

Business Case (Silk Sector) Cambodia

Developing an Innovative Business Model: The Case of Color Silk Enterprise in Cambodia

Prepared by Stephen Paterson & Yim Keorithy

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Preface

This case was prepared for the ASEAN SME Case Study Project based in Manila, entitled “Formulation of Case / Industry Studies to Develop ASEAN Baselines and Benchmarks for SMEs in Three Identified ASEAN Priority Sectors Study ((ND/SME/09/003/REG),” funded by the Japan-ASEAN Integration Fund (JAIF).

This case, which focuses on the Silk Sector in Cambodia, is intended for teaching purposes in both undergraduate and graduate courses related to entrepreneurship, social entrepreneurship and international development.

Case Summary

Within the context of the silk weaving sector in Cambodia, this case focuses on Color Silk Enterprise which was started by a young woman entrepreneur and recent university graduate, Ms. Ngorn Vanntha, in 2009, with startup capital of US\$ 8,000 for the initial pilot launch of the business, followed by a further investment of US\$ 80,000.

The first part of the case will provide an overview of the Cambodian economy and its emerging and dynamic micro, small and medium enterprise (MSME) sector.

The second part of the case will provide a historical and geographic overview of the silk sector in Cambodia.

The third section will focus on the silk industry in Cambodia and in particular the silk weaving cluster in Takeo province. Value Chain analysis, plus the Porter Diamond Model and Five Forces Model will be utilized to provide a strategic analysis of the silk industry.

The final section of the case will focus on Color Silk Enterprise and its attempts to develop an innovative business model to enhance overall competitiveness and make the transition from a micro to a successful small business enterprise within the expanding silk sector in Cambodia. The analytical tool employed in this section will include the Business Model Canvas developed by Alexander Osterwalder and Yves Pigneur.

1.0: Overview of the Cambodian Economy

Cambodia is situated in a very dynamic and rapidly growing part of Southeast Asia. Cambodia has a land area of 181,035 square kilometers and shares land borders with Thailand (803 km), Laos (541 km) and Vietnam (1,228 km) in addition to a seaport and coastline on the Gulf of Thailand (443 km).

The capital of Cambodia is Phnom Penh which has a population of approximately 2.2 million persons. With a total country population of approximately 15 million and a per capita GDP income of US\$ 899, Cambodia experienced a wave of high economic growth during the period from 2000 to 2008, averaging a real annual GDP growth rate of 9.5%.

After the global economic crisis of 2008, the growth rate experienced a sharp decline, however, since 2012, the overall economy has rebounded. According to the Asian Development Bank, the growth rate for 2013 is projected at 7.2 percent, increasing to 7.5% by 2014. (Source: Asian Development Outlook 2013, ADB, April 2013)

Cambodia is a member of the Association of South East Asian Nations (ASEAN) since 1999 and a member of the World Trade Organization (WTO) since 2004.

The main economic sectors in Cambodia include garments, tourism, construction and agriculture. The garment industry, which includes about 500 garment and shoe factories, directly employs approximately 500,000 persons, 91% of whom are rural women. The total value of garment exports in 2012 was greater than US\$ 4 billion, and represented around 90% of the country's total exports. Garments are exported primarily to the United States and the European Union (EU). (Source: Garment Manufacturers Association of Cambodia, GMAC)

The tourism industry is the second most important industry after the garment sector. It is centered around the historic city of Siem Reap which is home to the world heritage site of Angkor Wat, with Phnom Penh receiving the second largest number of visitors. According to a recent ADB report, there were 3.6 million visitors arriving in Cambodia in 2012, which represents an increase of 24.4 percent over 2011, producing earnings of 2.2 billion US dollars, which represents an increase in tourism receipts of 15.6 percent over the previous year. (Source: Asian Development Outlook 2013).

The construction sector also continued to grow in 2012, with building project approvals reaching 2.1 billion US dollars which represents an almost doubling of the value of projects approved in 2011. (Source: Asian Development Outlook 2013)

While the garment, tourism and construction sectors continue to rapidly expand, the agricultural sector in Cambodia which employs approximately 80% of the population, continues to experience rather low levels of investment, growth and productivity. Subsistence rice cultivation represents the largest activity within the agriculture sector, followed by additional cash crops such as cassava, rubber, maize, sugar cane and soybean. The agricultural sector as a whole represents only 32 percent of GDP and the total value of agricultural exports during the first

10 months of 2011, was only US\$ 330 million, which stands in contrast to the more than US\$ 4 billion of exports generated by the garment sector. According to a recent ADB report, the agriculture sector grew by only 4 percent in 2012.

1.1: The SME Sector

The vast majority of businesses in Cambodia are part of the Small and Medium Enterprise (SME) sector which consists of both formally registered enterprises and also businesses that operate in the informal sector. The sector is important not only for its overall contribution to the Cambodia economy, but also for job creation.

According to the Ministry of Industry, Mines and Energy in Cambodia, Micro enterprises and SME's can be defined as follows:

Classification	# of Employees	Fixed Assets (excluding land)
Micro	< 11	< 50k
Small	11 to 50	50k to 250k
Medium	51 to 100	250k to 500k
Large	> 100	> 500k

(Source: "Constraints on SME's in Cambodia and their Participation in Production Networks," Chheang Vannarith, et al., Chapter 5)

Estimates vary regarding the number of enterprises operating in Cambodia, as many SME's, especially micro-enterprises, do not formally register and thus operate in the informal sector. A recent Asia Foundation report mentions a total of 505,134 enterprises in 2011. They also go on to note that only about 3.5 percent of these enterprises are registered with the Ministry of Commerce. (Source: Cambodia's Small Businesses Serve as Backbone of Sustainable Economy, Asia Foundation, May 15, 2013)

According to the Federation of Association for Small & Medium Enterprises of Cambodia (FASMEC), they refer to a 2009 census prepared by the National Institute of Statistics, which lists the total number of enterprises operating in Cambodia as 376,761 with the following breakdown in terms of size:

Classification	# of Employees	# of Enterprises
Micro	Less than 5	316,607
Micro	5 to 9	46,233
Small / Medium	10 to 99	13,123
Large	100 to 999	692
Large	1000 and above	106

(Source: Federation of Association for Small & Medium Enterprises of Cambodia FASMEC 2013)

According to another survey conducted by the National Institute of Statistics in 2000 and subsequent data provided by the Ministry of Industry, Mines & Energy, in 2005, approximately 80% of SMEs were involved in the food, beverages and tobacco sector, 13% were involved in the small-scale garment and textile sector,

while the remaining 7% were involved in the furniture sector. (Source: “Constraints on SMEs in Cambodia and their Participation in Production Networks,” Chheang Vannarith, 2010).

Women also have a very active role in the SME sector, as approximately 50.1% of registered SME’s are headed by women. This figure is higher for non-registered SME’s. With regards to persons employed in the MSME sector (Micro – Small Medium Enterprises), there are 1,469,712 persons working in the sector, with a gender breakdown of 842,929 (Female) and 626,783 (Male). Approximately 68.8% of SME’s are located in rural areas, while the remaining 31.2% are urban based. (Source: Federation of Association for Small & Medium Enterprises of Cambodia FASMEC 2013)

1.2: Starting a Business Enterprise in Cambodia

Business enterprises in Cambodia can register under several categories, the most common being Sole Trader / Partnerships (minimum capital none) and Limited Liability Company (minimum capital USD 1,000.).

Taxation is assessed at a rate of 20 percent on profits. Enterprises are also responsible for payroll taxes which are progressive up to 20%

According to the IFC’s annual report on Doing Business 2012, they outline the following steps and costs of starting a Limited Liability Company in Cambodia:

#	PROCEDURE	TIME	Department	COST / FEE
1	Deposit capital in bank	1 day		Deposit only (USD 1,000.)
2	Company name check (is the name available)	5 days	Ministry of Commerce	USD 10.
3	Publication of Company Profile (charter, list of board members, etc.)	7 days		USD 15.
4	Incorporate the company with commercial register	25 days	Commercial Court	USD 105.
5	Make a Company Seal	1 day	Ministry of Commerce	USD 15.
6	Approval of registration documents	3 days	Phnom Penh Tax Department	USD 49.
7	VAT and Patent registration	13 days	Tax Office	USD 390.
8	Labor declaration	30 days	Ministry of Labor	USD 250.

(Source: IFC: Doing Business: Measuring Business Regulations, 2012)
<http://www.doingbusiness.org/data/exploreeconomies/cambodia/starting-a-business>

1.3: SME Financial Services

As of 2012, there were 33 commercial banks, 7 specialized banks, 32 microfinance institutions and 29 NGOs providing banking, microfinance and rural credit services in Cambodia.

According to a recent IFC report, the micro enterprise and SME sector face several problems when it comes to financial services, which include high collateral requirements of commercial banks, high interest rates of both commercial banks and MFIs, and also delays in terms of the processing and receiving the loans, which is further complicated by the weak financial reporting of many SMEs. (Source: “Understanding Cambodian Small and Medium Enterprise Needs for Financial Services and Products,” IFC, 2010).

The interest rates charged range from 10 to 18 percent per year for the top 6 commercial banks, and for the microfinance sector they can range up to 3 percent per month. The more favorable interest rates are therefore often accessed only by the larger SMEs.

The same IFC study found that SMEs involved in the agriculture, wholesale and the hospitality sectors had the highest loans. The maximum size of loans also increased based on the size of the enterprise.

Size of Enterprise	Loan Amount
Micro	Up to US\$ 2,400.
Small	Up to US\$ 15,400.
Medium	Up to US\$ 46,000.
Large	Up to US\$ 122,000.

(Source: “Understanding Cambodian Small and Medium Enterprise Needs for Financial Services and Products,” IFC 2010)

1.4: Ease of Doing Business (SME's)

According to the IFC / World Bank's Annual Doing Business rankings, “Doing Business 2013: Smarter Regulations for Small and Medium-Size Enterprises,” which measures the ease of doing business in a country by measuring factors such as starting a business, dealing with permits, paying taxes, getting credit, etc., Cambodia ranks 133 out of a total of 185 countries listed.

With regards to Cambodia's position relative to other countries in ASEAN, please see the following table:

COUNTRY	RANKING
Singapore	1
Malaysia	12
Thailand	18
Brunei	79
Vietnam	99
Indonesia	128
Cambodia	133
Philippines	138
Laos	163

(Source: World Bank, *Doing Business 2013* (Washington D.C., 2012))

To provide a more detailed understanding of the ease of doing business in Cambodia, the World Bank breaks down the ranking into the following sub-categories. Compared to the results for 2011, Cambodia shows some improvement with regards to increased access to credit for SMEs, though the ease of starting a business in terms of the number of days and procedures is still well behind most countries within the region.

CAMBODIA (Ease of Doing Business)	RANK (133)	Number
Starting a Business	175	
Procedures		5
Time (days)		85
Cost (% of per capita income)		100.5%
Minimum Capita (% of per capita income)		28.5%
Dealing with Construction Permits	149	
Getting Electricity	132	
Registering Property	115	
Getting Credit	53	
Protecting Investors	82	
Paying Taxes	66	
Trading Across Borders	118	
Enforcing Contracts	142	
Resolving Insolvency	152	

(Source: World Bank, *Doing Business 2013* (Washington D.C., 2012))

1.5 Government Strategy for the Development of the SME Sector

The development of the SME sector in Cambodia comes under the overall Rectangular Strategy for Growth, Employment, Equity and Efficiency which was announced by the Royal Government of Cambodia in 2004.

The section of the Rectangular Strategy which discusses SME policy is as follows:

“The Royal Government has committed itself to the promotion of SMEs through the following policies: (i) encourage the development of SMEs, especially through the provision of medium and long term finance; (ii) suppress smuggling; (iii) reduce registration procedures and start-up processes for companies; (iv) facilitate export-import activities by simplifying procedures such as licensing and other letters of permission, (v) support for newly-established industries for an appropriate period; (vi) promote linkages between SMEs and large enterprises; (vii) establish a national center for productivity to assist SMEs enhanced their productivity and reduce production costs; (viii) establish a national standards institution to help ensure the quality of domestic products to meet regional and international standards; (ix) establish national laboratories for physics, chemistry, micro-biology, mechanics and tests for quality and criteria of products; (x) strengthen mechanisms for the protection of industrial intellectual property rights, to prevent illegal copying, re-creation and illegal use of new techniques and technology; (xi) promote vocational/skills training, both domestic and overseas; (xii) expand and accelerate the "one village, one product" program; and (xiii) strengthen the legal framework by creating laws on concerns such as: factories, industrial zones, patents and inventions, measurements and industrial safety.” (Source: http://www.cdc-crdp.gov.kh/cdc/aid_management/RGC_Rectangular_Strategy_2004.pdf, pages 18 & 19)

The overall strategy and policy formation for the SME sector is under the responsibility of the SME Sub-Committee which is chaired by the Minister of Industry, Mines and Energy (MIME). The SME Sub-Committee also serves to coordinate all the SME related issues among the different government ministries and departments in Cambodia.

1.6 Major Challenges faced by Cambodian SMEs

- Human Resource Development: The workforce often lacks the necessary hard and soft skills necessary to be competitive in the region. Vocational education and skills development is also limited.
- Access to finance (though this is improving as noted in the above IFC / World Bank’s Annual Doing Business rankings which ranks Cambodia as #53 in terms of access to credit)
- Limitations to exporting (due to poor product quality/standards)
- Public perception regarding the quality of locally produced products is low.
- Loss of skilled resources (labor) to other economic sectors.
- Lack of coordination due to multi-government institutions concerned with managing and regulating the overall SME sector which creates inefficiencies in the sector. SME’s are therefore faced with too much bureaucracy.
- High energy cost (Cambodia ranks #132 out of a total of 185 countries in terms of the cost and difficulty in obtaining electricity).

2.0: History and Overview of the Silk Sector in Cambodia

The history of Cambodian silk goes back many centuries to both the Angkorian period (9th to 12th Century) and to the ancient Funan period (1st to 6th Century) and involved both silk sericulture and weaving activities. It should be noted that Cambodian silk is different from the silk produced in neighboring countries such as Vietnam and China. Cambodian silk is yellow or golden in color and it is also more coarse than the white silk produced in Vietnam and China.

During the several decades of strife and civil war which engulfed Cambodia from the late 1960's to the early 1990's and included the genocidal Khmer Rouge period from (1975 to 1979), the silk sector and especially sericulture or raw silk production was severely disrupted. Knowledge and skills related to weaving techniques and patterns and use of natural color dyes were also diminished.

In 1960, Cambodia produced approximately 20,000kg of raw silk, but this number fell to only 1,000kg by 1990. During the period after the civil war, sericulture did increase to a high of 7,000kg in 2005, this number, however, has since declined due to a variety of factors which include environmental conditions and also the ability or rural communities to make more income from producing other cash crops. (Source: Cambodian Sericulture Stock Taking Report, International Trade Center, 2008)

While silk sericulture has declined over the years in Cambodia, the trend and future outlook for silk weaving is still positive within particular regions of the country. Most of the raw silk used in the weaving sector today is now imported from Vietnam & China and chemical dyes from Thailand have replaced natural dyes, though there are some international NGO's and social enterprises who are trying to restore some of the natural color dyes.

The silk weaving sector has of course also been affected by the long civil war, as weaving skills and knowledge of tradition pattern making have declined. There are also more opportunities for Cambodian women to work in the garment sector in Cambodia, so many young rural women are opting to leave the villages and the traditional weaving culture to seek garment industry jobs in and around Phnom Penh.

2.1: Geography of Cambodian Silk Weaving

The following map and table shows the location and number of silk weavers in Cambodia. This case is focused on Takeo Province, which is home to the largest concentration of silk weavers in Cambodia. As can be seen from the table below, Takeo province has more than 12,000 silk weavers.



Province	# of Weavers	Specialization
Takeo	12,584	Hol (86%), Plain fabrics (8%), Krama Scarf (6%)
Kandal	4,513	Phamuong , Chorobab
Svay Rieng	2,037	Plain fabric / organza (83%), Krama Scarf (17%)
Kongpong Cham	770	Hol (95%)
Siem Reap & Banteay Meanchey	321	Plain fabrics, Blankets, Krama Scarf (70%)

(Source: Khmer Silk Villages, 2010)

It should also be noted that weavers specialize in the production of different silk items. The Khmer term “Hol” refers to silk fabric which can be used to make a variety of traditional skirts with patterns which are often used in Khmer ceremonies. “Phamuong” is 100% plain color silk. “Chorobab” refers to silk fabric with either gold or silver threads. “Organza” refers to very thin or sheer silk.

2.2 : Cambodian Silk

Cambodian silk which is yellow in color and often called Golden Silk is different from the white silk which is imported from Vietnam, China and Thailand. While Golden Silk is often viewed as being of higher quality, its availability is very much on the decline, as only 4 tons are currently produced nationally. As a result, most products which currently claim to be made of Cambodian golden silk are often a mix between golden silk and white silk. Imported white silk is currently used in 99% of silk products in Cambodia. (Source: “Report: Cambodia Sector-Wide Silk Project,” International Trade Center, 2011).

3.0: Industry & Cluster Analysis

This section looks at the broader dynamics and level of competitiveness within the silk industry, by utilizing Michael Porter's cluster concept in addition to his analytical tools such as the Diamond Model and the 5 Forces Model. A value chain will also be outlined for the silk sector.

3.1: What is a Cluster?

According to Harvard Professor Michael Porter, "Clusters are geographic concentrations of interconnected companies and institutions in a particular field." (Source: "Clusters and the New Economics of Competition," Harvard Business Review, 1998).

With regards to the silk weaving cluster in Takeo Province, we are interested in assessing the level of strengths and weaknesses among the multi-directional linkages involving suppliers, distributors and enterprises producing related products or services.

3.2: Cluster Competitiveness: Porter's Diamond Model

Michael Porter's Diamond Model enables us to assess the level of a cluster's competitiveness by focusing on 4 main determinates which include Factor Conditions, Demand Conditions, the Context for Firm Strategy & Rivalry and Related and Supporting Industries.

- a) Factor Conditions includes the level of development of human resources, knowledge resources, physical resources, capital and Infrastructure. In general, the factor conditions are rather weak within the silk weaving cluster of Takeo province. As a result of Cambodia's turbulent past, many of the knowledge skills related to weaving traditional patterns and use of natural color dyes, have been lost or diminished.

Weavers can be classified into three groups: those above age 50 who have a high degree of knowledge and skills regarding the weaving process, knowledge of patterns and colors. Those between the ages of 30 to 50, who are semi-skilled, but often illiterate. And those below age 30, who represent the largest age group of weavers, and whom are literate due to the recent investment in national education. They however lack skills and knowledge of weaving and have other options such as working in the garment industry, which employs approx. a half million workers in Cambodia.

With regards to infrastructure, the road system is in reasonable condition (the main markets in Phnom Penh are only one and a half hours drive) and electricity from Vietnam is also available, though prices tend to be quite high. The price of electricity is around 3,000 riels or USD 0.75 per kilowatt hour, compared to only 1,000 riels or USD 0.25 in Phnom Penh.

Access to credit is also available, though this is mostly provided by the buyers.

- b) Demand Conditions places an importance on the sophistication of domestic demand as this increases the overall competitiveness of the cluster. With regards to the silk weaving cluster in Takeo province, most of the demand is from middle to upper middle class families who are purchasing silk phamuong (e.g. sarong) for traditional ceremonies. Colors and patterns are based on tradition, so there is not much demand for new and innovative designs. Colors tend to be derived from bright chemical dyes imported from Thailand.

International demand is also present, both at the low end (via tourists who visit the cluster and markets in Phnom Penh) and the high end (silk boutiques both in Phnom Penh and abroad). It is this demand that is driving innovation in the silk sector, through their focus on organic and natural dyes, new patterns and creative designs.

- c) Context for firm rivalry: The overall level of rivalry is quite intense, with most weavers competing on price. The dealers/buyers from Phnom Penh are often trying to copy the patterns and designs of rival competitors in addition to poaching the supply of other buyers. There is very little cooperation within the sector. The production unit is still very much family based.
- d) Related and supporting industries includes both the garment sector and the tourism sector. The garment sector in Cambodia employs approximately 450,000 workers and represents approximately 90% of Cambodia Exports. The linkages with this sector are not very well developed, though on the labor side, the garment sector competes with the weaving sector for rural based labor.

After the garment industry, the tourism sector is the second most important contributor to the Cambodian economy. The linkages between the silk sector and the tourism sector are high and in the case of Takeo Province, there is also an eleventh century temple called Phnom Chiso which attracts tourists and is also a source of direct sales via the homes of silk weavers. As the tourism sector grows and becomes more developed, this will have a positive impact on the silk sector.

Agriculture is also a sector which has some linkages to the silk industry. While silk sericulture (e.g. raising of silkworms to produce raw silk) is not well established in the province as most raw silk is imported from Vietnam and China, there is however some linkages to the agricultural sector as most of the weaving families in the province are engaged in subsistence rice agriculture with weaving providing additional income to the family, especially during the dry season.

3.3: Porter 5 Forces Model: While the Porter Diamond Model focuses more on competitiveness at the macro level, focusing on the nation and clusters, the 5 Forces Model looks at the competitive environment from the firm perspective in terms of the competitive environment in a particular industry by focusing on Barriers to entry, threat of substitute products, buying power of customers and suppliers and finally the nature and level of rivalry among competitors within the industry.

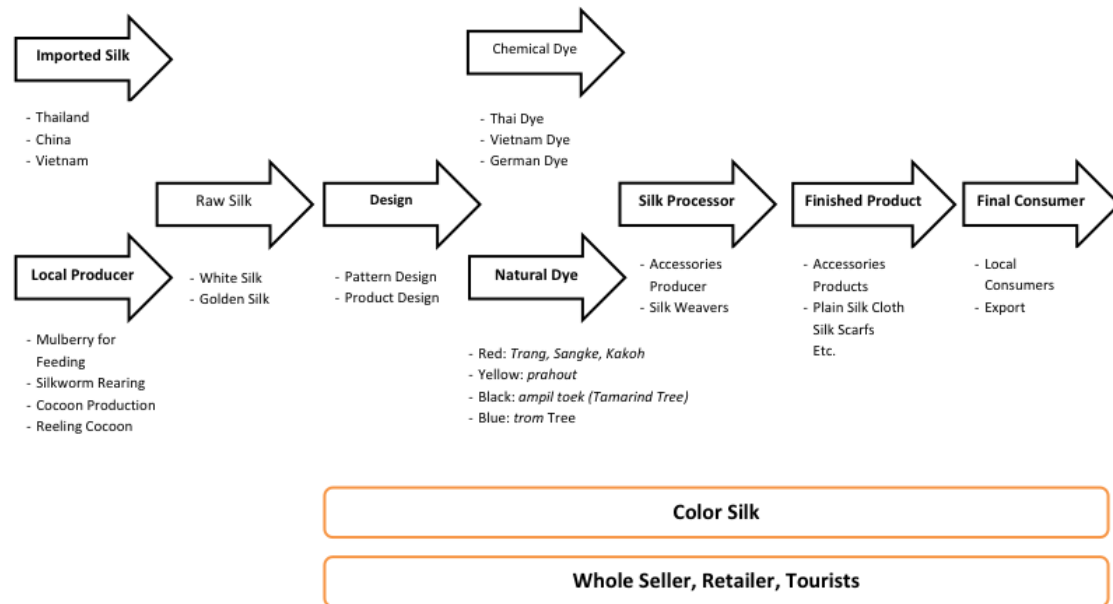
a) Barriers to entry: The barriers to entry within the silk weaving sector are very low. With regards to capital requirements, it only involves an initial investment of US\$ 250. to purchase a weaving loom. Finance is also really available via micro finance institutions in addition to the buyers whom often supply the basic raw materials to their clients. The basic knowledge skills can also be obtained via apprentice type relationships within the community.

B) Threat of Substitutes: There are very few substitutes to silk as it is an integral part of the Cambodian culture and used for most ceremonies. If prices rise however, cheaper imported silk products are readily available from both Thailand and Vietnam. Additionally, Buyers can use other kind of cloth that made of cotton to cut their cost when silk price rise.

C) Buying Power of Customers & Suppliers: In the silk sector this is combined as the dealers provide both the raw material inputs and purchase the final product. The dealers have a lot of power in this relationship as the local weavers are unfamiliar with the market prices in Phnom Penh and also lack knowledge and awareness regarding the demand from final customers both in Phnom Penh and abroad.

D) Rivalry among weavers and also the buyers who purchase the final products is intense. Levels of cooperation among village weavers are rather limited, though improving. With regards to the buyers, they are constantly trying to compete on price and often copy designs of their competitors in addition to poaching products which have already been contracted or commissioned by other buyers.

3.4: Value Chain of Silk Sector in Cambodia



3.5: SWOT Analysis (Silk Value Chain)

1. Strengths

- Large number of weavers available in the rural areas of Cambodia
- Labour costs are low.
- Strong domestic demand for silk, as it is part of Cambodian culture (e.g. silk products are used in weddings, traditional ceremonies, etc.)
- The quality of Cambodian golden silk is nationally and internationally recognized
- Weaving techniques and designs are also varied and complex
- Involvement of NGO's and other key stakeholders which assist in organizing and coordinating the silk sector

2. Weaknesses

- Overreliance on imported silk (e.g. 99 percent)
- Inefficient production methods
- Weavers lack market information regarding prices and styles / patterns preferred by final customers / end users
- Traders and inter-mediators dominate the value chain
- Lack of funding for skills training centers
- Quality control and certification bodies are lacking
- High dependency on imports of raw materials, almost everything is imported (dyes, equipment parts, etc)

3. Opportunities

- Emerging international demand for Cambodian silk products due to increase in international tourists (3.6 million tourists visited Cambodia in 2012)
- Rising middleclass in Phnom Penh creating demand for both traditional silk products and potentially developing into a market for more modern designs, styles and silk accessories.
- Neighboring countries are transitioning away from silk production
- Export market: close to no restrictions on silk importation in developed countries.
- Rise of the internet and ecommerce technology in Cambodia and worldwide is creating more direct sales and marketing opportunities for the participants in different parts of the silk value chain.

4. Threats

- Price of imported raw materials is increasing (e.g. imported raw silk, color dyes, etc.).
- Availability of local inputs including Cambodian golden silk, natural materials which form the basis for organic color dyes is also diminishing.
- Rural women have more economic options than traditional weaving. Many women are leaving their village communities to work in garment factories in and around Phnom Penh. The garment sector currently employs 500,000 workers, most of whom are rural women.

(Source: "Report: Cambodia Sector-Wide Silk Project", International Trade Center, 2011)

4.0: The Case of Color Silk Enterprise

The following section will focus on the case of Color Silk Enterprise and its attempts to find a new and innovative business model to ensure future success in the silk sector.

4.1: Origins

The idea for Color Silk Enterprise emerged in 2008, when Vanntha Ngorn and two university students entered the National Business Plan Competition in Phnom Penh, Cambodia which was a university competition implemented by the National University of Management in Phnom Penh in partnership with the international consulting firm McKinsey & Company, which served as the overall knowledge partner for the competition.

In 2009, Vanntha Ngorn and Taing Theary also entered the South-East Asia Round of the Global Social Venture Competition in Bangkok where the idea of Color Silk received more attention from the social venture community.

Based on the success of the idea within these two competitions and also based on the advice and encouragement of several international mentors, Vanntha

decided to launch Color Silk with Taing Theary as a social enterprise in 2009 with startup capital of only USD 8,000. for the initial pilot launch of the business, followed by a further investment of US\$ 80,000.

4.2: Vision & Mission

The Vision & Mission of Color Silk is to develop the silk weaving community in Takeo Province, empower women, contribute to poverty alleviation by job creation and by helping silk weavers access local and international markets. It is also the mission of Color Silk to help preserve the silk weaving culture which is at risk of disappearing, while reducing poverty and contributing to economic development in more isolated areas. (Source: Color Silk: GSVC Business Plan 2011)

4.3: Target Area

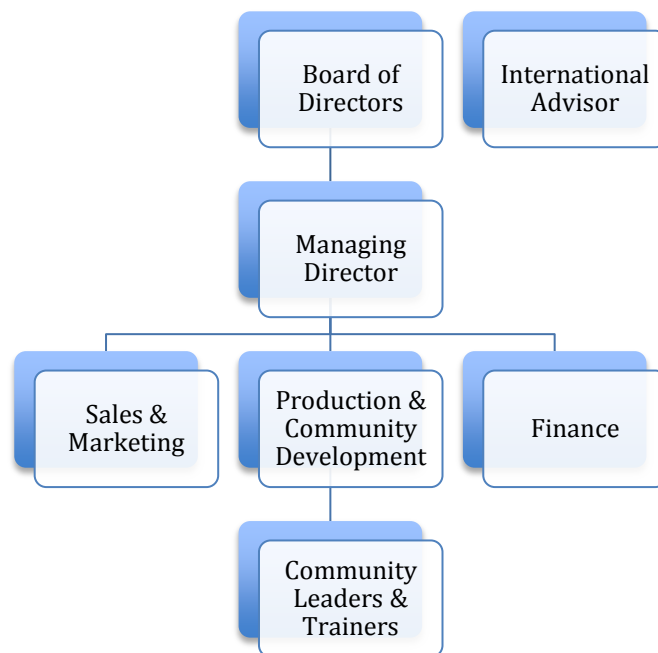
Color Silk is located in Tang Yab commune, Prei Kabas district, Takeo Province, which is in the center of the silk weaving culture in Takeo Province. In addition to rice farming, families in this region depend on silk weaving as a source of extra income for their families.

Color Silk operates in 6 different villages in Prei Kabas district and has 400 members and 100 non-members. Members receive training and full year weaving contracts, while non-members are contacted when the demand for work exceeds the production capacity of the members.

4.4: Key Activities Summary

Color Silk works with more than 400 silk weaver members in Prei Kabas district, Takeo province. Members of the Color Silk community receive financial support to purchase the necessary equipment (e.g. silk looms) to initiate their home based silk weaving enterprises. The whole process of silk weaving from supplying silk to providing color dyes and designs/patterns is organized and monitored by Color Silk Enterprise according to their market knowledge of the domestic and international end users of the final products. Color Silk Enterprise then collects and distributes the final silk products to wholesalers, retailers and individual consumers around Cambodia and abroad, mostly in the United States and France. Each member (silk weaver) within the Color Silk community only sells their final silk products to Color Silk Enterprise. Today Color Silk's product line includes a wide variety of textiles, scarves, sarongs and silk accessories in both traditional and modern styles and patterns. (Source: Color Silk: GSVC Business Plan 2011)

4.5: Organizational Structure & Personnel



(Source: Color Silk: GSVC Business Plan 2011)

Board of Directors and Management

Name	Position	Background
Ms. Vanntha Ngorn	Managing Director & Chairman of the Board	Vanntha received an MBA degree from the Royal University of Law & Economics (2009). In October 2010, She received an award as a Global Young Social Entrepreneur from Youth Action Net, a program of the International Youth Foundation (IYF) in Washington D.C. and has more than 5 years work experience in social development and project management. Vanntha is original from Takeo province.
Mr. Keat Savuth	Director of Administration & Finance & Member of the Board of Directors	Savuth, graduated with a Bachelor's Degree in Business Administration from the National University of Management (NUM) in Phnom Penh. He has more than 4 years working experience in accounting and financial management with local private companies and is currently pursuing an MBA degree.
Ms. Hok Sok Ny	Member of the Board of Directors	Sok Ny was selected from the community to serve as a board member of Color Silk Enterprise. She has more than 35 years

		experience in silk weaving, and also has expertise in dying colors and designing new patterns for both traditional and modern styles. She is also responsible for the training of new weavers in the color silk community.
Ms. Reagan Hudgens	Member of the Board of Directors and International Advisor	Reagan is based in the U.S. and currently works as Director of Sales at Adgregate Markets which sells emerging social commerce technology solutions. These solutions enable companies to merchandise and sell products within Facebook and anywhere they have customers, focusing on Internet Retailer Top 500 companies, luxury brands and travel companies, responsible for developing client relationships, business models and optimized social commerce programs.
Ms. Hok Changy	Production & Community Development Coordinator	
Ms. Yeiy Chreng	Training Coordinator	

(Sources: Color Silk Business Plan (GSVC) and Color Silk Enterprise Report)

4.6: Customer Segmentation

Color Silk is focused on satisfying the needs of both business and individual customers in both the domestic and international markets.

- i) Domestic: The domestic market is mostly centered on the capital city, Phnom Penh, and also Siem Reap, which is the main tourism destination of Cambodia. The domestic market represents 40% of Color Silks sales and is focused mostly on retail stores and boutiques located in Phnom Penh and Siem Reap, representing 30%, and an additional 10% coming from direct sales to middle and upper middle class families in Phnom Penh.

The types of products which are purchased by the boutiques include silk fabric and silk scarves, while individual families tend to purchase silk phamuong (sarongs). Demand from individual customers (e.g. families) is seasonal, between October to April, which coincides with weddings and traditional ceremonies. Demand from retailers is all year round.

Demand from retailers is more sophisticated, requiring use of natural and non chemical color dyes, and innovative designs, while domestic

demand from families tends to be less sophisticated, focusing more on traditional patterns and chemical dyes.

- ii) International: 60% of the Color Silks' customers are from the international market, consisting mostly of stores/boutiques, in addition to some individual direct sales. Most of the boutiques and individual customers are located in the United States (40%) and France (20%). Customer demand is very sophisticated, requiring use of natural and non chemical / organic colors.

4.7 Competition

Color Silk is competing with commercial silk dealers and imported silk products from neighboring countries. Color Silk's approach is to develop a good relationship with the silk weaving community by offering training and other services. It also aims to create new and innovative products and designs which use primarily natural Khmer dyes derived from tree bark, leaves and seeds. All products are 100% handmade and products can be designed to meet the specific needs of customers. (Source: Color Silk: GSVC Business Plan 2011)

4.8 Products & Pricing

Color Silk Enterprise produces a wide variety of unique silk products, using natural dye colors and also organic / chemical dyes. It's current product lines include a richly-hued array of raw textiles, sarongs (with flower, stripe and plain patterns) silk fabric, silk scarves and cotton scarves.

Product Name	Average Cost Per Unit (USD)	Max-price (USD)	Description
Khmer Dye silk	110.00	200.00	One Kben = 4meter
Chemical Dye silk	50.00	150.00	One Kben = 4meter
Sarong Sot (silk skirt)	25.00	40.00	One Kben = 4meter
Neck tie	5.00	15.00	For each
Kramar Sot	3.00	50.00	For each

(Source: www.colorsilk.biz/product.html)



Silk scarves weaved by graduate trainees (Source: Color Silk Enterprise Report)

4.9 Awards & Achievements

Date	Achievement	Description
2008	National Business Plan Competition	Color Silk was selected as a one of the top ten teams in the National Business Plan Competition which was organized by the National University of Management in Phnom Penh in partnership with the international consulting firm McKinsey & Company.
2010	Global Fellowship: Youth Action Net	Color Silk won a global fellowship as a Young Social Enterprise with the Youth Action Net program / International Youth Foundation (IYF) in Washington DC
2011	Global Social Venture Competition	Color Silk Enterprise was selected to present in the final round of the Global Social Venture Competition – Southeast Asia round, which was hosted by Thammasat University, in Bangkok, Thailand.
2011	Starbucks Foundation Grant	Color Silk was awarded a grant from Starbucks Share Planet, through the Youth Action Net program a collaboration between the International Youth Foundation (IYF) and the Starbucks Foundation.
2011	Surinam-House Junction Project	Color Silk Enterprise participated in the joint International Handicraft Surinam-House Junction Project in which two representatives from color silk's weavers were invited to join the Cambodia silk weaving exhibition in Thailand.
2011	Artisans' Association of Cambodia	Color Silk became a member of the Artisans' Association of Cambodia (AAC) a Fair Trade association of Cambodia.
2011	Trade Promotion Department	Color Silk was selected as one of the top ten products by the Trade Promotion Department of the Ministry of Commerce.
2012	Women's Entrepreneur Association	Color Silk joined the Cambodian Women's Entrepreneur Association (CWEA)
2013	Mekong Women's Entrepreneurship Challenge	Ms. Vanntha Ngorn wins the Mekong Women's Entrepreneurship Challenge sponsored by InfoDev, a global grant-giving program within the World Bank and travels to South Africa to attend the 5 th Global Forum on Innovation and Technology (May, 2013)
2013	Georgetown Social Enterprise Consulting Practicum	Color Silk Organization was selected to participate in the Georgetown Social Enterprise Consulting Practicum. Color Silk continues further consulting engagements with Georgetown University graduate students in the coming years.

(Source: Color Silk Enterprise Report)

4.10 Silk Weaving Training Center

In December of 2011, Color Silk opened a training center in West Slar Village in Somroang District, Takeo Province, about 4 kilometers from the historical tourist destination of Phnom Chiso or Chiso Mountain.

The purpose of the training center is to provide vocational training to lower income rural women. Courses in silk weaving will be offered to groups of 20 weaver trainees for a duration of 12 weeks. It is expected that up to 200 weaver trainees per year will participate in this program.

Color Silk will produce the curriculum in Khmer language and make a book for trainees with 6 modules:

Training Module	Training Topics
#1	Orientation and history of silk in Cambodia
#2	Understanding the different stages of the silk work process, including raw materials and equipment
#3	How to make natural dyes
#4	How to install silk looms
#5	How to clean raw silk. How to design traditional and modern patterns
#6	How to weave

(Source: Color Silk Enterprise Report)

The purpose of the training center is closely linked to Color Silk's social mission to preserve the tradition and culture of silk weaving in Cambodia and to also provide future employment opportunities via training and skills development to rural women in Takeo province.

Color Silk has signed a five year lease to rent the land for the training center at a cost of US\$ 80. per month.

Additionally, to maintain the operation of the training center, Color Silk will contribute 20% of its net profits to the training center and the documentation of silk weaving skills.

4:11 Profile Story of a Weaver Trainee

The following is an interview with one of the silk weaving trainees in the Color Silk training program:

Ms. Maly In is 19 years old and currently studies in grade 11 at Samdach Ouh high school, and was selected as a silk weaver trainee with color Silk. On February 12, 2012, she joined the opening ceremony of the silk weaving training center. "I am very happy that I was selected as one of

silk weaver trainees, I hope that during the 10 weeks training course, I will learn the whole process of silk weaving and while at the sometime I can earn some money from silk weaving to support my study using my free time in the afternoon and on weekends, because my family is poor and my parents cannot afford to pay for study anymore. I think this is good opportunity that I will be able to learn and have a part-time job in my community with Color Silk” Maly said.

With a smiling face, she added that “In the next five years with experience in silk weaving, I want to become a specialist in silk weaving and that I will share and teach the new generation in order to contribute and help maintain the Cambodian silk weaving heritage”. (Source: Color Silk Enterprise Report)

4.12: Social Impact:

According to the founder of Color Silk, Ms. Vanntha Ngorn:

Color Silk creates sustainable rural employment opportunities in the silk weaving sector for hundreds of households in Tang Yab commune, Prei Kabas district, Takeo Province. Through its training programs and color silk community, it enables rural women to earn extra income which helps them to escape from the cycle of rural poverty.

Color Silk also reinforces the social fabric of the village by providing employment opportunities within the village community, which also helps to reduce the necessity to depart the village in search of employment opportunities in Phnom Penh or immigration abroad.

In addition to the economic and social benefits, Color Silk also helps to preserve the traditional culture of silk weaving in Cambodia, including knowledge of traditional silk designs, patterns and colors. It also encourages villages to preserve certain plants and trees within the surrounding community which are essential to the making of nature color dyes used in the traditional silk weaving process.

In the future, Color Silk’s goal is to offer silk weavers the opportunity to be a shareholder in the social enterprise and is always very concerned to maintain a healthy balance between financial return (profit) and positive social impact. (Source: Color Silk: GSVC Business Plan 2011)

4.13: Financial Summary

Color Silk’s total revenue for 2010 was US\$ 96,563. In 2012, this figure increased more than threefold to US\$ 361,406., mostly due to an increase in international sales. (Please see attached financial statements in Appendix # 1)

4.14 Donations & Crowd-Funding

In addition to commercial sales, color silk also seeks donations and contributions for its training center and social activities within the silk weaving community in Takeo province. In 2011, it received a grant of USD 10,000. from the Starbucks Foundation.

In 2012, Color Silk experimented with crowd-funding , trying to raise funds via the internet through the crowd-funding platform GlobalGiving. GlobalGiving (www.globalgiving.org) provides an online platform that connects individuals and donors in developed nations with local grassroots projects in the developing world.


Unfortunately, the results of the crowd-funding experiment were not very successful. Color Silk received only 3 donations, for a total of US\$ 80. While this experiment was not successful, it however, does show that Color Silk is looking for new and innovative ways to enhance its financial position. It was also an accomplishment for Color Silk to be recognized by GlobalGiving and officially listed on their website.

4.15: Business Model

The business model is divided into 9 building blocks and shows how Color Silk Enterprise “creates, delivers and captures value.” (Source: “Business Model Generation,” Alexander Osterwalder & Yves Pigneur).

The business model canvas which appears on the following page provides a sketch of the current business model for Color Silk Enterprise. The business model canvas can also be used as a brainstorming tool to sketch or design new and innovative business models.

Business Model: Color Silk Enterprise (2013)

<p>Key Partners</p> <p>Artisans Association of Cambodia</p> <p>Starbucks Foundation</p> <p>GlobalGiving</p> <p>Full and partial members of Color Silk Community</p> <p>National Center of Disabled Persons (NCDP)</p> <p>Trade Promotion Department (MOC)</p>	<p>Key Activities</p> <p>training</p> <p>design</p> <p>marketing</p> <p>Key resources</p> <p>Training Center</p> <p>People (experts in design & color technique)</p> <p>Color Silk Weavers Community</p>	<p>Value Proposition</p> <div data-bbox="679 539 845 636">  </div> <p>Houl (silk fabric), Phamong (sarongs), and scarves with innovative designs using natural colors</p>	<p>Customer Relationships</p> <p>Personal relationship with most customer segments</p> <p>use of social networks to provide info. And receive feedback from customers (e.g. Facebook)</p> <p>www.facebook.com/-colorsilk.community</p> <p>Channels</p> <p>both Direct & Indirect Channels</p> <p>Website: www.colorsilk.biz/</p>	<p>Customer Segments</p> <p>Boutiques (Phnom Penh & Siem Reap)</p> <p>Middle to Upper Income Families (Phnom Penh)</p> <p>International Boutiques (U.S. & France)</p> <p>Individual Customers (International)</p>
<p>Cost Structure</p> <ul style="list-style-type: none"> - Office (Phnom Penh) – US\$50. per month - Weaving Center (80\$ per month) - Website: US\$ 80. Per year - Operating costs: US\$ 1,200. Per month - Membership fees: US\$ 250. Per year (AAC & CWEA) 			<p>Revenue Streams</p> <ul style="list-style-type: none"> - International sales - Domestic Sales - Donations (e.g. Starbucks, GlobalGiving) 	

4.16: Keys to Success

According to the founder of Color Silk, Vanntha Ngorn, the keys to success for Color Silk are fourfold:

The first is a clear knowledge and understanding of individual customers and also retailers and wholesalers, focusing on product preferences and affordable prices. Research is also conducted on customer's preferred patterns, favorite colors, and sizes.

The second key to success is an understanding that “Our weavers are our most important resource:” which means working with and partnering with the weavers in the rural village communities. Color Silk cares about their weavers and provides support in terms of training and access to both materials and capital.

The third key to success is a focus on high quality products at reasonable prices. Color Silk offers a range of silk products and prices to meet the needs of different customer segments.

Finally, Color Silk is constantly looking for the latest or next trend in silk fashion and accessories and this emphasis on product development gives them a competitive edge in the marketplace. (Source: Color Silk: GSVC Business Plan 2011)

4:17: Future Plans

With regards to the future, Color Silk Enterprise is planning to introduce more products into its existing market. These products can be classified as silk accessories such as silk handbags and silk ties.

It also plans to expand its existing community by recruiting more silk weavers and by also expanding into new villages which are in close proximity to its existing community. As Color Silk recruits more members, they are searching for both skilled and experienced weavers and disadvantaged women within the community whom they can assist through further training to become more active and productive members within the community. This is part of Color Silk’s social mission to increase the income generation activities available to disadvantaged rural women while also helping to preserve and expand the traditional silk weaving culture of Takeo province.

To improve its supply and lower costs of natural color dyes, Color Silk is planning to grow the raw materials which are necessary to produce organic / natural colors directly within the community.

Color Silk is also planning to increase its international sales by both attending international silk trade exhibitions and also developing its online sales to individual customers.

4.18: The Next Three Years

When asked to discuss her upcoming plans for the future development of Color Silk over the next three years, including strategic options currently under consideration, the founder of Color Silk, Ms. Vanntha Ngorn, responded as follows:

- 2013-2014: Color Silk plans to work with an international consulting firm to explore possibilities of being a supplier to large U.S. corporations as part of a CSR program.

- 2013-2015: Color Silk is planning to apply for a bank loan of 100K to help fund future expansion plans.
- 2014: Color Silk is planning to undertake a study to analyze the advantages and disadvantages of transforming Color Silk from a social enterprise to a formal registered company by inviting new investors and the weaving association to be shareholders. The new equity structure currently being discussed would be Founders (30%), Weaving Association including staff (20%), Individual Investors (20%), International Social Investors (30%).
- 2014-2015: Color Silk is considering the possibility of opening a formal showroom and office in Phnom Penh.
- 2014-2015: Color Silk is planning to contract with an IT firm that has expertise in developing online sales platforms.

Color Silk Enterprise (CSE)

Financial Statement Summary

Profit and loss (PnL)							
	2009	2010	2011	2012	2013	2014	2015
Total revenues	77,250	96,563	180,703	361,406	542,109	867,375	1,301,063
Total Cost of revenues	59,750	74,688	135,527	263,827	374,055	598,489	884,723
Gross margin	17,500	21,875	45,176	97,580	168,054	268,886	416,340
% of Total Revenues	23%	23%	25%	27%	31%	31%	32%
Total operating expenses	8,370	10,388	12,909	16,137	24,205	36,308	54,461.43
Net operating margin (loss)	9,130	11,488	32,266	81,443	143,849	232,579	361,879
% of Total Revenues	12%	12%	18%	23%	27%	27%	28%
Total financial income (cost)	-	-	-	-	-	-	-
Net operating income (loss) before tax	9,130	11,488	32,266	81,443	143,849	232,579	361,879
Tax expenses	-	-	-	-	28,770	46,516	72,376
Net operating income (loss) after tax	9,130	11,488	32,266	81,443	115,079	186,063	289,503

Balance Sheet							
	2009	2010	2011	2012	2013	2014	2015
Total current assets	94,930	108,043	142,466	211,411	566,261	794,299	1,069,878
Total fixed assets	1,200	1,575	2,043	3,065	4,597	6,895	10,343
Total assets	96,130	109,618	144,509	214,476	570,858	801,194	1,080,221
Total current liabilities	7,000	9,000	11,625	17,981	262,232	175,123	156,531
Total long-term liabilities	-	-	-	-	-	-	-
Total liabilities	7,000	9,000	11,625	17,981	262,232	175,123	156,531
Social/share Capital	80,000	80,000	80,000	80,000	100,000	250,000	300,000
Retain earning beginning of the year	-	9,130	20,618	35,052	93,546	190,009	334,187
Net result for the year	9,130	11,488	32,266	81,443	115,079	186,063	289,503
Total equity	89,130	100,618	132,884	196,495	308,625	626,072	923,689
Total liabilities and equity	96,130	109,618	144,509	214,476	570,858	801,194	1,080,221

Ratio Analysis							
	2009	2010	2011	2012	2013	2014	2015
> Profitability							
Profit margin	12%	12%	18%	23%	21%	21%	22%
Assets turnover	80%	88%	125%	169%	95%	108%	120%
Return on equity (RoE)	10%	11%	24%	41%	37%	30%	31%
Return on assets (RoA)	9%	10%	22%	38%	20%	23%	27%
> Financial management							
Debt / equity (DER)	0.08	0.09	0.09	0.09	0.85	0.28	0.17
Operational sustainability	209%	211%	350%	605%	694%	741%	764%
> Liquidity							
Current ratio	13.56	12.00	12.26	11.76	2.16	4.54	6.83

Operational Indicator							
	2009	2010	2011	2012	2013	2014	2015
> Manpower							
# of weavers	20	60	250	350	450	650	1,000
# of support staffs	2	3	4	6	8	15	18
> Geography							
# of operation villages	1	3	6	6	8	12	16
> Customers							
# of wholesales	6	10	30	35	40	50	80