

The Application of Local Wisdom for Production of Condiment Isan' Food Ingredient into Commercial

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Abstract: Problem statement: The problem of the research derives from a lack of study and understanding about the production of condiment Isan food and ingredients being introduced into commercial, even though Isan food is popular among consumers widespread both inside and outside the country. The government introduced a policy to expand trade to create an export value of Isan products. The purpose of the research is to study the local wisdom in the field of the application of the ingredients used in Isan food. In addition, the purpose is to study about the problems of applying local wisdom to produce Isan food for consumption into commercial. **Approach:** The fields of study are Kalasin, Khon kaen, Maha Sarakham and Roi-Et. These are the places of Isan food local culture and original application of Isan food that have been producing to the present and also popular among the consumers widespread. There are 5 types of food that are chosen to be the proposition; Kaeng Wai (Curry Wai), Kai Yang (Roasting chicken), Tom Kai Ban (Boiled chicken), Mok Lab Pla Thong (Grilled Lab Pla Thong) and Om Pla (Fish soup) from 9 restaurants. Using Qualitative Research for data gathering from the concerning document, the data will be collected from fieldwork, survey, observation, interviews and focus group discussion from a group of totally 71 informants, presenting the result by using analytical descriptive. **Results:** The local wisdom of application of Isan food ingredients is a herb that is easy to find in the local area. It is used for the deodorizing of meat and as a garnish to give taste and flavor to the consumer. Isan food is highlighted as spicy and salty. A Spicy taste is from hot chili and dried chili. A Salty taste can be regarded as an important deliciousness that is an identity of Isan food from pickled fish and salt. A Sour test derives from tamarinds. Ya Nang (*Tiliacora triandra*) is used in order to reduce uric acid of Wai (*Calamus caesius* Blume). Adding ginger, Kha (*Languas galangal*) and Lemon Grass to the main ingredients in order to be spicy and increase fragrance. Instant ingredients are used to highlight the taste and fragrance to enhance the flavor. Moreover, all herbs and vegetables that are used are good for our health. Following the local wisdom for the production of condiment Isan food ingredient is the production of day by day by estimating the quantity of using per day and using in a day in order to be fresh. The product is prepared by washing with water and cutting unnecessary parts away, using an easy kitchen application for production. The problem of using the application of local wisdom for production of condiment Isan food ingredient is the lack of available product and it is quite expensive in some seasons. Problems are encountered with low quality products, rear of labor and long period of times to produce and keep the product. Applying the application of local wisdom for production of condiment Isan food ingredient into commercial, fresh product is chosen and washed with water and unnecessary parts are cut away by using simple kitchen application in order to prepare the product. A drying technique is used by using a heated air dryer, drum dryer and freeze dryer. The research attempts to find out the result of the test by using the senses of evaluation, smell, color and taste of the food. The packaging and ticketing of the product is also important to show the ingredients, condiment, proportion and guidance of how to store the product. **Conclusion/Recommendation:** Applying the application of local wisdom for production of condiment Isan food ingredient into commercial is the way of using basic local wisdom in order to apply and develop the product by integrating between original production and modern technology. Both two ways can control the temperature and moisture in order to gain the most resemble of the original product. In addition, it is easy to keep in some difficult seasons, saves time and natural resources; it is easy to cook and has the prospect of being developed into industry to import and export. It is the way to bring income into the country, including enabling Isan food and culture to be recognized worldwide.

Key words: Condiment, local wisdom, commercial production, pickled fish, roasted chilli curry, hairy basil, remarkable identity, production of condiment, methodological triangulation

INTRODUCTION

Food is important for human beings in order to live. It is one thing that can show culture identity and significant in mental response of human need. Isan food has a simple cooking method, convenient, fast and the taste has identity itself. It is easy to make and is strong-flavored, but it is also filling and nutritious. Many of the ingredients are things that can be found near the home or out in the fields-herbs and climbing vines or plants that grow near water. The meat used might be squirrels, birds, frogs, certain kinds of insects or small frogs. There are several ways to cook like grill, boil, Lab and Koi. A Spicy taste is created by adding hot and dried chili. A Salty taste can be regarded as an important taste that is an identity of Isan food, which derives from adding pickled fish and salt. A Sour taste is from tamarinds, ants and olives. So, Isan food is actually a good taste created by using natural resources. Condiments are food ingredients that the Isan people have been using for a long time. Isan food has a taste which is bold and hot that makes Isan food appear outstanding. Isan food brings ingredients from the local area that are mixed together to create a mellow taste. The well known dishes are especially known as the good taste of Pla Ra [pickled fish], which is put as an ingredient in a variety of foods. The difference between the wide varieties of food caused to use a lot of condiments and also lead the food to have its own remarkable identity. Not only are there a lot of Isan restaurants in the North East, but you can also find Isan food and restaurants in almost every part of Thailand, including other countries. Nowadays, condiment processing in Thailand has increased the convenience of cooking and has proved an easy way for a consumer to store and use. While Thai people are firmly carrying on their own original taste, the condiment industries continue to rise and continue to grow, not only inside the country but also extended worldwide. Some people spread out its use to other countries, together with the trend of consuming healthy food. Supporting the policy of Thai cuisine to be part of the world cuisine is the impulse of expanding Thai condiment trade and get along with Thai restaurant that continue grow in a lot of places in the world. However, almost all of the condiment industries both inside and outside the country still appear in the shape of the condiment. There has actually only been a few serious studies or condiment production of Isan food. Therefore, researchers are interested in this topic.

MATERIALS AND METHODS

Using qualitative research for the gathering of data from the concerning document and the data from fieldwork by using purposive sampling. The fields

of study are Kalasin, Khon kaen, Maha Sarakham and Roi-Et. The entire provinces have the places of local culture about Isan food and the original application of Isan food ingredients. The ingredients of the condiment have been produced and in the present and very popular among consumers worldwide. There are 5 types of food that were chosen to be the proposition; Kaeng Wai, Kai Yang, Tom Kai Ban, Mok Lab Pla Thong and Om Pla. So, there are three restaurants for each type. The approach and appliance that was used in gathering the data are primary survey form primary survey form, participation observation, non-structure interview form and focus group discussion with a group of totally 71 informants. They includes; (1) key informants group which includes 11 experts in food technological and restaurant owners (2) Casual group which includes 15 cooks, Isan food ingredients applier and tester (3) General group which includes 45 people such as members of the general public and consumers. The Investigation is conducted by using methodological triangulation, inductive analysis and typological analysis. The results are presented by means of a descriptive analysis.

RESULTS

The local wisdom for production of condiment Isan food: The most commonly used plants are easy to find in the local area. Isan people will grow their plants in their backyard garden to use while cooking for their family. They use fresh leaves, roots, stems, fruits and the top of vegetables in their meal preparation. The condiment is Pla Ra [pickled fish] that is an original salty condiment which is commonly used. Pla Ra is made by pickling several varieties of fish, mainly Snakehead Murrel [*Channa striata*] and herring. The fish is cleaned and cut into pieces, after which it is mixed with salt and rice bran. The whole fish is then left in a big jar covered with a wooden lid, to ferment for three months to a year. Another salty condiment is salt. The salty taste is also from Pla ra and salt. The sour test is from tamarinds. Ginger, Kha, garlic and lemon grass is added to create a spicy taste and for increasing aroma. In addition, fresh aroma vegetables and condiment instant are used to highlight the taste. Moreover, all the plants and vegetable are herbs that also good for our health.

The order of the food that was used in the research of the local wisdom for production of condiment Isan food are:

- Kaeng Wai; the condiments: roasted chilli curry with chili, garlic, red onion and salt for a spicy taste and increasing aroma by using Ya- nang as its

- soup. Nam Pla Ra [pickled fish water] is used for a salty taste, Khawbua [Sticky rice flour] is used as a thickener and finally salt or fish sauce is used for increasing the taste. The vegetables are lemon grass, hairy basil and Cha Om [Apicia pennata]
- Kai Yang, there are two main ingredients; the first part is the condiment of marinade chicken. In the past, used just pepper, garlic and salt. Nowadays, some soy sauces and Monosodium Glutamate are added in order to enhance the aroma of the dish. The second part is the condiment while grilling chicken called Namman Krateam Jeaw [tatted garlic oil] using for aroma and turning the chicken yellow
 - Tom Kai Ban, the condiments: Kha, lemon grass, red onion, kaffir lime which is used for decreasing the fishy smell of the chicken, aroma and giving a more spicy taste to the dish. Chilies are added for a spicy taste and tamarinds for a sour taste. The vegetables are; coriander, hairy basil to increase the spicy taste and the aroma. The condiments are Monosodium Glutamate and instant condiment to highlight the taste
 - Mok Lab Pla Tong, the condiments: ground dried chilies for spicy test, roasting rice for aroma, Nam Pla Ra is used for creating a salty test, kaffir lime, red onion and Kha used for increase spicy taste and aroma. The vegetables are; green onion and eryngium foeti which is used for enhancing the spice and aroma of the food. The instant condiments are salt or fish sauce
 - Om Pla, the condiments: roasted chilli curry with chili, garlic, red onion and salt for spicy taste and increasing aroma. Nam Pla Ra is used for salty taste, Khawbua is used for thickener, salt or fish sauce is used for increasing salty test. The vegetables are lemon grass, Kha increase spicy and aroma. The aroma vegetable like hairy basil, dill, limnophila aromatica and green onion used for decrease fishy smell of fish, for aroma and spicier. The instant condiments are fish sauce that used for salty test and harmony with Monosodium Glutamate

The current conditions and problems of using the local wisdom for production of condiment Isan food: Using the local wisdom for production of condiment Isan food nowadays is the day by day use by local Isan people. The orders are from the propositions of the research. The orders of using the local wisdom for production of condiment Isan food from the research are; (1) Kaeng Wai ; the condiment: roasted chilli curry, garlic, red onion and salt for a more spicy taste and increasing aroma by using Ya- nang as its soup. Nam Pla Ra is used for salty taste, Khawbua is used as a

thickener. Salt or fish sauce is used for increasing salty taste. The vegetables are lemon grass, hairy basil and Cha Om [Apicia pennata]. (2) Kai Yang, there are two main ingredients; the first part is the condiment of marinade chicken. In the past, used pepper, garlic and salt. Nowadays, some soy sauces and Monosodium Glutamate are added in order to enhance the aroma. The second part is the use of the condiment while grilling chicken called Namman Krateam Jeaw, used to enhance the aroma and give the chicken a yellow color. (3) Tom Kai Ban, the condiment: Kha, lemon grass, red onion, kaffir lime that is used to decrease the fishy smell of the chicken, give an aroma and a spicy taste. Chili is used to create a spicy taste and tamarind for a sour test. The vegetables are; coriander, hairy basil to increase spicy test and aroma. The condiments are Monosodium Glutamate and instant condiment to highlight the taste. (4) Mok Lab Pla Tong, the condiment: ground dried chillies for spicy taste, roasting rice for an added aroma, Nam Pla Ra used for salty taste. Kaffir lime, red onion and Kha are used for an increased spicy taste and aroma. The vegetables are; green onion and eryngium foeti are used for spicy and aroma. The instant condiments are salt or fish sauce that is used for a salty taste. (5) Om Pla, the condiment: roasted chilli, garlic, red onion and salt for spicy taste and increasing aroma Nam Pla Ra is used for a salty taste , Khawbua is used as a thickener, salt or fish sauce is used for increasing the salty taste. The vegetables used are lemon grass, Kha to increase its spice and aroma. The vegetables that enhance the aroma like hairy basil, dill, limnophila aromatica and green onion used for decreasing the fishy smell of fish, for aroma and a more spicy taste. The instant condiments are fish sauce that used for salty and harmony with Monosodium Glutamate. The problems of using the local wisdom for production of condiment Isan food are the problem of product for production. Some products are sometimes not always available and the added expense during some seasons because of production factor in agriculture that causes the product to become more expensive. Another problem is the quality of the product such as the risk of mold in red onion, garlic and chili.

The applying of the local wisdom for production of condiment Isan food ingredient into commercial: The local wisdom is used in this case in order to keep the product fresh for a long time. Another way is using modern technology in processing the product to create a better product, which also can be kept for a long time. The orders from the research are; (1) Kaeng Wai; the condiment: roasted chilli curries are produce by grinding all of condiments like chili, garlic, red onion by electronic machine and drying them by using a drum

dyer. Nam Ya-nang and Khawbua are also produced by electronic machine. Ya-nang is grinded with the water by using a grinder. Khawbua is from rice and water together with Nam Ya-nang and then drying it by using a drum dyer until it appears to turn to powder. Nam Pla Ra is used for salty taste. Boiling fish from Pla Ra and then drying it by using a drum dyer until it appears as small slices of Pla Ra. The vegetables like lemon grass, hairy basil and Cha Om are dried by using a drying method by a heated air dryer machine and then grinded by grinder. (2) Kai Yang, there are three main parts; the first part is the condiment of marinade chicken. This is created by grinding pepper, garlic salt and water together and then drying it by using a drum dyer until it appears as a powder. The second part is the condiment while grilling chicken called Namman Krateam Jeaw. Step on the local wisdom in order to produce. This is created by pounding some garlic and frying in heat until it becomes a light yellow color and has a good aroma. The third part is to produce a condiment to scatter over the chicken, that is Krateam Jeaw. Krateam Jeaw consists of garlic and oil. (3) Tom Kai Ban, produced by slicing Kha and lemon grass first. Pounding red onion and ripping kaffir lime, that used for decreasing the fishy smell of chicken, aroma and adding a more spicy taste. Bai-mon is then pounded into pieces with chili for a spicy taste. Tamarind for a more sour taste soaked in boiling water. The vegetables are; coriander, hairy basil to increase spicy test and aroma, washed in water. (4) Mok Lab Pla Tong, produced by roasting ground dried chili and pounded to become powder. Roasted rice can be produced in the same way with chili. Also, Nam Pla Ra has the same way to produce like Kang Wai. Kaffir lime, binding together and cut into small slices. Both Red onion and Kha are sliced together and produced by using a freezer dryer. The vegetables like green onion and eryngium foeti washed in water and then cut. (5) Om Pla, the condiment like roasted chili curry produced by grinding all of condiment like chili, garlic, red onion by electronic machine and dried by using a drum dyer. Nam Ya-nang and Khawbua are also produced by electronic machine. Nam Pla Ra is used for a salty test. Boiling fish from Pla Ra and then dried by using a drum dyer, appear to be a small slice of Pla Ra. The vegetables that are used are lemon grass, hairy basil and Cha Om dried by using a heated air dryer machine, then grinded by a grinder.

For testing, all condiment were brought together to cook by 5 proposition orders of the research. The result of the test was as follows: (1) The group that used drying by heated air dryer has moderate quality of skin, aroma and color. (2) The group that used drum dryer has advantage quality of skin, aroma and color. (3) The

group that used freeze dryer has the most quality of skin, aroma and color. (4) The group that steps on the original local wisdom has perfect quality of skin, aroma and color. When its test is perfect by the suitable proportions, packing by heat and ticketing to show the ingredient, condiment, proportion and how to keep it.

DISCUSSION

Isan food often highlights with local vegetable that is the identity of itself both aroma and taste. Isan people have a deep local wisdom in selecting wide varieties of local vegetables and herbs in order to cook. The local vegetables and herbs have a lot of advantages and are also useful for our health. We able to say that, Isan food is the food for good health. Pla-Ra is the product that is used in almost every kind of food. It has its own characteristic due to its taste and smell; as it is both strong and nippy. Because of the special characteristic of it, Isan food has become popular almost everywhere in the country (Yaekkhoksung *et al.*, 2009). Nowadays, people have changed their lifestyle by attempting to increase their income by going out in search of work. So therefore, they have just a few opportunities to produce or prepare the food themselves. Buying instant or fast food is very convenient and saves the time of having to cook. The instant food products business is also popular, which is the one of the main substantial businesses that helps the economy each year. The business has been developing and expanding continuously. The application of local wisdom for production of condiment Isan food ingredient into commercial is using the local wisdom to apply and develop the new product that corresponds with the people's lifestyle (Prathumnet, 2011). However, the development to production of condiment Isan food ingredient into the public is also needed to be studied and consider about the rules, regulations and other related laws. It is the product that has an effect on a consumer's safety. It must be produced in accordance with an international standard, both inside and outside the country (Meshkini *et al.*, 2010; Abas and Ono, 2010). For example, the food and drug guidelines, agricultural product standards, industry standards and the consumer protection act. Meanwhile, the countries that import food products also focus on the safety of food. The product of condiment ingredients that will be exported should be controlled about the quality and safety standards in the production process this can be achieved by using a more quality system in the food industry, such as GMP, HACCP [Hazard Analysis Critical Control Point] or the administration of safety food, ISO 22000, which is newly developed. However, if focusing on production by control about the quality

and standards together with researching and developing the product that corresponds with the market demand, even today, the consumers have changed their behavior and mood, which is to response to the emotion and self-satisfaction as a primary matter, but most consumers still base it on the nutritional value and safety (Saenayabud *et al.* 2010).

CONCLUSION

The purpose of the Application of local wisdom for production of condiment Isan food ingredients into commercial is the study research about the Isan condiment in reality and the problem of using the local wisdom in condiment production. Also studying about how to apply the local wisdom with condiment Isan food ingredient into commercial, 5 menus from 5 provinces; Kaeng Wai, Kai Yang, Tom Kai Ban, Mok Lab Pla Thong and Om Pla. Applying and developing the original approach and the modern technology to produce the product based on the local wisdom, correspondence with people's lifestyle at the present time. The approach of the study research had been studying about the Product, ingredients, production, processing and product testing. By the results, the consumers are satisfied with the color, sensory odor and the taste of the food at an advantage level. The packaging should be safe and to be able to be stored for a long time making sure the quality of the product will not change. In addition, the application of local wisdom for production of condiment Isan food ingredient can continuously develop to be the condiment product industry for Thai people and also be introduced eventually to the world at large.

ACKNOWLEDGEMENT

The researchers express their sincere appreciation and thanks for all of those who supported in one way or another.

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