

# VALUE CHAIN UP GRADING TO SUPPORT COMPETITIVENESS of BANYUMAS BATIK INDUSTRY

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## ABSTRACT

The objective of this study were: 1) to describe value chain process of Banyumas Batik Industries, 2) to formulate model of competitiveness development of Banyumas Batik Industries based on value chain, and 3) to formulate up grading programs to increase value added of Banyumas Batik Industries chain. Data collected from survey, in depth interview, and literature was analyzed using descriptive analysis, value chain analysis, SWOT analysis. The results of SWOT analysis indicated that the strength of Banyumas Batik value chain was the well-known Banyumas batik product, the weakness was lack of investment to improve banyumas batik industry, the opportunity was the support of government, and the threat was the growing of product substitution growth. Recommended strategies were: 1) relying on the strength of Banyumas Batik as a focal point of the plus culture tourism programs, 2) improving quality of human resources at each value chain, 3) increasing investment for the development of value chain, and 4) marketing development of Banyumas Batik as of various integrated packages with other tourism objective in Central Java.

Keywords: Batik Banyumas, Value Chain, Competitiveness, Up-Grading

## Introduction

A formidable challenge in the development of SMEs in the era of free trade and global competition is increasingly fierce business competition. The tight competition in the corporate world is also felt by SMEs batik. The last few years, textile batik (batik printing) from a number of countries such as Malaysia, Thailand, Singapore, South African and Poland flooded Indonesia, and led to a traditional batik SMEs that produce batik and face constraints in terms of both production and marketing. This happens because, batik printing with advanced technology can be mass produced and quickly, with relatively cheaper price so that more attractive to consumers, particularly the lower middle class. The intensity of competition in the industry This, requires batik SMEs in the country to have a sustainable competitive advantage in order to be able to survive and win the competition. Sustainable competitive advantage is the value (value) is able to be created by SMEs batik for customers continuously (Thomson, 1999).

From an operational perspective, the main obstacle is Banyumas Batik not artisans inability to do their own batik cloth production process from beginning to end because of the lack of availability of supporting equipment yet. Staining for Banyumas Batik majority still do in Sokaraja sub-district. In terms of products, product design Banyumas Batik is still limited and underdeveloped. Banyumas batik motifs that have almost the same as Banyumas Batik, the design with the dominant themes of nature, such as *Jahe Serimpang*, *Pring Sedhapur*, *Lumbon* and *Bobon Angrem* and thus Banyumas Batik have pattern is more expressive and daring displays bright coloring (red, green, blue and purple). Batik pattern is made large, ornaments freer and use of large canting eye, the overall effect more daring patterns, straightforward and unequivocal (<http://www.Banyumaskab.go.id>). In terms of marketing, batik Banyumas products are still marketed to the local region, because the majority of producers do not have a market network due to lack of information and there is no coordination among craftsmen.

Batik is a traditional manual wax-resist dyeing technique in ancient Indonesia. It is one of the three printing techniques (the other two are tie dyeing and reticulated printing). As an important branch in three largest batik systems in Central Java Province Banyumas batik has formed a complete batik product supply chain from raw material, processing to finished product, then to consumption terminal. This promotes development of local economy to a certain extent. However, there are many problems in the course of Banyumas batik products entering the market, and many complex limiting and incentive factors in the sections from production to marketing. Based on value chain analysis methods, we analyze sections of batik industry in Banyumas Regency of Central Java Province. We find out limiting and favorable factors for development of Banyumas Batik industry. In line with these factors,

we put forward suggestions for batik industrial development, to increase cash earnings of participants of the industrial chain, and to bring more economic return for batik producers.

**Method**

Since the 1980s, many scholars have presented Theory of Value chain (1985), Professor Michael Porter from Harvard School firstly introduced the analysis method of value chain. The value chain is a higher level of logistic model. All value adding activities are part of the value chain, from input of raw materials to sales of product to end customers (Porter, 1999). The scope of the value chain forward extend to suppliers from inside of kernel enterprises, and backward extends to distributors, service providers and customers (Zhang; Ren and Liu, 2012). This forms various connections between operations of the value chain, between internal department of company, between company and customers and between company and supplier, making these parts interdependent and then influencing performance of the value chain. Therefore, it is of utmost important to coordinate, manage and control such interdependence relations between node enterprises and to improve operations efficiency and performance of node enterprises in the value chain (Taylor, 2005).

The value chain approach has a primary focus on the final or end market for the product/service. The analysis works backward through the chain to focus on the marketers, traders, processors, producers and input suppliers. The wideness of the value chain comes from horizontal analyses at each of the levels. One of the main analyses performed by the World Bank was the Value Chain Analysis for Sierra Leone in 2007 for the agriculture sector (ACDI/VOCA, 2007). The following elements were analyzed in order to develop the value chain of the agricultural sector: end markets, enabling environment, horizontal and vertical linkages, services, firm level upgrading, and key constraints (McCormick and Schmitz, 2002)

**Result and discussion**

**Analysis on Value chain of Batik Banyumas Industry**

Banyumas regency is situated in Central Java Province, Indonesia. Banyumas Batik is one of the famous craft in Central Java province. It mainly distributed in several city or province in Indonesia: Kalimantan, Sumatra, Jakarta, and West Java. Since the production and processing time and raw materials in batik industry is relatively long, the global value chain show that the support section can be separated in the space, the operating section is relatively concentrated on geography, so the industrial value chain is shorter. The specifics operating can be divided into raw material productions, product processing and sales section.

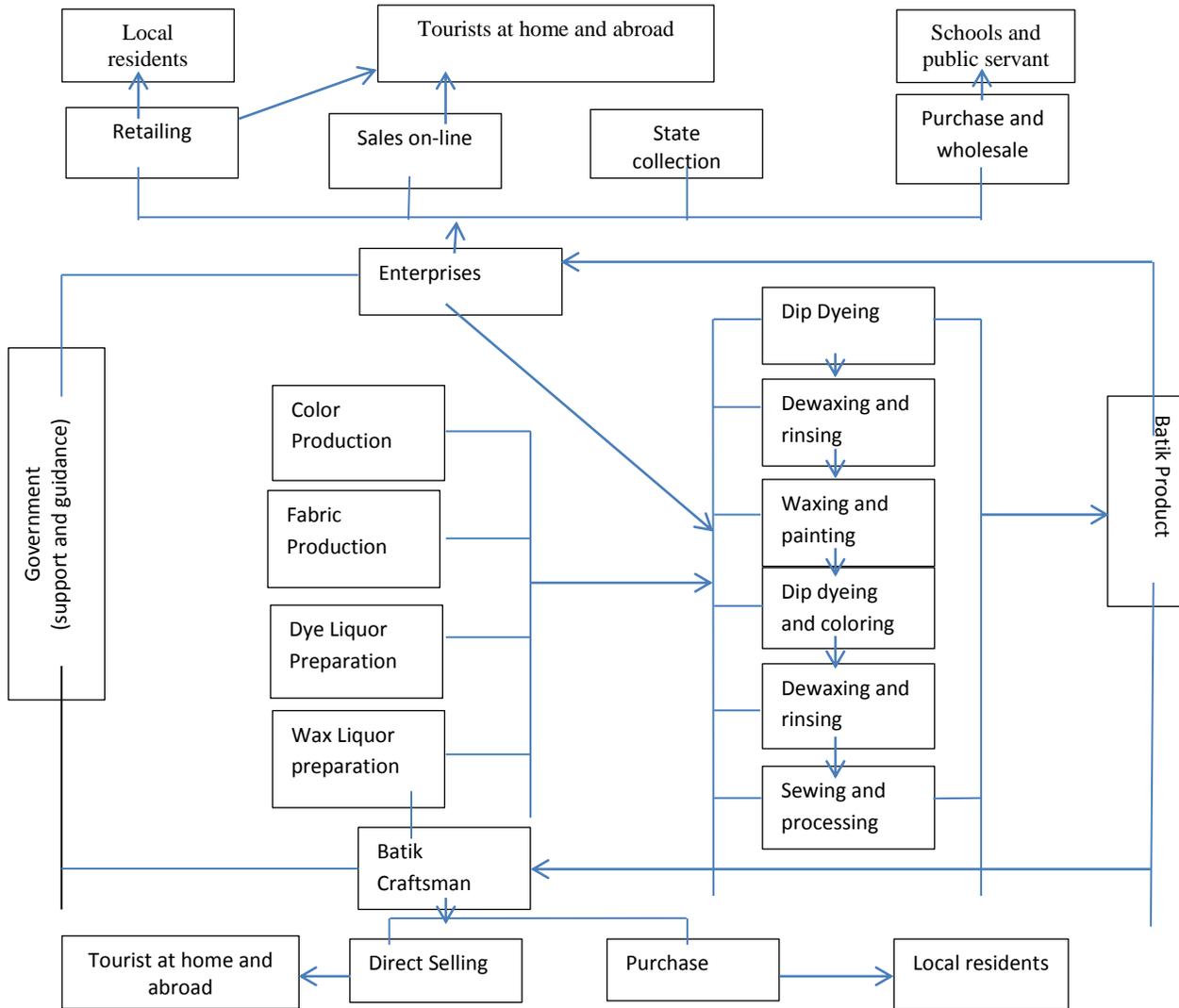


Figure.1 Diagram for analysis of value chain Banyumas Batik

**Primary Activity.**

This activities consist of five categories: inbound logistics, operation activity, outbound logistics, marketing and sales, service. Inbound logistics includes the activities of receiving, storing, managing and controlling inventories of raw materials, transport and returns to the supplier (Porter, 1990; Kotelnikov, 2008). The raw material for the manufacture of batik generally consists of three main components, namely fabrics, evening, and dye fabrics. Raw materials obtained from Banyumas regency and outside the region. For traditional craftsmen with production capacity is still small, generally obtain raw materials from collectors or buy directly at the store provider of raw materials for batik in Banyumas regency. While some batik entrepreneurs and collectors who need raw materials in a number of relatively more, cooperation with suppliers of raw materials from outside the region, including Pekalongan, Yogyakarta and Solo. There is no special way in the storage of raw material inventory. Enough fabric placed in a dry and clean. Night stored in a dry and not exposed to direct sunlight. While the fabric dye stored in

closed containers and protected from sunlight. The shelf life of raw materials vary. Fabrics can be stored over a period of five years. The shelf life of approximately five years night, as well as fabric dyes can only be stored in a period of approximately three months. The majority of the traditional batik in Banyumas not have to manage the inventory of raw materials, only batik entrepreneurs and collectors who cooperate with suppliers of raw materials from outside the area which manages raw material inventory. In this agreement with suppliers of raw materials, there is no refund agreement to suppliers of raw materials, therefore the management of raw materials is done to minimize the cost of ordering raw materials, ensure the quality of raw materials as well as the continuity of the production process.

**Operation Activity.** This activities associated with the conversion of raw materials into finished products. Operating activities (operations) includes changing the raw materials into finished products such as the provision and maintenance of production machinery, provision of production equipment and test the quality of the product (Porter, 1990; Kotelnikov, 2008). In the process of making batik, the main tools used include; canting, pans, stoves and items being dried (*"penggawangan"*). Canting is made of bamboo, copper-headed and or fowl, this canting function like a pen. Canting is used to scoop out the hot liquid wax, which is used as a protective cover or to dyes. Skillet used for a night at the moment heated in order to melt so easy to put follow a certain pattern. Stove used to heat up the night. In general stoves used by the craftsmen are kerosene stoves and cookers simple raw material wood. In the process of batik making the best stove is a stove that is able to generate a small but steady flame. Because what if the flame is too large then the night will be too liquid making it difficult to close the batik pattern. "Pegawangan" used to for draped fabrics are batik and for drying fabrics that have been dyed. Tools were obtained from Banyumas, Yogyakarta, Pekalongan and Solo. For the maintenance of the means of production, batik perform periodic cleaning once a month.

Banyumas batik making process can be briefly described as follows: First, create a pattern on the fabric (molani). The pattern is made by using a pencil. Not all artisans perform this process. To motif which was often made several craftsmen do not need to create a pattern, and immediately to the second stage process of making batik, which *"mencanting"* stage. To produce high quality batik, pattern-making stage play an important role. In addition to making more presentable motive, at this stage of creativity batik craftsmen to produce new motifs can be poured. Second stage is *"mencanting"* which coats the motif that has been created using a night. The aim is that the closed *"dicanting"* motif that night so that is not exposed to the dye in the coloring stage. Before the stage *"mencanting"*, night (Wax for batik) is heated in a skillet in advance in order to melt. (3) The third stage is the coloring. The finished batik cloth dipped into the dye solution *"dicanting"*. Staining for batik can use synthetic dyes and natural dyes. Including natural dyes obtained from the leaves and bark.

The last stage is *"nglorod"*. Nglorod process is a process to remove layers of fabric evening by boiling the finished batik cloth. In the process of making batik Banyumas there are several steps that can improve the quality of products, including pre-production process, where the raw materials of cloth dyed with peanut oil, or boiled with using bamboo leaves, then the fabric is pressed by wood timber (*"digemplong"*). This process can make batik cloth produced become finer and the colors produced can be more durable. In the process of making batik, batik craftsmen in Banyumas has its own advantages compared with batik artisans in the surrounding region, such as batik craftsmen in Banyumas, Banjarnegara and Cilacap, which is a good quality batik work especially ukel flexible and smooth. Besides batik craftsmen in Banyumas also famous fast in the batik process. For a piece of batik motif is often made, can be completed crafters just in one day. With the capabilities of this Banyumas batik artisans, many of batik entrepreneurs from outside the region, especially batik entrepreneurs from Banyumas, Banjarnegara, and Maos (Cilacap) which make the process of batik to batik designs they want to batik artisans in Banyumas. On the other hand, not all in the process of making batik done by the craftsmen. Batik banyumas making process in general only to a point mencanting. For the coloring process and *"nglorod"* done in Sokaraja. This work scheme has been running for generations and many craftsmen who are reluctant to do the coloring process itself by reason of not having the ability to do the coloring process and *"nglorod"* and do not have the tools and the land or a place to make the process of dyeing and *"nglorod"* batik. This leads to inefficiencies in the production process as well as the product may inhibit completion time. With this process one sheet of batik cloth usually can be completed within approximately one month. A long time due to the process of dyeing, batik artisans in Sokaraja will collect a number of batik cloth to be colored in a certain amount to reduce the cost of production. Whereas if you do own craftsmen whole process of batik, from *"molani"* to *"nglorod"*, a batik cloth sheet can be completed within four to five days.

Under conditions of high market demand, the average craftsmen capable of producing approximately 40 scores fabric/ month. But in a sluggish market conditions, the average number of production ranged between 20-30 scores fabric/ month. Some test-quality batik products are manufactured with color durability test on the washing and drying process. If there is quality of batik with the standards established under then they will fix these deficiencies until the product meets the standards. However, not all craftsmen perform this process. The majority of batik is not

to test the quality of the product, and if there is batik products that do not meet quality standards, they will sell to the market at prices below the average. Ready-made batik products will be packed prior to shipping. Traditional batik generally only uses transparent plastic, with no brand, and without labels to pack their batik products. However, some employers have been doing batik product packaging them better. Before packed, batik labeled containing information regarding the name and price of batik. Furthermore batik packed with transparent plastic and put in a cardboard box as a primary packaging, and put in a paper bag with the form of the brand identity and address of the manufacturer as secondary packaging.

**Outbound Logistics.** Activities related to the collection, storage, and distribution of the finished product to the buyer physically majority Batik Craftsmen not have a workshop once the outlet for batik products to display their products. Batik products that are ready to sell stored in the storage closet to avoid dust and dirty. Once a week removed and wined products on shelves to avoid moisture and prevent mildew. In marketing and distributing products to consumers, craftsmen and entrepreneurs generally take two ways of distribution, which is sold directly to consumers as well as deposit products to the store or collectors. Many ways done by the craftsmen are selling directly to get around to agencies in Banyumas. in addition to market products directly, craftsmen also sent the product to the store. If there is an order from outside the region, craftsmen will ship the products through courier service delivery package for customers who are outside the area.

**Marketing and Sales.** Marketing and sales activities (marketing and sales) includes activities to encourage, persuade and help consumers to buy the products that can be done through advertising, promotion, selection and distributor pricing (Evan, 2001). In marketing the product, batik craftsmen and entrepreneurs in Banyumas not use promotional media such as advertising, promotion done is merely following the exhibition of products and rely on word of mouth from customers. Artisans market their own products, and has no special power to sell and distribute the product. By the way craftsmen claimed sales cannot achieve optimal results, plus many consumers assess Batik banyumas relatively expensive. Price batik Banyumas average ranges from two hundreds rupiah until three hundred rupiah per sheet. One sheet of batik Banyumas have size 115 and 225 centimeters. Higher prices can be set at a more subtle batik, with a more complicated pattern. One of the craftsmen were able to sell homemade batik at around five hundreds rupiah until two million rupiah per sheet of batik. To set the selling price of the product, the traditional craftsmen generally only take into account the cost of raw materials, but do not consider the outpouring of time in batik making. However, some craftsmen who have developed, in addition to taking into account the cost of production, also taking into account the shipping costs (if any), commission fees (if any), promotion costs (if any) and taking into account the profit margin to be obtained. In determining the selling price of the product

**Service,** this activities associated with the provision of services to increase or maintain the value of the products, after sales Generally craftsmen do not make improvements to the products that rated below the standards they set. One product damage that often occurs is that the color does not come out. For products with substandard quality will be sold at a cheaper price.

#### **Activity Support.**

This activities consist procurement, technology development, human resource management, firm infrastructure. Procurement related to the procurement activity/ purchase of raw materials and ancillary equipment including the company's assets, and the method of payment. Raw materials and production equipment acquired craftsmen from Banyumas region and outside the region including Pekalongan, Yogyakarta and Solo. For traditional craftsmen, generally obtain raw materials from collectors or buy directly in stores raw materials providers to store them in Batik Banyumas. While collectors and batik entrepreneurs with higher production capacity has formed a partnership with suppliers of raw materials from outside the region, such as Yogyakarta, Solo and Pekalongan. There is an additional charge for the supply of raw materials from outside of Regional, range from thirty thousand until sixty thousands. Method of payment for the purchase of raw materials and production equipment is the cash system.

Technology development activities need to be done through the provision of technology, the latest procedures and techniques necessary by each activity. Traditional batik craftsmen, development activity in batik making them. This is in contrast with some of the young craftsmen are constantly trying to improve the efficiency in the process of making batik either through the use of technology or improvements to procedures and batik techniques. Form of development which do include the use of computers in design or motif, modify wood-fired stoves into LPG fueled a much cheaper cost of production, and perform staining using natural dyes derived naturally from the leaves and bark of some plants that are widely available around the craftsmen. By using this natural dye, batik whole process can be done by the artisans so as to accelerate the completion time of the product. Besides, the price of batik products with natural dyes is much higher than the batik products with synthetic dyes.

Human Resource Management activities include the selection, promotion, placement, assessment, awards and employee development as well as maintaining relationships between employees. Batik in general is a skill that is passed down through generations from one generation to the next. Craftsmen acquire the knowledge and abilities of

the parents batik autodidact. In meeting the market demand, the collectors usually have some craftsmen who often cooperative to batik belief system. Craftsmen will be given material to be written, and if completed will be handed back to the collectors. For one sheet of batik artisans generally will be paid ten thousand rupiah to twenty per sheet of batik. To improve the skills and abilities batik, craftsmen with a coordinated local village government several times included in the various training organized by local governments, universities and other institutions.

Firm infrastructure activities include management planning issues, finance, general management, accounting, legal and government relations (Barker, 1996). The majority of the operations in a simple craftsman. Business management is generally performed only on recording sales transactions daily. The relationship between craftsmen with local government Banyumas very well established. Attention local governments on the development of the batik industry in Banyumas manifested in aid for the promotion and marketing to include the craftsmen at events exhibition, organized training batik technique to improve the skills and abilities of the craftsmen, the provision of such assistance batik equipment and tools as well as the drawing board coloring material and various other forms of coaching and development (Rahab et al., 2013).

**SWOT Analysis and Value Chain Upgrading Strategies**

Banyumas Batik is one of the most luxurious craft in local market because of its high and quality. The local market is potential for banyumas batik and especially the international market has been opening strongly. Moreover, there are some problems in Banyumas Batik such as water pollution and limitation of coloring materials. Summarizing Batik Banyumas activity is presented in Strengths (S) Weakness (W) Opportunity, Threats (T) analysis box as following.

**Tabel 1. MATRIK S-W-O-T**

IFAS	<b>STRENGTHS (S)</b>	<b>WEAKNESS (W)</b>
EFAS	<ul style="list-style-type: none"> <li>• High Motivation of craftsmen to grow</li> <li>• Ability to design motifs attract crafters</li> <li>• Low labor costs</li> <li>• Product quality is good</li> <li>• Resource requirements are not high</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of capacity for promotion</li> <li>• Lack of professional manpower</li> <li>• Lack of capital.</li> <li>• Lack of raw materials</li> <li>• Limitations of the market.</li> </ul>
<b>OPPORTUNITIES (O)</b>	<b>SO STRATEGY</b>	<b>WO STRATEGY</b>
<ul style="list-style-type: none"> <li>• Have a strong potential as an art and culture as well as history</li> <li>• Establishment of the crafter</li> <li>• There is increasing demand for government help</li> <li>• Winning the competition.</li> <li>• An established connection</li> </ul>	<ul style="list-style-type: none"> <li>• Improve access and quality of Banyumas batik in order to remain ahead of the competition.</li> <li>• Expand market share by improving the quality and look smart in gap .</li> </ul>	<ul style="list-style-type: none"> <li>• Adding strategidan vast designs and cheap promotion</li> <li>• Increase sales and profits to increase their capital in order to increase production</li> </ul>
<b>THREATS (T)</b>	<b>ST STRATEGY</b>	<b>WT STRATEGY</b>
<ul style="list-style-type: none"> <li>• Increased competition from other regions Improve China products</li> <li>• Difficulty getting raw materials and dyes.</li> <li>• The difficulty of information about the philosophy and history of batik</li> <li>• Difficulty in funding</li> </ul>	<ul style="list-style-type: none"> <li>• Improve the quality of the group, so keep working with underprivileged.</li> <li>• Enhance business management expertise batik.</li> <li>• Optimizing the group to reduce the cost of transport</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce competition by supporting government law</li> <li>• Facilitate the provision of raw materials and value Batik aspects of philosophy and history</li> </ul>

Based on the SWOT matrix can be formulated four strategies scenarios that could be made to improve the development of batik Banyumas forward. The four scenarios are:

1. Strategies to achieve the opportunity to harness the power (SO)
  - a. Improving connections and the quality of Banyumas batik to remain ahead of the competition
  - b. Expanding market share by improving the quality of management as well as intelligent in seeing a gap.
2. WO Strategy
  - a. Adding strategi dan extensive promotional design and cheap.
  - b. Increase sales and profits to increase their capital in order to increase production
3. ST Strategy

- a. Improving the quality of the group, so keep working with underprivileged.
  - b. Improving business management expertise batik.
  - c. Optimizing the group to reduce the cost of transport
4. WT Strategy
- a. Reduce competition with government rules that support.
  - b. Facilitate the provision of raw materials and value Batik aspects of philosophy and history.

### **Favorable and limiting factors for development of Batik Banyumas industry**

#### **Favorable Factors**

**Factors of production.** Banyumas batik industry has great productive potentialities because the raw materials are abundant and women are good at batik production. Craft batik women in Banyumas regency from 11 or 12 years old to 60 or 70 years old are good at batik production.

**Artistic value.** Batik products feature primitive simplicity, elegance, boldness, and attractiveness. They have strong local color, unique local artistic style. The batik art is a unique national flower of art.

**Policy factors.** Banyumas government to offers great support for development of batik industry. Some batik enterprises get policy support from the government, and skilled batik artists also can receive encouragement from government.

#### **Limiting factors**

**Limiting factors from small family enterprises with peasant household as unit.** The development of batik banyumas industry is subject to many limiting factors, such as market, time, information, price, educational level, and organization and management (shown in Table 1). These are mainly manifested in following aspects. Firstly, the market is still narrow, it is still self-sufficient, lack of opportunity to communicate with outside. Market links are basically vacant. Secondly, the market identification of batik products leads to their low price, consequently failing to arouse enthusiasm of batik craftsmen for taking batik products to market. Thirdly, it lacks knowledge and skills to respond to the market. Nearly all batik producers are village people who do not understand English language, so it is difficult to communicate with customers.

**Limiting factors from batik associations and companies.** Batik associations and companies agree that the obstacles to development of banyumas batik industry can be summarized as follows to begin with, manual production takes much time and effort, so the time cost is high. Traditional handicraft art of villagers also needs improvement through training. Next, educational level of employees is low, and skills are varied. For example, some words on the pattern are conversely written, leading to serious economic loss. Other problems include loss of orders and product quality resulted from unacceptable quality control and standardized production. Employees do not know market, so they just produce batiks based on their imagination. Batiks produced in this way are beautiful but fail to meet market demands, thus they fail to be turned in to market value. Thirdly, it lacks funds, and processing shops are small and processing equipment is out of date. For many enterprises, capital mainly comes from self-raising or loaning. Once there is market bottleneck or capital turnover is impossible, enterprises will be faced with bankruptcy. Government provides policy support, but not offers capital support. Fourthly, marketing channel of enterprises is single and not stable. Fifthly, environmental pollution. Small family enterprises have little impact on environment due to small scale and use of pure plant materials. However, large Enterprises will create certain pollution, which, if not properly treated, will become an important fact or limiting development of batik industry. Sixthly, the cognition degree of batik culture is low. Blindly following market orders may repeat the failure in Banyumas batik industry, consequently leading to entry to strange Circle of low end market.

**Limiting factors from government.** Firstly, the economic. Development of Banyumas lags behind, so it is impossible to input necessary funds for development of batik industry. Secondly, there is little opportunity of popularization and exchange of batik culture, so external world has little knowledge of Banyumas batik products. Thirdly, it lacks the publicity. Banyumas batik is the representative of batik art, but it is not known to the external world, so the promotion of batik Banyumas is difficult.

#### **Up Grading Value Chain of Batik Banyumas Industry**

**Strengthening craftsman' ability in batik production section.** Farmers are the most important parts in the production of Banyumas batiks. Planting of indigo and batik picture drawing are carried out by farmers. These activities are closely related with their production and living, and it is also a kind of cultural continuity. Therefore, government should attach great importance to strengthening farmers ability in batik production in the first place, it should provide economic subsidy and technical guidance for indigo planting farmers. In the second place, it should

introduce the peer education. Specifically, women teach children how to draw batik pictures, and children teach women how to read, write and use modern tools to obtain information. Thirdly, it should provide information of training for farmers, to help them strengthen the recognition of cultural value of their products. Fourthly, it is recommended to invite women to Guiyang to hold various activities, such as drawing Batik pictures, evaluation and auction, media communication, etc.

**Enhancing capability construction of batik cooperatives and associations.** Batik associations are community organizations founded independently by peasant households. The annual sales amount of these associations is up to 1,2 million rupiah. They can produce batik products on a large scale. We have found that the ability of batik cooperatives is low. They have no perfect organization system and incentive mechanism, no clear division of labor, and the production efficiency is low. Cooperative members are low at educational level, which influences product quality. The channel for obtaining information is not smooth, and marketing methods are not effective, so it requires providing more training for members. In line with these situations, it is proposed to take following measures. Firstly, all relevant parties should participate in discussion of articles of association, system, and cooperation of community members, to work out collective cooperative mechanism and form formal specifications suitable for local conditions. Secondly, the same type of cooperatives and associations should regularly exchange experience, visit each other, learn from each other and invite experts to give lectures or provide training. Thirdly, clear Division of labor should be carried out on the basis of skills and ability of members of cooperatives, to establish proper type of work and setup the incentive mechanism. Fourthly, it is recommend providing basic computer and network facility to access to effective market information.

**Increasing cultural added value of batik products.** As the most important carrier of Miao people culture, the value of Batik art is also manifested in traditional culture. Through the ages, batik have been used as artistic representation of production and living of Java people, instead of commodities for exchange. Under the condition of market economy, the cultural attribute of batik products determines their economic attribute, so high value added batiks depend on accumulation of cultural tradition. Large scale production of batik products results in loss of traditional value, and high added value cultural products just become common commodities. Therefore, it is essential to increase the added value of batik products.

**Bolstering policy and financial support of government departments at present.** Banyumas government supports production and development of national handicrafts. Mainly through promoting development of cultural industry. However, it lacks specialized talents and channels in specific operating conditions. It is proposed to take following measures. Firstly, government works out plans for development of national culture and provides financial and technical support. Secondly, relevant departments can hold photographic exhibition, publish books, and setup cultural product website to publicize batik products and traditional culture. Thirdly, it is recommended encouraging and rewarding excellent batik production artists. Fourthly, it is proposed to cooperate with education departments to set up courses or hold matches for passing on national culture. Fifthly, it should energetically develop the tourism industry (Chen, 2009). Tourists are major consumers of Banyumas batik products, so the development of tourism industry is an important approach to promoting development of Banyumas batik industry.

**Promoting establishment of cooperative mechanism for handicrafts.** The promotion of handicrafts should be started from following two aspects. One is strengthening the cooperation between sales companies and craftsman of batik. Although there are many large batik sales companies in Pekalongan and Solo city, they have not involve all sections of batik production, so it required to establish cooperation mechanism of company and peasant household. The other combination of production of traditional handicraft with modern technologies. Even though the high value batik product are manually produced, it does not repel applications of modern technologies in some sections. Thus, it is proposed to invite expert to study the application of modern technologies in production of traditional handicraft.

**Establish and improve the internal management mechanism.** The credit management mechanism of the agricultural bank should protect the independence and professionalism of the organizational setting, and establish specialized agency to be responsible for the management, approval, examination and marketing of consumer credit and without violating the relevant provisions, all links of consumer credit should also maintain flexibility to some extent. The establishment of an effective personal enquiry system is the guarantee for the banks to control consumer credit risk. The scale of loans object of personal consumer credit is large, with complex situation, and the bank lacks comprehensive statistical method on consumers income and payment situation, therefore, based on reality, bank should use modern electronic network technology, learn from the management measures of the loan card implemented by the Local Bank on enterprises and institutions, and implement the network management of personal consumer credit. Establish and improve risk assessment system sound evaluation system and excellent reward and punishment system can help achieve effective control after the event (Chen, 2009). In terms of the quality management of credit assets in branches, The agricultural bank must adhere to the principle of using the Experience of a selected spot to promote the work in the entire area, carry out rotation on the leading bodies, and

conscientiously implement strict reward and punishment management measures. In terms of the evaluation system, it should improve and perfect the allocation coefficient of economic capital that can reflect the risk of loan customers. In the KPI assessment, it is recommended to optimize the quality indicators of new loans; strengthen the management of existing loans; take some indicators as the assessment indicators, such as non performing rate of new loans, the cost of credit, the non-performing loans, and risk based management; encourage various branches of agricultural bank to optimize the structure of

The existing loans, improve risk identification capacity, preserve assets timely, enliven non-performing loans, and improve the quality of loans. Furthermore, it should improve the risk management system of consumer credit, to gradually achieve online queries, graded review and approval, and concentrated check. In the links of pre loan investigation, loan examination and inspection, and post loan check, it should make responsibilities clear, regulate operations, and strengthen re-inspection and supervision.

**Improve consumer credit legal system.** At present, in Banyumas regency, channels of transacting and collecting the personal letters of credit of consumer credit are not smooth, the specific regulatory systems are not perfect, and especially the punishment of dishonesty, breach of contract is not specific. In the process of transacting consumer credit business, it is necessary to comply with financial regulations, ensure the safety of funds, try to simplify procedures, strictly implement the loan review and approval procedures; strictly inspect and examine the credit history of surety or the guarantee units; strictly limit the mutual guarantee between the borrowers; strictly check, examine and assess the mortgage loans, establish asset of effective incentive and restraint mechanisms, and reduce and manage the risk of assets to the extreme. The government and relevant departments should formulate appropriate policies to abolish all unreasonable charges restricting the consumption, promulgate the policies conducive to consumer credit encouraging consumer spending, arrest local protectionism, and further establish and perfect the legal system of consumer credit, to provide reliable legal protection for consumer credit.

## Conclusion

The analysis of the Banyumas Batik Industry value chain leads to the following conclusions: improvement of the market distribution is vital to increase sales; a better communication among the actors may lead to future integration and innovation; information programs and training in customer service for craftsman should be promoted. The analysis shows that banyumas batik industry in Banyumas regency possesses high competitiveness in comparison with other creative industry. The value chain generates great added value, high income, and contributes significantly to socioeconomic development of Banyumas Regency. The sustainable development for Banyumas batik industry requires local authorities and related actors to have the strategies of upgrading market-driven products, sales and marketing activities, linkage models, and raw materials. Value chain analysis approach may assess competitiveness of creative industry or to compare the efficiency of different creative industry value chains.

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