

CAMBODIA NATIONAL SILK STRATEGY

2016-2020



Kingdom of Cambodia



The Cambodia National Silk Strategy was developed on the basis of the process, methodology and technical assistance of the ITC. The views expressed herein do not reflect the official opinion of the ITC. This document has not been formally edited by the ITC.

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International
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The Cambodia Trade Integration Strategy 2014–2018 counts the silk sector among the 10 most important sectors for economic development in Cambodia, emphasizing its relevance for preserving cultural tradition and poverty alleviation, as well as its importance for tourism promotion and Cambodia's global image. In this context, the National Silk Strategy – which is an update of the Sector-Wide Strategy for the Cambodian Silk Sector first established in 2006 – aims at revitalizing sericulture and developing a modern Cambodian silk sector, producing high value products and providing sustainable income and equal opportunities for women and men.

The National Silk Strategy was developed with the support of the Royal Government of Cambodia, under the leadership of the Ministry of Commerce, financial support from the Enhanced Integrated Framework (EIF), and technical assistance of the International Trade Centre.

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ACRONYMS

AAC	Artisans' Association of Cambodia	HE	His Excellency
ASEAN	Association of Southeast Asian Nations	HS	Harmonized System
AFD	Agence Française de Développement (French Development Agency)	ITC	International Trade Centre
azo	Azobenzene compound or group of chemical substances/toxic compounds	KSV	Khmer Silk Villages
CDC	Council for the Development of Cambodia	MAFF	Ministry of Agriculture, Forestry and Fisheries
CEDEP	Cambodian Export Diversification and Expansion Programme	MoC	Ministry of Commerce
CGS	Cambodian Golden Silk	MoCFA	Ministry of Culture and Fine Arts
CLMV	Cambodia, Lao People's Democratic Republic, Myanmar, Viet Nam	MoE	Ministry of Environment
CNS	Centre National de la Soie (National Silk Centre)	MoEF	Ministry of Economy and Finance
CSR	Corporate Social Responsibility	MoIH	Ministry of Industry and Handicrafts
CTIS	Cambodia Trade Integration Strategy	MoLMUPC	Ministry of Land Management, Urban Planning and Construction
CWEA	Cambodia Women Entrepreneurs Association	MoLVT	Ministry of Labour and Vocational Training
CWBF	Cambodia Women Business Federation	MoPWT	Ministry of Public Works and Transport
C/O	Certificate of Origin	MoT	Ministry of Tourism
DPs	Development Partners	MoWA	Ministry of Women's Affairs
DTIS	Diagnostic Trade Integration Study	MRD	Ministry of Rural Development
EIF	Enhanced Integrated Framework	NGO	Non-governmental organization
EPRP	Economic Poverty Reduction Programme	PASS	Projet d'Appui au Secteur de la Soie (Silk Sector Support Project)
EU	European Union	PoA	Plan of Action
FAO	Food and Agriculture Organization of United Nations	PPP	Public-private partnership
FASMEC	Federation of Associations for Small and Medium Enterprises of Cambodia	R&D	Research and development
FO	Farmer Organization	SME	Small and Medium-sized Enterprises
GDP	Gross Domestic Product	SDC	Silk Development Commission
		Trade SWAp	Sector-Wide Approach to Trade
		TISI	Trade and Investment Support Institution
		WDC	Women's Development Centre
		YEAC	Young Entrepreneurs Association of Cambodia

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FOREWORD BY H.E. SUN CHANTHOL, SENIOR MINISTER, MINISTER OF COMMERCE



The Royal Government of Cambodia, in recognition of the importance of the silk sector for economic development and the cultural heritage of Cambodia, as well as its importance for tourism promotion, welcomes and supports the development of the National Silk Strategy 2016–2010, which aims to revitalize sericulture and develop a modern Cambodian silk sector.

Over the last 20 years, the Cambodian Government and different development organizations made several efforts to revive the sericulture sector. ITC has been instrumental in supporting the sector since 2005 through assistance in strategy design and updates, and subsequently through the successful implementation of two comprehensive sector-wide silk projects. The current High Value Silk Project under the Cambodia Export Diversification and Expansion Programme (CEDEP I), funded by the Enhanced Integrated Framework (EIF), led by the Ministry of Commerce and implemented by ITC, has demonstrated that targeted actions and support bring tangible results in terms of strengthening weaver communities and silk enterprises.

To tap the benefits arising from these opportunities and address persisting challenges, the National Silk Strategy aims to expand the importance of the silk sector for the national economy on the back of growing demand for silk products in domestic and international markets. Linked to market demand, the strategy also aims to revitalize sericulture in Cambodia in order to expand and strengthen its silk yarn production and to provide increased employment opportunities for women and men, particularly in rural areas. A dynamic private sector and stronger integration of sericulture, weaving and garment production will allow for increased specialization and professionalization of the sector overall. The strategy promotes enhanced public-private partnerships (PPPs) and investments for developing the silk sector on a larger scale.

The level of engagement of stakeholders – Government, silk enterprises and Non-Governmental Organizations (NGOs) as well as weaver communities and farmers' associations – in the design of the strategy update has been very high, both in terms of mobilization and the quality of dialogue and interaction between the private sector and the public sector. The dedicated work of sector stakeholders is reflected in this National Silk Strategy and its Plan of Action, which set out the vision and the road map for the consolidation and development of the silk sector in Cambodia in the next five years.

In order to maintain the momentum sparked by the consultations, the Royal Government of Cambodia, especially the Ministry of Commerce, is looking forward to an intensive collaboration with the private sector and development partners to address priority concerns, and developing high priority projects for short- and medium-term implementation. The Ministry of Commerce recently established the Silk Sector Commission, a dedicated governance structure to develop and promote the Cambodian silk sector and to steer the implementation of the National Silk Strategy.

The Royal Government of Cambodia is fully committed to supporting and developing this sector with a view to realizing the vision set out by the National Silk Strategy: 'Revitalized sericulture and a modernized silk sector producing high value products providing sustainable income for women and men'.

FOREWORD BY MS. ARANCHA GONZÁLEZ, EXECUTIVE DIRECTOR, ITC



The history of silk production is intricately linked with the history of Khmer tradition, culture and identity. Cambodia is one of a few places where golden silk is produced through hand weaving and the traditional craftsmanship of women. These ancient techniques give rise to high value silk textiles, handicrafts and garments, and this combination of traditional know-how, quality and its unmistakable Sericin colour makes Cambodian golden silk (CGS) a unique, high value product.

The silk sector has experienced a renaissance as a result of the flourishing tourist sector in Cambodia and increased customer interest in the fair trade niche market. Its current commercial success is also driven by the relentless efforts and dynamism of women entrepreneurs, small and medium-sized enterprises (SMEs) and NGOs to produce a quality product offering appealing designs attractive to foreign markets.

The silk sector in Cambodia has great potential to deliver impact for poverty reduction, job creation and income generation. But the sector needs consolidation, upgrading and scale. Today a new approach is required to transform the traditional view of the sector to one premised on a smart value-chain approach with innovation, investment and stronger linkages to emerging industries such as tourism and fashion. This will make Cambodian silk not only unique, but also competitive and recognized in mainstream markets.

This silk strategy seeks to promote investment and access to finance based on a PPP model. It aims to achieve greater vertical integration, specialization and mechanization in the value chain, with an overall view to scaling up yarn, textile and garment production. This will enhance quality and position Cambodia as a recognized supplier of high value quality silk at the regional and international level.

Going forward, operationalizing this silk strategy will require bold actions by Government, enterprises and development partners. It will contribute to a new type of partnership between the public and private sectors, one in which the business community is well positioned to take on a greater component of the necessary investment in developing productive capacities along the entire value chain. The public sector will play a critical role by ensuring a conducive business and policy environment and providing more efficient infrastructure, services and support. This partnership will require a realistic sharing of risks and the piloting of innovative funding mechanisms such as the proposed silk development fund.

As one of the 10 priority value chains for development of the Cambodia Trade Sector-Wide Approach (Trade SWAp), the silk sector will require a deliberate effort and support by all partners to ensure the recently established Silk Development Commission has a solid governance framework for the silk sector and is an effective platform for the implementation of the silk strategy.

For over ten years ITC has been a partner in supporting and developing the Cambodian silk sector through technical assistance and capacity-building interventions. This silk strategy has been developed in collaboration with the Royal Government of Cambodia, under the leadership of the Ministry of Commerce. It was designed within the framework of the High Value Silk Project of the Cambodia Export Diversification and Expansion Program (CEDEP I) managed by ITC and funded by the Enhanced Integrated Framework (EIF).

I look forward to continued collaboration with the Royal Government of Cambodia for the successful implementation of this silk strategy.

EXECUTIVE SUMMARY

Golden silk is at the heart of Khmer culture. Cambodia is one of a few places where golden silk is produced through hand weaving and the traditional craftsmanship of women, giving rise to high value silk textiles, handicrafts and garments appreciated by increasing numbers of foreign tourists as well as international consumers interested in fair trade products. On the back of the recent boom in tourist sales and exports, and recognizing its potential for additional income generation, silk was recognized as a national priority among 10 important sectors under the Cambodia Diagnostic Trade Integration Study (DTIS) 2014–2018. The present Silk Strategy has been developed under the Cambodian Export Diversification and Expansion Programme (CEDEP) I project supported by the Enhanced Integrated Framework (EIF) and is the second update of the original 2006 strategy.

In a nutshell, the Silk Strategy, through a public–private partnership (PPP) model, investment and access to finance, aims to achieve greater vertical integration, specialization and mechanization in the value chain, with an overall view to scaling up yarn, textile and garment production; enhancing quality; and positioning Cambodia as a recognized supplier of high value and quality silk at the regional and international levels.

OPPORTUNITIES AND CHALLENGES IN THE SILK SECTOR

The silk sector is only marginally important for Cambodia's national economy, but opens up economic opportunities to population groups that have few alternatives. Thus, it is particularly relevant for poverty alleviation and social development. Total employment in the silk sector is currently estimated to be about 7,000 persons. It is estimated that Cambodian silk generated a sales volume of US\$35 million in 2014, which corresponds to about 0.15% of

gross domestic product (GDP). Between 2004 and 2014 Cambodian silk exports grew at an average rate of 14% a year, achieving a staggering compound growth of 337%. However, due to its marginal sericulture and silk yarn production, Cambodia is a net importer of raw silk and silk fabric products.

The poor organization and the overreliance on traditional methods in the sector prevent the emergence of well-defined value chain stages from sericulture to weaving, design and garment production, resulting in a high degree of fragmentation of value chain actors, and small-scale operations at all stages. The growth of the sector is only driven by the perseverance and dynamism of SMEs and cooperatives, with little effective public support.

SILK STRATEGY VISION AND OBJECTIVES

To address both these opportunities and challenges the present Silk Strategy aims to expand the importance of the silk sector for the national economy on the back of growing demand for silk products in domestic and international markets. Linked to market demand, the strategy also aims to revitalize sericulture in Cambodia to expand and strengthen its silk yarn production to feed into domestic textile and garment production and to provide increased employment opportunities for rural populations. A dynamic private sector and stronger integration of sericulture, weaving and garment production will allow for an increased specialization and professionalization of the sector overall. The strategy promotes enhanced PPPs and investments for developing the silk sector on a larger scale.

The vision for developing the silk sector over the next five years, as articulated by sector stakeholders through an inclusive and participative process, is the following:

“ Revitalized sericulture and a modernized silk sector
producing high value products providing sustainable income
for women and men ”

To achieve the vision, the strategy will focus on pursuing four strategic objectives which are aimed at addressing key competitiveness constraints and seizing opportunities in terms of market development and diversification, as well as improvements in performance of the silk value chain as a whole. Those four strategic objectives are:

1. Enhance the enabling environment and institutional support for the silk sector;
2. Facilitate market entry and promotion for Cambodia's high value silk products;
3. Develop skills and improve product quality, design and innovation in the silk textile and garment subsectors;
4. Revitalize and strengthen integration of sericulture in the silk value chain to increase domestic silk yarn production.

ROAD MAP FOR SECTOR EXPORT DEVELOPMENT

Through the four strategic objectives, the present strategy proposes a series of structural changes to the silk value chain in the form of short-, medium- and long-term measures and recommendations which offer decision makers and stakeholders a sequenced road map to develop the silk sector and boost its competitiveness. Key measures and recommendations are follows:

KEY MEASURES IN THE SHORT TERM (1-2 YEARS)

- Operationalize and resource the Silk Development Commission (SDC) as the central governance structure for the Cambodian silk sector.
- Develop and promulgate the requisite silk policy to provide silk sector reforms and support measures with a firm and sustainable legal and institutional framework.
- Create a silk development fund as a financing mechanism to support expansion, modernization and investment in the sector.
- Introduce the PPP model to scale up sericulture, achieve greater vertical integration of operators, and leverage significant capital investment in the sector.
- Strengthen farmer organizations (FOs) in the regions to allow for better vocational training, provision of extension services and pooling of resources.

KEY MEASURES IN THE MEDIUM TERM (1-3 YEARS)

- Strengthen value chain integration by promoting investment, contract farming and innovative business models of weavers, service providers and middlemen.
- Promote national production of white silk yarn to substitute silk yarn import (PPP for setting up an industrial reeling facility in combination with a contract farming scheme).

- Provide trainings on design, marketing, export logistics, factory compliance and quality management to SMEs to better respond to market trends.
- Promote Cambodian silk in the domestic market through branding and events such as an annual national silk festival.
- Establish a capacity-building programme for women entrepreneurs to develop their entrepreneurship and managerial skills.

KEY MEASURES IN THE LONG TERM (3-5 YEARS)

- Establish sericulture centres equipped with research and development (R&D) laboratories able to select the best varieties of mulberry trees and silkworms (including hybrids), as well as disease controls, and resource them to ensure their long-term sustainability.
- Set up a national textile design and fashion school linked to and accredited by recognized international design school networks or associations.
- Introduce a national silk quality mark for silk yarn, textiles and clothing, based on improved national quality standards and certification.
- Establish strong forward and backward linkages with the tourism and handicraft industry, as well as the garment and fashion industry, to create synergies for design and promotion as well as new market opportunities.
- Harmonize domestic quality standards with regional (Association of Southeast Asian Nations (ASEAN)) and international standards.

IMPLEMENTATION MANAGEMENT

The achievement of these ambitious targets will require continuous and coordinated efforts from all relevant private and public stakeholders, as well as support from key financial and technical partners, donors and investors. Several institutions are designated to play a leading role in the implementation of the sector Plan of Action (PoA) and bear the overall responsibility for successful execution of the strategy. Each institution mandated to support the development of the sector is clearly identified in the strategy PoA. Moreover, the recently established SDC and its Executive Secretariat will play a coordinating and monitoring role in the implementation of the Silk Strategy. In particular, the SDC will be tasked with coordinating the implementation of activities in order to optimize the allocation of both resources and efforts across the wide spectrum of stakeholders.

It will take a deliberate and combined effort on the part of all stakeholders, private and public alike, to make the vision of the silk sector a reality.



Photo: ITC

INTRODUCTION

Sericulture has a long history in Cambodia, going back to the thirteenth century when villagers started breeding silkworms along the banks of the Mekong and Bassac rivers. For centuries, Cambodia was renowned for its unique Cambodian Golden Silk (CGS), which is produced from the yellow silkworm. CGS is famous for its strength and lustrous fibre. Weaving and wearing silk is an expression of deeply rooted cultural and social tradition in Cambodia.

Until 1930, many farmers in the provinces of Kampot, Takeo and Kampong Speu, and others, grew mulberry trees and produced silk yarn for their personal consumption and for commerce. After 1930, however, silk yarn production progressively decreased and was nearly destroyed during the Khmer Rouge period. The genocidal Khmer Rouge regime destroyed the mulberry tree population and people were forced to cultivate rice on collective farms. Before the Khmer Rouge took power, Cambodia was producing an estimated 50 tons of silk per year. That number dropped to just 0.8 tons after years of political and civil unrest. Only about 15 hectares of mulberry trees were found alive in Banteay Meanchey because the Khmer Rouge regime forced people to produce silk yarn only in Phnom Srok district of Banteay Meanchey. The majority of silk yarn is now imported from abroad and less than 1% of the thread used to weave Cambodian silk handicrafts today is actually produced in Cambodia.

Over the last 20 years, the Cambodian Government and different development organizations made several efforts to revive the sericulture sector. However, after periods of growth during times of project support, sericulture farming is back to the same marginal level as it was in 1990. It is assumed that there are less than 100 active silkworm breeders today, compared with 1,400 breeders trained and installed between 1995 and 2005. The number of weavers dropped from 20,000 to an estimate of less than 5,000 active looms producing silk fabric, scarves, cloth and other silk items, particularly in rural areas. Silk weaving is mostly done at household level, with one to four looms per household, and constitutes an important additional income source for low-income rural households.

About 50% of silk fabric is produced for the national consumer market, while the recent boom in the tourist market and some export promotion initiatives have opened up new perspectives for a number of shops, traders and organizations. Cambodian silk products are appreciated by tourists and foreign buyers for their various designs, quality and hand weaving techniques. They have become an important product group for the tourist market, and



Photo: ITC

non-governmental organizations (NGOs) and traders started to develop export of silk items. Several international market surveys and pilot projects have identified the silk sector as an important potential export sector to generate income for disadvantaged population groups in order to contribute to poverty reduction.

In 2004, a number of donors and implementing agencies recognized that support to the sector was fragmented and poorly coordinated, leading to duplication of effort and activities, missed opportunities for collaboration and reduced scalability. Based on a silk sector round-table in January 2005, a Sector-Wide Strategy for the Cambodian Silk Sector was first developed in 2006 and updated in 2009.

This document constitutes the second update of the Sector-Wide Silk Strategy, in line with the Cambodia Trade Integration Strategy (CTIS) 2014–2018, which counts the silk sector among 10 important sectors for economic development. While solid potential for robust or even rapid employment growth is questioned for silk, the CTIS underlines its continued importance for the cultural image of Cambodia as an important asset for tourism promotion and Cambodia's global image. Subsequently, one of the strategic outcomes aimed at in the CTIS is 'High Value Silk Products: A small but growing number of Cambodian producers are able to design and export high value silk products.'



Photo: ITC

WHERE ARE WE NOW?

CURRENT CONTEXT

Cambodia is characterized by fast-paced economic growth over the last several years, which is likely to continue. GDP was US\$ 16.7 billion in 2014, with a growth rate of 7%.¹ Total employment was 7.2 million people in 2012.² The economy still mostly depends on agriculture, which employed two-thirds of the Cambodian workforce in 2012. Most Cambodian farmers are smallholders with less than two hectares per farm.³ The annual per capita income in rural areas has increased steadily with high growth rates, and amounted to US\$ 285 (1,138,000 KHR) in 2012.⁴

Cambodia is transforming rapidly, with growth driven mainly by urban-based industries such as garments, manufacturing, tourism and construction. The garment industry employs 600,000 people and the number of international tourist arrivals doubled within five years

(2008–2013) from 2,125,465 to 4,502,775 tourists.⁵ As a result of this rapid growth, the national poverty rate dropped from 34.0% in 2008 to 17.7% in 2012.⁶

The silk value chain is only marginally important for Cambodia's national economy; however, it opens up economic opportunities to population groups that have few alternatives. Thus, it is particularly important for poverty alleviation and social development.

This role of the silk value chain is recognized by the Cambodian Government. It is estimated that silk generated a sales volume of about US\$ 25 million in 2012, which corresponds to about 0.15% of GDP in 2014. Cambodia is a significant net importer of raw silk and silk fabric products.⁷ Total employment in the silk sector is currently estimated to be about 7,000 persons.⁸

1. World Bank (2015). Countries: Cambodia. Available from <http://www.worldbank.org/en/country/cambodia>.

2. International Labour Organization and National Institute of Statistics (2013). *Cambodia Labour Force and Child Labour Survey 2012*.

3. Food and Agriculture Organization of the United Nations (2014). *Country Fact Sheet on Food and Agriculture Policy Trends: Cambodia*; Tong, Kimsun; Lun, Pide; Sry, Boparath; with Pon, Dorina (2012). *Levels and sources of household income in rural Cambodia 2012*. CDRI Working Paper Series No. 83. Phnom Penh: Cambodia Development Resource Institute.

4. *Ibid.*

5. Cambodia, Ministry of Tourism (2014). *Tourism Statistics Report December 2014*; Peter Ford (2015). Cambodia's garment industry rollercoaster. *The Diplomat*, 22 February. Available from <http://thediplomat.com/2015/02/cambodias-garment-industry-rollercoaster/>.

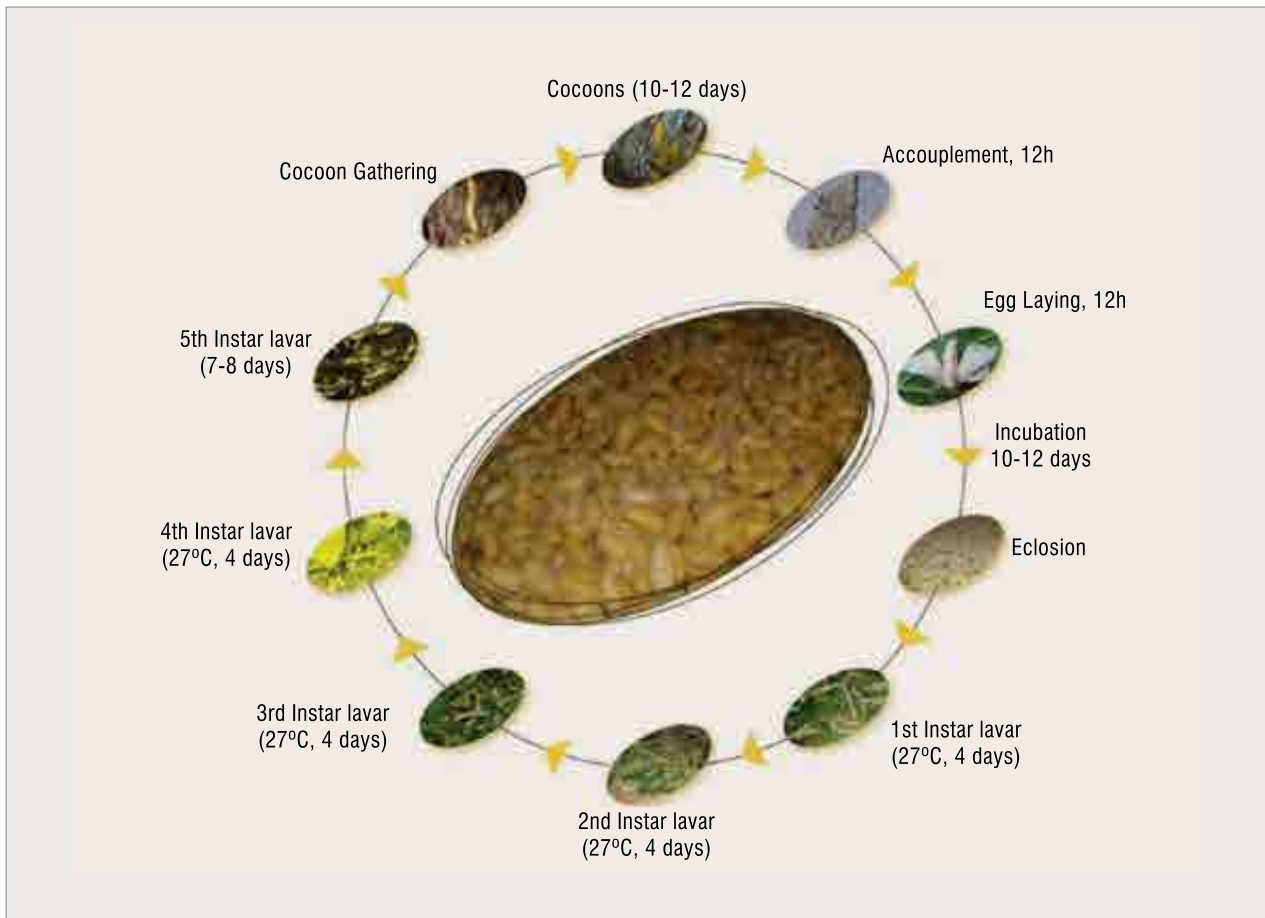
6. World Bank (2015). *2015 World Development Indicators*. Washington D.C.: World Bank.

7. Kingdom of Cambodia (2014). *Cambodia Trade Integration Strategy 2014–2018*. Phnom Penh.

8. Silk sector stakeholder consultation, July 2015.

Box 1: Economic indicators

GDP growth 2014	7.0%
GDP value 2014	US\$ 16.7 billion
Total employment 2011	7,900,000
Employment in the garment industry	600,000
Employment in the silk sector	7,000
Share of garments in GDP 2014 (\$5.7 billion)	34%
Share of silk in GDP 2014 (\$25 million estimate)	0.15%
International tourist arrivals 2014	4,502,775

Figure 1: Silk production – lifecycle of silkworms⁹

9. *Ibid.*

SILK PRODUCTION

'A legend tells us that 4,700 years ago in China, the Princess Si Ling Chi was drinking tea under the shade of a mulberry tree and was surprised when a small yellow object fell in her cup. She took it out of the cup and while examining it realized that she could spin a yarn of an incredible fineness and of great length. Thus, silk and sericulture were born'.¹⁰ This nice, simplified story of the invention of silk puts the emphasis on the close links between silk and sericulture: the product cannot be separated from the process.

Sericulture is the art of rearing silkworms for the production of silk, which spread from China to many countries along the silk roads, and which reached Cambodia in the thirteenth century when villagers started breeding silkworms along the banks of the Mekong and Bassac rivers. In medieval times, silk production even reached Europe, where Italy and France set up their own silk industries.

China and India remain the biggest producers of silk today. Indeed, the Chinese Government is currently trying to use the old silk roads to fund different projects to combat poverty in some least developed countries located along these roads, which all were linked to China in ancient times by road or by sea.

Silk is made of proteins (fibroin wrapped by sericin) secreted by a silkworm in the form of a cocoon. The breeding starts with the mating of silkworm moths (*Bombyx mori*, a variety of moth with wings but unable to fly) which will result in laying around 300 eggs. Eggs will be collected and incubated. The incubation period takes from 10 to 12 days, after which silkworms begin to hatch. The silkworms (larvae) grow quickly while being fed mulberry leaves over a period of about 28 days. Then, the silkworms start to spin cocoons as a protective shell before reaching a pupa stage. In 10–12 days, the silkworms inside the cocoon transform into a silkworm moth and emerge from the cocoon to repeat cycle.

10. Khmer Silk Villages (2006) *On the Golden Silk Trails*.

ROLE OF WOMEN IN THE SILK SECTOR

Despite its modest contribution to the national economy, the silk sector provides ample opportunities for women's employment. Women generate income from sericulture farming and from handicraft production such as silk weaving, sewing and various handicraft trading activities. Breeding of silkworms and silk weaving generate significant additional income for women living in farm households.

Several international market surveys and pilot projects have identified the silk sector as an important potential export sector to generate income for disadvantaged population groups in order to contribute to poverty reduction. Surveys of beneficiary companies under the ITC CEDEP II project confirm the importance of the silk sector for women's employment and demonstrate that support to the silk sector has a direct effect on job creation.

The proportion of women within the silk workforce is very high: it varies from 66% to 87%. In all cases, experts acknowledge that the vast majority of value chain beneficiaries are rural women.¹¹ The employment created by silk companies offers large opportunities for women, since 75% of total employees were women in 2014 and 2015. The total employment (permanent staff and workers) created by 14 silk companies supported by ITC increased from 352 employees (of which 251 were women) in 2012 to 440 employees (of which 332 were women) in 2014, and should reach at least 446 employees (of which 336 are women) in 2015. As for weavers, excluding permanent workers, those who have been subcontracted by silk companies increased from 273 in 2012 to 441 in 2014 and continued to grow in 2015 to 568. About 95% of contracted weavers are women.¹²

Almost all silk companies employ disabled or vulnerable women, while others aim to provide jobs to women to prevent them from becoming victims of trafficking or abuse. Another relevant aspect is that, due to the former conflict in Cambodia, a significant number of people working in the sector are from underprivileged groups that have limited or no access to reliable sources of employment. These include landmine and polio victims, people with disabilities, victims of human trafficking, widows, orphans, out-of-school youth and the poor.¹³ As in many developing countries, rural exodus is a major concern as well, causing profound social and economic changes. Many

11. International Trade Centre (2011), *Mid-term External Evaluation: Cambodia Sector-Wide Silk Project (Phase II) CMB/49/05A*. Geneva: ITC; other project data

12. International Trade Centre (2015). *End-Line Company Survey Report (Draft)*, pp. 4-5.

13. Global Sources (2010). *Cambodia Sourcing reports: Silk fashion accessories*. Available from <http://www.chinasourcingreports.com/sites/default/files/DSRCFA.pdf>

women are abandoning their craft occupation and seeking work in one of the cities' booming textile factories. The trend does not represent an imminent threat for the survival of the weaving sector. However, the relevance and economic importance of the sector will depend on its ability to provide competitive alternatives for income generation.¹⁴

STRUCTURE OF THE SILK VALUE CHAIN

The silk value chain is composed of the following six value chain segments:

- Input supply
- Sericulture
- Yarn trade
- Silk yarn processing and weaving of silk fabric
- Production of final handicrafts
- Trade in final products.

The six main segments of the value chain each comprise a number of more detailed functions which are presented in box 2. Not included in the silk value chain is the industrial sewing of silk cloth that may take place as part of Cambodia's large-scale garment industry. The industrial garment sector is part of a different value chain without any major linkages to sericulture and silk weaving in Cambodia.











INPUT SUPPLY

The most important inputs for sericulture farmers are silkworm eggs and mulberry saplings. Farmers have to buy silkworm eggs for raising silkworms and have to plant mulberry saplings to be able to feed the silkworms. The Agricultural Station of the Ministry of Agriculture, Forestry and Fisheries (MAFF) in Kandal Province has a mulberry nursery and raises silkworms of five different local varieties and five Korean varieties to ensure access to different silkworm varieties.

Other inputs for weaving and production of final silk products, such as chemicals, dyes, equipment and accessories, are provided by individual traders. The Cambodian silk sector relies heavily on imports of raw silk for reeling and of silk yarn for weaving, as well as a variety of inputs for the production of silk fabric, garments and handicrafts, including weaving equipment, degumming stuff, dyes, chemicals and packaging. The main supplier markets are neighbouring countries: China, Viet Nam and Thailand.

14. International Trade Centre (2012). *Activity Completion Report: Sector-Wide Cambodian Silk Project*. Geneva: ITC.

Box 2: Description of value chain functions

Segment	Functions	
Input supply	Inputs for sericulture (mulberry saplings, silkworm eggs) and other inputs for weaving and the production of final silk products are mostly provided by individual traders.	
Sericulture	Silkworm rearing (mulberry tree planting, hatching eggs, harvesting of leaves, silkworm breeding, cocoon production). Done by small-scale farm households.	
	Yarn preparation (reeling, spinning, cleaning, done manually using simple devices). Mostly done by farm households. In exceptional cases also by yarn traders buying the cocoons.	
Yarn trade	Yarn trading (wholesale of CGS yarn, import of silk mainly from Viet Nam and China). Performed by a number of middlemen as well as KSV.	
Silk yarn processing and weaving	Processing of silk yarn (twisting, degumming, bleaching, dyeing). Use of natural dyes, Thai dyes and azo-free dyes. Done by service providers, companies or weavers.	
	Use of traditional handlooms or fly shuttle handlooms. Warp set-up is mostly done by individual service providers at village level. Weaving is mostly done by individual weavers, who usually have one to four looms per household.	
Handicraft production	Product conception and production planning (design, input provision, subcontracting). Done by individual weavers, group leaders, middlemen, SMEs and NGOs.	
	Production (sewing, knitting, stitching, screen printing, embroidery). Mostly done in-house by SMEs and NGOs. Specific activities may be outsourced.	
	Product finishing (quality control, washing, ironing). Mostly done by SMEs and NGOs.	
Domestic trade and export	Selling (labelling, displaying in shops, packaging, export). Done by individual weavers, group leaders, middlemen, SMEs, NGOs, and wholesale and retail traders.	

Box 3: Profile of the average Cambodian sericulture farmer¹⁵

The average sericulture farmer:

- Is a man living in a remote area
- Cultivates mulberry trees on small plots of land in addition to other crops
- Feeds the silkworms with mulberry leaves from his own land
- Has (mostly older) household members who do the reeling of the yarn by hand
- Sells 6 kg of Cambodian silk per year

15. International Trade Centre (2014). *Value Chain Analysis of the High Value Silk Sector – Cambodian Export Diversification And Expansion Programme (CEDEP I): High Value Silk Component*. Geneva: ITC.

SERICULTURE

Sericulture farmers are independent smallholder farmers who cultivate mulberry trees on small plots of land in addition to other agricultural produce. The farmers breed a particular variety of Cambodian silkworms producing CGS. The number of sericulture farmers in Cambodia was estimated to be 250 in 1990. With support programmes, the number went up to about 1,750 in 2005, but is estimated to be less than 100 farmers today (less than 50 farmers in Phnom Srok district in the east of Banteay Meanchey Province and about 50 farmers in other provinces) cultivating mulberry trees on a total area of less than 40 hectares.

Due to the decline in the number of farmers, the production of CGS yarn is estimated to be less than one ton today, as indicated by the Artisans Association of Cambodia (AAC)¹⁶ and as confirmed by seminar participants in July 2015. In 2007, the average production per sericulture farmer was estimated to be 6 kg of CGS, while the best sericulture farmers were said to be able to produce 9 kg of CGS and the production potential was estimated to be 15kg/farmer.

16. Chan Muyhong (2015). Silk board looks to revive flagging sector. *The Phnom Penh Post*, 23 June. Available from <http://www.phnompenhpost.com/business/silk-board-looks-revive-flagging-sector>.

In contrast to the declining number of farmers, the price of Cambodian silk more than tripled in the last seven years, meaning that a qualified sericulture farmer producing 9 kg of CGS per year would be able to generate a gross revenue of US\$810, based on the latest market prices quoted for 2014 (US\$90/kg). An Aid-For-Trade case story of 2011 indicates that, while one hectare of paddy rice production yielded between US\$500 and US\$600 annual income for a farmer, an equivalent one hectare of mulberry trees with silkworm breeding would yield an annual income of US\$2,000.¹⁷ In addition, sericulture has the advantage of providing regular cash income every two months. Nevertheless, farmers tend to prefer cultivating other crops where market linkages and demand are stronger. Cassava in particular is said to provide farmers with high gross profit margins per hectare.

Box 3 provides an overview on the typical profile of an average sericulture farmer who mostly cultivates mulberry trees on small plots of land in addition to other crops. Sericulture is in general an activity carried out alongside other, dominant agricultural activities.

17. Organization for Economic Cooperation and Development/World Trade Organization (2011). The expansion and diversification of Cambodia's exports of silk products. Aid-for-Trade Case Story: Cambodia – No. 274. Available from <http://www.oecd.org/aidfortrade/48413548.pdf>.

Table 1: Sericulture development in Cambodia, 1990–2014¹⁸

	1990	2003	2005	2007	2010	2014
Number of sericulture farmers	250	500	1 750	1 000	300	<100
Production of CGS	1 ton	3.5 tons	7 tons	3.8 tons	4 tons	<1 ton
Price/kg of CGS				US\$24	US\$60	US\$90

18. Gibbons, B. and Vahl, J. (2008). *Cambodian Sericulture Stocktaking Report: For Cambodian Sector-Wide Silk Project*. Geneva: International Trade Centre; Chan Muyhong (2015). Silk board looks to revive flagging sector. *The Phnom Penh Post*, 23 June. Available from <http://www.phnompenhpost.com/business/silk-board-looks-revive-flagging-sector>; Dawn News (2013). Cambodian silk industry on its last threads, 27 February. Available from <http://www.dawn.com/news/789057/cambodian-silk-industry-on-its-last-threads>.

There is potential to promote sericulture, as large surface areas of land are still unused (though access to land would have to be facilitated for small farmers) and most people living in rural areas are not fully employed year-round. Additionally, some regions show favourable geographic characteristics for the deployment of irrigation and fertilizer, which facilitates economies of scale for silk yarn production.¹⁹

Yarn production (reeling and spinning) is mostly done manually at farm household level. There are three different qualities of CGS yarn (fine, mixed and raw). Most farmers produce the mixed quality, which is less suitable for processing into final products of high quality. CGS is appreciated by the market for its colour, softness, uniqueness and natural touch. It is less suitable for mass production and not suitable for industrial reeling.

Manual reeling to unwind the yarn from the cocoon and spinning the yarn to transfer to the bobbin shuttle and tubes is a time-consuming process and the poorest-paid step of production. Reeling and spinning by hand are severe competitiveness bottlenecks. In addition, they do not provide the required quality in tension for warp setting up and yarn consistency in thickness and size. In more developed silk-producing countries such as China, India and Viet Nam, reeling machines make the process more efficient and increase the quality, as they provide standard size of yarn in Denier (which is a specific identified number of cocoons used that will equate to an average number of grams of yarn per 9,000 metres), as well as strong and consistent twisting, thereby creating better quality yarn for the warp.

Recently, some NGOs and handicraft producers started investing in sericulture. For example, Kosal Foundation, in coordination with Lotus Silk, began their own sericulture

19. Gibbons, B. and Vahl, J. (2008). *Cambodian Sericulture Stocktaking Report: For Cambodian Sector-Wide Silk Project*. Geneva: International Trade Centre.

on two hectares of mulberry plantation using decomposed natural materials, and have now started harvesting their own silk yarn.

YARN TRADE

CGS is mainly marketed via intermediary traders. In the past, the association Khmer Silk Villages (KSV) played an important yarn trading role. CGS is nearly exclusively used for products sold in the high-end tourist market segment and for export. It is interesting to note that in spite of the modest amount of silk yarn produced in Cambodia, many companies surveyed by the CEDEP I project in 2013 reported using CGS.²⁰

As mentioned above, 99% of all silk items produced in Cambodia are produced from imported silk yarn. In 2005, the total silk yarn demand in Cambodia was estimated at 400 tons per year,²¹ and came mainly from China and Viet Nam. In line with the reported 75% decrease in the number of weavers in the last 10 years (see next page), Cambodia's current silk yarn demand is calculated to be about 100 tons per year.

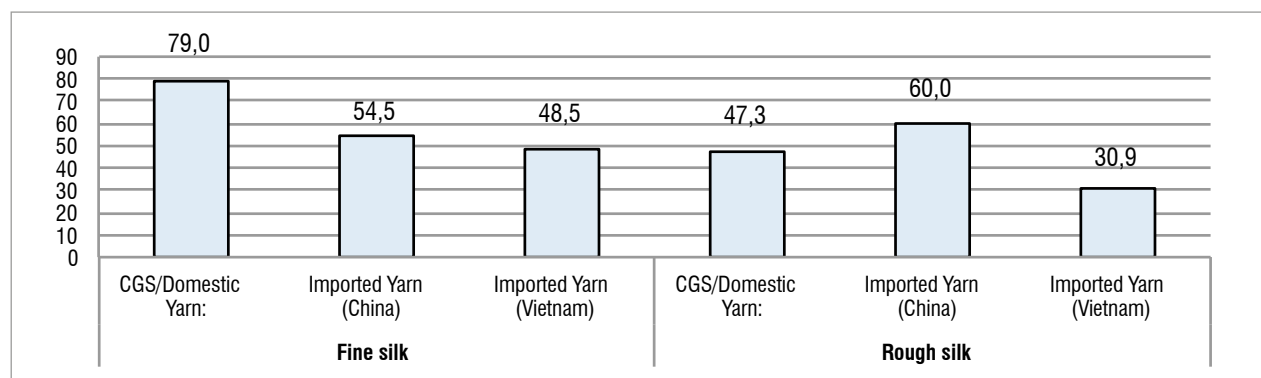
Silk yarn from Viet Nam is usually purchased through informal channels because of the relatively small volumes traded. The silk yarn is mostly sold at wholesale and retail markets in Phnom Penh. The yarn is variable and below standard in quality, affecting its appearance and its ability to absorb dyes, and easily breaking during weaving.²² This means that the weavers need to polish their warp yarn with starch from time to time to make it stronger and sturdier.

20. *Ibid.*

21. *Ibid.*

22. World Bank (2013). *Improving Trade Competitiveness : Cambodian Silk Exports*. Cambodia policy note; trade development. Washington, D.C.: World Bank. Available from <http://documents.worldbank.org/curated/en/2013/01/18594170/improving-trade-competitiveness-cambodian-silk-exports>.

Figure 2: Average cost of silk yarn by quality and country (US\$ /kg)



Companies mostly buy larger quantities of silk yarn from China. SMEs interviewed by CEDEP I in 2012 indicated an average price of US\$54.50 per kg of fine silk from China (see figure 2).²³ The average price of fine silk yarn imported from Viet Nam was US\$48.50, while the price for domestic fine silk (CGS) yarn was as high as US\$79. The price difference of 63% reflects the high demand for CGS fine yarn. The prices of rough silk yarn are much lower (for CGS 40% below the price level of fine silk yarn, for Vietnamese silk 36% below the price of fine silk).

In the Sector-Wide Silk Project (2010–2012), pooled purchasing of large quantities of Chinese yarn was facilitated instead of sourcing yarn from Viet Nam through informal cross-border trade. The formalization of imports has enabled Cambodian companies to comply with rules of origin requirements for formal exports. Purchasing units have also been set up and linked with raw material suppliers. In turn, this has allowed the bypassing of at least one trader level and has resulted in a significant reduction in the price of raw materials. A cost reduction of 5% to 10% was reported in silk yarn.²⁴ In 2012, 14 purchasing units were operational across Cambodia. These will likely continue to enhance the independence of weavers, increase their numbers and strengthen their negotiating power. Purchasing units are considered relevant and useful by weavers' groups.

SILK YARN PROCESSING AND WEAVING

Processing of silk yarn means twisting, degumming, bleaching and dyeing, which are mostly done by the weavers themselves or by independent service providers. Two dyeing techniques are used: synthetic and natural dyeing. For synthetic dyeing, either so-called 'Thai dyes' (non-azo-free) or so-called 'German dyes' (azo-free) are used. For access to the European Union (EU) market, the use of azo-free dyes is an obligatory requirement according to the EU directive 2002/61/EC.²⁵

Weaving is overwhelmingly an activity carried out by women. The weavers mostly belong to farm households having one to four looms in the basement of the farmhouse. Weaving in Khmer rural areas is work without time constraints. Women begin weaving when they have finished major work at home and their daughters begin to weave when they come back from school. In Takeo, for instance, weaver families often do not have enough land for rice farming and need silk weaving as an additional income source.

The number of weavers was estimated to be 18,000–20,000 in 2005,²⁶ but dropped to an estimated number of less than 5,000 active looms producing silk fabric, scarves, cloth and other silk items – particularly in rural areas – today.²⁷

Weaving starts with warp preparation, which is inseparable from weaving. Like dyeing of the yarn, warp preparation is increasingly done by intermediaries, independent service providers or village-based service centres in order to ensure better product quality.

23. International Trade Centre (2014). *Value Chain Analysis of the High Value Silk Sector – Cambodian Export Diversification And Expansion Programme (CEDEP I): High Value Silk Component*. Geneva: ITC.

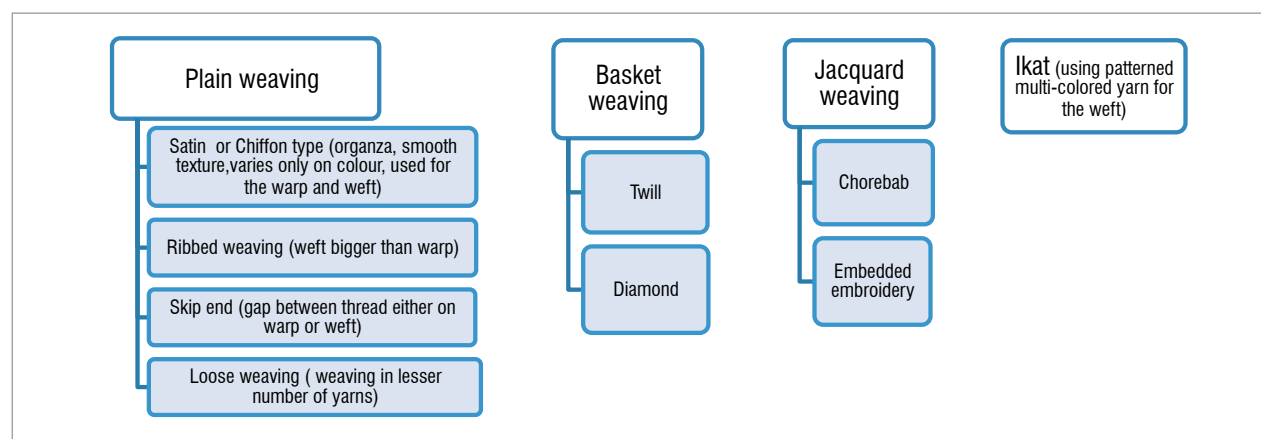
24. International Trade Centre (2012). *Activity Completion Report: Sector-Wide Cambodian Silk Project*.

25. ITC (2009). *Sector-Wide Strategy for the Cambodian Silk Sector*.

26. *Ibid.*

27. Estimation by seminar participants 2015.

Figure 3: Weaving techniques used by weavers²⁸



28. ITC (2013). *Analysis of Weaver Survey Data: Cambodian Export Diversification and Expansion Programme (CEDEP I): High Value Silk Component*. Geneva: ITC.

Weavers use different types of handlooms which are distinctive to each geographic location, ranging from old traditional handlooms to semi-modern looms, from looms for plain and basic weaving to looms for weaving jacquards. According to an International Trade Centre (ITC) survey in 2007, 53% of weavers have one loom, 33% have two looms, 9% have three looms and 4% have four looms.²⁹ Figure 3 provides an overview of the different weaving techniques applied.

Most weavers are organized in loose producer groups, which are often linked to companies through an independent middleman or a producer group leader at village level. It is estimated that 90% of weavers are in a contractual relationship with a middleman or company. In this case, the middleman or the company usually provides all inputs, including the silk yarn, and takes the final product. Some middlemen provide 'full warp preparation' services. Others provide only dyeing services or dyed yarn.³⁰

At 31, the average weaver is still quite young. Weavers are in general self-employed and, though some weavers can reach quite high incomes, are rather poor in general (having no savings but with debts). They are in a contractual relationship with a middleman or company, but usually do not belong to a cooperative (see box 4).

Weavers often perform all three steps of silk yarn processing (twisting, degumming, bleaching, dyeing), warp

preparation and weaving, which is very hard work. But with the quick development of the sector, each of these three steps could be performed independently. The weaver will be able to focus on his/her weaving techniques and will subcontract the other steps of preparation to specialized service providers. Such specialized service providers for dyeing of the yarn and setting up of the warp are of growing importance. They have special skills and knowledge and play an increasingly important role in quality management. Weavers work with silk yarn, either 100% silk yarn or synthetic yarn mixed with handmade silk, or silk mixed with other raw materials such as cotton.

Weaving and processing of silk are common in many provinces all over Cambodia, whereas sericulture is concentrated in three provinces: Banteay Meanchey, Oddar Meanchay and Siem Reap. Figure 4 shows that silk weaving can be found in eight provinces and processing of silk products in 10 provinces. Weaving takes place in Siem Reap, Takeo, Prey Veng, Banteay Meanchey, Kampong Cham, Kampong Thom, Kandal, Phnom Penh and Stung Treng. Tailors, screen printers, embroiderers and other subcontractors are located in Siem Reap, Phnom Penh, Takeo, Kampong Speu, Kandal, Kampong Chhnang, Kampong Cham, Kampot, Banteay Meanchey, Kampong Thom and Prey Veng. While sericulture farming is mainly concentrated in the northern provinces, silk weaving and product processing are more common in the southern provinces.³¹ Recently, SMEs working with silk have also started introducing sericulture in some southern provinces (Kampot and Takeo).

29. ITC (2007). *EPRP Impact Assessment Tool: Household Survey, Textile Sector in Cambodia*.

30. ITC (2014). *Value Chain Analysis of the High Value Silk Sector – Cambodian Export Diversification And Expansion Programme (CEDEP I): High Value Silk Component*. Geneva: ITC.

31. ITC (2014). *Value Chain Analysis of the High Value Silk Sector – Cambodian Export Diversification And Expansion Programme (CEDEP I): High Value Silk Component*. Geneva: ITC.

Box 4: Profile of the average Cambodian weaver³²

The average weaver:

- Is a woman aged between 20 and 49, with a median age of 31
- Lives in a household with four to five persons, where the head of the household is a man
- Has primary schooling
- Is self-employed and is not a member of a cooperative
- Does not have savings but has debts
- Owns a small piece of land
- Performs farming activities for family consumption
- Cooks with firewood and has electricity through battery
- Has one loom
- Is supplied with raw material and dyestuff through middlemen

32. *Ibid.*

Figure 4: Regional concentration of sericulture, processing, weaving and markets



HANDICRAFT PRODUCTION

Scarves and local 'Sampot (kben)' skirts represent the main production output of weavers. The majority (82%) of weavers produce scarves and local 'Sampot (kben)' skirts; 29% produce fabrics and a few also produce blankets and fringes.³³ In addition, companies produce silk accessories, ties and a broad range of home interior decoration items such as tablecloths, cushion covers, curtains, bedspreads, silk towels and seasonal ornaments.

As with silk weaving, the proportion of women involved in the production of final handicrafts is high. The proportion

varies from 66% (out of a panel of 30 companies, including office and weaving/processing jobs, full-time and sub-contracted) to 87% (out of 14 companies among the 30 companies having responded to the company survey).³⁴ In any case, the vast majority of value chain beneficiaries are rural women.³⁵

Silk weaving and production of final handicrafts are closely interlinked, as an estimated 250 SMEs, NGOs and mid-dlemen play a crucial role in the entire value chain. The

33. ITC (2013). *Analysis of Weaver Survey Data: Cambodian Export Diversification and Expansion Programme (CEDEP I): High Value Silk Component*. Geneva: ITC.

34. ITC (2014). *Value Chain Analysis of the High Value Silk Sector – Cambodian Export Diversification And Expansion Programme (CEDEP I): High Value Silk Component*. Geneva: ITC.

35. ITC (2011). *Mid-term External Evaluation: Cambodia Sector-Wide Silk Project (Phase II) CMB/49/05A*. Geneva: ITC.

SMEs purchase inputs, design products and subcontract the weaving to loosely organized weaver groups. The weaver groups are mostly subcontracted via individuals such as intermediary traders and village group leaders, who in turn organize production by the weaver groups.³⁶ The weavers are supplied with raw materials by the SMEs, NGOs, middlemen and their intermediary traders, and village group producer leaders. After production, the handwoven product is collected and supplied to the SMEs, NGOs or middlemen. These do the finishing of the product (knitting, sewing, stitching, screen printing, embroidery, washing and ironing) either by themselves in-house or by subcontracting other service providers.

The income from silk weaving reported by different weavers varies widely, depending on skills, product groups (e.g. ikat or plain silk) and market linkages. An assessment of the primary data of the 2015 ITC weaver survey shows an average monthly income from silk weaving

of US\$214 for all weavers with 1–3 employees. While some individual weavers report an average monthly income from silk as low as US\$50 per month, other individual weavers reach an income of US\$285 per month. Weavers who employ 2–3 persons reach an income of up to US\$1,230 per month. There are a few weavers who follow a different business model, employing 5–120 other weavers and reaching an average monthly income from silk of US\$3,172.³⁷

Box 5 provides an overview of a cost calculation for a silk scarf, where the weaver only has a daily income of US\$4–US\$6 from weaving, due to the high cost of the yarn and dyeing. In such a case, the income from weaving is often not much higher than the minimum wages in the garment sector. Taking into consideration the uncertainty and volatility of the market, this leads many weavers to look for alternative employment, for example, in the garment industry.

36. Silk sector stakeholder consultation, July 2015.

37. ITC (2015). Primary data of the *End-Line Weaver Survey Report (Draft)*.

Box 5: Cost calculation example: a silk scarf³⁸

Production costs of scarves or other final silk products vary heavily depending on the kind of product, the design and quality, the calculation of the company, etc.

In the case of a typical scarf which sold for US\$8.5 FOB at exporter level in February 2015, the silk cost made up 35% of the total, whereas the weaver got about US\$2 for her work. A weaver can produce two to three scarves of this type per day. Based on five to six days of work per week (24 working days / month), her income from weaving would be US\$96–US\$144 a month. Experienced master weavers and producer group leaders are able to earn much higher incomes.

Silk weaving provides income in remote rural areas which is similar to the minimum wage in the garment industry, but often goes along with much higher market uncertainty. The advantage of handloom weaving of silk is that the work is mostly done at household level in rural areas. Silk weaving generates additional income to farming activities and the weaver can stay at home. She can take care of her family and children and has lower living costs than in urban areas.

Handwoven scarf for export, German dyes

Silk US\$3	Dyeing US\$1.8	Weaving US\$2	Finishing/packaging overheads/profit US\$1.7	FOB price US\$8.5
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38. ITC (2014). *Value Chain Analysis of the High Value Silk Sector*.

Box 6: Profile of the average export company³⁹

The average export company:

- Sells a majority of silk products but also other items such as cotton products
- Targets both the domestic and the export markets
- Had a gross revenue from sales of US\$ 78,493 in 2013
- Has experienced growth in all market segments (domestic, tourists, exports) since 2009
- Employs 22 persons, two-thirds of them being women
- Has only one office
- Has several ways to develop new designs: together with buyers but also with in-company designers, through the owner(s) or contracted external designer(s)
- Subcontracts specialists such as tailors or embroiderers, paid per hour
- Accepts orders of less than 20 items
- Has already participated in trade fairs
- Has a website and a product catalogue
- Sees its mission as related to social issues.

39. *Ibid.*

DISTRIBUTION, MARKETING AND EXPORTS

The final handicrafts are distributed according to three main market segments. The domestic market is composed of the traditional local Khmer customer market (about 50% of the total market) and the quite different tourist market (about 30%). The third market segment is the export market, with about 20% market share. While the tourist and the export markets are of growing importance, the traditional local Khmer market is declining. The Internet market is so far of very little importance.

Individual weavers and SMEs sell their silk handicrafts to wholesalers and retailers working in the domestic market. Wholesale markets such as Orussey market play an important distribution function for the traditional Khmer market. SMEs often supply a number of local retail shops directly.

As for the export market, the SMEs producing silk handicrafts mostly export directly to international buyers. Many SMEs follow a business model combining sales in different markets. While some items are especially produced for international customers, part of the production is often sold in own shops or commissioned to other shops. A particular feature is that Non-Governmental Organizations (NGOs), other social enterprises and business associations play an important role for silk exports. About half of the silk exporters belong to these groups who are a preferred partner for international companies with socially-responsible sourcing.

CAMBODIA'S VALUE CHAIN MAP

The value chain map in figure 5 illustrates the structure of the value chain from input supply to end markets. It highlights particularly the central role of about 250 SMEs in input supply, subcontracting, product design, production of final products and market access.

Boxes in red reflect a high percentage of women's employment. Women play an important role in sericulture farming. Harvesting of mulberry leaves and the breeding and rearing of silkworms are activities mainly performed by women. Reeling and spinning of silk yarn, as well as weaving, have always been considered household duties of women and are still dominated by women today. About 90% of weavers are women.⁴⁰ SMEs and NGOs working with silk are also mostly businesses run by women. Producer group leaders and intermediary traders are often women too.

In addition to the different actors mentioned above, the most important service providers are presented at the bottom of the value chain map. Service providers range from the Directorate of Agriculture/Directorate of Rural Development, which is in charge of R&D of sericulture, to sewing/washing/finishing and freight service providers. The Ministry of Commerce (MoC) and the different associations play important support roles in trading.

Value chain promotion is based on identifying market trends, requirements and opportunities in order to allow building the capacity of value chain actors to improve their competitiveness. For the silk sector in Cambodia this means an assessment of market trends in the three main market segments of silk products: the domestic market, the tourist market and the export market.

40. *Ibid.*

Figure 5: Current Cambodian silk value chain

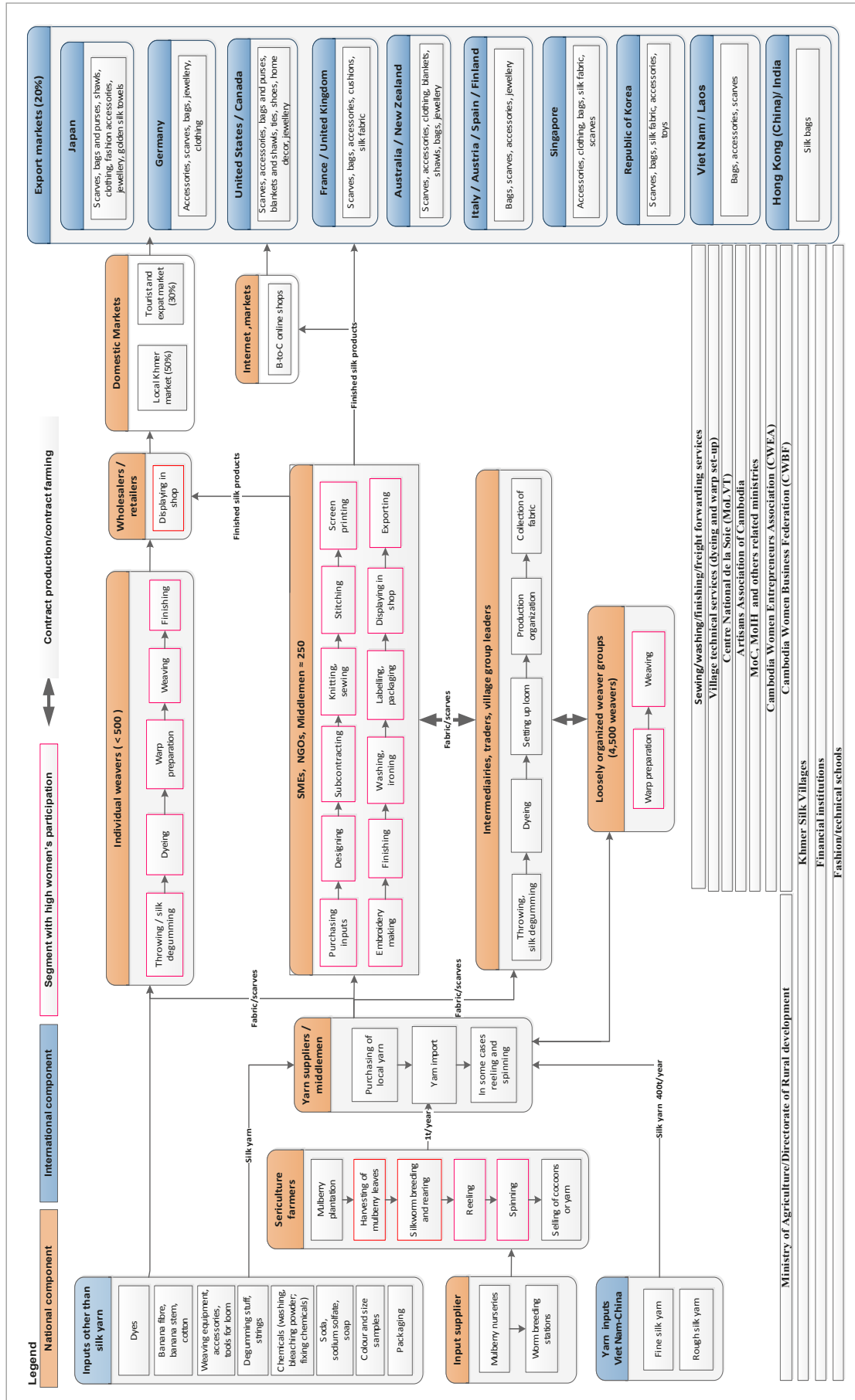




Photo: ITC

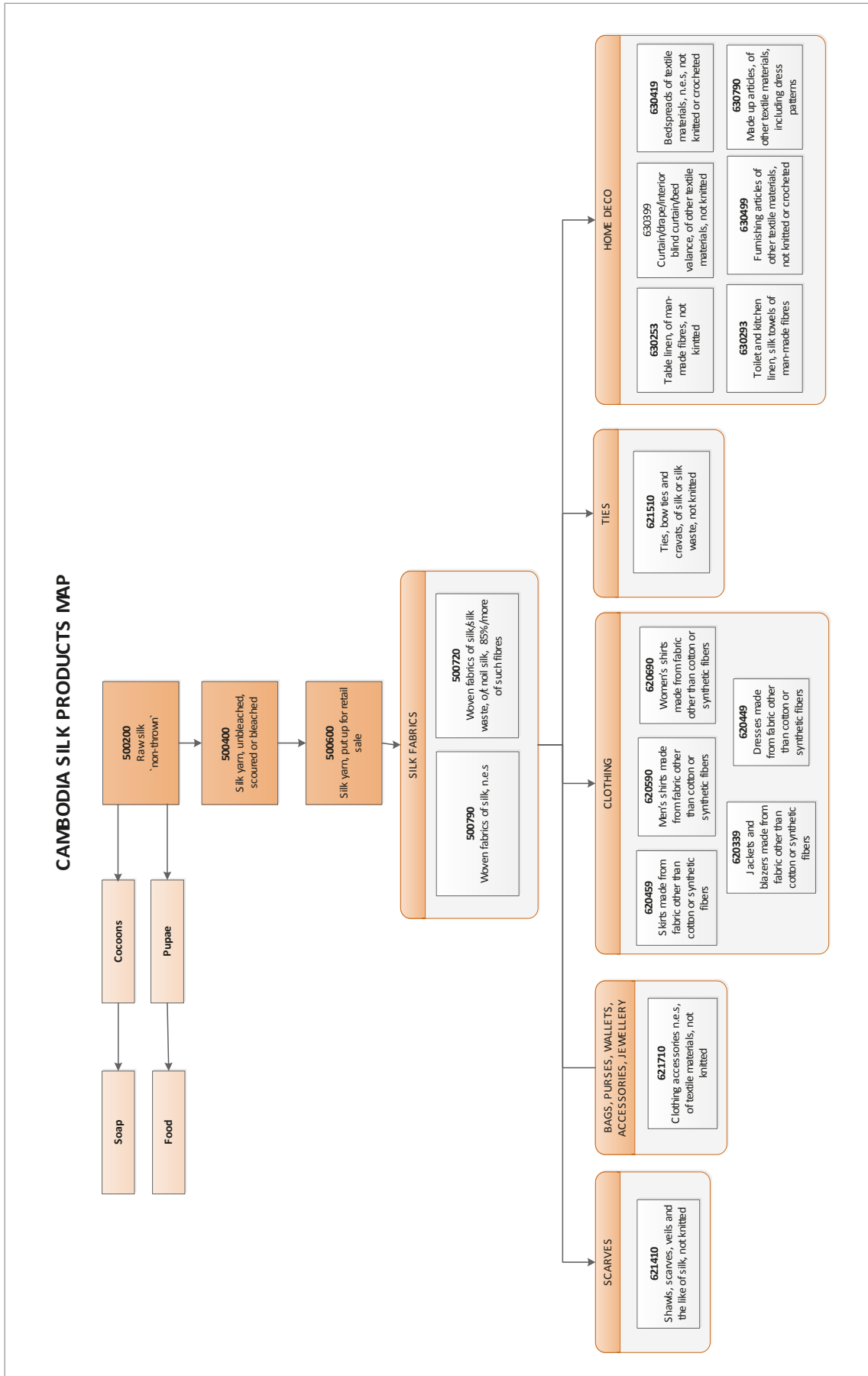
CAMBODIA'S SILK PRODUCT MAP

The product map (figure 6) shows that raw silk yarn is produced or imported as a raw material. An important by-product from sericulture is the pupae, which are valued by the local population as high-protein food. In addition, soap is made as a by-product. For the time being, no production of mulberry paper stationery items, tea or other cosmetic products is reported.

The main final silk products are scarves/shawls and clothing such as skirts, shirts, dresses, jackets/blazers and trousers. In addition, companies produce a broad range of silk accessories such as bags, purses, wallets, silk jewellery, ties and interior decoration items such as tablecloths, cushion covers, curtains, bedspreads, silk towels and seasonal ornaments.

All over Cambodia, locals still continue their tradition of wearing silk dresses to attend formal functions and occasions such as weddings and official meetings. Weddings are big events for the population and an important part of social life. Women are obliged to attend and wear their traditional silk dresses. Likewise, men are perceived as formal and proper when they wear their formal silk polo shirts. Phamuong is a fabric that women wear like a skirt and which they can buy pre-cut in the market, either as sampot (approximately two metres) or kben (approximately four metres). Krama is a multi-chequered scarf of different dimensions and is worn throughout the country. Organza scarves and shawls are also becoming popular for formal occasions.

Figure 6: Cambodian silk product map



GLOBAL DYNAMICS IN SILK TRADE

Trade in silk yarn reflects the dynamics of production of silk yarn and its consumption for the production of silk fabrics. Trade in silk fabrics in turn reflects the global dynamics of production of silk textiles and their consumption for the manufacturing of finished silk products (clothing, accessories, home decor, etc.). Finally, trade flows in finished silk products such as clothing and accessories reflects the dynamics of global supply and demand for those products. Today Cambodia is a net importer of silk yarn for the domestic production of silk fabrics. It is, however, a net exporter of silk clothing, apparel and home decor, mainly in the high value segment. An analysis of global trade dynamics provides insights about Cambodia's position in the global silk trade and how the latter affects this position.

GLOBAL SILK PRODUCTION

According to the International Sericulture Commission,⁴¹ total world silk production accounts for less than 0.2% of the global textile market today and involves over 60 countries in the world. Between 2008 and 2014, silk production grew by 47.9% from 120,396 to 178,057 tons (see table 2). The major silk producers are in Asia, with China and India being respectively the world's biggest and second-biggest producers and chief suppliers of silk, covering 90% of mulberry and almost 100% of non-mulberry silk production. New entrants in the global production market notably include Brazil, Bulgaria, Egypt and Madagascar. Sericulture is also a labour-intensive activity employing, for example, some 8 million workers in India, about 1 million in China, and around 20,000 weaving families in Thailand.



Photo: ITC

41. International Sericulture Commission (2015). Statistics. Available from <http://www.inserco.org/en/?q=statistics>.

Box 7 : Product categories

Since it is not possible to capture the global dynamics of silk trade through one single product category, we have grouped silk products in four main product categories relevant for Cambodia's trade. Each category is constituted of products identified in the product map, which are either imported by Cambodia for local consumption and transformation or exported as intermediary or finished products. Globally, trade in these four categories follows different patterns which correspond to the overall logic of the global silk value chain.

1. Raw silk, silk yarn, silk yarn & yarn spun from waste (Harmonized System (HS) 500200, 500400 and 500600).
2. Woven fabrics of silk (HS 500720 and 500790).
3. Silk shawls, scarves, veils, ties and clothing accessories (HS 621410, 621510 and 621710).
4. Men's and women's clothing of silk and other fabrics (HS 620339, 620449, 6200459, 620590 and 620610).

Table 2: World silk production 2008–2014 (tons)

2008	2009	2010	2011	2012	2013	2014
120 396	106 170	139 100	129 662	152 846	159 737	178 057

Source: International Sericulture Commission (2015).

TRADE IN RAW SILK AND SILK YARN

Global raw silk and silk yarn exports reached a total value of US\$757.5 million in 2014. Measured by HS 50040 alone, figure 7 illustrates the effect of decreasing production volumes on the value per ton of exported silk yarn. In volume terms, world exports were very stable until 2007. However, after a peak of 11,289 tons in 2008, exported volumes gradually and steadily decreased to 5,735 tons in 2014. During the period 2005–2014, export volumes decreased by almost 36%, while the United States dollar value of exports increased by 29%. This evolution had a dramatic effect on the unit value per ton, driving it up by 101% from US\$29,062 per ton in 2005 to US\$58,453 per ton in 2014. Consequently, in the period 2005–2014, while exported volumes dropped by 4.3% a year, the unit value per ton increased at a more rapid pace of 7.2% a year.⁴²

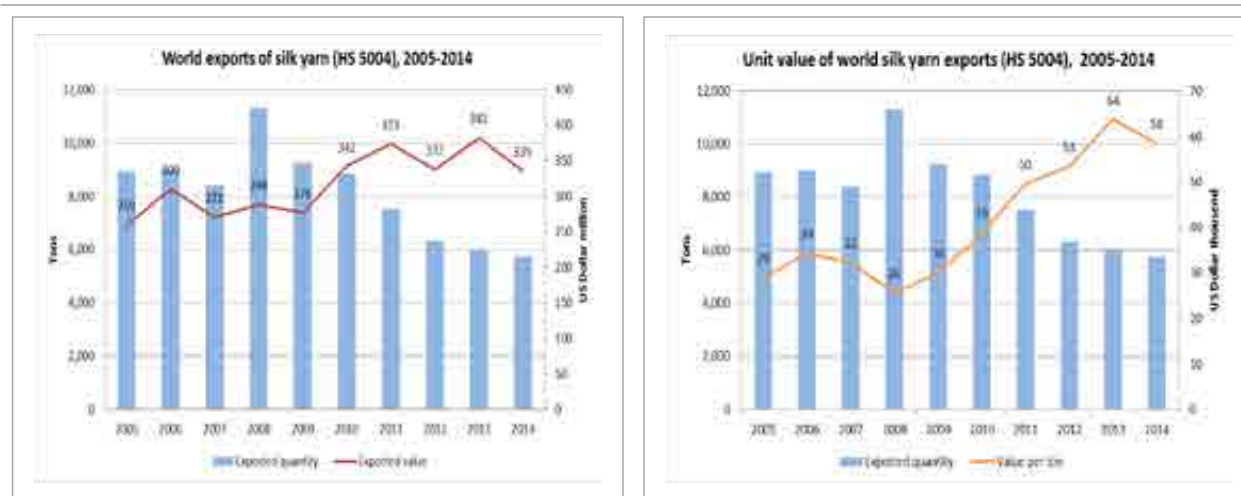
Although sericulture has traditionally been widely spread across continents, until recently the bulk of silk yarn production was centred in Asia and in some European countries. As a group, Asia's total exports reached US\$537.4 million in 2014, making up 73.6% of the world supply of

raw silk. China, India, Japan, the Republic of Korea and Viet Nam are the predominant raw silk exporting countries. China is the absolute world leader with US\$459.8 million, accounting for 62.5% of world exports of raw silk in 2014. However, China registered a slowdown of 11% in its exports between 2010 and 2014. With Romania, Italy and Germany, European countries represent the second-largest group of raw silk exporters with total exports of US\$215.2 million, making up 21.9% of world exports and growing faster than Asian counterparts.

On the demand side, world imports of raw silk have over the past 10 years slowly but steadily increased from US\$671 million in 2005 to US\$777.1 million in 2014. Major importing countries of raw silk are predominantly European countries. European silk imports have registered very high growth over the last five years, with a stunning 180% growth for France, 120% for Romania, 76% for Germany and 57% for Italy. This impressive import growth is driven by increasing demand for the production of silk fabrics and silk finished products. The second-largest group of importers of raw silk is represented by Asian countries, led by India and followed by Japan, Viet Nam, the Republic of Korea and Hong Kong (China).

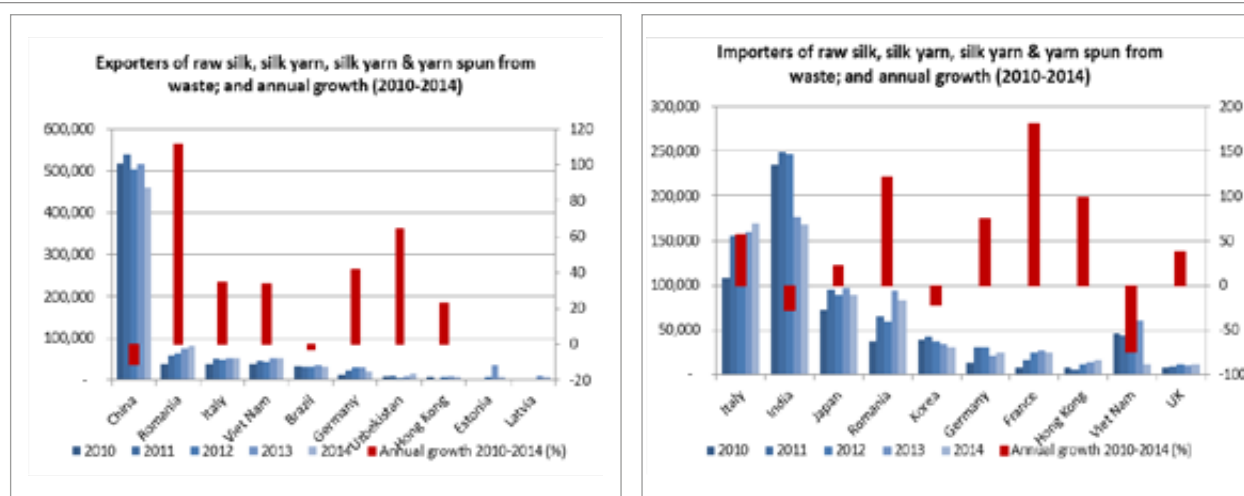
42. Compound annual growth rate.

Figure 7: World exports of silk yarn in quantity, value and unit value, 2005–2015



Source: ITC calculations based on United Nations Comtrade statistics.

Figure 8: World trade in raw silk and silk yarn, 2010–2014 (US\$ thousands)



Source: ITC calculations based on United Nations Comtrade statistics.

TRADE IN WOVEN FABRICS OF SILK

The world production of woven silk fabrics is concentrated in Asia, which accounts for 68% of world exports. The top producer and exporter of woven silk fabrics is China, with exports in excess of US\$1 billion a year in 2012–2013, dropping to US\$893 million in 2014 with a resulting average growth of -9% between 2010 and 2014. China alone accounted for 48% of total exports of woven silk fabrics in 2014. The other major Asian exporters are India, Japan, the Republic of Korea and Hong Kong (China); however, their exports have registered negative growth rates with -63%, -19%, -14% and -66% respectively between 2010–2014.

Other Asian exporters include Viet Nam and Thailand. Whereas Thai exports have been dropping by 3%, Viet Nam experienced a boom with 29% growth between 2010 and 2014. The main competitor group for Asia is formed by European countries, which as a whole account for 31% of world exports of woven silk fabrics. Although on average European silk fabric exports have been following a downward trend, two exporters are standing out: Romania and France with respectively 137% and 54% growth in the period 2010–2014.

Importing markets represent traditional locations of clothing and fashion production and consumption, located in Europe, the United States and Asia. Italy, with its important textile and clothing industry, has been the leading world importer –with imports oscillating at around US\$200 million a year over the last five years– and accounts for some 14% of total world imports. With a share in world imports of 8%, the United States is the second-biggest importer of woven silk fabrics, but its demand has dropped by almost

15% over the last five years. Leading Asian importers include Hong Kong (China), Viet Nam, Japan, China, the Republic of Korea and India. However, demand in those countries for woven fabrics has been sluggish, except for Viet Nam, which registered 275% growth in 2014. Official statistics show that overall demand for woven silk fabrics is shifting from traditional to emerging markets such as the United Arab Emirates, Pakistan, Turkey, Madagascar and more recently the Russian Federation.

TRADE IN SILK SHAWLS, SCARVES, VEILS, TIES AND ACCESSORIES

World exports of silk shawls, scarves veils, ties and accessories followed a slightly upward trend of 2.1% year on year over the period 2010–2014⁴³ and reached a total value of US\$3 billion in 2014. As stated in the section above, the major suppliers are mostly located in Europe and Asia, which are characterized by their important clothing industries, which rely on woven silk fabrics for the production of finished silk products. Europe and Asia account respectively for 48% and 44% of total world exports of silk shawls, scarves, veils, ties and accessories.

Italy is the leading supplier of silk shawls, scarves, veils, ties and accessories with US\$608 million worth of exports, closely followed by China with US\$602 million, each representing 20% of total world exports. However, while Italy's exports grew by 1.7%, China was able to catch up very quickly with growth of 4.4% over the last five years.

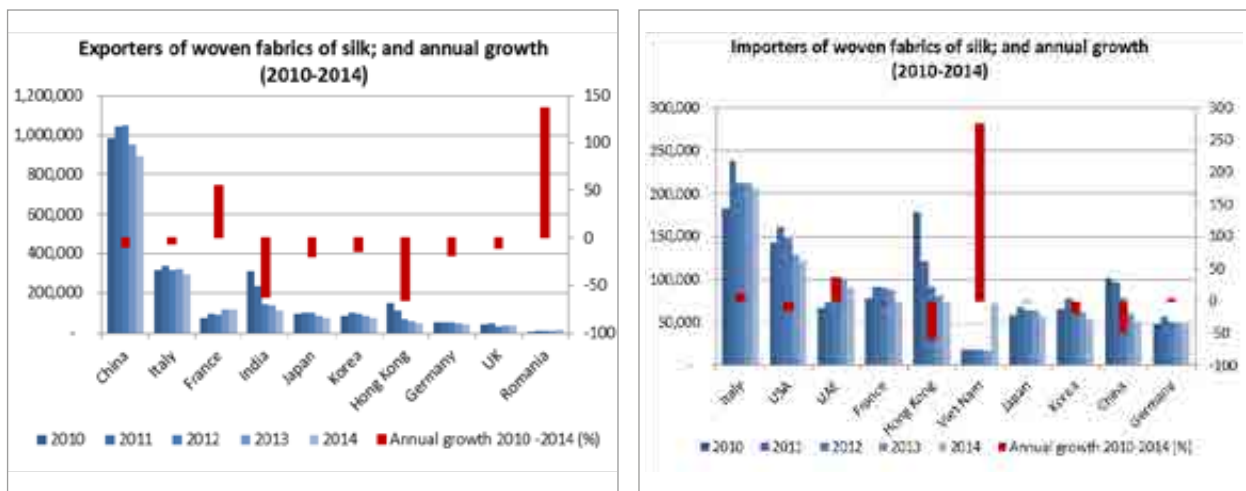
43. Compound annual growth rate.

The other major world suppliers are France, the Republic of Korea, India and the United Kingdom of Great Britain and Northern Ireland, all of which enjoyed strong growth rates between 2010 and 2014 (44%, 65%, 28% and 48% respectively). The United States, Hong Kong (China) and Germany registered negative growth rates of -3.4%, -10% and -16% respectively.

Major consumer markets for silk shawls, scarves veils, ties and accessories are traditionally located in North America, Europe and Asia. With US\$472 million of imports, the United States –the leading single world importer of silk shawls, scarves, veils, ties and accessories– accounted for 16% of total world imports in 2014. The United States is a dynamic market which featured a strong demand growth of 18% between 2010 and 2014. As a group, Europe accounted for 37% of total world imports in 2014, followed closely by Asia with 36%.

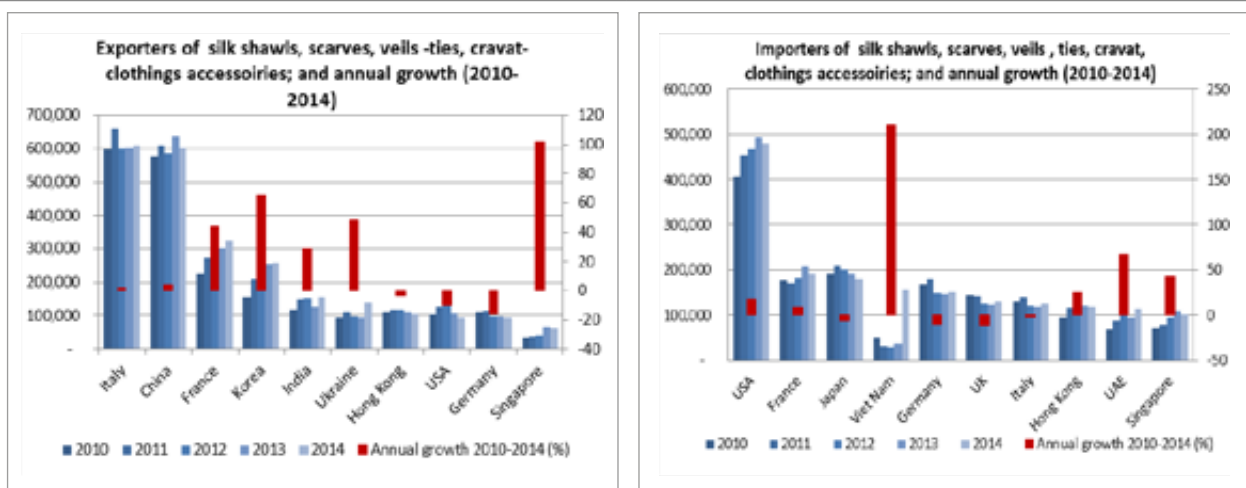
However, import markets are slightly less concentrated than for exports. As the leading European importer of silk shawls, scarves, veils, ties and accessories with US\$192.2 million, France accounts for 6.5% of total world imports in this category. It is followed by Germany, the United Kingdom and Italy, each representing 5.1%, 4.4% and 4.3% of world imports respectively. However, except for France, whose imports grew by 9% between 2010 and 2014, import growth in the other major European markets has been largely negative, translating to a drop in demand. In Asia, the biggest single importer is Japan with US\$178.5 million, accounting for 6.2% of world imports. It is followed by Hong Kong (China), Singapore and Viet Nam, all which have strong import growth rates over the last five years. An important emerging import market in Asia is the United Arab Emirates, which recorded 101% growth in imports between 2010 and 2014.

Figure 9: World trade in woven fabrics of silk, 2010–2014 (US\$ thousands)



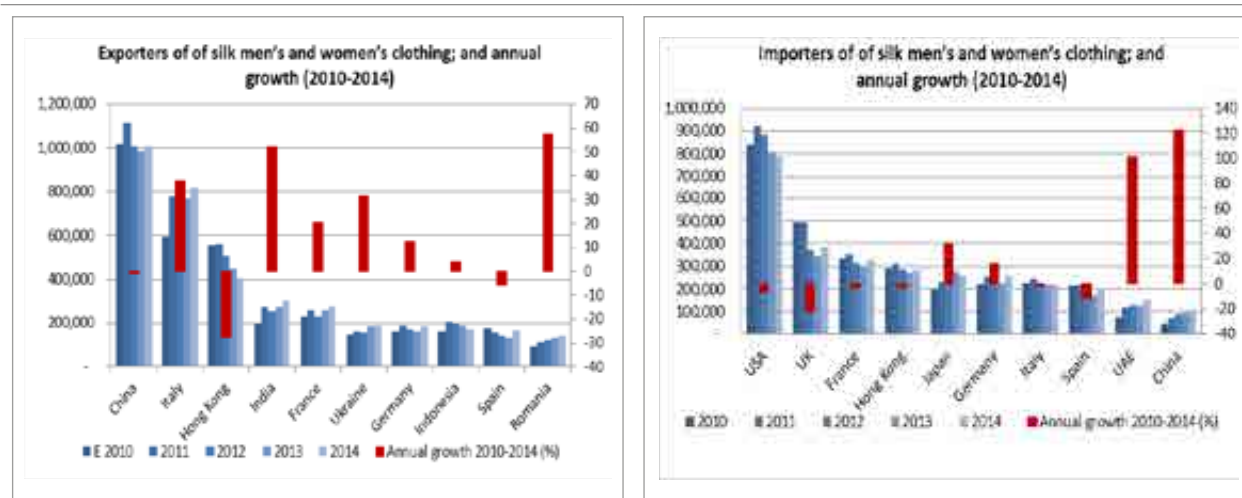
Source: ITC calculations based on United Nations Comtrade statistics.

Figure 10: World trade in silk shawls, scarves, veils, ties and accessories, 2010–2014 (US\$ thousands)



Sources: ITC calculations based on United Nations Comtrade statistics.

Figure 11: World trade in silk clothing and other fabrics, 2010–2014 (US\$ thousands)



Sources: ITC calculations based on United Nations Comtrade statistics.

TRADE IN SILK CLOTHING

The silk clothing segment is more difficult to analyse based on statistical data, as most of the relevant HS codes include products made of a mix of silk and other fibres in varying proportions. Therefore, this data amplifies trade flows but does not represent silk clothing exclusively.

Similarly as for the accessories segment, silk clothing represents one of the end products of silk. Producing countries either manufacture or import silk fabrics for their garment and clothing industry. They may also import finished garments and include silk elements as a means of adding value to the products, notably in the fashion industry. This trade pattern explains that most of the countries considered are both importers and exporters of silk clothing. Between 2010 and 2014, exports of silk clothing dropped by 17% to US\$5.1 billion following a downward trend of -2% year on year after a period of expansion in the years 2005–2009, consistent with the general slowdown in trade flows after 2009.

As shown in figure 11, major silk clothing exporting countries are located in Asia and Europe, each continent accounting for 48% and 46% of world exports respectively. China has been the biggest single exporter of silk clothing for the last 10 years with average exports in excess of US\$1 billion and a 20% share in total world exports in 2014. The other main Asian exporters are Hong Kong (China), India and Indonesia. However, China and Hong Kong (China) featured negative export growth of -1% and -28% respectively between 2010 and 2014, whereas India and Indonesia grew by 52% and 4% respectively.

In Europe, Italy has been the lead exporter of silk clothing, featuring robust growth of 38% between 2010 and 2014 to US\$820 million worth of exports. As the second-biggest exporter of silk clothing, Italy accounted for 16% of world exports of silk clothing. With the exception of Spain, exports of the major European players grew over the period 2010–2015, with 21% for France, 31% for the United Kingdom and 13% for Germany. Romania appears as a dynamic emerging exporter of silk clothing with 57% growth in exports between 2010 and 2014.

The importing markets for silk clothing are very similar to those for exporters, which suggest that they are producers but also major consumers of silk clothing. The United States is the biggest importing market with imports of US\$789 million in 2014 but with demand declining by 6% between 2010 and 2014. Demand has been dropping for most European importers except for Germany, whose imports grew by 16%. In Asia, Hong Kong (China) and Japan are major importing markets. Demand in Japan was strong, with 37% growth in imports between 2010 and 2014. The United Arab Emirates and China are emerging as dynamic consumer markets with respective growth in demand of 101% and 122% in the same period.

CAMBODIA'S MAJOR COMPETITORS

Cambodia's two main regional competitors –China and India– supply large volumes of cheap, low-end industrial silk products. Viet Nam and Thailand export smaller volumes of industrial but also hand-made products directly competing with Cambodian high value handwoven silk products. The only relatively competitive Cambodian flagship product is represented by shawls and scarves (HS

621410). At the global level, countries with traditionally large fashion and clothing industries, but with no sericulture and weaving activities, are directly competing with a variety of high-end, high-value silk products of excellent quality supplied in large volumes. However, those countries need to import woven silk fabrics to sustain production, which may be an export opportunity to explore for Cambodia and one that justifies maintaining and expanding sericulture.

Box 8: Cambodia's main competitors on silk export products

Products	Competitors
Raw silk	China, India
Silk fabric	China, Viet Nam, Thailand
Silk garments	China, Viet Nam
Silk accessories	China, Viet Nam, Thailand, Lao People's Democratic Republic
Specific silk crafts	Thailand, Lao People's Democratic Republic
Silk home decor	Asia in general, Indonesia
Other potential competitors	Lao People's Democratic Republic, Southern Europe, Eastern Europe

Source: Silk sector stakeholder consultation, July 2015 – market characteristics.

CONCLUSIONS

- If it continues to rely on imports of silk yarn for its textile and garment production, Cambodia will need to absorb foreseeable yearly price increases of 7.2% on average, which in the long run will constitute a major competitiveness constraint and will hamper the development of the silk sector.
- While the main supplying countries of woven silk fabrics are located in Asia, demand for those fabrics has been shifting from Asian traditional silk manufacturers to emerging markets such as the United Arab Emirates, Pakistan, Turkey, Madagascar and more recently the Russian Federation.
- Regarding silk shawls, scarves, veils, ties and accessories, the traditional import markets continue to be the United States, Europe and Japan, but new opportunities may emerge in the Middle East.
- Finally, the market for silk clothing is highly competitive, with traditional American and European markets being global fashion industry hubs and major consumers at the same time, but there are also opportunities in emerging Asian consumer markets.
- Given the fierce competition in low-end industrial silk products from its regional neighbours, Cambodia could aim at competing with Thailand and Viet Nam by pursuing a differentiation strategy towards high-end hand-made silk products.

CAMBODIA'S TRADE PERFORMANCE

An analysis of Cambodia's trade performance is challenging and approximate at best, because official trade statistics do not reflect real trade flows for various reasons:

- For most silk products the harmonized system does not include specifically dedicated tariff lines at HS six-digit level, hence mixing silk products with other fibres. This is the case for most garments, bags and purses, and home decor products. A national nomenclature at HS eight-digit level, which would allow distinguishing silk products, does not exist in Cambodia.
- Concerning official statistics, there are very important discrepancies between trade flows registered by Cambodian Customs (direct data) and partner countries (indirect data). From 2010 to 2013, export of silk products reported by Cambodian Customs is only about 50% of the value that the importing countries report.
- Export figures collected by the CEDEP I project show much higher exports than the official Customs statistics, although these companies do not only export silk products.
- Finally, it is estimated that 90%⁴⁴ of actual trade transactions are informal or otherwise unregistered through Customs, or registered under different HS codes, hence not appearing in the official statistics.⁴⁵

44. Baseline data collection, International Trade Centre (2014). *Cambodia: Company Perspectives – An ITC Series on Non-Tariff Measures*. Geneva: ITC.

45. ITC (2013). *Cambodian Export Diversification and Expansion Programme (CEDEP I): High Value Silk Component*. Geneva. Recommendations to streamline 'harmonized system' (HS) reporting of Cambodian high value silk exports, p. 3.

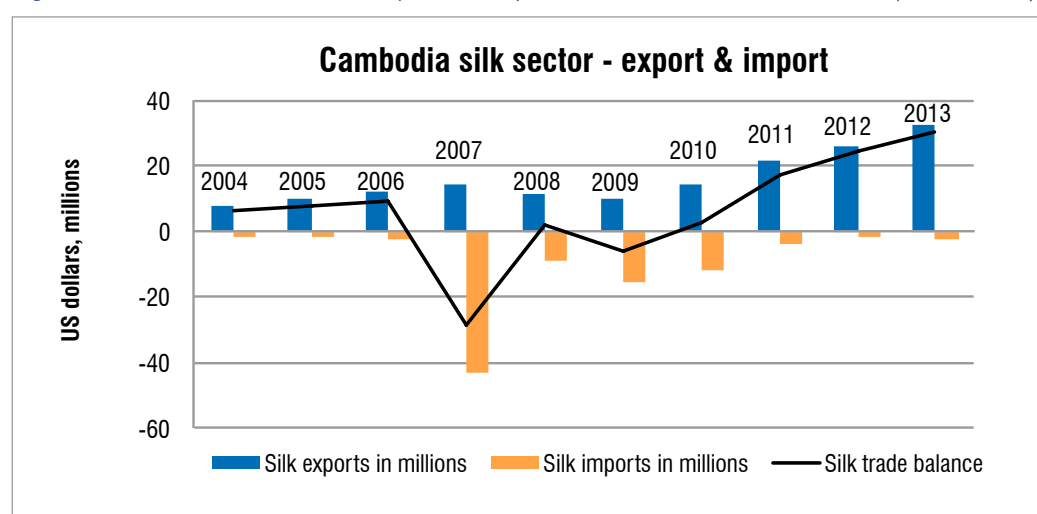
Therefore, in order to come as close as possible to the reality of actual trade flows, all statistical calculations were made based on the HS codes reflected in the product map in figure 6. Due to the fact that a number of HS codes related to clothing and home decor include products made of a mix of silk and other fibres in varying proportions, official statistical data tends to amplify trade flows in silk products. However, it is assumed that these trade flows capture essentially all formal exports by Cambodian SMEs in the silk sector, including all those participating in the CEDEP project, and thus show trends at the national level.

EXPORT PERFORMANCE⁴⁶

Cambodia remains a small player in the global silk market with a global market share of less than 1%. However, the Cambodian silk sector has demonstrated gradual growth of its cross-border exports. According to official statistics based on HS codes which mention and include silk (see figure 12), Cambodian exports of silk products stood at US\$32 million in 2013, while imports were about US\$2 million and the trade balance accounted for US\$30.1 million. In 2014 Cambodian silk sector exports totalled US\$35 million, which represented about 0.3% of Cambodia's total exports. With the exception of 2007 and 2009, its trade balance has been positive since 2004, which reflects a fair degree of specialization and offers a sound basis for market and product diversification. This trend is consistent with the experience of Cambodian SMEs in the silk sector reported by CEDEP progress reports and Silk Strategy consultations.

46. Based on HS codes used in the product map.

Figure 12: Cambodian silk sector – export and import, and trade balance, 2004–2013 (US\$ millions)⁴⁷



47. Source: ITC calculations based on United Nations Comtrade data.



Photo: ITC

Table 3: Top 10 destinations for Cambodian silk exports, 2002–2006 and 2010–2014⁴⁸

	2002–2006			2010–2014		
	Country	Value (US\$ thousands)	Share (%)	Country	Value (US\$ thousands)	Share (%)
1	United States	5 384.19	66.06	United States	10 744.59	40.35
2	Singapore	749.79	9.20	Singapore	2 217.68	8.33
3	France	514.88	6.32	Japan	2 145.10	8.06
4	United Kingdom	344.54	4.23	United Kingdom	1 940.63	7.29
5	Australia	341.46	4.19	Australia	1 718.43	6.45
6	Canada	195.68	2.40	Canada	1 344.60	5.05
7	United Arab Emirates	121.89	1.50	Luxembourg	1 147.95	4.31
8	Viet Nam	89.16	1.09	France	983.37	3.69
9	Malaysia	62.10	0.76	Kuwait	808.24	3.04
10	Organization of American States	51.15	0.63	Germany	395.19	1.48

48. Source: ITC calculations based on United Nations Comtrade data.

EXPORT DESTINATIONS

Cambodia silk sector export markets are fairly well diversified with a wide variety of export destinations. As illustrated in table 3, Cambodia's top export destinations for 2010–2014 and 2002–2006 were similar, with a concentration on traditional silk importing markets, mainly the United States and Europe. During the period 2010–2014, Japan and Singapore made up a 16.4% share of Cambodia's silk exports, suggesting emerging market opportunities in the Asian region. New entrants in the top 10 export destinations are Kuwait and Germany, with respectively 3% and 1.5% shares of silk exports. However, in terms of market concentration, in the period 2002–2006 the top three export destinations (United States, Singapore and France) accounted for a share of 82% of Cambodian silk product exports, whereas in the period 2010–2014 this share went down to 57%, showing significant improvement in terms of market diversification. The remaining export destinations are fairly fragmented, with shares ranging from 7.3% to 1.5% of total silk exports.

By contrast, if we take into consideration 30 Cambodian companies exporting silk products alone, the most important export destinations in 2011–2012 appear to be as follows:⁴⁹ (1) Japan, (2) Germany, (3) Switzerland, (4) Australia, (5) France, (6) United States, (7) United Kingdom and (8) the Republic of Korea. The small export values involved induce a high year-on-year volatility of export destinations, as illustrated by Switzerland. However, the top export destinations remain to a large degree consistent with official statistics.

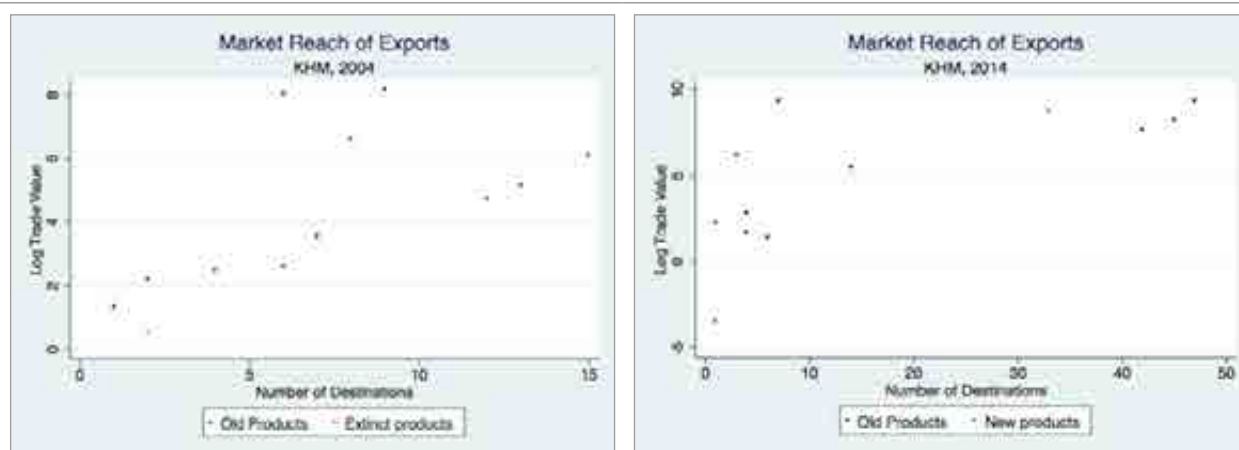
49. International Trade Centre (2013). *Overview of Key Importing Markets for Cambodian High Value Silk*. Geneva: ITC.



Photo: ITC

Market diversification is an important factor in export success. As shown in figure 13, in 10 years, as the value of silk exports increased, the average number of destinations per export product also significantly increased, passing from a range of 5–15 destinations for most products in 2004 to a range of 20–60 destinations in 2014. This increase in market reach proves that market diversification has worked for the Cambodian silk sector and illustrates the dynamism of Cambodian silk companies.

Figure 13: Market reach of Cambodian silk exports



Source: ITC calculations based on United Nations Comtrade data.

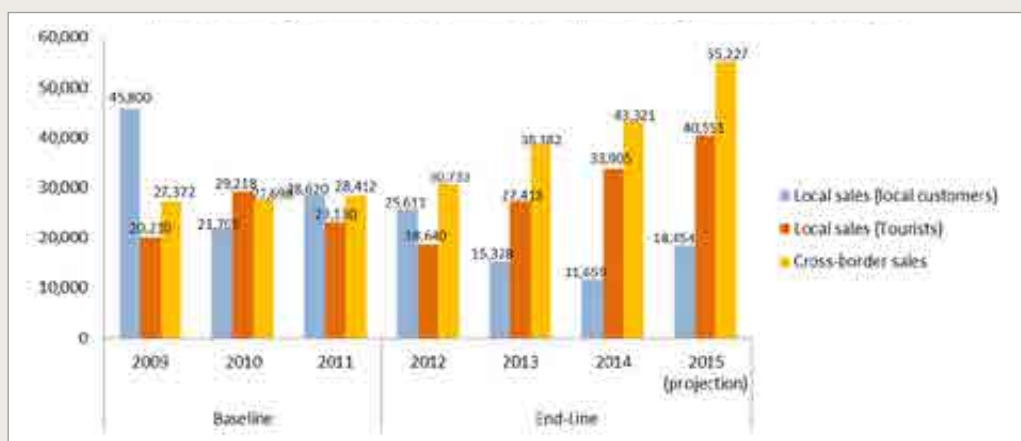
Box 9: Evolution of export sales of surveyed Cambodian silk companies⁵⁰

The 14 Cambodian companies supported by the CEDEP project do not only sell silk products, but work with other raw materials too. More or less all companies exporting silk products engage in other business activities. They run local shops serving the tourist and domestic markets and sell a variety of other products besides items made from silk (e.g. products made from cotton or recycled materials, jewellery, garments, office and hotel uniforms). Nevertheless, the export sales indicated by just these 14 companies, which at least have some focus on silk, are already much higher than the official Cambodian Customs figures.

According to export companies working with the CEDEP I project, exports of silk products by 14 companies grew by 41% during 2012–2014, and each company exported an average of US\$43,321 in 2014. The growth in exports resulted from the acquisition of new clients and new export markets.

The average silk exporter is a small company with one office, employing an average of 22 persons and having gross sales revenues of US\$78,493 in 2013. Most companies target both the international and domestic markets and also work with other raw materials such as cotton. They design the products, work with their own weavers or weaving groups, and subcontract part of the work to specialists such as tailors or embroiderers. Unusual for exporters in other value chains, silk exporters even accept very small orders of less than 20 pieces which are shipped by courier service.

Figure 14: Average annual sale of silk products by market segmentation per company, 2009–2015 (US\$)



Source: International Trade Centre (2015). End-Line Company Survey Report (Draft).

50. International Trade Centre (2015). *End-Line Company Survey Report (Draft)*.

EXPORT BASKET

Official trade statistics, as shown in table 4, suggest that the top 10 exported products in the silk sector remained largely unchanged between the 2002–2006 and the 2010–2014 periods, and were dominated by textile and clothing products, which as mentioned above can also include fibres other than silk. However, silk products typical of the Cambodian silk sector, such as shawls, ties, silk fabrics and clothing accessories, have seen their share in total sector exports grow from 6.15% in 2002–2006 to 13.56% in 2010–2014. Interestingly, raw silk and silk fabrics disappeared from the top 10 export products in 2010–2014, which suggests that their importance as export products has decreased over the last 10 years as Cambodia's silk sector increasingly relied on imports of raw silk for weaving, and clothing and handicraft production. Bearing in mind the amplification effect of official statistics related to textile and clothing products, this suggests that pure silk accessories and handicrafts have demonstrated important expansion potential and contributed to product diversification.

In terms of products, scarves, toys and ornaments (for seasonal decoration), and bags are the main product groups for the EU market. Japan mainly imports toys and ornaments (e.g. for key rings), silk fabric (e.g. for kimonos and business suits) and silk bags. The United States market mainly imports scarves, home decoration items (such as sofa blankets) and silk jewellery. In all three markets, directly importing retailers are the main type of buyers, in addition to fair trade wholesalers in Europe and the United States.

Cambodian silk exporters are successful in niche markets in industrialized countries for socially responsible products, natural fibres, organic products, ethnic crafts and handmade items. These markets developed well in the past and can easily absorb medium quantities like those being produced in Cambodia. As there are close to no restrictions on silk imports in developed countries, market access offers favourable conditions. There are quite a large number of handicraft and silk products producers which are oriented towards the fair trade market segment. Led by AAC, a number of companies and local NGOs have sharpened their fair trade profile to meet the increasing demand and high interest of international fair trade buyers.

As suggested by the revealed comparative advantage indicator in figure 15, the Cambodian silk sector is fairly specialized and would appear to have a comparative advantage in bags and purses, and table linen. However, given their growing market success, silk handicraft products such as shawls, scarves and ties can be considered emerging products with potential for further growth and candidates for product diversification.

The decomposition of export growth in figure 16 shows that in the period 2004–2014 growth in the Cambodian silk sector was for the most part (65% margin) credited to exports of new products reaching existing markets (product diversification) and to a lesser extent to existing products reaching existing markets (export intensification). In other words, Cambodian silk exporters have managed to grow by increasing exports of their emerging products mainly to their traditional markets.

Figure 15: Cambodia's revealed comparative advantage

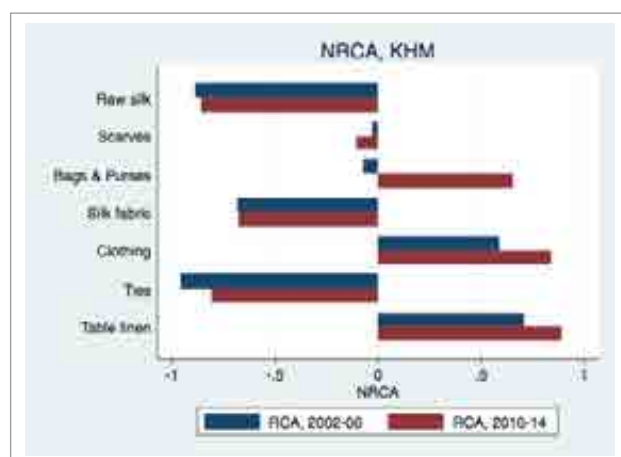
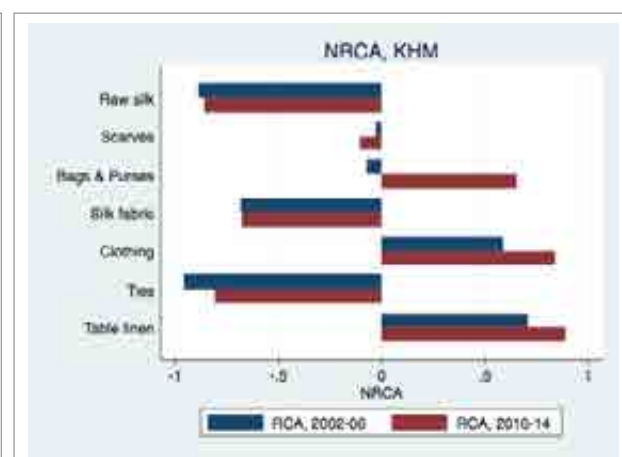


Figure 16: Decomposition of Cambodian export growth, 2004–2014



Source: ITC calculations based on United Nations Comtrade data.

Table 4: Top 10 Cambodian exported products, 2002–2006 and 2010–2014⁵¹

	2002–2006				2010–2014			
	HS code		Average value (US\$ thousands)	Share (%)	HS code		Average value (US\$ thousands)	Share (%)
1	630253	Table linen	3 555.34	45.27	630253	Table linen	13 023.51	50.54
2	620459	Women's skirts made from fabric other than cotton	1 950.93	24.84	620590	Men's shirts made from fabric other than cotton	4 894.06	18.99
3	620590	Men's shirts made from fabric other than cotton	1 245.33	15.86	621710	Clothing accessories	3 226.31	12.52
4	620339	Curtains, drapes, interior blinds, curtains	576.48	7.34	620459	Women's skirts made from fabric other than cotton	2 486.07	9.65
5	621710	Clothing accessories	335.43	4.27	620339	Curtains, drapes, interior blinds	1 685.23	6.54
6	621410	Shawls, scarves, veils of silk	132.37	1.69	621410	Shawls, scarves, veils of silk	245.66	0.95
7	630499	Furnishing articles of other textiles	24.31	0.31	630419	Bedspreads of textile materials	138.59	0.54
8	630419	Bedspreads of textile materials	9.67	0.12	630499	Furnishing articles of other textiles	30.25	0.12
9	500200	Raw silk (not thrown)	9.41	0.12	500400	Silk yarn not put up for retail sale	12.61	0.05
10	500790	Woven fabric of silk	5.97	0.08	621510	Ties, bow ties and cravats of silk	9.19	0.04

51. Source: ITC calculations based on United Nations Comtrade data.

CONCLUSIONS

- Overall, this analysis suggests that Cambodian silk exports have expanded but remained relatively concentrated on traditional markets such as the United States and regional Asian markets.
- The potential for further expanding market shares in these existing markets is still important, driven by continued demand in fair trade segments.
- The relatively well-diversified export basket testifies to the potential of silk exporters to diversify their offer in response to market trends.
- Volatility in exports suggests challenges in complying with buyer requirements and sustaining long-term trade relationships. Penetration of new markets remains a challenge.

INSTITUTIONAL PERSPECTIVE

The trade and investment support institutions (TISIs) providing important services to the Cambodia silk sector can be divided into four groups according to the relevant areas of support:

- Policy support network
- Trade services network
- Business services network
- Civil society network.

Tables 5–8 identify the main TISIs whose service delivery affects the silk sector in Cambodia. An assessment of the TISIs along the value chain considering the four following dimensions – coordination, human capital, financial resources and advocacy – is provided. The ranking is high, medium or low for each selected TISI, taking into account the service delivery of the TISI relative to the silk products sector. In other words, the assessment was conducted based on stakeholder evaluation of TISIs from the perspective of how well they serve silk sector stakeholders.

POLICY SUPPORT NETWORK

There are a number of government ministries involved in sericulture and the silk sector. The leading national authority for the silk sector is MoC, which is steering the new SDC and which has the main coordination role.

MoC has good human capital resources but lacks financial resources to promote the silk sector more actively, e.g. in terms of trade promotion. It has taken measures to help silk yarn imports through a duty-free import policy. On 27 April 2010, the Royal Government of Cambodia made silk thread imports tax-free, suspending import tax and value added tax on the product, which equates to a 7% to 10% cost cut.⁵² MoC has a Department of International Cooperation, which is the focal point for coordinating the execution, monitoring and assessment of trade-related assistance. It provides the Government with an important mechanism for ensuring that trade, development and poverty alleviation actions are properly integrated as regards policy formulation and execution, and

52. International Trade Centre (2014). *Value Chain Analysis of the High Value Silk Sector – Cambodian Export Diversification And Expansion Programme (CEDEP I): High Value Silk Component*. Geneva: ITC.

with respect to relations between the Government and its development partners (DPs).

Financial resources for all ministries are provided by the **Ministry of Economy and Finance** (MoEF), which therefore plays another high coordination role, together with the **Council for the Development of Cambodia** (CDC).

MAFF plays a medium–high coordination role for the silk sector. It is in charge of R&D as well as extension services in sericulture but lacks resources to conduct particular programmes.

The **Ministry of Industry and Handicrafts** (MoIH) is responsible for product standardization and promotion of handicrafts and conducts some training, while the **Ministry of Women’s Affairs** (MoWA) promotes women’s employment and has provincial **Women’s Development Centres** (WDCs) providing vocational training.

The **Ministry of Labour and Vocational Training** (MoLVT) provides skills trainings for weavers and runs the **Centre National de la Soie** (CNS) in Siem Reap (with support from the private company Artisans d’Angkor), which still serves as the main silk training centre in Cambodia.

Table 5: Policy support network

Name	Function/role	Coordination	Human capital	Financial resources	Advocacy
MoC	MoC is the lead ministry for the silk sector and facilitates export, and provides Certificates of Origin (C/Os) and training on export Customs procedures	H	H	L	H
MAFF	MAFF has the mandate to provide technical assistance and is in charge of research in sericulture. MAFF has agricultural stations, of which the one in Kandal Province has a mulberry nursery and raises five different local and five Korean silkworm varieties.	M–H	M–H	L	M
MoIH	MoIH is in charge of product standardization and promotion of handicrafts. It provides logos/products for graphic design and conducts some training.	M–H	M–L	L	M–H
MoEF	MoEF provides financial resources for the activities and projects of other ministries	H	H	H	H
Ministry of Environment (MoE)	MoE is in charge of environmental protection	M–L	M	L	M–H
MoWA	MoWA promotes women’s employment and has provincial WDCs providing some vocational training	M	L	L	M–H
MoLVT	MoLVT provides some skills trainings, including trainings for weavers	M	M–L	L	L
CDC	Coordination	H	M–H	M–H	M

Table 6: Trade services network

Name	Function/role	Coordination	Human capital	Financial resources	Advocacy
AAC	Handicraft association, export facilitation	M	M–L	L	M
FASMEC	Provision of information, lobbying, organization of exhibitions	M–H	M–H	M–H	H
Chamber of Commerce of Cambodia	Not many services for silk	M	M	H	M
KSV	Promotion of sericulture, trade in CGS	M–L	M–L	L	M

Table 7: Business services network

Name	Function/role	Coordination	Human capital	Financial resources	Advocacy
Packaging services	Packaging companies do not exist in Cambodia. All labels, tags and packaging materials are sourced in Viet Nam	L	L	L	L
DHL, Link Star, etc. (courier services)	Courier services, freight forwarding and other logistics services	M	M	M	M–H
Cambodia Freight Forwarders Association	Freight forwarding association	L	L	L	L
Mekong Express, Sorya Bus, etc. (transport services)	Transportation services to/from provinces (bus/taxi)	L–M	L–M	L–M	M–H
Laboratory services	Private companies, can issue laboratory test results to authenticate the quality standard required by buyers	L	M	M	L
Dyeing services	Yarn and fabric dyeing	M–H	L	L	L

Table 8: Civil society network

Name	Function/role	Coordination	Human capital	Financial resources	Advocacy
CWEA	Voice of women's businesses	M–H	L–M	L	H
Cambodia Women Business Federation (CWBF)	Women's empowerment federation	L	L	L	H
YEAC	Youth Entrepreneur Association of Cambodia	M–H	L–M	L	H
Business Network International	Business matching	M	M	M	M

Table 9: Analysis of the trade support network – influence versus capacity

		Current capacity of institution to respond to sector's needs	
		Low	High
Current level of influence on the sector	High	<p>MoE</p> <p>CWEA YEAC</p> <p>AAC</p> <p>MoWA</p> <p>Courier services</p>	<p>MoEF</p> <p>MoC</p> <p>FASMEC</p> <p>MAFF</p> <p>CDC</p> <p>MoIH</p> <p>MoLVT</p> <p>Chamber of Commerce of Cambodia</p> <p>Business Network International</p>
	Low	<p>Transport services</p> <p>CWBF</p> <p>KSV</p> <p>Laboratory services</p> <p>Packaging services</p> <p>Cambodia Freight Forwarders Association</p>	<p>Dyeing services</p>

Legend: black: policy support network, red: trade services network, blue: business services network, green: civil society network.

Some other ministries are also involved in the silk sector.

- **Ministry of Tourism (MoT):** The Ministry provides trainings on hotel and restaurant services, but so far has not yet considered promoting ecotourism on silk. MoT can potentially support the silk sector with initiatives on ecotourism in silk. It can also help promote traditional silk handicrafts and can establish closer links to the tourism sector.
- **Ministry of Culture and Fine Arts (MoCFA):** The Ministry produces a book of traditional designs / protects heritage.
- **Ministry of Education, Youth and Sports:** The Ministry provides traditional design trainings.
- **Ministry of Mines and Energy:** The Ministry subsidizes electricity supply.
- **Ministry of Rural Development (MRD) (Ministry of Public Works and Transport (MoPWT) / Ministry of Water Resources and Meteorology):** The Ministry constructs bridges, solar systems, irrigation systems and road infrastructure.
- **Ministry of Information:** The Ministry spreads news nationwide through associations, television, newspapers, provincial branches and radio.

With regard to service provision to the silk sector, all ministries only have very limited financial resources to conduct support programmes. This leads to the fact that MoC cannot provide more active support to the silk sector and that only one agricultural station in Kandal Province provides limited services to sericulture farmers. The situation is similar for all ministries. The WDCs cannot provide many services to women weavers/women enterprises and MoLVT only has limited resources for weaver trainings.

The Cambodian Government recently set up the SDC, which is composed of representatives of the different ministries and private sector representatives with specific responsibilities. For the development of the silk sector, it will be crucial for the SDC to mobilize funds for silk promotion programmes.

TRADE SERVICES NETWORK

In addition to government institutions, there are a number of private sector organizations which offer trade services to companies working with silk. **AAC** is the main representative organization of craftsmen in Cambodia. It represents 48 NGOs and SMEs that manufacture fashion accessories and handicrafts, and offers training and assistance to its members, many of whom work with silk.

The **Federation of Associations for Small and Medium Enterprises of Cambodia (FASMEC)** plays an important coordination and advocacy role in the framework of public-private dialogue. On the private sector side, it also has the highest human capital and financial resources. FASMEC is important in terms of organizing exhibitions, providing information and lobbying for private sector concerns in Cambodia.

The **Chamber of Commerce of Cambodia** provides services to SMEs in general, but not particular services for silk companies. **KSV** was created in 2005 and represents silk-worm breeders and silk weavers. KSV covers the entire value chain, including processing, weaving and promotion of final products, but it lacks resources to continue the extensive work it was doing during the *Projet d'Appui au Secteur de la Soie (PASS)* project (Silk Sector Support Project).

BUSINESS SERVICES NETWORK

Laboratory services for quality inspections and courier transport services are well developed, but there are no real packaging services, meaning all labels, tags and other packaging materials need to be sourced in Viet Nam. Export and import facilitation services are in general underdeveloped, but some companies, AAC and specialized service providers offer Customs clearance and freight consolidation services.

The actors of the business services network in general have rather low or medium coordination and advocacy roles, except freight forwarders and transportation services which have medium–high lobbying influence. Dyeing service providers play a medium–high coordination role in the sector.

CIVIL SOCIETY NETWORK

Civil society organizations mostly play important roles for advocacy and coordination, particularly the **Cambodia Women Entrepreneurs Association** (CWEA) and the **Young Entrepreneurs Association of Cambodia** (YEAC), but are limited by their weak financial resources and few staff.

With regard to civil society organizations, **CWEA** has more than 200 members and plays an active role in raising issues of Cambodian women in business and helping promote the silk sector, as a number of women entrepreneurs are working with silk. The Association provides training, lobbying and networking services to women entrepreneurs and cooperates with MoC, YEAC and ITC on promoting silk sector activities. It is particularly important for coordination of women-led SME activities in the silk sector and for lobbying for women entrepreneurs' interests.

CWBF has 57 members, some of whom are from the silk sector. The Federation is working on solutions to provide alternative space for local shops in Phnom Penh, such as a mall for silk and other Cambodian handicrafts in the centre of Phnom Penh. It is assumed that they will have an important influence on the silk sector in the future.

YEAC, established in 2009, has the mandate to support young entrepreneurs and is influential due to its networking and business matchmaking in the ASEAN region. YEAC supports silk companies with international and local activities. Two silk companies were also recently awarded the 'Cambodia Enterprise Award 2015'.

The **Business Network International** chapter in Cambodia was launched in 2013 and may have medium importance in future.

Table 8 summarizes the role of the different kinds of support institutions in terms of their current level of influence

on the sector compared to their current capacity to respond to sector needs. It turns out that MoEF, MoC, MAFF, MoIH, CDC and FASMEC rank highest in terms of both capacity and influence. Private sector actors such as AAC, CWEA, YEAC, as well as the ministries MoE and MoWA, also have a high influence on the sector, but less financial and personal capacity to respond to needs. Actors from the business services network have rather low influence and capacity, as do KSV and CWBF. Of the business services network, freight forwarding and dyeing services providers have the highest influence and capacity.

CONCLUSIONS

- The ministries MoEF, MoC, MAFF, MoIH and MoLVT have high influence on the sector and in general rather high capacity to respond to the sector's needs, but lack resources for active trade promotion on silk (MoC) for silk extension services and provision of inputs (MAFF), and for training of weavers (MoIH, MoLVT). The ministries MoWA and MoE have less means to conduct promotion activities in the silk sector.
- As for the trade services network, particularly FASMEC and AAC have the capacity to support silk companies in terms of organizing exhibitions and providing trade facilitation services.
- CWEA and YEAC can have significant influence if they receive some support.
- The high influence or capacity of courier services and dyeing services providers can be developed further to strengthen the competitiveness of the industry.

DEVELOPMENT POLICIES AND DONOR ACTIVITIES

TRADE POLICY FRAMEWORK

Cambodia was the first least developed country to become a World Trade Organization member following a full accession process in 2004. Cambodia is a member of ASEAN. Through ASEAN, Cambodia has trade agreements with several large economies, including Australia, New Zealand, Canada, the Republic of Korea, China, India and Japan. As a least developed country, Cambodia enjoys the benefits of the Generalized System of Preferences from a number of countries. A large proportion of Cambodia's exports to EU markets are duty-free and quota-free under the Everything But Arms initiative.⁵³

The EIF, a multi-donor programme that helps least developed countries play a more active role in the global trading system, is important for coordinating and stimulating

53. International Trade Centre (2014). *Cambodia: Company Perspectives – An ITC Series on Non-Tariff Measures*. Geneva: ITC.

development. In 2002, Cambodia was the first country to complete a DTIS, which allowed moving the trade development agenda forward.

In 2007, the Government adopted a revised and updated DTIS, launched a Sector-Wide Approach to Trade (Trade SWAp) initiative, and reorganized MoC to allow it to better manage trade-related assistance. The DTIS 2007 laid out a new agenda for trade development. It identified 19 products and services with export potential; examined the human development and poverty reduction potential of the 19 sectors; identified markets abroad that could be attractive to Cambodian exporters and services; and expanded and updated the agenda for legislative reform. The three different pillars of the DTIS (legislative reform, promotion of 19 products and services, and capacity development) developed road maps defining goals, strategic objectives and outcomes, which cover a large part of Cambodia's Aid for Trade strategy.

In early 2014, the Government launched CTIS 2014-2018, which is the third generation of DTIS. Cambodia is the first country to update its original DTIS for the second time. The CTIS 2014-2018 benefits from funding from the EIF, the Asian Development Bank, the United Nations Development Programme and the World Bank, and technical inputs from the Inter-Ministerial Committee for Updating the CTIS 2013-2018, which includes senior officials from:

- | | |
|---|--|
| • MoC | • MRD |
| • MoEF | • MoWA |
| • The Ministry of Health | • MoLVT |
| • MoT | • MoPWT |
| • The Ministry of Planning | • The Ministry of Education,
Youth and Sports |
| • MoH | • The Council of Ministers |
| • The Ministry of Industry,
Mines and Energy | • CDC |
| • MAFF | • The Royal School of
Administration |

The CTIS 2014-2018 has identified silk as one of 10 priority export sectors to receive focused attention. It underlines the importance of the silk sector for the cultural tradition of Cambodia as an important asset for tourism promotion and Cambodia's global image, as well as its relevance for the development of disadvantaged rural regions in Cambodia. Subsequently, one of the strategic outcomes aimed at in the CTIS is 'High Value Silk Products: A small but growing number of Cambodian producers are able to design and export high value silk products.' To reach this aim, the CTIS calls for 'strong public-private sector engagement backed by a road map and a national policy framework to guide investment in both sericulture and silk production.'⁵⁴

54. Kingdom of Cambodia (2014). *Cambodia Trade Integration Strategy 2014-2018*. Phnom Penh.

SILK SECTOR PROMOTION INITIATIVES

During the last 20 years, the Cambodian silk sector received support from a number of donor organizations, of which the Agence Française de Développement (AFD), ITC, Belgian Technical Cooperation, the EU, the Food and Agriculture Organization of the United Nations (FAO), and the Belgian NGO Aide au Développement Gembloux conducted the most important projects. For the first 10 years (1994-2005), the AFD was the main donor reviving the silk sector with the Project for Silk Rehabilitation in North-Western Cambodia and the PASS project. As a result of these projects, the number of active sericulture farmers reached a peak of 1,750 farmers in 2005.

At that time, ITC contributed to the preparation of the first Sector-Wide Silk Strategy, conducted weaver training programmes and started to promote export of silk products. The EU and FAO recently carried out the Economic and Social Relaunch of Northwest Provinces Project in Siem Reap and Banteay Meanchey provinces and the Cambodian Silk Programme 2009-2012. Belgium Technical Cooperation and Aide au Développement Gembloux provided trainings to sericulture farmers and FOs 2006-2007 and 2011-2013. From 2012 to 2016, ITC intensified its silk trade support in Cambodia with the CEDEP I programme, which focuses on capacity-building of selected silk export SMEs and worldwide trade fair participation and promotion in the United States, Germany, France, Japan and Australia.

The main document formulating a strategy for the silk sector in the last 10 years was the Sector-Wide Strategy for the Cambodian Silk Sector, which was first developed in 2006 and updated in 2009.

The Sector-Wide Strategy for the Cambodian Silk Sector 2006 aimed at producing high-quality handmade silk products for national and international markets combining innovative design and techniques with traditional weaving and dyeing, and production of CGS yarn. Subsequently, the goal was to create income-generating employment for 5,000 new silk thread producers, as well as expand income generation for the existing 19,000 mainly female weavers in poor communities within five years. The strategy 2006 defined three major goals:

- Product and market development of the export, tourist and local markets
- Improvement of weaving capacities
- Improvement of yarn supply (increased production of CGS and better quality of imported yarn).⁵⁵

55. International Trade Centre (2009). *Sector-Wide Strategy for the Cambodian Silk Sector*. Geneva: ITC.

Box 10: Key donor organizations influencing the Cambodian silk sector⁵⁶

Donor organization	Aims	Projects
AFD	Poverty reduction, relaunch and strengthening of the silk sector in Cambodia	<ul style="list-style-type: none"> In 1994, AFD supported the establishment of CNS. From 1997 to 2001, AFD funded the relaunch of the silk sector in the north-western and eastern provinces and provided technical support to CNS and its R&D Department on sericulture and yarn processing. From 2002 to 2005, AFD again funded PASS in the north-west, east and south of Cambodia. By the end of the PASS project, KSV was created.
ITC	Trade promotion	<ul style="list-style-type: none"> From 2003 to 2007, ITC carried out the Economic Poverty Reduction Programme (EPRP) which contributed to the elaboration of the first Cambodian Sector-Wide Silk Strategy in 2005. ITC also supported the update of the Silk Strategy in 2009. ITC currently (2012 to 2016) carries out the CEDEP I programme with a focus on export promotion of high value silk and capacity-building of selected SMEs.
Belgium Technical Cooperation	Job creation to contribute to poverty reduction	From 2006 to 2007, Belgian Technical Cooperation collaborated with KSV to provide training on sericulture to farmers in Battambang Province.
EU	Support the creation of added value generated by silk production (silk yarn and weaving) in the north-west and create employment opportunities	From 2007 to 2010, development and promotion of the silk sector in Siem Reap and Banteay Meanchey provinces under the framework of the Economic and Social Relaunch in the Northwest Provinces Project.
FAO	Development of the agricultural sector	The FAO launched a Cambodian Silk Programme in 2009, including a Silkworm Egg Production Centre. After the end of the project in 2012, the Silkworm Egg Production Centre still received some support from the Cambodian Government and the EU.
Aide au Développement Gembloux	Improve production and marketing of FOs	From 2011 to 2013, the Household Agriculture and Food Sovereignty Programme (Agriculture Familiale et Souveraineté Alimentaire) supported individual mulberry planters of FOs and strengthened the structure of FOs – including mulberry planters, silk producers and weavers in Banteay Meanchey and Siem Reap provinces – in partnership with KSV.

56. International Trade Centre (2014). *Value Chain Analysis of the High Value Silk Sector – Cambodian Export Diversification And Expansion Programme (CEDEP I): High Value Silk Component*. Geneva: ITC.

The Sector-Wide Strategy for the Cambodian Silk Sector 2006 was conducive to mobilizing donor support for promoting the silk sector and contributed to the implementation of a number of donor initiatives in the following years. As a result, export and tourist sales of silk products increased.

The Silk Strategy update in 2009 was much influenced by two main developments. On the one hand, it was desirable that the success of the previous initiatives undertaken should be ensured, particularly the first results of export promotion activities undertaken by ITC, the development of KSV and the temporary increase in sericulture farming as a result of the PASS project. On the other hand, four years after the end of the PASS project, the yields of sericulture farmers plunged because of mismanagement of silkworms and mulberry trees, and many sericulture farmers returned to the cultivation of other crops such as cassava and rice. Subsequently, the strategy update underlined the need for continued support in terms of training, mentoring, information sharing and technical support programmes. The Silk Strategy update kept the three main goals as formulated in 2005, with the aims of: reaching an export and high-end tourist market growth of 30% per year; an increase of 10%–20% per year in the low-end tourist and local Khmer sales market; improving productivity and organization of the existing 19,000 weavers; and increasing the production of CGS yarn from 3–5 tons per year to 35 tons per year.⁵⁷

Six years later, in 2015, it has to be stated that these goals were mostly not achieved. Sericulture farming dropped to a production of less than one ton per year and the number of weavers is estimated to have declined to less than 5,000 in 2009. Only the intended increase of 30% per year of export and high-end tourist sales has been partly achieved according to the latest ITC silk SME survey. From 2009 to 2015 (projected figure), the 14 supported companies report a total export turnover increase of 101.74%, equivalent to an average annual growth rate of 17%. In the same period, local sales of these SMEs to tourists also doubled, while sales to local customers declined.⁵⁸ The experience in sericulture shows that farmers were willing to take up sericulture as long as they received support in terms of training and provision of inputs, but stopped sericulture when there was no more support.

While sericulture is back to rudimentary level, there is sustainable development at SME level as a direct result of project activities. Silk weaving and production of final silk items are transforming in order to cater more for higher-value tourist and international markets, as well as for higher-quality domestic demand. In the last 10 years, it has become normal for a number of SMEs to produce silk



Photo: ITC

scarves according to international requirements. Export increased as a number of independent dyeing and warp set-up service providers allow the production of reliable quality. The variety of shops supplying the tourist market similarly increased.

CONCLUSIONS

- Sericulture can only be revitalized if there is continued government support (provision of regular extension services and access to inputs) and private sector investment ensuring a reliable market.
- The revitalization of sericulture should not rely on the production of CGS only but include the promotion of white silk yarn production.
- The production of white silk yarn requires industrial investment in reeling and contract farming. Compared to the previous silk sector strategies, there should be a stronger focus on mobilizing private sector investment. Silk SMEs supported by the ITC project CEDEP I show that an annual increase in export and tourist sales of 17% per year is realistic. Trade promotion support should be intensified as it has been successful.
- Primary data of the ITC weaver survey 2015 show that weavers with 1–3 employees report an average monthly income from silk weaving of US\$214, which is much higher than the minimum wage of US\$128 per month paid in the garment industry. Professionalization of weavers should be continued because significant income can be generated in rural areas.

57. *Ibid.*

58. International Trade Centre (2015). *End-Line Company Survey Report (Draft)*. Geneva: ITC.

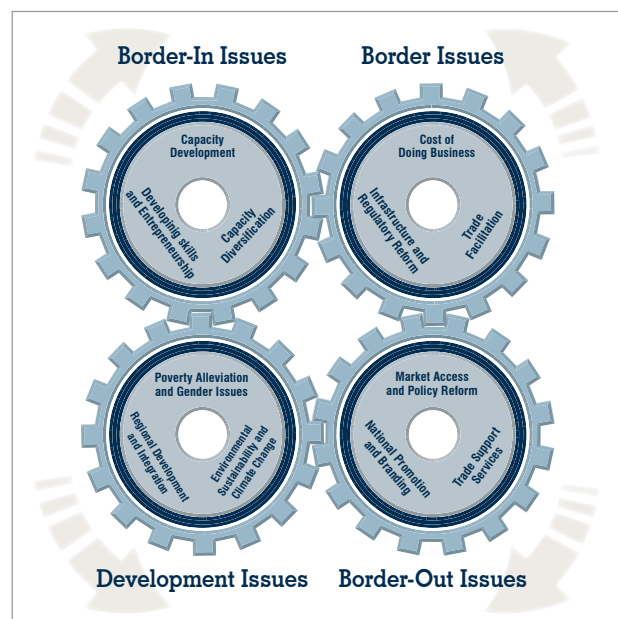
EXPORT COMPETITIVENESS ISSUES: FOUR GEAR ANALYSIS

The traditional approach to strategic planning tends to focus exclusively on market entry issues such as market access, trade promotion and export development.

This restrictive approach can lead to ignoring several important factors in a country's export competitiveness. Effective tools for export strategic planning address a wide set of constraints, including any factor that limits the ability of firms to supply export goods and services, the overall quality of the business environment, and the development impact of the country's trade, which is important to its sustainability.

Figure 17 illustrates the four-gear integrated approach that has been followed to uncover the main competitiveness constraints of the silk sector. The four gears encompass the supply-side constraints, the business environment constraints, the market entry constraints and the social and developmental constraints. Overall competitiveness is affected by the four gears.

Figure 17: Four gear approach



THE BORDER-IN GEAR: SUPPLY SIDE

Supply-side constraints affect the production capacity of the sector. These include challenges in areas such as the availability of appropriate skills and the necessary competencies, the capacity of the sector to diversify, and the technological content and value added in the sector's products.

DECREASING PRODUCTION OF CGS DUE TO A LACK OF CONFIDENCE IN THE MARKET

Sericulture farms are small-scale. In most cases, there is no real plantation of mulberry trees. Most breeders have various plots of mulberry trees either near their house or in many cases quite some distance away. Producers are reluctant to produce CGS as they lack confidence in the market. A high proportion (40%–50%) of the sales price of CGS yarn goes to intermediary traders and does not reach the farmer, because farmers depend on the intermediary traders.⁵⁹

Farmers lack access to water during the dry season, and as the application of pesticides in rice fields harms sericulture, silkworms may die due to the pesticides. There is a lack of larger plots of land as sericulture is competing with other crops and as the productivity of sericulture is still at low level in Cambodia. Only the older generation has the necessary skills for sericulture farming. There is a general lack of support from MAFF for sericulture, particularly in terms of technical assistance in the communes. There is also a lack of support from the Ministry of Water Resources and Meteorology in terms of irrigation needed for sericulture. Sericulture farmers complain about silkworm diseases and the low quality of silkworm varieties.

Farmers are not organized at community level, e.g. in cooperatives, as in neighbouring countries, which causes constraints for joint purchasing activities, availability of reeling facilities and market access, as well as for coordinating government support. The reeling of cocoons is time-consuming and not well paid. The use of old, slow, hand-reeling techniques is due to a lack of specialization and the fact that CGS yarn cocoons are not suitable for industrial reeling machines.

NO DOMESTIC PRODUCTION OF WHITE SILK YARN DUE TO A LACK OF INVESTMENT

There is no domestic production of white silk yarn, even though white silk yarn is the main input for silk weaving. As a result, Cambodia is highly dependent on silk imports. The missing domestic production of white silk yarn is due to a lack of investment for an industrial reeling centre and no experience of sericulture farmers with white silk. The profitability of setting up a reeling centre in Cambodia is unknown and there is a high market risk because domestic demand figures are unreliable estimates and domestic production would have to compete with imports in terms of both quality and price.

59. International Trade Centre (2014). *Value Chain Analysis of the High Value Silk Sector – Cambodian Export Diversification And Expansion Programme (CEDEP I): High Value Silk Component*. Geneva: ITC.

Box 11: Overview of supply-side issues

- Decreasing production of CGS due to a lack of confidence in the market
- No domestic production of white silk yarn due to a lack of investment
- Increasingly bad quality and high price of imported silk yarn due to unreliable supply sources
- Silk weaving capacities have decreased because weaving provides lower income than work in garment factories
- Small-scale and fluctuating production of final handicrafts due to volatile markets and lack of effective organization and technology
- Few product and design innovations reduce the attractiveness of final products

Sericulture farmers are not aware of the income potential of white silk cocoon production, have little knowledge about suitable technologies, and would need to be organized in a producer group to ensure stable market linkages.

INCREASINGLY BAD QUALITY AND HIGH PRICE OF IMPORTED SILK YARN DUE TO UNRELIABLE SUPPLY SOURCES

Companies report increasingly bad quality of imported silk yarn, which is mainly due to unreliable supply sources and illicit imports, mostly from Viet Nam. As companies in general buy small quantities from retailers and middlemen, their market position does not allow them to ensure getting better quality. An additional aspect of illicit trade is that unknown sources of raw material and different parts/accessories cause serious problems for C/O issuance.

Increasing silk yarn prices reflect global shortages of silk yarn, as there are not many countries left with a functioning silk weaving sector. This may lead to further shortages of silk yarn on the world market in future.

SILK WEAVING CAPACITIES HAVE DECREASED BECAUSE WEAVING PROVIDES LOWER INCOME THAN WORK IN GARMENT FACTORIES

Silk weaving capacities have decreased because the income from silk weaving is lower than the income potential of alternative employment, e.g. from work in garment factories. Particularly, the lack of continuity of income from weaving – due to insufficient market demand and the fact that the Government does not promote the use of silk garments – leads many weavers to stop silk weaving. Other factors for the low income level of weavers are the low productivity, low product prices, increasingly high cost of silk yarn, and little access to weaver training programmes.

The low productivity is due to a lack of specialization and modernization. Traditional looms would need to be equipped with new warps, allowing faster weaving and more design variety. Part of the production could be based on semi-automatic looms as in other countries.

There is a lack of cooperation and specialization at village level. Weavers need access to services such as dyeing and warp set-up services or being supplied with yarn. There are only a few qualified providers, who often do not work with weavers in remote areas.

Due to migration to urban areas and few training programmes, many looms in the countryside are not used any more. Young women often prefer to work in the garment industry because demand for skilled workers is high and minimum wages have increased to US\$ 128 per month. Work in garment factories is also attractive because city life is more exciting for most of the younger generation than traditional village life and farm work. Because of migration to cities, weaving knowledge is no longer passed on to the next generation as it was before. There are few weaver trainings which help young women to develop better weaving skills.

SMALL-SCALE AND FLUCTUATING PRODUCTION OF FINAL HANDICRAFTS DUE TO VOLATILE MARKETS AND LACK OF EFFECTIVE ORGANIZATION AND TECHNOLOGIES

Small-scale and fluctuating silk production makes final silk products more expensive than in other countries. Many weavers only work part-time, in line with the seasonality of farm work. Companies are small and depend on small orders, as they often come from a retail or NGO background. Small-scale orders do not allow for employing a larger number of permanent staff. Sewing and finishing work are rather expensive because the wage level in the garment industry is rising and silk companies often pay fair wages, and because the companies lack organization and production lines. If they outsource work, they must compete with increasing demand from the garment industry. Companies also suffer from the increasing cost of dyes or other inputs, mainly due to small purchasing quantities.

Due to the priority of farm work during the rainy season, women often do not have time for silk weaving during the farming season. The seasonality of weaving is a handicap for complying with customer requirements on shipping deadlines.

There is a lack of facilities and effective machinery to standardize production, as well as a lack of technical staff to operate machines. There is also a lack of vocational skills training facilities for industrial set-up and basic manual weaving and dyeing to create workmanship consistency for beginners.

FEW PRODUCT AND DESIGN INNOVATIONS REDUCE THE ATTRACTIVENESS OF FINAL PRODUCTS

There is insufficient product development and design innovation, as companies lack the budget for major investment in new products and market research. Companies also lack access to qualified national designers. There is no particular national textile design school producing graduates who could be employed. Another issue is the lack of respect for copyright. Companies also find it is difficult to introduce new products because old weavers are reluctant to change to new designs which they are not used to weaving. Markets for higher-priced designs are limited. There is general lack of knowledge about market trends due to limited market exposure and no access to regular market trends information.

THE BORDER GEAR: QUALITY OF THE BUSINESS ENVIRONMENT

Business environment constraints influence transaction costs, such as regulatory environment, administrative procedures and documentation, infrastructure bottlenecks, certification costs, Internet access and cost of support services.

HIGH COST OF EXPORT FORMALITIES DUE TO COMPLEXITY IN EXPORT PROCEDURES AND INSUFFICIENT CAPACITY OF HUMAN RESOURCES

According to the ITC survey,⁶⁰ applying for export licences and permits is challenging. An extensive list of documentation and procedures is required and exporters have to renew their licences every year. The waiting time for obtaining licences and permits is unclear. Exporters recommended that this uncertainty be reduced and that relevant authorities adhere to a strict time frame. Exporters reported that information regarding requirements is not being sufficiently disseminated, which sometimes causes misunderstandings and errors in the documents. Small silk exporting companies fear the cumbersome procedures of export licensing, with the result that they avoid formalization of their export activities.



Photo: ITC

The MoC with the support of the World Bank has been developing an online automated system for exporters to apply for a C/O. An e-payment system linked to the online C/O application is also due for development. Both systems are expected to reduce misunderstandings in completing various forms, streamline procedures, save time for companies and potentially eliminate the need for direct human interactions. However, pending the full implementation of the automated systems, many challenges remain as reported by operators, including a lack of transparency in and predictability of actual fees and charges, ineffective implementation of regulations and procedures. Going forward, increased human capacities, adequate resources and increased investment in IT are necessary in order for MoC to offer a high standard service delivery to exporters.

60. International Trade Centre (2014). *Cambodia: Company Perspectives – An ITC Series on Non-Tariff Measures*. Geneva: ITC.

Box 12: Overview of business environment issues

- High Customs clearance cost due to a lack of transparency in Customs clearance and weak coordination
- Data inconsistency and unavailability
- Complicated company and Tax Department registration due to difficult procedures and forms
- High transport costs due to small quantities, few carriers and expensive domestic transport
- Absence of regulations for shop rental, high demand and insufficient energy supply have resulted in increasingly high costs
- Limited specific silk promotion measures in place due to lack of recognition of the silk sector
- Limited access to finance and high bank charges
- Unbalanced pricing due to lack of market information and dependence on middlemen
- Lack of access to trade information due to lack of qualified institutions and opportunities to observe international markets

DATA INCONSTANCY AND UNAVAILABILITY

As indicated above, there are big differences in reported trade statistics. Even a simple comparison between direct and mirror data of Customs authorities shows underreporting of Cambodian silk exports. Exports of silk products reported by Cambodian Customs are only about 50% of the value that importing countries report. The export of many Cambodian silk products is hidden in general tariff lines such as clothing, bags, home decor, etc. and 90% of all silk transactions are informal. The absence of a national product nomenclature for silk products at eight-digit level does not allow for counting of all exports of different kinds of final silk products.

COMPLICATED COMPANY AND TAX DEPARTMENT REGISTRATION DUE TO DIFFICULT PROCEDURES AND FORMS

Company registration, and particularly Tax Department registration, is complicated, which induces companies to avoid changing an earlier registration (usually as a shop/retailer) to an export company registration. The difficult procedures and forms are a result of too many steps in the registration process and lack of dissemination of tax rules. Companies lack information about the exact rules and do not know where to find the rules. They are not confident of being able to follow the rules diligently. Cambodian enterprises must be made aware of regulations and procedures but lack access to training. Services provided by officers and staff of government agencies are ineffective and inefficient.⁶¹

Silk companies in general have little knowledge about the preparation of financial statements. They need training on accounting and they also need tailored templates for bookkeeping. For the time being, only a few are able to keep records and to do proper accounting. Most companies need to hire accounting staff but cannot afford this.

61. *Ibid.*

HIGH TRANSPORT COSTS DUE TO SMALL QUANTITIES, FEW CARRIERS AND EXPENSIVE DOMESTIC TRANSPORT

Rather small export quantities, the predominant use of parcel services such as DHL, Fedex, Linex and Globex, and few direct flights from Cambodia to its main markets all result in high international transport costs compared with regular airfreight transport from other countries such as Thailand, Viet Nam, the Philippines or China. The relatively high international transport costs were a regular complaint of importers who engaged in business with Cambodian silk companies in the framework of the CEDEP I programme. The government postal service is affordable but less secure, and therefore mostly not an alternative. Bad road conditions and production in remote areas lead to high domestic transport costs.

ABSENCE OF REGULATIONS FOR SHOP RENTAL, HIGH DEMAND AND INSUFFICIENT ENERGY SUPPLY HAVE RESULTED IN INCREASINGLY HIGH COSTS

Companies have increasingly high electricity costs and pay increasingly high rents for their facilities, particularly for shops in Phnom Penh and Siem Reap. Due to high demand for good locations, there is a lot of fluctuation of shop rental contracts, but no regulated rent control for retail shops.

While rental fees in residential areas in Phnom Penh are reported to be about US\$ 1/m², shop rental fees in the riverside district of Phnom Penh are about US\$ 12/m². Cambodia has existing rules for mortgages of bigger investments, long-term lease or land concessions, but no rules protecting SMEs.⁶²

62. Information provided by seminar participants 2015.

LIMITED SPECIFIC SILK PROMOTION MEASURES IN PLACE DUE TO LACK OF RECOGNITION OF THE SILK SECTOR

The Government is committed to supporting the silk sector but there is little allocation of resources into the sector. There is a general lack of community training centres for sericulture farmers and weavers. Existing support centres lack funds and there is no regular Government support to promote silk in the national market or for export. The limited allocation of resources is due to the fact that the silk sector is very small and has little significance for employment compared with other sectors. As shown above, employment in the silk sector is decreasing and the income of weavers and sericulture farmers is not high.

The relevance of the silk sector for culture, tourism and poverty alleviation is underestimated because there are few data available. This is partly due to unreliable export statistics and the invisibility of final silk products exports due to the HS product nomenclature specific to silk products (the nomenclature is governed by the Convention on the Harmonized Commodity Description and Coding System and elaborated under the auspices of the World Customs Organization).

LIMITED ACCESS TO FINANCE AND HIGH BANK CHARGES

Bank procedures to open business accounts are complicated and access to loans is difficult without adequate collateral. There is a social bias against women for dollar transactions and property. Interest rates and bank charges for international transactions are high. There is no financial support scheme for silk companies as there is little awareness about the need for and the potential of a silk development fund.

UNBALANCED PRICING DUE TO LACK OF MARKET INFORMATION AND DEPENDENCE ON MIDDLEMEN

Due to a lack of market information, no regulation and dependence on a few middlemen, weavers complain about unbalanced pricing of silk products which leaves weavers with a low income. Weavers are in a much weaker and less informed position than middlemen and mostly have to accept the prices offered by the middlemen, resulting in dependency and unfair distribution of income on the one hand. On the other hand, access to quality services, inputs and markets through middlemen is an advantage. The intermediaries are a crucial node in the value chain. They have been there for decades. Some offer very good services and are very successful and dynamic. If their skills and capacities are enhanced based on fairer pricing, the sector can foster business linkages which will ultimately translate into more income for weavers.⁶³

LACK OF ACCESS TO TRADE INFORMATION DUE TO LACK OF QUALIFIED INSTITUTIONS AND OPPORTUNITIES TO OBSERVE INTERNATIONAL MARKETS

Companies lack information about market requirements, players and trends, and do not know where to find such information. There is no institution in Cambodia that provides regular information about the international silk market because the Cambodian silk sector is so small. No organization is in charge of disseminating information about trends, target markets, fashion news, trend colours, etc. to exporters. There are also no links to organizations in other countries. The lack of access to relevant trend and sector information is a serious handicap for the sector.

63. International Trade Centre (2011), *Mid-term External Evaluation: Cambodia Sector-Wide Silk Project (Phase II)* CMB/49/05A. Geneva: ITC.

Box 13: Overview of market entry issues

- Non-conformity of products with export market regulations due to lack of attention and unreliable supply sources
 - Low level of competitiveness of Cambodian silk products due to high prices, and less structured and less experienced companies
 - Lack of company compliance in terms of company registration and Corporate Social Responsibility (CSR) certification due to difficult formalization requirements
 - Lack of management and communication skills, stemming from lack of training and financial resources
-



Photo: ITC

THE BORDER-OUT GEAR: MARKET ENTRY

Market entry constraints are external to the country but manifested internally. These include issues related to market access, development and diversification, as well as export promotion.

NON-CONFORMITY OF PRODUCTS WITH EXPORT MARKET REGULATIONS DUE TO LACK OF ATTENTION AND UNRELIABLE SUPPLY SOURCES

According to the experience of the CEDEP I programme, in many cases Cambodian silk products still do not conform to market requirements. EU importers, for example, require proof of using azo-free colours for all product parts which can get in regular contact with the human skin. Silk jewellery is required to come with nickel-free silver. While azo-free dyes are available in Cambodia, many companies still lack awareness of and pay scant attention to such market requirements.

It is difficult for SMEs to manage the large number of different final products,⁶⁴ sometimes unknown supply sources, and different materials and accessories to meet market requirements. Supply sources often are not very reliable and the quality of inputs is sometimes insufficient because there are few specialized importers of quality inputs. Importers regularly ask for laboratory tests according to different specifications. As supply quantities tend to be small, the demand for tests causes an unfavourable cost-sales ratio.⁶⁵

64. See product map (figure 6).

65. Silk sector stakeholder consultation, July 2015.

LOW LEVEL OF COMPETITIVENESS OF CAMBODIAN SILK PRODUCTS DUE TO HIGH PRICES, AND LESS STRUCTURED AND LESS EXPERIENCED COMPANIES

Viet Nam, China, and India in particular offer much lower prices of final silk products than Cambodia and have a number of very experienced handicraft exporters with well-established long-term business relations. They benefit from favourable economies of scale, well-structured processes, higher productivity, and lower raw material and service costs. In Cambodia, all businesses start from a lower level and are much less experienced, which makes them less competitive. In general, Cambodian silk SMEs lack awareness about innovative technologies, production methods and efficient tools that could lower production costs.

LACK OF COMPANY COMPLIANCE IN TERMS OF COMPANY REGISTRATION AND CSR CERTIFICATION DUE TO DIFFICULT FORMALIZATION REQUIREMENTS

Most exporters of final silk products are registered as retailers/shops or NGOs. According to the ITC end-line survey of SMEs participating in the CEDEP I project, only one-third of such companies are registered as a commercial entity.⁶⁶ Most SMEs can neither get a C/O nor ship products with Customs clearance by air cargo because they do not have an export licence. Instead, they rely on expensive parcel shipment services and on self-declarations for low value consignments of less than €6,000 to the EU. This is neither in line with the formalization

66. International Trade Centre (2015). *End-Line Company Survey Report (Draft)*. Geneva: ITC.

intended by the Cambodian Government nor sufficient for importers, who require C/Os and air cargo shipment to reduce costs and to avoid long discussions with import Customs authorities in the target market.

SMEs in the silk sector are also often informal and lack the ability to structure and document their compliance with buyer requirements on work safety and labour conditions in their supplier network. Many companies claim to be fair trade-oriented but few can prove to what extent they fulfil fair trade requirements. Fair trade importers request comprehensive information about the suppliers' CSR, its sourcing and production processes, and if possible, certification by fair trade organizations that demonstrate conformity with fair trade standards. Cambodian companies have an increasing need for monitoring/evaluation of the entire supply chain and company certification.

LACK OF MANAGEMENT AND COMMUNICATION SKILLS, STEMMING FROM LACK OF TRAINING AND FINANCIAL RESOURCES

Small-scale exporters are uncertain and lack experience about technical communication in international trade. International customers have particular requirements for detailed and frequent communication that are often not understood by less experienced exporters. Entrepreneurs often lack a proper management education background. They also lack business exposure, knowledge and experience. Order management and quality control continue to be challenges, as businesses suffer from overload of work and lack of qualified staff due to limited financial resources. For many SMEs in the silk sector, there is also still an important international language barrier due to weak basic education in English.

THE DEVELOPMENT GEAR: ENVIRONMENTAL AND SOCIAL SIDE

Socioeconomic constraints include issues related to poverty reduction, gender equity, youth development, environmental sustainability and regional integration.

UNQUALIFIED LABOUR, PARTICULARLY AMONG WOMEN AND YOUTH, DUE TO LIMITED ACCESS TO TRAINING AND CULTURAL RESTRICTIONS AS WELL AS TRADITIONAL HABITS

In general, women have fewer employment opportunities than men in Cambodia due to cultural restrictions and traditional habits on the one hand, and a lack of suitable education on the other. Women lack self-confidence and knowledge, and often have access only to lower job

categories, such as work in garment factories. There is a particular lack of education and training opportunities for women who often have to prioritize family issues and farm work.

In contrast to these general conditions, the silk sector offers a variety of self-determined income opportunities for women. Women can create their own income both by sericulture and by weaving and trade, and thus make an important contribution to family income. Since women do not have to work in factories in the silk sector; they can work from home and arrange their activities around household duties and children's education.

LOW EMPLOYMENT OPPORTUNITIES AND SOCIAL PROTECTION OF DISABLED PERSONS

Another relevant aspect is that, due to the former civil war in Cambodia, a large number of people working in the sector are from underprivileged groups with limited or no access to reliable sources of employment. These include landmine and polio victims, people with disabilities, victims of human trafficking, widows, orphans, out-of-school youth and the poor.

These disadvantaged groups have particularly low income opportunities and are not always supported by a well-developed social security system. This means that there are also a larger number of disabled people in the silk sector who can earn a decent income from silk weaving or production of final handicrafts.

INEQUALITY IN URBAN AND RURAL INCOMES AND LIVING CONDITIONS DUE TO FEW EMPLOYMENT ALTERNATIVES IN REMOTE AREAS

As in many developing countries, rural exodus is a major concern, causing profound social and economic changes. There is a great imbalance between income and employment opportunities in urban and rural areas, leading to considerable migration.

Many women are abandoning their craft occupation and seeking work in one of the cities' booming textile factories. The trend does not represent an imminent threat for the survival of the weaving sector. However, the relevance and economic importance of the sector will depend on its ability to provide competitive alternatives for income generation.

STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS ANALYSIS

Based on the diagnostic done so far, an analysis of strengths, weaknesses, opportunities and threats can be drawn up. Some major strengths, weaknesses, opportunities and threats of the Cambodian silk sector are

summarized in table 10 to provide an overview of the main issues.⁶⁷ While strengths and weaknesses seem to be well-balanced, the opportunities outweigh the threats.

67. Silk sector stakeholder consultation, July 2015 based on International Trade Centre (2011), *Mid-term External Evaluation: Cambodia Sector-Wide Silk Project (Phase II) CMB/49/05A*. Geneva: ITC.

Box 15: Strengths, weaknesses, opportunities and threats analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> ■ Large number of weavers (about 5,000), mostly women, involved in the silk value chain ■ Area-specific silk traditions exist, and there are a large variety of silk weaving techniques in existence ■ Comparatively cheap labour (by international standards) ■ CGS is a brand name for silk professionals ■ Strong fair trade movement and female entrepreneurship in the silk sector ■ Coordination body (SDC) has been set up 	<ul style="list-style-type: none"> ■ Sericulture is close to non-existent and covers less than 1% of silk yarn demand ■ No modern reeling facilities in use ■ High dependency on imports of raw materials ■ Government is committed to supporting the sector but allocates few resources to it ■ Skills training facilities are not sufficient for the entire country and weaving skills are diminishing ■ Inefficient production organization resulting in higher final product prices than in Viet Nam, China or India
Opportunities	Threats
<ul style="list-style-type: none"> ■ Local demand for traditional silk products exists, use of silk is part of the Cambodian culture ■ Increasing number of tourists ■ High potential in niche markets in industrialized countries ■ Improvements in quality, design and supply capacity can open access to higher-value markets ■ Some SMEs plan to invest in sericulture ■ There are not many countries left with a functioning silk weaving sector. Global silk production is decreasing ■ Close to no restrictions on silk importation in developed countries 	<ul style="list-style-type: none"> ■ Strong competition from neighbouring countries ■ Increase in prices for raw materials ■ Alternative employment opportunities in the garment industry make home-based silk weaving less attractive for many young women ■ Risk of loss of skills if the sector declines ■ Animal protection groups could cause significant problems in the future (boiling of pupae)



WHERE WE WANT TO GO

The formulation of a joint vision of the value chain stakeholders and related strategic objectives which are key for achieving the vision will provide guidance for the value chain promotion for the next five years. It will provide a basis for consensus among the different actors and lay out the main fields of intervention.

VISION

The silk sector is important for preserving cultural tradition and providing employment opportunities and income to the rural population and disadvantaged groups. The vision for the value development over the next five years, as articulated by the sector stakeholders, is the following.

“ Revitalized sericulture and a modernized silk sector producing high value products providing sustainable income for women and men ”

STRATEGIC OBJECTIVES

The Silk Strategy vision – ‘Revitalized sericulture and a modernized silk sector producing high value products providing sustainable income for women and men’ – will be achieved through four strategic objectives, which result from the analysis of competitiveness constraints and from the opportunities identified by silk sector stakeholders. The four strategic objectives are in turn broken into detailed operational objectives, which will be achieved through individual implementation activities set forth in the strategy PoA.

1. Enhance the enabling environment and institutional support for the silk sector

Enhancing the business environment will improve the framework conditions of doing business in the silk sector. The improvement of Customs clearance and company registration formalities, as well as assistance to companies to be able to comply with registration and customer requirements, will facilitate trade. Improved policy regulations and sector statistics, R&D in sericulture, and the establishment of a silk development fund will stimulate investment.

2. Facilitate market entry and promotion for Cambodia’s high value silk products

Improved market entry will be achieved through trade promotion programmes on the international market, particularly by allowing SMEs to participate in international

trade fairs, as well as comprehensive silk promotion activities (silk festival, fashion shows, product labelling) in Cambodia to boost local demand. In addition, better linkages with the domestic garment and fashion industry must be created.

3. Develop skills and improve product quality, design and innovation in the silk textile and garment subsectors

Skills and value chain development aim at increasing the capacity of weavers, silk SMEs and traders to improve their business performance, productivity and efficiency. This will include a broad range of activities such as the introduction of new technologies, technical trainings for weavers and service providers, business trainings for SMEs and traders, design innovation, the introduction of standards, improved business linkages, etc. The promotion of improved business linkages, innovative business models, vertically integrated companies and overall better coordination of actors in the value chain will make the silk sector more competitive.

4. Revitalize and strengthen integration of sericulture in the silk value chain to increase domestic silk yarn production

The revitalization of sericulture aims at rebuilding Cambodia’s own in-country production of genuine Cambodian silk yarn as the basis for weaving silk fabric. This will be achieved by promoting investment of SMEs in

sericulture, by introducing white silk production in addition to CGS, by increasing the know-how of silkworm breeders on silkworm rearing and mulberry tree cultivation, and by supporting irrigation.

MARKET DEVELOPMENT OPTIONS

The market for Cambodian silk products can be divided into three different segments: a) the local Khmer market, b) the tourist and expat market and c) the export market:⁶⁸

- Domestic market (local Khmer market): 50%
- Tourist market (including expats): 30%
- Export market: 20%

Overall sales volume was estimated to be US\$25 million in 2012.⁶⁹ While it is estimated that the market share of the local Khmer market recently went down from 70% to about 50%, the tourist/expat market share went up to 30% and the export market share to an estimated 20%.⁷⁰ All three market segments are considered to have further growth potential. Silk products are exported to many different countries, including Japan and other Asian markets; Germany, France and other European countries; the United States/Canada; and Australia/New Zealand.⁷¹ In fact, silk products from Cambodia find markets all over the world. The Internet market is still of negligible relevance, but exists and will have increasing growth potential in future.

DOMESTIC MARKET

Each respective province has local silk traders in the market. These local traders sell silk yarn and silk fabrics. They can be located easily by the majority of consumers. Mostly, these silk traders also act as middlemen providing yarn to weavers. In Phnom Penh, there are various locations such as Olympic Market, Orussey Market, Central Market, Kandal Market, Tuol Tom Pong; as well as some shops along popular streets in Phnom Penh such as Sothea Boulevard, where locally designed products are visible to the local consumer.

Main market segments and distribution channels in the local Khmer market are:

- Direct sales to local end users for their personal use;
- Production for local businesses such as hotels, airlines, aviation companies, banks, tourism agencies and fashion agencies;

- Sales to local retail shops, individual market vendors, middlemen/wholesalers and silk companies with their own retail or wholesale shops at Central Market, Orussey Market or Tuol Tom Pong market.

Ikat weavings, scarves, bags and silk garments are popular on the domestic market and often worn at official occasions. Wearing silk brings status, dignity and a wealthy image. Sampot skirts made of ikat, phamuong skirts, silk dresses, etc. are commonly worn by the local population and are widely available at local markets. Corporate businesses order corporate uniforms, gifts and interior decoration items.

In the local wholesale and retail shops market, the main product groups are bags, accessories, corporate gifts, fashion jewellery, scarves and silk fabric (plain, ikat, ikat-chorebab and chorebab). Top critical success factors in the local Khmer market are colours, quality of silk, dyeing/colour fastness, ikat patterns, skilled master weavers and production according to personal tailor-made specifications. In comparison with competitors, particular strengths of local products are the use of ikat and chorebab patterns as a sign of cultural heritage. Neighbouring countries are highly competitive in terms of price, quality and colours.

The main products for local businesses are uniforms, ties, interior decoration items such as curtains, cushions, cushion covers, bed runners and bedlinen (such as duvet covers, blankets, traditional bed cushions, etc.), wall hangings, silk frames, etc. and fashion garments for business events. Top critical success factors for this market segment are production capacity, delivery time, colour/design consistency, fashion trends, designs and weaving/sewing patterns. Particular strengths in comparison with competitors are the respect of fair trade values and the preservation of cultural designs slightly converted to contemporary applications. Neighbouring countries are competitive in terms of design, price, quality, service and social responsibility.

There is high potential for better market penetration. To achieve this and to preserve the cultural silk tradition, it is deemed necessary to promote the continuity of the tradition of wearing silk among Cambodian youth. Fashion shows with national designers and popular actors showing silk clothes, and silk bags and purses should help develop contemporary Khmer style further.

In terms of product diversification, new designs of fashion jewellery, silk ties, silk shoes, silk tissue boxes and more can be promoted. There is an emerging trend to use more silk fabric for interior decoration items such as sofa blankets, curtains, wall hangings, bedspreads, table runners and pillow cases.

68. MoC/ITC seminar 21–22 July 2015.

69. Kingdom of Cambodia (2014). *Cambodia Trade Integration Strategy 2014–2018*. Phnom Penh.

70. Silk sector stakeholder consultation, July 2015.

71. Silk sector stakeholder consultation, July 2015.

Table 10: Opportunities in the domestic market

Main target market – individual consumers				
Distribution channels	Products with high market demand	Potential for product diversification	Critical success factors	Comparison with competitors
<ul style="list-style-type: none"> • Retail shops • Silk vendors • Middlemen • Local markets such as Central market, Orussey market, etc. 	<ul style="list-style-type: none"> • Silk fabric • Sampot skirts • Phamuong skirts • Shirts • Dresses • Scarves • Bags • Accessories • Home decor 	<ul style="list-style-type: none"> • Silk jewellery • Ties • Shoes • Tissue boxes 	<ul style="list-style-type: none"> • Colour • Quality • Dyeing • Colour fastness, ikat pattern • Reputation of the master weaver 	<ul style="list-style-type: none"> • Strengths are ikat and chorebab patterns and the cultural heritage • Neighbouring countries are competitive in terms of price, quality and colours
Main target market – corporate businesses (hotels, airlines, aviation companies, banks, fashion agencies)				
Distribution channels	Products with high market demand	Potential for product diversification	Critical success factors	Comparison with competitors
<ul style="list-style-type: none"> • Direct contracts with silk SMEs 	<ul style="list-style-type: none"> • Uniforms • Ties • Interior decoration • Fashion dresses 	<ul style="list-style-type: none"> • Silk jewellery • Ties • Shoes • Tissue boxes 	<ul style="list-style-type: none"> • Production capacity • Delivery time • Fashion trends • Design and weaving patterns • Quality 	<ul style="list-style-type: none"> • Competition mainly within Cambodia • Strengths are fair trade values and traditional designs, price, quality and service

SUMMARY OF THE DOMESTIC MARKET

- Increase local consumption of silk products by promoting the cultural identity of wearing silk among Cambodian youth
- Organize national events such as fashion shows or an annual silk festival with popular actors
- Diversify the product range by promoting silk for interior decoration and other new types of silk products

TOURIST MARKET

Siem Reap (Angkor Wat) and Phnom Penh are the main tourism centres, with hundreds of souvenir shops, night market stalls and more exclusive boutiques serving the tourist market. The number of international tourist arrivals doubled within five years (2008–2013) from 2,125,465 to 4,502,775 tourists. Most (77.7%) foreign tourists are from Asia (20.1% from Viet Nam, 12.4% from China, 10.2% from the Lao People's Democratic Republic, 9.4% from the Republic of Korea, 6.2% from Thailand, 4.8% from Japan), 15.7% are from Europe, 6.1% are from North America, 3.5% are from Oceania, 0.3% from the Middle East and 0.1% from Africa.⁷²

More and more Asian tourists and more and more affluent middle class tourists are visiting the country. There is

a trend towards more exclusive interior decoration and fashion shops which also sell a large number of silk products. Asian tourists are a particularly interesting target group for silk products. Scarves are the main product for all kinds of tourists. In addition, Asian tourists mainly buy accessories and silk jewellery; while French tourists are more interested in silk clothing, and American tourists go more for cushion covers and silk jewellery. The products are mostly used as gifts or for personal use.

There is an increasing number of Asian tourists from neighbouring countries (Viet Nam, Thailand and the Lao People's Democratic Republic), but also from Asian countries with higher purchasing power such as Japan, China, the Republic of Korea, Singapore, Malaysia and Indonesia. Asian tourists are attracted by the cultural importance and beauty of the ruins of the Angkor Empire and have a particular taste for and tradition of wearing silk. There is also a significant market share of 25.3% of tourists from Europe, North America and Oceania, including a growing number of more affluent middle class tourists. All different tourist market segments constitute important target groups for selling silk products. According to the draft end-line survey of the CEDEP I programme, sales to tourists by the 14 beneficiary companies grew by 80% in the space of two years.⁷³

72. Cambodia, Ministry of Tourism (2014). *Tourism Statistics Report December 2014*. Phnom Penh.

73. International Trade Centre (2015). *End-Line Company Survey Report (Draft)*. Geneva: ITC.

The main products sold to tourists are scarves, accessories, silk jewellery and cushion covers. Silk products are light and easy to carry and are perfect souvenirs for personal use or as a gift. Top critical success factors for sales to tourists are the ethical/social background of the supplier, colours and designs, and quality in terms of softness, smoothness and finishing. Products from Thailand, the Lao People's Democratic Republic, and Viet Nam compete in the tourist and expatriate market in terms of design, price, quality and ethical production.

There is some potential for product diversification in terms of promoting more organic, eco-friendly, natural silk products. Tea from mulberry leaves, cosmetic products produced from cocoons and stationery products produced from mulberry paper would also be interesting products for sales to tourists. Important elements for better promotion of national silk products in the tourist market are improved business linkages with souvenir shops in Phnom Penh and Siem Reap, and product labelling and certification. There is particular potential for organic/eco-friendly products including the use of natural dyes.

The organization of a national silk festival/fashion show and stronger links with tour operators will also be

important for promoting silk in the tourist market. The silk sector plays an important role in conserving the cultural heritage of Cambodia, which is also important for tourism promotion. Special promotion activities by MoT and airline companies can also benefit the silk sector.

SUMMARY OF THE TOURIST MARKET

Short-term measures:

- The organization of an annual silk festival and fashion shows would be helpful both for promoting sales of silk products and for serving as tourist attractions
- To better penetrate the tourist market, business linkages between silk producers and souvenir shops must be strengthened

Medium-term measures:

- Boutiques selling silk products can be upgraded to serve higher-value, more exclusive market segments
- National silk products should be labelled and certified as authentic Cambodian handicrafts to differentiate them from imported mass production items

Table 11: Opportunities in the tourist market

Main target market – tourists from Germany, France and Japan				
Distribution channels	Products with high market demand	Potential for product diversification	Critical success factors	Comparison with competitors
<ul style="list-style-type: none"> • Retail shops 	<ul style="list-style-type: none"> • Accessories • Scarves • Jewellery 	<ul style="list-style-type: none"> • Organic, eco-friendly products with natural dyes • Tea from mulberry leaves • Cosmetic products • Mulberry paper 	<ul style="list-style-type: none"> • Ethical production • Quality • Colours and design • Use of natural dyes 	<ul style="list-style-type: none"> • Main competitor is Thailand • Laotian ethnic designs are strong but Laotian quality is worse
Main target market – tourists from France				
Distribution channels	Products with high market demand	Potential for product diversification	Critical success factors	Comparison with competitors
<ul style="list-style-type: none"> • Retail shops 	<ul style="list-style-type: none"> • Scarves • Clothes 	<ul style="list-style-type: none"> • Organic, eco-friendly products with natural dyes • Tea from mulberry leaves • Cosmetic products • Mulberry paper 	<ul style="list-style-type: none"> • Colours and design 	<ul style="list-style-type: none"> • Products from Thailand are less appreciated in terms of colours and designs • Products from Viet Nam are preferred in terms of price, quality and design
Main target market – tourists from the United States				
Distribution channels	Products with high market demand	Potential for product diversification	Critical success factors	Comparison with competitors
<ul style="list-style-type: none"> • Retail shops 	<ul style="list-style-type: none"> • Scarves • Cushion covers • Jewellery 	<ul style="list-style-type: none"> • Organic, eco-friendly products with natural dyes • Tea from mulberry leaves • Cosmetic products • Mulberry paper 	<ul style="list-style-type: none"> • Ethical production • Design • Quality • Softness 	<ul style="list-style-type: none"> • Cambodian products are more competitive than Thai, Vietnamese or Laotian silk.



Photo: ITC

EXPORT MARKETS

As indicated in table 2, the major export markets for final silk products (silk shawls, scarves, veils, ties, other silk accessories, and women's and men's silk clothing) are North America, Europe and Asia. With US\$ 1.266 billion of imports, the United States is the leading single world importer of final silk products. As a group, Europe accounts for an even larger share of total world imports of final silk products. Only the four largest European markets –France, the United Kingdom, Germany and Italy– imported silk products worth US\$ 1.784 billion. Japan (US\$ 438 million) and Hong Kong (China) (US\$ 400 million) are the biggest markets for silk products in Asia.

Imports of silk shawls, scarves, veils, ties, other silk accessories and silk clothing by the eight biggest international markets totalled US\$ 4.156 billion in 2014. In comparison, Cambodia's total exports of silk products in the period 2010–2014 to its eight main markets were only US\$ 22 million (see table 2) which compares to about 0.5% of the market potential of just the eight main international markets for silk products. This demonstrates the tremendous untapped market potential of the world market for silk.

Cambodian silk exporters are present in all main markets, ranging from the United States/Canada and many European countries to different Asian markets, as well as clients in Australia and New Zealand. All these markets still offer tremendous opportunities for increasing sales of scarves, bags, clothing, fashion jewellery and interior decoration items. Handwoven product quality, organic production/use of natural dyes and fair trade compliance provide ample export possibilities.

In terms of product categories, particular opportunities are seen in the:

- **European market** for scarves, fashion jewellery, bags, Christmas ornaments, recycled accessories, pillow cases, toys and fabric;
- **United States/Canadian market** for pillow cases, ties, scarves, Christmas ornaments, fashion jewellery, bags, clothing (dress) and fabric (plain and ikat);
- **Asian market** for handkerchiefs, scarves, fashion jewellery, bags, clothing, fabrics, Kimono belts, ornaments, pillow cases and ties;
- **Australian/New Zealand market** for scarves, fabric, toys, fashion jewellery and bags.

Table 12: Main importers of silk scarves, veils, ties, accessories and silk clothing 2014⁷⁴

Rank	Country	Value (US\$ thousands)
1	United States	1 266 125
2	France	516 493
3	United Kingdom	514 263
4	Japan	438 383
5	Germany	407 456
6	Hong Kong (China)	400 051
7	Italy	346 083
8	United Arab Emirates	267 629

74. Source: ITC calculations based on United Nations Comtrade data.

Table 13: Opportunities in export markets

Main target market – Europe				
Distribution channels	Products with high market demand	Potential for product diversification	Critical success factors	Comparison with competitors
<ul style="list-style-type: none"> • Retailers • Fair trade wholesalers 	<ul style="list-style-type: none"> • Scarves • Bags • Toys and ornaments 	<ul style="list-style-type: none"> • Fashion jewellery • Recycled products • Home decoration, (curtains, bedding, etc.) • Christmas ornaments • Jackets & blouses • Personal accessories 	<ul style="list-style-type: none"> • Eco-friendly • Organic • Price • Quality and softness of the silk • Handmade production • Producer story • Design • Functionality • Durability 	<ul style="list-style-type: none"> • Thailand and the Lao People's Democratic Republic offer consistent quality and India much lower prices, while China focuses on factory-made silk products. Cambodia's advantage is the diversity of suppliers in the fair trade field • Disadvantage: no organic certification in Cambodia
Main target market – United States / Canada				
Distribution channels	Products with high market demand	Potential for product diversification	Critical success factors	Comparison with competitors
<ul style="list-style-type: none"> • Retailers • Fair trade wholesalers 	<ul style="list-style-type: none"> • Scarves • Home decoration • Silk jewellery 	<ul style="list-style-type: none"> • Wedding gifts • Wraps & shawls • Summer dresses & nightdresses 	<ul style="list-style-type: none"> • Eco-friendly • Organic • Price • Quality and softness of the silk • Design 	<ul style="list-style-type: none"> • China, India and Viet Nam are main competitors • Limited production capacity in Cambodia and the loom width of 1–1.2 m are disadvantages
Main target market – Asia				
Distribution channels	Products with high market demand	Potential for product diversification	Critical success factors	Comparison with competitors
<ul style="list-style-type: none"> • Retailers 	<ul style="list-style-type: none"> • Toys and ornaments • Silk fabric • Bags • Scarves 	<ul style="list-style-type: none"> • Kimonos • Kimono belts • Silk jewellery • Business suits • Funeral dress • Pillow cases • Ties 	<ul style="list-style-type: none"> • Use of CGS and natural dyes 	<ul style="list-style-type: none"> • Strong competition from Thailand and the Lao People's Democratic Republic for handwoven silk • Limited production in Cambodia and low price level in China
Main target market – Australian / New Zealand				
Distribution channels	Products with high market demand	Potential for product diversification	Critical success factors	Comparison with competitors
<ul style="list-style-type: none"> • Retailers • Fair trade wholesalers 	<ul style="list-style-type: none"> • Scarves • Shawls • Bags • Clothing • Accessories 	<ul style="list-style-type: none"> • Fashion jewellery • Recycled products • Home decoration 	<ul style="list-style-type: none"> • Fair trade certification 	<ul style="list-style-type: none"> • Competition with Viet Nam

Top critical success factors in Europe and the United States are the production of eco-friendly/organic products, price, the quality/softness of the silk, handmade production, producer story, design, functionality and durability. The Japanese market has a particular appreciation of CGS and the use of natural dyes.

Main competitors are Thailand, Viet Nam, China, India and the Lao People's Democratic Republic. Particularly China, India and Viet Nam offer much lower prices and bigger quantities, while Thailand and the Lao People's Democratic Republic are known for consistent product quality of hand-woven silk. An advantage of Cambodia is the diversity of suppliers in the fair trade field and the fact that the production is not machine-made. Thailand is well known for more industrialized silk items. The small width of the weaving loom used in Cambodia (often only one metre) is a handicap. Thailand, China, India and Viet Nam are exporting much higher volumes which cannot be compared with Cambodia. Products from these countries are often found in the markets in Cambodia. Stakeholders deplore that they find foreign products labelled 'Made in Cambodia'.⁷⁵

Cambodia is less competitive in the mass market for silk products. Instead, Cambodian products mostly sell in niche markets such as the fair trade market segment and in shops selling ethnic crafts. Products using natural dyes are welcome too. In general, buyers are pushing in favour of a stronger effort to comply with international market requirements: fair trade and CSR standards, and international standard requirements such as azo-free, pentachlorophenol-free, traceability, textile labelling in the customer's language and C/O.

EUROPEAN MARKET

The EU is one of the most lucrative markets in the world for silk fashion accessories and clothing. European customers value authentic and handmade products, which have become a real market trend in Europe. The European market is highly price-competitive. Buyers are looking for suppliers who can help save costs and who can ensure that orders arrive in the right quantity and quality, in good shape and in time.

Emphasis should be put on essential products, added value and high-end products. A mix of ethnic design, contemporary styles and trends, and colours are the elements most in demand. Product safety standards, ecological standards and socioeconomic standards are also very important. 'Ethical fashion' and 'organic/green' are strong trends. By far the most popular product on the EU market is Cambodian silk scarves, which are appreciated in France, Italy, Germany, Austria and Denmark.

Silk jewellery is of interest to buyers across all European countries and market segments, while silk bags are less suitable for the cold and rainy environment.

While some buyers are willing to spend more as long as the quality of the products is good enough and the materials used look unique, the majority of buyers, particularly wholesalers, are very sensitive to prices. Wholesalers find it difficult to sell Cambodian silk products if prices increase even slightly for more intricate designs.

With regard to stronger market penetration, Cambodia's main markets still offer high potential. This applies particularly to Italy. With imports of silk shawls, scarves, veils, ties, other silk accessories and silk clothing worth US\$346 million in 2014, it is one of the world's biggest silk importers but remains largely untapped by Cambodian exporters. France also holds high further potential due to its huge fashion market, the historical relationship between the two countries and the presence of an important Cambodian diaspora in France. However, compared with the import figure of US\$516 million in 2014, Cambodian exports of silk products to France of less than US\$1 million in the period 2010–2014 were marginal.

The United Kingdom market, the second-largest European market for silk products, so far is poorly developed as well, with Cambodian silk exports to the United Kingdom amounting to only US\$2 million in 2010–2014. Cambodian exports of silk to Germany saw an increase in the last 10 years, but are still at an even lower level with only about US\$0.4 million in 2010–2014. Luxembourg, with US\$1.1 million, is on the list of Cambodia's top 10 export destinations for silk in 2010–2014. Switzerland is also referred to by Cambodian exporters as being a good market for Cambodian silk. All these markets still offer great opportunities for expanding market share.

New, promising, largely untapped European markets for Cambodian silk are the Netherlands, Spain, the Russian Federation and other Central and Eastern European countries. The Netherlands have strong textiles and crafts trading companies, and several Dutch NGOs support the import of handicrafts to the Netherlands. Spain is a relatively large market with a climate suitable for silk clothes and bags. Spanish buyers have repeatedly made contact with Cambodian companies at trade fairs.⁷⁶ Due to increasing income and a growing number of tourists from Central and Eastern Europe, the Russian Federation and neighbouring countries are mentioned regularly by Cambodian exporters as promising new export locations.⁷⁷

Fashion jewellery made from silk has recently been successfully introduced recently to the European market as

75. International Trade Centre (2009). *Sector-Wide Strategy for the Cambodian Silk Sector*. Geneva: ITC.

76. *Ibid.*

77. Silk sector stakeholder consultation, October 2015.

a new product. It holds particular potential for future sales growth, as well as recycled products made in combination with silk. There is a whole new 'upcycling' market which developed in the EU and to which some Cambodian silk exporters have already developed linkages. Home decoration such as curtains, bedding and Christmas ornaments made from silk offer new market diversification potential. Further diversification potential is seen for silk garments such as jackets and blouses, as well as personal accessories made from silk such as eye shades.⁷⁸

UNITED STATES / CANADIAN MARKET

The single most important import market for final silk products, the United States market is also Cambodia's main silk export market. However, compared with the total import value of silk products to the United States of US\$1.2 billion in 2014, Cambodia's silk exports to the United States of US\$10 million in the period 2010–2014 represent a market share of less than 1%. The United States remains a high potential destination for Cambodian silk. As many Cambodian SMEs have developed business linkages with importers and NGOs in the United States, there is good potential for further growth. Canada is a stable market for Cambodian silk exporters too, with a number of companies buying from Cambodia and total exports of Cambodian silk products of US\$1.3 million in 2010–2014.

The main silk product groups exported from Cambodia to the United States/Canadian market are scarves, home accessories and silk jewellery. While the consumption of large home decoration items has been declining or stagnating recently, gift items and seasonal products such as Christmas gifts and ornaments have been less affected. Silk jewellery is particularly found to be innovative and catches the interest of buyers in the United States. Silk necklaces, pendants, earrings, rings, bracelets, brooches, hair accessories (hair clips, headbands, hair pins, ribbons), accessories for men (ties) and children (hair ornaments, rings, necklaces), as well as soft silk scarves, have high market potential.⁷⁹

China, India and Viet Nam have strong market positions in the handicraft market in the United States/Canada. They are highly competitive and Cambodia has to offer prices, quality and services which are comparable. However, the United States/Canadian market distinguishes between mass-produced 'industrial handicrafts' and more authentic items handmade by producers in developing countries. Such unique handcrafted products have more appeal in high-end markets. As in other developed markets, there

is increased awareness of environmental and social concerns in the United States and Canada.

Cambodian silk exporters see the fashion market in the United States/Canada as a particularly promising opportunity to diversify the product range. Cambodian exporters recently participated in fashion shows in the United States and developed contacts to American fashion brands for which products can be produced. Wedding gifts made from silk, wraps and shawls, summer dresses and silk nightdresses are interesting new products for the American market.⁸⁰

The export distribution channels are flattening. While they involved four to five players before (artisan/producer – exporter – importer/wholesaler – retailer – end consumer), this number has been reduced to two to three players (artisan/exporter – importer/retailer – end consumer). Buyers increasingly tend to request their suppliers to comply with a set of values and business practices. Large discounters/mass retailers and department stores play an important role in the market but have high requirements in terms of quantities needed, timely delivery, packaging, quality and company compliance. Few exporters from developing countries are able to supply orders of this type. More suitable target groups for Cambodian silk exporters are the so-called 'alternative trade organizations' who often work directly with artisans in developing countries and act as importers, wholesalers, agents and retailers; as well as specialty retail shops.⁸¹

ASIAN MARKET

Japanese imports of silk products totalled US\$438 million in 2014. Japan is one of the most dynamic markets in the world. Though being a major destination for Cambodian silk exporters, as in Europe and the United States, Cambodian exports of silk products to Japan (US\$2 million in 2010–2014) are marginal compared with the market size.

The interior decoration market in Japan is growing as Japanese customers pay more and more attention to their lifestyle. Although environmental concerns have always existed, the 'green' trend has strengthened in the last few years. Particularly in the higher and less price-sensitive market segments, Japanese customers seek authentic and durable lifestyle products. Quality expectations are reported to be highest in the Japanese market. Design and story, including fair trade certification, are key elements for exporters to differentiate from competitors. Ecological and socioeconomic standards, including the use of organic products and natural dyes, are of growing

78. Silk sector stakeholder consultation, October 2015.

79. International Trade Centre (2013). *Market Opportunities for Cambodian High Value Silk in the United States*. Geneva: ITC.

80. Silk sector stakeholder consultation, October 2015.

81. International Trade Centre (2013). *Market Opportunities for Cambodian High Value Silk in the United States*. Geneva: ITC.

importance. This is an asset for Cambodian silk companies, which are often social enterprises working with natural dyes and weavers in rural areas.⁸²

Buyers are increasingly interested in items that are unusual in design and materials, such as a distinctive embellishment (hand beading or embroidery), a combination of materials (for example, silk and leather), or a layering of colours, patterns and textures. The uniqueness of the product and differentiation in terms of pattern, style and traditional design are also important. The Japanese are particularly sensitive to novelty and so are always looking for new products. The originality of the product and the brand concept are becoming increasingly important. The typical life cycle of a product design is six months. There is a trend to increasingly use fashion accessories such as soft silk scarves, silk jewellery and hairbands.

The Japanese market is characterized by a high percentage of specialty stores (53% market share) and department stores (27% market share). While exporters had to go through importers/wholesalers in the past, the number of intermediaries has decreased and more and more retailers have decided to negotiate directly with suppliers.⁸³ Cambodian silk exporters participate regularly in trade or training missions to Japan and have also exhibited regularly at Japanese trade fairs for many years, which is a contributing factor to why Japan is Cambodia's main export market for silk.⁸⁴

Singapore and the Republic of Korea are other important Asian markets for Cambodian silk. Cambodian SMEs developed a number of business linkages with Singapore and the Republic of Korea in the past. The increasing number of Singaporean and Korean tourists interested in Cambodian history/culture, and their countries' strong economies, play an important role too. A particularity of the Korean market is that silk cloth is often used for funerals. Handwoven silk cloth for funerals is rather expensive and considered to be a good market opportunity.

In terms of product categories, kimonos, silk jewellery, wedding dresses, funeral dresses and silk fabric are products that can be promoted in the Japanese and Korean markets.⁸⁵ In general, handwoven silk is regaining popularity in the Asian market and a number of emerging economies have increased purchasing power. Countries such as Indonesia, China, the Philippines, Brunei Darussalam and Myanmar are considered to be interesting new markets for Cambodian silk.

82. International Trade Centre (2013). *Market Opportunities for Cambodian High Value Silk in Japan*. Geneva: ITC.

83. *Ibid.*

84. International Trade Centre (2013). *Overview of Key Importing Markets for Cambodian High Value Silk*.

85. Silk sector stakeholder consultation, October 2015.



Photo: ITC

AUSTRALIAN / NEW ZEALAND MARKET

Geographical proximity makes Australia and New Zealand natural trading partners. The relationship between Australian and New Zealand buyers and Cambodian silk exporters is long-standing and promising. Export of silk products to Australia amounted to US\$1.7 million in 2010–2014. Directly importing retailers are the main target group, often establishing a first contact when visiting Cambodia as tourists, fair trade wholesalers or fair trade-related companies. Scarves and shawls, accessories, clothing and bags are the main product groups.

ARAB MARKETS

Arab countries offer increasing potential for silk exports. The United Arab Emirates is one of the biggest importers of silk products (US\$267 million for silk shawls, scarves, veils, ties, other silk accessories and silk clothing in 2014) and was one of Cambodia's main silk export destinations in the period 2002–2006. Kuwait recently became one of Cambodia's main export destinations for silk in 2010–2014.

The export market potential is huge, as recent data from the CEDEP I programme shows as well: the export of silk products by 14 companies supported grew by 41% from 2012 to 2014. By the end of 2015, the growth projection for 2012–2015 based on the results from the first four months of 2015 and export orders in the pipeline was 80%.⁸⁶

86. International Trade Centre (2015). *End-Line Company Survey Report (Draft)*.

SUMMARY OF THE EXPORT MARKET

Short-term measures:

- There is high potential to increase the market share in Cambodia's main current export markets: (1) United States, (2) Singapore, (3) Japan, (4) United Kingdom, (5) Australia, (6) Canada, (7) Luxembourg, (8) France, (9) Kuwait and (10) Germany.
- New, promising markets to be developed are the Netherlands, Spain, the Russian Federation and other Central and Eastern European countries in Europe; and Indonesia, China, the Philippines, Brunei Darussalam and Myanmar in Asia.
- A comprehensive trade promotion programme with repeated participation in leading trade fairs should support Cambodian exporters to develop their customer portfolio.

Medium-term measures:

- Product range diversification should include fashion jewellery, recycled products, home decoration, and particularly all kinds of silk clothing and accessories (blouses, jackets, summer dresses, nightdresses, ties, etc.).
- To increase competitiveness, design innovation and quality improvements need to be promoted, and productivity needs to be increased.

Long-term measures:

- The capacity of exporters to comply with customer requirements needs to be strengthened.
- Cambodia should position itself as a leading producer of handwoven silk products in the fair trade, organic and ethnic niche markets.

Box 16: Value options

Improve efficiency

- Raise productivity of sericulture farming through an increase in cultivated land and semi-mechanization of the reeling process
- Support R&D in sericulture by strengthening agricultural stations
- Improve extension services in sericulture for increased know-how of silkworm breeders
- Improve weaving, dyeing and handicraft production processes
- Professionalize export companies and improve sector coordination
- Strengthen value chain integration by promoting investment, contract farming and innovative business models of weavers, service providers and middlemen
- Provide support to promote investment in the silk sector
- Improve framework conditions for export companies
- Promote Cambodia's silk sector through the ASEAN regional network

Retain more value in the country

- Substitute silk yarn imports by introducing the production of white silk yarn in Cambodia
- Increase use of natural dyes
- Develop domestic packaging and labelling services
- Develop linkages with the garment and fashion industry

Add value by improving existing products

- Innovate designs and diversify the product range
- Introduce and certify quality standards and promote organic, fair trade and other standards

Create value by developing new products

- Develop a national silk label and promote the cultural identity of wearing silk
- Establish stronger linkages with the tourism industry to promote the silk sector
- Encourage the use of cocoons in the cosmetic industry
- Provide employment for disabled persons and other disadvantaged population groups

Contribute to development

- Promote women's entrepreneurship and employment
- Develop stationery products from silkworms and mulberry trees

STRUCTURAL IMPROVEMENTS TO THE VALUE CHAIN

A number of structural improvements of the value chain were suggested by value chain stakeholders, which have been grouped according to the following five value options:

IMPROVE EFFICIENCY

The value chain can enhance its competitiveness mainly by increasing productivity of sericulture farming and reeling; by improving weaving, dyeing and handicraft production processes; by strengthening value chain integration; by professionalizing export companies; and by enhancing the enabling environment.

1. RAISE PRODUCTIVITY OF SERICULTURE FARMING THROUGH THE INCREASE OF CULTIVATED LAND AND SEMI-MECHANIZATION OF THE REELING PROCESS

The currently low productivity of sericulture farmers of 6 kg of silk yarn per farmer in 2007 needs to be increased to an estimated production potential of 15 kg/silk farmer.⁸⁷ One possibility to increase productivity is the combination of producing both CGS and white silk yarn. It is necessary to support community development, organize farmer groups and create/strengthen FOs to provide for better provision of extension and input supply services, and pooling of resources. Irrigation also needs to be improved.

The limited tools for hand reeling of silk yarn need to be improved. This can be done by improving the traditional tools and equipment used for the production of CGS and by introducing industrial reeling machines for white silk yarn in the framework of PPPs.

2. SUPPORT R&D IN SERICULTURE BY STRENGTHENING AGRICULTURAL STATIONS

In addition to the agricultural station in Kandal Province, a number of other agricultural stations of MAFF need to be equipped with technology, funds and know-how to conduct research on suitable mulberry tree and silkworm varieties, as well as to provide sericulture farmers with disease-free silkworm eggs and mulberry tree plants. R&D is particularly needed for the introduction of white silk yarn production, with regard to high potential and

well-adapted silkworm and mulberry varieties, disease-control and equipment.

3. IMPROVE EXTENSION SERVICES IN SERICULTURE FOR INCREASED KNOW-HOW OF SILKWORM BREEDERS

The capacity of MAFF to provide trainings to farmers on silkworm rearing and integrated agricultural practices on mulberry tree cultivation needs to be strengthened, and the number of qualified extension agents needs to be increased. A number of MAFF extension officers need to be trained in different provinces in order to be able to provide training to silkworm breeders. The extension services need to cover topics such as planting and growing mulberry trees and raising silkworms. The training programmes should further include irrigation and provide farmers with know-how on suitable small-scale irrigation techniques.

4. STRENGTHEN VALUE CHAIN INTEGRATION BY PROMOTING INVESTMENT, CONTRACT FARMING AND INNOVATIVE BUSINESS MODELS OF WEAVERS, SERVICE PROVIDERS AND MIDDLEMEN

Value chain integration can be strengthened in two ways. First, SMEs producing final handicrafts can further integrate sericulture production, dyeing and product finishing functions in their activities. Integrated models with contract farming for sericulture, industrial reeling and in-house dyeing and finishing can be developed to increase efficiency and mitigate investment risk. Such models can be pursued by quite a number of the leading SMEs in the silk sector, leading to a significantly changed value chain structure.

Second, innovative business models of weavers, service providers and middlemen can be promoted as well so that they cover several functions in the value chain. As shown by the latest ITC survey on weaver income, incomes vary widely. Some more entrepreneurial weavers have developed successful business models, employing a large number of other weavers and/or providing services to other weavers, which allow them to reach quite a high income.⁸⁸ Such business-minded entrepreneurs can be growth models for other weavers, demonstrating more efficient methods of production, increased scale and better organization, with high income-generation possibilities. This would contribute to more structured silk sector development, which would be based on SMEs rather than individual weavers. Employed weavers would benefit from more stable income and better market access.

87. International Trade Centre (2014). *Value Chain Analysis of the High Value Silk Sector – Cambodian Export Diversification And Expansion Programme (CEDEP I): High Value Silk Component*. Geneva: ITC.

88. International Trade Centre (2015). Primary data of the *End-Line Weaver Survey Report (Draft)*.

5. IMPROVE WEAVING, DYEING AND HANDICRAFT PRODUCTION PROCESSES

Traditional weaving looms need to be equipped with improved reeds which allow faster production and more diversified textile patterns. Weavers need to be trained in different provinces in cooperation with silk SMEs.

In addition to continued hand weaving in part of the production – as a key feature of the Cambodian silk industry – the use of semi-automatic looms should be promoted to increase productivity. This is particularly necessary for developing the export market. Cambodian silk SMEs should become more competitive by using different weaving technologies for different product groups.

The increasing use of deep dye techniques is another possibility to improve productivity and make products more competitive. The number of qualified service providers is currently very limited. There is potential to train more people to provide deep dye services to silk SMEs. Dyeing units should be available in each silk weaving province. Warp set-up services are another important service for increasing productivity and improving quality at weaver level. The number of qualified service providers for warp set-up has to be increased as well. Warp set-up services should be available at village level.

Productivity increases should also be envisaged with regard to dyeing, printing, sewing and embroidery. Research and pilot projects should be conducted on potential productivity increases in weaving, dyeing, printing, sewing and embroidery; with expert advice, coaching and technical training.

6. PROFESSIONALIZE EXPORT COMPANIES AND IMPROVE SECTOR COORDINATION

Cambodian enterprises must be made aware of regulations and procedures. Workshops should include training sessions on subjects such as how to identify new markets, understanding market access conditions, marketing strategies, supply chain management and advocacy.⁸⁹

Silk SMEs working in foreign markets need to be registered as exporters in order to be able to fulfil buyers' requests for regular Customs clearance documentation. In addition, transparency about company compliance with fair trade and CSR standards needs to be improved. The capacity of SMEs to work on larger export orders needs to be enhanced. This requires more reliable planning and handling of orders, as well as better communication in English.

89. International Trade Centre (2014). *Cambodia: Company Perspectives – An ITC Series on Non-Tariff Measures*. Geneva: ITC.

To improve framework conditions, it is suggested to establish a particular silk sector policy to implement key recommendations of the silk sector strategy. In order to channel support and stimulate public–private dialogue, associations will be set up at provincial level. The management of sector statistics needs to be improved and better transparency about market prices should be ensured.

7. SUPPORT TO PROMOTE INVESTMENT IN THE SILK SECTOR

The establishment of a silk development fund to provide investment and financing schemes can trigger private sector investment to scale up production capacities and support modernization and industrialization of the silk sector. Linked to the silk development fund, a number of PPPs should be supported.

8. IMPROVE FRAMEWORK CONDITIONS FOR EXPORT COMPANIES

The most important factor for increasing the competitiveness of silk SMEs is the improvement of Customs clearance formalities (increase transparency on official payments/fix fees, reduce number of different authorities performing controls, introduce online registration and bank transfers). There is a need for capacity-building of officers and staff incentives in government agencies to ensure effective and efficient services, eliminate corruption, and reduce the reportedly high turnover of staff.⁹⁰

9. PROMOTE CAMBODIA'S SILK SECTOR THROUGH THE ASEAN REGIONAL NETWORK

Silk is an important industry in the ASEAN region. Countries like Thailand and Viet Nam have highly developed silk sectors and are leaders in silk research. Other countries like Singapore are promising markets with a high demand for silk. There are a number of regional events in the ASEAN network coordinating research and business linkages in the region. Cambodia should participate in ASEAN conferences and seminars in order to ensure access to information and new technologies for improving efficiency, as well as for strengthening regional trade.

RETAIN MORE VALUE IN THE COUNTRY

The value chain can retain more value in the country by substituting the import of white silk yarn, by increasing the use of natural dyes, and by developing domestic packaging and labelling services.

90. *Ibid.*

10. SUBSTITUTE SILK YARN IMPORTS BY INTRODUCING THE PRODUCTION OF WHITE SILK YARN IN CAMBODIA

As the silk weaving sector imports 99% of its silk raw material from other countries, increasing the national production of silk yarn holds the single most important potential to retain more value in the country. Import substitution should include both increasing the domestic production of CGS and promoting domestic white silk yarn production. The combination of both can be an advantage, as white silk yarn production generates twice the yields of CGS, but is only advisable in large parts of the country during the rainy season because of the lower temperatures.

A prerequisite to revitalize sericulture is to ensure a stable market for sericulture farmers. In this regard, the introduction of contract farming is regarded as the main way to differentiate from previous promotion activities. On the one hand, it allows sericulture farmers an assured market and fixed prices for their cocoons. On the other hand, silk SMEs develop a reliable supply source and additional income from sericulture, and become less dependent on world market prices for silk. Contract farming will increase the motivation of other farmers to take up sericulture again.

The increasingly high prices and demand for white silk yarn constitute a major market opportunity for investors, but if Cambodia introduces the production of white silk yarn, it will need at least 10 years of production to reach the level that Viet Nam is already at and to have an influence on market prices for silk in Cambodia. To support this, a longer intervention perspective is necessary, beyond the short-term projects implemented in the past.⁹¹

11. INCREASE USE OF NATURAL DYES

The use of natural dyes is common in the Cambodian silk sector and is highly appreciated by an important market segment looking for more organic products. Increasing use of natural dyes means less import of chemical dyes and will thus retain more value in the country. A major opportunity for increasing the use of natural dyes is the production of natural dye powder from plants, which would ensure year-round supply of the dyes with a positive effect on the environment.

12. DEVELOP DOMESTIC PACKAGING AND LABELLING SERVICES

Cambodia lacks national producers of high-quality packaging and labelling services (producers of labels, tags, stickers, bar codes and plastic packaging material) which makes it difficult for silk exporters to respond to buyers' demand and which has potential for adding more value to in-country production. Selected printing companies and local packaging producers should be trained on how to provide better services for export-oriented companies. They should be made aware of new production technologies and the market potential of improved packaging and labelling services. Linkages with exporters should be facilitated.

13. DEVELOP LINKAGES WITH THE GARMENT AND FASHION INDUSTRY

Cambodia's garment and fashion industry is characterized by strong growth, but hardly linked to the national silk sector. The local production of silk fabric can be an input for the domestic garment sector. Particular potential is seen for national fashion designers to differentiate themselves from the mass market. The organization of national events, design competitions and an annual silk festival can help establish business contacts. Linkages between domestic producers of silk yarn and the garment industry can be promoted as soon as there is enough local yarn production.

ADD VALUE BY IMPROVING EXISTING PRODUCTS

The value chain can add value to existing products by stimulating design innovation; by product diversification; by introducing and certifying quality standards; and by promoting organic, fair trade and other standards.

14. INNOVATE DESIGNS AND DIVERSIFY THE PRODUCT RANGE

Design innovation is widely recognized as the most important aspect with high potential to add value to the existing product range. Regular design innovation is regarded as a must. Companies need to come up with new collections once or twice a year. To be able to do this, they need to have access to qualified designers and information about market trends. The promotion of innovative designs should include improved cooperation with universities, exchange programmes for design students, the setting up of a design centre for textile design, and design competitions on silk products. Weavers can also be stimulated to come up with their own new designs.

91. International Trade Centre (2011), *Mid-term External Evaluation: Cambodia Sector-Wide Silk Project (Phase II) CMBJ/49/05A*. Geneva: ITC.

All three major markets for silk products (national market, tourist market and export market) show potential for product diversification with regard to silk garments, silk fabric, silk jewellery, silk accessories and interior decoration. Diversification needs to be encouraged and silk SMEs should be qualified to take up more complex, higher-value production systems, that is, to move from simple scarf production to more sophisticated sewing and tailoring according to different sizes of garments. Networking and subcontracting with specialized service providers can help broaden the product portfolio.

The use of viscose on the warp can also help to diversify the product range and to improve the comfort of wearing silk garments. In addition, it allows faster weaving. SMEs should be made aware of the advantages of a viscose/silk mix and should be encouraged to communicate these advantages to their clients. Information brochures may help convince buyers.

15. INTRODUCE AND CERTIFY QUALITY STANDARDS AND PROMOTE ORGANIC, FAIR TRADE AND OTHER STANDARDS

National quality standards should be introduced for both silk yarn and final handicraft products. As a proof of quality and authenticity, quality labels will render the products more valuable and provide incentives to buy more Cambodian products and to accept reasonable prices. Quality labels will thus help to increase market shares.

The organic textiles market based on natural dyes and organic silk production is a promising high value niche market in both tourist and export markets. Many silk companies are active in the fair trade movement. Compliance with fair trade principles and fair trade certification are important possibilities to realize higher product prices. The Cambodian silk sector should strengthen its position in these growing niche markets to differentiate itself from mass producers in Viet Nam, China and India.

16. DEVELOP A NATIONAL SILK LABEL AND PROMOTE THE CULTURAL IDENTITY OF WEARING SILK

The introduction of a national quality label like 'Cambodian handwoven silk' can help distinguish between high-quality domestic production and machine-made imports. A label can be developed and managed by an association. The label can be used for increasing sales to both tourists and domestic customers. Fashion shows and the organization of an annual silk festival will help promote the label and the cultural identity of wearing silk.

CREATE VALUE BY DEVELOPING NEW PRODUCTS

The value chain can create value by developing particular tourist products, and by introducing silk/viscose mix fabric as well as cosmetic and stationery products from silkworms or mulberry trees.

17. ESTABLISH STRONGER LINKAGES WITH TOURISM INDUSTRY TO PROMOTE SILK SECTOR

CTIS suggests strengthening backward linkages from tourism to the silk sector.⁹² Specific tourism offers can be developed in sericulture such as home stays at sericulture farms or silk weaving courses. There is increasing demand by tourists for more active holidays, creating new experiences and developing new skills. Such specific tourism products would belong to the category of ecotourism in silk. Sericulture can help diversify Cambodia's tourism industry. Sericulture farmers and weavers can create value by developing new income sources.

18. ENCOURAGE THE USE OF COCOONS IN THE COSMETIC INDUSTRY

There is demand for new cosmetic products produced from silkworms. Adding value to sericulture as a side product, it has the potential to provide more incentives for silkworm breeders to render sericulture more profitable. The market demand of the domestic and regional cosmetics industry for silkworm cocoons should be assessed. The potential of linkages with the cosmetics industry should be explored and pilot projects be conducted.

19. DEVELOP STATIONERY PRODUCTS FROM SILKWORMS AND MULBERRY TREES

Mulberry paper production and making final stationery products based on mulberry paper are currently missing in Cambodia, but are used in neighbouring countries to diversify the product range. Suitable techniques of producing handmade paper from mulberry leaves should be studied, for example, in Viet Nam. A group of producers should be trained and linked to souvenir shops to serve the tourist market. This can provide additional income for mulberry tree farmers.

92. Kingdom of Cambodia (2014). *Cambodia Trade Integration Strategy 2014–2018*. Phnom Penh.



Photo: ITC

CONTRIBUTION TO DEVELOPMENT

The value chain can contribute to development by promoting women's entrepreneurship and employment, as well as employment of disabled persons and other disadvantaged population groups.

20. PROMOTE WOMEN'S ENTREPRENEURSHIP AND EMPLOYMENT

The silk value chain provides ample opportunities for women's entrepreneurship and employment at all value chain levels. Silkworm breeding and silk weaving constitute important income sources for rural women. Women entrepreneurs are particularly successful in silk handicraft production and trading. In cooperation with MoWA, particular training programmes for women can be conducted for improving technical skills – for example on weaving or sewing – as well as business trainings promoting entrepreneurship.

21. PROVIDE EMPLOYMENT FOR DISABLED PERSONS AND OTHER DISADVANTAGED POPULATION GROUPS

Specific skills development trainings on weaving and sewing should be organized for groups of disabled youth in order to provide employment opportunities for disadvantaged groups in the silk sector. Linkages between training organizations for disabled persons and silk SMEs will be strengthened to provide adequate jobs after the initial training.

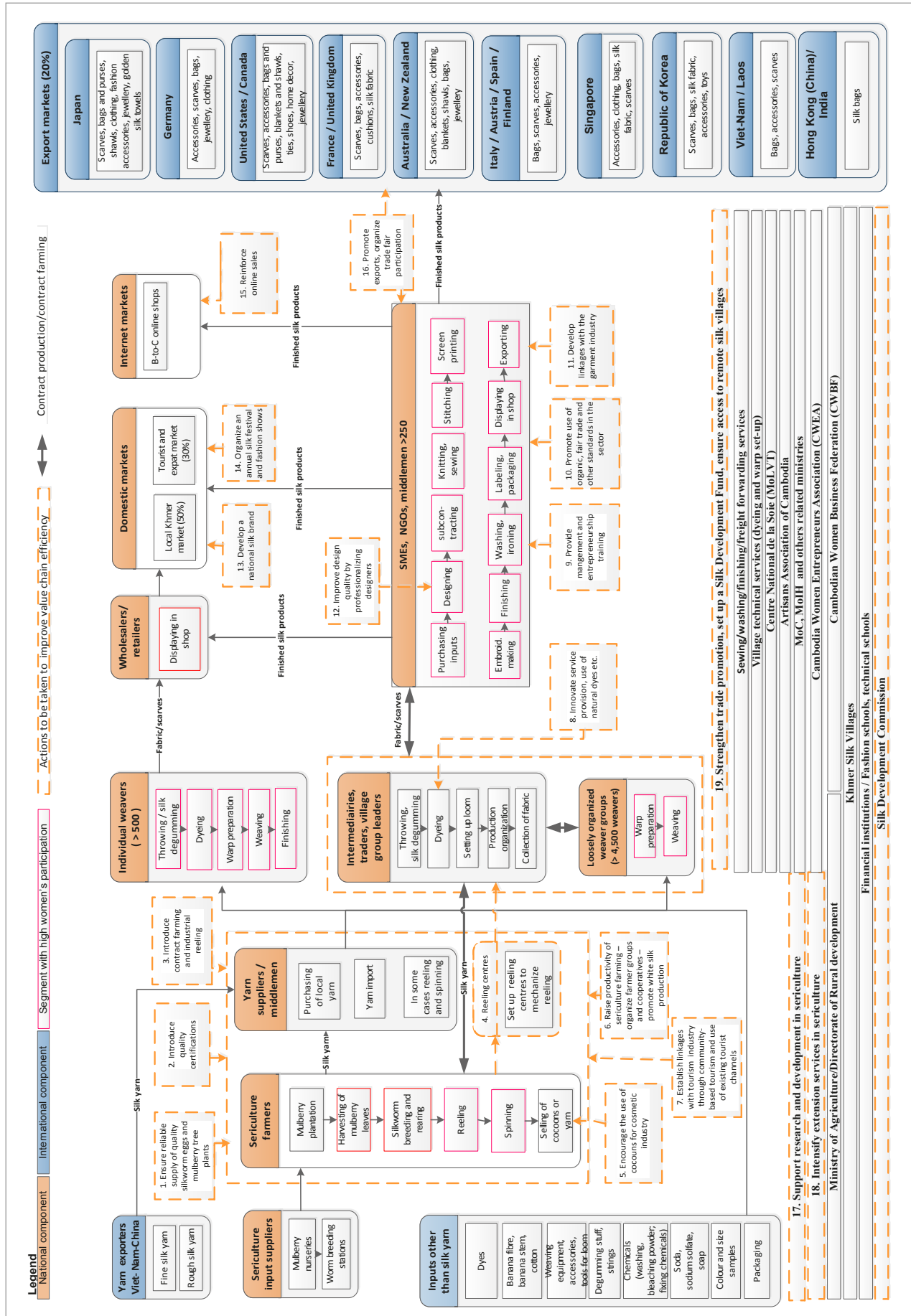
THE FUTURE STRUCTURE OF THE SILK VALUE CHAIN

The future structure of the silk value chain will be characterized by important changes that are summarized in figure 18. To counteract the high degree of sector fragmentation of functions as well as the weak organization of actors currently prevailing at various stages in the value chain, the strategy aims at achieving a higher degree of vertical integration among the different functions and stakeholders in the silk sector, allowing for greater professionalization and specialization around functions (sericulture farming, reeling, weaving, design, and handicraft and clothing production).

This will be achieved through PPPs for vertically integrated SMEs, contract farming and pooling together the resources of farmers' and weavers' organizations, as well as mechanization of reeling and weaving activities. Better value chain organization also aims at higher specialization of actors and their subsequent professionalization, which in turn will have an effect on farming output and yarn production, and quality and consistency of weaving and garment production.

The envisaged changes range from improved input supply and extension services for sericulture farmers to intensified trade promotion and setting up a silk development fund to fund investments and projects in the sector. The introduction of contract farming and industrial reeling for white silk production will play a crucial role in revitalizing sericulture. Contract farming for sericulture must be developed by SMEs and their intermediaries at village level, which will strengthen their position in the value chain. SMEs must be the drivers of change, innovating products and developing new market linkages. The new SDC will ensure sector coordination and programme implementation.

Figure 18: Future Cambodian silk value chain



HOW TO GET THERE

The following section explains the framework that will guide the implementation of the strategy. The road map highlights short, medium and long term key measures and recommendations that will shape the sector going forward. Roles and responsibilities of leading institutions in the implementations of the strategy are also presented. Finally this section contains a detailed Plan of Action for the strategy, strategic and operational outlining objectives, activities, beneficiaries, target measures and implementing partners.

ROAD MAP FOR SECTOR EXPORT DEVELOPMENT

Through the four strategic objectives, the present strategy proposes a series of structural changes to the silk value chain in the form of short-, medium- and long-term measures and recommendations which offer decision makers and stakeholders a sequenced road map to develop the silk sector and boost its competitiveness.

Key measures in the short term (1–2 years; priority level 1)

These measures represent either low-hanging fruit which can be quick wins for the sector or upstream activities that require priority implementation in order to allow downstream activities to happen. These measures are critical as they will lay the groundwork for rolling out the key measures that will shape the future structure of the silk value chain.

- Operationalize and resource the SDC as the central governance structure for the Cambodian silk sector.
- Develop and promulgate the requisite silk policy to provide silk sector reforms and support measures with a firm and sustainable legal and institutional framework.
- Create a silk development fund as a financing mechanism to support expansion, modernization and investment in the sector.
- Introduce the PPP model to scale up sericulture, achieve greater vertical integration of operators and leverage significant capital investment in the sector.
- Create or strengthen FOs in the regions to allow for better vocational training, provision of extension services and pooling of resources.
- Expand access to vocational training for sericulture farmers in the regions by decentralizing training activities of the CNS.

- Reduce the costs related to Customs formalities, including Customs clearance and the number of different authorities which have to perform controls before export, and reduce import tax on accessories.
- Strengthen support for public sector institutions (Customs authorities, the National Institute of Statistics, MoC, MAFF) to collect and manage production, commerce and trade data for silk by creating a national HS product nomenclature specific to silk products.
- Conduct a cost-share trade fair participation and export promotion programme for silk, including buyers/sellers missions and government-to-government support.
- Make silk a priority for the Trade Exhibition Department of MoC.
- Create a geographic indication for CGS and register it with the World Trade Organization.

Key measures in the medium term (1–3 years; priority level 2)

The following measures require the implementation of the upstream activities above and would typically take a longer lead time to start implementation. These key activities will produce most of the expected direct and tangible outcomes as a result of the strategy.

- Raise the productivity of sericulture farming through an increase in cultivated land and semi-mechanization of the reeling process.
- Strengthen value chain integration by promoting investment, contract farming and innovative business models of weavers, service providers and middlemen.
- Support R&D in sericulture by strengthening good agricultural practices.
- Improve extension services in sericulture to increase the know-how of silkworm breeders.
- Improve weaving, dyeing and handicraft production processes.
- Promote national production of white silk yarn to substitute silk yarn import (PPP for setting up an industrial reeling facility in combination with a contract farming scheme).
- Provide trainings on design, marketing, export logistics, factory compliance and quality management to SMEs to better respond to market trends.
- Promote Cambodian silk in the domestic market through branding and events such as an annual national silk festival.

- Develop partnerships with public and private design schools abroad, aimed at providing grants or scholarships to Cambodian designers and for foreign designers to visit and provide training in Cambodia.
- Diversify the product range for export, including export of handwoven fabric.
- Support SMEs to conduct technical trainings to strengthen the skills in the weaving subsector, including women weavers.
- Establish a capacity-building programme for women entrepreneurs to develop their entrepreneurship and managerial skills.

Box 17: Silk Development Commission

The SDC will be responsible for the following tasks.

- Define strategies and measures to support the development of the Cambodian silk sector.
- Provide market information and seek markets for Cambodian silk products.
- Assist in improving the competitiveness of silk production.
- Coordinate with international organizations and DPs to seek funding and technical assistance for the development and implementation of the Cambodian Silk Strategy.
- Facilitate securing funds for the implementation of projects related to the silk sector in Cambodia.
- Establish indicators for monitoring the progress of the promotion and development of the Cambodian silk sector.
- Organize a technical plan and the annual budget for the actual implementation of projects related to the Cambodian silk sector.
- Facilitate the resolution of difficulties arising in the silk sector.
- Organize strategic policy to promote the development of the silk sector, from cultivation and production of silk yarn to the circulation of silk products in local and international markets.
- Facilitate partnerships between the public sector and the private sector involving the Cambodian silk sector.
- Join national and international forums related to the silk sector.
- Be involved in the preparation of silk standards in Cambodia.
- Conduct R&D on silk production lines.
- Preserve traditional Cambodian silk.
- Prepare half-yearly and annual technical and financial reports for MoC and copy them to the relevant line ministries and institutes involved in the implementation of its duties.

SDC has a Secretariat at MoC which is responsible for the following:

- Organization of the annual action plan for the Commission;
- Organization of practical activities related to the Cambodian silk sector;
- Carrying out duties as recommended by the Commission.

The operating system of the Commission is as follows:

- In the absence of the Chair, the Vice-Chair will automatically take on the Chair's responsibilities;
- The Commission shall meet once every six months, or more often if decreed by the Chair;
- The Commission has the right to use the seal of MoC on its official documents.

Key measures in the long term (3–5 years; priority level 3)

The following represent substantial long-term support and investment measures in the silk sector, hence requiring longer preparation and implementation times. These measures are expected to shape silk sector structure and competitiveness in the long run.

- Establish sericulture centres equipped with R&D laboratories able to select the best varieties of mulberry trees and silkworms (including hybrids), as well as disease controls, and resource them to ensure their long-term sustainability.
- Provide support for investments in irrigation requirements in sericulture regions through public channels and through PPPs and arrangements (mixed enterprises, commercial management contracts).
- Set up a national textile design and fashion school linked to and accredited by recognized international design school networks or associations.
- Introduce a national silk quality mark for silk yarn, textiles and clothing, based on improved national quality standards and certification.
- Develop domestic packaging and labelling services.
- Establish strong forward and backward linkages with the tourism and handicraft industry, as well as the garment and fashion industry, to create synergies for design and promotion as well as new market opportunities.
- Substitute silk yarn imports by introducing the production of white silk yarn in Cambodia.
- Harmonize domestic quality standards with regional (ASEAN) and international standards.
- Promote Cambodia's silk sector through the ASEAN regional network.

COORDINATED IMPLEMENTATION

The broad range of activities, together with the complex nature of integrated interventions, requires careful implementation involving efficient allocation of resources and monitoring of results. To this end, close coordination of private sector and public sector efforts is important. Private sector investment needs to be mobilized and supported by public programmes to overcome the failures of activities undertaken in the past. SMEs active in the value chain have confirmed their interest in revitalizing sericulture and addressing market opportunities.

A number of institutions will play a key role in the implementation of this silk sector strategy, as illustrated in the TISI section and the PoA. These are institutions that have the overall responsibility for successful execution of the strategy, as well as support institutions that are active partners but not leading institutions. Each institution



Photo: ITC

mandated to support the development of the silk sector is clearly identified in the strategy PoA.

SILK DEVELOPMENT COMMISSION

The recently established SDC and its Executive Secretariat under MoC will play a key role in managing and monitoring the implementation of the Silk Strategy. In particular, the SDC will be tasked with coordinating the implementation of activities as well as coordinating implementation partners, with a view to achieving the objectives set forth by the Silk Strategy and optimizing the allocation of resources and efforts across the wide spectrum of stakeholders. More broadly, the SDC will be instrumental in developing and organizing the silk sector and in promoting Cambodian silk domestically and abroad. The SDC is a public–private dialogue platform composed of representatives of different ministries and private sector representatives, with specific responsibilities' as shown in box 17.

The Secretariat function of the SDC is provided by MoC. In view of the limited technical and financial resources of MoC, the Silk Strategy includes under strategic objective 1 a series of activities aimed at operationalizing the SDC and its Secretariat and strengthening its resources and outreach.



Photo: ITC

GOVERNMENT

The Government's role will be crucial in making this Silk Strategy a success. The Government will need to commit to investing in long-term training and extension services as well as allocating substantial farmland for sericulture. The Government's role will also be essential in establishing a framework for partnerships with the private sector to invest in and develop the silk sector, and delivering on Governments' responsibilities as a partner. Furthermore, trade facilitation measures set forth under strategic objective 1 are well-identified policy and regulatory measures, which represent quick wins to boost the efficiency of exporting SMEs and hence the overall competitiveness of the silk sector. However, their implementation requires a firm government commitment as well as financial resources. Finally, as one of the 10 priority sectors for development and government support, the silk sector will require the Government's deliberate effort to match priorities with adequate funding, be it through its own budget or through donor support. The viability of the SDC – and thus the sector – will in essence depend on it.

PRIVATE SECTOR

Silk producing and exporting SMEs have proved that only they can actually support any activities going on in the sector, primarily weaving and garment production but also support to sericulture. As shown by lessons learned from the two previous silk strategies, sericulture farming is heavily dependent on the level and quality of government support for training and extension services. In the face of

failure to provide training and extension services, farmers immediately switched to more lucrative activities, bringing silk yarn production close to collapse. Hence the role of the private sector has been to make up for service gaps to the extent of their abilities. Going forward, however, the Silk Strategy requires a new type of partnership between the public and private sectors, one in which the private sector is keen to take on a greater burden in investing in infrastructure and the means of production. However, this will only be possible if the PPP model provides for a fair and realistic sharing of risks. The private sector will also need to partner with the Government to successfully develop innovative funding mechanisms such as the proposed silk development fund.

DEVELOPMENT PARTNERS

The Cambodian silk sector can potentially provide livelihoods and support for rural and urban populations, especially women and disabled persons, thereby directly contributing to increasing their standards of living. The Silk Strategy offers a wide range of opportunities for supporting important initiatives aimed at developing skills, innovative collaborative models, improving the quality management framework of the silk sector, and helping the sector grow on the back of the booming demand for Cambodian quality silk products. Therefore, donors and implementing partners have wide scope for using the Silk Strategy and its PoA for enhanced coordination and alignment of their interventions. A number of priority activities represent low-hanging fruit for the donor community to give the sector some critical quick wins in the short run.

CAMBODIA NATIONAL SILK STRATEGY

PLAN OF ACTION



Strategic objective 1: Enhance the enabling environment and institutional support for the silk sector.

Operational objective	Activities	Priority 1=high 3=low	Beneficiaries	Target measures	Lead implementing partner	Supporting implementing partners	Existing programmes or potential support
1.1 Improve access to finance for sericulture.	1.1.1 Establish a 'silk sector development fund' to provide investment and financing schemes (credit, loans and guarantees) to scale up investment in production capacities and support modernization and industrialization of the silk sector.	1	PPPs	Feasibility study conducted; Silk Development Fund established; Increased funding for silk sector	Banks / microfinance institutions	National Bank Council / SDC / MoEF	Need to include in MoC Mid-Term Plan No. 9 – Access to Finance
	1.1.2 Facilitate access to finance for investment and working capital by working with banks to sensitise them to opportunities in the silk sector and to adapting their services.	2	Sericulture farmers / weavers / SMEs	Access to banks and microfinance institutions improved	Banks / microfinance institutions / associations / SMEs	National Bank Council / SDC / MoEF	Need to include in MoC Mid-Term Plan No. 9 – Access to Finance
	1.1.3 Develop central and provincial 'cooperative funds' in collaboration with farmer and weaver associations in order to facilitate access to finance	3	Sericulture farmers / weavers / SMEs	One cooperative fund per province established in 3 years	Provincial governments	National Bank Council / SDC / SMEs / line ministries	Need to include in MoC Mid-Term Plan No. 9 – Access to Finance
1.2 Improve policy regulations.	1.2.1 Develop and promulgate a specific silk sector policy to provide silk sector reforms and support measures with a firm and sustainable legal and institutional framework.	1	Exporters / SMEs	Silk sector policy in place	Supreme National Economic Council	Line ministries and DPs / MoEF / CDC	Not yet existing. Need to have silk policy. Need to include in investment rules under Private Sector Structuring (PPP arrangements) – to include SMEs
	1.2.2 Introduce legislation and provide incentives for the creation of PPPs for investment in the silk sector; Assess the current legislative framework and PPP best practice; consult stakeholders develop and promulgate draft legislation.	1	Exporters / SMEs	Legal framework of PPPs in place in one year	Supreme National Economic Council	Line ministries and DPs / MoEF / CDC	Not yet existing. Need to have silk policy. (Check Concept Note No. 1: Trade Policy, Sector Policy, Legal and Regulatory Reform and to include in Concept Note No. 4: Investment Rules under Private Sector Structuring (PPP arrangements) – to include SMEs)
	1.2.3 Develop and promulgate a policy for sourcing affordable and good quality raw materials and inputs and controlling imports thereof at borders.	1	Exporters / SMEs	Increased product controls at borders; Increased quality of imported products in 2 years	Supreme National Economic Council	Line ministries and DPs / MoEF / CDC	Not yet existing. Need to have silk policy. (Check Concept Note No. 1: Trade Policy, Sector Policy, Legal and Regulatory Reform and to include in Concept Note No. 4: Investment Rules under Private Sector Structuring (PPP arrangements) – to include and Logistics)
	1.2.4 Reduce or remove import duties for accessories.	1	Exporters / SMEs	Import duties on accessories removed in one year	MoEF / MoIH	Line ministries and DPs / MoEF / CDC	Approved during the Government Private Sector Forum
	1.2.5 Follow up support / negotiations regarding extending the value added tax exemption for import of silk yarn.	1	Exporters / SMEs	Value added tax exemption for import of silk yarn extended until 2020	Government Private Sector Forum / FASMEC	SDC / associations / MoWA / SME Forum	Existing Government Private Sector Forum / CWEA is seat no. 3

Strategic objective 1: Enhance the enabling environment and institutional support for the silk sector.

Operational objective	Activities	Priority 1=high 3=low	Beneficiaries	Target measures	Lead implementing partner	Supporting implementing partners	Existing programmes or potential support
1.3 Streamline Customs formalities.	1.3.1 Improve Customs clearance formalities (increase transparency on official payments / fix fees, reduce number of different authorities performing controls, introduce online registration and bank transfers).	2	Exporters / SMEs	Improved procedures in place	MoEF / CDC	MoC	Mid-Term Plan of MoC (Trade Facilitation and Logistics)
	1.3.2 Reduce the costs related to Customs formalities, including Customs clearance, number of different authorities which have to perform controls before export.	1	Exporters / SMEs	Improved procedures in place	MoEF / CDC	MoC	Mid-Term Plan of MoC (Trade Facilitation and Logistics)
	1.3.3 Establish a framework aimed at minimizing unofficial fee payments, based on online registration and bank transfers, which should become standard.	2	Exporters / SMEs	Unofficial payments of silk exporters reduced by 90% in two years	MoEF / CDC	MoC	Mid-Term Plan of MoC (Trade Facilitation and Logistics)
	1.3.4 Provide all Customs-related formalities, including Customs documentation, inspection and clearance, in Siem Reap to facilitate shipments by road and by air to domestic and foreign markets.	2	Exporters / SMEs	All Customs clearance formalities can be done in Siem Reap	MoEF / CDC	MoC	Mid-Term Plan of MoC (Trade Facilitation and Logistics)
1.4 Regulate and control the quality of imported silk yarn.	1.4.1 Summarize and complete research on international silk yarn supply and import channels to Cambodia.	1	SMEs / associations	Research document available and disseminated to SMEs and associations	MoIH	SDC	Mid-Term Plan of MoC
	1.4.2 Build capacity of Customs and quality management authorities to exercise effective control and correct labelling of imported silk yarn.	1	SMEs	Increased control rates; Improved quality of imported year in two years	MoEF / CDC	SDC	Mid-Term Plan of MoC
1.5 Company registration.	1.5.1 Simplify Tax Department registration to make the formalization of companies easier.	3	Exporters / SMEs	Simplified Tax Department registration in place	MoC	Line ministries	Mid-Term Plan of MoC under single window registration and e-registration
	1.5.2 Introduce special registration status for silk companies, which allows receiving C/O (including grace system after registration).	1	Exporters / SMEs	C/O available for all silk companies	MoC	Line ministries	Mid-Term Plan of MoC under single window registration and e-registration
	1.5.3 Set up single window registration and e-registration for silk companies.	1	Exporters / SMEs	e-registration introduced	MoC	Line ministries	Mid-Term Plan of MoC under single window registration and e-registration
1.6 Improve management of sector statistics.	1.6.1 Introduce a national HS nomenclature specific to silk products and strengthen support for public sector institutions (Customs authorities, National Institute of Statistics, MoC, MAFF) to collect and manage production, commerce and trade data for silk products.	1	Exporters / SMEs	HS nomenclature established; Specific silk product statistics available	MoEF / General Department of Customs and Excise / Customs	MoC / line ministries	Mid-Term Plan of MoC – ongoing but need to include silk products if not currently included
	1.6.2 Disseminate follow-up and implementation of the HS reporting on Cambodian high value silk exports to Cambodian silk companies through the SDC, in cooperation with the General Department of Customs and Excise.	1	Exporters / SMEs	Accurate HS codes will be applied by 90% of silk exporters	MoEF / General Department of Customs and Excise / Customs	MoC / line ministries	Mid-Term Plan of MoC – ongoing but need to include silk products if not currently included

Strategic objective 1: Enhance the enabling environment and institutional support for the silk sector.

Operational objective	Activities	Priority 1=high 3=low	Beneficiaries	Target measures	Lead implementing partner	Supporting implementing partners	Existing programmes or potential support
1.7 Introduce standards.	1.7.1 Introduce national quality marks for local yarn production and handwoven silk products.	3	PPPs / exporters / SMEs / NGOs	Quality mark introduced; Product quality improved	MoC / MolH	Line ministries	Mid-Term Plan of MoC – ongoing but need to include silk products if not currently included
	1.7.2 Harmonize domestic quality standards with regional (ASEAN) and international standards.	3	PPPs / exporters / SMEs / NGOs	Conduct feasibility study; Increased number of national standards harmonized	MoC / MolH	Line ministries	Mid-Term Plan of MoC – ongoing but need to include silk products if not currently included
	1.7.3 Provide capacity-building for SMEs, NGOs and their suppliers to comply with quality standards.	2	PPPs / exporters / SMEs / NGOs	Increased knowledge of different specifications and standards; Product quality improved	MoC / MolH	Line ministries	Mid-Term Plan of MoC – ongoing but need to include silk products if not currently included
1.8 Improve intellectual property protection.	1.8.1 Introduce a development programme for the preservation and expansion of traditional knowledge in the silk sector.	3	PPPs / exporters / SMEs / NGOs	Programme introduced Traditional knowledge better protected	MoC	National Committee for Intellectual Property Rights	Mid-Term Plan of MoC – Private Sector Structuring
	1.8.2 Strengthen cooperation and linkages with intellectual property rights organizations in other countries to exchange experience on silk.	3	PPPs / exporters / SMEs / NGOs	Traditional knowledge better protected	MoC	National Committee for Intellectual Property Rights	Existing laws on intellectual property / MolH alliance 'Registration Design Act (CAP 266) Republic of Singapore'
	1.8.3 Create a geographic indication for CGS and register it with the World Trade Organization.	1	PPPs / exporters / SMEs / NGOs	Geographical indication CGS introduced	MoC	National Committee for Intellectual Property Rights	Existing laws on intellectual property / MolH alliance 'Registration Design Act (CAP 266) Republic of Singapore'
1.9 Strengthen regional cooperation.	1.9.1 Create a regional / ASEAN network of silk business associations to exchange experience and good practices, and establish business relations.	1	SMEs / PPPs	ASEAN network of silk sector associations established	SDC / Ministry of Foreign Affairs and International Cooperation	Line ministries / business associations / silk clusters	CLMV exchange programmes / Mekong Sub-Region / ASEAN Women Entrepreneurship Network / ASEAN integration
	1.9.2 Set up a national silk SME network and link the silk network to ASEAN organizations.	1	SMEs / PPPs	National network of silk SMEs is operational	SDC / MoWA / Ministry of Foreign Affairs and International Cooperation	Line ministries / business associations / silk clusters	CLMV exchange programmes / Mekong Sub-Region / ASEAN Women Entrepreneurship Network / ASEAN integration
	1.9.3 Garner ASEAN recognition / awards – e.g. 'Outstanding Regional Awards'.	1	SMEs / PPPs	ASEAN visibility recognition of Cambodian silk increased in 3 years	SDC / MoWA / Ministry of Foreign Affairs and International Cooperation	Line ministries / business associations / silk clusters	CLMV exchange programmes / Mekong Sub-Region / ASEAN Women Entrepreneurship Network / ASEAN integration
	1.9.4 Engage in networking and business matching / exchange programmes / ASEAN fairs.	3	SMEs / PPPs	One ASEAN business matching activity supported per year	SDC / associations	Line ministries / business associations / silk clusters	CLMV exchange programmes / Mekong Sub-Region / ASEAN Women Entrepreneurship Network / ASEAN integration

Strategic objective 1: Enhance the enabling environment and institutional support for the silk sector.

Operational objective	Activities	Priority 1=high 3=low	Beneficiaries	Target measures	Lead implementing partner	Supporting implementing partners	Existing programmes or potential support
1.10 Build capacities of the SDC.	1.10.1 Strengthen the capacities of the SDC Secretariat in terms of human capital and financial resources to ensure the capacity of SDC to effectively manage the Silk Strategy.	1	SDC	SDC Secretariat fully operational	SDC / MoC	Line ministries	ITC CEDEP 1 High Value Silk Output 3 / potential link to DPs, and SMEs
	1.10.2 Assist the SDC Secretariat in performing key implementation management functions for the Silk Strategy: project development, operational planning and budgeting; monitoring and reporting on implementation.	1	SDC		MoC	DPs / experts	ITC CEDEP 1 High Value Silk Output 3 / potential link to DPs, and SMEs
	1.10.3 Assist the SDC Secretariat in performing communication and policy advocacy on a regular basis.	1	SDC		SDC / MoC	DPs / experts	ITC CEDEP 1 High Value Silk Output 3 / potential link to DPs, and SMEs
	1.10.4 Assist the SDC to design a dedicated Silk Strategy website and link it to existing major trade information platforms.	1	SDC		SDC / MoC	DPs / experts	ITC CEDEP 1 High Value Silk Output 3 / potential link to DPs, and SMEs
	1.10.5 Build the capacity of the SDC Secretariat to undertake, collect and disseminate periodic market research and intelligence for the silk sector.	1	SDC		SDC / MoC	DPs / experts	ITC CEDEP 1 High Value Silk Output 3 / potential link to DPs, and SMEs
	1.10.6 Assist the SDC with drafting its internal rules of procedure, its internal organization, and establishing formal relations with implementing partners for the Silk Strategy.	1	SDC		SDC / MoC	DPs / experts	ITC CEDEP 1 High Value Silk Output 3 / potential link to DPs, and SMEs
	1.10.7 Appoint a Silk Strategy 'ambassador' to represent the interests of, advocate for, and promote the development of the silk sector and the implementation of the Silk Strategy.	1	SDC	Silk strategy 'ambassador' appointed	SDC / MoC	DPs / experts	ITC CEDEP 1 High Value Silk Output 3 / potential link to DPs, and SMEs

Strategic objective 2: Facilitate market entry and promotion for Cambodia's high value silk products.

Operational objective	Activities	Priority 1=high 3=low	Beneficiaries	Target measures	Lead implementing partner	Supporting implementing partners	Existing programmes or potential support
2.1 Increase and diversify access to export markets.	2.1.1 Intensify the joint sector-wide trade promotion training and capacity-building on management and communication skills, and compliance of SMEs and NGOs with buyer requirements in terms of quality, consistency and volumes, design and packaging, fair trade, factory compliance and CSR requirements.	2	PPPs / exporters / SMEs / NGOs	Between 30 and 40 silk exporters increase their knowledge and their expertise in communication	MoC	MoT, business associations	CEDEP 1 – High Value Silk, links to CSR organizations, the World Fair Trade Organization, and the fair trade initiative in Cambodia
	2.1.2 Develop specific marketing plans and related promotional material and actions geared at each of the strategic markets (current and new) identified in the Silk Strategy.	1	PPPs / exporters / SMEs / NGOs	Marketing plan and promotion material developed and disseminated	MoC – Trade and Promotion Department	MoC – Trade and Promotion Department / MoT	CEDEP 1 – High Value Silk / MoC Trade and Promotion Department / CLIMV exchange programmes
2.2 Strengthen trade promotion.	2.2.1 Strengthen the capacity of SMEs to match market demand and buyer requirements in terms of quality, consistency and volumes, and design and packaging.	1	PPPs / exporters / SMEs / NGOs	Buyer program established in one year and silk exporters increased their capacity to meet buyer requirements	MoC – Trade and Promotion Department	MoC – Trade and Promotion Department / MoT	CEDEP 1 – High Value Silk / MoC Trade and Promotion Department / CLIMV exchange programmes
	2.2.2 Conduct a cost-share trade fair participation and export promotion programme for silk, including buyer / seller missions and Government-to-Government support.	1	PPPs / exporters / SMEs / NGOs	Cost share mechanism to assure access to a trade fair participation programme established	MoC – Trade and Promotion Department	MoC – Trade and Promotion Department / MoT	CEDEP 1 – High Value Silk / MoC Trade and Promotion Department / CLIMV exchange programmes
	2.2.3 Make silk a priority for the Trade Exhibition Department of the MoC.	1	PPPs / exporters / SMEs / NGOs	Special silk export promotion programme is in place	MoC – Trade and Promotion Department	MoC – Trade and Promotion Department / MoT	CEDEP 1 – High Value Silk / MoC Trade and Promotion Department / CLIMV exchange programmes
2.3 Promote silk in the national market.	2.2.4 Implement a web-based price information system for silk yarn, inputs and silk products to improve market transparency.	1	PPPs / exporters / SMEs / NGOs	Price information system is implemented	MoC – Trade and Promotion Department	MoC – Trade and Promotion Department / MoT	MoC Mid-Term Plan – Skills for Export No. 7
	2.3.1 Promote Cambodian silk in the domestic market through branding and events such as an annual national silk festival and fashion shows.	2	SMEs	Local sales boosted by 50%	SDC	DPs	SMEs / MoC (see MoC Mid-Term Plan under Concept Note 4 – project title: Private Sector Structuring)
	2.3.2 Set up a sales outlet centre or a night market area for silk products, and community association centres for direct sales.	2	SMEs		MoC – Trade and Promotion Department, and city officials	DPs	Night markets in Phnom Penh and Siem Reap
	2.3.3 Link tourism and product promotion (promote silk festival and fashion shows, develop home-stay tourism on sericulture farms, set up duty-free sales shops at airports).	2	SMEs		MoT	MoC	ITC / DPs
2.3.4 Increase visibility of tourist protection in tourist areas and promote safe tourism in Cambodia.	2	SMEs		City officials / Ministry of Interior	MoC / SMEs	Security Council	

Strategic objective 2: Facilitate market entry and promotion for Cambodia's high value silk products.

Operational objective	Activities	Priority 1=high 3=low	Beneficiaries	Target measures	Lead implementing partner	Supporting implementing partners	Existing programmes or potential support
2.4 Upgrade export marketing skills.	2.4.1 Upgrade export marketing and export procedures skills of exporting companies through workshops, and directly through individual export marketing plans / guidelines.	1	SMEs	Between 30 and 40 export companies increased their capacity on exporting	DPs / experts	SDC	ITC / DPs
	2.4.2 Create a showroom / information centre aimed at international buyers to ensure availability of information on quality and capacity of exporters; to connect sellers and buyers; and conduct marketing activities for Khmer silk products.	1	SMEs	Showroom / information centre established	MoC	SDC	ITC / DPs / SMEs, e.g. Artisans de Angkor
	2.4.3 Develop marketing plan to promote a positive and distinctive image for Cambodian golden silk in export markets through sector associations.	1	SMEs / Cambodia	Local sales boosted by 50% – CGS acknowledged across the border and globally	MoC	SDC	Collaborations between DPs / SMEs / MoC (see MoC Mid-Term Plan under Concept Note 4 – project title: Private Sector Structuring)
2.5 Diversify the product range.	2.5.1 Conduct pilot projects with selected SMEs and associations to broaden the product range in line with recommendations of the Silk Strategy.	2	SMEs	Increase in product diversification of 50%	SDC	SDC	ITC – High Value Silk CEDEP 1
	2.5.2 Introduce silk and viscose mix fabrics (viscose on the warp) or mixed fabrics using other types of yarn.	2	SMEs	New products available and tested	Private sector / SMEs	SDC	
	2.5.3 Assess the feasibility of and market demand for different kinds of cosmetics made from silkworms for domestic and foreign markets.	3	SMEs		Private sector / SMEs	SDC	
	2.5.4 Develop the production of stationery products made from mulberry paper.	3	SMEs		Private sector / SMEs	SDC	
	2.5.5 Experiment with other fibres to produce yarn (e.g. lotus yarn or other yarns). Make technical tests and disseminate results among weaver and SME associations.	3	SMEs		Private sector / SMEs	SDC	Samatou – Lotus Yarn Project, Goel Community – Silk and Cotton
2.6 Strengthen silk branding.	2.6.1 Introduce a national silk quality mark for silk yarn, textiles and clothing based on specific quality standards and requirements to comply with by SMEs as well as eligibility and award procedure.	1	SMEs	National quality mark established	MoC	Line ministries and SMEs	(See MoC Mid-Term Plan under Concept Note 4 – project title: Private Sector Structuring)
	2.6.2 Establish an independent institution to issue, manage and control the national quality mark for silk yarn, textiles and clothing.	1	SMEs	Institution established and operational	MoC	Line ministries and SMEs	(See MoC Mid-Term Plan under Concept Note 4 – project title: Private Sector Structuring)
	2.6.3 Strengthen collective branding in high value silk through the development of a Cambodian silk brand and brand promotion efforts domestically and internationally, as well as support for SME's to qualify for the Cambodian silk brand.	2	SMEs	National brand established and used by an increased number of operators	MoC	Line ministries and SMEs	(See MoC Mid-Term Plan under Concept Note 4 – project title: Private Sector Structuring)

Strategic objective 3: Develop skills and improve product quality, design and innovation in the silk textile and garment subsectors.							
Operational objective	Activities	Priority 1=high 3=low	Beneficiaries	Target measures	Lead implementing partner	Supporting implementing partners	Existing programmes or potential support
3.1 Strengthen the organization of weavers.	3.1.1 Set up weaving clusters, promote weavers' groups and improve business linkages.	1	Weavers / SMEs / associations	At least 30% of weavers organized in associations or clusters	SDC	MoC / MoIH	MoC Mid-Term Plan for Cambodia Trade SWAp Road Map 2014–2018 No. 3 and No. 6 out of 10 possible clusters
	3.1.2 Establish and operate weaver groups at the local and regional level. In particular: » Develop concept and activities of association and meet Government at provincial / district level to explain concept; » Establish a formal structures and governance, including staff, and recruit members; » Determine benefits and services for members (information, training, technical assistance, best practice in environmental and social standards, microfinance); » Establish communication channels to weavers and SMEs.	1	Weavers / SMEs / associations	At least 50% of weavers organized in associations or clusters	SDC / MoC	MoIH, Ministry of Interior	
3.2 Upgrade technical skills of weavers.	3.2.1 Provide weaver training programmes in different provinces in cooperation with SMEs to expand the number of active weavers.	2	Weavers / SMEs	3000 weavers trained per year 15,000 active weavers in 5 years	MoLVT / CNS / KSV / SMEs	MoWA, MoIH	WDCs & Vocational Training Centres
	3.2.2 Provide permanent technical training: Basic skills for weaving (use of semi-automatic looms, de-gumming, reeling, setting up of loom).	2	Weavers / SMEs	100% increase in domestic silk fabric production in 5 years	CNS	MoWA / SDC / SMEs / MoIH	MoLVT / CNS / KSV / DPs
	3.2.3 Provide training for weavers and SMEs on buyer requirements, design / trends, golden silk use, export quality, timeliness, general business relationships and practices.	2	Weavers / SMEs	100% increase in domestic silk fabric production in 5 years	MoC – Department of Trade and Promotion / DPs / experts	SDC / SMEs / design schools / exchange programmes / MoIH	CEDEP 1 – High Value Silk (ITC)
	3.2.4 Provide enterprise development training at village level: basic courses in management of micro and small enterprises (costing and pricing, business mind-set).	2	Weavers / SMEs	100% increase in domestic silk fabric production in 5 years	SDC in collaboration with associations / SMEs / DPs / experts	SDC / SMEs / MoIH	CEDEP 1 – High Value Silk (ITC)
3.3 Increase productivity in textile and garment production.	3.3.1 Implement a pilot project on productivity increase in weaving, dyeing, printing, sewing and embroidery with expert advice, coaching and technical training.	1	Weavers / SMEs	Pilot project conducted and replicated if successful	MoC / MoLVT / MoIH	Line ministries & donor partnership	CEDEP 1 – High Value Silk (ITC)
	3.3.2 Introduce semi-automatic looms at weaver level for part of the production.	1	Weavers / SMEs	Productivity per weaver increased by 100% in 3 years	SDC	MoIH	Potential cooperation between SMEs / DPs / impact investors
	3.3.3 Promote the use of improved weaving loom needs for traditional looms.	1	Weavers / SMEs	Productivity per weaver increased by 100% in 3 years	CNS / KSV / SMEs	SDC	ITC / KSV / CNS
	3.3.4 Scale up purchasing units in key weaving communities for sourcing inputs and lowering costs for weavers.	1	Weavers / SMEs	Ten per cent more purchasing units created each year	SMEs / middlemen	SDC	Potential revival of ITC / KSV Silk Sector-Wide Programme

Strategic objective 3: Develop skills and improve product quality, design and innovation in the silk textile and garment subsectors.

Operational objective	Activities	Priority 1=high 3=low	Beneficiaries	Target measures	Lead implementing partner	Supporting implementing partners	Existing programmes or potential support
3.3 Increase productivity in textile and garment production.	3.3.5 Promote boiler system / solar system / biogas to use for heating in dyeing, screening or printing, and finishing.	2	SMEs	Increase in efficiency of 50% / 50% reduction in electricity consumption	Exporters / SMEs	MoH / MoE	Potential linkages with experts / DPs / United Nations Development Programme
	3.3.6 Promote Cleaner ACT production programme and assembly line system.	2	SMEs	Increase in efficiency of 50% / 50% reduction in electricity consumption	Exporters / SMEs	MoH / MoE	Potential linkages with experts / DPs / United Nations Development Programme
3.4 Improve the quality of service provision.	3.4.1 Develop curriculum and a manual, and conduct a training programme for dyeing and warp set-up service providers to increase the number of qualified service providers.	1	SMEs / weavers	Five qualified service providers trained per province per year	KSV / CNS	SDC / MoLVT	CEDEP 1 High Value Silk
	3.4.2 Develop curriculum and a manual, and conduct a training programme for the use of natural dyes.	1	SMEs / weavers	Five qualified service providers trained per province per year	KSV / CNS	SDC / MoLVT	CEDEP 1 High Value Silk
	3.4.3 Develop a book of patterns of Cambodian textiles. Develop specific cards for each traditional textile and a name for each pattern.	3	SMEs / weavers / National Library	Reference book available and disseminated	SDC / MoH	MoCFA	DPs and experts
3.5 Enhance SME management and capacities for greater productivity and innovation.	3.4.4 Develop a book of natural dye resources and colours that can be generated from a specific natural dye source, plant characteristics, biological name, details, how to use it, and its formulations.	3	SMEs / weavers / farmers / National Library	Reference book available and disseminated	SDC / MoH	MoCFA	DPs and experts
	3.4.5 Develop a book of natural mordents existing in Cambodia to strengthen the hold of colours, and increase their performance in colour fastness.	3	SMEs / weavers / farmers / National Library	Reference book available and disseminated	SDC / MoH	MoCFA	DPs and experts
	3.5.1 Establish a capacity-building programme for women entrepreneurs to develop their entrepreneurship and managerial skills.	1	SMEs	50% increase in company management efficiency	SDC	MoWA / associations / CWEA	ITC – CEDEP 1 High Value Silk
3.5.2 Provide on-the-job and continuing education and training in design, marketing, export logistics, factory compliance and quality management to SMEs so they can better respond to market trends.	3.5.2 Provide on-the-job and continuing education and training in design, marketing, export logistics, factory compliance and quality management to SMEs so they can better respond to market trends.	1	SMEs / middlemen	50% increase in company management efficiency	SDC	SMEs / experts and DPs	ITC – CEDEP 1 High Value Silk
	3.5.3 Provide support to adult schooling for business English enhancement and business-related computer knowledge, as most entrepreneurs are middle-aged and do not have strong English language skills.	1	SMEs / middlemen	50% increase in company management efficiency	Ministry of Education, Youth and Sports /	Private schools / NGOs /	Potential collaborations with exchange programmes / volunteers / DPs / NGOs / SMEs
3.5.4 Establish a dedicated company development programme to improve internal organization through workshops and individual coaching and in partnership with international buyers. The ultimate aim is to enable larger silk businesses to provide export quality and quantity.	3.5.4 Establish a dedicated company development programme to improve internal organization through workshops and individual coaching and in partnership with international buyers. The ultimate aim is to enable larger silk businesses to provide export quality and quantity.	1	SMEs	Increase in management skills of 50% for at least three to five big silk companies	DPs / SMEs / MoH, SDC	MoC / DPs	ITC – CEDEP 1 High Value Silk / potential collaborations with DPs

Strategic objective 3: Develop skills and improve product quality, design and innovation in the silk textile and garment subsectors.							
Operational objective	Activities	Priority 1=high 3=low	Beneficiaries	Target measures	Lead implementing partner	Supporting implementing partners	Existing programmes or potential support
3.6 Promote design innovation at SMEs.	3.6.1 Organize a national design competition for silk products and prize award during a major national fashion event.	2	SMEs	Access to 10 new potential local designers per year	MolH	SDC	Potential collaboration with DPs / Designers Group – Fashion Week / business associations
	3.6.2 Set up a design centre for silk and textile design to provide advice, short-term training and access to library, information and technical material.	2	SMEs	One national centre and library for design established	MolH / MoC	SDC / MoCFA	Potential collaboration with private design schools / DPs / SMEs, business associations / exchange programmes
	3.6.3 Provide short-term design trainings to SMEs based on their specific design needs, by requirements and market trends. Establish and roll out the programme in cooperation with weaver and business associations.	1	SMEs	Twenty exporters can create their own original designs	SDC	DPs	Potential collaboration with private design schools / DPs / SMEs and business associations / exchange programmes
	3.6.4 Develop national silk fashion magazines and fashion events to promote high value silk products and know-how in Cambodia and abroad.	2	SMEs	One national silk fashion magazine and one new fashion event established in five years	MoC – Department of Trade and Promotion	SDC / DPs / Ministry of Information	Potential collaboration with local fashion magazines, fashion week / national television
3.7 Enhance design skills in the textile and garment subsectors.	3.7.1 Set up a national textile design and fashion school linked to and accredited by recognized international design school networks or associations.	3	SMEs	National design school established; Design quality improved	MoCFA	MolH / DPs / MoLVT	Collaboration with design schools in Cambodia / NGOs / DPs / exchange programmes
	3.7.2 Introduce a curriculum on textile design at art schools and universities across the country. Review existing curricula, suggest necessary adjustments or new curricula and introduce them.	1	SMEs	Curriculum on textile design developed and introduced	MoCFA	MolH / DPs / MoLVT	Collaboration with design schools in Cambodia / NGOs / DPs / exchange programmes
	3.7.3 Provide scholarship grants to design students and organize international student exchange programmes with foreign universities on textile design.	1	SMEs	Ten design students per year receive scholarship grants and participate in design exchange programmes	MoCFA	MolH / DPs / MoLVT	Collaboration with design schools in Cambodia / NGOs / DPs / exchange programmes
	3.7.4 Develop partnerships with public and private design schools abroad, aimed at providing grants or scholarships to Cambodian designers and for foreign designers to visit and provide training in Cambodia.	1	SMEs	Five partnerships established in 3 years	MoCFA	MolH / DPs / MoLVT / MoC – Department of Trade and Promotion	Collaboration with design schools in Cambodia / NGOs / DPs / exchange programmes / Japan International Cooperation Agency
	3.7.5 Conduct a specific skills development training programme for handicapped people in cooperation with silk SMEs.	1	SMEs	Fifty handicapped persons trained per year	MoCFA / National Disabled Centre	MolH / DPs / MoLVT	Collaboration with design schools in Cambodia / NGOs / DPs / exchange programmes

Strategic objective 3: Develop skills and improve product quality, design and innovation in the silk textile and garment subsectors.

Operational objective	Activities	Priority 1=high 3=low	Beneficiaries	Target measures	Lead implementing partner	Supporting implementing partners	Existing programmes or potential support
3.8 Strengthen linkages with other sectors.	3.8.1 Improve business linkages with packaging service providers by working with them on buyer requirements for silk packaging and on joint sourcing.	1	SMEs	Improvement of 50% in sourcing of packaging, and 50% increase in sales	SMEs	DPs / business associations / experts / MoIH	Collaboration with business printing companies / associations
	3.8.2 Develop linkages to the fashion industry (events, use of promotion channels, training, silk festival).	1	SMEs	One promotion event per year organized	MoCFA / MoC – Trade and Promotion Department / MoIH	SDC	ITC / DPs
	3.8.3 Establish strong forward and backward linkages between the tourism and handicraft industries to create synergies and new market opportunities.	1	SMEs	One special promotion activity per year	MoC – Trade and Promotion Department / MoT	MoT / business associations	ITC collaboration with CWEA
	3.8.4 Facilitate partnerships with tour operators / hotels to bring tourists to village-based weaving sites and showrooms of exporters and conduct other commercial and promotional activities.	1	SMEs	Three new community-based tourism offers developed per year	SDC / Ministry of Information	MoT / business associations	Potential collaboration between MoT, MoLVT and MoIH

Strategic objective 4: Revitalize and strengthen integration of sericulture in the silk value chain to increase domestic silk yarn production.

Operational objective	Activities	Priority 1=high 3=low	Beneficiaries	Target measures	Lead implementing partner	Supporting implementing partners	Existing programmes or potential support
4.1 Promote PPPs.	4.1.1 Conduct pilot projects to support vertical integration in silk production using PPP collaborative arrangements and based on contract farming.	1	Silk SMEs, silk farmers	Implement at least one pilot project	SDC	MAFF Sericulture Centre	Related programmes: MoC Mid-Term Plan / Trade SWAP, AND EIF Finalization and adoption of Law on PPP, MoEF and CDC drafting
	4.1.2 Based on experience from the first pilots, develop a PPP scheme for silk development based on vertical integration and contract farming and replicate it in relevant regions.	2	Silk SMEs	PPP scheme developed; five PPP projects implemented	SDC	MAFF Sericulture Centre	Related programmes: MoC Mid-Term Plan / Trade SWAP, AND EIF Finalization and adoption of Law on PPP, MoEF and CDC drafting
	4.1.3 Support public–private collaborative arrangements (e.g. mixed enterprises or commercial management contracts) for investment in irrigation improvement and upgrading to allow year-round sericulture farming in different provinces.	3	Sericulture farmers	Implement at least one pilot project	Ministry of Water Resources and Meteorology	MRD	MRD programmes
	4.1.4 Conduct feasibility studies for different or possible models and approaches to ascertain their technical feasibility and economic viability for golden and white silk production in Cambodia.	1	Sericulture farmers / SMEs	Implement at least one pilot project	SDC	MAFF / DPs	Potential support from DPs, contracting / consulting firms / agencies

Strategic objective 4: Revitalize and strengthen integration of sericulture in the silk value chain to increase domestic silk yarn production.

Operational objective	Activities	Priority 1=high 3=low	Beneficiaries	Target measures	Lead implementing partner	Supporting implementing partners	Existing programmes or potential support
4.2 Strengthen the organization of sericulture.	4.2.1 Support community development, organize farmers' groups and create /strengthen FOs to ensure better provision of extension services and for pooling of resources.	1	Sericulture farmers	Form 10 farmers' groups	SDC	SMEs / MAFF / MoC	Rural Development for Exports including Extension Services, Cooperatives Development, Surveillance Services
	4.2.2 Promote and incentivize cooperatives of silk farmers and weavers in sericulture regions to better organize farming, yarn production and weaving, and link to buyers by developing and deploying a business model for cooperatives.	2	Sericulture farmers / SMEs	Implement at least one pilot project	SDC	SMEs / MAFF / MoC	Rural Development for Exports including Extension Services, Cooperatives Development, Surveillance Services
	4.2.3 Create incentives and conditions for farmers to engage in sericulture by introducing contract farming arrangements, especially for women, by developing and deploying a contract farming model.	1	Sericulture farmers / SMEs	After two years, 30% of farms operate under contract farming	SDC	MoC / MAFF / MoWA / MoEF / MRD	Rural Development for Exports including Extension Services, Cooperatives Development, Surveillance Services (Trade SWAp: 10 possible clusters for future technical assistance), (need to include in MoC Mid-Term Plan nos. 5, 6 and 7)
	4.2.4 Set up industrial reeling facilities in combination with contract farming schemes on a PPP basis.	2	Sericulture farmers	Implement at least one pilot project	MoH	MoC / MAFF	Potential initiatives are from SMEs / NGOs / DPs (need to include in MoC Mid-Term Plan Nos. 5, 6 and 7)
	4.2.5 Provide training for reaching quality standards, training in management skills and organization of farmer communities.	1	Sericulture farmers / SMEs	After two years, 30% of farmers trained	MoLVT	MAFF / MoEF	Potential initiatives are from SMEs / NGOs / DPs (need to include in MoC Mid-Term Plan Nos. 5, 6 and 7)
4.3 Significantly increase production of high-quality silk yarn.	4.3.1 Facilitate access to agricultural land for sericulture farming – in order to increase total farmland surface area – through leasing schemes for small-scale farmers, cooperatives or vertically integrated SMEs.	1	Sericulture farmers / SMEs	Available farmland surface area increases by 15% a year	Ministry of Land Management, Urban Planning and Construction (MoLMUPC)	MAFF / MoEF	Potential initiatives are from SMEs / MoLMUPC (need to include in MoC Mid-Term Plan No. 3)
	4.3.2 Clarify and strengthen legal security and predictability in land ownership for sericulture.	2	Sericulture farmers / SMEs	Deliver valid land titles to 30% of farmers	MoLMUPC	MAFF / MoEF	Potential initiatives are from SMEs / MoLMUPC (need to include in MoC Mid-Term Plan No. 3)
	4.3.3 Introduce mulberry tree plantations and nurseries through FOs or cooperatives, or through support of vertically integrated private enterprises.	1	Sericulture farmers / SMEs	Implement at least one pilot project year	SDC / MoC	MAFF	MAFF Sericulture Centre / SMEs direct collaboration (need to include in MoC Mid-Term Plan No. 3)
	4.3.4 Promote and facilitate access to semi-mechanized reeling equipment in increase production scale and productivity.	2	Sericulture farmers / SMEs	At least 50% of farmers covered in five years	MoH	MoC	Potential initiatives are from SMEs / NGOs / DPs (need to include in MoC Mid-Term Plan No. 3)
	4.3.5 Establish reeling centres, introducing more efficient reeling techniques.	1	Silk SMEs	Produce 50 tons of silk yarn in five years' time	SMEs	MAFF / MoC – SDC	Potential initiatives are from SMEs / NGOs / DPs (need to include in MoC Mid-Term Plan No. 3)

Strategic objective 4: Revitalize and strengthen integration of sericulture in the silk value chain to increase domestic silk yarn production.

Operational objective	Activities	Priority 1=high 3=low	Beneficiaries	Target measures	Lead implementing partner	Supporting implementing partners	Existing programmes or potential support
4.4 Ensure reliable supply of raw materials, silkworm eggs, natural dyes, and mulberry nursery sources, tools and equipment.	4.4.1 Establish a programme to train local carpenters to construct semi-automatic looms and provide them with technical assistance and advice to optimise utilization, output and ensure maintenance.	1	Silk weavers / SMEs	Five carpenters trained for each target province per year	MoH	SMEs / communities / associations	Potential initiatives are from SMEs / NGOs / DPs (need to include in MoC Mid-Term Plan No. 3)
	4.4.2 Build capacity of decentralized dyeing service providers.	1	Silk SMEs	One centre in each target province	SMEs	SMEs / communities / associations	Potential initiatives are from SMEs / NGOs / DPs (need to include in MoC Mid-Term Plan No. 3)
	4.4.3 Create and operate central purchasing units at the community level to have better bargaining power and assure quality.	1	Sericulture farmers / weavers / SMEs	One official central purchasing unit in each target province to act as main provincial distributor	Microfinance institutions, SMEs	SMEs / communities / associations	Potential initiatives are from SMEs / NGOs / DPs / impact investors (need to include in MoC Mid-Term Plan No. 3)
	4.4.4 Supply equipment, tools and silkworm eggs through associations, cooperatives and integrated silk companies.	1	Sericulture farmers / SMEs	One qualified supplier in each target province	MAFF	SDC	Potential initiatives are from SMEs / NGOs / DPs / impact investors (need to include in MoC Mid-Term Plan No. 3)
	4.4.5 Promote and expand the use of tools and simple machinery such as reeling machines for yellow silk cocoons and white silk cocoons to extract yarn.	3	Sericulture farmers / SMEs	In five years, 50% of local silk yarn production is based on improved tools and machinery	MoC / SMEs / logistics companies	Line ministries	Concept Note No. 2 of MoC Mid-Term Plan – Trade Facilitation and Logistics – review of institutional arrangements among Cambodian line ministries
4.5 Improve access to training for farmers.	4.5.1 Expand access to vocational training for sericulture farmers in the regions by decentralizing training activities of CNS, located in Siem Reap under MoLVT.	1	Sericulture farmers / SMEs	Productivity increase of 20% per trained farmer in target provinces	MoLVT	SDC	Potential support from CNS / KSV potential collaboration
	4.5.2 Provide regular extension services on silkworm rearing, irrigation and integrated agricultural practices on mulberry tree cultivation by agricultural stations of MAFF.	1	Sericulture farmers / SMEs	Productivity increase of 20% per trained farmer in target provinces	Fibre and Addictive Crops Office of MAFF, Sericulture Centre	SDC	Potential support from MAFF Sericulture Centre
	4.5.3 Establish a programme to train farmers on sericulture, both on golden silk and white silk and management and optimisation of their revenues from silk.	1	Sericulture farmers / SMEs	Train 500 farmers in five targeted provinces; 100% increase in knowledge of white silk	SMEs	SDC	CNS / KSV potential collaboration based on demand and need
	4.5.4 Train farmers on natural dye plantation and growing 'leak kramor' to increase natural dye source and supply.	2	Sericulture farmers / SMEs	Train five big SMEs working with farmers in five targeted provinces	SMEs	SDC / experts	CNS / KSV potential collaboration based on demand and need. Cambodia, Lao People's Democratic Republic, Myanmar and Viet Nam (CLMV) exchange programmes
	4.5.5 Conduct a training programme for farmers on irrigation techniques in the main sericulture regions.	1	Sericulture farmers / SMEs	Visibility of irrigation system in five targeted provinces	MAFF / Ministry of Water Resources and Meteorology	SDC	Potential support CNS / SMEs / DPs

Strategic objective 4: Revitalize and strengthen integration of sericulture in the silk value chain to increase domestic silk yarn production.

Operational objective	Activities	Priority 1=high 3=low	Beneficiaries	Target measures	Lead implementing partner	Supporting implementing partners	Existing programmes or potential support
4.6 Support R&D.	4.6.1 Establish sericulture centres at agricultural stations of MAFF to provide disease-free silkworm eggs and mulberry tree seedlings to farmers.	1	Silk SMEs	Five sericulture centres established	MAFF	SDC	Potential support: KSV / CNS / DPs (need to include in MoC Mid-Term Plan No. 7)
	4.6.2 Establish a national sericulture centre equipped with R&D laboratories and able to select the best varieties of mulberry trees and silkworms – including hybrids – as well as disease controls, and resource it to ensure its long-term sustainability.	3	Sericulture farmers / SMEs	All production needs covered in five years	MAFF	SMEs / MoH	Potential support from SDC and initiatives from private sector or SMEs (need to include in MoC Mid-Term Plan No. 7)
	4.6.3 Improve key production technologies applied in sericulture, such as a reproduction centre for silkworms, cross-breeding of worms, and introduction of new mulberry tree varieties.	2	Sericulture farmers / SMEs	Half of domestic yarn production based on new technologies in five years	MAFF	MoH / SDC	Potential collaboration between CNS, KSV and experts (need to include in MoC Mid-Term Plan No. 7)
	4.6.4 Establish a book of local natural dye sources and keep developing new colours from different plants, and advise what colours can be generated from each plant and their formulations.	2	Sericulture farmers / SMEs	Enhancement of 100% in the creation of a Cambodian silk product identity. Improvement of 50% in localizing dye supplies; and slowly eliminate the azo content in the use of chemical dyes	MAFF	MoH / SDC	Potential collaboration between CNS, KSV and experts (need to include in MoC Mid-Term Plan No. 7)
4.7 Improve extension services.	4.7.1 Support training and supply to village-based dyeing units using German and Thai dyes.	3	Silk SMEs	One dyeing unit per target province and per silk district in the five target provinces	SMEs	SMEs / MoH / SDC	Potential collaboration between SMEs, SDC, CNS, KSV and experts
	4.7.2 Introduce, and provide advice and assistance on, integrated agriculture practices and multi-cropping to farmers' associations and cooperatives.	1	Sericulture farmers	All sericulture farmers have access to training in five years	MAFF / Ministry of Water Resources and Meteorology	MoC	Potential collaboration between SMEs, SDC, CNS, KSV and experts
	4.7.3 Increase the number of sericulture experts and extension agents, and conduct training of trainers.	2	Extension staff, sericulture farmers	Extension staff numbers increase by 20% a year	MAFF	SMEs	Collaboration between SMEs, SDC, CNS, KSV and experts
4.8 Facilitate access to remote sericulture / silk areas.	4.8.1 Support transport facilitation to provide priority access to remote sericulture and production areas in Siem Reap and to link them to main roads and to Sihanoukville port.	3	Sericulture farmers / SMEs	Half of total sericulture area accessible by main road in five years	MoPWT / MRD / SMEs	DPs / MoEF	Potential collaboration between MoC and MoPWT
	4.8.2 Support building of bridges and develop means of transport from remote villages to access main roads, in order to facilitate transport and trading.	3	Sericulture farmers / SMEs	Half of total sericulture area accessible by main road in five years	MoPWT / MRD / SMEs	DPs / MoEF	Potential collaboration between MoC and MoPWT
	4.8.3 Support road development and construction, and transport, for silk villages in Prey Veng and remote villages in Kampong Cham, Takeo and other provinces.	3	Sericulture farmers / SMEs	Half of total sericulture area accessible by main road in five years	MoPWT / MRD / SMEs	DPs / MoEF	Potential collaboration between MoC and MoPWT

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33	Mr Chin Chhunleng	Manager	Leng Silk
34	Mr Khov Mengkong	Owner	Mengkong raw silk supplier
35	Mr Morimoto Kikuo	Director	Institute of Khmer Traditional Textiles
36	Mrs San Vannary	Owner	Lotus Silk
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