

## The Development of Quality and Standard of Sukhothai Ceramic Products for Export to Japan

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### Abstract

The major objective of this research is to develop the ceramic products by adopting new technique of exchanging knowledge among the same career of ceramic producers. In order to fulfill its goal, the researchers apply the community of arts practice (CoAP) in the process of community art development.

This research was an operational research. The mix-method of anthropology and social sciences, especially the cultural dimension such as local wisdom was adopted. The researchers developed a new technique called "public social interaction network/PSIN". Simultaneously the CoAP model was constructed. Three communities were chosen purposively according to their specific characteristics of art elements based on the ceramic type. This included time, content of work identity and life style.

This research found that 80 pieces of the contemporary ceramic products which had a strong connection with consumers' needs had patterns, contents, and process related to socio-cultural context of local community. These products lastly became a significant contemporary art of local community. These products based on local wisdom and a best practice of knowledge management. They connected the people, strengthened the community relationship and created the cultural innovations which were in the form of ceramic products. These products provided the communities opportunity to be a good practice of the cultural tourist site of this region in the future.

**Keywords :** Standard Quality Development and Ceramic Export Product

### Introduction

According to Kasikorn Research Center report, 2552, page 10, Japan is a major market for Thai ceramic product which worth U.S. \$326.6 million (52.6% of the whole exports value). The exporting ceramic products including rail, tube, pipe, fittings for pipe or tube ware, chemical laboratories ware, agriculture laboratories ware, and packaging ware are the major

exported product which worth U.S. \$311 million or 84.8% of the whole exporting value. It was followed by the United States, which worth U.S. \$ 79.3 million (12.8% of the whole export value) and top subsequent namely Australia, Laos and Malaysia, respectively. The United States major imported products are sanitary ware which worth U.S. \$ 47.7 million (44% of whole value of Thai sanitary ware exports). The most exported ceramic products to Australia and Lao are floor-wall tiles and mosaic while the other types of ceramics are exported to Malaysia.

Due to economic recession in the United States and other countries including Japan in late 2008, the purchasing power of each country has been declined. As a result, the ceramic product exports were also decreased and had affectation to the whole value of ceramic exports as clearly reveal in the early 2009. Kasikorn Research Center estimates that in 2009 the export value of ceramic products is likely to slow down dramatically. It seems to grow only 2.3 percent of exports, representing only about U.S. \$ 853 million. If entrepreneurs cannot adjustment and resolve to keep pace with the global economic slowdown, the export value of the company's revenue for 2009 will be decreased by 1 to 10 percent.

However, types of ceramic products such as souvenirs and jewelry from Thailand are in demand of the Japanese market which matches their traditional style. Thai product has an advantage of the lower labor cost which can made the product at very affordable prices, but still remain a good quality and standards as Japanese required which are very particular.

According to the Office of Industrial Economic report, 2008, page 16, there are some regulations on importing products tableware made of ceramic products in Japan. Therefore, they must be passed food sanitation law, inspected and certified by Industrial Standardization Law (JIS Mark) Pottery Manufacturer Federation, and received a ceramic ware safety mark on the product packaging. These standards are the main factors for the ceramic industry in Thailand. They have to seriously study the standards and procedures in detail in order to avoid the loss of the returned goods which are lack of quality.

When considering the impact of global trade liberalization on the ceramic industry, there is more benefit to ceramic industry in Thailand since we already have domestic material and government support. In contrast, if entrepreneurs cannot maintain the product quality standard and unique design which are matched their requirement, the global trade liberalization would be disadvantage for our economy.

The research from three communities in Sukhothai reveals that the ceramic product should be developed their marketing and design. The development of manufacturing, quality control and standards, and outstanding and unique design would be lead to exports. Thus, this research aim to focus on studying the standard of ceramic industry in Tokoname where is the biggest producer ceramic of Japan so that our product can finally be exported to Japan.

## The objective of the research

Develop quality and standard of Sukhothai ceramic product for Japan exportation.

## Methodology

This research is a participatory community research which use qualitative research methodology as a main. The research team is composed with a group of Naresuan University researchers, Japanese ceramic professionals, the group of folk artists from Ban Koa Talaeng, Sri Somrong district, the group of ceramic producer from Ban Maung Kout, Maung district, and the group of local ceramic from Ban Koa Noi, Srisatchanalai district, Sukhothai province. They involved in every research process.

The duration of this research takes about one year. It is divided into four processes which is designed to develop the product to meet Japanese standard and quality before presenting to the public. The researcher also uses a mixed research methodology which including the variety of ceramic product development in production processes, forms and applications. This developing product will increase the demand of Japanese ceramic market.

### 1. The Methodology for the quality criteria and standards of ceramics in Japan

1.1 Historical Method is a usage of documentary study and oral history that is involved with ceramic producer community in Japan.

1.2 Quantitative Method is used to survey the provenience of the community and basic information on various aspects of the community, and compare the similarities and differences in the form of ceramic products including marketing management. This survey are covered in the area of the following:

- 1) Nagoya University of Arts
- 2) Design Ceramic Research Center and Museums of Mino city, Gifu Prefecture
- 3) Ceramic handicraft villages and the Museum at Seto City.
- 4) Contemporary Design Museum at Aichi Prefecture.
- 5) Nagoya City Art Museum
- 6) Ceramics and Arts and Crafts Center within the city of Kyoto.
- 7) Kyoto Handicrafts Center
- 8) The Ceramic Society of Japan.
- 9) Tokyo Handicraft and Culture Center
- 10) Product Design in Tokyo
- 11) Design Ceramic Industries Company
- 12) Museum design for the masses in Odaiba, Tokyo Prefecture.

13) Innovation and Technology Museum, Tokyo Prefecture.

### 1.3 Qualitative Method and Action Research

1.3.1 In-depth interview with experts, ceramic professionals and folk artists. This interview is covered with content of ceramic production management, economic status, society, and culture of Japan.

1.3.2 Non-participant observation from highly qualified persons, ceramic professionals, and folk artists in behavior of the arts and the use of ceramic products in Japan.

## 2. The Operational Research for Development

### Action Research and Development

- a. Development of methodology 1-3 and a comparative analysis of various dimensions.
- b. Design and prototyping ceramics from the local identity. This unique contemporary ceramic is blended from three community in Sukhothai by using the community of art practice (CoAP) which is a knowledge exchanged between local networks for their sustainable learning development.
- c. In order to meet the most Japanese demand, researcher team has invited a ceramic professional from Japan and a Thai ceramic professional exporter to suggest about the product.
- d. Adjusted and developed the prototype by brainstorming from local folk artists of three communities and researchers. An idea of brainstorming is for the purpose of community of art practice which is knowledge exchanged between local networks for their sustainable learning development. The folk artists from each community in the network have selected a unique contemporary identity of their communities and use it in their ceramic product design by themselves. The style and design of 150 ceramic pieces were come out and revealed their context community.

### 3. Verified the Quality and Standard of Ceramic in Japan

As food containers, the 150 ceramic products must be inspected about a soluble substance by using an experimental methods and the scientific process at Ceramic Industrial Development Center, Department of Industrial Promotion, Ministry of Industry Thailand, Lampang Province. After pass the inspection, the pieces were exhibited at Naresuan University Art gallery and evaluated from experts such as local philosopher, professor, designer, local artist, and etc.

#### 4. Educated and Trained to Ceramic Manufacturer Communities in Sukhothai

4.1 Researcher uses the community of art practice (CoAP) as a methodology in educated and trained to ceramic manufacturer community. There were 200 people participated in this activity which is divided into four sub activities as in the following;

4.1.1 Seminar about ceramic knowledge and presented the research to both ceramic manufacturer communities and the public at Sredpong Meeting Room of Old City Municipality, Sukhothai Province on the date of 19 to 20, March, 2011.

4.1.2 Sukhothai Ceramic Exhibition was held at Institute of Mekong-Salween Civilization studies Gallery, Naresuan University on June 28th, 2011. The 100 pieces of ceramic were showed and evaluated by experts such as local philosopher, professor, designer, and folk artist.

4.1.3 Sukhothai Ceramic Demonstrated by Mr. Ket Puldee who is an expert from Koa Noi community on June 28th, 2011.

4.1.4 Studied and Visited Sukhothai Ceramic Manufacturers, Koa Noi, Koa Talaeng, and Ban Maung Kau community on July 2nd, 2011. There were 100 participates in this activity.

4.2 Researcher summarizes the result in quality standard and development of Sukhothai ceramic for export to Japan.

#### Population and Sample

Ceramic community group for this research is categorized into four groups depending on area, which are Ban Mon Ceramic Group, Maung Nakornsawan, Ban Tapo Ceramic Group, Maung Phitsanulok, Taungluong Ceramic Group, Keremas, Sukhothai, and Ban Koa Noi Ceramic Group, Srisatchalai, Sukhothai. Each group represents his own ceramic product under the following concepts.

1. Local community art concept which are continued and accepted by professional. This product can be a good sample for other communities.
2. Community organization concept which has at least two members who can create and produce ceramic product. This organization can be either formal or informal but must have some jointly regulation and agreement to achieve the objectives of local art work.

Population in this research is divided into four groups as the following;

1. Local information and ceramic information
2. Folk artist who produces ceramic product
3. Ceramic product developer

#### 4. Product selector and prototype developer

Sample in this research is composed with;

1. Japanese ceramic information
2. Folk artist
3. Ceramic product developer
4. Product selector and prototype developer

#### Research Instrument

Document study and interview experts are instruments that researcher use to bring the concept to create a tool for field data collection from each ceramic community group. Researchers use in-depth interview and non-participant observation process.

#### Design of Research Instruments

On the part of local history and patterns of ceramic products, researcher has studied document and interviewed experts about contemporary ceramic and related science such as culture, learning process, and etc. This concept guideline can be studied from the following source;

1. Studied from primary source which is presented direct idea and experience of researcher. This type of source is textbooks, academic research in foreign countries, Ph.D. dissertation – Master, electronic media such as CD-ROMs and the internet from the various institutions such as Chulalongkorn University, Srinakharinwirot University, Naresuan University, and Department of Cultural Promotion, Thailand.
2. Studied from secondary source such as minutes of the cultural and education leader biography, cultural policy conference record of Department of Cultural Promotion, Thailand, operation manual, annual report, the National Ceramic Art Exhibition catalogue of the various departments where related to this research.

Validity and reliability of document could be accepted in general if a writer has an academic role and experience in that field. Moreover, a trustworthy academic publisher and printing amount of the document would be more assist. This type of source can be both research information and thesis which have to be inspected from reliable educational institute. In order to receive the most update information, the research information and thesis must be finished within three to five years and have be suggested more involving documents for setting up conceptual framework in research from professor.

3. Studied from participated seminar such as planning workshop and work system development of Maung Kout Subdistrict, Sukhothai. Researcher also researched about

Sukhothai cultural inspection which was help in various information studied and field information collection.

4. Studied from expert interview by creating some question about the research from document studied and experience. Then, collect some information from expert answer which is appropriate to the research. The selection of experts for this interview has to be purposive sampling from ceramic expert. The researches use both in-depth interview and non-participant observation to collect research information.

## Conclusion and Recommendation

This research has shown that three communities were developed in potential market and ceramic style and design for export. In short, manufacture can control the modern production standard line and quality as the objective of this research which is to improve the quality of Sukhothai ceramic at a quality as equivalent as Japanese ceramic. The successful of this development will lead to the other future exports including Japanese market.

## Result

The result can be concluded as in the following;

1. Quality and standard of Japanese ceramic is set up by workshop participation of two researchers and two community representatives at Nagoya University of Arts, Ceramic Park MINO, and Museum of Modern Ceramic Art, Tokoname, Japan. The principle of this workshop is compose with various learning procedures as the following;

- a. Ceramic Design Concept and process studied at Nagoya University. This workshop is a theory learning and practicing about production technology which can be easy made by us.
- b. Motif drawing training at Design Ceramic Research Center, Ceramic Park, MINO and Museums of Mino city, Gifu Prefecture. The learner found that Japanese motif drawing has some special technique which is rely on special brushes, supported equipment, and painting color. Some equipment has been brought to Thailand and successfully adapted and used in the production line.
- c. Studied and factory visited about production, design, and marketing at Takonamae city, Saeto city, Mino city, and Kyoto city.

### 2. Research practice for development

Folk artists from Koa Talaeng ceramic group, Srisumrong district, Ban Maung Kout ceramic group, Maung district, and Ban Koa Noi ceramic group, Srisatchanalai district, Sukhothai have be assigned job by their own skill, for instance, Ban Koa Noi ceramic

group is in charge of forming ceramic shape while Maung Kout group is in charge of forming shape and motif drawing. The coating process is in charged by Koa Talaeng group. All together, the total complete products are 150 pieces.

### 3. Japanese standard and quality inspection

Naresuan University researchers, a Japanese professional, an English artist, an executive management from Export Company, and Sukhothai ceramic folk artists have cooperated in evaluated prototypes and testing for lead and cadmium which can be melted from ceramic food container. This testing procedure was completely finished and passed by Ceramic Industrial Development Center, Department of Industrial Promotion, Ministry of Industry Thailand, Lampang Province.

### 4. Educated and trained to community

Researchers have educated and trained member of ceramic community by using community of art practice theory. The community is used as an art learning center for 200 members. The training and activity is designed into four activities.

- a. Two seminars which have 200 participants
- b. Sukhothai ceramic demonstration
- c. Sukhothai ceramic communities visit which have 100 participants

This research has changed many ways of local ceramic production excluding product development for exports. Firstly, the research community area becomes a ceramic learning center for student, academicians, professors, and other interested persons who can exchange knowledge between each other. Secondly, a cultural tourism route is established by Tourism Authority of Thailand. This route is linked to the other tourism attraction place including nearby Sukhothai Historical Park, world heritage. The community tourist target group is tourists who always buy ceramic from them. These customers have encouraged them to design their products in more contemporary style. Thirdly, the communities are interested by mass media, since this research has many public relation types such as brochure, website, and etc. Finally, three communities of area research received more incomes from selling ceramic products which are created and developed for this research. In addition, these communities have potential in ceramic business management using holistic business strategy. After all, they will be strong and self-reliant communities where the others can learn from.

In conclusion, researchers have found research style between relationship of ceramic product and community context. As a result of interaction between people in the context of society and Thai culture, a mix of knowledge exchange and skill assignment, which are enlighten from knowledge of the thinking process and the adaptability of the people in the



community, has been occurred. Thai society accepts that this mixing is appropriate, still exists and inherits by socialization process, social action, and social interaction. This serves as a critical tool in maintaining either the cultural identity of their social group or species. It is expressed in the form of ceramic products which can be marketed to the world with grace.

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