

# The Production Process of Local Pottery in Thai and Cambodian Community

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#### **ABSTRACT**

The study of the production process of local pottery and the consumer's life-style in Thai and Cambodian Community at Nam Kam village, Thatoom district, Surin province, Thailand and Grangrue village, Kampong Chanang province, Cambodia revealed the similarity in production process of local pottery and the life style of people in the two communities. With the techniques of surveying and in-depth interviewing, there are two steps in pottery production; shaping and firing. At Nam Kam village, the initial molding techniques are walking around the wooden log and hitting into shapes while in Kampong Chanang, the molding techniques are walking around the palm log and on the potter's wheel. In the firing step, the pottery at Nam Kam village is fired in open area while in Kampong Chanang, the pottery is fired in open and in the temperature controlled wood, electric kiln. The potters in the communities produce several kinds of pottery, for example, drinking water jars, flowers vases for Buddha image, etc. There are some differences in production techniques of pottery making in the two communities depend on the skills of potter and the uses of existing technology, however, a similar characteristic of the two communities is that the knowledge and experience of the potter have been transferred and preserved to the next generation.

**Keywords :** Pottery, Production Techniques, Pottery's Wheel, Production, Life Style

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### Introduction

The potter at Nam Kam village in Thailand and at Grangrue village, Kampong Chanang in Cambodia use simple techniques which have been transferred for many generations. Most of the potteries are utensils used in the family and if they have more lofts, they sell them. The pottery products will be produced in the villages in which materials and surroundings are rich and it is a minor job after farming. The survey of the area of pottery productions in these two communities revealed the similarities and differences in pottery making techniques, and geographical area influences the differences in pottery making in the two communities.

#### Body of Knowledge in Clay Source

The researcher studies the production techniques and the life style of the people in the two communities using survey and in-depth interview. The much important information obtained from two potters who were local in Nam Kam village in Thailand and Grangrue village, Kampong Chanang, Cambodia. The potter use clay from different source. At Ban Nam Kam, potter use the ball clay in the middle level from "Gud"

near the Moon River. The clay was taken to produce the pottery. Moon River is located in Korat Plateau. which occurred from the Jurassic Era. That is the volcano area, which occur lava crystallized and become Igneous rock, another when it cooling down and become Basalt rock in finally. According to the several media such as wind and rain which create weathering and erosion process over these kinds of rocks. These processes have created sediment which is transferred and deposited in long term. This clay sediment has good plastic viscosity and fine grain which sufficient for molding.

"In the raining season, Moon river water level will be increased which create a lot of troublesome for potter to dig down deeper to the bottom of this river. Because of they must dig down deeper at the same place in several times so that area is become deeper, once raining season has reached the potter could not use that clay at there. It's might cause of end carrier in near future." (Wan Punpol. interviewee. 2006.)

From this interview, this source of clay was used several times and the clay digger found difficulties to dig the clay in rainy season. When



the tide is high, only a strong man with diving skill can do this job but they always migrate to big cities for jobs. It is no doubt that in this situation, the traditional craftsmanship which transfers from generation to generation is nearly abandoned.



Figure 1 Surin Province, Thailand

In Kampong Chanang, Cambodia, the clay from the mountains and the rice fields in Kampong Chanang area was taken to make pottery. The red, fine clay from Grangdoimea Mountain was taken to produce household accessories, such as, vases, lamps, small pots etc. They use the less fine, yellow clay from the rice field to produce kitchen utensils; stove, rice pot, etc.



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Figure 2 Khampong Chanang Province, Cambodia

"Many potter dig clay from Grangdoimea Mountain, But the source of this raw product located in the place which need permission from the land lord. They have to pay for mining clay at 5,000 riel per cart. Quantity of clay will depend on the personnel efficiency to take it with their cart. After all they will bring their cart which fully contain of clay back to their place for the next process. The source of this clay material is form into finer grain and reddish. Usually product that made from this raw material will become decoration pottery. Not only clay from this source but also clay which bring from rice field which place under the top soil layer for 1.5 meter. This clay is in yellowish, most of product from this source will be made for kitchen utensils." (Lin Bautuen. Interviewee. 2005.)





Figure 3 Clay Mixing Site Colour

From the information of the survey done in the lower part of the Greater Mekong Sub Region, it found that people in the area speak Khmer dialect. The family size is big. Male is the authorized leader and female is a housewife. The members of the family join together in their free time activities to do mat weaving and pottery making etc; as a result, the relationship of people in the family is strong and it is a source of extra income for the family.

#### **How to Make Pottery**

E-sarn pottery, especially kitchen utensils, is uncoated. The steps in pottery making of the nearby area are similar; the material is clay from the rice field or from the bank of a canal of a river (Tawee Prompruks.

1980: 56). The clay used in the traditional pottery making must be cleaned, kneaded and mixed with loose soil, the mixture of clay and husk paddy, in different proportion. The clay is molded into different shapes with many techniques; hand building technique (Tanasit Chantaree. 2005: 102), on wheel throwing, slip casting, jiggering and squeezing method, etc.

At Nam Kam village, the shaping is base molding while in Kampong Chanang, base molding and wheel throwing is used. The steps in shaping at Nam Kam village are: 1) half-dry clay is wedged by rounded wooden stick into cylinder shape, 2) the cylinder shape clay is put on the log and hit while the potter walks around the log, 3) the rim (pak) of the pot is made by using a piece of cloth or hemp or plastic carefully catch the rim and the pottery maker walks around the log (swee pak) same as figure 4, and 4) the clay is hit into shape by a piece of wood and a stone (Hin Du) same as figure 5. The shaping has been done several times and dried in the sun for 2-3 days before firing.

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**Figure 4** The Edge Trimming of the Pot by Thai Potter



**Figure 5** Shape up the Pottery by Hitting by Thai Potter

At Kampong Chanang, the shaping is done in the base molding and on the throwing wheel same as figure 6. Kampong Chanang potter will squeeze the clay into shape and walk around the clay tray which is a palm log and paddle the clay with hands. The differences in pottery product design in each area depend on cultures, tools and uses of pottery.



Figure 6 Throwing Wheel Technique by Cambodia Potter

## **Firing Process**

Pottery firing is done by open fires with low temperature at about 800-1000 degree of celcius. The steps of firing at Nam Kam village begin with fire wood piling. The alignment of shaped and dried pottery will keep in 45 degree average and keep space between each other. Normally they will limit only 2 stack pile up which upper stack will place pottery cover and small piece of pottery. Either these small pieces or cover might be place in space between of big pottery. Hay will be covered all over the pottery and then burning. Fire is lit from below and hay is added. It take about 30 minutes for firing a few pots. In the village, the pottery maker uses fresh firewood to substitute hay in the burning step, as figure 7. The resin in



the fresh firewood increases the temperature and decreases time of burning, on the contrary, the outer colour of the pottery is not good, black and red-brown not clear only red-brown.



Figure 7 Firing Process by Thai Potter

"Pottery which pass through this firing process need to be align in proper way, the pot need to be bottom up position which lead to sturdy, prevent fatigue of pieces and completely mature along this process. Bottom up position will bring heat flux run through deep inside all over the pottery. In the other hand, the faulty align position will lead insufficient heat flux through the pottery and effect to only the bottom part of pottery reach to proper temperature. The firing process will continued until the pot turn into red colour, but cannot indicate its colour during the fire procedures. Personnel experience and skill will guide to the end of this process." (Pin. Interviewee. 2005.)

The steps in pottery firing at Kampong Chanang are in similar with Nam Kam village but there are two types of burning; in the open fire and in the temperature controlled kiln. In the open fire, hay and small firewood are used for firing. The firing continue until the colour of the pot present red in colour. When hay is used in the firing step, the only surface of the pottery get mature, so when they want a good result from firing, more firewood will be added for proper firing and strong pottery. For big pots and large utensils, opened air burning is used while the temperature adjustable kiln is used when vases and colourful household accessories are fired.

#### Conclusion

The findings of the research of Nam Kam village pottery, Thatoom district, Surin province, Thailand and at Grangrue village pottery, Kampong Chanang province, Cambodia revealed that the pottery production techniques in two communities are similar. Differences fall on the tools used and expertise of the potter and acceptant of existing technology. The steps of





pottery making are shaping and firing. The simple technique is used in local pottery making; such as using light equipments and local materials. The design of the pottery depends on the favor in each area, in general, simple and beautiful. The pottery production is a unique craftsmanship of each community and it is in a favour of local communities. Most of the pottery productions are used in local and produced in a limited number. It is a second source of income from the main farming job. The development and support in pottery production are still in a wrong way which destroy the value identity of the pottery. Most of the potter intend to keep their expertise in their technique and transfer and preserve this expertise through timeline from generation to generation.

### **Discussion**

Comparative points between Ban Nam Kam and Kampong Chanang village in two different issues concern about build up the pot and firing process.

1. Pottery molding process: hand building technique which potter has to walk around the working piece

which place on top of palm log, which is the only method that existing in Nam Kam village. But in Kampong Chanang has same method as Nam Kam village but include wheel throwing into their pottery making. Therefore, pottery product from Kampong Chanang has been created in various techniques than Nam Kam village which effect to the speed of molding itself and better appearance. Conclusion from this comparative, researcher would suggest increasing the value of pottery at Nam Kam village by transferring this molding knowledge through localized potter.

2. Firing process: Technique of placing pots for firing cause the difference of success. Nam Kam village align pots in 45 degree average while burning which base on believes that heat influx along this process will transfer through potter faster than other align position. But the bottom up position which run in Kampong Chanang base on believe that heat from inside of pottery will distribute through the whole piece..



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