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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

This study focuses on the Thangka art industry in Sikkim. The life and teachings of Buddha inspired artists through centuries, resulting to the creation of a rich tradition of Buddhist art. As the culmination of confluence of various Buddhist art forms in Tibet, Thangka Art form was created around 1000 years back. Today it has become one of the major items of art market. Sikkim has been carrying the mantle of this art that it received some 80 years back from Tibet. The trade that remained in a stagnant stage has been surviving through servicing a niche market.

Market

Customers of Thangkas produced in Sikkim are mainly religious value seekers. Quality and adherence to religious guidelines are the major driving forces of Thangka trade in Sikkim. Alongside, a thriving and growing market of Thangkas has been created by the supplies from outside Sikkim that are cheaper and far greater in number than what is produced in Sikkim. Majority of this supply originates from Nepal. A very few number of Thangkas created in Sikkim find their way to the open market as they are not competitive in the context of price and ready availability. There is an immense opportunity thrown open for local Thangkas in Sikkim market by the operation of these outside players. In the recent past the volume of market has extended considerably. With the establishment of dedicated emporium on Thangka and vigorous persuasion of present marketing channel members the opportunity can be materialized.

Production

Other than the artisans who are known figures in the religious circuit, Thangka production is not a very serious business in Sikkim for a common artisan. Sufficient job is available only with a handful of artists. Almost all the artists get engaged only on receiving orders. Space and other required facilities are provided by the Directorate of Handicrafts & Handloom, Government of Sikkim at Gangtok (DHH). Not many takers are found for this facility. Very small private initiatives are present there in Gangtok and Namchi (headquarter of South Sikkim district) by two of the award winner artists. These private centres starve of facilities and amenities. Raw

materials required in this trade are generally not made in Sikkim and procurement of these items is a problem as supply is erratic. As a result, artists are shifting to alternatives those are not suitable either for a product of religious significance or of the environmental standards. It is revealed in this survey that establishment of centralized ready canvas making unit and colour processing unit along with Thangka workshops are needed to overcome this situation.

Manpower

It is found that around 500 trained persons are there in Sikkim in this trade. Nearly 40 of them are estimated to be involved actively in this trade i.e. producing Thangkas in a regular manner. Majority of the manpower who have undergone training in this art form are only semi-trained and dissociate themselves with this art or opt for allied activities like Gumpa painting. It is estimated in this survey that the present market is capable of creating 160 more jobs if the market already created by the outside supply is serviced by the local artisans.

Technology

Very little change has taken place in Thangka creation process in Sikkim since it was started here on a recognizable scale nearly 80 years back. Same traditional process as has been practiced by the Tibetan artisans for centuries is still being followed. The areas where change has taken place are the fabric preparation and colour. Traditional method of fabric preparation has been replaced by coating cloth with distemper paint and colour as derived from natural ingredients have been replaced by acrylic colour. Lower cost Thangkas those are coming in the Sikkim market from outside are produced with the use of various degrees of mechanization and this is the area where Sikkimese artisans are losing the battle. This study reveals that there are areas in the Thangka painting process like sketching those can be mechanized at a mass scale within the ambit of Handicrafts.

Strategy

This study reveals that segmentation of the total Thangka market in three categories namely, i. scroll painting of any theme; ii. low cost Thangkas

with traditional religious themes and iii. Thangkas intended to get spiritual benefits for the informed and demanding customers, shall cover almost all of the market. As the major threat to this industry in Sikkim is emanating from the price front, the strategic move towards ‘overall price (cost) leadership’ is needed to face this challenge. Alongside, overhauling in all the major factors in the marketing mix may be considered to take on the competition and achieve growth which may include dedicated trade fairs etc. in addition to the measures already suggested in the market, production and technology sections. It is estimated that through the adoption of measures suggested in the study, around 200 full time direct employments may be created as against around 40 part-employment created today.

CHAPTER I

Introduction

1. INTRODUCTION

1.1 Study Background

Thangka is believed to be a source of mystic divine power that tries to harness this power through a drawn and painted art creation and endeavours to be complete and perfect.

Thangka Paintings are well done art products. It is believed that the craft flourished about 1000 years back in Tibet as the culmination of the confluence of Indian, Nepalese and Chinese traditions. The creation of Thangka is still carried out in micro scale. The artisans are scattered all over the 4 districts of Sikkim.

Despite enormous potential in domestic and export markets, the subject craft needs immediate attention particularly in the areas of production facilities, employment and market exposure to harness its potential. It was felt that the in-depth study is required to gather information in sub-sectors relating to availability of raw materials and common facilities around the units located in the states.

It was felt that in view of the changed dynamics of the market there may arise a need for modification in the approach of marketing and customization of Thangkas. It was also felt that this area might be given an in-depth analytical examination through this study.

In this backdrop, the present Status Survey suggesting Upgradation of Process and Technology of Thangka art in Sikkim was proposed by Sikkim Consultancy Centre and subsequently approved and sponsored by the Office of the Development Commissioner (Handicrafts), Ministry of Textiles, Government of India.

1.2 Objectives

The study has been directed to provide information on strengths, weaknesses, opportunities and threats of the Thangka industry in the state of Sikkim in general.

The study tries to analyse the strengths, weaknesses, opportunities and threats to the Thangka crafts in the state of Sikkim in general for suggesting necessary measures for infrastructure development and making

strategy to withstand competition and leverage its potential to grow both in domestic and export market.

1.3 Terms of Reference

The guiding force of this study in general and selection of survey design and methodology in particular are the Terms of Reference laid by the Office of the Development Commissioner (Handicrafts) Ministry of Textiles, Government of India

1. Identification of the problems relating to production facilities of the units engaged in the production of Thangkas and recommending the measures to be adopted to overcome the problems.
2. To assess the present status in the sector and future employment generation opportunities
3. To identify the problem areas relating to availability of raw material and to assess qualification of the items in lot and recommend adoption of appropriate measures.
4. To assess the present technologies of the craft and identification of upgraded technology for increasing efficiency to improve the quality of the products.

In addition, it is also expected that the study would analyse the strength, weakness, opportunities and threat to the Thangka crafts in the state in general for suggesting necessary measures for infrastructure development and making strategy to withstand competition and leverage, its potential to grow both in domestic and export markets.

1.4 Sponsor of the Study

The Office of the Development Commissioner (Handicrafts), a subordinate office of Ministry of Textiles, Government of India, formulates & Implements various schemes for the development of Handicrafts in the country. The schemes are based on the evaluation/ research studies conducted from time to time and for this it has an in-house scheme called 'Research & Development' in force since a long time. Research and Development Scheme was introduced in 1956-57 as a Central Sector Scheme. This Scheme was introduced to generate feedback on economic, social, aesthetic and promotional aspects of various crafts and artisans in

the sector. DC (Handicrafts) [include in abbreviation section] has been implementing the scheme called Research and Development on all India basis since the time it was introduced to conduct surveys and studies of important crafts and making in-depth analysis of specific aspects and problems of Handicrafts in order to generate useful inputs to aid Policy Planning, fine tune the ongoing initiatives and to have independent evaluation of the schemes implemented by it.

1.5 Consultant

In consultation with the Govt. of Sikkim, Industrial Development Bank of India Ltd. (IDBI) took the initiative to set up a State-level consultancy centre under the style “Sikkim Consultancy Centre (SICON)” as a division of West Bengal Consultancy Organisation Ltd. (WEBCON). SICON became operational in Sikkim in 1983. WEBCON is an ISO 9001:2000 certified multifunctional consultancy organization in the public sector promoted by all-India and State-level financial institutions and nationalized banks under the leadership of IDBI for playing a catalytic role in promoting entrepreneurship, industries and infrastructure.

1.6 Constraints and Limitations

The decisions on how and when the survey should be carried out were largely determined by time constraints. An important negative factor for the survey was that it had to be performed during the rainy season in Sikkim, which affected the access to some extent. Considerable thought was given to the formulation of the questions of the questionnaire, with the aim of obtaining answers with the desired precision. Questionnaire normally included an assortment of forced choice questions or open ended questions, to which participants were asked to respond. No doubt, certain assumptions were necessarily made while drafting the questionnaire. Although considerable care was taken to produce a clearly stated questionnaire, it is quite possible that the use of a certain terminology with which the Thangka artist is well acquainted may have caused some confusion among people with lesser familiarity with the subject.

Limitations of the study were as listed below.

- The study relies on the feedback collected during the course of primary survey which may have respondent bias.
- Authenticity of the information revealed by respondents could not be cross checked.
- Wide geographical dispersion of artisans spread over a very difficult terrain made it impossible to cover all concerned artisans. Therefore, the inputs collected were limited to a few representative artisans contacted during the course of the study.

CHAPTER II

Approach and Methodology

2. APPROACH AND METHODOLOGY

2.1 Study Design

This study consists of three parts: Status Survey in Sikkim, SWOT Analysis and Strategic Discussion.

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Phase I Collection of background information | |
| Phase II | |
| <ol style="list-style-type: none"> 1. Analysis of production process 2. Focus group discussion with stakeholders 3. Preparation of draft questionnaire 4. Trial run of draft questionnaire 5. Formulation of final questionnaire sets | <ol style="list-style-type: none"> 1. Collection of information regarding artisans through DHH, DC (Handicrafts), associated NGOs and SHGs scattered all over Sikkim 2. Making field work plan 3. Collection of information regarding Thangka retailers |
| Phase III Data collection and analysis | |
| Artisans | Retailer |
| Field work | Field work |
| Data collection | Data collection |
| Tabulation | Tabulation |
| Analysis of data | Analysis of data |
| Findings | Findings |
| Phase IV Environmental Analysis SWOT Analysis | |
| Phase V Recommendations | |

Methodology

Basic methods applied for collection and analysis of data in accordance to the Terms of Reference for this survey were quantitative in nature. Qualitative techniques had also been applied to certain extent. Data were collected through two sets of questionnaires (schedule) aimed at the artisans and the retailers associated with Thangka trade. Data were coded as per the requirement of the study and the requirement of the statistical package used for analysing the data i.e. SPSS. Statistical tools like percentage calculation and correlation were applied to analyse the collected data.

Ascertaining Data Need

A close examination of the Terms of References reveals that Corporate Level Strategic Direction is already incorporated in this work and this study aims at arriving at Competitive Strategy and Functional Strategy for Thangka Art in Sikkim.

The process adopted for creating the survey questionnaires was

- i. Desk research,
- ii. Consulting proponents and practitioners, and
- iii. Performing test trials.

Indeed, this was a complicated task, since it involved testing more than one applications on a variety of query types, their export and administration possibilities, as well as their limitations on the number of participants and on data preservation.

2.2 Desk Research

This involved a broad collection and review of secondary data from print media, digital media, handicraft bodies, miscellaneous govt. departments, etc.

Data collection had been carried out through secondary sources under the guidance and coordination of DC (H) and Directorate of Handicrafts & Handloom, Government of Sikkim for collecting necessary information of producers and exporters of handicraft items of the state.

The desk research entailed investigation of

- Different connotations of Thangka
- Evolution of the Thangka art
- History of Thangka art in Sikkim
- Ingredients used
- Production process suggested and followed by various authorities and practitioners
- Primary collection of data on the Thangka artisans in Sikkim

In addition following information were collected and incorporated as suggested by the sponsor:

- Mapping of technology available, list of machines required with approx costing and the details of the local vendors in the country
- Production bases in the country other than the state of Sikkim and also outside of India and their status in the Thangka Painting business, if available.

2.3 Questionnaire formulation and testing

Keeping in mind the laid down Terms of Reference, two sets of questionnaire were formulated and administered on Thangka artisans and retailers in Sikkim.

During the process for formulating the questionnaire the objective of the study was kept in mind and was discussions were held with the officials of DC (H) and Directorate of Handicrafts & Handloom, Government of Sikkim.

Trial runs of the questionnaire were conducted with a chosen group of artisans and retailers were conducted before finalizing. A few alterations and modifications were incorporated on the basis of the trial runs.

Questionnaire for the artisans

In addition to the above it was also directed that the study would analyse the strengths, weaknesses, opportunities and threats to the Thangka crafts in the state in general for suggesting necessary measures for infrastructure development and making strategy to withstand competition and leverage its potential to grow both in domestic and export market.

Going by the functions this trade may be broadly divided in 4 major functional areas such as Human Resource, Finance, Production and Marketing. Hence, this study approached the SWOT analysis from the aspect of these functional areas.

A. Human Resource

- i. Attracting new human resource
- ii. Training and development
- iii. Providing career opportunity

B. Finance

- i. Need and availability of long term capital
- ii. Need and availability of Working Capital

C. Production

- i. Manpower
- ii. Machine
- iii. Material
- iv. Space

D. Marketing

- i. Product
- ii. Price
- iii. Distribution
- iv. Promotion

The questions were derived from the requirement of the study objective of SWOT analysis and on the basis of the discussions on the renowned proponents of Thangka art in Sikkim.

This questionnaire contained three distinct sections as follows:

A. Collection of personal details

From this section information regarding demographic aspects of the Thangka artisans in Sikkim became available.

B. Training aspect

From this section information regarding the training aspects became available like,

1. Training received, its duration and institution from where the training was received
2. Coverage of different areas, both technical and managerial, associated with Thangka art in the training
3. Trend among the youth about participation in Thangka industry

C. Practice aspect

1. Regularity of practice of the art
2. Availability of different inputs both spiritual and material
3. Marketing process followed (inclusive of customer profile, communication process, price and pricing)
4. Problem faced by the artisans engaged in this trade
5. Role of private initiative in spreading this art form
6. Emerging trend
7. Scope of introduction of mechanisation

The questionnaire for the artisans consisted of 19 queries. Two questions, query nos. 1 and 6 were related to the present engagement status of the artisan with this trade. Three questions, query nos. 2 to 5 were related to different aspects of the training received by the artisans. Three questions, query nos. 7 to 9 were related to availability and sourcing of different inputs. Five questions, query nos. 10 to 14 were related to the market and marketing aspects. One question, query no. 15 directly asked the problems faced in the areas of training, production, finance and marketing. Three questions, query nos. 16 to 18 relate to finding the proliferation possibility of this art form. One question, query no. 19 was related to exploration of the possibility of introduction of mechanization in this trade.

Questionnaire for the Thangka retailers

The questionnaire for the retailers consisted of 16 queries. One question, query no. 1 was related to find out the present market presence of Thangkas of non-religious theme. Two questions, query nos. 2 and 3 were

related to find out the price range. One question, query no. 4 was related to find out the trend of invasion of low cost Thangkas. One question, query no. 5 was related to find out composition of market by different geographical segments. One question, query no. 6 was related to find out the market size of Thangkas for the retailers in Sikkim. One question, query no. 7 was related to find out the source of Thangkas for the retailers in Sikkim. Two questions, query nos. 8 and 9 were related to find out the seasonal fluctuation of Thangka sales. One question, query no. 10 was related to find out the source of lower cost Thangkas in Sikkim. One question, query no. 11 was related to find out the strongest motive of the customers in Sikkim market place to purchase Thangka. One question, query no. 12 was related to find out supply gap, if any, in Sikkim market. One question, query no. 13 was related to find out customer sensitivity to price, quality and variety. One question, query no. 14 was related to find out the distribution channel constituents of Thangka. One question, query no. 15 was related to find out the price categorization and their popularity among the customers. One question, query no. 16 was related to find out the geographic distribution of customers for higher value Thangkas.

Copy of this questionnaire is provided vide annexure nos. I & II

2.4 Sample size

To satisfy the need of the study we have taken help of many different types of variables in the questionnaire. This necessitates application of formula to be used for each different scale / type of variable.

For interval-scaled variables

The “Availability of production inputs” in question no. 8 has been considered for this purpose.

The formula employed for ascertaining the sample size required to do the study was:

$$n = \left(\frac{Zs}{e} \right)^2$$

where,

Z: The Z score from the standard normal distribution for the confidence level desired by the study. Here, in this study a 95 per cent confidence level (from

a standard normal distribution for a two-sided probability value of 0.95) yields a Z score of 1.96.

s: s represents the population standard deviation for the variable we are trying to measure in the study, here, “Availability of production inputs”. This remained an unknown quantity since we were yet to determine the sample.

However, we used a rough estimate of the population standard deviation for the variable in question. This estimate was obtained in the following way:

Assuming that all variables, 99.7 per cent of the values of the variables would lie within ± 3 standard deviations of the mean, we would get an approximate value of the standard deviation by dividing the range by 6.

The logic applied is, that range is equal to 6 standard deviations for most variables. Therefore, range, when divided by 6, should give a fairly good estimate of the standard deviation.

Since the variable measurement is on a five point scale, we assign the lowest point the value of 1 and the highest point the value of 5. Thus the range of values for this variable is $5-1=4$.

Therefore, the estimated sample standard deviation becomes $4/6 = 0.67$.

e: The third value required for calculating the sample size was ‘e’, i.e. tolerable error in estimating the variable in question. We have taken the value at 0.1 i.e. 10% level.

On the basis of the above assumptions we calculated n as

$$n = \left(\frac{1.95 \times 0.67}{0.1} \right)^2$$

$$= 172.44 \text{ or } 172 \text{ (approximately)}$$

In many questions the variable being estimated is not continuous but a proportion or percentage. The most important question in this group is of dichotomous scale, with only two choices for an answer. Namely, whether currently practising Thangka art or not? The following formula was used to determine the sample size in such case.

$$n = pq \left(\frac{Z}{e} \right)^2$$

' p ' is the frequency of occurrence of current practising expressed as a proportion. From the discussions with DHH & Ecclesiastical Affairs Department, Govt. of Sikkim and most renowned private practitioners of the trade like Khandu Wangchuk and Pema Wangyal we collected that there might be around 500 available trained hands in the state out of which around 40 were pursuing this trade. This results in a proportion of 12.5. We have taken this guidance while ascertaining the value of p i.e. 1 out of every 12 respondents. Thus p got the value $1/12 = 0.083$. ' q ' is the frequency of non-occurrence of the same event and calculated as $(1 - p)$.

Z remained the same as above

While estimating the value of e we have taken the value at 0.05 i.e. 5% level.

On the basis of the above assumptions we get the sample size

$$n = (0.083)(0.917) \left(\frac{1.96}{0.05} \right)^2$$

$$n = (0.083)(0.917)(1536.64)$$

$$n = 117 \text{ (approximately)}$$

In view of the constraints like time, terrain, difficult weather, available resources etc. instead of taking the higher of these two estimates we have taken the average of the two estimates which equals to 145 (approximately). On the basis of this estimate we started the study and ultimately ended up with responses from 152 artisans.

Selection of the Survey Participants

Prior to the selection of the survey participants, in order to aggregate all organizations and important individual artists possibly involved in the Thangka painting, an initial survey was conducted. The outcome of this first survey was a list of diverse institutions viz., religious institutions, archives, public agencies and prominent practitioners, etc. From this list we proceeded to the selection of the survey participants according to a number of premises including availability, accessibility etc.

2.5 Field survey

Apart from collecting information through personally administered questionnaire (schedule) a great deal of information was collected through secondary research and personal discussions with renowned practitioners like Pema Wangyal Bhutia, Khandu Wangchuk Bhutia, Nima Tshering Bhutia, Pema Tshering Bhutia; administratorS like Smt. N. Thapa, Director, Directorate of Handicrafts & Handloom, Government of Sikkim and CEO of Handloom & Handicrafts Development Corporation, Govt. of Sikkim and Shri S.T.Gyatso, Deputy Director, Cultural Affair & Heritage Department, Govt. of Sikkim, Shri Phurden Lepcha, Curator, State Library, Sikkim, Shri L N Sharma, Museum Assistant, State Archive, Sikkim etc.

2.6 Compilation and processing of data

Data were tabulated primarily on the MS Excel® sheet. Every questionnaire was tabulated on two different sheets. One sheet was used for their personal information and the other was used to tabulate the information on the queries asked through different questions.

Collected data were processed mainly through MS Excel® and SPSS. Data were imported from the MS Excel® sheets to the SPSS console and then processed using different tools available in the package.

CHAPTER III

Status of Thangka in Sikkim

3. STATUS OF THANGKA IN SIKKIM

3.1 Product profile

The life and teachings of Buddha inspired artists through centuries, resulting in the creation of a rich tradition of Buddhist art. In the beginning, Buddha was depicted in symbolic form. With the commencement of the Kushana period, when making of gods and goddesses in human form was greatly encouraged, the real life image of Buddha came into being. Aesthetic expression of the Buddhist theme began to manifest themselves through myriad media such as stone sculpture, terracotta, ivory, bronze, frescos and cloth painting. The Thangkas, usually executed on silk by strict adherence to specific ritualistic norms, represent the finest variant in Buddhist cloth paintings. A short profiling of Thangka provides us the following:

- Features – scroll type painting of religious themes on cotton and silk media
- Benefits – improves religious and artistic ambience
- Value type – perceived
- Focus – both internal and external
- Unique Strengths – yes

3.1.1 Historical account of Thangka

The origin of Thangkas can be traced back to the early paintings at Ajanta, Ellora, Bagh and the Ceylonese cave paintings. When Buddhism spread to Tibet, it also carried to mountain kingdom the mature elements of Buddhist painting style together with aspects of Tantrik art. It is believed that from this cultural intermingling were created the first Thangkas 600 years ago in Tibet.

Ms. Edna Bryner, a scholar on Thangkas, in her book titled 'Thirteen Tibetan Tankas' published by The Falcon's Wing Press, Indian Hills, Colorado, referring to the old, authoritative account found in the introduction to W.R.S. Ralston's Tibetan Tales, a translation into English from F. Anton von Schiefner's German translation (made in 1869) of the Tibetan original, wrote that this art form :

“arose, some five hundred years before Christ, out of the teachings of the Perfectly Enlightened One, Gautama, the Buddha. As it spread out from the Master’s native India, it carried the glorification of his earthly path throughout the subtle complexity of nations comprising Central Asia, until, some five hundred years after Christ, it brought its universe-embracing directive-embracing directive power to Tibet.

Amid ever multiplying influences, this religious art had undergone a thousand years of intensification and of extended “speakingness” (brjod-pa)-for that was its prime function-before it reached Tibet, its new, high and hard Himalayan home. There it came into its own anew. It was as if Tibet had been preparing itself slowly, surely, over the years, to develop a special genius in the blending of art and religion.

Gathering rich nourishment in its far journeying, that art came to Tibet, it is popularly claimed, by way of the two Buddhist wives of the country’s famous King Srong-btsan-sgam-po. One, a Nepalese Princess (her marriage sealed an alliance between her father, King Amshuvarman of Nepal, and the Tibetan King) brought with her an array of Buddhist images, among which was Aksobhya, one of the five Dhyani Buddhas. The other Buddhist wife, Wen Ch’eng, a Chinese Imperial Princess (her marriage in A.D.641 accented a peace treaty in which the T’ang Emperor T’ai-Tsung recognized the Tibetan king as supreme in Kuku-nor), brought a famous statue of the Buddha represented as a young prince. Both of these precious depositories of power remained in the Jo-Khang in Lhasa, which King Srong-btsan established as his capital.

In the sixtieth year of the reign of King Lha-tho-tho-ri (he is said to have reigned one hundred year, A.D. 367-467), there one day descended from heaven upon the golden terrace of his place “namely, the image of two hands in the position of prayer, a golden pyramid-temple (*chaitya*) an ell high, a small coffer with a gem (cintāmani, ‘wish-granting jewel’) marked with the six fundamental syllables (om mani padme hūm)” and a copy of the Kārandavyūha sūtra (religious dissertation), presumably from Nepal, since that country, not China or India, venerated this sutra especially. Not Understanding the nature of the holy objects, King Lha- th-tho-ri ordered them to be locked up in his treasury. While they lay there, “misfortune came upon the king in the way of children being born blind, failure of fruits and

grain, cattle plague, pestilence. After forty years, there came five strangers, supposedly missionaries from Nepal, to the king. They asked him how he could let such mystic and powerful objects be cast into the treasury, presumably explained them, and suddenly disappeared. The king then ordered the objects to be brought forth, to be attached to the points of standards, and to be treated with the utmost reverence. After that, all went well, with children, fruits, cattle.

The very first concern of King Srong-btsan, on coming to the throne, was to form an alphabet for the Tibetan language, there being as yet no written characters but the use, instead, of “stick-writing” (notched pieces of wood) and “string-talk” (knotted cordelettes) for communication and documentation. For this purpose, several years before his first marriage, the king sent seven nobles to India. Unable to find a way there, they returned without having accomplished anything.

The descending of Tibetan searchers for an alphabet and for the Doctrine into the Buddha’s land stirred Buddhist missionaries into toiling up through the plains of India over old trade routes and along precipitous trails across Western Tibet. The missionaries brought with them arrays of sacred images, which firmly embedded Indian artistic tradition as basic in the development of Tibetan art. The iconography, for the most part, goes back to the Greco-Buddhist Gandhara school of northwest India, in which the Buddha is represented as a human being. These images, used doubtless then as today to illustrate teaching or preaching, presented principally the Great Being himself, the chief Bodhisattvas (that is, saints who had attained the highest station next to the Buddha), and scenes from the Buddha’s life— not only from his life as the Buddha, with its so frequently pictured four greatest events and four greatest miracles, but also from his former existences as he himself told of them to the Brotherhood.

Tankas, the most characteristic product of the whole Tibetan painting field, are not a spontaneous creation of Tibetan talent but a type of painting borrowed from India. In time they received the imprint of Tibetan genius. The Indian models, called *pata*, are, as Giuseppe Tucci explains in his monumental work titled *Tibetan Painted Scrolls*, of three types:

1. Tissues painted with images and symbols of divinities, used for magic or as work producing merit. There was no greater merit than to diffuse, by

any means whatever, the Buddha's teachings, thus enlightening souls in darkness and permitting those who merely look upon the painted images to accumulate good *karma*. (In Buddhism, *Karma* is the doctrine of consequences, the working of the law of cause and effect. That is, a person's acts in one existence determine the rebirth level in his subsequent existences, in unending succession, until, by continuous effort, he has freed himself.)

2. The mandala, a projection of the cosmos for the purpose of evoking deities. It was originally drawn upon the ground and erased after the performance of the rites, just as the American Indians of today make their sand paintings.
3. Painted representations of the lives of saints, for the use of storytellers and guides to holy places."

3.1.2 Connotation

There is no single universally accepted meaning of the word Thangka. There are a number of meanings forwarded by many proponents of this art form. We have considered three major meanings here.

Ms. Edna Bryner has given an authoritative account of the meaning of Thangka as follows:

"The word Thang means a plain, or flat country. *Thang-ka*, or *thang-sku*, is an "image, properly of human beings; at present equals picture, painting, in a general sense, also of landscapes, etc." The word *thang-ka*, which stresses the formal aspect of the picture of an image, has taken the place of *ras-bris*, or *ras-ri-mo* ("design on cotton"), which stresses the material. Tankas are hung in immense numbers in temples and private homes; borne in religious processions; and carried into lonely places by wandering lamas to serve in their preaching. To all who see them, tankas keep reiterating the "hope of ultimate deliverance of every living thing, subhuman, human, and superhuman."

Tibetan artists do not date their work, nor do they (one high period was an exception) sign their names. They remain anonymous, out of time and space, working in the eternal verity now, while producing sacred images that have power.

This power aspect may have something to do with the fact that (as stated in George Roerich's *Tibetan paintings*) a Tibetan who owns a tanka will hardly part with it, especially if it is consecrated by some high lama and has an imprint of the lama's hand on the reverse side. A non-Buddhist outsider has no chance at all of acquiring such a tanka. Most of the paintings found in Western public and private collections have been thrown on the market because of war and upheavals that destroyed lamaseries and impoverished rich painting-possessing families."

Going back little further in time, traditionally, Lamas and Brahmins used meditation in order to achieve inspiration for the creation of religious paintings. Once an image had been formed in their mind, they would abide to strict rules in creating the painting's image while applying mixtures of colour that mirrored their feelings towards the gods. Exact measurements of divine subjects were applied to the painting as well as colour to provoke feelings that would greatly influence the owner's life and all those who looked upon it.

The second angle has been given by Shri Nima Tshering Bhutia, the trainer at the Directorate of Handicrafts & Handloom, Government of Sikkim. According to him Thangka is derived from two of the Tibetan words 'Thang' and 'Ga'. 'Than' means 'to see' and 'Ga' means 'to be happy'. Putting together these two words we get Thanka which means 'Something that we become happy in seeing'. Alternatively, according to him, this art form is also called 'Tsathang'. In Tibetan 'Tsa' means face and 'Thang' means 'to see'. Thus Thangka is an art form wherein faces are depicted.

Third and the most recent meaning has been acquired by Thangka art through the working of market mechanism. As against the traditional system whereby, Thangka used to mean anything of image, picture, painting, landscapes, etc., created on commissions from religious devotees, and were not sold on the open market, today, though some highly skilled Thangka artists still work on commission, less refined Thangkas are produced in bulk for open markets. It includes scroll painting of different thematic expressions including pictorial representation of nature, animals like Red Pandas, flowers like Rhododendrons etc. predominantly of mountain culture but doesn't exclude other themes also. At present Thangka has gathered a connotation much wider than that of the earlier times and for the less

informed customers it has become synonymous to any type of scroll paintings.

3.1.3 Thangka Art in Sikkim

History of Thangka in Sikkim is around 80 years old. Two distinct lines are there in Thangka art in Sikkim, governmental initiative and private initiative.

Governmental initiative

Four higher ranked artists were brought in from Tibet to paint the King's palace in Sikkim with religious paintings during 1930s. While they were working on that project a very influential Kazi (person with almost independent charge over a territory, even with authority of minting coins), Barmia Kazi, deputed a boy from Temi in South Sikkim district, as a helping hand cum apprentice to these painters. This boy named Rinzing attracted the attention of many because of his god-gifted capability of painting. Rinzing worked with the painters of the royal residence, honed his skills and later became a revered master of this art form. Till date he is remembered as Rinzing Larippa (Larippa is a person one who paints pictures. The word Larippa is believed to be derived from Lathipa. In Tibetan 'La' means God and 'Thipa' means Painter). Rinzing Larippa is also known as Temi Larippa or Barmia Larippa.



Fig. 2: One of the original pieces created by Shri Rinzing Larippa

Later he became the first official trainer at the Palzor Thendup Namgyal Institute at Gangtok (this institute presently operates as the

Directorate of Handicrafts & Handloom, Government of Sikkim). He served this institute for less than a year. He handed over the rein of the training at the institute to Ganden Larippa, his best student. Shri Ganden Larippa served the institute upto 1993. After Shri Ganden Larippa, Shri Nima Tshering Bhutia, the present trainer, continued to carry the mantle.



Fig. 3: Shri Nima Tshering Bhutia taking class at DHH

At present the institute has a capacity of 15 seats and it is running in full capacity at present.



Fig. 4: Training session at DHH

Private initiative

Shri Phuntsok Sangpo initiated a lineage in the late 1950s. He stayed in Sikkim, besides other places in West Bengal and Bhutan. His mantle is now borne by artists like Shri Khandu Wangchuk at Namchi and Shri Pema Wangyal in Gangtok. Both these artists are well known in the world arena and have become successful commercially. In addition, a few of the lesser known pass outs from training institutes run in public and private sectors are serving the market in their private capacities



Fig. 5: Shri Khandu Wangchuk with one of his Thangkas



Fig. 6: Shri Pema Wangyal Bhutia with his Thangkas

3.2 Production process and the technology

The creation of Thangka was a complex process in which the artist had to discipline himself to rigorous religious rules concerning the execution of the work. In fact, the very act of making a Thangka was considered to be a form of worship. Typically, the artist began to paint a Thangka on an auspicious day. The iconographic details of the Buddha and Bodhisattvas always have fixed proportions those are allowed to be changed. In Tibet, mostly mineral colours were used.

i. Generating a Motive

Earlier in Tibet, a Thangka used to be the fruit of a sacred human trio: a lama, a religious practitioner and a Thangka artist. The practitioner, having sought the counsel of a qualified Buddhist lama, learned which deity image of the Tibetan pantheon was most beneficial for his spiritual practice. He then invited and brought home a Thangka painter and hosted him artist with the best possible hospitality for the duration of the painting process. If the requested deity was especially difficult or unusual, the artist consulted with the lama to clarify aspects of the image.

In order that the finished Thangka or thanka be worthy of the practitioner's heartfelt devotion, offering and meditation practice, the Thangka or thanka painter generated a pure intention free of all selfish motives and undertook the task with a joyful mind. There was no discussion of price when the order was placed, and the Thangka or thanka was not considered a mere commodity but as a living expression of enlightened energy.

The practitioner had to remain patient and refrain from rushing the artist. The combined energy generated by the realized lama, the devout practitioner and the focussed artist rendered the finished Thangka particularly sacred.

It is expressly laid down canonically in the Kanjur (the portion of the Tibetan Buddhist canon containing the sutras, the texts ascribed to the Buddha himself and called the "Buddha Word". Sanskrit Buddha-Vachana) one of the two big collections of Buddhist scriptures which early searchers brought from India and to which they added commentary – that the artist must be a saintly man of good behaviour, learned in the scriptures, reserved in manner; and his place of work must be clean and proper for the making of sacred images. Usually he is a lama, knowing thoroughly the traditional teaching. He accompanies his work with continuous reciting of prayers. Sometimes another lama is present, who reads prayer aloud while the artist works sitting on the ground, holding the painting on his knees. Round him, his disciples prepare colours and attend to his needs, with advanced students sometimes colouring the outlines of figures drawn by the master.

ii. Canvas Preparation

Traditionally, the cloth to be painted used to undergo a complex process of preparation, which would take between 14 to 20 days depending on local climatic conditions. In foggy Himalayan foothills, canvasses for the whole year used to be prepared in the dry months of March, April, October and November. If a canvas was improperly prepared, the entire Thangka would be a failure. The process of canvas preparation was as follows:

First, the cloth was carefully sewn onto four lengths of bamboo which were tightly strung to a large wooden frame. The artist then applied a coat of glue over the whole canvas and left it to dry. He stirred up a mixture of white clay, water and glue in a clean pot to the consistency of thick cream. Blessed medicines or other sacred substances were added if available. The mixture was then strained through fine gauze to remove any impurities and applied evenly to the dry canvas.

When this second coat dried the canvas was held up to the light and unevenly coated areas were patched up with more of the clay mixture and again left to dry. This process used to be repeated 8-10 times until the entire canvas was evenly coated. The canvas was then laid upon a smooth wooden board and a small area was moistened with water using a soft white cloth. Section by section, the artist vigorously rubbed the canvas smooth with a piece of white marble, moistening it with water as he worked. This took about an hour. The entire canvas was then slowly and carefully stretched by tightening the strings tied to the frame and left to dry in indirect sun.

Once dried, the entire procedure was repeated for the other side of the canvas, stretching it after each moistening and leaving it to dry. When it had been thoroughly treated and dried, the canvas was then so tightly stretched that it made a nice drum sound when tapped. This was the sign that the canvas was ready to be painted. The front of the canvas was then polished with a conch shell.

At present in the absence of white clay mainly zinc oxide is used in Sikkim but slowly distemper paints are becoming the industry standard. A canvas preparation is finished in one sunny day. Silk is the fabric of choice for many customers, particularly in the case of high value Thangkas but now a days almost all the Thangkas are made on poplin.

iii. Foundational Line Drawing

On the subject of the images, Tucci quotes from an older source; “The image, all of whose lines are complete, is a bestower of happiness, while the image in which they are lacking causes all sorts of evils.’ (Vivarani, ed. H. Mitra, p.1.)” The painter does not copy nature. He follows prescribed “measurements of perfect creatures. But this perfection, we repeat it, is not the perfection of an ideal beauty, it is the expression of an inner superiority, the manifestation, through signs and proportions, of a nature transcending humanity, the symbol of participation in an essence different from that which common creatures are made of.”

Earlier at this stage the artist bathed, took purification vows at dawn, meditated upon his tutelary deity, and performed rituals to clear away obstacles and harmful spirits. Having studied the description of the image to be painted in a religious text and consulted a lama about any confusing details, the artist recited the sacred syllables of the Buddha or deity in question and started drawing.

Ideally, the artist recited these syllables and visualized the deity for the full duration of the creation of the Thangka. If this was done in a proper way, the Thangka was very different from an ordinary work of art and became inherently highly sacred. The foundational lines were drawn in pencil (followed by black ink) and used to take between 10 to 30 days to complete, depending on the size and complexity of the Thangka.

Shri Phuntsok Sangpo writes in his book titled ‘The Clear Mirror Depicting The Pearl Rosaries Of Thangka Painting of the Tsang-Pa Tradition Of Tibet’ published by Tibetan Refugee Self Help Centre, Printing Department, Darjeeling, mentioned that examples of measurements to be followed for drawing the outlines of Lord Buddha and other divinities are given and unalterable. He writes “In the texts of Duekhor (Dus- hkhor) or Kala Chakra, Domjung (Sdom-hbyun) or and in a text explained to Sari-Putra by Lord Buddha, the body measurement of the various Gods and Goddesses are given. These texts were further revised for easy understanding by the learned Pandits of India and Tibet.

The measurement of ‘Sangay’ (Sans-rgyas) or Lord Buddha, the Bodhisattavas and the celestial Goods or Sambogkaya are as follows:

Lord Buddha has a face measurement of $12\frac{1}{2}$ Sors (unit of measurement) and the while length of the body is equal to ten face measurements (i.e. $10 \times 12\frac{1}{2}$ sores). The Budhisattavas (Byan-semes) have face measurement of 12 sors and the body is equal to ten-face measurement (i.e. 10×12 sors) in height. The Female divinities are nine face measurement, the Wrathful Divinities are 8 face measurements and Dwarf Form Divinities are 6 face measurements respectively.

Thus, there are five basic measurements i.e. Buddha, Bodhisattavas, female Divinities, Wrathful Divinities Dwarf Form Divinities which need to be dealt separately.

For the standing divinities, generally, the drawing is begun with the Main Central Perpendicular line or the line of Brahma. Draw the Main Central Perpendicular line and construct various horizontal lines in descending order with distances of 4 sors, 4 sors, 12 sors, 4 sors and 12 sors, 12 sors, 12 sors and 4 sors, 24 sors, 4 sors, 24 sors and 4 sors representing the tsuktor (gtsuk-tor) or sero-vest, hair face, neck and the chest, stomach, abdomen and the hips, thigh, knee, calves and feet respectively. Thus, the total height is 120 sors (2 sors of Gemtop is not included)

Perpendicular lines from the Main Central perpendicular line at distances of 12 sors, 20 sors, 16 sors, and 12 sors to both the right and left sides are drawn. These lines represent the left and right chest, right and left arms, left and right forearms and the left and right palms including the fingers. Thus, the total width of the body is 120 sors.”

In his book he provided the following example.



Fig. 1: Sketch provided by Shri Phuntsok Sangpo

iv. Colour / Mixing Paint

The predominant colour (minerals, rarely vegetables), according to Tucci, “are lime white, red, yellow (obtained from arsenic), green (from vitriol), vermillion (from carmine), blue (from lapis lazuli), and indigo. Mineral colour are pounded in a special stone mortar with a wooden pestle. Gold is much used for backgrounds and ornaments; the use of silver is rarer.”

It generally took a full day to prepare the five primary colour used in Thangka painting i.e. white, yellow, red, blue and green. The materials included a variety of mineral and vegetable substances: minerals, precious stones, bark, leaves, flowers (especially the rock rose), gold, silver, copper, etc. Each had to be collected from its source in different areas of Tibet , cleaned, ground, powdered, crushed or cooked. Nowadays, artists tend to opt for chemical based pigments, easily available in the market. In an attempt to preserve the genuine tradition, a master artist uses natural materials as far as possible in his work. While each colour is being mixed, it is continuously tested on the edges of the canvas and allowed to dry. Only after the paint is completely dried it reveals its true colour.

v. Glue

This is more of an accessory than a main item of production. It is essential in brush production, working with precious metals etc. Traditionally, glue was derived from the layers of Yak skin. Other parts of Yak’s body such as horn were sometimes used but glue derived from skin was accepted as of the best quality. If the processing was done appropriately it remained effective for long time even for centuries.

vi. Paint Brush Making

Traditional paintbrushes were made out of several different materials. For painting on rough surfaces, brushes were made out of Nama grass, a tough grass growing along riverbanks. For medium soft brushes, the hair of horses' tails was used. For soft brushes of any size, the tufts of hair growing above goats' hooves, the fine hair inside cows' ears, the fur of otters, the very soft feathers of mountain songbirds, and the fur of brown and black cats (especially in India where the other hair and fur are not available) were considered to be perfect for painting.

It took 3 to 4 days to make about 20 high quality brushes. The handle of the brush was a slender piece of upward growing bamboo cut just above the joint. One-inch long hair clipped from the animal had to be carefully mixed with powder and sorted to find the hair resembling a needle in shape. These were carefully extracted and laid side by side in perfect evenness.

Then they were very carefully inserted into the bamboo in such a way that all the hair lay together in a cone shaped point. They were seized in between the fingertips and dunked into glue. The bamboo was also dunked in the glue, and the hair was then inserted into the bamboo. Each hair had to be perfectly in place. Then a string was carefully tied around the bamboo, not too tight and not too loose. The brushes were then left to dry.

vii. Colour

As regards colour, the primary ones are white, yellow, red, blue and green, in all five in number. The secondary colour are vermillion, saffron, flesh colour and light purple while smoke colour, brown, turquoise blue fall into the third category.

These colours may further be divided into as many as 32 small varieties. However, it is said that polish, splendour and texture are the test of good colour preparation and correct shading, smoothness and outlining are demarcations and the test of good application.

Traditionally, and even today for good quality hand painted Thangkas, chemical colour is not used. Though chemical colour is superior in almost all the aspects to non-chemical colour ranging from usability to availability, scalability etc., this type of colour gets damaged after some time. Depending on the quality of the colour used, this time period may vary from a few months to a few years. In sharp contrast where no chemical was used, colour derived from stone/clay lasted for many years, even for centuries without losing its character.

viii. Painting

Many artists follow a definite, specific sequence to colour application. In general, the Thangka was painted from top to bottom. The first step was the sky, which used to take 3 to 6 days. An initial deep blue wash was followed by innumerable slender, lengthwise brush strokes to produce a

stipple effect of lines. Then all the blue parts of the Thangka (water, clothing, etc.) were filled in.

The dark green landscape and all the dark green areas were handled next. This was followed by light blue, then light green, red, orange, pink, brown, pale orange, yellow, pale yellow and finally white. When the whole series of base coat colour had been applied and allowed to dry, the Thangka was scraped with a razor blade, held at an arched angle to the cloth, to smoothen away any roughness in the paint. The dust was brushed off with a soft cloth or feather.

ix. Redrawing and Shading

The original detailed lines of the clouds and flowers that had been covered by paint, were redrawn by pencil and traced over in black ink. The artist then shaded them with a fine paintbrush.

In general, a Thangka needs three applications of paint, but flowers require many repeated applications of thin paint to give them their effect of inherent radiance. A single flower may take 3 to 7 days to complete.

x. Details

Painting the intricate details of the back and foreground landscape and brocade clothing designs followed the same sequence of colour application as above. This took 18 to 20 days to complete.

xi. Body Shading and Final Painting

At the next stage the artist would apply shades of colour to give shape to the figure's body and face. The flowers were given final shading and all the minute background details such as fish, deer, birds, fruit and countless grass blades were painstakingly painted.

xii. Application of Gold and Other Precious Metals

A considerable quantity of gold was used to highlight and give the Thangka its final glorious touches. This entails a strenuous, complex process. Preparing the gold would take 7 to 10 days and applying it took an additional 6 to 25 days. The artist generally procured about 50 gramme of

gold at a time (not more than five gramme are applied to a single Thangka) and employed a goldsmith to heat, clean and beat it into sheets.

The artist cut the sheets into tiny pieces and put them in a mortar with water and grain sized pieces of marble or glass. He ground the mixture until the bits of marble or glass were mere dust particles. More water was added and the mixture was covered and allowed to stand overnight. By morning, the gold sank to the bottom and the milky mix of marble water was dumped off.

This process was repeated with the addition of glue each morning for seven days. Finally, only glue was added to the gold and this mix was vigorously ground to extract any remaining impurities. The artist then evenly heated a metal sheet over a medium flame. Adding water and a little glue, he dropped tiny dollops of gold onto the hot metal.

The water evaporated and the gold hardened into little pellets. A few of these were then mixed with water, glue and egg white or juice of Sema grass seed. After the gold was been applied to the Thangka, it was polished with a semi-precious stone often known as gZis stone.

Today also the artists who choose to make their own gold for application follow this process almost in the same way. For the willing artists, ready gold dust and pellets are available in the market.

xiii. Opening the Eyes

This is the most important moment of a Thangka artist's work. Before painting the figure's eyes, the artist bathes and makes offerings to the Buddha's body, speech and mind. When the eyes have been painted, seed syllables and prayers are inscribed on the back of the Thangka to awaken the image's energy.

xiv. Brocade

Final 4 to 6 days are needed for the tailor to fix a brocade frame to the completed Thangka. Silk made brocades come from two distinct sources. Cheaper material comes from China and the costlier, higher quality material comes from Varanasi.

xv. Consecration

This final step is one of the most important steps of Thangka creation. The practitioner takes his newly completed Thangka to a highly realized Buddhist master and makes offerings seeking his blessings.

The master, endowed with the clear mind of enlightenment, is able to "bring alive" the image on the Thangka by infusing energy into it. The Thangka, having now been properly consecrated, becomes a receptacle of wisdom. It is ready to be hung and venerated as a genuine living embodiment of enlightened mind.

It is important to note that this final step is only necessary if the Thangka artist himself is not acknowledged as a realized being. It is believed that many important Buddhist masters have intentionally taken rebirth as Thangka painters, and if such an artist creates a Thangka or thanka, the very mind of the artist naturally consecrates the image being painted. In such cases, there is no need to seek the services of a lama for an additional consecration.

These steps are a generalized Thangka making process however, it is advised that one must remain aware that it is essential to combine these processes with the correct motivation, philosophy and creative ability to obtain a Thangka of excellence. The spiritual significance of Thangkas is deep rooted. The devotees believe that to look at a Thangka is to be blessed. The Buddhist religious work Manjushree Mulkalpa says that the proper making of a Thangka gives spiritual happiness. The Thangka are miniature shrines on which the pictures of Bodhisattvas and Avalokiteshwaras are the images in the garbhagriha of a temple

Inputs for Thangka Art

An analysis of the Thangka creation process based on the literature survey and discussion with the renowned practicing experts reveals the following inputs those are used in Thangka Painting:

Physical Inputs:

1. Canvas
2. Glue
3. Clay

4. Trained manpower
5. Brush
6. Stone Colour
7. Vegetable Colour
8. Precious metal powder
9. Facilities – working space and utilities

Spiritual inputs:

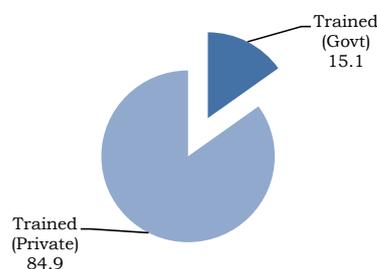
1. Motive – Religious guidance for creating a Thangka
2. Consecration guidance
3. Auspicious days

3.3 Status of Training and production

Training institutions

In Sikkim, training on Thangka art is imparted by organizations that can be categorized under two heads, govt. and private. Majority of the artisans who are pursuing this trade are connected with the training facility run by DHH. In governmental initiative DHH and Ecclesiastical Affairs Department, Govt. of Sikkim are the two centres as impart training on Thangka art. In private initiative two major centres are there. Khangchenzondnga Traditional Handicrafts run by Shri Khandu Wangchuk at Namchi and Sikkim Thangka Centre run by Pema Wangyal Bhutia at Gangtok.

| | Frequency | Percent |
|--------------------------|-----------|---------|
| Trained (Govt) | 23 | 15.1 |
| Trained (Private) | 129 | 84.9 |
| Total | 152 | 100.0 |



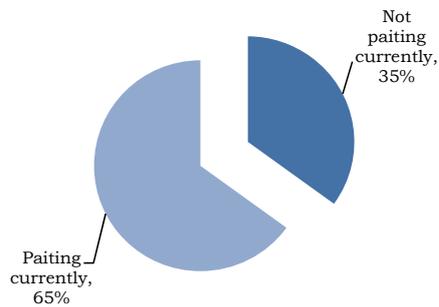
It is observed that 15.1% and 84.9% of the respondents got their training from govt. and private training facilities respectively. It is further

observed that persons trained from the govt. facility are practising the trade more than that of the trainees from the private facility.

Current status of engagement

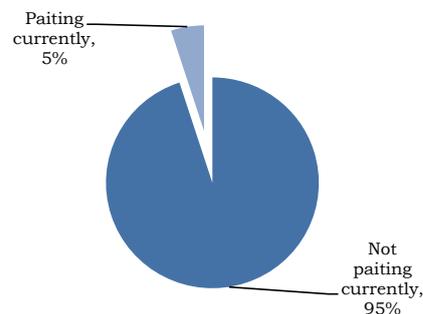
Cross-tabulation between painting status and source of training received reveals that, so far as the training imparted by govt. facilities is concerned, 8 out of 23 trainees (35%), who received training, are not pursuing this trade whereas 15 are pursuing this trade (65%).

| | Trained (Govt) |
|-------------------------------|-----------------------|
| Not painting currently | 8 (35%) |
| Painting currently | 15 (65%) |
| Total | 23 |



On the contrary, so far as the training imparted by private initiative is concerned, 123 out of 129 trainees (95%), who received training are not pursuing this trade whereas 6 (5%) are pursuing this trade.

| | Trained (Pvt.) |
|-------------------------------|-----------------------|
| Not painting currently | 123 (95%) |
| Painting currently | 6 (5%) |
| Total | 129 |



Crosstabulation between training source and current painting status

| | Not painting currently | Painting currently |
|-------------------|------------------------|--------------------|
| Trained (Govt) | 8 | 15 |
| Trained (Private) | 123 | 6 |



Further it is observed that the trainees from the govt. institute get market access through the institute more than that of private players. Correlation analysis reveals that a significant correlation is present between training received from the govt. institute and getting orders through the institute.

Correlations

| | | Trained | Customers get in touch Referred by third party-Govt |
|-----------------------------------------------------|---------------------|---------|-----------------------------------------------------|
| Trained | Pearson Correlation | 1.000 | .520 |
| | Sig. (2-tailed) | . | .000 |
| | N | 152 | 152 |
| Customers get in touch Referred by third party-Govt | Pearson Correlation | .520 | 1.000 |
| | Sig. (2-tailed) | .000 | . |
| | N | 152 | 152 |

**Correlation is significant at the 0.01 level (2-tailed) i.e. post training service provided by the govt. institute has strong influence on the trainees' following the trade.

Post training pursuit of the trade

Thangka is a complex art form that combines delicate subjects of iconography, craftsmanship, painting, religious understanding etc. There is no simple technique to impart training on this art within a short period of time. According to the established practitioners it generally takes nearly a decade when a trainee can start creating his own Thangkas. This long

training is not imparted by any training facility in Sikkim and for students also it becomes an impractical proposition to pursue such a long training.

Longest duration formal training is imparted by DHH and it runs for 4 years. Only the very determined few complete the total training and it is observed that these candidates remained connected with the trade.

There are trainees who undergo training for longer duration than 4 years under private training facility. After completion of 3-4 years of training these trainees start helping the trainer and become subsistence level wage earner. They remain as assistants for several years, generally for 5-6 years.

The present survey reveals that out of the total 152 respondents surveyed none has undergone formal training more than 4 years; 130 (85.5 %) of the practitioners had undergone formal training between 2-4 years and 22 (14.5%) less than 2 years.

| Training duration | Frequency | Percent |
|-------------------|-----------|---------|
| <2 years | 130 | 85.5 |
| >2<4 years | 22 | 14.5 |
| Total | 152 | 100.0 |

Cross-tabulation between painting status and duration of training reveals that out of the 131 artisans who are not painting 122 (93%) have got training for up to 2 years. In contrast out of the 21 artists who are painting currently 13 (62%) have got training for more than 2 years

| Training duration | Not painting currently | Painting currently | Total |
|--------------------------|------------------------|--------------------|-------|
| Between 1-2 years | 122 (93%) | 8 (38%) | 130 |
| >2<4 years | 9 (7%) | 13 (62%) | 22 |
| Total | 131 | 21 | 152 |

It is observed that 62 % of the artisans who are continuing with the trade have got training between 2 and 4 years and 38 % of the artisans who are continuing with the trade have got training for less than 2 years

A more in-depth analysis of this data with the help of statistical tools of correlation reveal that (higher) / (lower) the duration of the training (higher)/ (lower) is the chance of an artisan to pursue this trade.

Correlation

| | | Duration of training | Painting currently |
|-----------------------------|----------------------------|----------------------|--------------------|
| Duration of training | Pearson Correlation | 1.000 | .540 |
| | Sig. (2-tailed) | . | .000 |
| | N | 152 | 152 |
| Painting currently | Pearson Correlation | .540 | 1.000 |
| | Sig. (2-tailed) | .000 | . |
| | N | 152 | 152 |

** Correlation is significant at the 0.01 level (2-tailed), i.e. duration of the training has a strong influence on the artisans to become practitioners in this trade.

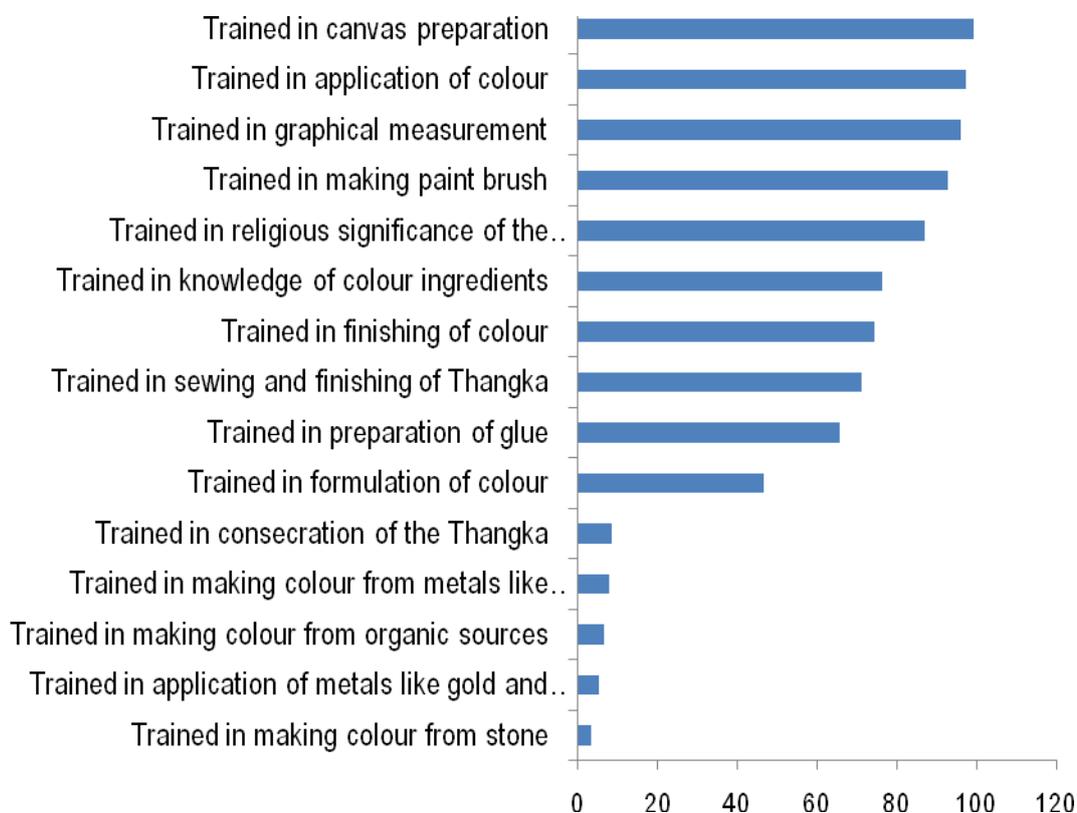
Coverage of training

Thangka creation process analysis reveals that it has fifteen major areas to cover. Majority of these heads are physical in nature while a couple of the heads are intellectual. It is found, when the more basic painting aspects get higher coverage in the training whereas more advanced aspects those are important for attaining the distinction in the market such as preparation of colour, making usable precious metal components etc. are covered less.

In many cases, particularly in the cases of lesser trained ones, paradigm shift has taken place so far these inputs are concerned. To these newly introduced to the Thangka art, glue means chemical adhesive, colour means acrylic, poster colour etc., making colour means mixing these chemical colour, white clay means distemper colour etc.

| Heads of training | Trainees received training (%) |
|----------------------------------------------------|--------------------------------|
| Trained in canvas preparation | 99.3 |
| Trained in preparation of glue | 65.8 |
| Trained in knowledge of colour ingredients | 76.3 |
| Trained in making colour from organic sources | 06.6 |
| Trained in making colour from stone | 03.3 |
| Trained in making colour from metals like gold | 07.9 |
| Trained in formulation of colour | 46.7 |
| Trained in graphical measurement | 96.1 |
| Trained in application of colour | 97.4 |
| Trained in making paint brush | 92.8 |
| Trained in application of metals like gold and | 05.3 |
| Trained in finishing of colour | 74.3 |
| Trained in sewing and finishing of Thangka | 71.1 |
| Trained in religious significance of the paintings | 86.8 |
| Trained in consecration of the Thangka | 08.6 |

Overall coverage of all the heads of training stands at 55.88%.



When these heads of training are trimmed down to the basic operations of preparation of canvas, drawing, painting and tailoring overall coverage goes to 88.50%.

It is observed that while the scale of training coverage impacts the success of conversion of trainees to artisans in reality training revolves around the most basic areas of Thangka art.

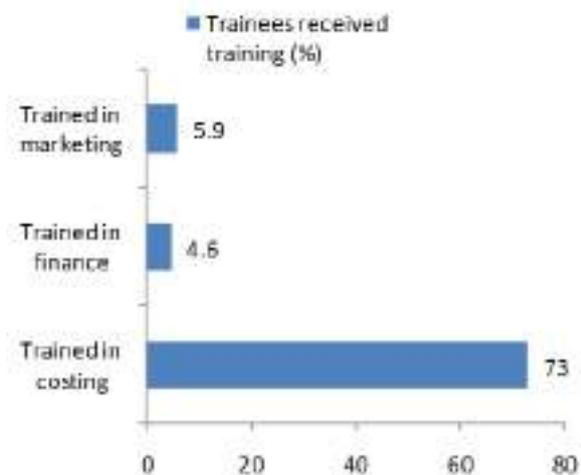
| Heads of training | Percentage of trainees received training |
|--------------------------------------------|------------------------------------------|
| Trained in canvas preparation | 99.3 |
| Trained in graphical measurement | 96.1 |
| Trained in application of colour | 97.4 |
| Trained in making paint brush | 92.8 |
| Trained in finishing of colour | 74.3 |
| Trained in sewing and finishing of Thangka | 71.1 |

Training on managerial aspects

Traditionally, Thangka was not associated with business. Nevertheless, it has become an item of vibrant business today. Artists in the old Tibet were offered lodging and honorarium for their work. But in the present days this type of arrangement has become unviable and market dynamics has taken the place of commissioning. Today's artists should not only be trained in the aspects of creation, they need to be trained in the business aspects of the trade.

It is found that very few candidates get training on aspects like finance and marketing whereas majority of them get exposure to costing part.

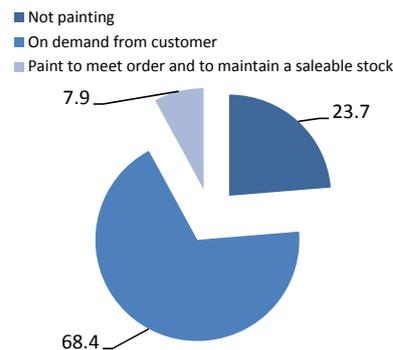
| Heads of training | Trainees received training (%) |
|----------------------|--------------------------------|
| Trained in costing | 73 |
| Trained in finance | 4.6 |
| Trained in marketing | 5.9 |



Present level of association with the trade

Market of Thangka in Sikkim is not a very big one. A handful of the practitioners remain engaged in creating Thangka on a regular basis to satisfy their customer need. These artisans are well established names in the market. There is a second group of a few artists who remain engaged with Thangka creation fairly regular. They work almost as job worker associated with some organization.

| Regularity of painting Thangka | Percent |
|-----------------------------------------------------|--------------|
| Not painting | 23.7 |
| On demand from customer | 68.4 |
| Paint to meet order and to maintain a saleable sock | 7.9 |
| Total | 100.0 |



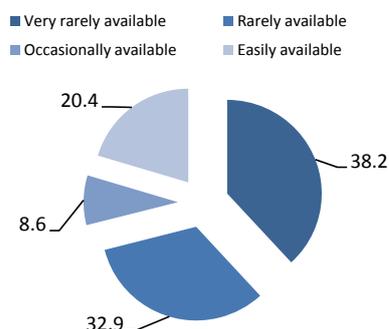
It is observed that 7.9% of the respondents are producing Thangkas on regular basis whereas 68.4% of them are producing Thangkas on demand only. It is further observed that 23.7% of the respondents are not pursuing this trade at all currently. Majority of the artisans associated with this trade are only partly employed.

Availability of religious inputs

Thangka is an art form that deals a great extent with the preternatural world. The authenticity of this art depends very much on the religious precepts. Many a times guidance on religious aspects is needed for the creation of authentic Thangka and this input is considered to be vital for market acceptability of Thangkas. It is observed that on the whole this input is available to the Thangka artists in Sikkim.

Observation

| Availability of religions inputs | Percent |
|----------------------------------|--------------|
| Not available | 00.0 |
| Very rarely available | 38.2 |
| Rarely available | 32.9 |
| Occasionally available | 8.6 |
| Easily available | 20.4 |
| Total | 100.0 |

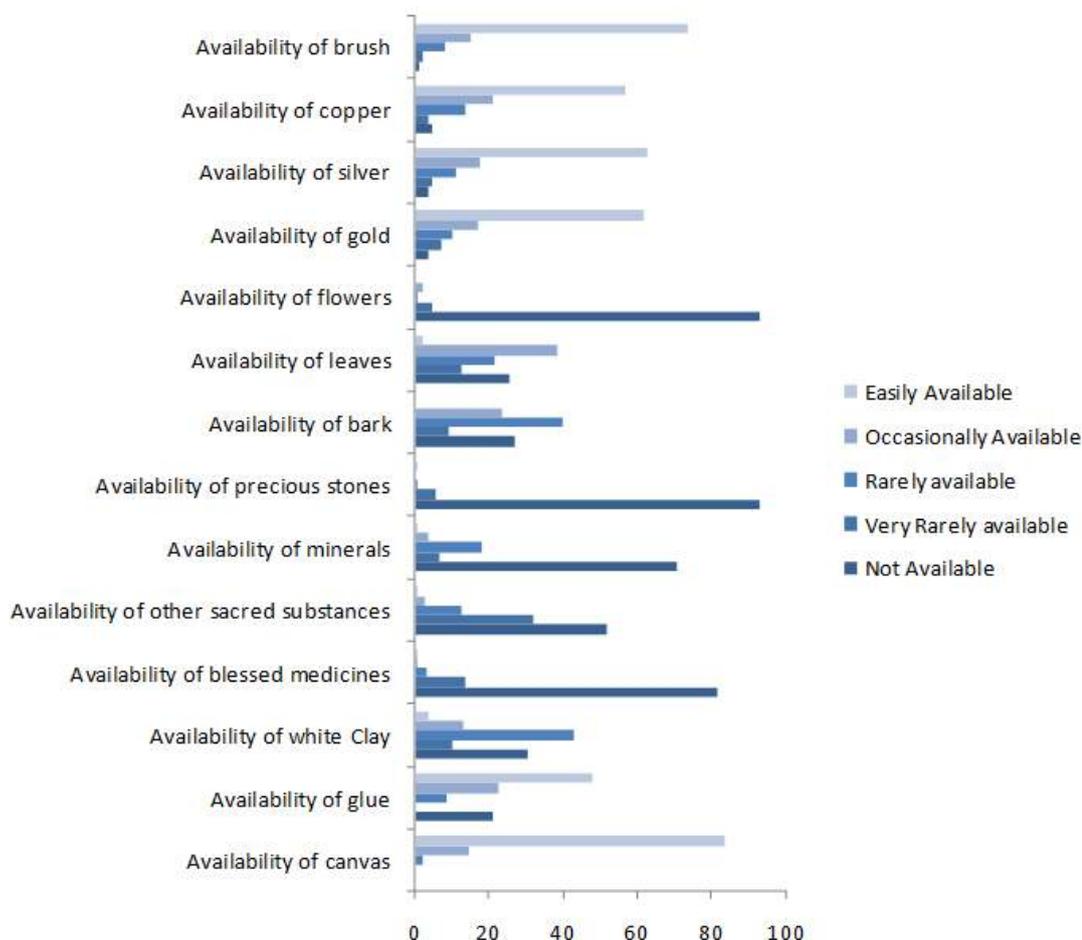


Availability status of production inputs

Physical inputs of a Thangka are specified. Much alteration is not accepted in the authentic pieces. There is a wide variation in the availability of the identified 14 major physical inputs required in Thangka creation. The following table and graphs describes the status.

Observation

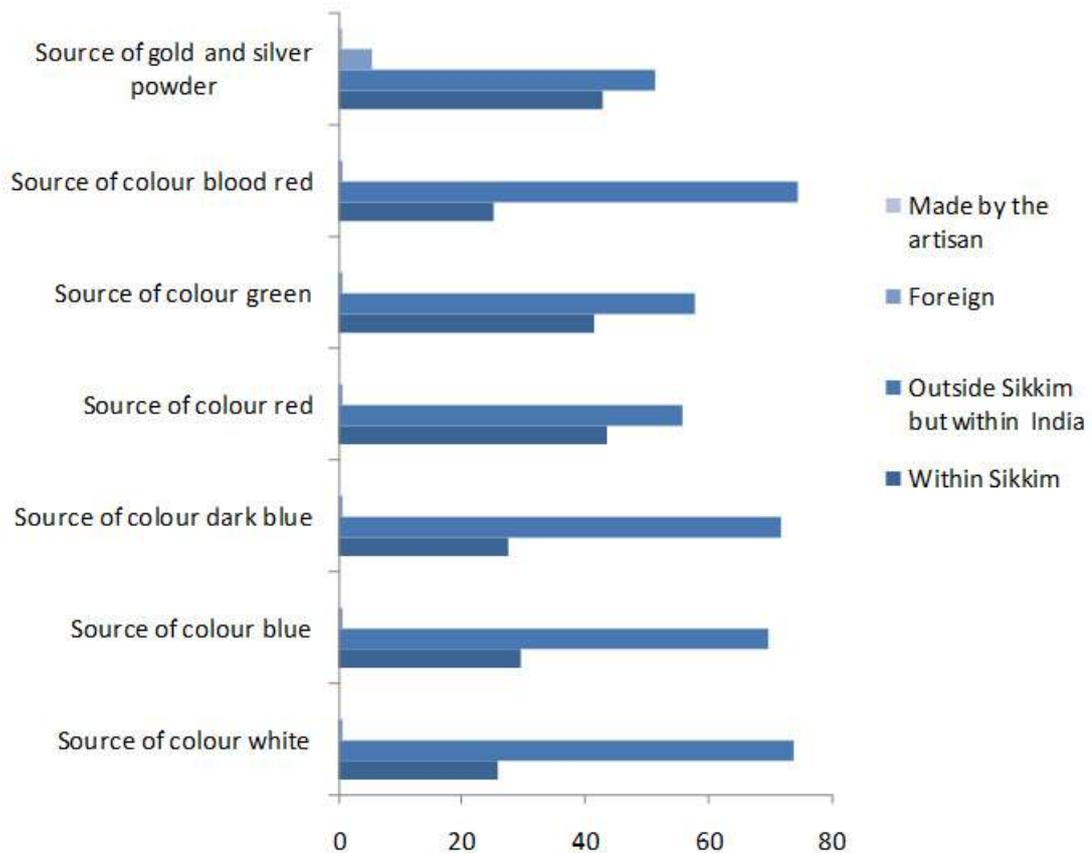
| | Not Available | Very Rarely available | Rarely available | Occasionally Available | Easily Available |
|-----------------------------------------|---------------|-----------------------|------------------|------------------------|------------------|
| Availability of canvas | - | - | 2.0 | 14.5 | 83.6 |
| Availability of glue | 21.1 | - | 8.6 | 22.4 | 48.0 |
| Availability of white Clay | 30.3 | 9.9 | 42.8 | 13.2 | 3.9 |
| Availability of blessed medicines | 81.6 | 13.8 | 3.3 | 0.7 | 0.7 |
| Availability of other sacred substances | 52.0 | 32.2 | 12.5 | 2.6 | 0.7 |
| Availability of minerals | 70.6 | 6.5 | 18.3 | 3.9 | 0.7 |
| Availability of precious stones | 92.8 | 5.9 | 0.7 | - | 0.7 |
| Availability of bark | 27.0 | 9.2 | 40.1 | 23.7 | - |
| Availability of leaves | 25.7 | 12.5 | 21.7 | 38.2 | 2.0 |
| Availability of flowers | 92.8 | 4.6 | 0.7 | 2.0 | - |
| Availability of gold | 3.9 | 7.2 | 9.9 | 17.1 | 61.8 |
| Availability of silver | 3.9 | 4.6 | 11.2 | 17.8 | 62.5 |
| Availability of copper | 4.6 | 3.9 | 13.8 | 21.1 | 56.6 |
| Availability of brush | 1.3 | 2.0 | 7.9 | 15.1 | 73.7 |



Sourcing of colour

Specialized inputs of Thangka art are procured from different sources by the artisans, whereas some of these inputs specially the colour are made by the master artisans themselves from the available natural resources. The following table and graphs describes the present source of seven major colour inputs for the artisans in Sikkim.

| | Within Sikkim | Outside Sikkim but within India | Foreign | Made by the artisan |
|-----------------------------------------|---------------|---------------------------------|---------|---------------------|
| Source of colour white | 25.7 | 73.7 | 0.7 | - |
| Source of colour blue | 29.6 | 69.7 | 0.7 | - |
| Source of colour dark blue | 27.6 | 71.7 | 0.7 | - |
| Source of colour red | 43.4 | 55.9 | 0.7 | - |
| Source of colour green | 41.4 | 57.9 | 0.7 | - |
| Source of colour blood red | 25.0 | 74.3 | 0.7 | - |
| Source of gold and silver powder | 42.8 | 51.3 | 5.3 | 0.7 |



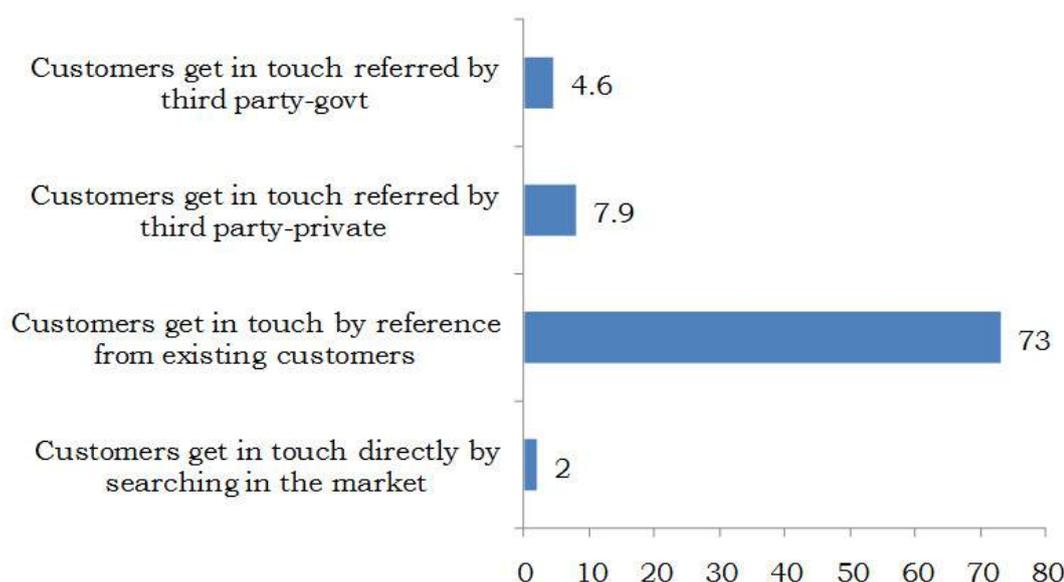
It is observed that majority of the colour components is procured by the artisans from the sources outside of Sikkim but within India. Further, it is found through personal interaction with the artisans that for majority of them colour means chemical colour and from that view point many of them answered the query. Moreover, there are agents within Sikkim who make arrangements of colour for the artisans. These middlemen in turn source these colour from places unknown to the artisans. For the artisans the source of this input is Sikkim only.

Customer contact

Customer contact and its intensity are vital for every business and it is particularly so in the case of Thangka art. Proper customer contact not only alleviates sales but also facilitates the 'feeling of pulse' of the market and acts as the main factor of market orientation.

It is found that the interaction of artisans with the customer base is minimal. Reference is the main channel through which customers and artisans get in touch with one another.

| | Yes | No |
|--------------------------------------------------------------------|------|------|
| Customers get in touch directly by searching in the market | 2.0 | 98.0 |
| Customers get in touch by reference from existing customers | 73.0 | 27.0 |
| Customers get in touch referred by third party-private | 7.9 | 92.1 |
| Customers get in touch referred by third party-govt | 4.6 | 95.4 |



Correlations

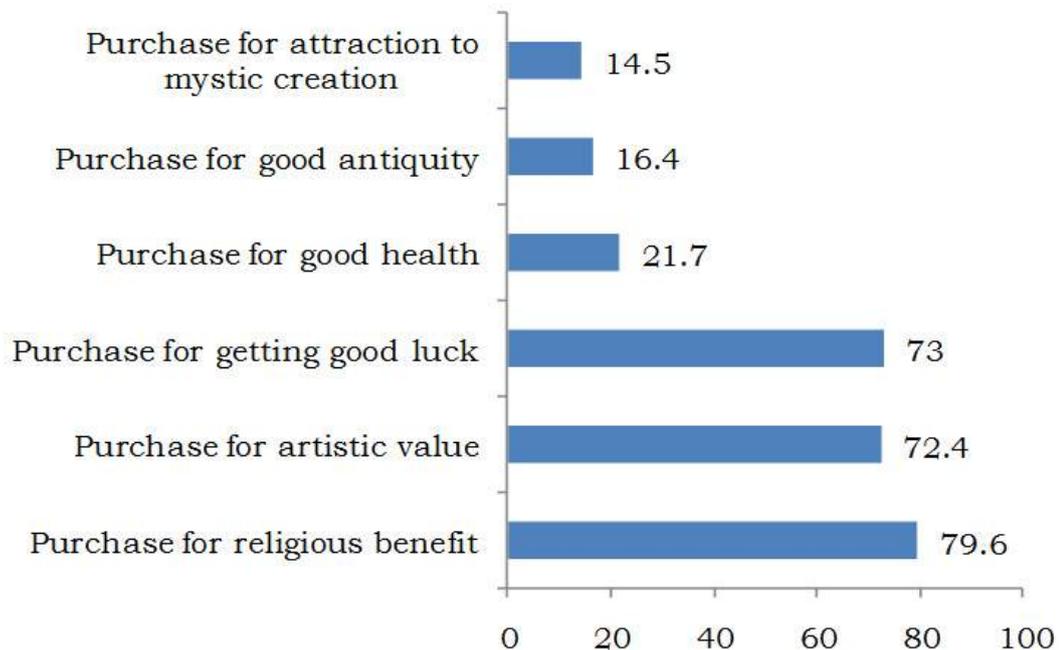
| | | Trained | Customers get in touch referred by third party-Govt |
|------------------------------------------------------------|---------------------|---------|-----------------------------------------------------|
| Trained | Pearson Correlation | 1.000 | .520 |
| | Sig. (2-tailed) | . | .000 |
| | N | 152 | 152 |
| Customers get in touch referred by third party-Govt | Pearson Correlation | .520 | 1.000 |
| | Sig. (2-tailed) | .000 | . |
| | N | 152 | 152 |

** Correlation is significant at the 0.01 level (2-tailed) i.e. there is a strong correlation between 'getting trained through government institute' and 'getting the customer contact through government institute'.

Customer motive / purchase drive behind possessing a Sikkimese Thangka

For any business it is important to understand the underlying motive of the customers to purchase. Traditionally Thangka is associated with religion. Nevertheless, there are other reasons also behind the purchase of Thangka. Apart from religion, there are a number of utilities that a Thangka offers to its customers, six such benefits including religion that a Thangka may offer to the possessors were earmarked and put to test in this survey and following is the summary of the finding

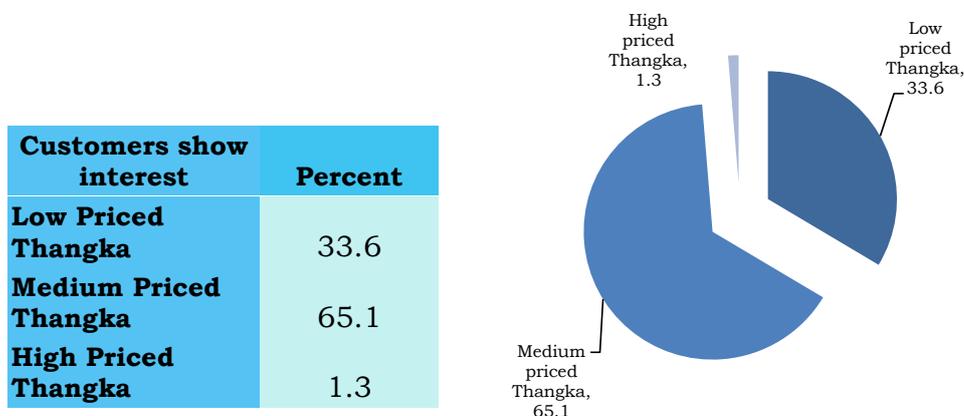
| | Yes (%) | No (%) |
|---------------------------------------------------|---------|--------|
| Purchase for religious benefit | 79.6 | 20.4 |
| Purchase for artistic value | 72.4 | 27.6 |
| Purchase for getting good luck | 73.0 | 27 |
| Purchase for good health | 21.7 | 78.3 |
| Purchase for good antiquity | 16.4 | 83.6 |
| Purchase for attraction to mystic creation | 14.5 | 85.5 |



It is observed that the practitioners of Thangka in Sikkim at present mainly cater to the need of the religiously inclined; but focus on the art inclination is almost absent. This survey reveals that religious benefit (tradition), good luck and artistic value are the three most important benefits in that order that the customers seek from a Thangka.

Price segmentation

As Thangka is purchased for various utility values, its market also can be segmented on the basis of the price that its customers are ready to pay. Artisans in Sikkim are aware of this price categorization and try to produce Thangkas those can be divided into distinct three categories. It is observed that majority of the artisans restrict themselves in producing low and medium priced Thangka. High priced Thangkas are produced in limited number by the very established practitioners only and that too mainly on demand.



It is observed that customers of Sikkimese Thangka are mainly interested in medium price Thangkas. Low priced Thangkas created by Sikkimese artisans face major competition from multitude of scroll printings and cheaper Thangkas, often produced with varying degree of machanisation.

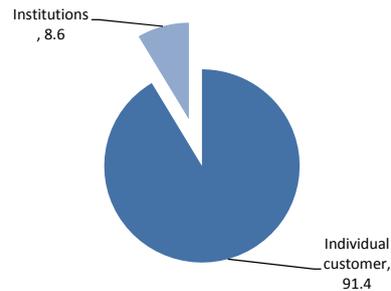
The practitioners of Thangka in Sikkim at present are not in a position to take the competition to the lower price segments that prevail in the market.

Constituent units of the market of Sikkimese Thangka

Understanding of ‘who constitutes the market?’ is of immense importance in servicing the market. Approach need to be distinctly different for individual and institutional consumer units. As Thangka is mainly consumed for religious purposes a Thangka is purchased by both

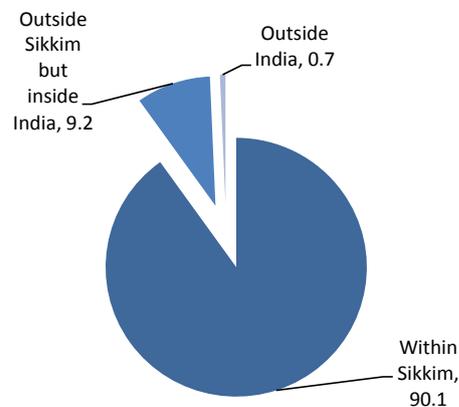
individuals as well as religious institutions. It is found that vast majority of the artisans (over 90%) in Sikkim are servicing the individual customers from within the state of Sikkim. 8.6% of the artisans service the institutions, mainly the meditation centres. Moreover, for a number of artisans DHH acts as the institution that mediates between the artisans and the customers.

| | Frequency | Percent |
|----------------------------|-----------|---------|
| Individual customer | 139 | 91.4 |
| Institutions | 13 | 8.6 |
| Total | 152 | 100.0 |



Geographical distribution of customers

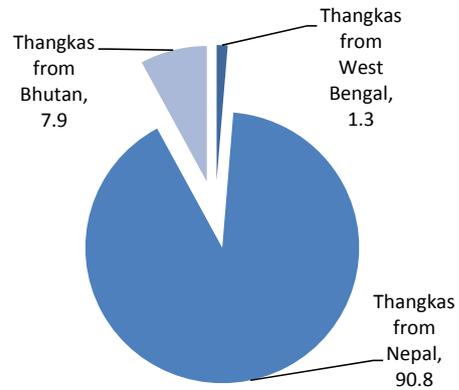
| | Frequency | Percent |
|----------------------------------------|-----------|---------|
| Within Sikkim | 137 | 90.1 |
| Outside Sikkim but inside India | 14 | 9.2 |
| Outside India | 1 | 0.7 |
| Total | 152 | 100.0 |



Reach wise it is observed that Thangka industry in Sikkim is mainly confined within the geographical boundary of Sikkim. It is observed that for over 90% of the respondents the customers are from inside Sikkim. Only in 10% of the cases customers from outside Sikkim are serviced. A major chunk of the market that is the tourist population is not tapped by the artisans.

Source of competition

| | Frequency | Percent |
|----------------------------------|-----------|---------|
| Thangkas from West Bengal | 2 | 1.3 |
| Thangkas from Nepal | 138 | 90.8 |
| Thangkas from Bhutan | 12 | 7.9 |
| Total | 152 | 100.0 |

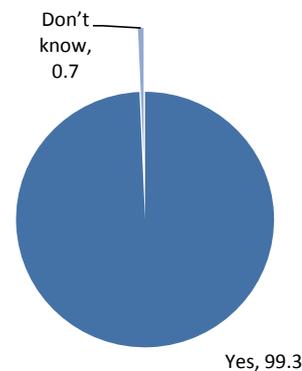


They are facing main competition from outside of the country. Nepal is the main source of competition for Sikkim, followed by Bhutan and China.

Threat of mechanization

Mechanization has been introduced in Thangka art to different extent in different production centres. Thangkas produced through mechanised processes have started infiltrating in Sikkim market too. It is observed that the artisans in Sikkim are aware of this development and searching for ways to face this changed situation.

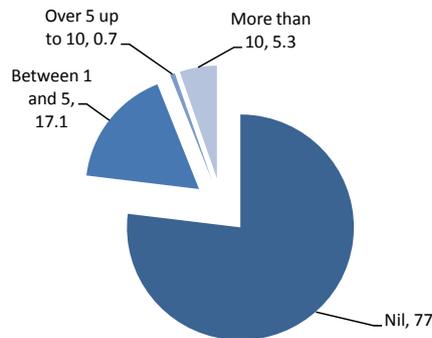
| Threat of Mechanisation | Frequency | Percent |
|-------------------------|-----------|---------|
| Yes | 151 | 99.3 |
| Don't know | 1 | .7 |
| Total | 152 | 100.0 |



Cheap Thangkas produced using mechanized devices/processes are a threat to the hand painted Thangkas of Sikkim. To be more precise the segment of cheap Thangka (sub `2000) has been created by the supplies from outside of the state and the local artisans are now trying hard to cope with this development. Overwhelming majority of the artisans believe that Thangkas created with the help of mechaised processes is a threat to their hand painted Thangkas. When the total process of Thangka creation is manual it takes anywhere between a few days to a few months to complete depending on the illustration involved. It severely affects the productivity of the artisans.

No. of Thangkas sold last year

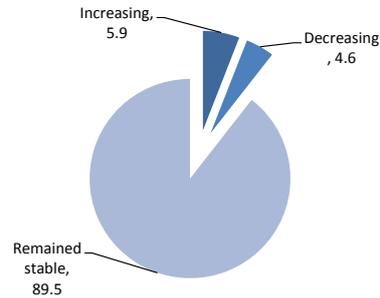
| | Frequency | Percent |
|------------------------|-----------|---------|
| Nil | 117 | 77.0 |
| Between 1 and 5 | 26 | 17.1 |
| Over 5 up to 10 | 1 | 0.7 |
| More than 10 | 8 | 5.3 |
| Total | 152 | 100.0 |



It is observed that huge majority of the respondents have not sold any Thangka in the past one year. It again substantiates the observation that majority of the Thangka artisans in Sikkim are partly employed.

Trend of sales

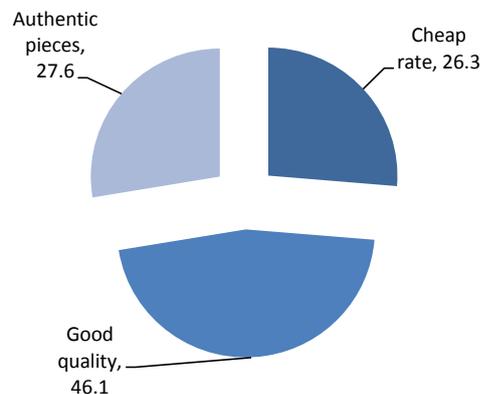
| | Frequency | Percent |
|------------------------|-----------|---------|
| Increasing | 9 | 5.9 |
| Decreasing | 7 | 4.6 |
| Remained stable | 136 | 89.5 |
| Total | 152 | 100.0 |



It is observed that for majority (89.5%) of the respondents, sales has remained stable over the years which indicates that market for hand-painted Thangkas from Sikkim is stagnant. Since the market as a whole is growing, stable customer base indicates that the market share for Thangkas of Sikkim origin is declining steadily.

USP

| | Frequency | Percent |
|-------------------------|-----------|---------|
| Cheap rate | 40 | 26.3 |
| Good quality | 70 | 46.1 |
| Authentic Pieces | 42 | 27.6 |
| Total | 152 | 100.0 |

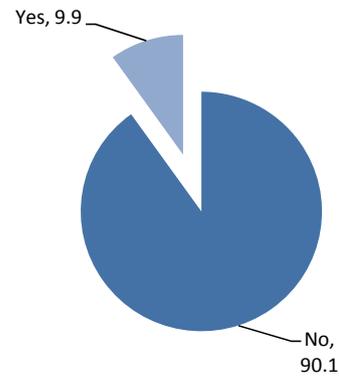


It is observed that for majority (46.1%) of the respondents USP is 'good quality'. It is followed by 'authentic pieces' created by the Sikkimese artisans. Traditionally these are the two segments which have been

successfully serviced and still being held by the Sikkimese artisans for a niche market.

Prospecting

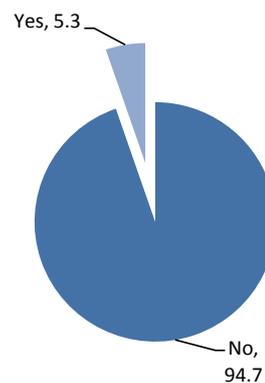
| | Frequency | Percent |
|--------------|-----------|---------|
| No | 137 | 90.1 |
| Yes | 15 | 9.9 |
| Total | 152 | 100.0 |



It is observed that for vast majority (90%) of the respondents effort to find out customers for their product is totally absent.

Taking help of internet

| | Frequency | Percent |
|--------------|-----------|---------|
| No | 144 | 94.7 |
| Yes | 8 | 5.3 |
| Total | 152 | 100.0 |

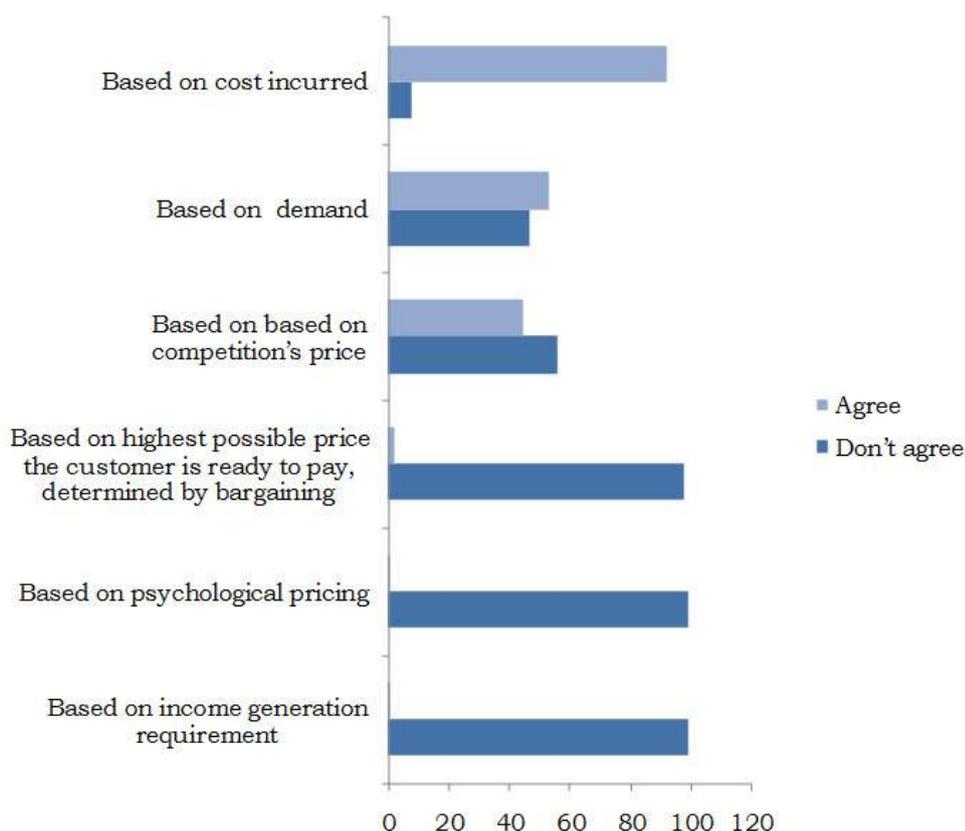


It is observed that majority (94.7%) of the respondents don't take any help of use of ICT (Information and Communication Technology) for the purpose of prospecting.

Basis of Pricing

Price is considered as the most important marketing tool. This tool can be used as a simple cost recovery one or as a lethal market capturing one. It is observed that most important pricing criteria for the Thangka artisans in Sikkim is the ‘cost incurred’ whereas very few keep competition’s price and other strategic considerations in view while pricing. Moreover, so far competition’s price is concerned the artisans within Sikkim consider the competition within themselves. Following is the summary of the observation made on this aspect.

| | Don't agree | Agree |
|-----------------------------------------------------------------------------------------------|--------------------|--------------|
| Based on income generation requirement | 99.3 | 0.7 |
| Based on psychological pricing | 99.3 | 0.7 |
| Based on highest possible price the customer is ready to pay, determined by bargaining | 98 | 2 |
| Based on based on competition's price | 55.9 | 44.1 |
| Based on demand | 46.7 | 53.3 |
| Based on cost incurred | 7.9 | 92.1 |

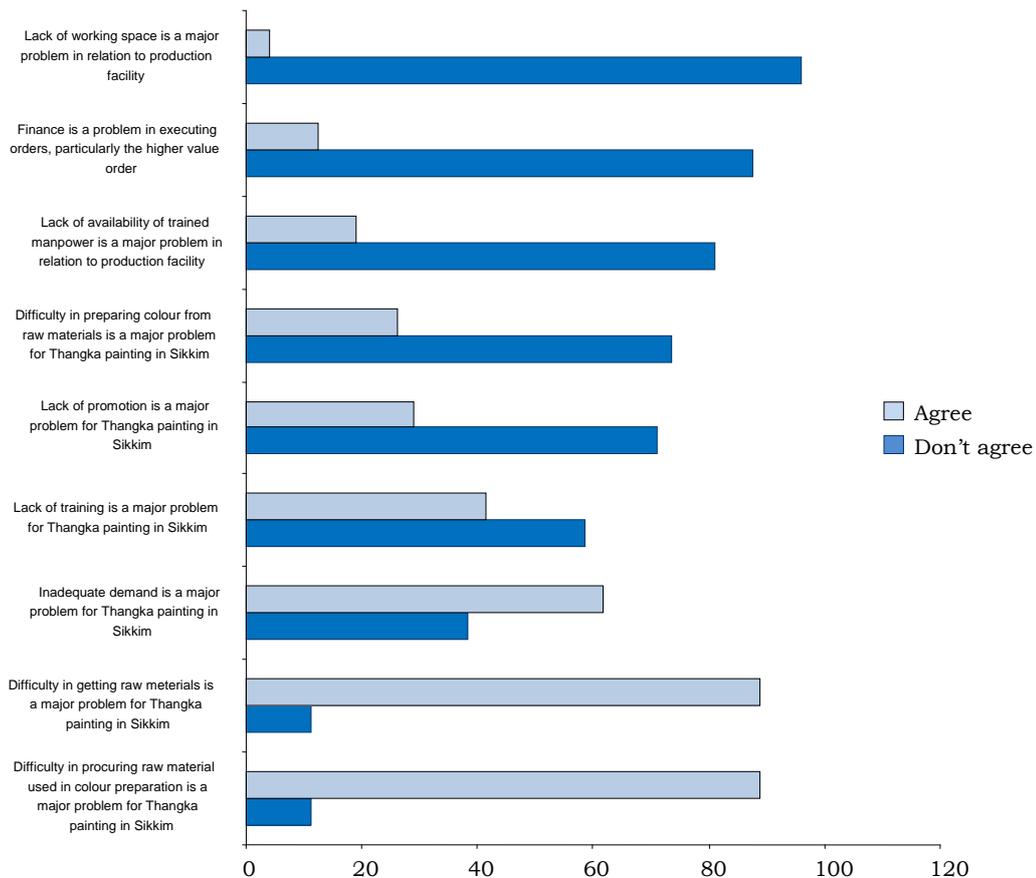


It is found that this trade in Sikkim is not tuned and focused to the competition that it has already been put by the lower cost Thangkas and other scroll paintings and pricing is done mainly on the basis of cost incurred .

Major perceived problems of the trade

It is observed that when asked directly about the problem areas those the Thangka artisans are facing in Sikkim, only two out of the nine areas are accepted by the majority of the artisans. These two areas are inadequate demand (61.8%) and difficulty in procuring raw materials (88.8%).

| | Don't agree | Agree |
|--------------------------------------------------------------------------------------------------------------------------|--------------------|--------------|
| Difficulty in procuring raw material used in colour preparation is a major problem for Thangka painting in Sikkim | 11.2 | 88.8 |
| Inadequate demand is a major problem for Thangka painting in Sikkim | 38.2 | 61.8 |
| Difficulty in getting raw materials is a major problem for Thangka painting in Sikkim | 11.2 | 88.8 |
| Lack of training is a major problem for Thangka painting in Sikkim | 58.6 | 41.4 |
| Lack of promotion is a major problem for Thangka painting in Sikkim | 71.1 | 28.9 |
| Difficulty in preparing colour from raw materials is a major problem for Thangka painting in Sikkim | 73.7 | 26.3 |
| Lack of availability of trained manpower is a major problem in relation to production facility | 80.9 | 19.1 |
| Finance is a problem in executing orders, particularly the higher value order | 87.5 | 12.5 |
| Lack of working space is a major problem in relation to production facility | 96 | 4 |

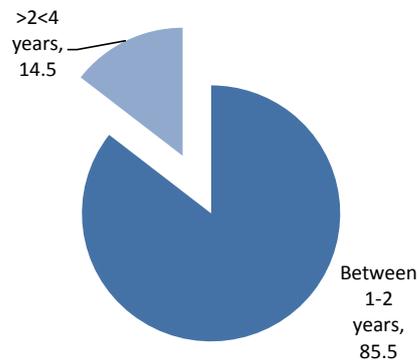


Production of Thangka is very limited in scale in Sikkim and that is the major reason behind the low level of problem facing by the artisans. The two areas those have been recognized as major problem areas are so basic in nature that in any level of engagement they affect the practitioners.

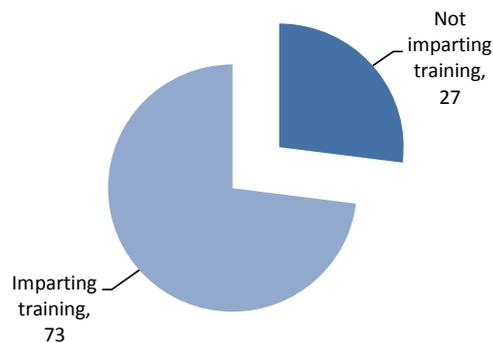
Training in private domain

It is observed that majority of the artisans who are associated with this art are imparting training or ready to impart training in Thangka art but the number of students that are getting training from these trainers are small in number. It is further observed that though only 22 artisans out of total 152 surveyed i.e. 14.5% undergone training more than 2 years 111 of all the artisans i.e. 73% imparts training.

| Training duration | Frequency | Percent |
|-------------------|------------|--------------|
| Between 1-2 years | 130 | 85.5 |
| >2<4 years | 22 | 14.5 |
| Total | 152 | 100.0 |



| | Frequency | Percent |
|------------------------|------------|--------------|
| Not imparting training | 41 | 27.0 |
| Imparting training | 111 | 73.0 |
| Total | 152 | 100.0 |



Finding

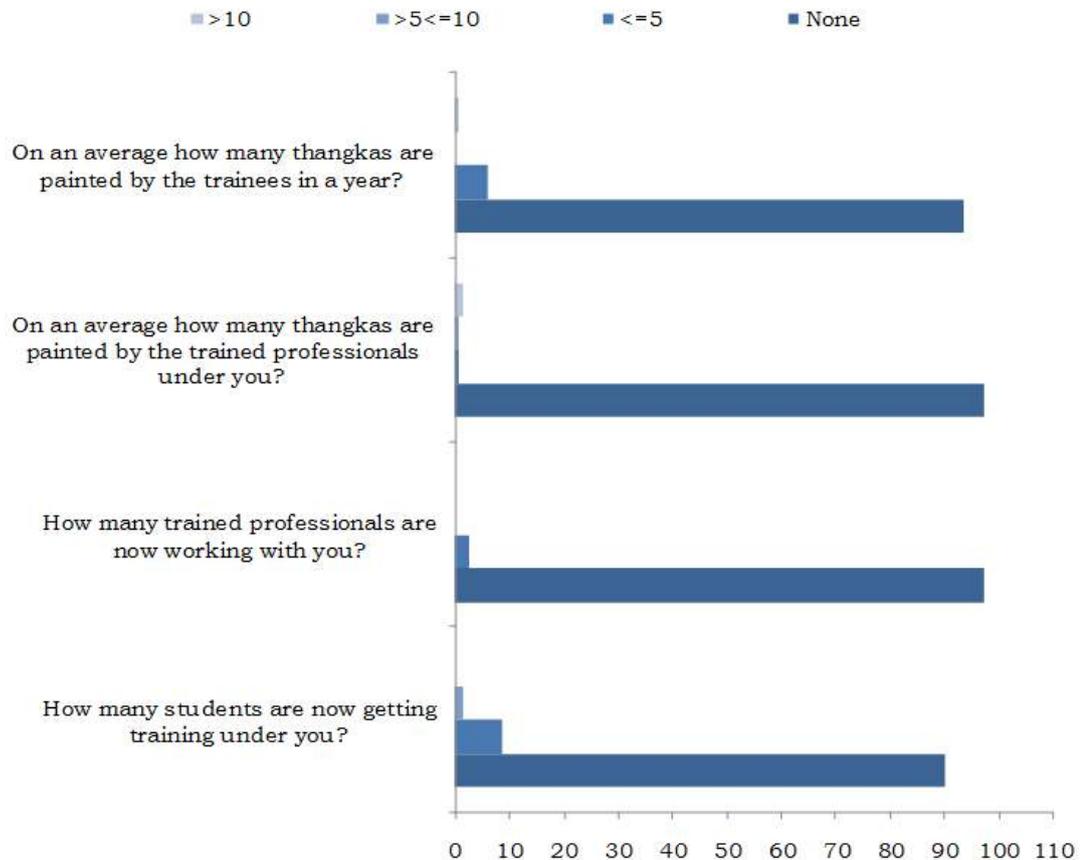
It is found that in private domain there are a lot of trainers who are under-qualified. Though world renowned artisans are there in Sikkim who are successfully imparting training for the last many decades in their private capacities and they have produced a number of successful protégés, the quality of the artisans who are trained by the lesser trained practitioners may be highly questionable.

Extent of training in private domain

Vast majority of the artisans (90.1%) who are willing to impart training are not training anyone presently.

It is observed that though majority of the artisans are in one way or the other involved in imparting training in the private domain, very few of them (9.9%) are presently having students under them or having trained professional working under them.

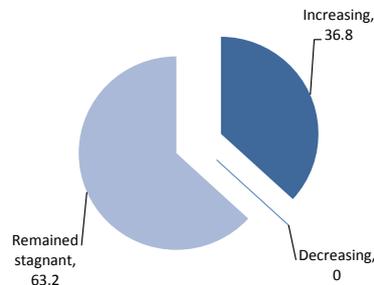
| | Percentage | | | |
|--------------------------------------------------------------------------------------------|------------|-----|--------|-----|
| | None | <=5 | >5<=10 | >10 |
| How many students are now getting training under you? | 90.1 | 8.6 | 1.3 | 0 |
| How many trained professionals are now working with you? | 97.4 | 2.6 | 0 | 0 |
| On an average how many Thangkas are painted by the trained professionals under you? | 97.4 | .7 | .7 | 1.3 |
| On an average how many Thangkas are painted by the trainees in a year? | 93.4 | 5.9 | 0 | .7 |



Interest among new generation

It is observed that in the opinion of most of the artisans the interest among the present day youth is increasing in this trade.

| | Frequency | Percent |
|---------------------------|-----------|---------|
| Increasing | 56 | 36.8 |
| Decreasing | 0 | 0 |
| Remaining stagnant | 96 | 63.2 |
| Total | 152 | 100.0 |



As Thangka is coming from the domain of the religion related consumers to the domain of general consumers, the market is growing bigger in size, steadily. This phenomenon has not gone unnoticed. Members of the present generation are finding it as a viable income generating activity and increasingly they are showing interest to get involved with this trade.

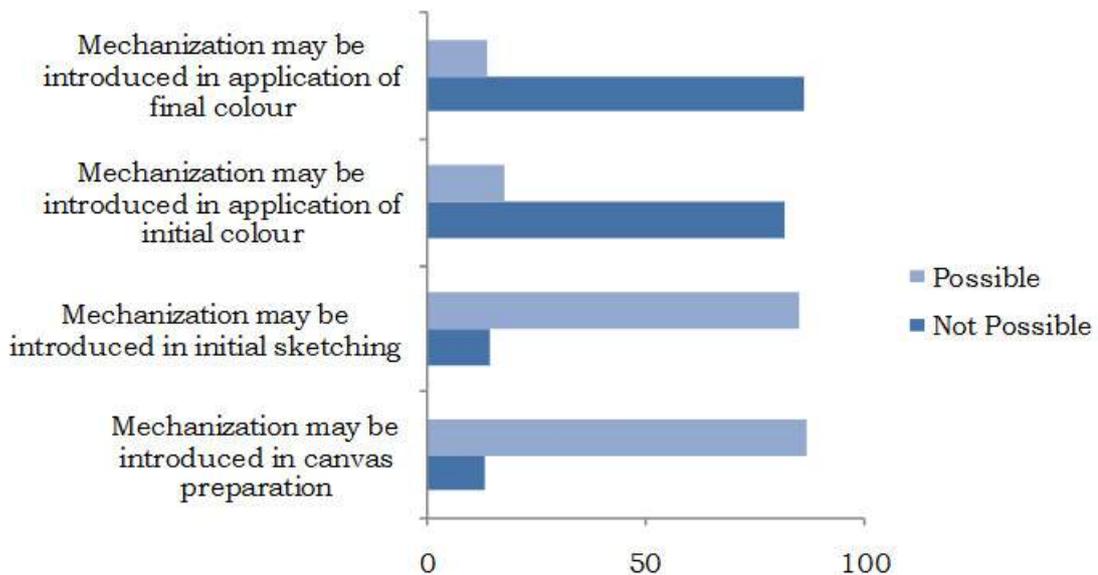
Understanding and extent of acceptability of mechanization

Artisans, in general, are agreeable to the introduction of mechanization in different areas of Thangka art. When go by the statistics we find that canvas preparation and initial sketching are the two areas where, according to the majority of the artisans, need is there and mechanization may be introduced. Other areas i.e. applications of colour were not found to be very much conceivable by the artisans.

In addition to the survey done through the questionnaire extensive discussion were also held to find out the details from a few of the established and renowned proponents of Thangka art in Sikkim. It is revealed that the stalwarts in Sikkim in this line are very much open to the suggestion of introduction of mechanization in this field. While two of the most renowned practitioners in the private domain are open to mechanization to any extent possible the trainer at the DHH is cautiously optimistic. He opines that the designs, as it is tweaked within the permissible limit of the trade, first be tried and then be accepted. It is learned from him that though the depiction

of Buddha and Bodhisattvas is guided by religious stipulations and is fixed, the other characters on the Thangkas may be altered in size, position, orientation, design etc. as per the wish of the artists or need of the market.

| | Not Possible | Possible |
|-------------------------------------------------------------------------|---------------|---------------|
| Mechanization may be introduced in canvas preparation | 13.2 (20) | 86.8 (132) |
| Mechanization may be introduced in initial sketching | 14.5 (22) | 85.5 (130) |
| Mechanization may be introduced in application of initial colour | 82.2 (125) | 17.8 (27) |
| Mechanization may be introduced in application of final colour | 86.2 (131) | 13.8 (21) |



Mechanisation to a given extent has acceptance among the artisans in general in Sikkim

3.4 Problems relating to production facilities

From the findings of the survey, problems relating to the production facilities may be identified as follows:

1. Absence of full fledged training centres in three out of the four districts in Sikkim. It is to be noted that many more artisans are getting trained through private initiatives spread all over Sikkim than

that of the governmental training facility. Short supply of artisans trained in Thangka creation beyond mere painting which includes preparation of colour from natural ingredients, application of precious metals, creation of Thangka from description given in Holy Scriptures etc.

2. So far as production units are concerned only two units are there under private initiative in Sikkim namely, -Khangchenzondnga Traditional Handicrafts run by Shri Khandu Wangchuk at Namchi and Sikkim Thangka Centre run by Pema Wangyal Bhutia at Gangtok. Both of these units have reported lack of physical infrastructure for imparting training and working of the artisans.
3. Absence of mechanization and lack of mechanized support for this trade.
4. No facility for the under-trained artisans to hone their skill by working as apprentice where they can be engaged under stipend.
5. Absence of training on managerial aspects of this trade

3.5 Problem areas relating to raw material

It is found that so far as traditional raw materials are concerned no major raw materials are available in Sikkim in sufficient quantity or volume. Stones used in colour preparation are not available in the local market and it takes weeks to prepare these colour. Vegetational sources for preparation of colour are also rarely available in Sikkim. The only major item available is Sunkhen/ Sungen and that is used to prepare the green colour. Vegetational sources for colour red, blue, dark blue etc. are not available in Sikkim. It is very difficult for an individual Thangka producing unit with very limited sales to procure these ingredients in bulk and process them in their units. Owing to low scale of operation this becomes uneconomic. The knowledge base of this domain has eroded substantially and remained confined to a handful of experts only. Prolonged confrontation with this problem has shifted the artisans away from using organic sources to the use of chemical ingredients.

To the present day artisans, chemical alternatives for all these raw materials are easily available at comparatively cheaper costs and these alternatives have become industry standards.

The trade channel for the prescribed raw materials is not structured. Artisans are at the mercy of the middlemen who collect the materials from diverse sources and bring to the artisans infrequently and occasionally. No regular and identifiable outlet is there in Sikkim for such materials. An artisan has to explore the persons who deal in these materials.

Production process of the major two raw materials viz., canvas and organic colour are volume based activities. Lower cost and higher availability is achievable when scale of operation becomes higher and handling is done in lot.

3.6 Present status and future employment generation opportunity

At present nearly 40 artisans are engaged in regular practice of this trade in Sikkim. Most of them are under-employed.

In this study directly it was not asked to the artisans whether they were engaged full time or part time in Thangka creation process. Two sets of data namely, i. whether they were engaged currently with Thangka Art and ii. Number of Thangkas sold by them in the last year, were used to make out the regularity of engagement of the artisans with the trade. Artisans who were currently engaged with the Thangka trade and sold 5 and above Thangkas last year were considered to be engaged full time with the trade. List of such artisans contacted in the survey is as follows:

| Sl. No. | Name | District | Block | Panchayat |
|---------|---------------------------|----------|------------|-----------------|
| 1 | Shri Lakpa Bhutia | North | Dzongu | Hee Gyathang |
| 2 | Shri Mingma Dorjee Sherpa | South | Temi Tarku | Chuba (Perbing) |
| 3 | Shri Pemba Sherpa | South | Temi Tarku | Temi |
| 4 | Shri Ruben Dorjee | East | Gangtok | Tathangchen |
| 5 | Shri Tashi Norbu Lepcha | East | Gangtok | Tathanchen |

Personal interviews revealed that in addition to the above, the following master craftsmen / trainers were also engaged full time with the production of Thangkas and Thangka art.

| Sl. No. | Name | District |
|---------|-----------------------------|---------------------------------|
| 1 | Shri Nima Bhutia | DHH, Gangtok, Sikkim (E) |
| 2 | Shri Pema Wangyal Bhutia | Baluakhani, Gangtok, Sikkim (E) |
| 3 | Shri Khandu Wangchuk Bhutia | Allay Dara, Namchi, Sikkim (S) |

Part time

Similar to the full time artisans part time artisans have been calculated on the basis of artisans contacted during the survey who have sold at least one Thangka in the last one year prior to the study period. This list also includes artisans who were not painting at the time of the survey.

| Sl. No. | Name | District | Block | Panchayat |
|---------|---------------------------|----------|--------------------|--------------------------------|
| 1 | Shri Ajay Rai | East | Gangtok | Gangtok (Lower Burtuk) |
| 2 | Shri Binod Rai | East | Rhenock | Rhenock Tarpin (Reshi) |
| 3 | Shri Dhadul Bhutia | East | Gangtok | Tibet Road |
| 4 | Shri Lapka Sherpa | East | Gangtok | Bojoghari Bye pass Road |
| 5 | Shri Milan Subba | East | Khamdong | Sirwani |
| 6 | Shri Parja Thapa | East | Rhenock | Rhenock Tarpin (Rungdung) |
| 7 | Shri Sushil Kr. Choudhary | East | Gangtok | Tathangchen |
| 8 | Shri Tashi Narbu Lepcha | East | Gangtok | Tathanchen |
| 9 | Shri Chewang Lhamu Lepcha | North | Dzongu | Hee Gyathang |
| 10 | Shri Loden Lepcha | North | Dzongu | Hee Gyathang |
| 11 | Shri Nim Tsh. Bhutia | North | Kabi Tingda | Rongong Tumlong (Phodong) |
| 12 | Shri Ongdup Dorjee Lepcha | North | Dzongu | Hee Gyathang |
| 13 | Shri Sangro Ugen Lepcha | North | Dzongu | Hee Gyathang |
| 14 | Shri Sultim Lepcha | North | Mangan | Lungchok |
| 15 | Shri Indra Bdr. Tamang | South | Namchi | Maneydara (Namthang) |
| 16 | Shri Lakpa Sangay Sherpa | South | Temi Tarku | Chuba (Perbing) |
| 17 | Shri Nima Temi Sherpa | South | Namthing | Loe plubing |
| 18 | Shri Nordhen Sherpa | South | Temi Tarku | Chuba (Perbing) |
| 19 | Shri Palgor Sherpa | South | Temi Tarku | Chuba (Perbing) |
| 20 | Shri Prem Lal Tamang | South | Namchi | Maneydara (Namthang) |
| 21 | Shri Shevab Chuden Lepcha | South | Temi Tarku | Chuba (Perbing) |
| 22 | Shri Singh Bir Tamang | South | Namchi | Maneydara (Namthang) |
| 23 | Shri Sonam Paldem Sherpa | South | Namchi | Tingrithang (Pabong/Gangchung) |
| 24 | Smt. Sunita Limbtoq | South | Temi Tarku | Birmiok / Barnyak |
| 25 | Shri Deepan Rai | West | Tadong Rinchenpong | Rinchenpong |
| 26 | Shri Purna Hang Subba | West | Yuksom | Gerethang |

Out of the above full-time practitioners found in this study only two have reported that they have trained professionals working under them. Number of such trainees was less than five. Shri Pema Wangyal Bhutia was found to be the most regular and proficient practitioner and having 8 trained professionals working under him.

Sikkim has been affected by the development in surrounding areas of Nepal, Bhutan as well as China. Where Nepal and to some extent Bhutan are producing Thangkas of lower costs, Chinese supply of printed scrolls are being sold in Sikkim market with great success. The most recent and technologically advanced threat is emanating from Taiwan. Printed Thangkas being supplied from that source are exact copies of the originals. The situation is such that very few Thangkas as are displayed for sale at the stores in Sikkim are created in Sikkim.



Fig. 9: Hand-painted scroll

As in the case of any challenge, the current situation of Thangka art in Sikkim has thrown open opportunity for this trade. The market size of Thangka has grown bigger by the supply from outside. The market potential is tested by this across-the-boundary supply. Test marketing required for

any new concept has been done by this supply. Now, since the potential is known, arrangement for supply of such materials from within Sikkim may derive benefit of the situation as well as to keep the Thangka industry in Sikkim to remain competitive.

Conservative estimate based on this study shows that in a year nearly 1500 Thangkas are being sold in Sikkim and out of this about 50-60 Thangkas are sold through the emporium at DHH. The remaining is the market that is up for grabbing.



Fig. 10: Printed scroll sold in Gangtok

In addition to the above, lots of low priced scroll printings (₹ 50 – 500) are at present being sold every year. Domestic tourists are the main customers of these Thangkas. In 2009-10 around 6.3 lakh domestic tourists visited sikkim. On the basis of assumption that an average household comprises 5 persons, it can be estimated that around 125000 domestic families visited Sikkim. If one out of every 10 families purchases a scroll as souvenir then 12500 is the size of this market. This type of scrolls is very widely available. All possible outlets including even cloth merchants, stationery shops etc. carry this product all through the state of Sikkim. This is also the market that may be catered to by the artisans in Sikkim. Some other places like Mecleodganj in Himachal Pradesh etc., with which Sikkim may be benchmarked, have successfully taken up the competition to this

segment. Small hand-painted Thangkas of 6" × 9" are sold in the market at sub `600 range.



Fig. 11: Sub `600 Thangka sold at Mecleodganj, Himachal Pradesh

According to the experts, it takes at the least 15 days to finish a medium sized Thangka and two days for a non-Thangka scroll or single image sub `500 Thangka. Going by these data at least $\{(1500 \times 15) + (12500 \times 2)\}$ i.e. 47500 man days may be generated in this trade in Sikkim. This is equivalent to 160 full time employment with 300 working days per year for painting alone. When support activities like colour preparation are added to this, the employment figure rises up substantially at least to 200 full time direct employment. This figure shall have a strong upward bias with the opening up of new markets in domestic and export arena.

CHAPTER IV

Thangka Market in Sikkim

4. THANGKA MARKET IN SIKKIM

Planning activity involves thinking about the future. The focus of strategic planning is not on predicting the future, but instead on making better decisions in order to reach a desired future. As the future cannot be known with certainty, decision makers must make certain assumptions about what the future will hold. An important part of the strategic planning process is to find a fit between what the industry environment wants and the offering of the industry. Strategic planning requires information about both the external economic environment in which the industry operates and the internal characteristics of the industry. One method of collecting needed information is by conducting an environmental scan.

In this study this analysis has been done to identify where this trade of Thangka art is strong and vulnerable – where it should defend and attack. This study classified the findings in light of the following factors:

Strengths

- Positive tangible and intangible attributes, internal to this trade
- They are within the trade's control

Weaknesses

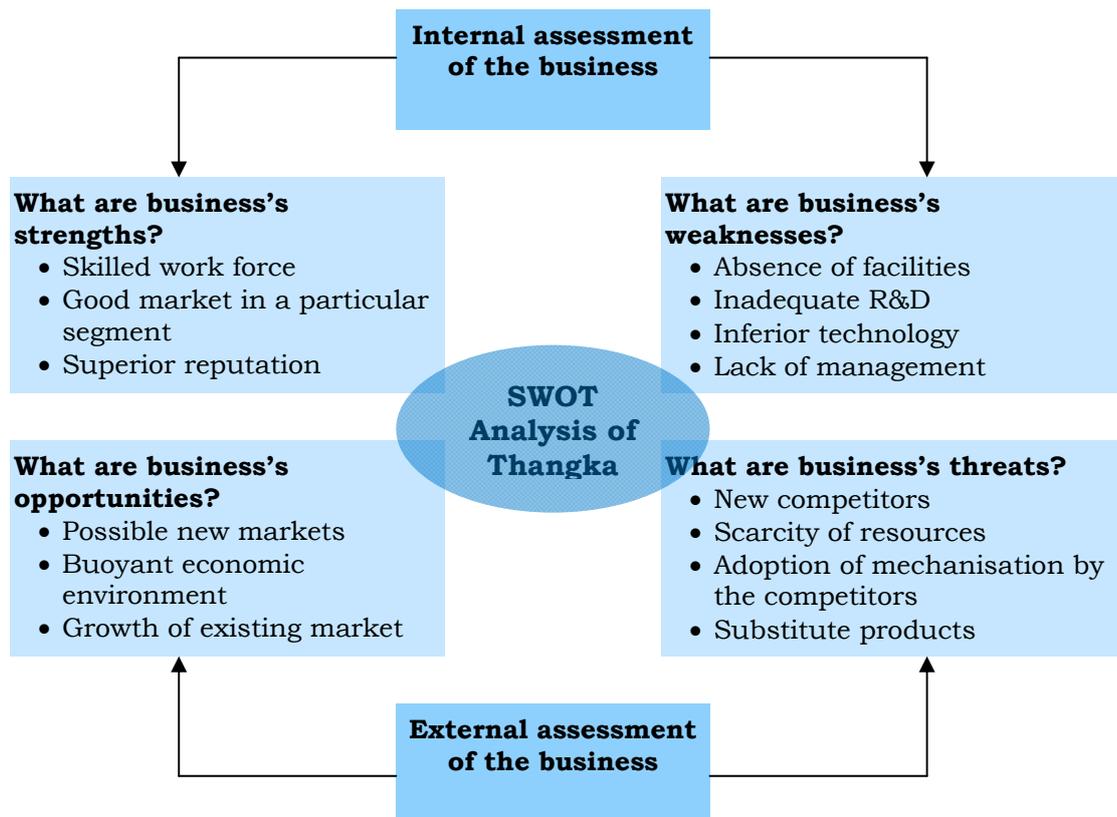
- Factors that are within this trade's control that detract the trade from its ability to attain the desired goal
- Which areas might the trade improve

Opportunities

- External attractive factors that represent the reason for this trade to exist and develop
- What opportunities exist in the environment, which will propel the trade

Threats

- External factors, beyond the trade's control, which could place the trade's mission or operation at risk.
- The trade may benefit by having contingency plans to address them if they should occur.



4.1 Macro environment

Economic environment

India is the second fastest growing economy in the world and poised to become one of the biggest economies. Purchasing power of an average income is growing steadily over the past many years. Estimate shows that the number of HNIs (high net-worth individuals, i.e. one million dollar and above) in India is over 1.25 lakh in the middle of calendar year 2010.

Sikkim is not very far behind so far per capita income is concerned. It stands very near to that of all India average of ` 22580.00 at ` 22277.00 for the year 2006-07.

Per capita income in India is growing at a fast pace and Sikkim economy is not lagging much behind.

Operating environment – Production bases

Apart from Sikkim, within India, Thangka is understood to be produced at Kalimpong in West Bengal, Bylekuppe, Coorg in Karnataka and Patlikuhl, Kullu, Himachal Pradesh.

Outside India Thangka is produced in considerable number in Nepal, in and around Kathmandu and in China, around Lhasa, Chengdu, Regong, Sengeshong. A good Thangka industry is also present in Thailand mainly in Bangkok and Chiang Mai. Thangka art is nurtured considerably in California, USA.

It is found in the desk research that thousands are earning their livelihood through Thangka trade in Nepal. China is taking up this trade in a big way.

Though the operating environment study was not expressly made a part of this study it became imperative to undertake one as is felt that the strategy could not be formulated without considering this aspect. The relevant portion of this aspect that was collected through desk research has been included.

The first international expo of Tibetan Thangka was held in Xining, capital of northwest China's Qinghai Province, showing the traditional Tibetan painting and other intangible cultural heritage to the public. It lasted for five days. Art pieces from India, Nepal and Myanmar were also on display.

More and more Tibetans in Qinghai are learning the craftsmanship of this cultural heritage. Not only a religious painting for worship, Thangka has become underpinning of a thriving cultural industry in Qinghai. It is reported that one can earn 80,000 to 90,000 yuan (about 11,580 to 13,030 US dollar) annually on average from Thangka painting. Villages are there like Lower Wutun where a few thousand of persons (about 3,000 in this village) paint Thangka as a profession. Tongren county where Lower Wutun village is situated is called "Rekong / Regong" in Tibetan language, meaning "golden valley". The local government has helped to build the Regong Art Institute and set up Regong Art Association to display fine art works of folk artists so that the Regong art is developed and the income of the residents get increased.

Legal environment

In this era of liberalization and globalization the industry environment has been opened up and continued to be opened more and more. Cross border trade is being increasingly easier.

Technical environment

Tremendous technological improvement has taken place in the related areas of this industry, particularly in the fields of computer technology and printing technology.

Huge number of Thangkas is produced in Nepal. Though traditionally the Thangka production process is universally the same, it is understood, mechanization of the production process to a certain extent has been introduced. Sketches are made for the intended Thangkas in different sizes with the help of machines and the artisans do painting on those sketches by hand with the guidance from the main copy in their possession. As a result of these artists have become freed from the tedious, time consuming, monotonous and largely non-creative process of sketching and the time to produce a Thangka has come down considerably.

Countries like Taiwan has gone one step ahead. The whole process of creating a Thangka has been mechanized and in doing so producers there have done away with the canvas altogether. Thagkas are printed on fabric unknown to the industry here in India and the whole item is printed with the help of machine. These Thangkas are true copies of the originals. Only difference is that they are printed, not painted and fabric is not canvas. These Thangkas are priced less than half of the identical hand painted Thangkas of equal size.



Fig. 7: Replica of a Thangka created by Shri Rinzing Laripa

Fig. 7 shows a replica of a famous Thangka created by Shri Rinzing Laripa of Sikkim. This is created on synthetic vinyl type media. Detail and colour on this piece is exactly the same to that of the original. It is possessed by a renowned practitioner in Sikkim. Price wise this Thangka is less than half of a piece created by hand.

Human resource environment

For the religiously inclined and for art collectors, more decidedly those with money, from around the world, there remains a strong international market for traditional paintings. To own and worship the traditional painting is to create a psychological linking with the feelings it emits through its subject and colour in order to influence the beholder's life. Love, happiness, despair, fear, comfort and confidence are among the major feelings that traditional paintings produce.

For the average artist, the trade off is between the value offering of these art pieces and the monetary gain. Sacrifice of Thangkas' values to increase production and meeting demands is a trade off that generates additional revenue in the short run but provides little assurance that enough profit will continue to be to be generated in the long run. Understanding of

the informed collectors about this traditional art form remains the backbone for a steady demand for authentic pieces.

The relatively cheaper hand painted Thangkas those are sold in Gangtok and other market places in Sikkim have their source in neighbouring areas and Himalayan countries mainly Nepal.

The majority of Thangka artists in Nepal today are of poor economic background. Religious worshippers, art collectors, and tourists buy Thangkas. Traditional methods that were strictly enforced by lamas used to dominate the paintings' dimensions, colour, and subjects. Now, they make way for increasing commercialization for meeting tourists' mainly foreign consumers' demand for traditional paintings. Thangkas have notched a good market and many jobs have been created through this field. The increased production of Thangkas takes away from the paintings' original intentions that led to a powerful provocation of feeling in those that possessed and beheld it. Majority members of the Thangka artist community are very much pressured to delve into the commercialization of their products. This fuels the diversions from traditional rules.

Natural dyes were used to generate an earthy realism what is all but lost in major production today. Acrylic colour and watercolour are the norm for present paintings that may be catchy but leave the colour void of any religious significance. The tools of olden times have been discarded by the present day artists to speed up the paintings and reduction of costs.

Cheaper methods of production are being applied by many, abandoning natural dyes that are expensive and hard to find. Thangkas are now produced in a commercial scale at workshops where the owners of the workshops are not at all associated with the process of creation of Thangka. Workshop owners have brought down the labour expenses making it difficult for labourers to find alternatives. The price of these paintings has fallen in relation to their production costs and can now be bought at very low price. Shopkeepers buy the paintings from workers for a portion of what they are sold. This situation forces the artist to increase production further to maintain income level, pushing them to make more cuts. These issues progressed towards the breaking of traditional rules and the increased production of traditional paintings.

Producing a traditional painting without the traditionally prescribed steps defined by the original creators robs the painting of any religious validity. But however far the present state of this painting may be from its past, it is still greatly appreciated by a great number of people for its significance.

Commercialization of this art may have had its negative effects but it has also rendered many jobless hands with profession.

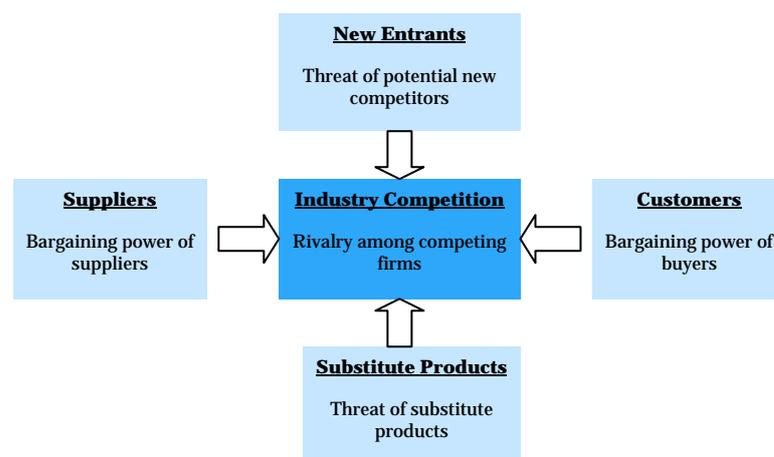
4.2 Micro/Task environment

The task environment, otherwise called as microenvironment includes those elements or groups that directly affect the industry and in turn are affected by it. These are demand-related factors, consumer, supplier, competitors, government etc. A corporate task environment is typically the industry within which firms operate.

External environment

The external environment consists of variables that are outside the industry and typically not within the short-run control of the firms.

The method widely used to analyze the external environment is Porter's Five-Forces Model. This method involves analyzing the threat from the new entrant, rivalry among the existing players, pressure from the buyers, pressure from the suppliers and pressure from the substitutes.



New entrants usually bring new capacity and competition for customers and resources. This is a threat to existing businesses in the industry. The threat of entry depends on presence of entry barriers. Entry barriers

make it difficult for another business to enter the industry. In Thangka art industry in Sikkim the major barrier for new entrants is the access to the potential customers.

Substitute products are products that appear to be different but can satisfy the same need as another product. In the present case any similar looking art products made on canvas/ cotton / silk that can be rolled up are the major substitute products available in the market that is capturing a substantial chunk of the market.

Bargaining power of suppliers affects their ability to raise prices. Suppliers are likely to be powerful if they are few in number. Since Thangka art in Sikkim is overwhelmingly dependent on the supply of raw materials from outside the State and for many items outside of the country the bargaining power of the units in Sikkim is non-existent.

Bargaining power of buyers affects the industry through their ability to force down prices, bargain for higher quality or more services, and play competitors against one another.

Though the nature of this product is such that any single player or any cohesive group of players doesn't have the bargaining power to influence the prices there exists an influence of such force in this market. As the product is not an essential item for majority of the potential customers and similar type of substitute products are available in the market customers naturally assume bargaining power. The customers for whom this product is an essential item pose less challenge for this industry in Sikkim. For them the pious conformity to the guidelines is the only major consideration.

Rivalry among existing firms is the amount of direct competition in an industry. Industries that have intense competition are characterized by competitors that are roughly equal in size, slow rates of industry growth, the production of commodities, high fixed costs, and high exit barriers arising from investments in specialized equipment.

In Thangka market rivalry among units promoted by artists or reputed is experienced. The main basis of this rivalry is puritan adherence to the religious scriptures and methodologies adopted in creation of Thangkas.

Internal environment

The internal environment of an industry consists of variables those are within the industry and are not usually within the short run control of management of units.

Production infrastructure

So far as infrastructure requirement is concerned, creation of a hand-painted Thangka doesn't require a very sophisticated production facility. Main facility requirement is a sanctified work environment. Most important production input is skilled and learned manpower only other very critical input needed for production is colour.

As on date DHH, Govt. of Sikkim, provides production facility at its premises at Gangtok, East Sikkim district. No other district in Sikkim does have any facility accessible for partially-employed artisans. Even award winning artists who are practicing in the private capacities face difficulty in arranging this production facility and input for their units.

Availability of colour

Among the production inputs, colour is the one group that has an availability problem. Though there is no strict guideline for using colour of any particular type, informed customers prefer the traditional stone-based colour. The difficulty in procuring such colour is making the way for readily available synthetic colour. Plastic-based colour are soft and long lasting. Stone-based colour, though traditional in nature, has a usability issue. This type of colour becomes stiff and develops cracks when rolled. The best maintenance regime for Thangkas created using such colour is not to roll them. This creates transport problem. Vegetable-based colour are used by a couple of expert artists. This type of colour doesn't have the problem of cracking.

At DHH colour derived from stone / clay is sourced from Japan. A vial of such colour costs around `1000/-. This type of colour comes as a set of 12 vials and 3-4 Thangkas of the size 3' × 1.5' can be painted from one set of such vials.

Trained Manpower

It is collected from the authorities during the survey that in total around 500 trained hands are available in Sikkim. This includes trainees from DHH, different monastic schools and private trainers. Capacity at the DHH is to train 15 students in one batch. If the trainees who passed out from this institute in the past 15 years are considered as available manpower then the total figure comes to around 225. Shri Khandu Wangchuk has trained around 100 artisans. Apart from these main facilities, some private trainers in the market also have trained a number of artisans. It is revealed in this survey that in the absence of a thriving market of Thangkas in Sikkim majority of these trained hands are being engaged in painting of the Gumphas.

Interview with P. T. Bhutia of Ecclesiastical Affairs Department reveals that around 25-30 artisans are actively pursuing Thangka painting in Sikkim on regular basis.

Market

In general established artisans in Sikkim make Thangkas on demand from customers. Their customers are mainly religious institutions situated at far off places and many a time overseas also. Since these artists have attained a high level of recognition in the market they generate their business mainly through references from their existing customers.

A number of relatively new artisans entering into the market get the scope of producing Thangka for commercial purpose through DHH.

Market size

It is gathered that on an average 50 number of Thangkas are sold from the Art Emporium at DHH in Gangtok. Apart from this, there are only a few other places where Thangkas are created in Sikkim. Except one, all the other prominent centres are situated in and around Gangtok. The only other centre worth mentioning is situated at Namchi, District head quarters of South Sikkim District.

Total market size

The basic building block of Thangka market in Sikkim is the religious requirement. Gumphas and other religious centers procure Thangkas mainly for the purpose of meditation. Thangkas required for this purpose need to be of very high quality and strict adherence to the scriptures is a must. 'Chere(n)zi' or 'Avalokiteshwara' is one of the most important in this category. Apart from this Thangkas are also associated with two of the most important events of life, birth and death. It is generally followed that these two events should be commemorated with Thangkas. Thangka that is made for birth is known as 'Kirab Lechi' and Thangka that is made for death is known as 'Kine'.

Market size of Thangkas created in Sikkim is very small, as the industry here doesn't compete in the open market. Until very recently hardly any Thangka created in Sikkim was sent to the market for sale. In the very recent past a handful of artists have come up with produces that are competitive in the market and are being sold through outlets in Gangtok. In the true sense of the word these scrolls cannot be categorized as Thagka.

Market preparedness

Very rarely saleable stock is found with the artisans in Sikkim barring a few very renowned artists. To find a ready saleable stock even with them is a very rare phenomenon.

Since Thangka is a very personalized product for the informed ones, it is highly risky to maintain any such stock. Ideally and generally it is produced in consultation with the customer. Thangkas produced in Sikkim may be viewed and purchased off the shelf only at DHH.

Market segments

At present following are the major segments served by the artisans

- i. Religious institutions– Gumphas and other religious institutions both in domestic and foreign markets (for meditation and other religious purposes)
- ii. Religiously oriented individuals– birth, 49th day's ceremony after death, private collection
- iii. Educational institutions

iv. Individuals, mainly curious tourists

At present no other major segments in the market are either explored or tested t service. In the absence of other market segments the need for any product augmentation, product differentiation etc. have not been felt till date.

Market targeting

Main market targeting effort revolves around the religion and the main targeting tool is the puritan adherence to the religious guidelines while preparing the product.

Marketing mix

Marketing mix is the set of controllable variables and their levels that the industry uses to influence its target market. It describes combination of four inputs, which constitute the core of a industry's marketing system.

Product

Thangka is an art product that is there in the market for nearly 1000 years. Product modification is not allowed and also not desired as this art form follows strict religious guidance. However product innovation is possible and is being practised by a handful of artists in Sikkim. Many a times Thangka is mixed with any art form that is painted on a piece of cloth and can be rolled up, in short the scroll paintings.

Price

Today, it has become necessary to set prices for Thangka, but in old Tibet an artist was paid whatever the practitioner could afford or felt was appropriate. The artist felt grateful and happy regardless of the size or quality of payment.

Pricing is done mainly on the cost plus basis. Apart from colour used, the factor that gets maximum weightage in this process is labour cost. And in doing so the artisans are at a loss as to how take on the competition that is emanating from across the border.

Following example shows an indicative break-up of a low cost Thangka of the size 18" × 15" by an artist in Sikkim.



Fig. 8: Low cost Thangka

1. Canvas – ` 150
2. Paint (stone / clay) – ` 1000
3. Brocade & tailoring – ` 500
4. Artist's fee – `1000

Thangkas of this category essentially portrait a single object say, the Buddha. To keep the cost low many of the Thangkas in this category are generally not framed in brocade.

As the production of Thangkas in Sikkim is still in the domain of artists who have undergone training for years under proper guidance, Thangkas produced by the artists here command a little higher price than that of the Thangkas originated from its regional competitors. Many a time a Thangka is priced on the artist's judgment of the customer. This sometimes leads to overpricing of their produces by the newer entrants.

Presently price is being seen as a derived factor and it is not being seen as a strategic tool of marketing.

Distribution (place)

No formal channel of distribution is present. Products are sold through personal channels. Even the local retailers are not tapped by the artisans in general. Some of the artisans who are well known in the market (particularly who are award winners in the national or state levels) get their orders through the existing customers from around the world. They have

long exposure to the world market through the religious circuit. Others seldom get orders. Whenever they get orders they get it from DHH.

Artisan → Referee → Consumer

Promotion

As such no promotional activities happen in Sikkim. A few of the artisans attend fairs and exhibitions arranged by different authorities. Such fairs include Delhi Hut, Suraj Kund Mela, SARAS Mela etc.

Minimal initiative is there to communicate the merits of this product and to persuade target customers to buy it. The process of communication to pass on a message to the channel members as well as ultimate consumers to inform, persuade and remind – “Buy me” is almost inexistent. The great deal of competition that Sikkim Thangkas are put to by supplies from outside the country necessitates increase in promotional activities.

Branding

Traditionally, Thangkas are not branded. Thangkas, in general, don't contain any extra information from where the artist, the institute, the place etc. can be known. Only permitted branding is the consecration by some high lama, like Rimpoche, The Dalai Lama, etc. by the imprinting his hand or signing on the reverse side of a Thangka. Generally, such a Thangka doesn't find way to market. This practice has been observed even at Mecleodganj, Himachal Pradesh.

But of late, under the compelling need of modern mass marketing, the names of the artisans are now being written on the back side of the Thangkas so as to track transactions with the artists by the retailers.

Product life cycle stage

This product is there in the market for nearly one thousand years. It is in the latter part of the maturity section of the PLC curve. So far Indian perspective is there no immediate signal is there that indicates decline of market for this product. A proper strategic push may introduce a smaller new PLC from the present position.

Product innovation

No innovation has taken place in the areas of images to be painted, the story line, the canvas, the paint to be used for last many centuries.

Only recently the images of deities of other religion, nature etc. have been incorporated in Thangka art.

Competitive analysis

In many cases, Thangka artists in India benefit from their socio-cultural conditions. This is often one of the most important factors that positively distinguish Thangka artists in Sikkim from competitors in other places. This is particularly so for foreign competitors. Other positive factors are – for example, input cost like infrastructure cost.

There are also factors that weaken the competitive position of Sikkimese Thangkas. Producers proximate to lucrative overseas markets have the advantage of being close to their customers that in general facilitates the marketing of products and communication.

Another important difference is the fact that of late Thangka painting technology and intricate details of Thangkas are readily available to producers in the targeted markets.

Producers of Thangkas in other developing countries also represent an important group of potential competitors.

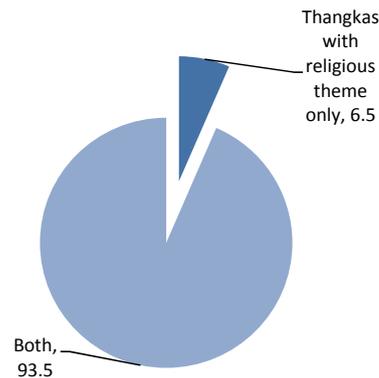
The findings of this study on the basis of situation analysis can be tabulated in a manner as follows:

4.3 Status of Thangka trade in Sikkim

Retailing of religious vs. non-religious Thangkas

It is observed that though traditionally Thangka is associated with religion, majority of the retailers in Sikkim presently keep scroll paintings of both religious and non-religious themes.

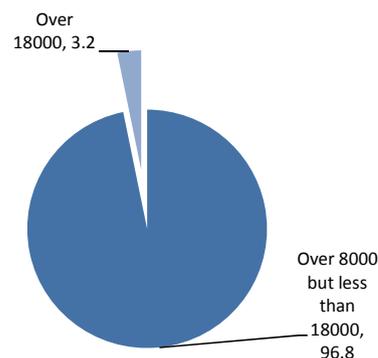
| | Frequency | Percent |
|-------------------------------------------|-----------|---------|
| Thangkas with religious theme only | 2 | 6.5 |
| Both | 29 | 93.5 |
| Total | 31 | 100.0 |



Price range maintained at retail shops

It is found that most of the retailers keep Thangkas in a range of ₹1500-18000. Out of 31 retailers surveyed only 1 respondent reported keeping Thangka over ₹18000. Price of a Thangka depends on a number of factors which include size, number of items depicted on the Thangka, type of colour used, framing, type of fabric used etc. It is observed that the lower priced Thangkas have lesser number of figures on them and the lowest priced ones have only one figure on them.

| Costliest Thangkas (₹) | Frequency | Percent |
|--------------------------------------|-----------|---------|
| Over 8000 but less than 18000 | 30 | 96.8 |
| Over 18000 | 1 | 3.2 |
| Total | 31 | 100.0 |

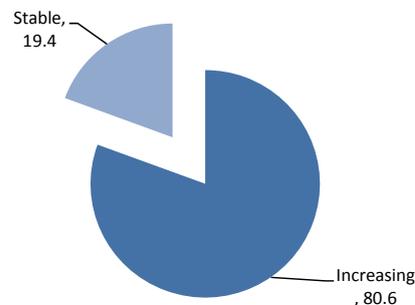


| Cheapest Thangkas(`) | Frequency | Percent |
|----------------------------|-----------|--------------|
| Less than or equal to 2000 | 31 | 100.00 |
| Total | 31 | 100.0 |

Supply of cheap Thangkas to the retailers

It is observed that over 80% of the respondents have reported that supply of Thangkas which are cheaper in price as categorised above is increasing over the years as against 19% of the retailers who reported that the supply of such Thangkas is stable.

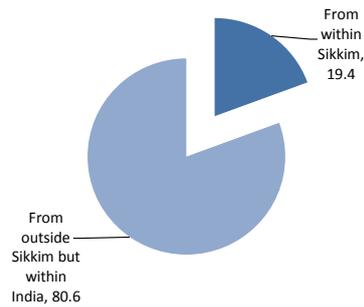
| | Frequency | Percent |
|-------------------|-----------|--------------|
| Increasing | 25 | 80.6 |
| Stable | 6 | 19.4 |
| Total | 31 | 100.0 |



Geographical distribution of customers for retailers

Majority of the customers (80%) for Thangka retailers in Sikkim are from outside Sikkim but within India which means this customer base is essentially the visiting tourists. Only 20% of the retailers reported that their customers are mainly from within Sikkim.

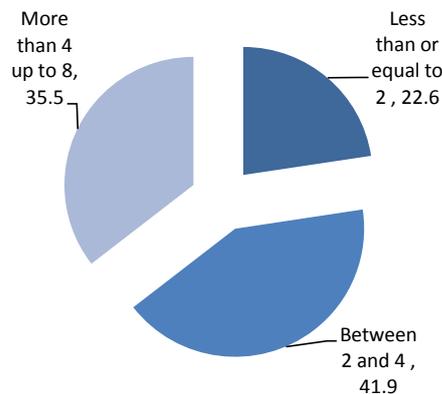
| | Frequency | Percent |
|---------------------------------------------|-----------|---------|
| From within Sikkim | 6 | 19.4 |
| From outside Sikkim but within India | 6 | 80.6 |
| Total | 31 | 100.0 |



Present retail market size

Average monthly sales of Thangka range between 2 and 8. Majority (41.9%) of the outlets generate average sales between 2-4 units while 35.5% of the outlets generate sales between 4-8 units. When computed individually and combined we get the total sales figure of 1464 units a year.

| | Frequency | Percent |
|--------------------------------|-----------|---------|
| Less than or equal to 2 | 7 | 22.6 |
| Between 2 and 4 | 13 | 41.9 |
| More than 4 up to 8 | 11 | 35.5 |
| Total | 31 | 100.0 |

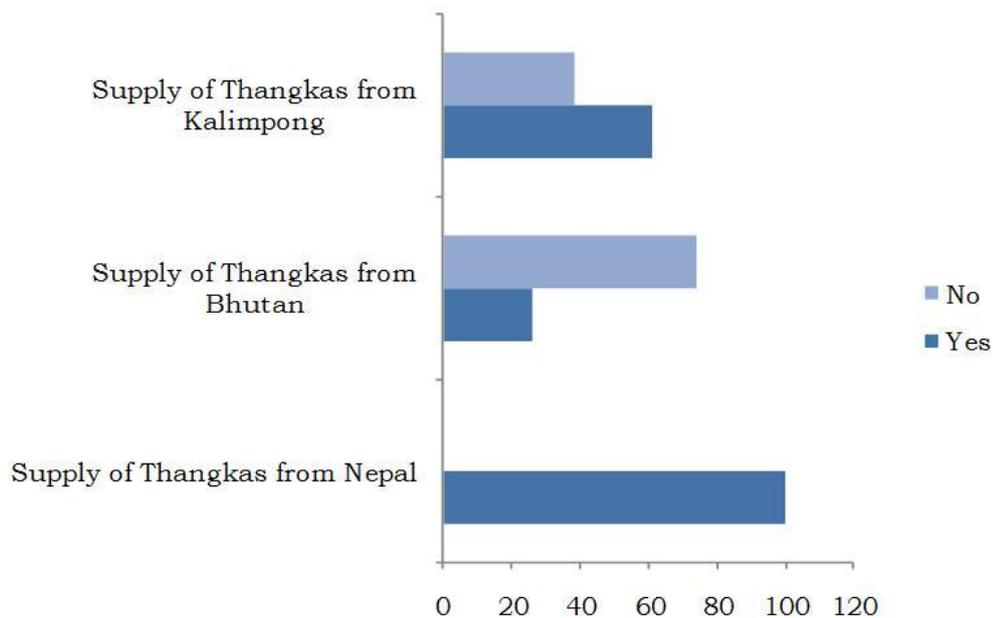


Since in this survey all the major outlets in and around Gangtok are covered it can be safely concluded that when the sales from DHH outlet is added with the above sales figure that gives us the indicative total market size of Thangkas in Sikkim. DHH has reported sales of around 50 units in a year. Thus total market size is calculated at 1500 pieces a year.

Source of supply for the retailers

Before starting the survey, at the time of piloting it was revealed that very little or no Thangka created in Sikkim find their way in the open market in Sikkim. Based on this information the survey was conducted. It is found that most of the Thangkas in Sikkim market are sourced from Nepal followed by Bhutan.

| | Yes | No |
|------------------------------------------|------------|-----------|
| Supply of Thangkas from Nepal | 100 | 0 |
| Supply of Thangkas from Bhutan | 25.8 | 74.2 |
| Supply of Thangkas from Kalimpong | 61.3 | 38.7 |

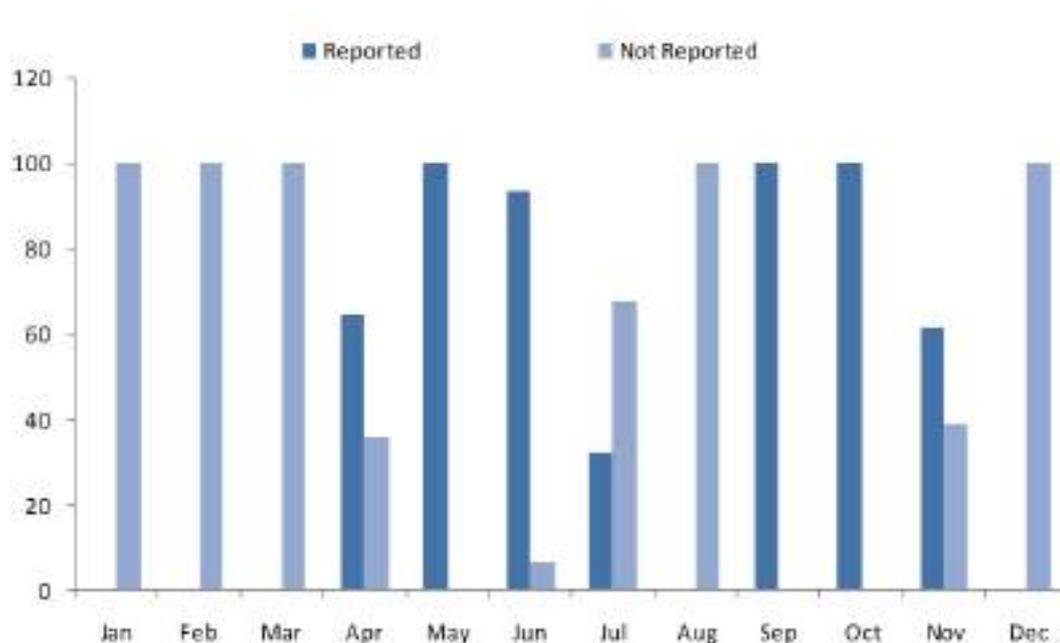


Seasonal fluctuation in sales of retailers

All the respondents reported seasonal fluctuation in sales. So far the monthly fluctuation in sales is concerned it is found that higher sales has been reported in the months of May, September and October by 100% of the respondents followed by June (93.5%), April (64.5%), November (61.3%) and July (32.3%).

| | Frequency | Percent |
|-------------------------------------|-----------|---------|
| Reported monthly fluctuation | 31 | 100.0 |

| | Reported | Not Reported |
|------------------|----------|--------------|
| January | 0 | 100 |
| February | 0 | 100 |
| March | 0 | 100 |
| April | 64.5 | 35.5 |
| May | 100 | 0 |
| June | 93.5 | 6.5 |
| July | 32.3 | 67.7 |
| August | 0 | 100 |
| September | 100 | 0 |
| October | 100 | 0 |
| November | 61.3 | 38.7 |
| December | 0 | 100 |

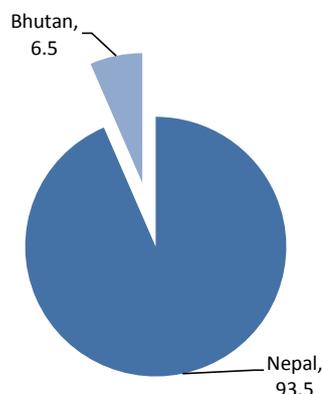


Reported fluctuations in sales coincide with the tourist seasons in Sikkim.

Source of cheaper Thangkas for retailers

Majority (93.5) of the respondents reported that source of cheaper Thangka for them is Nepal.

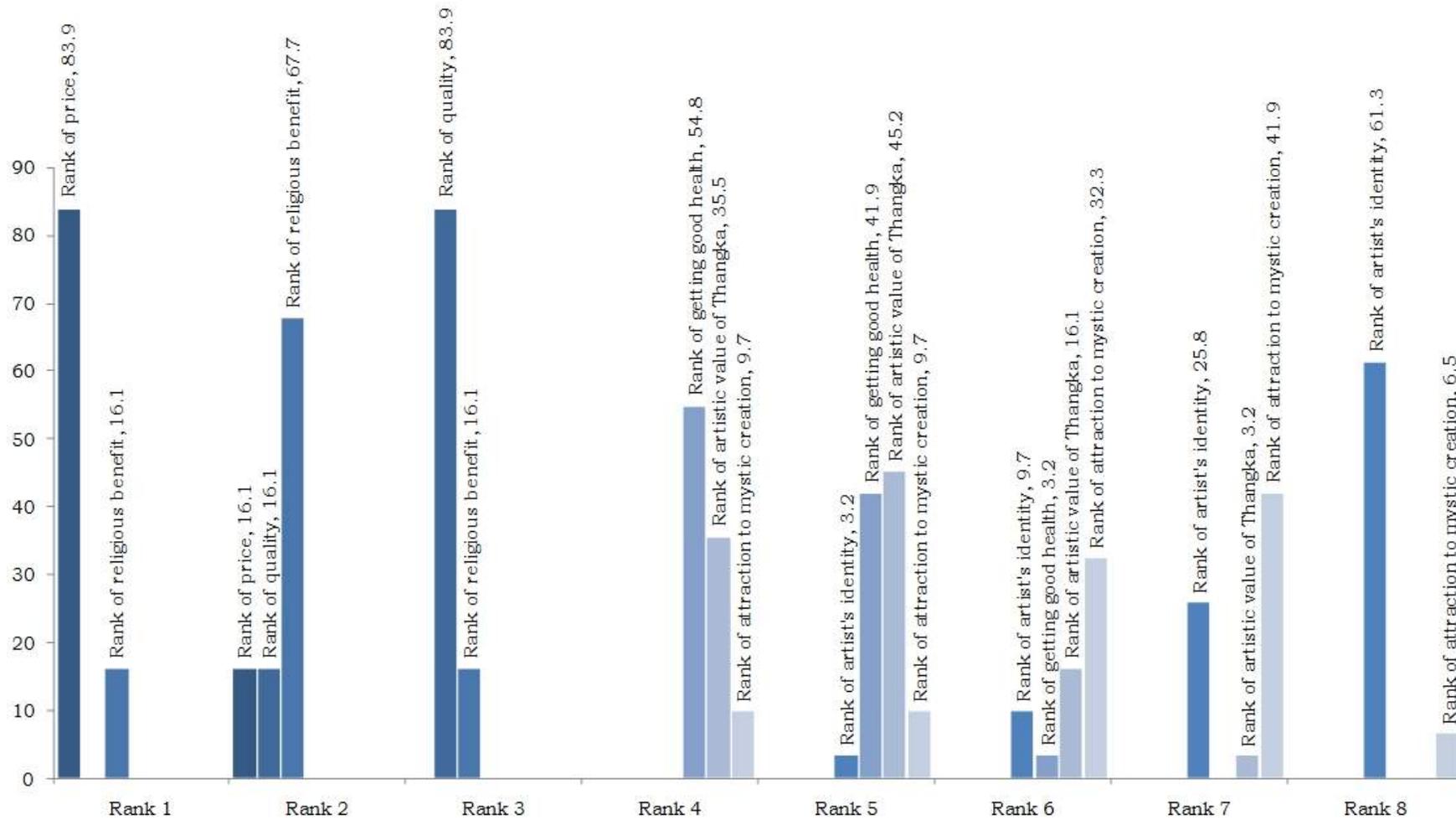
| | Frequency | Percent |
|---------------|-----------|---------|
| Nepal | 29 | 93.5 |
| Bhutan | 2 | 6.5 |
| Total | 31 | 100.0 |



Factors influencing retail customers' purchase decision

It is found that price is the most important factor in consumer's purchase decision with 83.9% of first ranking followed by religious benefit with 67.7% of second rank and quality with 83.9% of third ranking.

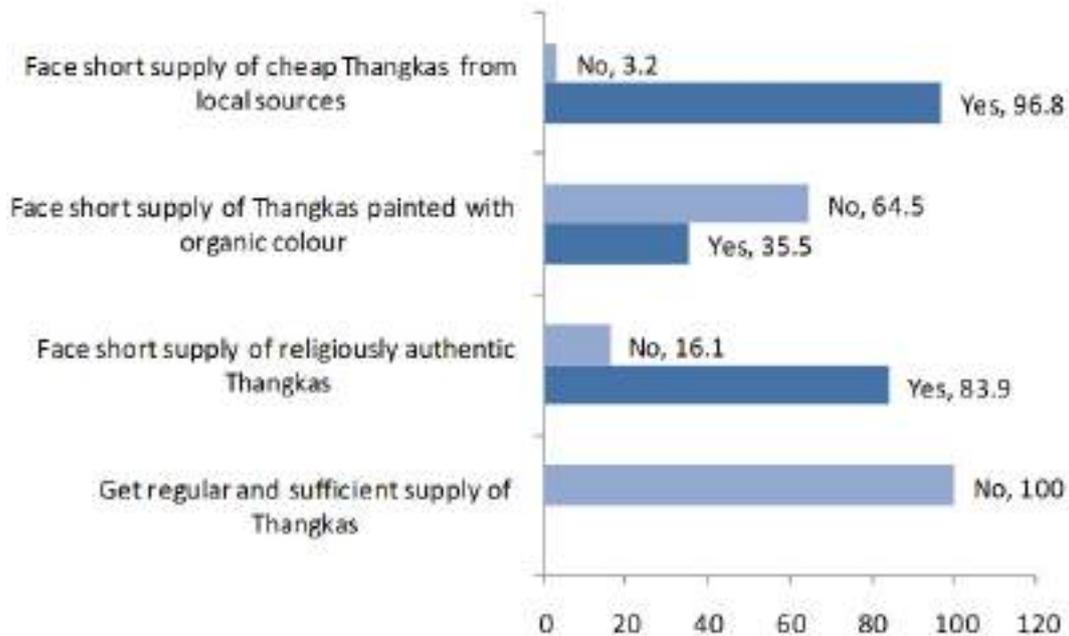
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|----------------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Rank of price | 26 (83.9) | 5 (16.1) | -- | -- | -- | -- | -- | -- |
| Rank of quality | -- | 5 (16.1) | 26 (83.9) | -- | -- | -- | -- | -- |
| Rank of religious benefit | 5 (16.1) | 21 (67.7) | 5 (16.1) | -- | -- | -- | -- | -- |
| Rank of artist's identity | -- | -- | -- | -- | 1 (3.2) | 3 (9.7) | 8 (25.8) | 19 (61.3) |
| Rank of getting good health | -- | -- | -- | 17 (54.8) | 13 (41.9) | 1 (3.2) | -- | -- |
| Rank of artistic value of Thangka | -- | -- | -- | 11 (35.5) | 14 (45.2) | 5 (16.1) | 1 (3.2) | -- |
| Rank of attraction to mystic creation | -- | -- | -- | 3 (9.7) | 3 (9.7) | 10 (32.3) | 13 (41.9) | 2 (6.5) |



Adequacy of supply of Thangka for retailers

It is observed that none of the retailers surveyed is getting sufficient supply of their requirement. High level of short supply is observed for cheap Thangka from local sources and religiously authentic Thangka.

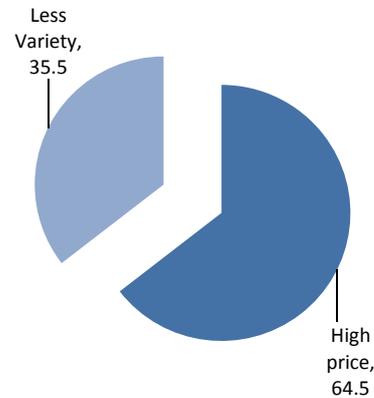
| | Yes | No |
|------------------------------------------------------------------|------------|-----------|
| Get regular and sufficient supply of Thangkas | | 100 |
| Face short supply of religiously authentic Thangkas | 83.9 | 16.1 |
| Face short supply of Thangkas painted with organic colour | 35.5 | 64.5 |
| Face short supply of cheap Thangkas from local sources | 96.8 | 3.2 |



Negative stimuli for retail customers

It is observed that prospective customers who don't buy Thangkas are sensitive to high price and less variety of Thangkas.

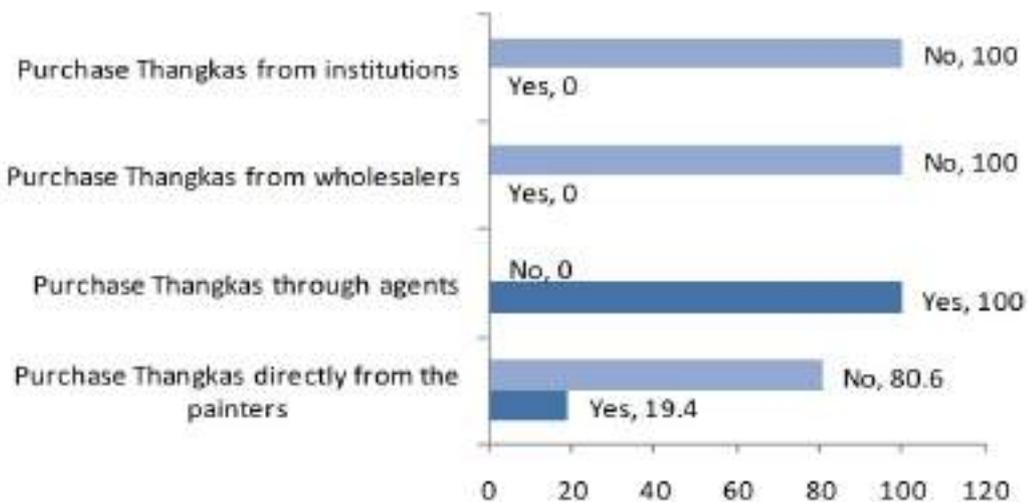
| | Frequency | Percent |
|---------------------|-----------|---------|
| High price | 20 | 64.5 |
| Less variety | 11 | 35.5 |
| Total | 31 | 100.0 |



Retail supply channel members

It is observed that the supply chain of Thangkas has only one intermediary i.e. the agents. Every retailer in Sikkim procure Thangkas through the agents. Only around 19% of the retailers procure Thangkas directly from the painters. This refers mainly to the painters of Kalimpong.

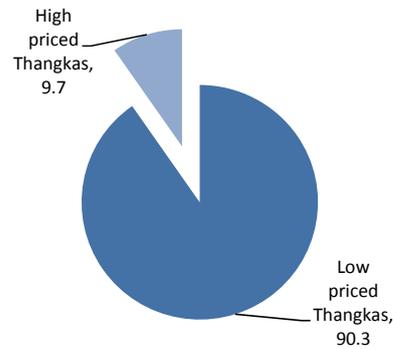
| | Yes | No |
|-----------------------------------------------------|------|------|
| Purchase Thangkas directly from the painters | 19.4 | 80.6 |
| Purchase Thangkas through agents | 100 | 0 |
| Purchase Thangkas from wholesalers | 0 | 100 |
| Purchase Thangkas from institutions | 0 | 100 |



Price preference of retail customers

It is found that overwhelming majority of retailers(90.3%) reported that customers of Thangkas prefer low priced Thangkas to high priced Thangkas.

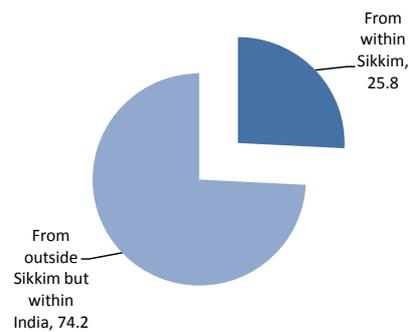
| | Frequency | Percent |
|-----------------------------|-----------|---------|
| Low priced Thangkas | 28 | 90.3 |
| High priced Thangkas | 3 | 9.7 |
| Total | 31 | 100.0 |



Geographical distribution of customers of higher value Thangkas

Higher value Thangkas are mainly purchased by customers from outside Sikkim.

| | Frequency | Percent |
|---------------------------------------------|-----------|---------|
| From within Sikkim | 8 | 25.8 |
| From outside Sikkim but within India | 23 | 74.2 |
| Total | 31 | 100.0 |



4.4 SWOT Analysis

Internal Factors

Strengths

- Age old craft
- Sales are steady at their own levels and still generates good revenue margin over cost
- Customer interaction with the artisans is intense
- Artisans get themselves involved in marketing
- Lama painted Thangkas of Sikkim have good reputation for quality
- Religious inputs like training and guidance are available in plenty
- Low capital investment and high ratio of value addition
- Unique blend of aesthetics, religion, astrology and antiquity in one product
- Handmade and hence less competition
- Traditionally encourage chemical free ingredients
- Deep cultural association of a large section of people
- Strongly motivated and committed artisans at the core of this sector
- Low barriers for new entry in market
- Industry provides potential sources of employment
- Presence of committed niche markets
- Presence of strong, committed religious distribution channel

Weaknesses

- Trainees take a long time to come up to the mark to be a good artist
- Little exposure of artisans to market
- Little knowledge on modern marketing techniques among the artisans
- Salespersons at the retail outlets are not trained in the intricate details of Thangkas
- Inconsistent quality
- Lack of market study and marketing strategy
- Lack of production infrastructure, communication and e-commerce facilities
- Inability to handle large order

- Age old production system with little mechanization
- Poor R&D initiatives
- Lack of working capital
- Small quantities & irregular supply limit market opportunities
- Focus on high value items
- Lack of co-ordination between government bodies and private players
- Inadequate information on new technology and developments
- Lack of supply of highly skilled labour in the industry
- Lack of promotion of products accreditations, etc.

External Factors

Opportunities

- Large discretionary income at disposal of consumers in the domestic market
- Revolution in communication technology made it possible for low cost speedy B2B connectivity with lucrative overseas markets
- Opening up of Nathula trade route with china
- Rapidly growing Indian and Chinese markets of novelty seekers
- Diminishing patronage of Buddhist art in neighbouring areas
- Fascination of certain markets in getting Thangkas from the renowned artists in Sikkim
- Thangka-like scroll printings and cheap Thangkas have increased the volume of business in this trade and is increasing awareness of this type of art among the common masses
- Professional teachings are being made available for grooming new artisans in this line
- Reliable artisans are increasing in number for producing Thangkas
- Interest among the new generation is increasing about Thangkas
- Technological improvements
- Revolution in Retail sector offers great requirements of handicrafts products
- Tremendous increase in domestic and international tourism, developments in the areas of e-commerce and internet have thrown open very good distribution channels to market the craft products

Threats

- Very cheap non-religious Thangka- style scroll printings from various sources including China
- Thangkas those are not conformed to the religious guidelines are finding their way to Sikkim from outside the country
- Stricter international standards
- Competition from machine made goods in domestic segment
- Availability problem of raw material
- Pressure from commercial forces to lower standards
- Challenge to have balance between higher demand and supply of products
- Identifying a real practitioner is a major problem in India.

CHAPTER V

Recommendations and Action Points

5. RECOMMENDATIONS AND ACTION POINTS

5.1 Technology upgradation

Very little change has taken place in Thangka creation process in Sikkim since it was started here on a recognizable scale nearly 80 years back. Same traditional process is followed that has been practiced by the Tibetan artisans for centuries. The areas where change has taken place are the fabric and colour.

Use of technology is minimal in both the production and management processes. Canvas is prepared manually, sketches are done by hand, readymade colour are used, painting is done manually. In short, none of these processes has introduced any level of mechanization.

Since mechanization has not been introduced in this trade as yet, there remains a tremendous opportunity to introduce permissible degree of mechanization in different processes of this art to achieve higher efficiency and at the same time to maintain the status of handicraft by remaining within the prescribed limit of the trade.

In this regard it is thought to be worthwhile mentioning that according to Asean Handicraft Promotion and Development Association (AHPADA) “it is essential to impose a certain degree of mechanization to achieve certain minimum standardization levels. It also ensures adequate supplies and helps keep delivery schedules.”

In this survey we have discussed with the Department of Printing Engineering, Jadavpur University, Kolkata. The discussions reveal that mechanization may be introduced in the following areas.

5.1.1 Mapping of technology available and indicative cost involvement

Canvas

Thangka is created on either cotton canvas or silk. Preferred medium for general purpose Thangkas is the cotton only. Traditionally these canvases are made by hand following very elaborate and tedious process by the master craftsmen. It adds substantially to the cost as manpower is one of the major cost heads in a Thangka and quality canvas preparation is a pretty time consuming activity. Then also the process is felt to be

unexpendable as this is one of the few prime determinants of the durability of a Thangka. For a Thangka to stand the test of time, quality of the canvas is of paramount importance.

Choice of the fabric becomes the prime determinant of the adoption of technology in the next phase of the Thangka creation i.e. selection of printer from the available alternatives.

Option 1.

Use cotton canvas in its present format.

Option 2.

Use canvas made out of synthetic fabric that is specially created for reproduction of original art work through machine printing.

Option 3.

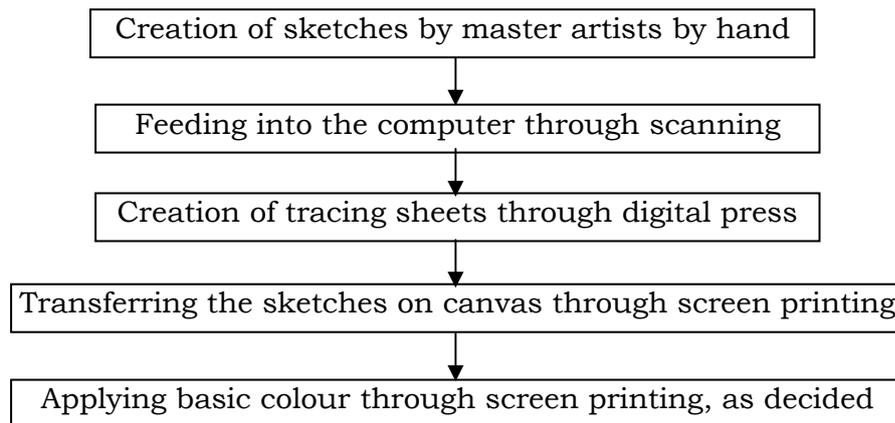
Discard cotton canvas all together and adopt synthetic media like vinyl sheet.

Sketching and colouring on canvas

Major part of a Thangka has fixed measurements and for majority of the Thangkas very little changes are allowed to be made. This practice throws open the opportunity for mass copying. Alternative applicable technologies are as follows:

Option 1. Through screen printing

Initial outline sketches may be procured from master artists and stored in digital format in computer. These sketches will work as master-copies. Copies of these master sketches may be made on tracing papers with the help of digital press. These sketches may be transferred on canvas through screen printing. Automatic / semi automatic screen printing machines will be needed for this purpose. Different base colour also may be applied by following the same system within the limit of degree of automation allowed.



As Thangka is renowned for its perfection and meticulousness any imperfection in the creation shall negatively affect the trade. And when we work with the system of screen printing the finished product always remains vulnerable to such imperfections either in line drawing or in colouring.

Indicative list of suppliers of screen printing machines:

- i. Lolita Manufacturing Works
N-190, Sector-5, DSIDC Industrial Park, Bawana
New Delhi - 110 039 (India)
Phone : +(91)-(11)-65466719/65362110
Mobile : +(91)-9810516585/9213177300
Office :+(91)-(11)-55362110
Factory :+(91)-(11)-23518859
Tele Fax : +(91)-(11)-27791141
E-mail : mailto:m_k_rathod@yahoo.com

- ii. Veena Tech Screen Printing Machines Pvt.Ltd
556, Marina Mansion No.1, Ground Floor, Behind Finlays
Store,
Chowpatty Sea Face, Mumbai-400007,
Maharashtra, India. Contact Person
Phone : 022 - 23642583, 098922 35077
Fax : 022 – 66318794
E-Mail :response@screenprintingmachineindia.com

- iii. Ashirvad Techno Equipments
Plot No. 2311, Phase-II, G.I.D.C., Industrial Estate,
Dist: Gandhinagar, Chhatral,
Gujarat
Website : <http://www.pultrusionmachine.in>

- iv. APL Machinery Pvt. Ltd.
Plot No. 70, Sector-59, HSIDC Indl. Area,
Faridabad, Haryana
Website : <http://www.uvcuringsystem.in>

- v. New Vision Machines
Plot-1a, Shastri Nagar Industrial Area, Daultabad Road,
Gurgaon, Haryana
Website : <http://www.nvpad.com>

- vi. Vetech Equipment
Address: 370 - Industrial Area - A, Near Nahar Tower,
Ludhiana, Punjab
Website : <http://www.laundrymachine.in>

Option 2. Through plotters

Graphic plotters were invented in the 1950s. During the 1960s and 1970s, companies such as Hewlett Packard and IBM bought out smaller companies to become large-format print industry leaders. Graphic plotters were still in widespread use throughout the 1980s and 1990s. However, progress in the capabilities of laser printers (including size, speed, accuracy, computer compatibility and resolution) led to the decline of plotter use in traditional settings

Indicative list of suppliers of plotters:

Companies mentioned above may be contacted for these machines.

Option 3. Through digital printers

Prints on canvas are the next best thing to an original painting. They are original prints, and their quality is unsurpassed. The sophisticated digital techniques used to create these prints are able to capture all the fine details found in an original. Such a print is a fine substitute for an original painting, and best of all, it costs much less. Not only are the prices more affordable, but prints are almost always offered in various sizes allowing for more options that suit the needs.

Accessories and equipment requirement for such a set up:

- i. Digital Cameras
- ii. Color Management ICC profile Software
- iii. Inks
- iv. Media
- v. Monitors
- vi. Wide Format Fine Art Printer
- vii. Network Cables, etc.
- viii. RIP(Hardware RIP and Software RIP) - \$4000 - \$7000
- ix. Scanner
- x. Storage – CD, DVD, Hard Drive etc.

Indicative list of suppliers of digital printers:

Some of the manufacturers of digital art quality printing machine and accessories are: ITNH, Mutoh ColorSpan, Roland, Epson, Canon, Kodak, HP, and Mimaki. As these machines are configured according to the personalized individual requirements, indicative prices can be obtained only on a thorough discussion with the representatives of the supplying company. Following are a couple of suppliers who deal in various high end printing machines:

- i. SATYAKRITY
4, Synagogue Street,
Room No. 713, 7th Floor,
Kolkata - 700001,
West Bengal
91-33-22424691
91-33-22826591
- ii. Spintex Group
301, Harsha House, Karampura Coml. Complex,
New Delhi - 110 015
Ph : 91-11-25920530, 25920532
Fax : 91-11-25920536, 25920537
- iii. Excell Innovatory Products
4th Cross, 5th Block, Rajajinagar,
Bangalore,
Karnataka-560010
Tel. 91-080-6456-4309

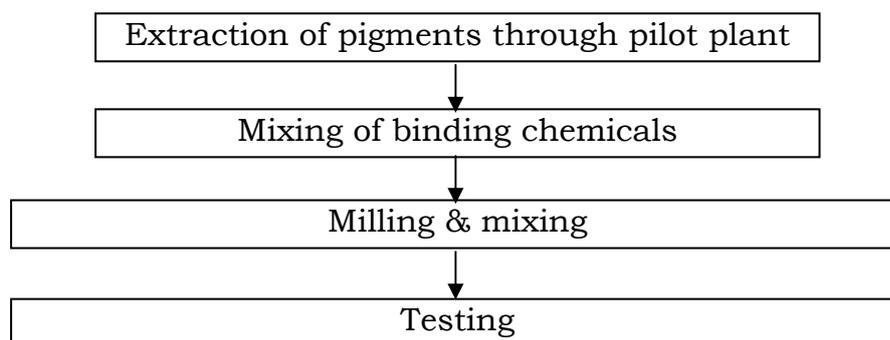
Indicative cost involvement

As highlighted by the experts at Department of Printing Engineering, Jadavpur University, Kolkata, a Digital Press may cost between ₹50 to 70 lakh, a screen printing machine may cost around ₹20 lakh. Our desk research reveals that when we consider getting Thangka printed through latest art quality ink jet printers then the total machinery cost may hover around ₹50-60 lakh. These costs are highly indicative and may vary widely from the actual amount involvement.

Sourcing of colour

Organic sources are desirable in preparation of colour to be used in Thangka creation. This type of colour is preferred over the chemical colour by the informed and conscious customers. There are expert artists in Sikkim who use such colour. Essentially these colour are prepared in home scale and thus economy of scale is not achieved. Artisans, who are interested in using this type of colour cannot do so either for lack of technical know-how or higher involvement of cost and effort.

Preparation of colour from organic sources may be centralised for operational efficiency to achieve economy of scale. The process involves extraction, milling & mixing and testing. Extraction plant may be installed to get the pigments from the source, after adding necessary additive binder chemicals, milling & mixing may be done with the help of ball mill. Testing of the colour may be done for light fastness, shade etc.



As a measure of enhancing the longevity of Thangkas, varnishes like UV varnish may be applied over the painting.

Pigment extraction equipment suppliers

- i. Hiller Decanters (India) Private Limited
23 Chowringhee Court, 55, Chowringhee Road,
Kolkata – 700 060
Contact – 033-22820007
- ii. Shradhha Enterprise,
Opp.Laxmi Pump, Rajkot Road, Sabal Pur, Junagarh, Gujarat
Phone : 91-285 -2660911
Mobile : +919427423780
Fax : 91-285-2661226
- iii. Aditya Engineers
5-5-35/1-A, 1st Floor, Prasanth Nagar Main Road, Industrial
Area,
Opp. Narayana Junior College, Kukatpally, Hyderabad,
Phone : 91-40-23074953
Mobile : +919949043257
Fax : 91-40-40175531
- iv. Sparktech
5/11, Tardeo Air Condition Market, Tardeo Road, Tardeo,
Mumbai,
Phone : 91-22-23526600,
Mobile : +919820443509
Fax : 91-22-23526600
- v. Servotech India Ltd.,
501, Triveni Krupa, Carter Road No. 3, Opp. Amba Mata
Temple, Borivali (E), Mumbai,
Phone : 91-22-33093600/33093601
Mobile : +919892450932
Fax : 91-22-28083296
- vi. Spectec Techno Projects,
Cb-254, Office No. 1, 3rd Floor, Ring Road, Naraina, New Delhi,
Phone : 91-11-32658725/25777397
Mobile : +919312002125
Fax : 91-11-25777397
- vii. Ali Engineering Works,
Village Akbarpura, Ahmedghar Mandi, Ludhiana Malerkotla
Road, District Sangrur, Punjab,
Phone : 91-1675-240845/249045/241786,
Mobile : +919872627227,
Fax : 91-1675-241786
- viii. Phoenix Engineering,
Plot No. A-15/22 Midc, Butibori, Nagpur, Maharashtra,
Phone : 91-7104-265588
Mobile : +919422107759

Fax : 91-7104-265588

- ix. Saratech Consultants & Engineers
Plot No. 99, Sector-3, H.S.I.I.D.C. Industrial Estate, Karnal,
Haryana
Phone : 91-184-2220099/2220899/3291543
Mobile : +919315699899
Fax : 91-184-2220099
- x. Kumar Metal Industries Pvt. Ltd.
101, Kakad Bhavan, 30th Road, Opp. Gaiety Galaxy Cinema,
Bandra (W), Mumbai
Phone : 91-22-28459100/28458300/26441674
Fax : 91-22-28456263/26428136
- xi. PHARMAC Technologies Private Limited
J137, Ansal Industrial Estate, Saki Vihar Road, Andheri (East),
Mumbai – 400072, India
Contact – 022-66935781

Organic sources for colour are available in Sikkim. For the present scale of operation for creating hand-painted Thangkas there is sufficient supply of organic materials. But for a higher scale of operation which is envisaged, organic pigment may be sourced from suppliers who are present all over the country a few of them are listed below:

Organic colour suppliers

- i. Arpan Herbichem
Medchal, Hyderabad
Contact - 9395566701
- ii. Gemini International
302, Shyam Complex, Chandania Compound, Samad Road,
Aligarh – 202 002
Contact – 0571-2505757 / 2505594
- iii. Sanjivani Phytopharma (P) Ltd.
307, Third Floor, Prabhat Centre (Annex),
Sector 1A, C.B.D. Belapur, Navi Mumbai,
Maharashtra, India, Pin – 400 614.
Web. www.sanjivaniherbals.com. ; E-mail.
info@sanjivanitech.com,
Mobile – 9930205577 / 9323409461,
Tel – 02232990790,
Fax - 02227574535

Indicative cost involvement

As highlighted by the experts at Department of Printing Engineering, Jadavpur University, Kolkata, local made pigment extraction plant and milling & mixing machine may cost around `3 lakh. This is a highly indicative cost and may vary widely from the actual amount.

5.2 Strategy

Strategic environment

Competitive strategy is about being different. It means deliberately choosing to perform activities differently or to perform different activities than rivals to deliver a unique mix of value. The endeavour is in creating tomorrow's competitive advantages faster than competitors mimic them.

This business needs to make two fundamental decisions in establishing its competitive advantage: (a) whether to compete primarily on price or to compete through providing some distinctive points of differentiation that justify higher prices, and (b) how broad a market target it will aim at.

The survey reveals that this industry works under the following conditions:

- ❖ The industry's product is much the same from seller to seller
- ❖ The marketplace is dominated by price competition, with majority of the buyers being highly price-sensitive
- ❖ There are few ways to achieve product differentiation that have much value to informed buyers
- ❖ Most buyers use product in same ways i.e. common or similar user requirements
- ❖ Switching costs for buyers are low
- ❖ Buyers are large in number and have significant bargaining power

Strategic options to achieve competitive advantage are:

| | | | |
|---------------------|---------------|----------------------------------|------------------------------------------|
| Market scope | Broad | Cost leadership strategy | Differentiation strategy |
| | Narrow | Focused low cost strategy | Focussed differentiation strategy |
| | | Low price | Unique product |

The strategy this industry may follow under such circumstances is **Overall Price (Cost) Leadership**.

To categorise and put the entire market of Thangka probably shall be too simplistic a classification. There exists a segment of value-conscious buyers that is large enough not to be classified as a market niche at the same time that is not big enough to attain the level of a broad market. In such market situation the customers may be given the best cost/value combination, by incorporating key good-or-better product characteristics at a lower cost than competitors. The main endeavour may be to incorporate up-scale features at lower cost than competitors. This strategy is a mixture or hybrid of low-price and differentiation. This **Best-Cost Provider Strategy** suits best in markets, like the one this study is being considering, that have both variety in buyer needs that make differentiation common and where large numbers of buyers are sensitive to both price and value.

To service this heterogeneous market, a market consisting of customers with diverse characteristics, needs, wants and behaviour the first job shall be to carve (divide) it up into homogeneous markets which are made up of customers with similar needs, wants and behavioural tendencies. This will allow sub-dividing the market into homogeneous sub-sections of customers, where any sub-section may conceivably be selected as a market target to be reached with a distinct marketing mix.

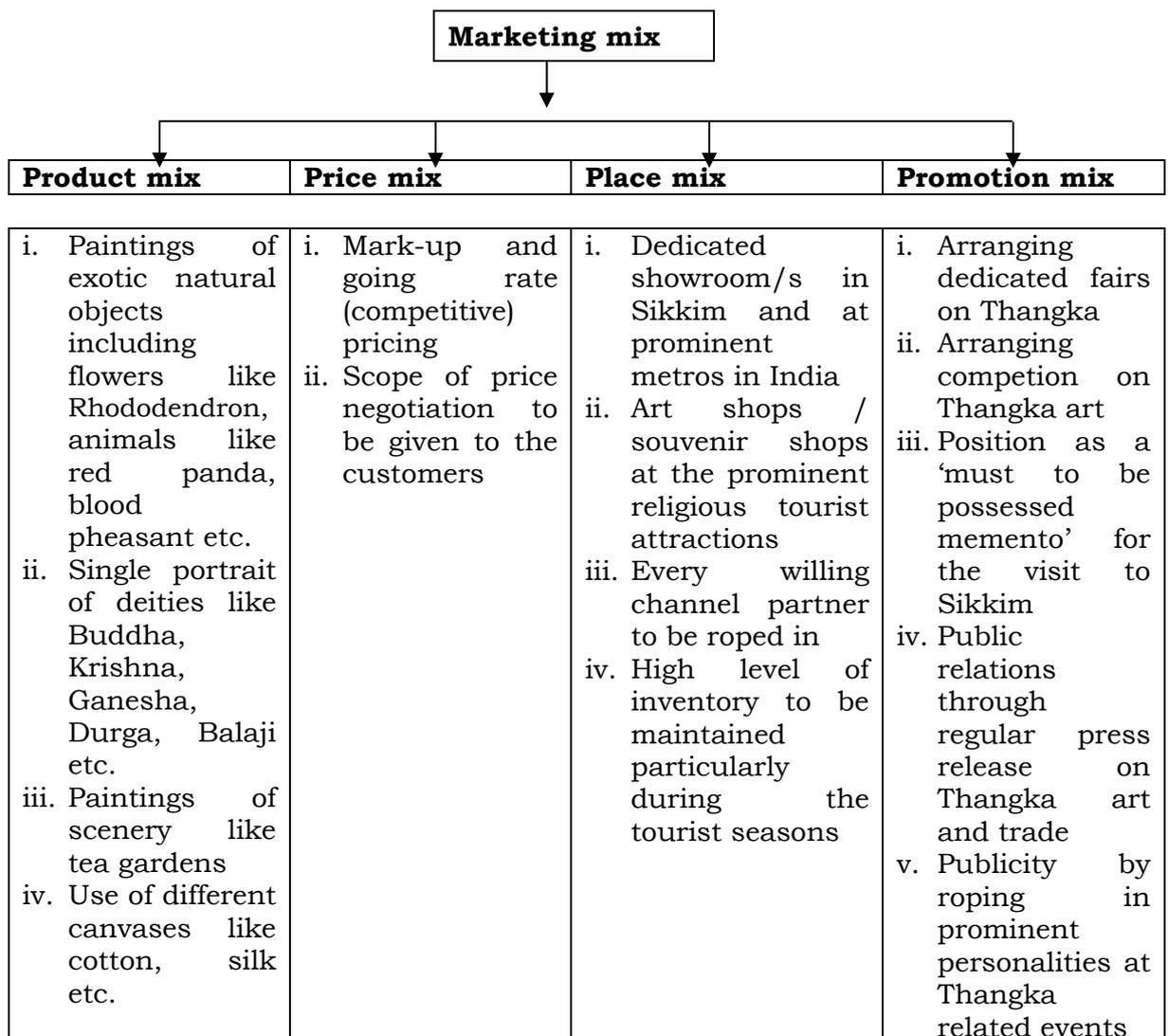
This study reveals that segmentation of the total market in three categories namely, **i) scroll painting of any theme; ii) low cost Thangkas with traditional religious themes and iii. Thangkas intended to get**

spiritual benefits for the informed and demanding customers shall cover almost all of the market.

The third segment, as mentioned above, is the most important and significant one from the angle of tradition and served by the Directorate of Handicrafts & Handloom, Government of Sikkim. From imparting training to provide production facility for the willing to acting as an interface between the customers and the artists, all are taken care of by this Directorate in Gangtok. It has gained a place of repute over the past many decades.

The first segment is the newest one and this segment is almost unattended to by the artisans in Sikkim. There are a handful of artisans who are in the fray to garner a place in this segment so far as hand painted scrolls are concerned. But the printed segment is entirely serviced by the imported articles.

Suggested marketing mix:



Pricing strategy

The present state of this trade in Sikkim is taking only one out of many strategic benefits of price i.e. to implant a sense of better quality in the consumer's mind – a psychological factor. To set a low price or high price would depend upon a number of factors, discussed above, and a wide variety of conditions

Pricing strategy to be adopted needs to be essentially low price strategy. Goal of this strategy shall be to target the segment with one of the following three offerings:

1. Superb – value strategy
2. Good – value strategy
3. Economy strategy

These strategic instruments may be applied after the market is segmented.

Promotional measures

Since the promotion of an industry as a whole is being addressed here, the options available become limited. Promotional weapons like direct marketing and personal selling go out of strategic option.

The remaining methods of advertising, sales promotion and publicity may be used. Arrangement of Trade Fairs and Exhibitions will be of great help.

Brochures and information pamphlets for the tourists are the documents where at least one image of Thangka may be included with the address of a centre of availability. In addition, catalogue of Thangkas may be made available to the market.

The process of selection of Thangka artists in Sikkim for State and National awards may be arranged in line with the modern day reality shows to attract the imagination of the new generation of artisans and the public at large.

Introduction of specialization

Specialization has been introduced successfully by other centres of Thangka production like Nepal. Artisans are employed only for executing a

job in which they have attained expertise. There are many production centres where an artisan does only one part of the painting and he has no idea about the whole product. In this way the productivity has been increased considerably. Higher production led to lower cost and lower price thus to higher volume of sales. This basic management strategy may be introduced in Sikkim to achieve higher efficiency.

Brand building measures

Brand building is all about making demand curve inelastic through the process of creation of loyalty. Branding of an art product is almost impossible to achieve with the tools and techniques adopted generally for the consumer or industrial products. Traditionally Thangkas don't bear the identity of the artists. Only very intimate few come to know about the identity of the artist. Brand building by the individual artisans may not be an option in immediate term for the general artists. As of today, Sikkim in general has an identity, among the informed customers, of producing Thangkas, which adhere to the religious standards. There is a fair chance to enhance this image by servicing even higher number of customers at more competitive price.

Nevertheless, for an art product there remains a higher level of acceptance in the market for products and services of award winning individuals / organisations.

Keeping in view the above, separate sections may be introduced at dedicated emporium/s earmarked for the award-winning artists at state and national level competitions.

More and more artisans have to be encouraged to take part at the national and state level competitions. Competitions may be introduced at various levels for Thangka only. This initiative may be undertaken in line with the 'Seal of Excellence' of the UNESCO.

A cue may also be taken from the 'mark' system introduced in woolen and silk products. A mechanism may be introduced by which authenticity of Thangkas produced in Sikkim may be proved.

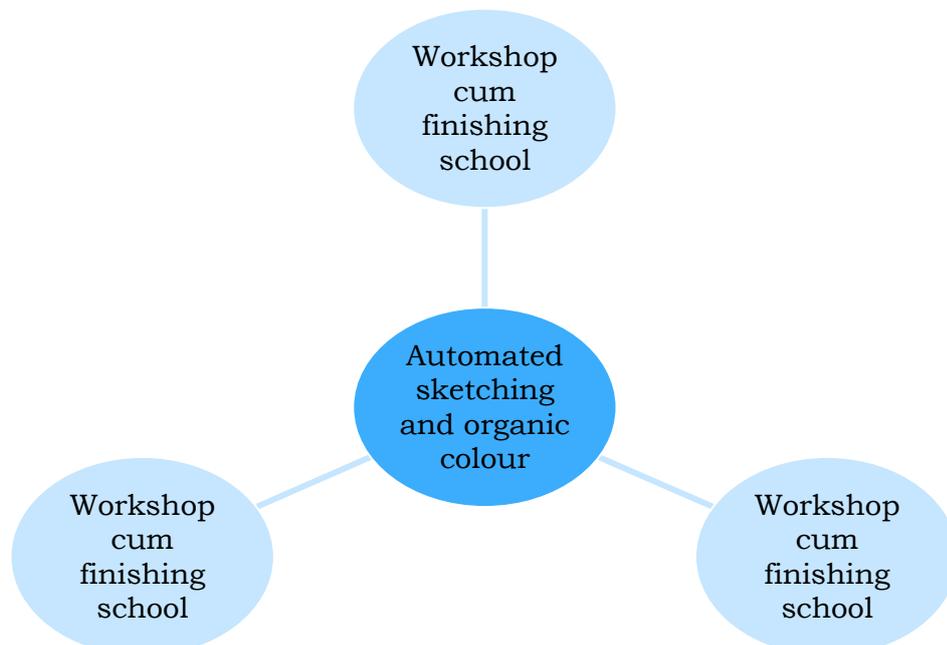
5.3 Infrastructure development

Rapid developments are happening in the creation of specialized fabrics for authentic reproduction of original art works and in different areas of digital printing. Exploration of other Thangka production and marketing centres both inside the country and outside India may prove to be helpful to get abreast of the latest developments happening in the similar direction which can be adopted in Sikkim. Identification of available, adoptable and deployable technologies shall determine the course of further action towards infrastructure development.

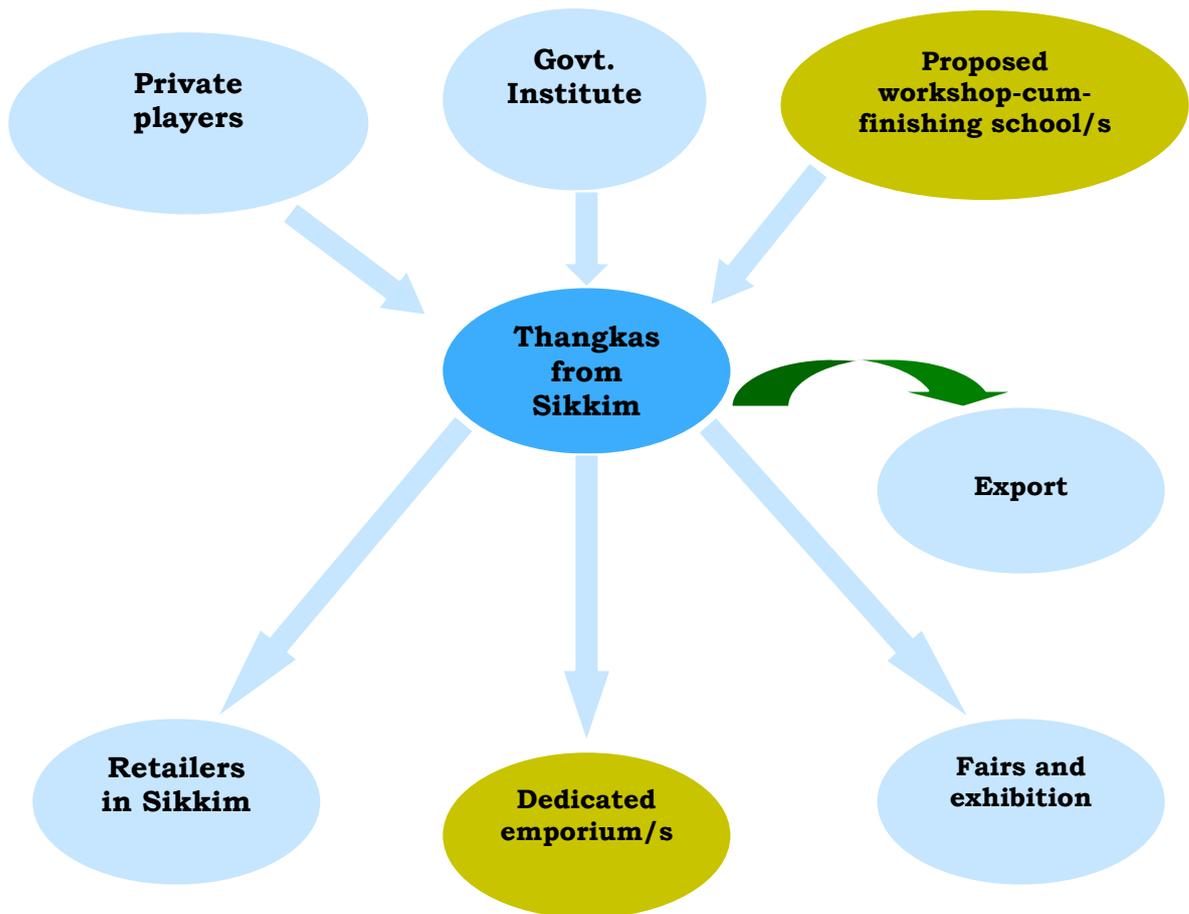
From the wider viewpoint, the volume of Thangka market is growing all over. Increasing number of Thangkas is being sold in major centres. It is observed that a degree of mechanization has been introduced along with cheaper labour and specialization to achieve cost reduction. Lower cost Thangkas produced in higher volumes is driving the growth of this market. The most prominent experts in Sikkim agree that the cost of Thangkas may be reduced considerably by introducing certain degrees of mechanization in Thangka painting.

Based on findings of this study it may be recommended that:

- i. In the back end of the business, establishment of at least one centre for preparation of colour, mechanized sketching and colouring facility may be considered. Apart from this, Thangka production centres (workshops)-cum-finishing shops may be created for semi trained artisans.



- ii. In the front end of the business, dedicated emporium/s, which is absent in Sikkim, may be introduced in addition to the existing retailers. Dedicated Thangka showrooms are there in good numbers in other places of India, particularly Buddhist religious destinations.



5.4 Implementing partners

A number of NGOs are operating there in Sikkim who is taking part in the development of the state with reputation. They can be considered for short listing of implementing partners. While selecting the implementing partner/s special focus may be given to rope in a master craftsman in the Thangka trade.



The Thangka trade in Sikkim may realize its full potential and attain new height when the physical infrastructural support and strategic guidance is provided.

ANNEXURES

ANNEXURE - I

SIKKIM CONSULTANCY CENTRE, GANGTOK

Status Survey - Thangka Painting in Sikkim

Survey Form for Individual Artisan

| | |
|---------------------------|--|
| Name of the respondent | |
| Age | |
| Religion | |
| District | |
| Block | |
| Panchayat Unit (PU) | |
| Telephone No. (if any) | |
| E-mail | |
| Website | |
| Distance from District HQ | |

For office use

| | |
|----------------------|--|
| F. No. | |
| Survey Date | |
| Name of the Surveyor | |

1. Are you practising Thangka Painting currently?

- Yes
 No

2. Have you ever undergone training on Thangka painting?

- Yes

Name of the institution / trainer.....

- No

3. What was the duration of the training?

months years

4. Your training covered the areas (Pl tick the applicable ones)

- i. Canvas preparation
- ii. Preparation of glue
- iii. Knowledge of colour ingredients
- iv. Making colour from organic sources
- v. Making colour from stone
- vi. Making colour from metals like gold and silver
- vii. Formulation of colour
- viii. Graphical measurement
- ix. Application of colour
- x. Making paint brush
- xi. Application of metals like gold and silver
- xii. Finishing of colour
- xiii. Sewing and finishing of Thangka
- xiv. Religious significance of the paintings
- xv. Consecration of the Thangka

5. Did your training course cover any of the following areas? (Pl tick the applicable ones)

- i. Costing
- ii. Financing
- iii. Marketing

6. You paint Thangkas

- i. Regularly to meet order and to maintain a saleable stock
 ii. On demand from customer

7. Availability of spiritual inputs

| Input | Not Available | Very Rarely available | Rarely available | Occasionally Available | Easily Available |
|-----------------------------|----------------------|------------------------------|-------------------------|-------------------------------|-------------------------|
| Motive (Religious guidance) | | | | | |

8. Availability of production inputs

| Sl. No. | Input | Not Available | Very Rarely available | Rarely available | Occasionally Available | Easily Available |
|----------------|------------------------------|----------------------|------------------------------|-------------------------|-------------------------------|-------------------------|
| 1 | Canvas | | | | | |
| 2 | Glue | | | | | |
| 3 | White Clay | | | | | |
| 4 | Blessed medicines | | | | | |
| 5 | Other sacred substances | | | | | |
| 6 | Minerals | | | | | |
| 7 | Precious stones | | | | | |
| 8 | Bark | | | | | |
| 9 | Leaves | | | | | |
| 10 | Flowers (like the rock rose) | | | | | |
| 11 | Gold | | | | | |
| 12 | Silver | | | | | |
| 13 | Copper | | | | | |
| 14 | Brush | | | | | |

9. Your source of required colour ingredients

- i. Source of colour white Within Sikkim
 Outside Sikkim but within India
(Pl specify the name of the place)
.....
 Foreign source
(Pl specify the name of the place)
.....
- ii. Source of colour blue Within Sikkim
 Outside Sikkim but within India
(Pl specify the name of the place)
.....
 Foreign source
(Pl specify the name of the place)
.....
- iii. Source of colour dark blue (Ram) Within Sikkim
 Outside Sikkim but within India
(Pl specify the name of the place)
.....
 Foreign source
(Pl specify the name of the place)
.....
- iv. Source of colour red (Simrik) Within Sikkim
 Outside Sikkim but within India
(Pl specify the name of the place)
.....
 Foreign source
(Pl specify the name of the place)
.....
- v. Source of colour green (Sunkhen) Within Sikkim
 Outside Sikkim but within India
(Pl specify the name of the place)
.....
 Foreign source
(Pl specify the name of the place)
.....
- vi. Source of colour blood red (Gyatso) Within Sikkim
 Outside Sikkim but within India
(Pl specify the name of the place)
.....
 Foreign source
(Pl specify the name of the place)
.....

- vii. Source of gold and silver powder
- Within Sikkim
 - Outside Sikkim but within India
(Pl specify the name of the place)
.....
 - Foreign source
(Pl specify the name of the place)
.....
 - Not available in the market. Made by the artisan at home

10. Customers get in touch with you (Pl rank the following, if needed)

- Directly by searching in the market
- By reference from your existing customers
- Referred by third party (Please specify)

11. Your customers purchase Thangka (Pl rank the following)

- For getting religious benefit
- For artistic value
- For getting good luck
- For getting good health
- For love of antiquity
- For attraction to mystic creation
- Any other, pl. specify
.....

12. Customers show interest in [Pl. indicate price range]

- Low priced Thangkas
- Medium priced Thangkas
- High priced Thangkas
- Premium priced Thangkas

13. Market

- i. Major customer of your Thangkas Individual customer
 Institutions
- ii. Majority of your customers are Within Sikkim
 From outside Sikkim but inside India
 Outside India
- iii. In your opinion main competitor of Sikkimese Hand Painted Thangkas Thangkas from West Bengal
 Thangkas from Nepal
 Thangkas from Bhutan
 Thangkas from China
 No competition
- iv. Machine printed Thangkas are eating up the market of Hand Painted Thangkas Yes
 No
 Don't know
- v. How many Thangkas you sold last year Nos.
- vi. Your sales over the years is Increasing
 Decreasing
 Remained stable
- vii. People come to you to purchase Thangkas of Cheap rate
 Good quality
 Authentic pieces
 Any other (please specify)
.....
- viii. Do you try to find customers for your Thangkas? Yes
 No
- ix. Do you take help of internet in finding customers? Yes
 No

14. You price your Thangkas (Pl tick the applicable ones)

- Based on cost incurred
- Based on income generation requirement
- Based on demand
- Highest possible price the customer is ready to pay, determined by bargaining
- Psychological pricing (to generate a sense of value in the mind of the customers)
- Based on competition's price
- Any other, pl. specify

.....

15. Major problem areas (Pl tick the applicable ones)

- i. In your opinion major problems for Thangka Painting in Sikkim
- Lack of training
 - Difficulty in getting raw materials
 - Inadequate demand
 - Lack of promotion
 - Any other (please specify)

.....

- ii. Major problems you face in relation to production facility
- Lack of working space
 - Lack of availability of trained manpower
 - Difficulty in procuring raw material used in colour preparation
 - Difficulty in preparing colour from raw materials
 - Any other (Pl specify)

.....

- iii. Is finance a problem in executing orders, particularly the high value order?
- Yes
 - No

16. Do you impart training on Thangka Painting?

- Yes
- No

17. If yes

- i. How many students are now getting training under you? Nos.
- ii. How many trained professionals are now working with you? Nos.
- iii. On an average how many Thangkas are painted by the trained professionals under you? Nos.
- iv. On an average how many Thangkas are painted by the trainees in a year? Nos.

18. In your opinion interest among the youth about Thangka Painting as an income generating activity is

- Increasing
- Decreasing
- Stagnant

19. In your opinion mechanization may be introduced in which area of Thangka Painting?

- Preparation of canvas
- Initial sketching
- Application of initial colour
- Application of final colour
- Any other area (Please specify)

.....

20. Any other comment you want to make on Thangka Painting in Sikkim

.....
Signature

ANNEXURE – II

SIKKIM CONSULTANCY CENTRE, GANGTOK

Status Survey – Thangka Painting in Sikkim

Survey Form for Thangka Retailers

| | |
|---------------------------|--|
| Name of the respondent | |
| Name of the establishment | |
| Telephone No. (if any) | |
| E-mail | |
| Website | |

| | |
|----------------------|--|
| F. No. | |
| Survey Date | |
| Name of the Surveyor | |

21. You sell

- i. Thangkas with religious theme only
- ii. Thangkas with non-religious theme only
- iii. Both

22. Costliest Thangka available with you

Rs.

23. Cheapest Thangka available with you

Rs.

24. Supply of cheap Thangkas, over the years, is

- i. Increasing
- ii. Decreasing
- iii. Stable
- iv. Don't know

25. Your customers are mainly

- From within Sikkim
- From outside Sikkim but within India
- Foreigners

26. On an average how many Thangkas you sell in a month?

27. You get supply of Thangkas from (Pl tick the applicable ones)

- i. Kalimpong
- ii. Nepal
- iii. Bhutan
- iv. Any other (please specify)

.....

28. Do the sales of Thangka fluctuates over the months?

- i. Yes
- ii. No

29. If yes, which months of the year experience higher sales?

- | | | |
|-----------------------------------|---------------------------------|------------------------------------|
| <input type="checkbox"/> January | <input type="checkbox"/> May | <input type="checkbox"/> September |
| <input type="checkbox"/> February | <input type="checkbox"/> June | <input type="checkbox"/> October |
| <input type="checkbox"/> March | <input type="checkbox"/> July | <input type="checkbox"/> November |
| <input type="checkbox"/> April | <input type="checkbox"/> August | <input type="checkbox"/> December |

30. Cheaper Thangkas originate from

- i. Kalimpong
- ii. Nepal
- iii. Bhutan
- iv. Any other (please specify)

.....

31. Factors those influence customers' purchase decision (Pl rank the following)

- Price
- Quality
- Religious benefit
- Artist's identity
- For getting good health
- Artistic value
- Antiquity
- For attraction to mystic creation
- Any other, pl. specify

.....

32. Do you get regular and sufficient supply of Thangkas

- i. Yes
- ii. No, face short supply of religiously authentic Thangkas
- iii. No, face short supply of Thangkas painted with organic colour
- iv. No, face short supply of cheap Thangkas from local sources
- v. Any other (please specify)

.....

33. Prospective customers who don't buy Thangkas from your shop are sensitive to

- i. High price
- ii. Low quality
- iii. Less variety
- iv. Any other (please specify)

.....

34. You purchase Thangkas (Pl tick the applicable ones)

- i. Directly from the painters
- ii. Through agents
- ii. From wholesalers
- iii. From institutions
- iv. Any other (please specify)

.....

35. Customers show interest in [Pl. indicate price range]

- Low priced Thangkas
- Medium priced Thangkas
- High priced Thangkas
- Premium priced Thangkas

36. Higher value Thangkas are mainly purchased by customers

- From within Sikkim
- From outside Sikkim but within India
- Foreigners

.....
Signature