

# **Enhancement of agriculture, environment and human attributes through Kyusei Nature Farming in Thailand**

*Kanit Muangnil*

*Kyusei Nature Farming Center, Saraburi 11810 Thailand.*

*e-mail : [kanitknf@thaikyusei.org](mailto:kanitknf@thaikyusei.org)*

## **Abstract**

*Kyusei Nature Farming Center (The Asia Center for Personnel Creation on Kyusei Nature Farming) was established in 1988 by Revd. Kazuo Wakugami The president of Sekai Kyuseikyo Thai Headquarters, the farming method which was initially advocated by Mokichi Okada the founder of Sekai Kyuseikyo in 1935. It is based on his belief that the world can be transformed into a paradise by eradicating disease, poverty and conflict.*

*The training and extension activities for Thais during 1988-2001 at the Saraburi center over 39,500 participants while the outside training over 200,000 participants. The cooperated International workshop with APNAN on KNF during 1994-2001 about 694 participants. The Kyusei Nature Farming and Environment Research Center was established in 1998, together with the Teacher's Association on KNF of Thailand aimed to promote the national research, education and extension also the activities of demonstration farms area 60 ha. The center has cooperated projects with government and private sectors in the field of environment.*

## **Introduction**

Kyusei Nature Farming is not traditional organic farming, its a way of life that harmonize with nature. It is a living process that blends all components of agriculture ecosystems to provide healthy food to all living being, while maintaining sustainability.

Kyusei Nature Farming using the technology of Effective Microorganisms (EM), is a system of agriculture that combines the benefits of both these extreme system of farming. It does not use chemicals which pollute the ecosystem, but is capable of producing high yields on a sustainable basis, while preserving the environment.

Effective Microorganisms (EM) was developed at the University of the Ryukyus, Okinawa, Japan in the early 1980's by a distinguished professor of horticulture, Professor Dr. Teruo Higa, he developed a mixture of beneficial microorganisms, first by accident and thereafter by diligent research to enhance productivity of conventional organic farming system. The results were remarkable and expansion process of this technology, which is now commonly referred to as EM.

## **Kyusei Nature Farming Center has 5 main activities**

### ***1. KNF Training and Extension Center***

1.1 The training activities for Thai participants during 1988-2001 (up to september) at the Saraburi Center were over 39,500 participants.

1.2 The training activities for Thai participants during 1988-2001. (up to september) outside the saraburi center over 200,000 participants, training outside the Saraburi Center. were cooperated and done by the KNF Extension's Association (SKK Public Religious activities) and Government organization Such as the Royal Thai Army (RTA) Electricity Generating Authority of Thailand (EGAT) Ministry of Interior and Teacher's Association on KNF of Thailand.

1.3 International workshops/Regional Training on KNF at Saraburi center (by the Asia Pacific Natural Agriculture Network/ APNAN) during 1994-2001 were cooperated with SKK Thai Headquarters during 1994-2001, which the participants were trained about 694 persons (28 times) from various countries such as Indonesia Lao PDR Bhutan Switzerland Sri Lanka Malaysia Vietnam Nepal Pakistan Philippines Singapore India Japan Austria Germany Poland Mauritius Myanmar and New Zealand.

1.4 The training activities for the Royal Thai Army (RTA) programs (The program for a Self-sufficiency economy)

The Royal Thai Army has the program under the situation of economic recession in Thailand from the year 1997, to help the rural poor people in various parts of the country, and under their Majesty the King and Queen's royal words :

His Majesty the King's royal words : *“ As a matter of fact I always make a speech in each meeting like this as the following being a tiger is not necessary, the necessity is not only to have some adequate things to survive but also to have sufficient economy, sufficient economy means to stand on one's own feet adequately. ”*

*4th December 1997*

Her majesty the Queen's royal words : *“ I learnt when I came here. Before coming here I was worried about the people who protected the forest. They promised me not to cut the trees and destroyed it. How were they? when I visited one of the projects I was very happy to see that they had enough food. It was a very good project. I would like to expand this project to other village to help them have enough food as well. ”*

*16th December 1998*

## **2. Kyusei Nature Farming and Environment Research Center. (KNFERC)**

The Research Center was established by Revd. Kazuo Wakugami, the purpose is to scientifically validate the technology of Effective Microorganisms and enhance its use in the country and region were discussed and presented. The first national conference on Kyusei Nature Farming and EM Technology held on November, 1998. The research activities aimed to promote the national research, education and extension of Kyusei Nature Farming and EM Technology.

## **3. The Teacher's Association on Kyusei Nature Farming of Thailand.**

The Teacher's Association on KNF of Thailand was established in May, 1992 by the vision of Revd. Kazuo Wakugami, the president of SKK Thailand. The main objectives are to enhance the educational sector to be trained and known the KNF and EM technology, create the pilot leading schools for KNF practices, improve the economic and spiritual benefits in the schools and to produce of safe and nutritious food for childrens.

#### ***4. The KNF Demonstration Farms, Saraburi.***

The demonstration farms were established in 1988, simultaneously as the establishment of the KNF Training and Extension Center. The farms mainly for Kyusei Nature Farming practice and improve the experience of the trainees and staffs, which the total land area about 60 ha. (ha.=6.25 rais) compose of the activities: vegetable production plots, rice cultivation plots, recycle farming and livestock, fisheries and aquaculture, horticulture, self-sufficient economic house and the New Theory integrated farm.(The King's model project, 1994)

#### ***5. The Cooperation Projects with Government and private Sectors in the field of environmental aspects.***

##### *5.1 The Environment protection project for the Pasak River, Sataburi province.*

The Royal historical Pasak river has importantly concened with the cultural and way of life for the people along and nearby the river, the civilization of various groups of thai people were occured along the river. In 1994 the Pasak Jolasid Dam was established under His Majesty the King kindness policy and finished in 1999, with the objectives for release floods and reserve the water for agriculture with the maximum capacity about 960 million cubic meters. The EM technology was used and applied for environmental protection both in agriculture and industial activities.

##### *5.2 The Saraburi Environment in Good Health : Culture and Nature.*

Natural agriculture to a sustainable agriculture by using Kyusei Nature Farming and EM technology to improve productivity, sustainable land use and ecological control for a better living. During February to May, 2001 the farmers and interested persons in 13 districts about 1,500 participants were trained on the special course "Kyusei Nature Farming and EM Technology"

##### *5.3 The Development of Swine farms Management for Environmental protection Project.*

The project was carried out for the registrated pilot 850 swine farms in the two livestock regional offices 2 (Chachoengsao) and 7 (Nakhon Pathom) of Department of Livestock, Ministry of Agriculture and Cooperatives. The EM technology was officially used in May to July 2001, to suppress foul odour in livestock, wastewater treatment from the farms, decrease flies and enhances animal health. The main purposes of EM application to swine farms are to improve the water quality and biodiversity of the two most important rivers namely Thajejan and Bangpakong river.

##### *5.4 The EM Technolgy for Public Environmental Protection Projects.*

###### *5.4.1 Hotel Case : The Tawana Rawada Hotel, Bangkok.*

The hotel used EM for water treatment and environment purpose in April, 2001.

###### *5.4.2 Hospital Case : The Lerdsin Hospital (ISO 14001), Bangkok.*

EM was firstly applied in August, 2000 to suppress bad smell in the water treatment system, kitchen garbage, rice washed water fermentation by EM and public environment system in the hospital.

#### 5.4.3 Industrial Case : The Saha Farms Co.,Ltd., Lopburi.

EM technology was used in June 2001, the main purposes are to decrease the BOD of treated water from 1,450 ppm. to under 20 ppm, following the industrial laws and a recycling water for fisheries and natural crops production.

#### 5.4.4 Private Park Case : Ancient City, Samutprakan.

#### 5.4.5 City Garbage : Praeksa Garbage Landfields, Samutprakan.

#### 5.4.6 University Case : Ramkamheang University, Bangna, Samutprakan.

The Bangna campus of University firstly used EM technology in 2000, mainly to suppress the bad smell from the toilets and the water treatment in septic tanks. The campus facilitated the students over 70,000 students a day. The EM was also used for the restuarants kitchen garbage management and drainaged water system.

#### 5.4.7 School Case :

- (1) Nonsi Witthaya school (ISO 14001), Bangkok.
- (2) Trimitr witthaya school, Bangkok.
- (3) Maha viranuwatra school, Bangkok.
- (4) Prakanong Phittayalai school, Bangkok.

The schools are committed to promote student activities which emphasis the need for an awareness of environment issues. EM technology was used in 1998 for kitchen garbage and water treatment system.

## References

- Asia Pacific Natural Agriculture Network Bangkok, Thailand, 1999. Kyusei Nature Farming and the Technology of Effective Microorganisms, Guidelines for Practical use, Revised Edition. 44 pp.
- Department of Livestock, 2001. The Development of Swine farms Management for Environment Protection Project, Division of livestock, Bangkok. (in Thai) 64 pp.
- Kyusei Nature Farming Center, 2001. The Asia Center for Personnel Creation on Kyusei Nature Farming, Saraburi, Thailand. 23 pp.
- Soonthorn Riwleung and Ampan Pintukanok, 2000. The Saraburi Environment in Good Health : Culture and Nature, Office of Saraburi Province, Saraburi. 54 pp.