The Process of Promoting the Economic base of the Thai Lanna Textile Handicraft Community in Sukhothai

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Abstract: This research aims to study the potential and develop skills in textile handicrafts of Thai Lanna ethnic group in Sukhothai Province. The research process was carried out as follows: 1) study the community context, 2) community-based knowledge transfer, and 3) the development of textile products using quantitative and qualitative research methods. Research tools include interviews and questionnaires, collected data from group conversations, and the satisfaction was assessed by a specific sampling group from key informants from Thai Chanasuek Sub-District Community, Thung Saliam District, Sukhothai province, in the group of 30 people by analyzing descriptive statistics. Research results showed that 1) the Thai Lanna ethnic community is a community that immigrated from Lampang Province with the traditions, culture, language, traditions and weaving with a flower pattern which has been the identity of the community and has been produced as costumes, blankets and bags. 2) The knowledge of the weaving production of the community arises from the dynamic exchange of knowledge between the conveyor and the recipient of knowledge in the form of explicit knowledge. Knowledge consolidation and the conversion of knowledge were applied to enhance the textile products and the economic base of Thai Chanasuek Sub-District Community. 3) Woven fabric pattern design, using the concept of Neem flower to develop the pattern by using cotton brocade technique and processing of woven fabrics into clothing with satisfaction in utility, shape and beauty. The average was at a very good level $\bar{x}=4.58$

Keywords: promotion, community economic base, textile handicrafts, ethnic community

1. Introduction

Woven fabrics are the main root in local development. Local wisdom is diminished by external factors and Thai consciousness. Most Thais believe that local wisdom cannot solve the economic crisis due to their incomprehensibility and disapproval of the true importance of local wisdom. Therefore, local wisdom cannot be applied for development or solving problems. Understanding local development is an important issue in today's Thai society. Before Thailand was open to the development of capitalism, Thailand existed with Thai wisdom at the national and local levels that resulted in the existence of the nation until today [1]. Weaving is a handicraft and art that has existed since ancient times. This is because weaving is part of the human way of life and is also considered the production of clothing, one of the four most important human factors. In addition, weaving is a kind of art because weaving in each ethnic group has different patterns and patterns of the fabric. The patterns and motifs on the fabric represent a long history of stories or events, including the identity and culture, beliefs and origins of the people from the patterns and symbols that have been named after them. [2]

Community-based economic development is the creation of jobs and income for the community by using local resources and local wisdom and give priority to cooperation and support in the community without an emphasis on competition or monopoly. In this regard, the focus will be on the community to be co-owner to think, co-operate and solve problems in terms of production, consumption and marketing to create jobs and generate income for the community along with strengthening the community by using existing community funds as a driving force in the community. This is to achieve well-being based on the community's potential for self-reliance, an essential base for community economic development [3].

People in Thai Chanasuek conserve local wisdom. There are local products and souvenirs, including baskets made from phonebooks and wicker for household use and products from local fabrics such as apparel, blankets and satchels. From visiting the area to study the problems and needs of the Thai Chanasuek community, Thung Saliam District, Sukhothai Province, it was found that the community's textile products lacked quality development in terms of pattern, pattern and product processing compared to similar local products such as Discontinuous Supplementary Weft Pattern Weaving of Si Satchanalai District, thus affecting the consumer's popularity and the income of the producer. From the aforementioned points, the researcher is interested in studying the potential and professional development of textile handicrafts for the community. It is the cultural capital of the Thai Lanna ethnic group, which is the local roots, to create new products by developing advanced skills in the production of textiles for the community. It is also reducing socio-economic inequality while enabling sustainable economy within the
community through: 1) Study the community context, 2) Knowledge transfer with community participation, and 3) Textile product development.

2. Research Objectives

The objectives of this research article were to study the potential and develop skills in textile handicrafts of Thai Lanna ethnic group in Sukhothai province.

3. Literature Review

Knowledge-seeking process of community knowledge: The researcher studied the concepts of [4] discussed in 6 points as follows. 1) Knowledge identification is a common goal for identifying knowledge of raw material properties, manufacturing processes and marketing as well as new techniques to develop traditional manufacturing processes. 2) The method of acquiring and acquiring knowledge is to seek knowledge from group members, assign or specify duties to knowledge from community guru inquiries, workshops and study visits, etc. 3) Knowledge-building is the basis of traditional knowledge as a basis for the production of local weaving together with the integration of new knowledge gained from training, transfer of academic research results to participants such as dyeing techniques, pattern design, market promotion and community product standards, as well as the processing of local woven products, etc. Much of the knowledge that is generated is embedded in the person, where knowledge is reproduced in order to generate skills and expertise. 4) Organization and storage of concrete knowledge but it uses simple and common organization and knowledge storage such as sample product data storage. 5) Knowledge exchange and transfer is the exchange of knowledge among members through telling, demonstrations, and hands-on training by speakers who are responsible for the transfer of knowledge to the participants of the activity and knowledge transfer in the form of research papers, articles and videos by researchers, scholars or officials of government and private sectors. 6) Use of knowledge Divided according to the function of duty into 3 types as follows: 6.1) Working in group production methods is the reproduction of existing knowledge and the use of new knowledge through practice to create expertise, experience and personal skills such as indigo dye preparation, indigo dyeing, weaving design / processed products, etc. 6.2) Extension of previous knowledge, whereby the group president will use new knowledge to combine with the old knowledge to create new products, both fabric and processed products. 6.3) Product development must be distinguished from traditional products by applying new knowledge and existing knowledge such as mixing other natural colors with indigo.

Knowledge transfer and product development: The concept of product design is an important factor that can be used to create woven fabrics that evoke local identity. Traditions, cultures and natural resource diversity can be used to target common weave designs to differentiate themselves from the general market. Textile product development process [5] has discussed the following guidelines for weaving patterns design: 1) Analysis of relevant data - this is related to the needs of the participants, product information and manufacturing processes. 2) Main Conceptualization - Since traditional patterns still cannot communicate (attract attention) to consumers, new designs have to be developed. When the concept of local identity was applied to come up with the main idea for the design of the new pattern to be more concrete, it highlighted the strength of the indigo-dyed textile products. 3) Sketch design - is the interpretation of the main idea and transforms the result into a concrete draft, divided into 2 parts: 3.1) The product structure design determines the size and shape of the product, which should be selected to use the type, color and fiber type to suit the design concept. 3.2) The design of pattern art elements is the use of visual elements of art such as dots, lines, colors, shapes, shapes or textures, that was inspired in the design to arrange new artistic elements to form a pattern based on conceptual and theoretical art frameworks. 4) Selection - Once the draft design has been completed, the designed draft is presented by discussion with the target audience based on discussion points, then used to adjust the sketch before being used to create a prototype. 5) Detail Design - At this stage, the work is divided into 2 sub-phases: 5.1) Determining the details of the sketch, such as determining the size of the fabric proportions, the characteristics of the motif, the size of the motif, the nature of the yarns to be used in each fabric and the weaving techniques and weaving patterns in each pattern unit added to the drawing to be used as a requirement in the prototype process. 5.2) Prototyping is a study of feasibility in the production of woven fabrics which [6] has divided the weaving patterns as follows. 1. Geometrical weaving groups are various triangular and trapezoid shapes that are combined to form a pattern. Points and lines are used to create geometric shapes, straight lines and bent lines to form a hook shape. 2. Clusters of plants and naga patterns, most striking is the pine pattern which mimics the nature of the pine tree. It is a line that is bent together in a bouquet from smaller to large. Naga pattern is a line that breaks at the end of the head to be bent like a serpent's head, which is usually combined with the pine pattern. 3. The Khor pattern (comb or lamp) is a line or point that is joined together and bent to form a hook or another name is the comb pattern. The lamp pattern is characterized by a trapezoid or triangle that is lined with lines or dots and 4. Animal pattern (beetle or butterfly) is one of the popular animal patterns which mimic the butterfly pattern in nature. Turtle pattern is an imitation of the turtle's shell.
4. Research Methods

A. Research Design

The quantitative and qualitative research used research tools, that is, interview and questionnaire. Data were collected from group discussions and satisfaction assessed by a specific sampling group from 30 key informants from the Thai Chanasuek Sub-District Community, Thung Saliem District, Sukhothai Province. The descriptive statistics were analyzed. The researcher has developed potential and professional skills in textile handicrafts of the Thai Lanna ethnic group, Sukhothai Province. The steps were as follows: 1) a community-based context education; 2) knowledge transfer through community-based participation and 3) textile product development and data processing at all stages by gathering, analyzing and presenting research conclusions.

B. Research Process

Research process - In developing potential and vocational skills in textile handicrafts of the Thai Lanna ethnic group, Sukhothai Province by studying the community context, knowledge transfer with community participation and the development of textile products can be divided into 6 steps:

Step 1: Study and collect data from research papers, textbooks, literature works and research related to the Thai Lanna ethnic group of Thai Chanasuek, Thung Saliem District, Sukhothai Province.

Step 2: Plan a field study of 30 people to conduct research and coordination to collect data in a community context, community-based knowledge transfer, and textile product development.

Step 3: Go into the field to collect and analyze data from interview participants in terms of everyday textile patterns, weave designs, materials and production tools and production techniques, then take notes and take photos.

Step 4: Design activities to develop potential through the process of exchanging and transferring community knowledge.

Step 5: Evaluate the results of the process by handing out a questionnaire to assess the satisfaction of the developed products in terms of functionality, shape and aesthetics, and summarize and discuss the findings.

Step 6: Develop a body of knowledge on patterns and textile production processes of the Thai Lanna ethnic group in Sukhothai Province.

Methods of conducting research for potential development and occupational skills in textile handicrafts of the Thai Lanna ethnic group, Sukhothai - The research was conducted as a qualitative research study by studying information from documents, textbooks, literature and research related to Thai Lanna ethnic group from interviews with participants in the context of community and local wisdom. In terms of the quantitative action, the investigators assessed the quality of the research by summarizing the data obtained from the participants’ satisfaction with the characteristics of the developed product for functionality, shape and aesthetic. There were methods of conducting research.

Population and sample samples were obtained from a specific sampling from Thai Chanasuek community, Thung Saliem District, Sukhothai Province. The study variables were 1) community context, 2) participatory knowledge transfer, and 3) product development.

Tools and development of research instruments - The quality of the research tools would be examined by qualified persons. The research tools were as follows. 1) The interview questionnaire was used for community context information and community-based local wisdom by in-depth interviews with the participants. 2) The questionnaire was used to find the opinions of the participants on the sketch of the woven pattern, the sketch of the clothing, and to assess their satisfaction with the developed product model in terms of functionality, shape and aesthetics.

The collection of research data has the following processes. 1) To study and collect data of Lanna ethnic groups from Banthai Chana Suek community in terms of textile production patterns and processes and various factors affecting textile products through the survey of related documents, textbooks, literature and research. 2) Enter the field to collect information on the community context and local wisdom about indigenous textiles in terms of apparel textiles, textile articles, products distributed locally, as well as the tools and equipment used in the production process by means of interviews and 3) Enter the field to pass on knowledge about natural dyeing, twill and satin weaves, costume design and collecting data from drafts of textile products from questionnaires and then summarizing the data to create a prototype of textile products.
Analysis of research data from interviews and inquiring the researcher has the following data analysis processes. 1) Analysis of information from documents, textbooks, literature and research related to the Thai Lanna ethnic group of Thai Chanasuek community. 2) Analysis of patterns and processes of local weaving used in daily life, traditional weaving patterns together with materials and tools for the production and 3) Satisfaction analysis of products developed in terms of functionality, shape and aesthetics.

5. Research Results

For the development of potential and professional skills in textile handicrafts of the Thai Lanna ethnic group, Sukhothai Province, in a participatory group discussion forum of Thai Chanasuek community in Thung Saliam District, Sukhothai Province with 30 participants, the results were summarized from the interview and questionnaire for 1) community context 2) Knowledge transfer through community participation and 3) product development.

A. Results of the study of community context

1) Population:

The study found that the people in the area migrated from the northern part of the country called themselves; Lanna Thais who migrated and emigrated from Lampang and came to live in the lowland areas in the foothills of Thai Chanasuek Sub-district, Thung Saliam District, Sukhothai Province. The way of life of the community continues to follow its ancestors that have inherited the local language, tradition and culture.

2) Local wisdom: The foundational economy that generates income for the community is agriculture, which is derived from the production of indigenous woven fabrics of the community using natural fibers such as cotton and rayon threads that are processed into apparel, blankets and satchels (Figure 1). The unique local weaving pattern is orange jessamine pattern, as shown in figure 2.

![Fig.1 Indigenous woven fabric with orange jessamine pattern](image1)

![Fig.2 Ban Thai Chanasuek Community Products](image2)

Tools, equipment and looms consist of 1) a 4-post loom 2) warp yarn 3) shuttle and Warp and weft yarn 4) beater 5) core fabric 6) seat 7) Pedal poles 8) heddle 9) pulley for supporting the heddle, as in figure 3.
Twill and satin weaves, a traditional weaving technique created by adding a special heddle for raising the standing yarn at the top, is called "Continuous Supplementary Weft weaving". When weaving is alternated with regular plain heddles to build strength to the fabric, this will result in the same pattern throughout the fabric.

B. The results of knowledge transfer through community participation

The knowledge of community-based textile production was created from the dynamic exchange and learning of information between the conveyer and the knowledge receiver in the form of (1)Enlightenment (2)Knowledge consolidation and (3)Knowledge conversion to be applied to enhance textile products and economic base of the Thai Chanasuek Sub-district community. This result can be summarized as follows:

1) Conveying the nature of natural dyeing: The material to be used for fabric dyeing is from neem peel that are hot extracted using heat to dissolve the color, the steps (Figure 4) are as follows. 1.1) Chopped neem peel into small pieces. Cleaned by rinsing and put it in a pot of boiling water. Take 2 kg of neem peel and 15 liters of water in a dyeing pot. 1.2) Add the cotton adhesion material with 1 kg of eucalyptus bark and take 2 hours to boil the color and lift the pot down. The filter separates the water and the resulting color is used to dye cotton yarn. 1.3) Clean cotton yarn by boiling for 1 hour to remove impurities such as factory cotton yarn coating and grease etc. 1.4) Pre-cleaned cotton yarn is put into the dyeing pot, should use a stick to beat the cotton yarn evenly so that the cotton yarn will expand. 1.5) Bring cotton yarn to a boil and dye for 2 hours. While boiling for dyeing, it should be turned over so that the cotton yarn is evenly colored. 1.6) Soak the finished cotton yarn in water and crumple the yarn evenly to increase the strength of the cotton yarn before producing. 1.7) Shake off the cotton yarn to loosen the yarn and dry it in the shade until dry before use in weaving production.

2) Knowledge transfer in the design of local weaving patterns by using neem flowers as the concept of weaving patterns. Neem is a medium to large sized plant, with a bunch of flowers on the stalk at the end of the branch. The flowers are small, white and have a light fragrance. People in the community prefer to use it for cooking. Neem will bloom from December to March. The process of transferring knowledge was done by practicing practical skills by
using neem flower visual elements such as lines, rhythms and balance to format according to the art elements as shown in Figure 5.

**Fig.5** Knowledge transfer of twill and satin weaves design by bringing neem flowers as design inspiration.

The results of the analysis and reproduction of neem flowers used as a concept in the design of the weaving patterns in the selection process for actual production, the study participants were given criticism and suggested improvements to the community identity in total of 6 patterns (Figure 6). The researchers evaluated the opinions of the participants from the questionnaire to find satisfaction with patterns suitable for production. The conclusion was that the pattern (b) was the most satisfied (\(\bar{x}=4.63\)).

![Neem flower weaving pattern](image)

**Fig.6 (a) – (f) Neem flower weaving pattern**

3) Transfer of knowledge in processing of local woven products to garments in the categories of formal wear, work wear and casual wear (Figure 7, the results from the knowledge transfer and practice of participating communities can be summarized as follows: 3. (1Creating ideas and designs by drawing a dress can reflect local identity 3. (2Creation of a pattern according to the predetermined size and proportion; and 3. (3Sewing.

**Fig.7 Knowledge transfer in costume design**
The results of the evaluation of the opinions of the participants were done by answering a questionnaire to find: the most satisfied with the work wear (Figure 8) in style (b) ($\bar{x}=4.74$), the most satisfied with the formal dress (Figure 9) in style (b) ($\bar{x}=4.63$) and the most satisfied with the casual wear (Figure 10) in style (c) ($\bar{x}=4.58$).

**C. Product development results**

The development of indigenous textile products is the use of cultural capital to promote the foundation economy and strengthen the community along with the satisfaction assessment of 30 participants, divided into females (80 percent), aged 46–55 years (40 percent), elementary education (53 percent), earning less than 15,000 baht (43 percent) and opinions on the products of Neem flower pattern weaving and the processing of woven fabrics into garments of local fabrics (Figure 11). The results of the assessment of satisfaction in functionality, form and aesthetic were at a very good level ($\bar{x}=4.58$), as shown in Table 1.

**Fig. 11 (a) Neem flower pattern woven (b) Costumes from local woven**
The research process in the areas of (1) community context (2) knowledge transfer through community participation and (3) product development for the purpose of developing potential and occupational skills in textile handicrafts of the Thai Lanna ethnic group, Sukhothai Province, the results of the study showed that the way of life of the community continued to follow the pattern of the Lanna Thai people, which was inherited in terms of language, tradition, culture and local wisdom. Most importantly, the production of indigenous textiles in orange jessamine patterns and bundles was transformed into apparel, blankets and satchels as community merchandise for sale to tourists. Knowledge transfer for dyeing cotton yarn from neem bark, the resulting color was brown.

Table 1. Assessment Results of Satisfaction (n=30)

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>( \bar{x} )</th>
<th>SD</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functionality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Product shape conducive to use</td>
<td>4.47</td>
<td>.51</td>
<td>High level</td>
</tr>
<tr>
<td>1.2 Suitability of materials used in production</td>
<td>4.60</td>
<td>.50</td>
<td>Most level</td>
</tr>
<tr>
<td>1.3 Durability to use</td>
<td>4.60</td>
<td>.50</td>
<td>Most level</td>
</tr>
<tr>
<td>1.4 Safety to use</td>
<td>4.53</td>
<td>.51</td>
<td>Most level</td>
</tr>
<tr>
<td>1.5 Size that is proportional for use</td>
<td>4.60</td>
<td>.50</td>
<td>Most level</td>
</tr>
<tr>
<td>Shape</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Modern, new and novel</td>
<td>4.60</td>
<td>.50</td>
<td>Most level</td>
</tr>
<tr>
<td>2.2 Size of proportions suitable for transportation</td>
<td>4.53</td>
<td>.51</td>
<td>Most level</td>
</tr>
<tr>
<td>2.3 Ease of use</td>
<td>4.53</td>
<td>.51</td>
<td>Most level</td>
</tr>
<tr>
<td>2.4 Optimized shape placement</td>
<td>4.60</td>
<td>.50</td>
<td>Most level</td>
</tr>
<tr>
<td>Aesthetic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Beautiful colors and attractive to use</td>
<td>4.43</td>
<td>.50</td>
<td>High level</td>
</tr>
<tr>
<td>3.2 Clear pattern</td>
<td>4.77</td>
<td>.43</td>
<td>Most level</td>
</tr>
<tr>
<td>3.3 Refinement</td>
<td>4.60</td>
<td>.50</td>
<td>Most level</td>
</tr>
<tr>
<td>3.4 Conveying local identity</td>
<td>4.60</td>
<td>.50</td>
<td>Most level</td>
</tr>
<tr>
<td>3.5 Creativity</td>
<td>4.60</td>
<td>.50</td>
<td>Most level</td>
</tr>
</tbody>
</table>

From Table 1, it was found that the satisfaction of aesthetic was at the highest level (\( \bar{x} = 4.60 \), followed by functionality (\( \bar{x} = 4.58 \)) and shape (\( \bar{x} = 4.57 \), respectively.

6. Discussions

The research process in the areas of (1) community context (2) knowledge transfer through community participation and (3) product development for the purpose of developing potential and occupational skills in textile handicrafts of the Thai Lanna ethnic group, Sukhothai Province, the results of the study showed that the way of life of the community continued to follow the pattern of the Lanna Thai people, which was inherited in terms of language, tradition, culture and local wisdom. Most importantly, the production of indigenous textiles in orange jessamine patterns and bundles was transformed into apparel, blankets and satchels as community merchandise for sale to tourists. Knowledge transfer for dyeing cotton yarn from neem bark, the resulting color was brown. The twill and satin weaves pattern from the Neem flower concept was the most satisfactory (\( \bar{x} = 4.63 \)), the satisfaction of the fabric into workwear in style (b) was the most satisfactory (\( \bar{x} = 4.74 \)), formal wear in style (b) was the most satisfied (\( \bar{x} = 4.63 \)), casual wear in style (b) was the most satisfied (\( \bar{x} = 4.58 \)). The satisfaction of the participants with the developed product models in terms of functionality, shape and aesthetics was very good (\( \bar{x} = 4.58 \)). From the development of potential and vocational skills of textile handicrafts as a part of the Thai Lanna ethnic group, Sukhothai Province, in Thai Chanasuek community, Thung Saliam District, Sukhothai Province, was consistent with the approach of knowledge management, local wisdom towards ecotourism and culture of [7], [8] as follows: 1) Establishing a knowledge-based approach 2) Knowledge collection 3) Knowledge examination and 4) Dissemination of knowledge and wisdom. From community involvement, stories are presented to give the group of people the opportunity to join, learn and share experiences from the philosophers living in the community; they were all capable of creating and imparting knowledge of beautiful woven fabrics which were hidden by morality, beliefs, culture and traditions. Although it was not studied according to the theory and principles of art but the works of local art in woven fabrics reflected knowledge, abilities, beliefs and deep understanding of life through socialization and participation in customs and rituals with the perspective of “inner people” Wisdom therefore
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co-relates with the balance between all things that lead to a great goal: the peace of the people of the community. Thus, the community's woven products reflected the path of belief, faith and social contracts. It also corresponds to [9]. The learning process was one of the key factors in allowing the group to develop in various areas such as management development, group management, implementation of group production activities and product processing and can enable the group to operate according to its objectives, including the group committee's learning process, which is also considered to be a member of the group. The learning process could be distinguished by this: 1) Production skills training 2) Training. In most cases, the opportunity to receive training was a member of a group committee, as training was promoted by a sponsored area such as the Department of Industrial Promotion in the training of weaving and dyeing. After the training was complete, members would be able to convey their knowledge to the members of the group in order to expand the results of the guidelines [10] to improve and develop community-based businesses towards sustainability. Development was rooted in seven fundamental concepts of driving the creative economy: 1) Use of knowledge 2) Education 3) Creative work 4) Use of intellectual property linked to cultural foundations 5) Culture 6) Wisdom and 7) Modern technology / innovation. It was a guideline for the development of local wisdom coconut shell products in Nakhon Pathom province to promote the creative economy in line with progress, stability, prosperity and sustainability

7. Conclusion

The development of potential and professional skills in textile handicrafts of Thai Lanna ethnic groups in Sukhothai Province could summarize the results of participatory research of Thai Chanasuek community in Thung Salaian District, Sukhothai Province as follows: 1) Community context in terms of population and local wisdom 2) The explicit transfer of participatory knowledge of the community to achieve the exchange of learning information between the broadcaster and the dynamic recipient. Knowledge consolidation and knowledge conversion were used to enhance the textile products and economic base of the Thai Chanasuek Sub-district community: 2.1) Conveying the message of natural dyeing 2.2) Knowledge transfer in the design of local woven fabrics 2.3) Knowledge transfer on the processing of local woven fabric products and 3) Product development and satisfaction assessment of the participants of the activity, making fabrics and garments made from local woven fabrics in terms of functionality, shape and aesthetic

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