement of womenfolk to the economy is a research discussion of paramount importance in a developing economy like India. The economic contribution of women to the economy is becoming an important research discussion in the developing economy. Demographic evolution and young population of the country is a significant test to policy segment. Focused women empowerment tactic through financial assistance by the self-help groups gave a new life to rural India. Financial inclusion efforts of the government authorized self-groups with easy access to monetary amenities and credit convenience at lower cost. Increased training and skill advance efforts by the promoters further increased chances and rights to rural women. (Patil, S. S., & Kokate, K. D. (2016).

### 2.3 Tissue Culture Support

The knowledge of advanced tissue culture lies with few cymbidium growers who are also marketing and selling their orchids online, they don’t rely on the state government for any assistance. The full-time growers do not have adequate knowledge for advance tissue culture and they rely heavily on government- funded training conducted by horticultural scientists. This is important as tissue culture support has been considered an important factor in horticultural development In vitro propagation and rapid multiplication has become a significant component for developing self-reliance in production of horticulture products in Third World countries (Bryan, J. E. (1988). FAO also gives technical support for tissue culture, and its projects have contributed to training staff and farmers, building local capacity and facilitating the exchange of knowledge and information (Arias, E., Hodder et al (2016). A National Horticulture Mission was stared in 2005 with an objective to
provide a strong push to the development of horticulture thought India to improve nourishment of horticulture production. (Choudhary, S. K. (2013).

**Literature Gap:** Agriculture sector being primary to human society requires major support from Government and non-governmental agencies. Cymbidium growers in Sikkim require wide support as this economic initiative is not traditional. Despite being a traditional home of Cymbidium, it has never been a commercial interest to in here. Is it being provided? If yes, how helpful and sufficient it is from growers’ perspective.

### 2.4 Integrated Infrastructure for Marketing of cymbidium orchids

In Holland, there is an urgent requirement of transport status information electronically, but the system is lacking which results in calling the growers on telephones to know about the location and situation of their product to which the growers have no information that can enable them to take actions on problems arising. (Jack G.A.J, et al 2012). There should be strong communities of the growers well connected with private entrepreneurs, where the growers get the adequate supporting infrastructures and where the information flow to all the concerned parties thus creating a synergy effect with a holistic growth. This will result in higher incomes for the growers. (Li, M et al 2015). A climate-smart cultivation that empowers small-scale growers to know and include weather and climatic information into production. (Msangi, J. P. 2014).

**Cold chain Storage:** Cymbidium orchids with 75% bloom stage with the spike length of 60-90 cm have a vase life of 55-60 days. (De, L. C et al., 2015). The concept of "the chain of life" (Staby et al., 1978) was introduced to the floricultural industry in USA and Canada. The concept was based on keeping the cut flowers in a refrigerated state starting from the stage of storage till the flowers reached the florist’s shop after being packed and transported. The cooling processes of freshly cut daffodils were examined during a vacuum cooling experiment. The vase life of vacuum cooled flowers with and without cold storage was studied. The results showed vacuum cooling can expressively extend the vase life of the flowers with and without cold storage and it is a very effective pre-cooling method for cut flowers (Sun, D. W., & Brosnan, T. 1999). A very common method of storing cut flowers is
Cold storage. Flowers should be harvested at the ideal stage of growth, should be pre-treated with a suitable preservative and pre-cooled for fast packing. It is necessary to maintain a stable and uniform temperature, (Senapati, A. K et al., 2016). All flowers were pre-cooled immediately after harvest by placing them in cold storage without packing or in open boxes until they reach the desired temperature, (De, L. C et al., 2014).

**Literature Gap:** Perishability of flowers make their supply chain extremely critical. Status of the supply chain for Sikkim Cymbidium needs to be investigated before arriving at valid conclusions.

### 2.5 Marketing Capability

Customer need is a core marketing concept. It has been found that these needs are rooted in the problems faced by customers and which relatively specific products enable them to meet the needs (A. Griffin (2005), D. Peppers (2011) . Needs are situation specific, have varying priorities, and can be identified before finding ways to address them (K. Ulrich (2012), D. Peppers (2011), Griffin A, 1993). need is essentially customer’s own description of the desired product benefit (Griffin A 1993). Identifying real purchaser needs involves comprehending real problems and developing products that enable customers to do so (RG Cooper, 2012). The difficulty is that customers are frequently unable to articulate their requirements, come up with unreasonable requests, are unaware of options and likelihoods, and propose the same things to competitors [E. Berggren, 2001]. Gathering implicit and complex knowledge from customers is challenging (C. A. Un 2010; I. Nonaka, 1995)

If you are sensitive to the customers need, there will be a satisfied customer as you will cater to his needs accordingly, (Cheetwood, J. E., & Connell, J. R, 1975). Competitive advantage suggests companies can satisfy customer needs more efficiently than their competitors and it is achieved if and when the real value is added for customers. The triumph of all association is determined by its receptiveness to the customer needs. (Catherine, N. K. 2013). The flower cultivators have chosen varied strategies to adapt to the market and the broader business situation, because it affects growers’ interests and the buyers’ feedback to product offers, references, communication, and need, (Vreeken, T. D. 2012). In Bhutan,
Cymbidium orchids are eaten as a delicacy. (Matsushima, K. at el, 2006). The added influence of a time perception in a benefit division method which can support marketers in understanding better and collaborating more effectively with consumers by illustrating consumer profiles built on when in time their foremost pursued benefit for an offering is apparent to take effect, (Gad Mohsen, M., & Dacko, S. (2013)

**Literature Gap:** Constructing customer needs is vital to ensure product success in markets. Cymbidium is not an exception to this rule. Growers may have developed farming skills but if not complemented by adequate marketing skills they may not be able to make their endeavour successful. No literature could be found on this issue and hence there is an urgent need to do so.

### 2.6 Product Knowledge

Orchids are known for their gorgeous flowers and food-flavelling products which make them a resource of great economic significance in the global horticultural and food businesses. (Kasulo, V, at el, 2009). The tubers are also reported to be used in the preparation of soup which is said to be served on the buffet tables and found on menus of some international tourist hotels (Hamisy, 2007). There are few orchid species that are eaten in Tanzania’s Southern Highlands of Southern African countries, but they should be conserved. (Davenport TRB, Ndangalasi HJ 2003; Bingham MG, Smith PP (2002). There are very many edible plants in southern African countries that are endangered species (Golding J.S 2003). In Bhutan, some wild plants were commonly used as edible plants, in fact, it was eaten as a delicacy. Cymbidium was one of the plants. (Laxmi, T. H. A. P. A. (2009). It has been found that in Tanzania, adhere are many edible plants. (Nyomora, A. M. S. (2009).

**Medicinal Value of orchids:** In China, 8% of Dendrobium species, 18% of Eria species and 42% of Liparis types have this point of alkaloid content. Therefore, it is quite imaginable that orchids grown in China have therapeutic or poisonous properties when consumed. Nevertheless, no herbal Chinese product has been imperiled to the tests for effectiveness and safety that would be obligatory to gratify the world drug supervisory establishments. (Bulpitt, C. J., et al.2007). There are 82
species of orchids which are used as herbal medicine in Nepal. (Acharya, K. P., & Rokaya, M. B. (2010).

Orchids are largest and most diverse group among angiosperms, and they are cultivated for beautiful flowers. They are widely known for their commercial prominence but less for medicinal worth. Some plants like Dendrobium crumenative, Eulophia campestris, Orchis latifolia, Vanda roxburghii and Vanda tessellata have been recognized for their therapeutic value (Singh, Amritpal and Duggal, Sanjiv, 2009). Cymbidium aloifolium is one of the horticulturally as well as remedially important epiphytic orchid of Nepal. (Acharya, K. P., & Rokaya, M. B., 2010).

Orchids have been used as a source of medicine for ages to treat different ailments like tuberculosis, chest pain, arthritis, paralysis, stomach disorders, syphilis, jaundice, cholera, acidity, eczema, tumour, piles, boils, inflammations, menstrual disorder, spermatorrhoea, leucoderma, diarrohoea, muscular pain, blood dysentery, hepatitis, dyspepsia, bone fractures, rheumatism, asthma, malaria, earache, sexually transmitted diseases, wounds and sores. (Hossain, M. M. (2011).) Ethnobotanical Studies were carried out in some parts of Andhra Pradesh and Tamil Nadu to identify orchids reported to have medicinal properties and to study their botanical distribution. This has resulted in the recording of 9 orchids used by the local population as medicine (A. Rao, et al, 1997).

The indigenous remedies have originated directly or indirectly from the folklore's rituals, magic and superstitions. Among the tribes of this region, Khamti of Arunachal Pradesh is considered as one of the most knowledgeable tribes in the field of herbal medicine. The orchids also find a frequent mention of their curative and aphrodisiac properties and as symbols of sanctity. Some orchid species used as medicine by the people of the northeastern region are as follows (Handa S.S, 1986).

For centuries, traditional knowledge has been used by native and local communities and plays a vital role in curative treatment. Today, the local people of Northeastern region use many orchids for a variety of traditional drugs and treatments as orchids are rich in alkaloids, flavonoids, glycosides, carbohydrates and other phytochemical contents which have great importance in medicinal fields. (Kirtikar R & Basu BD, 1935).
Worldwide, flower buyers have accredited meaningful imagery to flower colours. The buyers buy diverse flower colours to deliver different feelings, which someway guide consumers’ decision to buy diverse colour flowers for different occasions like red represents love and affection; pink signify grace, and happiness; orange symbolizes energy, enthusiasm, and warmth. (Kelley, K. M, at el, 2001). The presence of ecologically subtle consumers, often termed as ‘Green Consumers’, has been recognized by marketers in selling green colour products as these consumers accept the colour green as an essential factor into account when they make the purchase decision. (Kelley, K. M, at el, 2002). Cymbidiums are referred to as the King of wild orchids because of its varied colours, sizes and shapes. (Pal, R. at el, 2016). A Black cymbidium orchid flower, Mpro-tech, will cost ₹306.00 on online retails. (Snapdeal.com, 2016)

**Literature gap:** Do the growers have information on alternate uses of Cymbidium they grow. If not, then they are naturally unable to increase the sales of their product. Literature review reveals that Cymbidium has medicinal value and is also edible. Understanding of growers in this respect needs to be explored.

### 2.7 Economic Viability

Economic viability is the most fundamental factor behind success or failure of a business venture – more so in case of horticulture and floriculture. It is always important to measure the economic viability during its initial period. Floriculture has been found to be economically viable in the Kashmiri agribusiness (Directorate of Economic Survey-2012-2013, J&K). The literature on Sikkim cymbidium is rare. A recent study reports that farmers make a profit of Rs 80,000 to 1,00,000 from an area of 500 square meters. De, L. C., & Singh, D. R. (2016). In a broader context, World floriculture industry is growing at a Compounded Annual Growth Rate (CAGR) of 10.74 percent (Shelke, 2014). The average annual returns received from a unit of 1000 orchid plants have been reported to be Rs. 1,06,789 (Aishwarya Mohanan. 2016).

**Literature gap:** Despite this information, it is important to find whether the farmers in Sikkim find the venture of growing cymbidium economically viable or not? The
success of the government initiative will depend primarily on their response. In the absence of this viability soon the growers may give up on their ventures.

2.8 Distinct Beliefs and Values

Using Monique Scheer’s concept of emotion as a form of exercise examined how flowers were used in the practices of connecting feelings, remembering loved ones and passionately experience noteworthy happenings as well as facing enjoyable emotions. (Lindblom, I., 2016). In three different studies, it is found that flowers are a commanding positive emotion inducer. Flowers, upon giving to women, always provoked the true smile. Women who received flowers testified more optimistic moods 3 days later. A flower given to men or women in an elevator caused more positive social behaviour than other inducements. Flowers presented to elderly participants (55+ age) provoked progressive mood reports and improved discontinuous memory. (Havilland-Jones, J., et al, 2005). Both ethical feelings and explanations were knowingly connected to flower-picking intention. The stronger the visitors' moral sentiments were, the weaker was their flower-picking intention, while the more effective their explanations for flower-picking were, and the sturdier was their flower-picking intention. (Chang, L. C., 2010). A behavioural research study conducted by Nancy Etcoff, Ph.D., of Massachusetts General Hospital and Harvard Medical School (Boston), discloses that people feel more empathetic toward others, take less worry and nervousness, and feel less miserable when fresh-cut flowers are offered to them at home. (Etcoff, N.2011)

**Literature Gap:** Flowers we have seen are powerful symbols of emotions and cultural values. Brand images built on universal values have a profound impact on the buying behaviour of consumers. What values and beliefs people generally associate cymbidium orchids? As the literature on this aspect is silent, it deserves exploration.

**Availability:** Demand is often defined as human want backed by buying power, accessibility to the product and willingness to buy it. Accessibility to the product, therefore, is an important condition for marketing and it also reflects potential demand for a product. Increasing the access of any product to the customer has been found to be a useful marketing strategy (Grönroos, C. (1982; Bloch, P. H. (1986),

**Literature Gap:** From the literature gap we find that access to the product is important for marketing. In the context of Sikkim Cymbidium, it is important to identify if consumers find it readily accessible. If the answer is no, then it would be worthwhile to increase the accessibility – particularly as it is a time-sensitive product.

### 2.9 Benefit Segmentation

A study was undertaken using factor-cluster analysis of the tourists leaving Japan for foreign locations based on three benefit segments which included nature seeing, relaxation and family tour. The demographic features of these markets were comparatively studied using four different criteria which included risk, relative segment size, risk-adjusted profitability index and profit viability. This enables the researchers to take a decision on segmenting the outbound travel market based on benefits. (Jang, S. C., et al, (2002). Educated mothers used flowers mainly on their dinner tables. Flowers should be targeted for this use precisely. Price and package are important product characteristics and should be promoted in marketing, (Behe, B. K., et al 1992). In Nepal, dried powder of cymbidium orchids is used as a tonic against diarrhoea and fresh paste applied outwardly over broken or dislocated bones, (Subedi, A. et al, 2013).

**Flower as a stress-buster:** Patients with clinical depression who participated in routine therapeutic gardening activities experienced a reduction of severity of depression and increased attentional capacity benefits that last. (Gonzalez, M.T. 2010). Gardening may be a preventative measure to help reduce the onset of dementia, the gardening daily was found to reduce risk factors for dementia by 36%. (Simons, L.A et al, 2006). A more recent study suggests views of natural surroundings may benefit male and female patients differently. Men with obstructed views of nature demonstrated a decline in mental health, while women with obstructed views appeared to have a greater decline in physical health. (Raanaas, R.K. et al, 2012). A survey of visitors to four hospital gardens found that respondents
most commonly mentioned multiple nature elements of gardens - trees, greenery, flowers, and water - as having positive benefits on their moods. (Cooper-Marcus, C., M. Barnes. 1995). A study of brain activity, using alpha rhythms as a measure, showed that participants were most awake and relaxed while looking at plants with flowers, rather than empty pots. (Nakamura, R., E. Fujii. 1990). Flowers play an important role in recreation and keeping the mind in good spirit. (Sharma, M. K, 2014). Rock Rose is an extremely good example of Bach Flower Remedies to Treat Stress attacks linked to terror and panic. It is very good in bringing on a calmness and fortitude to the person. This is specifically in the case of people who have been in an accident or a natural disaster. These are really the best of flowers that can heal. (PV, B. D. (2014).

**Literature Gap:** Why do people buy cymbidium? For what precise purpose? What benefits do they seek? Questions become even more relevant because flowers are not an essential commodity. Answers to this question may help us to reach out to customers with appropriate communications.

### 2.10 Lifestyle Segmentation

Segmentation based on volume and location of purchase has been attempted by Behe, B. K (1991). He reports that heavy floral consumers have a higher level of floral knowledge, purchase more floral products for themselves and from non-florist retailers, and had higher incomes than light or medium floral users. Florist customers purchased fresh flowers more frequently, bought more floral gifts, and spent a higher amount per purchase than supermarket customers. Behe, B. K et al (1992) explored demographic data and floral-purchase factors to profile market segments. Fourteen factors contributed most to the differences between segments, including factors of product assortment, number of purchases, the degree of personal use, and package importance. Clusters can be used by supermarket and florist management as potential target markets. Yeung, R. M. et al (2010) explored consumer purchase intention at the flower market in Macau. The results indicate that distinct packaging has the highest influence on impulse purchase intention, followed by a healthy product, special price offer, and free sample tasting, while the prime location has the least an adverse effect. Altmann, M. (1982) studied consumer attitudes in the context
of the market in Germany and using psychological market segmentation with consumer typology he has divided ornamental plant market into six consumer categories, and which have been established based on individual structural attitudes towards the ornamental plants. Oppenheim, P. P. (1996) has used a means and end approach to understand factors influencing consumer choice of cult flowers. Consumer’s Lifestyle and floral purchase have been explored by (Bruwer, J. et al, 2002; Featherstone, M. (1987) Kollat, D. T., R. D. Blackwell, and J. F. Robeson. 1972, Herman de Boon, I. I. (1991). Benefit Segmentation has been focused upon by (Gad Mohsen, M., & Dacko, S. (2013), (Jang, S. C., et al, 2002), (Behe, B. K., et al (1992). From the literature review an important gap that emerges that segmentation of floral products through AIO (Activities, Interest and Opinions have remained untouched so far. Is the consumer behaviour for Sikkim Cymbidium a function of AIO? This emerges as an important concept and conclusions may be relevant for flower products in general also.

AIO or Activities, Interests, Opinions is an approach to identify psychographic segments. It is primarily used to define consumers’ psychographic profile. It provides answers to questions such as what a consumer likes, what are his interests and how does his thought process work. Ever since this approach was discovered it has attracted the attention of scholars from all over the world. The studies by (Grönoos, 1980) concludes that to have an effective marketing strategy it is important to identify activities and opinion that leads to improved long-range marketing potential. It may also be noted here that (Kim, 2012) mentions the relevant aspects of activities, interest and opinion of marketing in social media and discusses how these aspects could be used to forecast future purchase behaviour of customers who use luxury brands. (Kotler, 1971) Point out that the conceptual framework of using AIO approach in successful psychographic segmentation for social causes and social marketing. (Wind, April 1971) Studied how lifestyle can be measured and described in terms of the product a person consumes and that person’s activities, interests and opinions. (Wu, 2003) Examine the internet user concerns and perceptions of online shopping. The author also demonstrates that the Fishbein model can effectively be used to measure consumer attitudes and characteristics which are important enough to influence consumer attitudes and online shopping decisions. (Punj, 1983) studied the role of prior information, the degree of interest
in the product (like consumer durable) and the ultimate purchase decision made through opinion build up for products like automobiles. The authors successfully build a relationship model for information search for automobiles and go on to develop a model for information search. (Urbonavičius, 2005) Study new applications of a traditional psychographic segmentation approach. Values and Lifestyles are observed under the VALS approach, the interest and opinion buildup among the study group. (Arimbawa, 2015) Study the various demographic variables and discuss the influence of lifestyle on with AIO on low-cost green cars. The authors establish marketing strategies for a set of customers behavioural traits that highlight their ‘green’ orientation and establish their ‘green’ consumer satisfaction. (Satya, 2007) Study the lifestyle of wellness clients and try to segment them based on these lifestyle traits. The authors focus on wellness tourism and propose to use the AIO model to study the service providers of wellness. (Zhou, 2014) Establish a marketing model through data mining primarily utilizing the AIO approach to understand consumer concept, interest and behaviour in marketing luxury products in China. The study conducted by (Lee, 2014) use a binary logit model to find out what kind of customer would be interested in certain types of marketing activities in order to form a standard for ‘sales observation model’ based on various demographic variables, lifestyle, and the marketing activities of two well-known tea retailers in Ťaiwan. (Piazza, July 2017) Investigate the relationship Facebook likes and the AIO model and a given user lifestyle, the study concludes that there is a weak monotonic correlation between AIO and the like information. (Bodendorf, 2017) Also studies the relationship between individual Facebook likes and that given user’s lifestyle. (Sadic, 2007) Studies to establish integration of decision trees and cognitive maps to segment customers in the services sector through interests to help in customer relations. (Banerjee, 2015) Explore four distinct consumer types relevant in terms of luxury products based on numerous demographic factors.

**Literature Gap:** Segmentation, it is noted, is a core marketing concept. Flowers, by their nature, are better understood based on psychographic and lifestyle segmentation. The demographic context of Sikkim Cymbidium is understood and hence exploration of their lifestyle segmentation may provide us with some meaningful directions.
2.11 Gift Giving

Gift-giving is an important and a global socio-cultural tradition. What article is appropriate for a gift is important in this context. Flowers are considered a preferred gift-item for various reasons and characteristics. Is Cymbidium important in this respect? Literature shows that a Cymbidium hybrid named ‘Snow Bell’ was developed in South Korea and this orchid has a strong growth with a round flower. It also has a strong scent, unlike other cymbidium orchids. The strong scent of a round flower makes ‘Snow Bell’ a preferred gift. (Kim, M. S., at el, (2014).

Consumers are inclined to gift fresh flowers as a combination with other gifts when they are very passionate about their relationship. However, when consumers are more pleased with their romantic relationships, they are less likely to buy fresh flowers for their very close partners. Lai, Y. C., & Huang, L. C. (2013). People smile instinctively after getting freshly blossomed flowers as gifts even though the rational value and long-term utility of flowers are less, but they are viscerally outstanding. (Havilland-Jones, et al. 2005) A glass flute containing a flowering mini Cymbidium Cilindra with a very sophisticated packaging makes it a perfect gift for birthdays and festivals. De, L. C., & Singh, D. R, 2016).

Literature Gap: It is obvious from the literature that cymbidium is a potential gift item. This could be an important aspect of marketing strategy as it can be promoted for gift-giving. This aspect requires closer scrutiny.

2.12 Product Bundling

Product bundling is offering several products or services for sale as one combined product or service package. It is a common feature in many imperfectly competitive product and service markets. Bundling is based on the convenience trend, because the customers can save time by buying two or more products packed together (Nagyová, L., et al 2017). It has also been studied (Schmalensee, R. 1984) from the perspective of price-discrimination.

Product bundling has been found to be useful with farm products [(Roth, M. (1999; Chan-Halbrendt (2006); Bruch, M. L (2011). Uhl, J., et al (2009)] finds it useful for new-home buyers who need many common things to settle down. Many other sectors have tried this marketing strategy successfully. Is this approach useful for
gift-giving? Hu, W. (2007); Hu, W. (2017) reports that potential consumers are willing to pay a profitable sum for a gift basket. He further reports that if a basket is labelled as containing Hawaii-grown food products, an additional large positive value can be added to the basket. Different Chocolate bundling is found to make children happy during Christmas time Wang, H. et al 2018). The inclusion of a well-known whisky bottle, reportedly, improved the recipient's perception of the gift basket (Hennessy, J. et al 2017).

**Literature Gap:** It is understood that product-bundling could be an interesting opportunity for gifts. Is it applicable in the context of Sikkim Cymbidium? Will cymbidium as a component of combo-gift be a worthwhile option to market it? Which products as per the perception of consumers are found to go along with cymbidium if product bundling? Answers to these questions need to be discovered.

### 2.13 Online Promotion

Cymbidiums have a long vase life and it gives an opportunity to the marketers to sell it online. In recent years, flower e-commerce grew rapidly and attracted extensive attention from relevant fields with personalized customization is as options to the customers. (Li, Y., & Lei, M. (2015). Online consumers are gratified with flower quality and distinguish the online shops as easy to use. Despite these positive experiences, online flower shops are only considered for gifts. (Schettler, C., et al, 2015). The critical limitation for whether the seller does better online than life is not the predictable price but the assessment ambiguity. (Kazumori, E., & McMillan, J. (2005). Consumers worry about security, ease of use, levels of service and total cost pose substantial limitations on the growth of online purchase. Elliot, S., & Fowell, S. (2000).

**Literature gap:** Online sale has provided an exceptional opportunity to marketers to sell their products as well as promote it. Flowers appear to be not an appropriate commodity to be sold online by many researchers despite contrary claims. Is this true for Sikkim Cymbidium? This needs investigation.
2.14 Quality Parameters

Quality is not a modern concept, and it has been used through the ages and through different civilizations (Elassy, N. (2015). Quality has been identified as a critical factor in marketing. For example, superior product quality has been one of the keys to Japanese success in American markets (Garvin, D. A. (1984). Consequently, a growing number of organizations use quality management as a strategic foundation for generating a competitive advantage (Reed, Lemak, & Mero, 2000). Despite this, the definition of quality has always been a debatable issue and throughout the history, it has merely been talked about in lofty terms and which is described as a traditional concept of quality (Green, 1994). Quality is not a one-dimensional concept and has been defined differently by several authors. The most recent definition relies on the consumer perception implying that customers understand what their needs are, and which product meets their requirements (Morley, 2003). The Floral Marketing Research Fund (FMRF) has just released a comprehensive study on Consumer Preference for Flowers as Gifts. According to the study, the quality of flowers is more important to consumers than price. When compared with other attributes when purchasing flowers, consumers ranked quality the highest consideration in the buying process, followed by colour, price, design, and other factors. Literature review reveals that no literature exists on defining the quality of flowers for a comparison of various flowers purchased.

**Literature gap:** Literature review reveals that no literature exists on defining the quality of flowers for a comparison of various flowers purchased, therefore, literature gap exists in the literature regarding the development of a scale to compare flowers of varying genera.

2.15 First Purchase Motivation

Motivation to buy flowers has been a research area that has attracted many researchers. These studies find their echo in the theory of consumption values to expound consumer choice behaviour given by Sheth et al. (1991). Consumers reportedly purchase flowers to beautify their home/office, to celebrate a special event or moment (such as wedding or festivity, or simply for personal gratification (Kim et al., 1999). They also purchase flowers for sensory hedonics, emotional
conditioning, curiosity fulfilment, monetary worth, and showing care to others (Yeh and Huang (2009)


**Literature gap:** From their work, it is obvious that motivation to buy flowers are varied often complex. Literature review could not reveal any study on purchase motivation of cymbidium and that too in the cultural context of Sikkim. This appears to be an important gap and that deserves investigation.

### 2.16 Use Occasion

Investigation revealed that behaviors like using flowers as everyday essentials and giving flowers as gifts forced the consumers to become heavy users in the flower market. (Huang, L. C. (2005). Flowers when purchased for own use would be low priced, made from minimum service suitably located stores and often made on instinct. flower purchases made for mandatory events were ordered by phone, and store carried to the recipient. (Scammon, D. E. at el, 1982), Orchids represents prosperity, exquisiteness and social status. Orchids flower preparations are good table decorations in weddings. Among orchids, Cymbidium, Dendrobium and Phalaenopsis are the most desired for wedding decorations. (De, L. C., & Singh, D. R.2016). Buying inspirations, just like buying occasions, seem to exert an appropriate influence on the consumer normal spending which is higher for cut flowers than for potted plants. (Schimmenti. et al, 2010).
2.17 Perceptual differences across culture

Is culture important in marketing? Consumers across diverse cultures have varying attitudes, perceptions, tastes, preferences and values (Suh & Kwon, 2002). Blackwell et al (2006) that a lot of research in buying behavior, branding segmentation, communication and product adoption is through a cultural prism. Marketing strategies, in fact, are profoundly impacted by culture (Mooji, 2010). Failure to consider cultural differences across cultures has been the prime reason behind business failures (Rick, 1993). Sikkim cymbidium needs to be understood in this context because in a globalized scenario it is being sold locally, nationally and internationally.

2.18 Summary

The researcher has identified several issues that merits exploration and investigations. These are as follows:

i. **Current status**: There is not enough literature to understand the status of cymbidium growers of Sikkim. No literature is available to assess the present condition of cymbidium orchid’s vis-à-vis post-harvest management and marketing. A Macro study on this issue should be undertaken to comprehend the relationship between the variables that make cymbidium orchids a successful commercial flower.

ii. **Government Support**: Not much literature, concerning government’s Support to cymbidium growers of Sikkim, is available. A study has to be undertaken to understand the growers’ perspective about government’s support to orchid cultivation and marketing. Status of the supply chain for Sikkim Cymbidium needs to be explored before arriving at valid hypotheses.

iii. **Marketing Capability**: The available literature doesn’t convince the researcher about the grower’s knowledge about customers need. A study on need identification of the buyers has not been done. The growers may have become skilled farmers but have not complimented their growing skills with marketing skills.

iv. **Alternate uses of product**: The researcher has not been able to comprehend the grower’s knowledge about their products. Cymbidiums are used for various
purpose, but no literature establishes the fact that growers in Sikkim know the multiple usages of cymbidium orchids. This is a limitation which does not let growers market their products themselves.

v. **Economic Viability:** A study on the economic feasibility of growing cymbidium orchids is to be carried as no literature on the issue is available. If farmers are not happy with the return they achieve, the support of the government or the private entrepreneurs will be futile. The researcher could not come across any literature relating to the income of the farmers derived from growing cymbidium orchids.

vi. **Universally accepted customer values and beliefs:** No literature available on universally accepted customer values and beliefs about cymbidium orchids. This study, if undertaken, can give an insight into the customer’s perception about cymbidium orchids. No such study has been carried to understand the impact on the buying behaviour of cymbidium consumers worldwide.

vii. **Accessibility of product:** Do customers easily and conveniently buy cymbidium orchids in Sikkim? The available literature doesn’t address this issue to reach a conclusion. A study on this topic will be worthwhile as cymbidiums are perishable products. Our literature study advocates the importance of a product’s accessibility.

viii. **Benefit Segmentation:** No literature available to comprehend why customers buy cymbidium orchids. Segmentation is an essential marketing concept, but no study did yet on benefit segmentation of cymbidium orchids. Flowers are not an essential commodity and it makes it worthwhile to study the benefits derived from cymbidium orchids. More benefits mean easy selling with more demand.

ix. **Lifestyle Segmentation:** It is very important to understand the value, attitude and lifestyle of those customers who buy cymbidium orchids. It can help the marketers build promotional strategies to enhance sales. The available literature does not cover the study on lifestyle segmentation of cymbidium buyers.

x. **Gift Giving:** Can cymbidium orchids replace red rose on Valentine’s Day? No work has been carried out so far to understand the consumer’s perception of cymbidium orchids vis-à-vis gift giving. Cymbidiums have a vase life of more than 40 days compared to 7 days of a rose. A study on cymbidium orchids as a gift needs to be carried for the marketers to position cymbidium as gift items on various occasions including anniversaries and wedding.
xi. **Product Bundling**: No literature available on the preference of cymbidium orchids as a combo-gift component. Which products can be the best combo-gifts with cymbidium in case of product bundling? Sikkim is famous for manufacturing wine and it is a common gift item in the state. A study on product bundling of cymbidium with Sikkim made wine can be an interesting study which may be a combo-product for gift giving.

xii. **Online Sales**: How conveniently can one buy Sikkim Cymbidium Online? What are the total units of Sikkim Cymbidium sold online? No study so far reveals these facts. Online selling opens unique prospect to marketers to sell to a customer size scattered wide and far. Are consumers from the metropolitan cities of India buying cymbidium online? A study needs to be undertaken to understand the relationship of cymbidium orchids to online sales.

xiii. **Quality Parameters**: No literature available to study the quality parameters of flowers. How do consumers assess the quality of flowers? Quality assessment is not possible unless you create quality parameters. No significant data available in regard to quality parameters of flowers. Unless the marketers know the parameters of quality assessment, they will not be able to provide the sought-after quality in the product.

xiv. **First Purchase Motivation**: Why did a consumer buy orchids for the first time? A very complex question which needs to be answered for understanding the motivating factors that propel consumer’s intent to buy cymbidium orchids. Literature review does not disclose any study on purchase motivation of cymbidiums. An in-depth exploration of this issue must be considered.

xv. **Use Occasion**: Literature review does not reveal any study undertaken to understand the relationship between various occasions and cymbidium orchids. There are many occasions where cymbidiums may fit appropriate, but no study has been carried to convince the marketers to explore the proposition.

xvi. **Perceptual differences across local, national and international consumers.** We found this to be an important issue, yet no studies have been conducted for Sikkim cymbidium to identify gaps in this respect.

Based on these gaps and using inputs from the exploratory study following Hypotheses have been arrived at.
2.19 Hypotheses

**Ho1: Growers of Cymbidium do not have significant support**

This hypothesis is based on “General Theory of Keynes”. This theory suggests that economies are frequently unbalanced and full employment is conceivable with improvement in government policies and public investment. There are mainly two theories related to business. Some economists insist that government should just govern and not interfere in business, whereas, other economists led by Keynes, believed government must intervene. In the field of horticulture support on tissue culture has been studied by De, L. C. (2015), Beckford, C. L., & Norman, A. (2016). Wanyama, J, et al. (2016) supported on integrated Infrastructure for Marketing by Li, M et al (2015), Msangi, J. P. (2014), Zhu, Y., Lan, H., Ness, D. A., Xing, K., Schneider, K., Lee, S. H., & Ge, J. (2015).

**Ho2: Growers do not possess significant marketing capability**

Marketing capabilities are derived from the core marketing concepts that can impact overall efforts. Core marketing concepts include the ability to identify needs and wants and segmenting, targeting and positioning a product. The effects of market-based approaches can be dramatic for farmers who are self-assured to engage with markets but who lack the essential support. This is specifically true when farmers link to high value, formal markets (Ferris, S., et al, 2014).

**Ho3: Growers significantly are not aware of alternate uses of their product**

**Ho4: Growers are not having significant return to their investments**

The theory involved in Return on investment. Farming cymbidium involves investment including the value of time and effort of the grower. This is done expecting an adequate return on the same. If it happens the grower may be motivated to continue investing in the same else, they may give up on the endeavour. Small farmers do not have the logistics and marketing expertise and depend on large growers to sell their produce, (Sayantan Bera, 2013). This puts constraints on their revenue.

**Ho5: Growers do not find their endeavour significantly economically viable**

The Economic viability of farms can be largely looked upon as the capacity of farm operations to have enough monetary returns to meet its financial requirements and continue to function and grow. (Salant et al., 1986; Adelaja and Sullivan, 1998; Argiles, 2001). It remains a critical measure and an essential policy concern (Arglies, 2001; Vrolijk et al., 2010; Barnes et al., 2014; Harris et al., 2009). This is true universally and even in the context of Sikkim cymbidium farming.

**Ho6: Cymbidium orchids do not evoke distinct values significantly in the minds of local customers**

The theory involved is Values. Values go much deeper than behaviour or attitude and determine people’s choices over a long term. Marketers use it for segmenting and positioning their products by appealing to consumers’ inner self.

Product Positioning Refers to the place that a brand occupies in the mind of the customer and how it is distinguished from products from competitors. In order to position products or brands, companies may emphasize the distinguishing features (real or perceptual) of their brand. Our study is to find if Cymbidiums arouse distinct values in the minds of the local customers who are essentially Buddhist by faith. If Cymbidiums evoke distinct values with a degree of religious inclination, it becomes easy to position the orchids to the potential buyers based on its values set in the minds of the local customers.
Ho7: Local customers do not find cymbidium to be highly priced
In economic theory, price relates to demand in a function called the demand curve. The demand curve function assumes that the quantity consumers demand varies with price along with a downward slope - as prices increase, the consumer demand quantity falls. When prices decline, the consumer demand quantity increases. This model is also subject to non-price shifts in demand, such as the introduction of substitutes or changes in consumer tastes.

Ho8: Customers do not find cymbidium to be adequately available
Theory relevant to this objective is Demand which is defined as want backed by purchasing power and accessibility to the product. If customers would like to buy a time-sensitive product such as cymbidium but it is not easily and readily available, they will either not buy the product or buy a substitute product. This will result in lost marketing opportunity and corresponding loss of revenue.

Ho9: Local customers have no specific purchase motivation for cymbidium
The theory involved is Benefit Segmentation and which is dividing your market based on the perceived benefit, or advantage consumers associated with a product or service. This helps in reaching out to your different customers with tailor-made strategies based on the benefit they seek from the product.

Ho10: Specific factors do not make cymbidium a preferred flower
The theory involved is product features. Each product differs from other similar products of the family due to its distinct features. This concept is useful for positioning the product to consumers who seek value that distinction. This is referred as the product-feature positioning.

Ho11: Purchase of cymbidium is not affected by Activity, Interest, Opinions (AIO) profile of customers
The theory involved is Activities, Interests and Opinions (AIO). This serves as a basis for segmenting customers. AIO is an approach to identify psychographic segments. It is primarily used to define consumers’ psychographic profile. It provides answers to questions such as what a consumer likes, what are his interests.
and how does his thought process work. Ever since this approach was discovered it has attracted the attention of scholars from all over the world.

**Ho12: Cymbidium as gift items is not perceived better than other gifts**

The theory involved is *gift-giving*. This is a universal concept found within various cultural groups including the ancient ones also. Gifts are conceived as socially meaningful acts with altruism as one of the components of the motives. It is also explained by social exchange theory. Our thrust, however, is in the context of Market Development - In market development strategy, a firm tries to expand into new markets using its existing offerings.

**Ho13: Online promotion does not help in marketing cymbidium**

Theory: Online Marketing- Online Marketing is the process of driving sales by raising awareness about an online store’s brand and product offerings. Digital marketing for ecommerce applies traditional marketing principles to a multichannel, data-driven environment. In China, to gain greater market share, online marketing of flowers is on the rise with twenty-six companies already selling flower products online (Liu, 2008).

In this chapter we have discussed the relevant literature on the problem undertaken and identified the information gaps and which in turn provide us the objectives and hypotheses for the study. This provides us with a clear direction. This input will help us to formulate methodology to collect data and analyses the same to come to meaningful conclusions. In the next chapter we will discuss the methodology for the study.

**Ho14: There are no perceptual differences between the beliefs held by local, national and international consumers of Sikkim Cymbidium**

The theory involved is a cultural influence on consumer behaviour. Culture shapes our beliefs, values and norms (Kotler, 2003) and which in turn affects our consuming choices substantially. Flowers are known for their symbolism across cultures and hence they as a commodity are influenced by the prevailing culture even to a greater extent. Colour and its symbolism of flowers, for example, impacts when consumers
make purchase decision to buy flowers (Kelley, K. M, at el, 2001). (Pal, R. at el, 2016), (Snapdeal.com, 2016), (Kelley, K. M, at el, 2002). It is being assumed that due to cultural differences the local, national and international consumers will differ substantially.

In this chapter we have identified literature gaps through literature review and thereafter formulated hypotheses based on literature inputs and relevant theories. The next chapter is devoted to detailing methodology for fulfilling the research hypotheses/objectives.