



Research Article

Value Chain Alliance and Financing of Sikki Craft in Nepal

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Keywords: Sikki craft; Value chain alliance; Value chain financing; Nepal

Abstract

This paper examines the value chain alliance and financing of sikki craft in Nepal. Among other crafts, sikki crafts is the potential handicrafts in rural community in Nepal. Sikki (*dhakiya*) is the natural fiber made from grass and which is being used among *Tharu* communities as a gift during marriage ceremony of daughter and high export potential in global market. Sikki is more labor-intensive based production, which involvement of women in whole process as well as 79% costs of raw materials have been used from local resources. Lack of awareness, inadequate design, lack of coordination, networking and structures, inadequate business knowledge and inefficient technology were major constraints hindering the growth of this sikki craft sub-sector in Nepal. It was estimated that a total of 630 enterprises can be developed during the five-year period. The study revealed that, a total of NPR 70.5 million will required to manage their enterprises that can create over 1260 jobs. The loan fund to be required from external financial institutions will be NPR 3.9 million, where Government of Nepal can play a catalytic role to help these entrepreneurs obtain such loans from the formal sources through brokerage system charging fees. The return of investment of this product was 66% and benefit-cost ratio was 1.7. From the points of view of value chain financing of sikki craft, the business seems viable to the rural women in Terai' community of Nepal from employment generation and promotion of Nepalese handicraft in global niche markets.

Introduction

Nepalese handicrafts, which have been a part and parcel of the Nepalese heritage, depict the great tradition and proud culture of this great Himalayan. Nepalese handicraft products have been best known to the world for its rich art, crafts and oriental architecture. The skill and techniques of making handicraft products, which have been handed down from generation to generation, not only represent the talent

and skill of craftsmen but also reflect the social, religious and cultural values found in different parts of the country. Sikki is a type of grass and belongs to the category of natural fibres. This is grown in the damp and muddy area near the bank of the rivers. Sikki grass, as it is, cannot be used; it is first cut near to its roots and then dried for few days. The part of the stem bearing flower is not useful and cannot be

used for making craft so it is discarded. The rest of the portion of the grass is sliced and then shaved with knife. Then the natural golden colored grass is used as it is or it can be dyed in various colors. This grass is not having high strength so *Munj* grass is used as a strength provider. A bundle of *Munj* grass is taken which is completely covered by Sikki grass. Then it is turn like coil and this coil is used in forming various items such as lamps, containers, stools and other decorative items (Paras and Varshneya, 2014).

Nepalese handicrafts, which have been a part and parcel of the Nepalese heritage, depict the great tradition and proud culture of this great Himalayan. Nepalese handicraft products have been best known to the world for its rich art, crafts and oriental architecture. The skill and techniques of making handicraft products, which have been handed down from generation to generation, not only represent the talent and skill of craftsmen but also reflect the social, religious and cultural values found in different parts of the country (MoICS, 2020).

Handicraft sector occupies a prime position in the Nepalese economy. It is the largest employer, next to agriculture. The sector, while providing livelihood for thousands of artisans, provides avenues for realization of social and cultural potential of millions of people. The mythological, religious, social, historical and artistic expressions in crafts symbolize the strengths of cultural heritage while combining in these crafts both utility and beauty.

Being a labour intensive product, it is difficult for one to produce it in large quantity with uniformity and with equal quality standard. In Nepal, the production of handicrafts is an age-old occupation. In the last 27 years, export of handicrafts of the country has considerably grown. Thus, the development of handicraft, on one hand, helps in preserving the national heritage of the country and on other hand, it contributes in eliminating poverty by creating job opportunities. Nepalese handicrafts industries have been providing employment to hundreds of thousands of people of the country. It has also been a prime source of foreign exchange required for the importation of necessities.

The export of Nepalese handicrafts started from the mid 60's of the last century. However, the systematic export started only from early 70's. Handicrafts have long been a major line of Nepalese exports. Currently, it has been the largest overseas export item of the country next to readymade garments and carpets. More than 20 handicraft products mainly the pashmina products, woolen goods, silver jewellery, Nepalese handmade paper and paper products, metal craft, wood craft, cotton goods etc. are being exported to about 85 countries. USA (which alone absorbs around 25% of the total export of handicraft products), Britain, India, Canada, Germany, Japan, Italy, France, Australia,

Netherlands and China are its major foreign buyers (MoICS, 2020).

Nepal is known world-wide for its handicrafts, with products worth NPR 5.4 billion (approximately US\$ 52 million)¹ exported in the fiscal year 2016/17 (FHAN, 2018). Although the sector is tremendously popular, there is still plenty of opportunity to tap into the traditional skillsets of Nepali artisans in far-flung districts, who deserve to shine in the international arena but are constrained by geographical, legal, financial, organizational and other barriers.

High employment potential, low per capita investment and high value addition, involvement of women and weaker section, eco friendliness and the potential to stimulate creative talents make the sector one of the most preferred sectors in the process of economic development. One of the unique features of the handicrafts is that more often the same item of the handicraft, produced in different regions, are different from each other in terms of the craftsmanship, style, color combination and finish by artesian creativity (Khan and Ami, 2013).

Among other crafts, sikki crafts is the potential handicrafts in Nepal. However, the artisans have not taken this craft as their main profession but practice as a part time work. They are also engaged in services or labour work. An important feature of this crafts is that only female members of the families are engaged in this craft. So, artisan families are not dependent only on this craft for making their survival successful. The female artisans are also not fulltime practitioners. They weave in leisure time, of their daily life.

Government and development partner interest in promoting value chains to develop agriculture and contribute to food security and poverty reduction has been rising since 2008's global food crisis. Nepal has implemented a number of projects designed to assist smallholder farmers transform from subsistence into commercial agriculture, financed mainly by various development partners. Recognizing the importance of post-farm and services for successful value chain development, the poverty alleviation and commercial agriculture programs and projects financed by different bilateral and multi-lateral organizations have channeled investment into traditional areas of on-farm productivity, some percentage of investment into value chains, market support, post-farm processing and associated infrastructure, and major percentage on enabling services including credit, capacity development and policy. In this context, Government of Nepal can invest for value chain development alliance and financing sikki crafts production, processing and marketing (GoN/FAO, 2013).

¹ 1 US\$ = Nepalese Rupees (NPR) 114

Sikki is the natural fiber made from grass. Sikki (*dhakiya*) is being used in Nepal in Tharu communities as a gift during marriage ceremony of daughter. In addition, many items are crafted by skilled artisans from this fiber. This sikki handicraft not only make items which are used in daily life but its large portion is of decorative unique items. Various objects such as hot case, vessels, *thal chakadi*, egg shape pen holder, pen holder, *khutruke*, *belawa/thulo dhakiya*, dust bin, hand bag and tray are made from Sikki and sold at NPR 150 to 1200 per piece based on types of crafts. According to traders such types of products have been imported from Bangladesh, Thailand, China, Philippines, etc. in Nepal. On the other hand, there are initiations taken in exporting sikki based products to Germany and.

Sikki is more labor-intensive based production, which involvement of women in whole process as well as 79% costs of raw materials have been used from local resources. Thus, it has potential to create full time employment opportunities particularly rural women at local level thus reducing the under-employment problem. Sikki crafts business is found in Terai belts of Nepal, namely, Kapilvastu, Bardiya, Dang, Nawalprasi, Danusha as well as in inner Terai districts. This are also a major source of income for many artisans but this sector is still unorganized and decentralized. The artisans are not having any formal education about business. They do business based on their experience. Thus, their full potential is not utilized.

Regarding sikki crafts, there has not been any detail study regarding production and marketing in Nepal till date. However, Government organization as cottage and small industry office, District forest office have done some work in upgrading these traditional skills of sikki craft into business. Commercial production has started through support of government agencies (District Forest Office, Cottage and District Small Industry Development Office) and projects (PAF, MEDEP, CECI, etc.) in the various district in Nepal. Value chain analysis encompasses the full range of activities and services required to bring a product or service from its conception to sale in its final markets-whether local, national, regional or global (Kaplinsky and Morris, 2002).

In this context, the overall objective of this study was to provide sufficient understanding on the current status and future potential of sikki craft and to provide a comprehensive VCA of sikki and identify area of interventions.

Research Methodology

Both quantitative and qualitative methodologies were used to collect necessary information from value chain actors and enablers at different stage of sikki craft value chain alliance and financing. A comprehensive value chain analysis of the sikki crafts sub-sector from Poverty Alleviation Fund (PAF) beneficiaries of Kapilvastu district of Nepal have been

involved directly or indirectly. Focus group discussions (FGD) and key informant interviews (KII) tools were used to collect required information from indigenous Nepali 'Tharu' community. In addition, stakeholders' analysis was done at district, regional and national levels related to sikki craft value chain development focusing on production as well as trading scenario.

Questionnaires and checklists were developed and used for all value chain actors, enablers including inputs suppliers, producers, collectors, processors, wholesalers and retailers in value chain function. In this context, this study was conducted in Kapilvastu district using focus group discussion, key informant interview with sikki crafts producers, collectors, and rapid market survey was conducted with sikki crafts enterprises as well as traders at regional to national market hubs in 2018. Visits were also carried out to agencies like District Agriculture Development Office (DADO), Agriculture Service Centre (ASC), District Chamber of Commerce and Industries (DCCI), Cottage and Small Industry Development Board (CSIDB) in Kapilvastu and discussions were held with the key officials.

In addition, value chain development (VCD) alliance and financing detail checklist was used to pocket products community organization (CO) members, cooperatives, micro-financing institutions (MFIs) and banks. Two FGDs were conducted. Cost-benefit analysis, business potential, gap and stakeholder analysis, value chain mapping, end market assessment, product, chain, function and process diversifications, potential value chain development alliance and financing models and intervention were assessed in this study. Furthermore, both backward and forward linkage and horizontal and vertical integration of sikki crafts sub-sector were judged based on Poverty Alleviation Fund (PAF) Future Strategy, growth and value chain development potential for business promotion in a sustainable manner.

Since several value chain studies were carried out in Nepal in the past by numerous institutions, desk reviews were also conducted to obtain secondary data to ensure validation as well as to avoid the overlap. Desk review, group discussion (with producers using focus group discussion), key informant interview (with input suppliers, key model farmers, collectors, traders, processors, institutions and other VC market chain actors, enablers), rapid market appraisal (with commodity traders and wholesale market) and case studies were used as a VCA study technique using participatory learning and action (PLA) approach. The SWOT analysis, value chain map, backward and forward linkages with margin of all the actors in the value chain with recommendation mentioning the bottlenecks, opportunities, key leverage points and intervention strategy were assessed for each commodity. Descriptive statistics and value chain analysis tools were used to analyze data.



Fig. 1: Items made from sikki grass in study area

The study was conducted in collaboration with Ministry of Agriculture and Livestock Development (MoALD), Ministry of Industry, Commerce and Supplies (MoICS), Ministry of Forests and Environment (MoFE), and Micro-Enterprise Development Programme (MEDEP), other concerned stakeholders/line agencies focusing the core issue in the Agriculture Development Strategy 2015-2035 (ADS, 2014).

Results and Discussion

Production and Marketing of Sikki Craft

Sikki is a type of grass and belongs to the category of natural fibres. This is grown in the wet and marshy areas near the bank of the rivers and ponds in the lowland region of the country. Sikki grass, as it is, cannot be used; it is first cut near to its roots and then dried for few days. The part of the stem bearing flower is not useful and cannot be used for making craft so it is discarded. The rest of the portion of the grass is sliced and then shaved with knife. Then the natural golden color grass is used as it is or it can be dyed in various color. This grass is not having high strength so *Munj* grass is used as a strength provider. A bundle of *Munj* grass is taken which is completely covered by sikki grass. Then it is turn like coil and this coil is used in forming various items such as lamps, containers, stools and other decorative items.

In the present trend, harvesting authority of sikki has been given by forest office/Community Forest User Groups (CFUG) as *khar/kas* during harvesting period. Semi processed sikki is sold at NPR 500-600 per kg in some places according to fistful (*mutha*). Domestic practices have not been practiced however, Hariyali CFUG, Barkalpur, Budhhabhumi Rural Municipality Ward Number 9, initiated for domestication last 10 years ago but due to less care for protection and grazing by cattle, it had not expanded in commercial scale. It can be cultivated through slip (division of old shrubs) in rainy season. Within 2-3 years it can be harvested. Generally, 15 days is required initial level

processing (post harvesting management like discarded upper portion of part, drying, slicing, etc).

Production of handy crafts especially in Tharu (Chaudhary) is indigenous. Dhakiya is pre-requisite in the marriage ceremony and other traditional ceremony. But commercial production has been starting through support of government agencies (District Forest Office, Cottage and District Small Industry Development Office), projects (PAF, MEDEP, Center of International Studies and Cooperation/CECI). More than 80% is labour cost for whole production. This is the opportunities to create job opportunities at local level. Ultimately, it could help to reduce under employment problem to fulltime employment opportunities.

The major marketable sikki based products in the market are hot case, dustbin, basket, tray, table mats etc. According to traders during the interview, such types of products in huge quantity are being imported from Bangladesh, Thailand, china, Philippines, etc. Through promotion of this business, it has helped for import substitution in some extent. On the other hand, there is limited export of sikki based products in Germany and Denmark as well. During the study, it was reported that Mr. Ek Raj Chaudhary, Journalist, Gurubaba FM, Bansgadhi, Bardiya has facilitated trading of sikki handicrafts to Denmark through NRN representatives. So far he has exported 42 pieces crafts items and ordered for 200 additional pieces with the Jasu Hastakala Samuha, Basgadhi-4, Laxmanpur, Bardiya. Women Entrepreneur Association Nepal (WEAN) cooperative has sent Sikki products to Germany in the past but it has not been continued due to its bulky nature that increase transportation cost, despite the demand. Thus, it has help to create employment opportunities to women at local level in rural areas in Nepal.

Marketing of products is the main constraints for commercial promotion of this business. At present, these products have been selling at local level, Bhairhawa, Tilaurokot Darbar, Kathmandu, Nepalgunj, various trade fairs.

Current market channel of sikki crafts

- Raw material collection and post harvesting management → Entrepreneur/Craft producer group → Consumer/end market.
- Raw material collection and post harvesting management → Entrepreneur/Craft producer group → Regional Traders (Bhairhaha/other sales outlet → Consumer/end market.
- Raw material collection and post harvesting management → Entrepreneur/Craft producer group → Kathmandu buyer → Consumer/end market.
- Raw material collection and post harvesting management → Entrepreneur/Craft producer group → Kathmandu buyer → export → Consumer/end market.

Flow chart 1: Current market channel of sikki crafts shown in right direction

From Flow chart 1, point of view of current marketing channel of sikki crafts, following marketing strategy need to be applied for promotion of sikki products as:

- Strengthen SMEs for collective marketing and facilitate their business relationships with buyers at local, regional and international markets.
- Make regular interaction mechanism among producers and market actors.
- Facilitate buy back arrangement and contracts between craft manufacturers and buyers/exporters to establish and develop positive relationships
- Conduct Market research of sikki products both at national and international level.

Table 1: Status of sikki crafts production in Kapilvastu district, Nepal

| Name of Municipalities | No of COs | HHs involved | Production per HH/year (No.) | Total production (No.) |
|-------------------------------|-----------|--------------|------------------------------|------------------------|
| Budhabhumi Rural Municipality | 5 | 105 | 40 | 4200 |
| Kapilvastu Municipality | 1 | 25 | 10 | 250 |
| Banganga Municipality | 2 | 41 | 10 | 410 |
| Total | 8 | 171 | | 4860 |

Source: Field study (2018)

According to field study, it was estimated that about NPR 18.24 million sikki crafts were being traded in the country. Likewise, 2183 persons have been getting full time employment opportunities in sikki crafts at local level. In case of Kapilvastu district, 631 households (HHs) were involved in sikki crafts production and marketing that worth NPR 2.28 million trade however only 171 HHs were doing it in commercial scale. Total 18 person were fully involved in sikki crafts production in Kapilvastu. Total eight community organization (COs) were involved in sikki craft production from three municipality of Kapilvastu district. The status of sikki production in Kapilvastu district, Nepal is presented in Table 1.

Value Chain Mapping

The value chain map of sikki crafts is presented in Figure 2 presenting the sikki production and marketing scenario with reference to the study districts (Kapilvastu and Bardiya districts) including the number of actors involved, total production quantity and sales value. The value chain map outlines the main functions and actors along the chain starting from collection of raw materials (*kash, kush, banaksh*) from forest and river banks areas to local level processing (collection, grading, drying packaging) of raw materials, production of sikki crafts products, and distribution to the domestic and export markets and their relationship. It is understandable that one function maybe

performed by more than one actor, and each actor may perform more than one function. The individuals / institutions that have been supporting this sector directly or indirectly are listed as supporters/enablers.

The sikki value chain comprises numerous actors. The main actors in the sikki crafts value chain were the local collectors /harvesters, inputs suppliers, local processors and

craft producers, traders and consumers. The actors or stakeholders involved in sikki value chain at national Level is summarized in Table 2.

Gap Analysis for Sikki Crafts Value Chain in Nepal

The existing situation, constraints and opportunities at each node of sikki value chain is presented in Table 3.

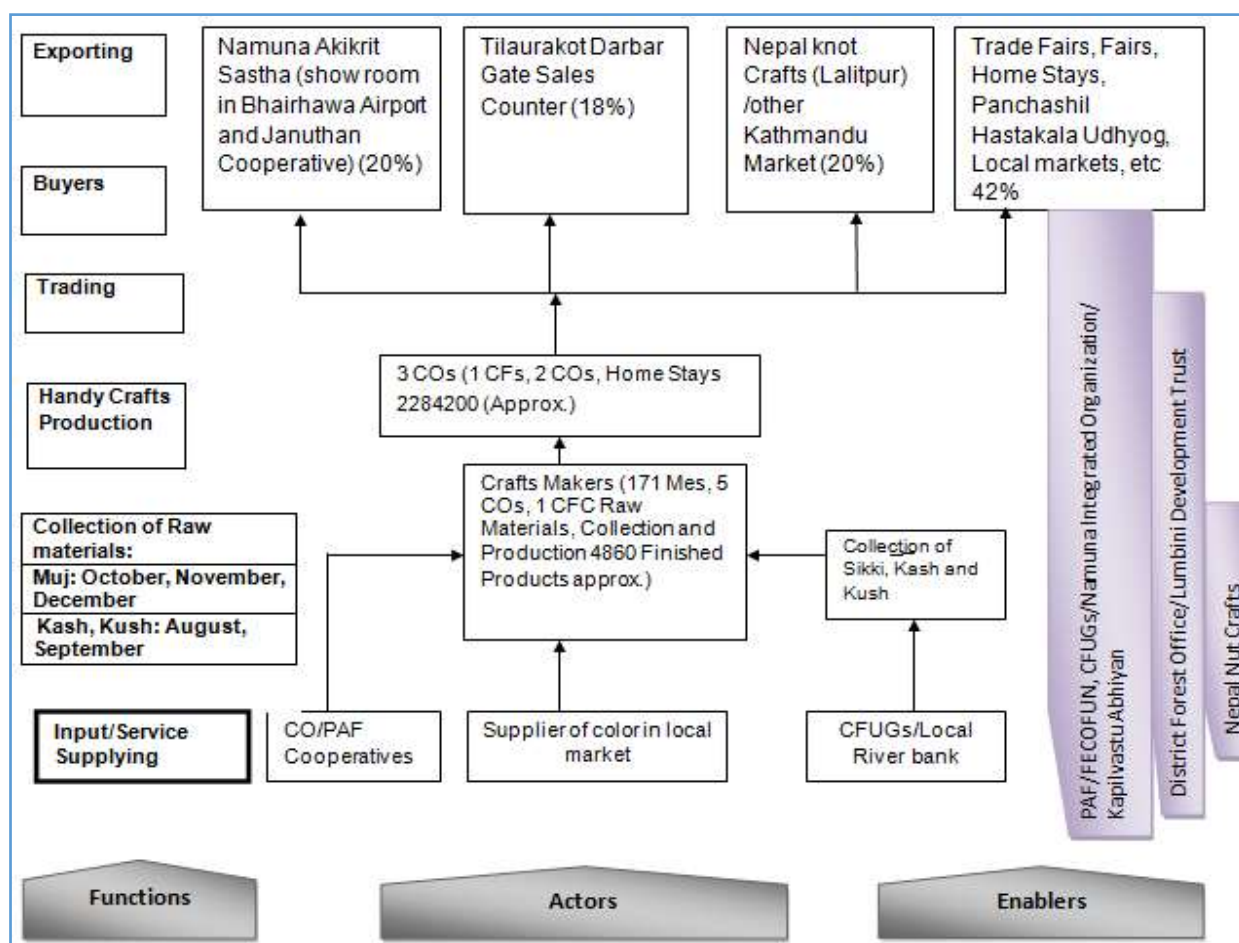


Fig. 2: Value chain map of sikki crafts in Kapilvastu district, Nepal

Source: Field survey (2018) in Kapilvastu district, Nepal

Table 2: Value chain actors, roles and responsibilities for sikki crafts value chain alliance and financing in Nepal

| Actors | Description |
|------------------------|--|
| <i>Input suppliers</i> | Various inputs are required at different stages of production, processing & product development. Input suppliers are those who provide inputs for the production of Sikki crafts such as sikki, <i>kash</i> , <i>kush</i> suppliers, colors and other tools, equipment etc. Local shops, Tools/ Equipment's / Manufacturer, Chemical supplier supplies above mentioned inputs CSIDB, PAF and MEDEP provide technical & financial support for sourcing /buying the required materials |
| <i>Collectors</i> | Sikki grass Collectors are mostly female farmers who collect raw materials as sikki, <i>kash</i> , <i>kush</i> and <i>bankash</i> from the forest both community and National as well as wet and marshy areas near the bank |

Table 2: Value chain actors, roles and responsibilities for sikki crafts value chain alliance and financing in Nepal (Contd.)

| Actors | Description |
|--|--|
| | <p>of the rivers during dry season dried in the field or at home for own use and/or sell at local market for additional revenue</p> <p>In some cases, there are organized collectors as CFUG members linked to sikki craft production at community/district level.</p> <p>Sikki grass, as it is, cannot be used; it is first cut near to its roots and then dried for few days. The part of the stem bearing flower is not useful and cannot be used for making craft so it is discarded. The rest of the portion of the grass is sliced and then shaved with knife. Then the natural golden color grass is used as it is or it can be dyed in various colors. This grass is not having high strength so <i>Munj</i> grass is used as a strength provider. A bundle of <i>Munj</i> grass is taken which is completely covered by sikki grass. Then it is turn like coil and this coil is used in forming various items such as lamps, containers, stools and other decorative items.</p> <p>Product includes tangible and intangible characteristics such as color, packaging, service and image. In sikki handicraft, there are various products that are made by artisans which includes decorative items as well as utility items. Utility items include lamps, containers, tables, bags, etc. and decorative items include dolls, wall hangings, etc. These are designed and produced by artisans. Generally, artisans use conventional ideas.</p> |
| <i>Raw Materials Processing</i> | <p>Local women, sikki Entrepreneurs (Individual/Group based) collect and/or purchase the sikki grass from collectors, do drying, discard the stem bearing flower which is not useful for making craft. The rest of the portion of the grass is sliced and then shaved with knife. Then the natural golden color grass is used as it is or it can be dyed in various colors. Sikki grass do not have high strength so <i>Munj</i> grass is used as a strength provider.</p> |
| <i>Product Designing and Development</i> | <p>These product development steps may include dyeing, printing, and designing /manufacturing of various products that includes decorative items as well as utility items such as lamps, containers, tables, containers, stools, bags, etc. and decorative items as per market demand by artisans /crafts man.</p> <p>After primary processing of raw materials, bundle of <i>Munj</i> grass is taken which is completely covered by Sikki grass. Then it is turn like coil and this coil is used in forming various items as mentioned above. Sikki crafts are produced throughout the year, however the suitable months are generally summer seasons. The products developed are stored and transported to stores and urban market like Kathmandu and Pokhara cities in Nepal. Production occurs between December and May.</p> <p>Craft producers /Artisans are predominantly local women, who do own their own or paid by the enterprise owner. Cos and CFUGs member are also involved in production of crafts in the study area. In addition, community Facility Centre (CFC) supported by PAF and MEDEP in the study area, provide space, regular technical support in production, sorting of finished products and financial services as well as linkages development to outputs market in lesser amount.</p> |
| <i>Trading /Marketing</i> | <p>CFC/Traders collect sikki crafts/ products from artisans / product manufacturers operating in local community individually directly and/or through COs/CFUG, store, sort if needed and transport and sell in local and National Fairs, Sales outlet, and traders and handicrafts shops operating in Kathmandu and other places. The handicrafts shop also exports some products in lesser quantity.</p> <p>The trader's explore potential buyers at major markets in country and abroad and communicate through photographs or samples of products and terms and conditions of offers, also provide training and guidance to producers to meet the market requirements, and sell products in domestic market and also exports.</p> |

Table 2: Value chain actors, roles and responsibilities for sikki crafts value chain alliance and financing in Nepal (Contd.)

| Actors | Description |
|---|---|
| <i>Exporters</i> | There are few handicraft exporters who also export sikki crafts. These exporters do not specialize in Sikki crafts only, they deal in a large variety of handmade products from Nepal. They collect all types of handicrafts from different individuals, artisans, manufacturers and specialized traders. These units have good linkages with importers and marketers of Nepali handicrafts in different parts of the world. |
| <i>Retailers</i> | The retailers represent the final link that connects Sikki crafts producers to the consumers in the market chain. They are mostly the traders who buy the goods from product manufacturers and sell to the end consumer as internal tourists, sales outlet and Retail shop of handicrafts. |
| <i>Consumers</i> | Main consumers of these products are individual HHs, tourists, tourist hotels and official purposes both at national and international level. |
| <i>Service Providers/ Support Organisations</i> | <p>Federation of Community Forest Users Nepal (FECOFUN), Federation of Handicrafts Association Nepal (FHAN), Handicraft Association of Nepal (HAN) and various development organizations as PAF, MEDEP, CECI, Paschik Mahila Jagaran Samaj, Kapilvastu Abhiyan are providing technology development, market exploration through trade exhibitions and fairs, and other support including technical and financial assistance to value chain actors for efficient value addition including buyer–seller meetings at various level for marketing.</p> <p>Cottage and Small Industry Development Board (CSIDB) & DFO support to related entrepreneurs especially for registration of enterprises, technical training, and technology access, financial support and so on. District Forest Offices (DFOs) by designing suitable policy for benefiting micro entrepreneurs and poor CFUG members. In Kapilvastu district forest office/MSFP did financial support to establish outlet in Tilaurakor Darbar Area, Taulihawa, Nepal.</p> <p>Lumbini Development Trust has supporting communities to preserve indigenous skill through providing marketing skills to beneficiaries. Likewise, it has provided venue to establish outlet in Tilaurakot Darbar. It also supported to establish home stay in these areas. Home stay is appropriate space for marketing products during visiting of guests in their home stay.</p> |
| <i>Enablers & Facilitators</i> | <p>MoFSC facilitate and provide technical support and policy related support for sustainable management, forest-based industry establishment through Department of Forest and District Forest Offices.</p> <p>MoIC supports manufacturing, exports and trade promotion through TEPC. MoIC/CSIDB has been implementing various product and market development programmes through organization of various trade fairs at local level and national level. Beyond that it has been providing financial support to participant to these events. Likewise, it has been supporting in Dang, Bardiya, Banke and Kailali district for skill training and marketing of products.</p> |

Source: Field survey (2018) based on focus group discussions ((FGD) and key informant interviews (KII)

Table 3: Situation, constraints and opportunities along the various functions of sikki crafts value chain

| Types of Services | Situation | Constraints | Opportunities |
|---------------------|---|--|---|
| <i>Input Supply</i> | <ul style="list-style-type: none"> • Main raw material for sikki crafts (Munj) has been collected from CFUG. <i>Kash</i> and <i>kush</i> have been collected from near river sides and CFUG. • Coloring agents from local market. | <ul style="list-style-type: none"> • Limited resources in CFUG. • No cultivation. • Certain land had allocated for sikki cultivation in Hariyali CFUG, Barkalpur. But due to animal grazing and less care, planted shrubs were loss. • No inventory in CFUG about resources and work plan in | <ul style="list-style-type: none"> • Local forest office (sector office) and CFUG positive for domestication, resource inventory and make action plan through revision of CFUG action plan. • Existing trainer / LRP. • SMEs and CFUG members have practices to sell semi- |

Table 3: Situation, constraints and opportunities along the various functions of sikki crafts value chain (Contd.)

| Types of Services | Situation | Constraints | Opportunities |
|------------------------------------|---|--|--|
| | <ul style="list-style-type: none"> Financial access to MEs through revolving fund and PAF cooperatives. | <ul style="list-style-type: none"> CFUG for cultivation, protection and harvesting. | <ul style="list-style-type: none"> finished products as raw materials. |
| <i>Production</i> | <ul style="list-style-type: none"> Materials Collection and Production of approx. 4860 finished Product. One CFC is available for MEs to work and storage of materials. Traditional knowledge All products are not produced according to market demand. | <ul style="list-style-type: none"> Limited MEs have received training for new design training. There are no suitable places for working. All product are not produced according to market demand. | <ul style="list-style-type: none"> Tharu female have traditional skills. Through little raw materials could produce large no of products. 171 MEs have already started in commercial production. |
| <i>Marketing</i> | <ul style="list-style-type: none"> Seasonal market demand in Taulihowa and Bhairhawa market. In Bhairhawa, they have not received payment up to 2 years after supplied products. | <ul style="list-style-type: none"> Limited linkage development with buyers. No personnel account no. provided for payment received. Many products remained in store due to difficulty in selling. | <ul style="list-style-type: none"> Opportunities to sale in home stay. Could establish outlet in Lumbini through coordination to Lumbini Development Trust. Target customer in domestic and foreigner. Possibility to B2B linkage and receive order. |
| <i>Financial Services</i> | <ul style="list-style-type: none"> Financial servicing through PA RFF. Other financial institution also exists (Chhimek, Tharuhat cooperative, etc.) | <ul style="list-style-type: none"> Limited financial access for doing other business. | <ul style="list-style-type: none"> Already enough fund in Cooperative/Cos. Commercial bank (NIC Asia), Mission development bank have already started micro credit facility. -Possibility to link other credit facility scheme. |
| <i>Infrastructure</i> | <ul style="list-style-type: none"> Exist CFC for storage and working place (Dumbra, Budhabhumi Rural Municipalities) Other have no working places | <ul style="list-style-type: none"> No sales outlet of beneficiaries for selling products. Inadequate working places | <ul style="list-style-type: none"> Opportunities to link local federal government to construct infrastructure and places. |
| <i>Technology</i> | <ul style="list-style-type: none"> Technology new design have been applying for production but not enough. -No approve curriculum development for training manual. No domestication technology have applied. | <ul style="list-style-type: none"> Update new design through regular coordination with buyer. Lack of quality products.as demanded by market | <ul style="list-style-type: none"> -Can produce market demand products with not exceed NPR 1000 per pcs in average selling price. |
| <i>Organization and management</i> | <ul style="list-style-type: none"> Register in PAF as CO. No registration in DCSIO. | <ul style="list-style-type: none"> No opening of bank account for trade. No registration in DCSIO, no possibility to get subsidies. | <ul style="list-style-type: none"> Register in DCSIO Can link with DCCI and other trade organization. |

Source: Field survey (2018) based on focus group discussions ((FGD) and key informant interviews (KII)

SWOT Analysis of Sikki Crafts

Competitive analysis provides an overview of the sikki crafts in various stages of the value chain. The analysis identifies strengths, weakness, opportunities, and threats. Strengths and weaknesses refer to the internal factors governing the product sub-sector, while opportunities and threats encompass the external factors influencing the business environment. The SWOT is presented in Table 4.

Value Chain Upgrading Strategy of Sikki Crafts

Table 5 presents Potential Interventions along the various functions of sikki crafts value chain.

Table 4: SWOT analysis for production, marketing and upgrading of sikki value chain

| Strengths (to capitalize on) | Weaknesses (to eliminate) |
|---|--|
| <ul style="list-style-type: none"> • Indigenous skills and culture in local communities in particular Tharu community. • Low capital investment required. • Low production cost, labor intensive business. • More than 79% use of raw materials from local resources. • Production potential according to market demand in quality, design and size. • No ban or restriction on collection, trade and export. • Cultivation can be extended to a wider area in CFUG land. • Easy cultivation technique through slips. • High potential for empowerment of women, youth and people with disabilities • Wide range of traditional production skills derived from indigenous knowledge | <ul style="list-style-type: none"> • No uniformity price among producer level. • No linkage development among producers and buyers. • Non-existence of standardization of design and size and poor quality products. • Lack of knowledge and product diversification. • Limited use of raw materials in the natural stage. Fixed season for harvesting of raw materials. • No approved curriculum by CTEVT for training packages. • Lack of design, innovation and technology up gradation. • Limited capitalization and low investment • Limited resources for production, distribution and marketing. • Limited e-commerce competence among producer groups. • Inadequate Infrastructure and inefficient traditional Technology restricts their production capacity and the quality of output. This is due to the lack of awareness or knowledge about the availability of appropriate tools, technology and other developments in the sector. • Limited access to markets: Despite high demand, only a fraction of artisans engaged in this sector have been able to utilize this opportunity; while most of the artisans have only been able to access just the local markets. As a result these artisans are absolutely dependent on traders, acting as middlemen, to sell their products in markets other than the local ones. |
| Opportunities (to take advantage of) | Threats (to overcome) |
| <ul style="list-style-type: none"> • Possibility for import substitution. • PAF and other government agencies have been supporting for commercialization of this occupation. • Huge opportunity to generate income and employment in the rural areas to indigenous women. • Niche market opportunity due to unique qualities. • Environment friendly production. • Government support and interest in preserving the craft Fair trade practices. • Increasing flow of tourists provide market for products. • Increasing emphasis on product development and design up gradation | <ul style="list-style-type: none"> • Dependencies on natural resources cause deficiency of raw materials for commercial expansion. • Threat to sustainable production of resource. • Most of the productions are traditional design rather than market demand. • Misunderstand of consumers that handy crafts products are more expensive than conventional plastic products. • Inadequate advocacy and promotions. • Decreasing supply of good quality raw material. • Lack of quality standardization process • High freight costs associated with air cargo and shipment during export. |

Source: Field survey (2018) based on focus group discussions ((FGD) and key informant interviews (KII)

Table 5: Potential Interventions along the various functions of sikki crafts value chain

| Value chain level | Situation analysis | Key Gaps | Intervention activities |
|---------------------|---|--|--|
| <i>Input Supply</i> | <ul style="list-style-type: none"> • Main raw material for sikki crafts (Munj) has been collected from CFUG. <i>Kash</i> and <i>kush</i> have been collected from near river sides and CFUG. • Coloring agents from local market. • Financial access to MEs through revolving fund and PAF cooperatives. | <ul style="list-style-type: none"> • -Limited resources in CFUG. • -No cultivation. • Certain land had allocated for sikki cultivation in Hariyali CFUG, Barkalpur. But due to animal grazing and less care, planted shrubs were loss. • -No inventory in CFUG about resources and work plan in CFUG for cultivation, protection and harvesting. | <ul style="list-style-type: none"> • Resource inventory, cultivation in CFUG • CFUGs' operation revision for cultivation and harvesting • Mobilization of CFUG according to Work Plan • Local service provider development for raw materials(semi products) • Access to finance through linkage development with MFI and commercial banks. |
| <i>Production</i> | <ul style="list-style-type: none"> • Materials Collection and Production of approx. 4860 finished Product. • One CFC is available for MEs to work and storage of materials. • Traditional knowledge • All products are not produced according to market demand. | <ul style="list-style-type: none"> • Limited MEs have received training for new design training. • There are no suitable places for working. • All product are not produced according to market demand. | <ul style="list-style-type: none"> • Capacitate and co-investment SMEs/artisans to produce quality, diversified & competitive product following sustainable design trends as per consumer demand (home decoration, restaurants and giftware). • Support for technical and advisory services to craft manufacturers on quality management, cost reduction and business management practices to improve competitiveness. • Encourage artisans /SMEs to organize themselves into cooperatives so that they can better access business development services (BDS) and as a platform for marketing their product. • Facilitate and enhance capacity of sikki product manufacturer /artisans on financial management and marketing of their products through sales outlet and trade fair /exhibition • Facilitate coordination among CSIDB/CTEVT and other concerned stakeholders to develop standard training curriculum on product designing & development. • Facilitate/Support to establish relationship among the craft producers and harvesters/collectors. • Facilitate and support to develop common facility centre at specific location • Alliance with primary processors to secure the availability of quality raw materials |
| <i>Marketing</i> | <ul style="list-style-type: none"> • Seasonal market demand in Taulihowa and Bhairhawa market. In Bhairhawa, they have not received payment up to 2 years after supplied products. | <ul style="list-style-type: none"> • Limited linkage development with buyers. • No personnel account no. provided for payment received. • Many products remained in store due to difficulty in selling. | <ul style="list-style-type: none"> • Support more financial services to collect bulk amount raw materials, so that they could produce yearly. • B2B linkage to buyers in Nepalgunj, Kathmandu and old buyers. • Support to establish outlet establishment in Lumbini and Tilaurakot Darbar through coordination to Lumbini Development Trust to producer group. |

Table 5: Potential Interventions along the various functions of sikki crafts value chain (Contd.)

| Value chain level | Situation analysis | Key Gaps | Intervention activities |
|-------------------------------|--|---|---|
| <i>Processing</i> | <ul style="list-style-type: none"> • Processing of raw materials traditionally. • Technology new design have been applying for production but not enough. • No approve curriculum development for training manual. • No domestication technology have applied. | <ul style="list-style-type: none"> • Update new design through regular coordination with buyer. • Inappropriate Finishing products. • All products are not producing according to market demand. | <ul style="list-style-type: none"> • Development of trader entrepreneurs within group. • Develop and approve training curriculum through coordination with CTEVT. • Regular backstopping to producer to produce market demand products and price. • Linkage with DCSIO for subsidies 60% to procure technology |
| <i>End market</i> | <ul style="list-style-type: none"> • Most products have been selling in domestic market. • Seasonal market in production district but regular market in Kathmandu. | <ul style="list-style-type: none"> • Lack of MIS to producer. • No regular interaction mechanism to output marketing. • Negative perception to consumers that handicrafts products are more expensive than other products. | <ul style="list-style-type: none"> • Management of MIS system. • Make regular interaction mechanism between producer and other value chain actors. • Advertisement and dissemination about the characteristics and importance of products. |
| <i>Backward linkage</i> | <ul style="list-style-type: none"> • Limited relationship with input service provider's especially raw materials suppliers. • No develop technology for commercial domestication. | <ul style="list-style-type: none"> • No recognize by government agencies as Sikki for management and trade. • No regular suppliers of sikki, need to manage raw materials in seasons. | <ul style="list-style-type: none"> • Coordination with government agencies to recognize as commercial products and R&D for commercial domestication. • Coordination with new federal structure and district cottage and small industry office to manage basic infrastructure such as technology, CFC, etc. • Linkage development with other financial access so that MEs could manage enough raw materials for production. |
| <i>Forward linkage</i> | <ul style="list-style-type: none"> • Register in PAF as CO. • No registration in DCSIO. • No information to producers about buyers. | <ul style="list-style-type: none"> • No opening of bank account for trade. • Without registration in DCSIO, no possibility to get subsidies. • Rare relationship with output marketing actors. | <ul style="list-style-type: none"> • Can build sub-contracting model for assurance of market. • Capacity development of MEs for business scale especially to produce market demanded products and interaction mechanism. |
| <i>Horizontal integration</i> | <ul style="list-style-type: none"> • Have relationship within PAF pocket area within COs group member. • No relationship outside district for uniformity of prices, advocacy, etc. | <ul style="list-style-type: none"> • No uniformity of prices during selling along with production of quality of products. | <ul style="list-style-type: none"> • Support to groups to make forum for uniformity of selling prices, linkage development for forward and backward actors. |

Source: Field survey (2018) based on focus group discussions ((FGD) and key informant interviews (KII)

Cost Advantage of The Proposed Sikki Crafts Value Chain

Generally, in Kapilvastu district, 15 types of sikki crafts products have been produced by Sikki entrepreneurs. The average cost of production, selling price and profit generated in each of the product with reference with Kapilvastu community is illustrated in Table 6.

Following the discussion with the entrepreneurs, it is estimated that on an average, one entrepreneurs (SMEs) produced 265 sikki crafts items generating annual sales revenue of NPR 136500 with positive profit (NPR 20613). It was calculated that it generates 280 men days' employment opportunities locally. The cost of production

was NPR 115886 that includes raw materials, color, tools/ equipment's and labour of 280-men days. Most of the labour and raw materials (more than 96%) in this business have been from local resource. The estimation of detail cost

and revenue generation through production of sikki based products (265 pcs) by an individual entrepreneur is given Table 7.

Table 6: Average cost of production, selling price and profit generated in each of the product of sikki craft

| Product Name | Raw materials | Amount (kg) | Rate (NPR) | Amount (NPR) |
|-------------------------|----------------------|--------------------|-------------------|---------------------|
| Kush Chakati/Pira (Mat) | Kush | 0.5 | 25 | 12.5 |
| | Muj/ Sikki | 0.1 | 600 | 60 |
| | Labor Cost | 0.67 | | 267 |
| | Total cost | | | 339.5 |
| | Selling price | | | 450 |
| | Profit | | | 110.5 |
| Colored Chakati (Mat) | Kush | 0.5 | 25 | 12.5 |
| | Muj / Sikki | 0.1 | 600 | 60 |
| | Labor Cost | 1 | | 400 |
| | Color | | | 10 |
| | Total Cost | | | 482.5 |
| | Selling price | | | 500 |
| Hot Case | Kash | 0.2 | 25 | 5 |
| | Muj/ Sikki | 0.1 | 600 | 60 |
| | Labor Cost | 0.67 | | 267 |
| | Total Cost | | | 332 |
| | Selling Cost | | | 350 |
| | Profit | | | 18 |
| Gamala | Kash | 0.2 | 25 | 5 |
| | Muj/ Sikki | 0.05 | 600 | 30 |
| | Color | | | 5 |
| | Labor Cost | 0.67 | | 267 |
| | Total Cost | | | 307 |
| | Selling Price | | | 400 |
| Thal Chakadi | Kash | 0.1 | 25 | 2.5 |
| | Muj/ Sikki | 0.02 | 600 | 12 |
| | Color | | | 5 |
| | Labor Cost | 0.2 | | 100 |
| | Total Cost | | | 120 |
| | Selling Price | | | 150 |
| Butta Gamala (Small) | Kash | 0.015 | 25 | 0.375 |
| | Muj/ Sikki | 0.03 | 600 | 18 |
| | Color | | | 5 |
| | Labor Cost | 1 | | 400 |
| | Total Cost | | | 423 |
| | Selling Cost | | | 600 |
| Egg shape pen holder | Kash | 0.01 | 25 | 0.25 |
| | Muj/ Sikki | 0.015 | 600 | 9 |
| | Labor Cost | 0.5 | 400 | 200 |
| | Total cost | | | 209.25 |
| | Selling price | | | 250 |
| | Profit | | | 40.75 |
| Butta Pen Holder | Muj/ Sikki | 0.015 | 600 | 9 |
| | Kash | 0.01 | 25 | 0.25 |
| | Color | | | 10 |
| | Labor Cost | 0.67 | 400 | 268 |
| | Total cost | | | 287.25 |
| | Selling Cost | | | 400 |
| Butta Khutruke | Muj/ Sikki | 0.01 | 600 | 6 |

Table 6: Average cost of production, selling price and profit generated in each of the product of sikki craft

| Product Name | Raw materials | Amount (kg) | Rate (NPR) | Amount (NPR) |
|----------------------|----------------|-------------|------------|--------------|
| | Kash | 0.01 | 25 | 0.25 |
| | Labor Cost | 0.5 | 400 | 300 |
| | Color | | | 5 |
| | Total cost | | | 306.25 |
| | Selling Cost | | | 400 |
| | Profit | | | 93.75 |
| Simple Khutruke | Muj/ Sikki | 0.01 | 600 | 6 |
| | Kash | 0.01 | 25 | 0.25 |
| | Labor Cost | 0.5 | 400 | 200 |
| | Total cost | | | 206.25 |
| | Selling Price | | | 250 |
| | Profit | | | 43.75 |
| Belawa/thulo Dhakiya | Muj/ Sikki | 0.5 | 600 | 300 |
| | Kash | 0.5 | 25 | 12.5 |
| | Colour | | | 100 |
| | Muga | | | 50 |
| | Labor Cost | 5 | | 2000 |
| | Total cost | | | 2462.5 |
| Dust bin | Muj/ Sikki | 0.1 | 600 | 60 |
| | Kash | 0.5 | 25 | 12.5 |
| | Labor Cost | 1.25 | 400 | 500 |
| | Total cost | | | 572.5 |
| | Selling Price | | | 600 |
| | Profit | | | 27.5 |
| Bag | Muj/ Sikki | 0.015 | 600 | 9 |
| | Bankash/Babiyo | 0.1 | 25 | 2.5 |
| | Labor Cost | 1 | 400 | 400 |
| | Color | | | 10 |
| | Total cost | | | 421.5 |
| | Selling Price | | | 500 |
| Kisti | Muj/ Sikki | 0.2 | 600 | 120 |
| | Kash | 0.2 | 25 | 5 |
| | Color | | | 20 |
| | Labor Cost | 2 | 400 | 800 |
| | Total cost | | | 945 |
| | Selling price | | | 1200 |
| | Profit | | | 255 |

Source: KII and FGD, Field Survey, 2018

Table 7: Annual sales and profit generated by an individual sikki entrepreneur

| SN | Name of the Product | Production Qty. | Selling Rate (NPR) | Sales Revenue (NPR) | Raw Material (NPR) | Labour Cost (NPR) | Total Cost (NPR) | Profit (NPR) |
|----|----------------------|-----------------|--------------------|---------------------|--------------------|-------------------|------------------|--------------|
| 1 | Simple Chakati | 40 | 450 | 18000 | 2924 | 10720 | 13644 | 4356 |
| 2 | Colour Chakati | 5 | 500 | 2500 | 415.5 | 2000 | 2415.5 | 84.5 |
| 3 | Hot Case | 50 | 350 | 17500 | 3265 | 13400 | 16665 | 835 |
| 4 | Gamala | 10 | 400 | 4000 | 352.5 | 2680 | 3032.5 | 967.5 |
| 5 | Thal Chakati | 50 | 150 | 7500 | 731 | 4000 | 4731 | 2769 |
| 6 | Butta Gamala | 5 | 600 | 3000 | 117.1 | 2000 | 2117.1 | 882.9 |
| 7 | Egg Shape Pen Holder | 10 | 250 | 2500 | 46.375 | 2000 | 2046.4 | 453.625 |
| 8 | Butta pen Holder | 20 | 400 | 8000 | 385.5 | 5360 | 5745.5 | 2254.5 |
| 9 | Khutruke | 20 | 250 | 5000 | 125.4 | 4000 | 4125.4 | 874.6 |

| | | | | | | | | |
|----|---|-----|------|--------|---------|-------|---------|---------|
| 10 | Butta khutruke | 10 | 400 | 4000 | 112.7 | 2000 | 2112.7 | 1887.3 |
| 11 | Belawa/thulo | 5 | 3000 | 15000 | 2317.5 | 10000 | 12317.5 | 2682.5 |
| | Dhakiya | | | | | | | |
| 12 | Beluwa/thulo dhakiya with more decoration | 5 | 4000 | 20000 | 4567.5 | 12000 | 16567.5 | 3432.5 |
| 13 | Dust bin | 15 | 600 | 9000 | 1096.5 | 7500 | 8596.5 | 403.5 |
| 14 | Bag | 5 | 500 | 2500 | 108.075 | 2000 | 2108.0 | 391.925 |
| 15 | Kisti | 15 | 1200 | 18000 | 3862 | 12000 | 15862 | 2138 |
| | Grand Total | 265 | | 136500 | 20426.6 | 91660 | 112086. | 24413.3 |

Other investment for one entrepreneur:

| SN | Name of material | No | Rate | Amount NPR) |
|----|--|----|------|-------------|
| 1. | Dungar(wooden Frame for Sikki Soak in water and color) | 1 | 1000 | 1000 |
| 2. | Iron Needle (Siyo) | 1 | 100 | 100 |
| 3. | Inch Tape | 1 | 200 | 200 |
| 4. | Scissor (Kaichi) | 1 | 300 | 300 |
| 5. | Silli (Stone for sharper Iron) | 1 | 200 | 200 |
| 6. | Other | 1 | 2000 | 2000 |
| | Total Cost | | | 3800 |

Note: Net Profit: NPR 136500- NPR 115886 = NPR 20613

Value Chain Financing

Value chain financing (VCF) refers to the financial products and services that are required to the actors in the chain of that particular value chain activity. The value chain financing (VCF) can be categorized as direct value chain finance and indirect value chain finance. Direct value chain financing refers to value chain actors ensure their financial shortages by entering into non-cash transactions and negotiations to better manage and coordinate the effective functioning of the value chain (Karki et al., 2010). This is more common where there are absence of formal financial institutions /banks. Examples of direct value chain finance are buyer advancing credit to small producers; producer or farmer groups providing inputs on credit to their members; Whole sellers advancing credit to retailers; and, input suppliers providing inputs on credit. Similarly, indirect value chain financing refers to financing of credit/loan from external financial institutions or agency which can be both formal or/and informal. In an environment where access to finance is limited, people might want to borrow loan from informal sources. Value chain finance can be grouped into three main types of vehicles: (1) the provision of credit, savings, guarantees or insurance to or among value chain actors, (2) The creation of strategic alliances through financing extended by a combination of value chain actors and financial institutions and (3) The offering of tools/services to manage price, production or marketing risks (Fries, 2012).

Since Government of Nepal (GoN)'s future direction is moving toward less dependent to donor support to manage their program, generating adequate revenue is deem necessary. Therefore, the team analyzed potential sources of revenues for GoN while offering value chain financing.

In sikki crafts value chain, indirect VC financing from formal financial institution is being considered and potential financial products and services are identified. Facilitating linkages of farmers and cooperative with financial institutions for obtaining additional finance (credit/loan) in managing inputs for production, PAF can generate revenues over time in the form of brokerage fee to meet their operational cost. However, the proposed revenues for GoN will be possible only if Poverty Alleviation Fund (PAF) decides to become revenue generating institution.

Likewise, PAF can also facilitate linkages with other value chain actors' as input suppliers, aggregators, traders and SMEs to obtain financial services and generate revenue. In this study, only the financing of producer's group/cooperatives has been considered as per the agreed ToR and they are the direct beneficiaries with credible working relationship for more than a decade. There needs separate study in order to project the potential sources and volume of revenues from other actors.

Demand for Loan at Production Level

Based on the study, the team estimated that a total of 630 enterprises can be developed/revived during the five-year period within GoN' PAF areas. Likewise, a total of NPR 70.5 million will be required for these 630 entrepreneurs to manage their enterprises that can create over 1260 jobs (see Table 8 for details). About 3.1 million will be available as a Revolving Fund (RF) and this fund to be mobilized from COs (@NPR 50000/enterprise). The loan fund to be required from external financial institutions will be NPR 3.9 million.

These amounts need to be borrowed from formal financial institutions and PAF can play a catalytic role to help these

entrepreneurs obtain such loans from the formal sources through brokerage system charging fees. In Nepal, four kind of formal financial institutions can offer these loans as per their lending rules-Commercial Banks, Development Banks, Microfinance Institutions and Cooperatives. Although there are finance companies also licensed by Nepal Rastra Bank, they generally do not offer this kind of loans. Moreover, there will be revenue generation of NPR of 2.9 million from the royalty of paid to District forest office or CFUG and 0.8 million as commission fees for PAF for brokering loan with commercial banks and MFIs.

Realizing the importance of access to capital at the local level, PAF has made a provision of Revolving Fund (RF) to its Community Organization (CO) members. As of now, PAF has disbursed a total of NPR 14 billion to the 32000 CO formed so far in 60 districts covering almost one million members. Due to equity contribution by CO members and interest accumulation from loans to the members, over NPR 2 billion has been added to the RF fund. This makes the total RF fund of NPR over 16 billion. In most of the study districts, the team found that in an average of NPR 50000 per member loans have been distributed to the CO members.

Currently PAF role is limited to support farmers and micro entrepreneurs in its project areas but in future it can also work to promote SMEs and traders for the kind of value chain activities CO members are currently doing not only in pocket areas districts but also in other PAF district where significant number of CO members are currently doing one of the VC activities.

While promoting value chain enterprises, several other actors in value chain will be emerged such as input suppliers, paper producers, product manufacturers Exporters in the form of SMEs. Based on our study, at least 630 SMEs will be emerged to support the proposed number of entrepreneurs to be promoted by PAF and they need at least NPR. 3.9 million loans to start their enterprise. Thus, the PAF can also help these SMEs obtain loans from formal financial sectors.

Proposed Fee for Loan Brokerage for PAF

Based on the current market rate, PAF can charge up to 2% brokerage fee from financial institution or borrower or both. Most of the case, financial institutions (commercial banks) will be happy to pay this fee as they don't have adequate expertise and interest on small size loans. In addition, due to mandatory condition of disbursing at least 10% of the total portfolio in Agriculture sector, this arrangement from PAF to recommend loans to the individual farmers by appraising the borrowers would extremely help meet their required agriculture portfolio percentage for banks.

Although it is still new, the culture of loan brokerage has already been started in Nepal and commercial banks are familiar about it. Currently an organization called Nepal Agribusiness Innovation Centre (NABIC) which was established during early 2017 with the support from Project for Agriculture Commercialization and Trade (PACT) under Ministry of Agricultural Development, Government of Nepal with assistance from the World Bank is also charging brokerage fee of 2% for all loan they arrange from commercial Bank for their SME clients. PAF can make similar arrangement and charge its brokerage fee. There are two types of loans that PAF can help famers obtain from commercial bank to extend credit for famers:

1. Individual Agricultural/SMEs loans to the individual farmer or producers' group
2. Wholesale loans to the Enterprises under deprived sector loans.

In an individual loan, PAF can charge up to 2% brokerage fee either from financial institutions or individual borrowers or both based on demand and amount of loans. While for cooperative, PF needs to reduce the brokerage fee rate as the cooperative will also require some spread. Normally for whole sale loan to cooperative, PAF can charge 1% either from commercial Banks or cooperative.

Based on the current status of PAF cooperatives, not that many cooperatives are eligible for getting deprived sector loans from commercial banks or development bank or wholesale microfinance institutions. Therefore, for the initial two years, most of the loans to be brokered with commercial banks would be individual loans. However, due to an MOU that was signed recently between PAF and with Cooperative Banks where the bank is willing to relax some of the criteria for PAF cooperatives that are used to other cooperatives. Among those criteria, they are intend to relax where possible savings loan ratio, share loan ratio etc.

The main area of capital requirement are raw material management for whole year, establishment outlet in Lumbini and Kathmandu, marketing, basic infrastructure (building/CFC, sale outlet), etc. Therefore, from loan brokerage fee from Sikki Value chain activities, there is not much PAF can expect in the current scenario however, there seems ample opportunity if PAF would work with all value chain actors as product Manufacturers and Exporters along the chain.

The amount of investment required for the proposed 630 Sikki crafts producers in PAF working areas along with other parameters as Income, Investment, Number of job creation, Return on investment (RoI) and Benefit cost (B/C) ratio etc. for is presented in Table 8.

Table 8: Cost-benefit and income generation potential of sikki sub-sector, amortization for 5 years

| SN | Aspects of Sikki Crafts Sub-sector VCD Potentiality: | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|----|---|--------|--------|--------|--------|--------|
| 1 | Income will be generated (Annual) (NPR. in Million) | 23.4 | 46.7 | 70.1 | 93.5 | 116.9 |
| 2 | Initial Investment/loan fund required (Annual)(NPR., in Million, both FC+OC) | 14.1 | 28.2 | 42.3 | 56.4 | 70.5 |
| 3 | Insurance premium cost to be required (Investment based) (NPR. In Million) Not applicable in Sikki Crafts due to collection of sikki from public wet land in Terai | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | Available capital fund (RF) from COs to be mobilized (NPR. In Million) | 6.3 | 12.6 | 18.9 | 25.2 | 31.5 |
| 5 | Loan fund to be required from external financial institutions (NPR. Million) | 7.8 | 15.6 | 23.4 | 31.2 | 39.0 |
| 6 | No. of Self Employed/No. of Entrepreneurs | 126 | 252 | 378 | 504 | 630 |
| 7 | No. of employment generated (seasonal) | 126 | 252 | 378 | 504 | 630 |
| 8 | No. of Sikki Crafts Production (No. of Craft) | 33390 | 66780 | 100170 | 133560 | 166950 |
| 9 | No. of potential SMEs to be created for value chain (processing, marketing and product diversification) | 0 | 0 | 0 | 0 | 0 |
| 10 | No. of employment to be generated by proposed SMEs | 0 | 0 | 0 | 0 | 0 |
| 11 | Total employment generation including enterprises and SMEs from PAF intervention | 252 | 504 | 756 | 1008 | 1260 |
| 12 | Return to Investment (RoI)% | | | | | 65.9 |
| 13 | Market Share (%) (Only few HHs involved in product making by PAF initiative in Nepal and after three year, out of total production PAF intervention will share 80% at national level) | | | | | 80 |
| 14 | No. of HH members benefited | 1184 | 2369 | 3553 | 4738 | 5922 |
| 15 | B/C ratio | | | | | 1.7 |
| 16 | Commission to PAF (from loan brokerage and insurance linkage services) | 0.2 | 0.3 | 0.5 | 0.6 | 0.8 |
| 17 | Revenue generated by government (CF), Fee, Royalty, and Private Sector / Public including tax (NPR. In million) | 0.6 | 1.2 | 1.8 | 2.3 | 2.9 |

Assumption Notes:

SN Sikki Crafts enterprises scheme basic features:

| | | | | | | |
|----|--|--|--|--|--|---------|
| 1 | Total Sikki Crafts small business enterprises in PAF pocket area of Kapilvastu (No. HH) | | | | | 105 |
| 2 | No. of Sikki Crafts sale by each enterprise per year | | | | | 265 |
| 3 | Average current market price per No. of Sikki Craft product (NPR/number) | | | | | 700 |
| 4 | Annual revenue /enterprise (NPR) [265 crafts*NPR.700/craft product] | | | | | 185500 |
| 5 | Cost of collection and making Sikki Craft (NPR/number craft) | | | | | 422 |
| 6 | Purposed total Sikki Craft enterprises in 5th Years (No.)/self-employment (in 6 Terai districts) | | | | | 630 |
| 7 | No. of employment generated (seasonal) | | | | | 630 |
| 8 | Total annual revenue to be generated from 630 Sikki Craft enterprises (NPR. Million) | | | | | 116.9 |
| 9 | Estimated No. of total annual production of Sikki Crafts in 5 th years (Number) | | | | | 166,950 |
| 10 | Market share % | | | | | 80 |
| 11 | Total annual investment to be required in 5th Year (NPR in Million) | | | | | 70.5 |

| | | |
|----|--|--------|
| 12 | Total annual investment required for each enterprise (NPR) [@265 Crafts*422 per Craft] | 111830 |
| 13 | Available capital fund (RF) from Cos to be mobilized (NPR in Million) [@NPR 50000/CO member] | 31.5 |
| 14 | Loan fund to be required from external financial institutions (NPR. Million) | 39.0 |
| 15 | Insurance (Investment based) (NPR in Million) in Sikki crafts scheme not applicable | 0.0 |
| 16 | Total annual investment required in 5th year (NPR in Million) | 39.0 |
| 17 | Total employment generation including enterprises and SMEs from PAF intervention | 1260 |
| 18 | Revenue generated by government (CF), Fee, Royalty, and Private Sector/Public including tax (NPR in million) | 1.8 |

Source: Calculation based of field study (2018)

Potential Intervention Area for Sikki Crafts Value Chain Alliance and Financing

Integration in the value chain can impact value chain enterprises in multiple ways and affect the sustainability of its competitive advantages. Experiences show that integration of the members of the Value Chain results in the improvement in productivity and profitability of organizations. But the success of value chain promotion and development depends on the relationship of value chain actors and enablers that we can term as alliance and ultimate success of the value chain activities would depend on the mode of relationship between the members and enablers.

According to Agricultural Development Strategy (ADS, 2014) of Government of Nepal, the Value chain development alliances (VCDA) are societies registered according to the law, owned by key industry representatives including farmers and their associations, entrepreneurs, input providers, logistics operators, warehouse managers, cooperatives, and other value chain actors. The common objective of all the actors in VCDA is that they all are engaged commercially on a specific value chain and are interested in promoting its commercial development while contributing to poverty reduction.

Therefore, it is very important that PAF identifies the potentials alliances and enablers and develop working relationship with them. Value chain actors are increasingly aware that they need to work together with their partners in order to best serve their customers and achieve business excellence and they will be happy to work with PAF to promote Value chain activities that PAF is aspiring for.

It is imperatively important for PAF to go beyond what it is currently doing. Most of the focus now is at the production level and working with farmers but now PAF has to look the whole value chain of the activities and work across all actors and also enablers.

Proposed Sikki Crafts VCD Alliance Model

PAF has empowered the poor people through social mobilization and capacity building to organize and obtain quality basic services in a cost-effective and sustainable manner with their direct involvement. PAF has own strength using partner organizations (POs) to help facilitate poor people and community groups or organizations (COs) to implement the program components, and they include local governments/bodies, NGOs/CBOs and private sector organizations. PAF also built partnership with various organizations working in its areas of operation at the village, district, and national level to ensure holistic development intervention for a visible impact on poverty reduction, scaling up the programs in considerably less time. Government of Nepal (may be PAF) has provided resources directly to the poor while ensuring efficiency and transparency by advocating for community ownership of its development activities.

PAF effort should focus on creating alliances and bring them into the center of development. PAF support should create a more business phenomenon at the project level by addressing problems of disintegration and lack of integration. PAF should stimulate public and private sector programs through the linkages to larger firms with small scale producer's organizations. The alliance should focus on relationships, alignment and trust. The alliance members should share responsibility for delivering, shared risk as well as delivery which promote collaboration and finding solutions (Figure 3).

The implementation of programme through the alliance will bring value. This may require specific support. The important role that lead firms can play within value chains for their mutual benefit, the nature of the linkages between the value-adding SMEs and the lead firms, and how to generate and deepen these linkages. Further research is necessary to define opportunities to bring lead firms together with SMEs.

Table 9: Potential Intervention Area for Sikki Crafts Value Chain Alliance and Financing

| Financial Institutions | Government Department | Private Sector |
|---|--|---|
| <ul style="list-style-type: none"> Commercial Banks Development Banks Microfinance Institutions Cooperatives None-Life Insurance companies | <ul style="list-style-type: none"> All agricultural related departments Cooperatives Department, Registrar office Municipalities and Rural Municipalities (GaunPalika) Agriculture and forestry University Rampur CTEVT and its affiliated agriculture training center Credit Information Bureau | <ul style="list-style-type: none"> FNCCI particularly Agro Enterprise Center Agro- SMEs Traders and aggregators Agro Vets |

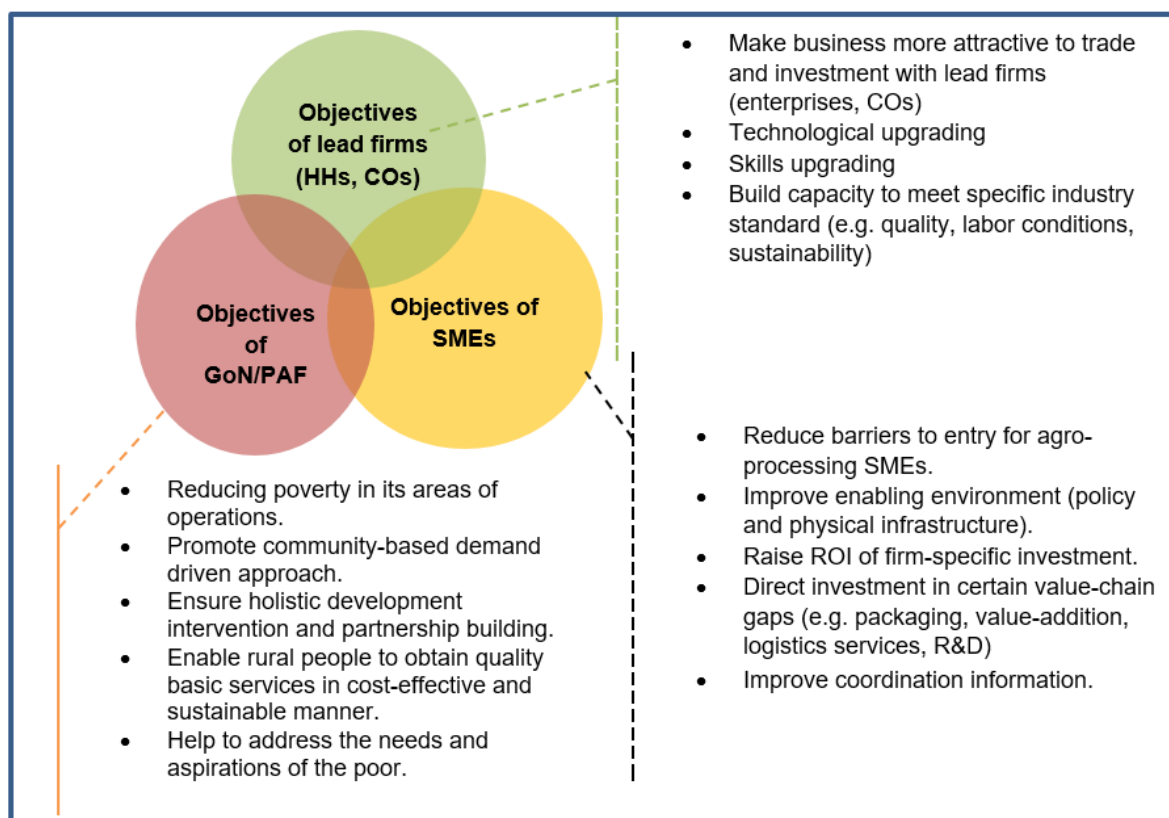


Fig. 3: Proposed sikki crafts VCD alliance model

Based on the study, following picture depicts a proposed alliance model where PAF can play an important model for value chain financing for its operational sustainability (Figure 4). This model helps address gaps and issues currently identified in the study for value chain development under PAF. Under this model PAF’s role is crucial and pivotal. PAF can link both the farmers and other actors in value chain such as input supplier, aggregator/wholesaler, SMEs, BFI, Insurance companies and market players. Since introducing digital platform is important for PAF in future for VCD, such platform is also appropriately placed in this model. While offering all these services to all value chain actors, PAF can also generate

revenue that helps PAF to be less dependent to external donor funding.

In order for PAF to adopt this model, they need proper structure and skilled human resources but current PAF structure and available human resources may not have adequate capacity to adopt this model. Therefore, PAF should plan to transform them to be ready for VCD interventions adopting this model. Similarly, PAF should start developing relationship and networking with the Value chain actors recommended in this model so that once the PAF is ready for VCD interventions, partnering with them will be easy (Fig. 4).

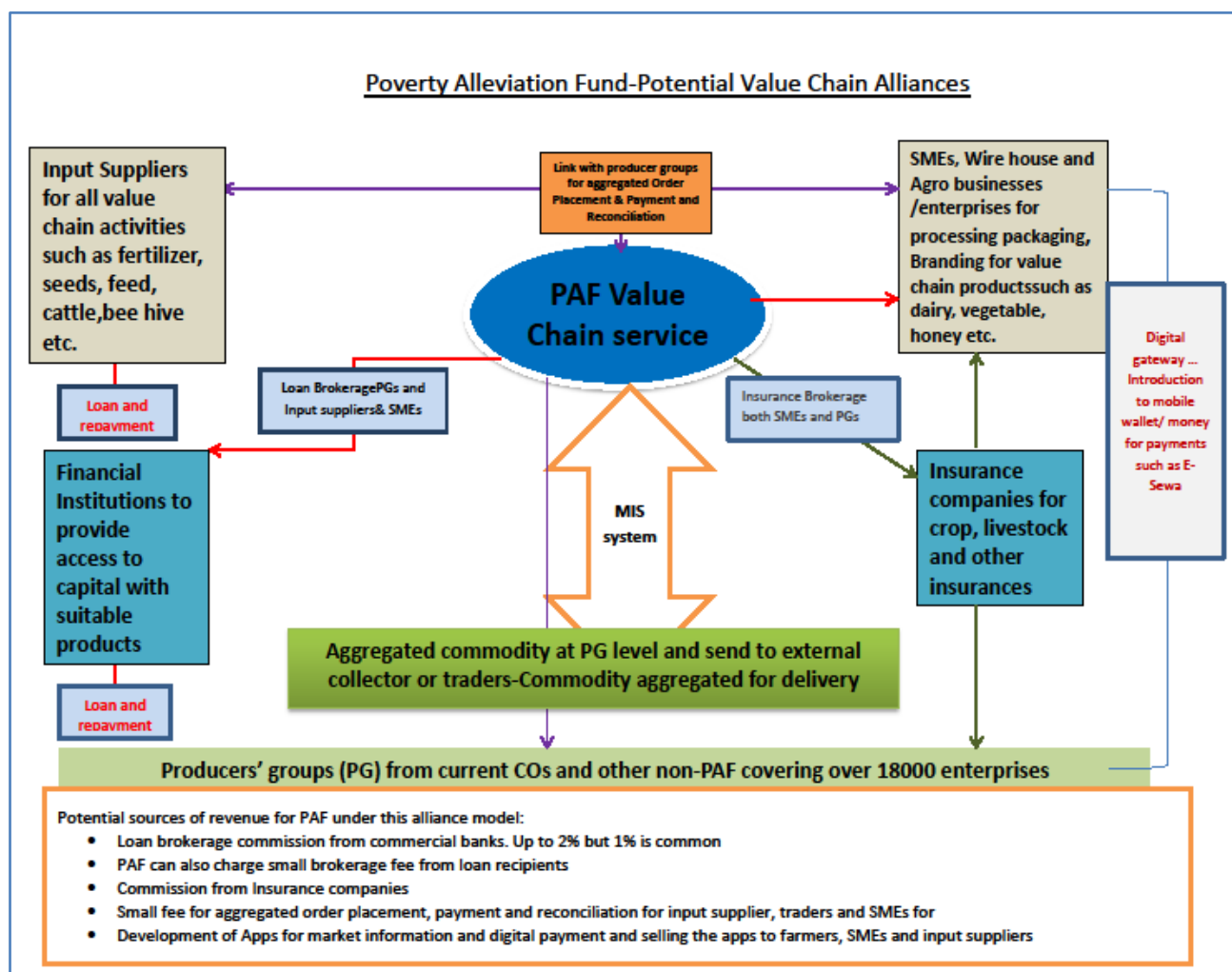


Fig. 4: Government of Nepal (Poverty Alleviation Fund) - Potential value chain alliances model for sikki crafts

Conclusion and Recommendations

Sikki crafts is the potential handicrafts in Nepal. Sikki (*dhakiya*) is being used in Nepal in Tharu communities as a gift during marriage ceremony of daughter. In addition, many items are crafted by skilled artisans from this fiber. Sikki is more laborintensive based production, which involvement of women in whole process as well as 79% costs of raw materials have been used from local resources. Thus, it has potential to create full time employment opportunities particularly rural women at local level thus reducing the underemployment problem. However, the artisans have not taken this craft as their main profession but practice as a part time work. They are also engaged in services or labour work.

Sikki crafts business is found in Terai belts of Nepal, namely, Kapilvastu, Bardiya, Dang, Nawalprasi, Danusha as well as in inner Terai districts. There has not been any detail study regarding sikki crafts production and marketing in Nepal till date. During the study, it has been observed that the Sikki crafts is one of the important handy crafts enterprise for rural women. Since, 3-4 years

commercialization of sikki crafts has seen in increasing trend.

Sikki crafts are major source of income for many artisans but this sector is still unorganized and decentralized, artisans. Lack of awareness, lack of adequate knowledge, skill, technology, inadequate design as per market, lack of coordination and networking and lack of structures are hindering the growth of this sector. Moreover, the artisans are not having any formal education about business. They do business based on their experience. Thus, their full potential is not utilized. Thus, following recommendations have been considered below in promoting the sikki craft to uptake its potential:

- Support and Coordinate among concerned stakeholders as Department of forest, FECOFUN and CFUG for domestication and sustainable management of resources.
- Capacitate and co-investment SMEs/artisans to produce quality, diversified & competitive product following sustainable design trends as per consumer demand (home decoration, restaurants and giftware).

- Support for technical and advisory services to craft manufacturers on quality management, cost reduction and business management practices to improve competitiveness.
- Encourage artisans /SMEs to organize themselves into cooperatives so that they can better access business development services (BDS) and as a platform for marketing their product.
- Facilitate and enhance capacity of sikki product manufacturer /artisans on financial management and marketing of their products through sales outlet and trade fair /exhibition
- Facilitate coordination among CSIDB/CTEVT and other concerned stakeholders to develop standard training curriculum on product designing & development.
- Facilitate/Support to establish relationship among the craft producers and harvesters/collectors.
- Facilitate and support to develop common facility centre at specific location
- Alliance with primary processors to secure the availability of quality raw materials Facilitate and Support enterprise registration and developing services for commercialization of this business.
- Strengthen SMEs for collective marketing and facilitate their business relationships with buyers at local, regional and international markets.
- Make regular interaction mechanism among producers and market actors.
- Facilitate buy back arrangement and contracts between craft manufacturers and buyers/exporters to establish and develop positive relationships
- Strengthen technical service providers and facilitate their linkages with product manufactures
- Lobbying government and development organization to enforce use of local handy crafts at offices.

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