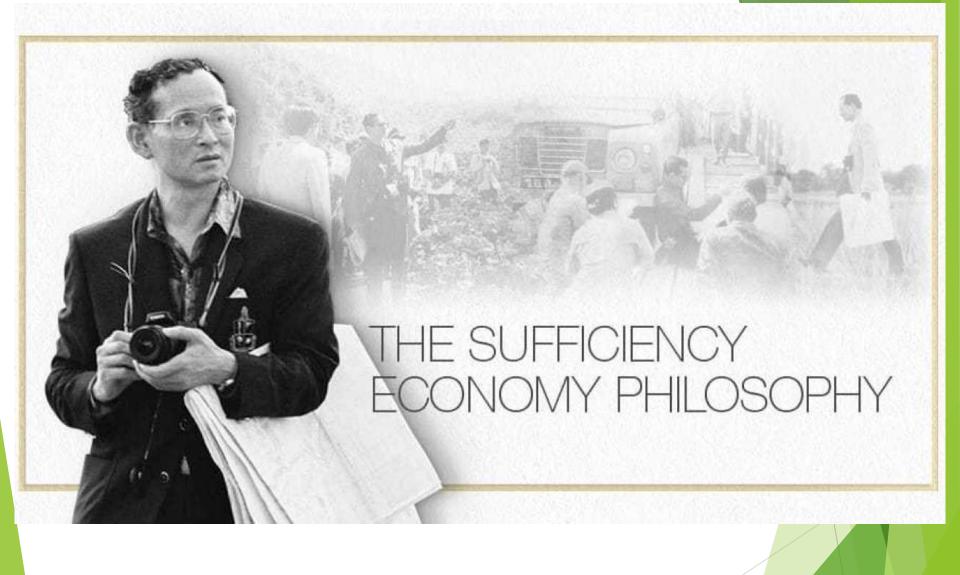
# Sustainable Strategy for Agricultural Development by His Majesty King Bhumibol of Thailand





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### **New Theory Farming System in Thailand**

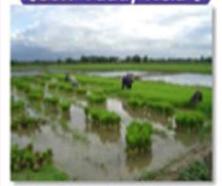


Divide the field into 4 parts in the approximate ratio of 30:30:30:10

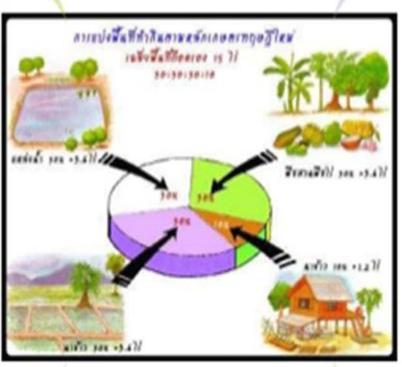
### 30% Pond

- Water saving for all year round
- Fish Aquaculture to increase more income
- At the edge of the pond - growing vetiver grass to protect soil erosion

### **●30%** Paddy Field **●**



- One crop / year
- Storage for year round consumption



#### ECONOMY



### ■30% Trees/ crops

- Fruits trees
- Perennial trees
- Annual tress
- ·Herb and spice
- Multi-purpose trees
- · Field crops

### **■ 10%** Residential **■**

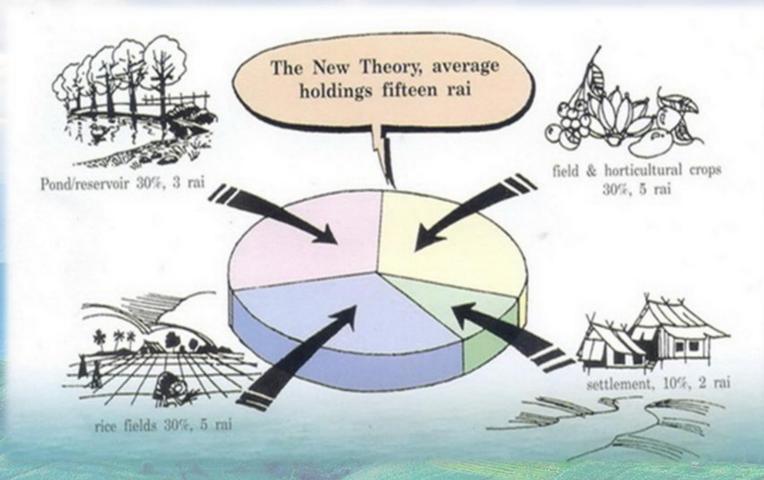


 Other activities: vegetable, herb, mushroom, livestock





### **Farmland Division for Optimum Benefits**



The land is divided into four parts with a ratio of 30:30:30:10.

### **Summary of the Sufficiency Economy Philosophy** The Middle Path Moderation Reasonableness Self-immunity Moral condition Knowledge condition (Integrity, diligence, (Prudence, carefulness) patience, sharing) Balance/stability/sustainability Economy/society/environment/culture Source: thaiembassy.org **POST**graphics

### **Development Vision**

### **Sufficiency Economy Philosophy**

Thais

Moral-led **Proficient** Keep-up Warm family Community/ institution

Strong community Peaceful society

system

Quality Stability Fair

Economic Natural resources environment

> Quality environment and sustained natural resources

Country Management System

Good governance Institutional Democracy Living in the world society with pride

### **Overall Happiness**

### **Abstract**

Agriculture is the main important part of Thai occupation. Planting without planning always causes the problem of agricultural products. King Rama IX or His Majesty the late King Bhumibol has done action research on his personal land since 1989 in order to explore the effective way of land and water management. He then finally found that "The New Theory" is the most effective way of helping Thai people to manage and cultivate their lands for agriculture. The New Theory is practised at three levels focusing on the effective management of farmland to optimize its use. Level one is to introduce a specific way of dividing the farmland into 30:30:30:10 proportions. There are 30% of the pond, 30% of paddy field, 30% of trees and crops, and the last 10% is for residential.

### **Abstract**

This first level is particularly for individual benefits. For the next two and three levels, there are for collective benefits at the community and national levels. The New Theory leads to better outcomes related to the domain of material, society, cultures and environment. The New Theory can bring to food security, sustainability and selfreliance. Therefore, this can influence farmers and general public to have a more positive attitude towards an occupation in the agricultural region. The new theory is also brought and applied by many countries such as Kingdom of Lesotho, the Kingdom of Bhutan, and Hashemite Kingdom of Jordan.

## The meaning of the sufficiency economy consists of the following aspects.

- ▶ 1. Modesty means moderation that is neither too small nor too much by not encroaching oneself and others, such as production and consumption at a moderate level
- ▶ 2. Reasoning means a decision regarding the level of sufficiency. It must be reasonable by considering the relevant factors as well as carefully considering the expected results of such actions.
- 3. Immunity means preparing to be ready and affected by various changes that occurred and taking into account the possibility of various situations which is expected to occur in the future. There are two conditions of decisions and carrying out various activities to be in sufficient level as follows.
  - 1. Knowledge conditions consisted of knowledge in various academic subjects to bring that knowledge into consideration to be linked together in order to plan and practice.
  - 2. Moral conditions that can be strengthened, consisting of awareness of morality, honesty and patience, perseverance, and wisdom in life
- From the meaning above is a concept that is driven in Thai society. The King of Thailand has brought the above concepts as a base for driving and be promoted. Therefore, the concept of Buddhism became an important concept and was driven into action both as a concept and a way of life until that concept was linked and passed on to the international level as well.

### The New Theory

- Concepts of operation and management of the new theoretical agricultural learning center in accordance with the sufficiency economy philosophy is a concept that initiated during the reign of King Rama IX (Bhumibol Adulyadej, 9 June 1946 13 October 2016) visited the people in various areas in the whole country and asked the farmers and observed the water shortage conditions for rice planting and the royal inspiration which is a concept as below:
  - 1. Rice is a very strong crop if getting enough water, it can increase the amount of rice grain.
  - 2. If the rainwater has been collected and used for cultivation, it can be harvested more.
  - 3. The construction of a large reservoir day by day but is difficult to implement due to community expansion and limitations of land quantity that is a major obstacle.
  - 4. If each household has a pond in every farm when combined, the volume is equal to the number of large reservoirs. The end of the cost is minimal and the maximum benefits are achieved more directly.

### Step 1: Basic New Theory

▶ The basic status of farmers is that there is little land, quite poor, located in the agricultural areas, rainwater is the main life security and security of rural communities. It is a more selfsufficient economy with allocation of arable land and housing to divide the area into 4 parts according to the ratio 30: 30: 30: 10 which means the first part area is about 30%, dig the reservoir to store rainwater during the rainy season and to supplement planting crops in the dry season including raising aquatic animals and various aquatic plants (can do fishing, growing plants such as morning glory, water mimosa, and others as well). The second part is about 30%, to plant rice during the rainy season, to use as a daily food in the household sufficient throughout the year in order to cut expenses and be able to be self-reliant. The third area, approximately 30%, to plant trees, fruit trees, perennial plants, vegetables, crops, herbs, etc. for use as daily food and if left over, it can be sold. The fourth area, about 10%, is used as a shelter for animal husbandry and other houses (road, hay pile, drying area, compost pile, house of mushroom, animal stalk, ornamental flower, vegetable garden, backyard garden, etc.)

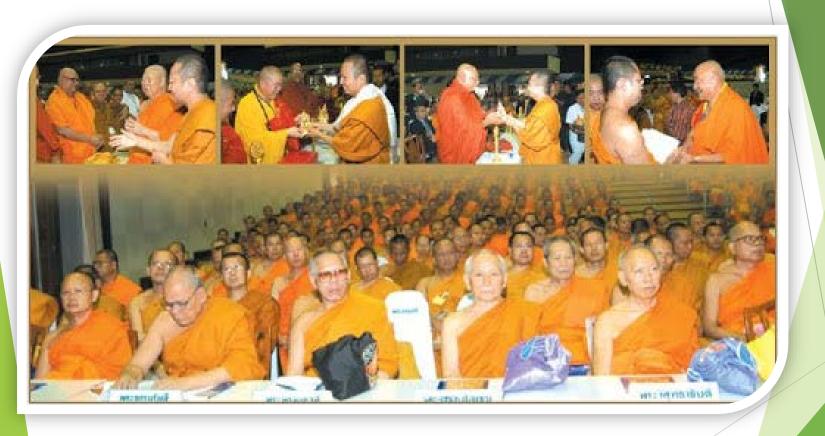
### Step 2: Intermediate New Theory

- When farmers understand the principles and have practiced on their own land until they are effective, they have to start the second step that farmers join in the form of groups or cooperatives together to work in the field as below aspects.
- ▶ 1. Production: Farmers must cooperate in production starting from soil preparation, finding plants, fertilizers, finding water sources for planting.
- ▶ 2. Marketing: When products are produced must prepare for selling products to maximize benefits, such as preparing rice drying slopes together, procurement of rice barns, prepare to find rice mill as well as the combination of selling products to get high prices and reduce costs as well.
- ▶ 3. Livelihood: At the same time, farmers must have a reasonable living with basic factors in living such as various foods, shrimp paste, fish sauce, sufficient clothing.
- ▶ 4. Welfare: Each community should have necessary welfare and services, such as having a health center in case of illness, or have funds to provide loans for various activities.
- ▶ 5. Education: There are schools and communities that play a role in promoting education, such as funding education for the youth of the community.
- 6. Society and religion: The community should be a center for social and mental development with religion as an anchor all activities mentioned above must receive cooperation from all parties involved consisted of government agencies, private organizations, and community members.

### Step 3: New Advanced Theory

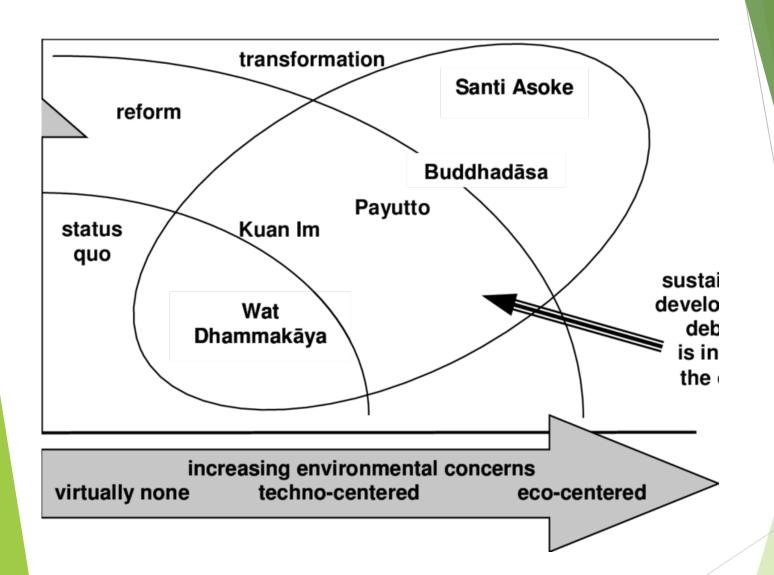
- Once the second step has been completed, farmers will have better incomes, stable farmers or groups of farmers should continue to develop and advance to the third step, which is to contact and coordinate to raise funds or sources of money, such as banks or private companies come to help in doing business investment and quality of life. Both farmers and the bank and the company will receive mutual benefits as follows:
- Farmers can sell rice at a high price. (don't be undercut)
- ▶ Banks and companies are able to buy rice at a low price (Buy paddy directly from farmers and mill them).
- Farmers can buy consumer goods at a low price because they buy together in bulk (a cooperative shop and buy at wholesale price).
- ▶ Banks and companies will be able to distribute personnel (to carry out various activities for better results).

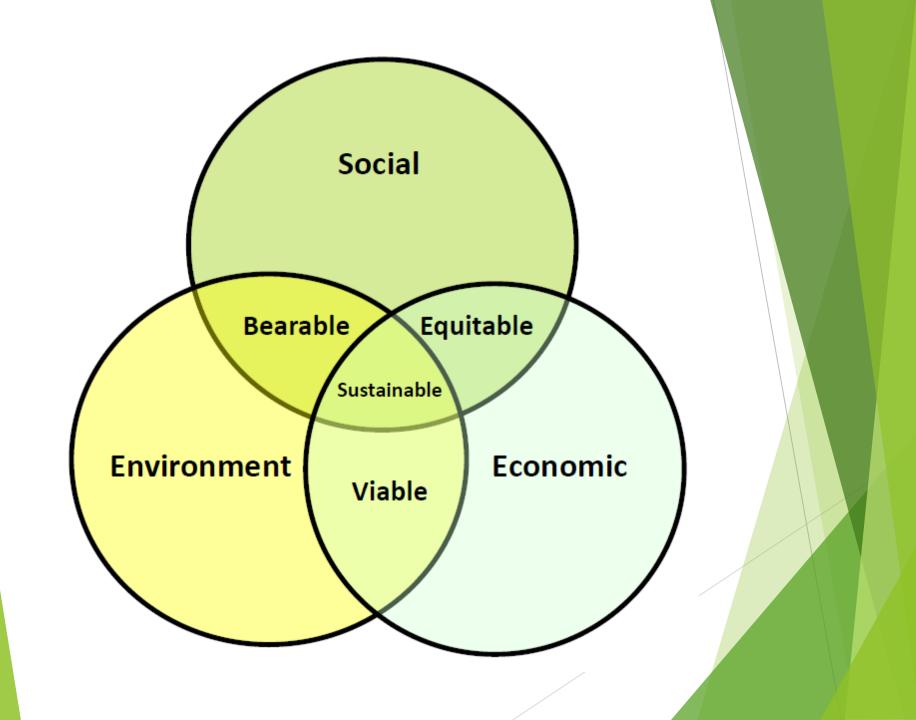
## Applying the New Theory in Buddhist University

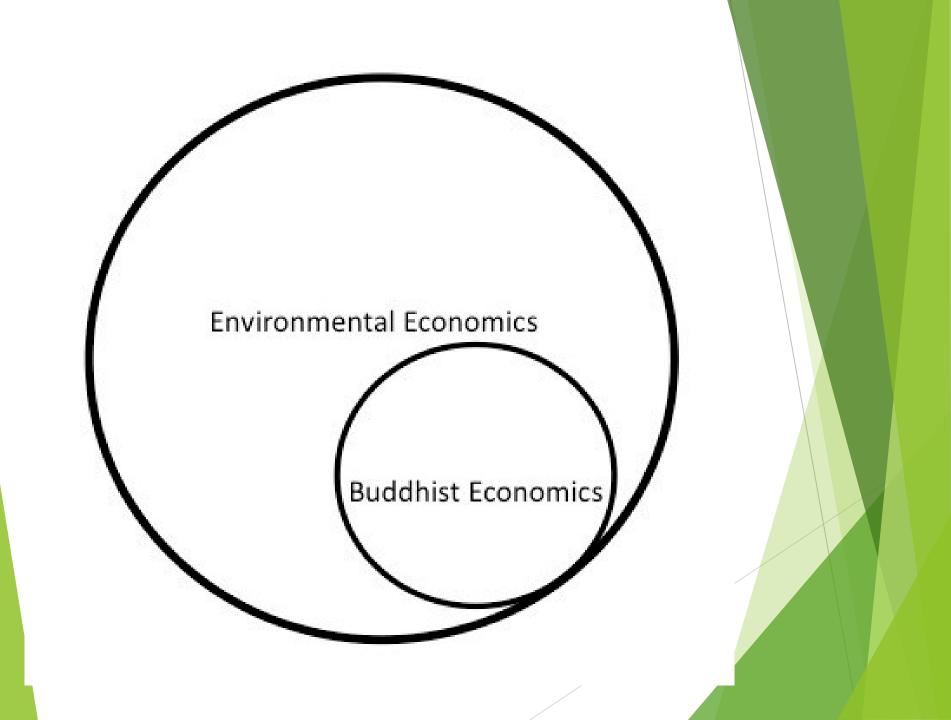




### BUDDHIST ECONOMICS







## **Environment and Green University**







### **Green University**



### **Green University**



### **Green University**







## Buddhist University & Buddhist Agriculture

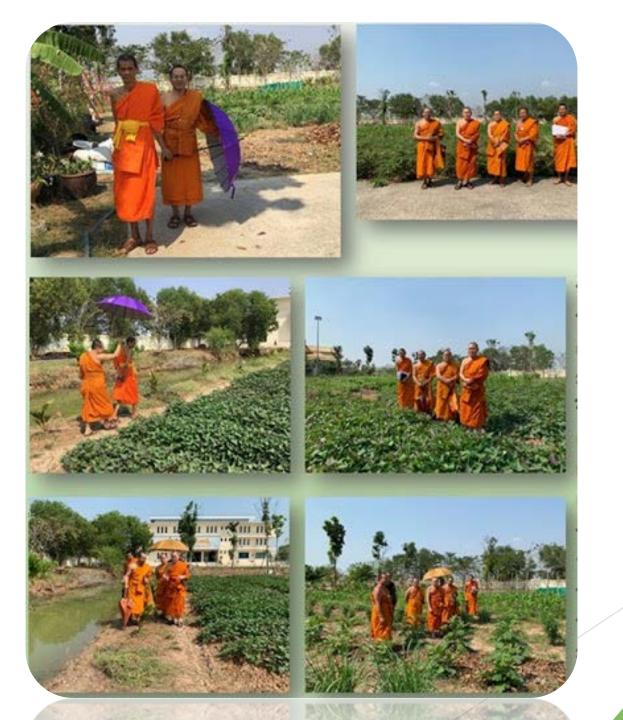
- ► Apply the Buddhist principles
- Grow vegetables
- Vegetable juice into the university kitchen

## Gardening Agriculture for Sustenance

- From the policy of the university in early 2018 by the university president Prof. Dr. Phra Rajpariyatikavi, that has to divide the land which is free adjacent to the auditorium building on campus, organic vegetables are grown. There are many vegetables such as Chinese cabbage, eggplant, long bean, Cantonese vegetables, chili, coriander, etc.
- The goal is to supplement food to the kitchen within the university acquired fresh, organic, quality vegetables and produced by the university to be cooked as food providing food with a goal for sustenance for lecturers and students at the university.
- Most of them are ordained from various countries and living within the university such as Laos PDR, Cambodia, Myanmar, Vietnam, etc. The overall result is satisfactory with the product which may be successful, or some not success depending on the time and weather. However, at least a learning experience was a direct experience of growing vegetables. For consumption under the framework, it has been shown the Buddhist way of life, agriculture, equation, sufficiency and sustenance in Mahachulalongkornrajavidyalaya University Phra Nakhon Si Ayutthaya Province.

















# The integrated agriculture garden and green university

These are the concept of the sequel to the first part which will expand the space within the university to increase the Buddhist agriculture garden by proceeding in a parts which are:

- (1) increasing the area for planting vegetables in the university.
- (2) growing food sources and perennial plants such as mangoes, jackfruit, coconuts, bananas, papaya and other plants that is a perennial plant for shade within the university, and produce food.
- (3) increasing green space for the university under the concept of Green University that has planted perennials for shade, heat protection, and the landscape for the university.

These perennials are associated with trees in the Buddha's life and Buddhism and important trees in Thailand as well including the adjustment of the landscape release fish species in the water source in the university to make it an integrated ecological system based on Buddhist principles, etc.

# The integrated agriculture garden and green university

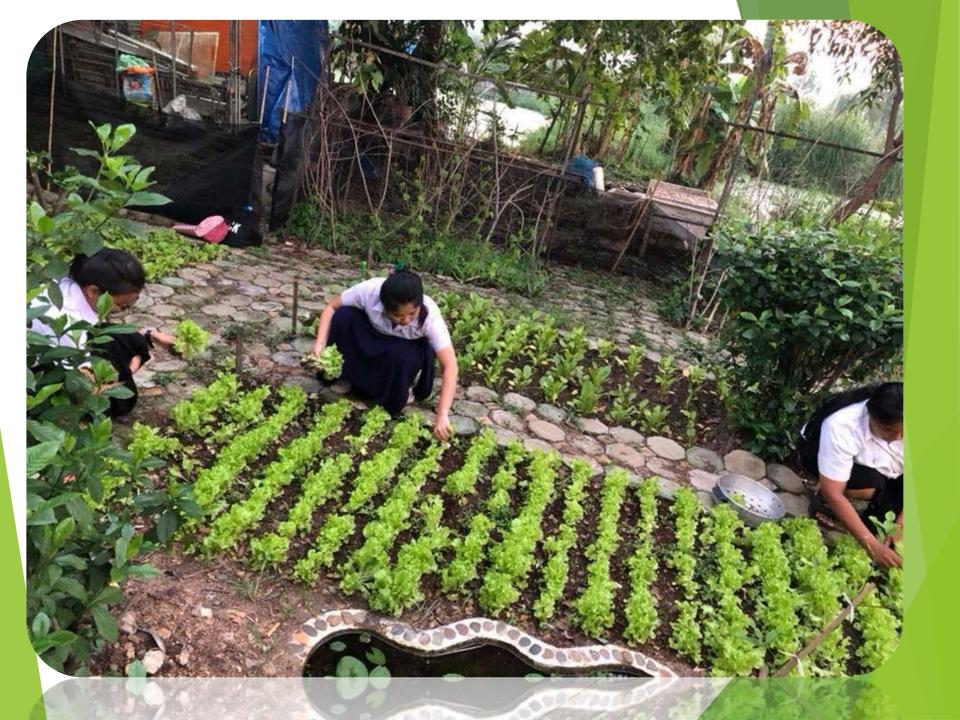
- In addition, a fund has been established to promote the full movement of the Buddhist agriculture garden that the university administrators jointly donated, for example, Phra Theppavaramethi made a donation and established a fund in the amount of 50,000 Baht and fundraising to drive the project in this area, too. The process has been developed and expanded, and the area has been developed to support the management such as a Buddhist agriculture garden. There will be a market that supports agricultural production.
- There are activities due to the university campus which is a Buddhist temple and there is a religious place in Buddhism under the concept of the campaign of Buddhist agriculture and Buddhist tourism in temples with the royal relics and religious places of worship in the form of paying respect to monks, merit-making tours in the Buddhist church, and religious sites in the university. All of them are ongoing projects from activity 1 and they will expand to have a broad connection with the community and society. In part 2, there will be vegetable plots, Buddhist agriculture orchard, Buddhist agriculture market, and travel in the Buddhist way appearing at the Buddhist University under the concept of Buddhism, agriculture and sufficiency economy as the base of operations.











### Area Studies of Research Project under Buddhist Economics "Learn and Earn Income"

Asst. Prof. Dr. Phrakrusankharuk Jakkrit Puripanyo, lecture from Faculty of Education has conducted a research project under the concept of "learn and earn income" as well as food production under the concept of "Buddhakaset", with funding budget for mixed vegetable growing in the of approximately 1 Rai. The farm has started a demonstration agricultural plot, and in the study framework for development of prototype agricultural demonstration plots on campus that aims to foster learning through integrated farming methods during the COVID-19 period with food production for subsistence and studying and have income in order to be a body of knowledge for students who applied research based on Thai society. It is an agricultural way encouraging students to make money through agriculture or developing agricultural products for commercial purposes.

### Area Studies of Research Project under Buddhist Economics "Learn and Earn Income"

- ► Therefore, this demonstration vegetable cultivation is a mixed vegetable planting, experimental research, studying the soil, water and electricity systems using water from the sewage system in the student dormitory to hold treated and bring that water to water the vegetables by using electricity that is renewable energy from solar cells. The production of electricity for pumping water planting vegetables did not use chemicals. The use of natural fertilizer such as fertilizer from cow dung and was a framework for doing, so not to encroach on Buddhism by not hurting oneself because the vegetables were organic and good for one's own health and do not encroach on living things or animals that eat plants.
- Agricultural garden beside the student dormitory of MCU related to the study of "Buddhist integration in social sciences and anthropology of food" (Phra Palad Raphin Buddhisaro and Others, 2020). In one sense, it was learning, in other words, agricultural development to enable movement under seeking knowledge in Buddhist research concepts to practice mechanisms. In other words, it was based on the production of sustained food under the COVID-19.











#### Conclusion

▶ Sufficiency economy concept based on the idea of Buddhism in the balance of sufficiency that has come from the concept of "Middle - Balance", and the late King Bhumibol Adulyadej predicted that Thai society is an agricultural way and there is a Buddhist concept on "Balance - Sufficiency" that people respect, and make most people see the importance and the usefulness. Role model of driving the concept of the sufficiency economy during His Majesty's existence has been driven throughout Thailand from a broad perspective over the past 3 decades.

#### Conclusion

- The Thai government has introduced the idea to drive through the concept of the 5 precepts village, which has temples and monks as the mainstay to pass on the said concept including stimulating the idea of "The late King Bhumibol's Philosophy" (Wilaivat Krisanaphuti, 2018; Jamaree Prasunin, 2019; Phrakru Sunthonkhemapinan and others, 2019) that brought the concepts of sufficiency economy as a driving mechanism for the past 1-2 years. According to the crisis of COVID-19 situation which occurred throughout the country and around the world, it caused stagnation in terms of social structure as a whole.
- ▶ Therefore, the Sangha and the state by the Department of Religious Affairs and the National Buddhism Office has campaigned for about 40,000 temples nationwide which temple has empty space, has a campaign to plant organic vegetables under the concept of Buddhist agriculture due to the sufficiency economy in order to be a source of food production during difficult situations as it appears today. The concept of the middle balance in Buddhism is therefore a joint concept in driving and developing Thailand with the goal of sustainability as from the past until the present.



