

Guidelines for Sustainable Development of Nanglae Pineapple from Local Wisdom to Creative Economy

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ABSTRACT

The objective of this article is to study the guidelines for the development of the Nanglae pineapple, which is the major economic crop of Chiangrai province and has been granted the geographical symbol of Nanglae, Muang, Chiangrai by the Department of Intellectual Property. A sustainable opportunity for the Nanglae pineapple has been achieved by combining sufficiency economy and creative economy concepts. The Eight, Ninth and Tenth National Economic and Social Development Plans of Thailand have adopted the philosophy of sufficiency economy to promote agriculture. The Eleventh National Economic and Social Development Plan (2012-2016), which is in use today, also adopts sufficiency economy to develop the country with an emphasis on human development to achieve strengthened economic and social security. The government provides fiscal budgets for research and development as well as encouragement of creative economy in every sector. The article ends by offering methods for sustainable development of the Nanglae pineapple and provides examples of products made from the pineapple that successfully utilise the principles of sufficiency economy and creative economy combined to enhance the quality of life of Nanglae farmers.

Keywords: Sufficiency, creativity, Nanglae pineapple, sustainable development

INTRODUCTION

Chiang Rai is the northernmost province of Thailand and it enjoys a mild climate

throughout the year. Because of its fertile soil and plentiful water supply, Chiang Rai is suitable for both crop farming and animal husbandry. The major economic crop in this province includes rice, longan, lychee, rubber, coffee, tea and the Nanglae pineapple, a well-known local crop particular to this province (Pim-ubon, 2011).

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In 2006, Nanglae Municipal District, Muang, Chiang Rai requested that the Department of Intellectual Property register Nanglae and Phulae pineapples as the geographical symbol of Nanglae as they have been planted in the district for more than 50 years. The request was granted and developing the pineapples became one of the pilot projects of Nanglae Municipal District, boosting local pride. Other important economic thrusts in the province are its solid waste management project and agricultural eco-tourism. These projects have led to an aggregation of agriculturists including the organic pineapple planting group, the pineapple processing group, the golden fish farming group and the cattle group (The Office of Industrial Economics, 2013). As the major economic crop and the main project of the province, an annual festival of Nanglae and Phulae pineapples is held in their honour by the Nanglae Municipal District in May, during which a large number of Nanglae pineapples are marketed.

As global changes cannot be prevented, particularly in the economic, social, cultural and environmental dimensions, it is necessary to study adaptation possibilities and methods that Nanglae pineapple farmers could employ in order to continue their activities in spite of those changes. It has been found that the farmers may be self-reliant by changing the method of planting from chemical to organic in order to reduce the deterioration of soil. Additionally, they have sufficient experience and knowledge to use agricultural waste from pineapple

processing to increase their income such as composting and making pineapple fibre paper (Sitthitho, 2007). Such community strength needs to be supported by both the government and private sectors including the Department of Agriculture, Department of Industrial Promotion, National Innovation Agency, the Thai Chamber of Commerce as well as the government's supporting projects provided for in the Eleventh National Economic and Social Development Plan (2013-2016). Consequently, the development of Nanglae pineapples by the farmers in Nanglae, Muang, Chiang Rai can be sustainable. They can also increase their capacity by expanding local wisdom to creative economy in order to add value to their business and products. This will lead to increased income as well as pride in local identity among the Nanglae people. The methodology used to gather data for this article was to study related literature in order to provide an evaluation of the extent to which existing practices of local wisdom and creative economy are being used.

Sustainable Development and Community Lifestyle

Globalisation has changed the life of human beings, plants and the environment dramatically. There has been an inverse relationship between increasing populations and decreasing resources, leading to the necessity to investigate the production of food crops. It is essential to take into account the sustainability and sufficient living to save natural resources for the

next generations. At the UN Conference on Environment and Development-UNCED in Rio de Janeiro, Brazil in 1992, Agenda21, a Global Action Plan on sustainable development, was finalised in various dimensions including social, economic and environmental dimensions. The main principle of the plan was that present generations are not allowed to decrease the capacity of next generations in achieving their needs of life. This principle has been accepted by the global community with regards to the three main dimensions of sustainable development, namely, society, economy and the environment, as defined below (Panchan, 2013).

Social dimension. Sustainable development improves the quality of life, education and safety of life and property of all peoples. In addition, the community must practise good governance, where the administration of resources is efficient and transparent for all to examine and all may access information pertaining to government projects.

Economic dimension. A society with sustainable development is one that has a stable economy and does not rely on outside help. The economy continuously grows whereas the distribution of income is fair and equitable.

Environmental dimension. Environmental quality is a higher standard that people and governments must adhere to in utilisation of valuable but scarce resources. The environmental dimension needs to be considered as a cost of production.

If the integrated development of these three dimensions is in balance, sustainability will follow, providing a better life for the next generations.

For Nanglae pineapple planting in Pasangwiat Village, Nanglae, Chiang Rai, to be in accordance with the sustainability guidelines outlined in the Global Action Plan, the starting point could be eco-friendly planting that reduces the use of chemicals as given in the principles of Good Agricultural Practice: GAP. Moreover, farmers may plan the area to be cultivated appropriately as well as use cover crop to improve soil fertility. They may also reduce the use of chemical fertilisers. They have already learnt to compost weeds and pineapple stalks instead of burning them in order to reduce pollution and soil degradation. Such a community lifestyle, which adopts eco-friendly planting effectively, can result in sustainable development.



Fig. 1: Sustainability relationship.
Source: sustainable.org.

Sufficiency Economy

Launched by His Majesty, King Bhumibol Adulyadej during a convocation ceremony at Kasetsart University in 1974, sufficiency economy consists of five principles that comprise three components and two conditions.

The three constituents include moderation, reasonableness and self-immunity, which are harnessed by the two underlying conditions of knowledge and morality.

1. Moderation: Do whatever is necessary to practise moderation and match work to core competencies. Choose a suitable business size and practise self-awareness.
2. Reasonableness: Use all equipment and machines with reasonable consideration. Employ local workers and use local materials.
3. Self-immunity: Be concerned about risk management and diversification. Create a variety of products. Cooperate with the community and form networks with local businesses for distribution of materials.

Creative Economy

The United Kingdom initiated creative economy in manufacturing industrial products created through local wisdom. The major principle of creative economy is that it is an economic concept based on knowledge, education, creativity, intellectual property and technology and it links with modern culture to discover

a selling point. The Republic of Korea is an example of creative economy as its films, songs and other products are widely popular across the globe today (Santana, 2013).

Accordance of Creative Economy with Sufficiency Economy

The Eleventh National Economic and Social Development Plan (2012-2016) has emphasised the wellbeing of citizens by improving capacity in production nationwide. The plan also adapts the philosophy of sufficiency economy combined with the use of innovation and technology to run economic activities through creative economy. Emphasis is put on the value added to products or services of business that have potential to create products in order to generate growth and development of creative economy. The government has established Thailand Creative & Design Center and the Office of Knowledge Management and Development (Public Organisation) to be responsible for providing knowledge of creative economy and to promote creative industries as the major mechanism to drive the Thai economy.

In line with the principles of sufficiency economy, creative economy has demonstrated consistency in terms of four foundational elements including creative generation, creative industry, creative space and creative cooperation. This trend of business administration based on creative economy was derived from concepts developed by John Hawkins in his

book titled ‘The Creative Economy: How People Make Money from Ideas’, which led to ideas on how individual creativity combined with Thailand’s enigmatic culture and unique flora and fauna can bring about value creation (Buakao, 2010).

Role of Government, Private Sector and Community in Promoting Value of Pineapples

Each government sector has a different role in promoting sustainability of Nanglae pineapples. The responsibility of the Department of Agriculture is to educate agriculturists on agricultural safety while the Department of Industrial Promotion encourages production beyond household products to provide a sufficient amount of distribution. In addition, provincial organisations have roles to support the planting and processing of Nanglae pineapples to make them provincial products and to set a budget for public relations and increasing its capacity of

production to support the growth of the ASEAN community. It is predicted that output of agro-industrial products has grown higher than 20% (Ministry of Industry, 2013). From data collected on the value chain of pineapples, it was found that all parts of the pineapple can generate growth for Thailand’s economy. For example, pineapple juice may be offered as ready to drink or in concentrate form due to its unique sweet and sour taste. For the enzyme production industry, pineapple as a source of bromelain is often used as a clarifying agent in juice processing as well as an ingredient in meat tenderisers.

The Chiangrai Chamber of Commerce plays the role of promoting the production of pineapples through public relations and business matching for pineapple products such as fresh, fresh-cut and processed pineapples to compete with foreign markets. The main markets are in Asia and the Middle East. This, in addition to its world-famous tea and coffee, can boost the economic growth of Chiang Rai.

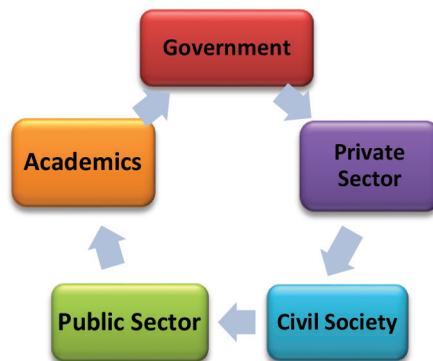


Fig.2: Pattern of sustainability from cooperation.
 Source: Poonpattaracheewin (2013)

At the forefront in the drive to promote and grow creative economy is the government sector consisting of political and government officials. Political officials should have clear policies and a development strategy to lead Thailand to be 'the country of creative economy'. They should also declare the development of creative economy as the national agenda for the continuation of practices despite political changes that may arise. Apart from national politics, local politics is considered an important mechanism for successful policy implementation. Consequently, it is necessary to encourage local politics to take an active role in local development to boost creative economy. Government officials can promote cooperation among government organisations in different ministries in order to incorporate development strategies for creative economy in Thailand in ministry policies and events. These strategies can be channelled to departments, regional agencies and local administration within the ministries.

The private sector is one of the major mechanisms in the growth of creative economy. First, it should have a staff development plan for creative work by providing information on staff requirements for the academic sector to design an appropriate curriculum. The private sector should also guarantee job placements for those who meet the requirements agreed on by the academic and the private sectors. Second, the private sector should build corporate social responsibility networks consisting of socially responsible businesses to set up social projects. Each network can choose a

project plan and presentation that it wants to support from the development strategy in order to develop Thailand as a creative economic country. For example, a network can provide funds for a community to buy computers or to pay for telecommunication services for the community. They can also support training staff and provide a budget for the public sector.

The major roles of the academic sector, which consists of scholars from educational institutes and independent scholars, in driving the development strategy for a creative economy are to develop human resources in creative work and to change teaching methodology to improve the creativity of students in all fields of study. Additionally, the academic sector has a role to create methods to develop people in the community so that they can improve their local identity as a locale known for creative products and services.

Civil society, which is closer and more familiar with the community and its needs than government agencies, can be the leader in implementing some policies. This can lead to opportunities to gain more support from the public. The final mechanism is representatives from the public sector; this is a key mechanism for these plans to succeed. Community creative ambassadors must be trained to convey the concept of creative economy and its application in daily life to the community. This mechanism can help a community learn and embrace the changes that are needed naturally (Poonpataracheewin, 2013).

An Example of Job Creation from the Consistency of Sufficiency Economy and Creative Economy

The Department of Agriculture and Petchburi Provincial Agricultural Extension Office cooperated to develop a new species of pineapple. The outstanding characteristic of this species is that the fruitlet can be removed easily. The consumer does not need to peel the skin, but may eat the fruit in the same way custard apples are eaten. Farmers may earn a higher income from this species as its price has increased to 150 Baht per kilogram. It has also become the pride of the community, generating income and the acquisition of learning resources.

CONCLUSION

Regarding the guidelines for the sustainable development of Nanglae pineapples planted in Nang Lae, Muang, Chiang Rai, the author agrees that sustainability focusses on the balanced use of resources of the present generation and that their awareness of the need to preserve those resources for the use of the next generations to live a normal life is vital. Nanglae pineapples should be studied in order to present them to reflect the lifestyle of the community that is at the same time linked to local wisdom and value creation. The development of these pineapples leads to stability, self-reliance and pride in being producers of the famous Nanglae pineapple while complying with the green policy for global sustainability. Thus, sufficiency economy and creative economy, which

the Thai government has included in the Eleventh National Economic and Social Development Plan (2012-2016), are consistent, and combined, they increase opportunities for improving community products in order to offer greater value and benefit beginning with a steady income for Nanglae pineapple farmers.

REFERENCES

Amornthai, S. (2013). *Green product*. Retrieved on 2013, March 26 from <http://businessconnectionknowledge.blogspot.com/2011/12/1-green-product.html>

Buakao, J. (2010). *Consistency of the philosophy of sufficiency economy and creative economy of Thailand*. Retrieved on 2013, March 16 from www.journal.Feu.ac.th/pdf/v412t2a3.pdf.

Ketnawa, S., Chaiwat, P., & Raodkuen, S. (2012, July). Pineapple wastes: A potential source for bromelain extraction. *Food and Bioprocess Technology*, 90(3), 385–391.

Office of Industrial Economics. (2013). *Value chain of the pineapple*. Retrieved on 2013, March 20 from <http://www2.oie.go.th/vc-pineapple/index.php/pineapple-industry>.

Panchan, S. (2013). *The sustainability development*. Retrieved on 2013, March 20 from <http://socialscience.igetweb.com/articles/420341.0/igetweb%E0%>.

Pim-ubon, R. (2011). *The report of community enterprise of Chiang Rai*. The Department of Agricultural Promotion.

Poonpataracheewin, T. (n. d.). *Creative economy # 2*. Retrieved on 2013, March 26 from <https://sites.google.com/site/gaiusjustthink/thitikorn-on-design/creativeeconomy2thamitxngsersthkicsrangsrrkh>

- Sitthitho, C. (2007). *The study of lessons to be learned for the survival of the Nang Lae pineapple farmers in the contest of socio-economic changing world*. (Master's thesis). Chiang Rai Rajabhat University, Thailand.
- Sustainable NI. (2013). *What is sustainable?* Retrieved on 2013, March 2 from <http://www.sustainable.org>.