

DEVELOPMENT AND ENHANCEMENT THE ROCK SALT FROM BAN DUNG, UDON THANI TO BE AN UNIQUE LOCAL PRODUCT AND DURABLE EARN FOR THE COMMUNITY BY ECONOMIC DEVELOPMENT MODEL “THAILAND 4.0”

Pailin Klinkesorn*, Pennapa Palapin & Thianchai Limjaroen*****

**Pailin Klinkesorn, Faculty of Humanities and Social Science, Suan Sunandha Rajabhat University Bangkok, Thailand, E-Mail: pailin,kl@ssru.ac.th*

***Pennapa Palapin, Faculty of Humanities and Social Science, Suan Sunandha Rajabhat University Bangkok, Thailand, E-Mail: pennapa.pa@ssru.ac.th*

****Thianchai Limjaroen, Faculty of Humanities and Social Science, Suan Sunandha Rajabhat University Bangkok, Thailand, E-Mail: thianchai.li@ssru.ac.th*

ABSTRACT

Abstract— This research aim to study how to Develop and Enhance the rock salt from Ban Dung, Udon Thani to be an unique local product and durable earn for the community by economic development model “Thailand 4.0”. The qualitative research data were collected by group discussion. There are 40 people included of salts farmer’s representative, Community local and regional leaders, Government private sector and public sector representatives discuss the results and find common conclusions each other. Researchers found that every sector representatives has comment about The government and related sectors should accelerate the promotion and development of rock salt in Ban Dung district to become standard products of community. Friendly to the community and the environment. Raise the rock salt of Ban Dungy district to become a Geographical Indications (GI) community product in concept by economic development model “Thailand 4.0”

For example; product design in “smart start up”concept, smart farmer, e-commerce, Logistic, Smart Cooperative etc. Meanwhile, the urgent need for measures to tackle the impact on other resources such as Rice fields, horticultural crops, farm areas in the vicinity of salt fields. The Holistic integration solutions have to proceed by all sectors participation through the civil state process for Sustainable development.

Keywords—The rock salt, Thailand 4.0, Unique local product

INTRODUCTION

Ban Dung, Udon Thani province is the area located on the source of the salt. It is the largest source of rock salt in the Northeast. It is said that the largest source in Thailand. In 2017 Rock salt in Ban Dung has faced obstacles. Salt was sold at the lowest level and can not be sold for 2 years. (2015-2017) Hold the salt warehouses about 150,000 tons. Due to the problems faced by salt producers in Ban Don district, some salt farmers abandoned their businesses and affected the economy of the community. Including dismissal Financial liquidity problems Land use problems. The release of land to the wilderness can not create economic value etc. During this time The government has an urgent policy to support the development of community products and the improvement of people's quality of life in all regions of Thailand. Under Thailand's 4.0 policy, the emphasis is on innovation driven to stability, prosperity and sustainability. And from the policy of encouraging the development of community products, the government is an opportunity to salt farmers in Ban Dung will be able to turn the crisis of trade in rock salt to recover again. Through government support in the development of rock salt products to the local community. And push them towards the community, which is a product with specific features, habitat and geographical indication of the area. Ban Dung is the largest source of rock salt in the Northeast and the largest in Thailand. It is a high concentration of salt with 95-99% purity. And also is a very popular salt. The salt farming of Ban Dung district has been passed down generations to become a part of the local community's way of life. Therefore good to be pushed towards the community, which is a product with unique features resident and important Geographical Indications(GI) to bring income

to the community. The community has a strong economy until it leads to sustainable development.

The Objective of Research

Study on the development and upgrading of rock salt in Ban Dung district A unique and sustainable product for the community. Under the model of economic development in Thailand 4.0

LITERATURE REVIEW

Thailand 4.0 means "Transforming the economy into an economy driven by innovation or value-based economy." the main concept are (Division of Research Administration and Educational Quality Assurance, 2016: 8-16) 1. Change from Commodities to Innovative Products 2. Change from country driven by industry to technology driven. Creativity and Innovation. 3. Shift from focus to manufacturing sector. To focus more service sector.

Thailand's agricultural upgrading to Thailand 4.0 needs to be driven by modern farmers, which means that farmers who use marketing, production lead with the spirit of entrepreneurship. Management and use of technology in manufacturing processing and service, Transformed into a modern agricultural business model. To have leadership, understand the changes in the world and focus on sustainability.

Summary of Economic Development Models Thailand 4.0 is focused on economic development from the foundation level of individualism and community to economic development at the national level. Based on the principle of sustainable development in "Sufficiency Economy" To bring Thailand out of poverty and to its goal of stability, prosperity and sustainability.

The term "Civil State" as stated in the National Economic and Social Development Plan No. 8 meaning to the people, the community and the civil society. Plays an important role in the development of local society and country. Management and development of the country by the government. The principle of public participation is extensive, serious and continuous at all levels. The operation of the government is honest, transparent, accurate, efficient, quality and efficient. Including decentralization to the local area thoroughly and sufficiently. Phaibun Wattanasiritham (2001) By coordinating the public-private network is the four main forces in society. 1) Politics 2) Department of State (Government) 3) Community (People) 4) Civil Society (Private) The goals of the Civil state include:

- 1) The right to participate in community and society development for the people.
- 2) Drive Experience Lessons and Wisdom of the People in the Country policy
- 3) Create a civic sector political system to monitor the political system.
- 4) Seal the "Civil state" with prestige. And the public's position clearly.

METHODOLOGY

Data were collected by qualitative research by focus group Interview.

Target groups used in the study are 40 people include community leaders, philosophers, villagers. And Public sector representative Government agents and private sector representatives in Ban Dung, Udon Thani province. The data from the study to conclude discussions in accordance with the purposes and presented in the form of a discussion.

RESULTS

Ban Dung District, Udon Thani Province Is an area located on the source of rock salt and is the source of the largest rock salt production in the Northeast Or can be said to be the largest source in Thailand. By about 1969-1970 Staff from the Department of Mineral Resources Ministry of Natural Resources and Environment Have come to explore the area and do ground drilling at Ban Dung Community School With a depth of about 70-80 meters deep. And found that white water penetrated through drilling tools and when tasting looks salty The people then boiled the water, which appeared that the boiled water had white scales. After that, the salt had been boiled in the household. And later there was a boiling of salt for commercial purposes. Rock salt, Ban Dung District Udon Thani province is considered a salt that is very popular in industrial plants because

it is a salt that has high concentrations, 95-99 percent purity than sea salt. In addition, the salt that is currently consumed is found mostly from Ban Dung district. For this reason, Ban Dung district is considered a source of salt that is sold throughout the country and products are branded in each province.

Figure 1
Map of Phon Sung, Ban Dung, Udon Thani



Ban Dung district has four salt-making areas, namely, Phon Sai, Tambon Ban Chai, Sri Suattho and Ban Dung locality. At present, Ban Dung has a rock salt business area of 1,191 acres. There are 188 license holders. The salt production is more than 2.5 hundred tons per year, worth more than about 100-150 million baht.(3,061,496 – 4,492,244 dollars) (Ban Dung District Agriculture Office, 2016)

Figure 2
Salt field in Phon Sung, Ban Dung, Udon Thani



Based on the physical and informational data of people in the area, there are problems with the impact of rock salt farming such as Social impact: Conflicts between salt producers and those who have been affected continuously. There is a problem complaining that the salt operator is not responsible that, In the salt season, salt will be cleaned. they swept down the lane to flow down the canal into the creek. Or by pumping down the creek, resulting in salinity in the creek, resulting in shrimps, crayfish, crabs that were once abundant in quantity. And the size is smaller. The people cannot use the water in the creek for agriculture, such as vegetables or economic crops. Some people found that the land was unprofitable so they sold it at low prices by selling it to salt entrepreneurs, both capitalists and owners of salt in neighboring areas. And turned to other occupations such as labour job, government service and private business in Udon Thani, another province, and Bangkok. Economics impact: Farmers cannot cultivate other vegetables and crops to earn a living or earn

extra income on and off the farm. When planted, it faced stunted yield problems. Growing up is not complete and or falling. And they cannot fish every season during rainy and dry season.

From The focus group discussion was held by the representatives from the Agriculture Cooperative. Community leaders Local and regional Public sector representative Government agents and private sector representatives in Ban Dung Udon Thani Province found solutions to the problem of rock salt. By accelerating awareness of social responsibility for operators of rock salt. All local government agencies, especially local authorities in the area, such as municipalities, subdistrict administrative organizations, will have to move forward with the salt operators to strictly comply with the regulations. Provide accurate information on you and the penalty caused by salt. Raise awareness among salt entrepreneurs and farmers. The necessity of operating in a salt industry that may be associated with farming. Because Ban Dung is an area with special geological features. The area is located on the source of the salt. It is an opportunity to create a community economy. Create income and to generate turnover in Ban Dung. And also In order to reduce the conflict between salt and farmers. As a result, people can live together happily. The government and related sectors must accelerate, promote, promote and develop the rock salt of Ban Dung district to become standard products of community. Friendly to the community and the environment. Pushing the salt to the community, which is a product with specific features, habitat and geographical indication of the area by refer The economic development model “Thailand 4.0” such as smart start up, smart farmer, e-commerce, Logistic, and Smart Cooperative. At the same time, measures must be taken to address the impact on other resources, such as rice, horticulture, crop production, and agricultural areas in the vicinity of salt mines. The problem must be solved in a holistic way. All sectors are involved through the Civil state process toward to sustainable development.

CONCLUSION AND FUTURE

Guidelines for solving rock salt farming problems in Ban Dung district Udon Thani Province. Firstly, it should accelerate the awareness of social responsibility for rock salt producers. Second, government agencies involved at all levels In particular, local authorities must campaigning for salt operators to strictly comply with legal regulations Provide accurate information about you and the penalty caused by salt farming. Knowledge and understanding to entrepreneurs and farmers of the importance of salt. The necessity of entrepreneurship in the manner that is a salt industry which may have to be done in parallel with farming. And the third is the development and upgrading of rock salt, Ban Dung District To unique local products and to generate sustainable income for the community Under the model of Thailand Economic Development 4.0 with product design with innovative techniques, products and services (smart start up), smart farmer), e-commerce, Logistic, Smart Cooperative along with solving problems affecting other resources As a holistic integration with all sectors participating through the civil state process. According to Pennapa Palapin (2017) found that saltwater intrusion in Ban Dung district Udon Thani Province resulting in problems and obstacles to the development of the area and affecting the people. There are economic problems such as people lacking opportunities to earn income from various land uses. social problems such as Conflict between salt operators and farmers in affected areas Relocation of people Changing agricultural livelihoods to be workers in large cities. Environmental problems such as changes in soil ecology. Water ecosystem Fresh water becomes saltwater, brackish water. The soil is saline. Many plants withered, perennial, dead, many aquatic species, extinct. In accordance with Phu Sithi Phukhamchanot (2017), who proposed a solution to the intrusion of saltwater from rock salt production in Ban Dung District, Udon Thani Province that, People have to come to have real participation. At the same time, people must adapt to changing conditions at all times. Not only people affected directly, entrepreneurs and government, directly responsible officials but also To find innovative new products or production or import of salt for added value. It arises from the will of the people as well as entrepreneurs and those in the affected area.

SUGGESTION

1. Truly encouraging civil society in Ban Dung District to participate by collaborating with local agencies and / or agencies at all levels to drive policy to develop rice paddy fields to lead to sustainable development. Together to innovate to be able to utilize the saltwater saltwater soil maximum by applying local wisdom as

a thinking base and using a variety of techniques.

2. Developing areas that are affected by the opportunity to generate income and living together happily by pushing rock salt in Ban Dung district into a community product that has local characteristics and is an important Geographical Indications areas by which all sectors are involved through the Civil state process.

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