

# Globally Important Agricultural Heritage Systems(GIAHS)

## **Traditional Sericulture Community in Nong Sung District of Mukdahan Province, Thailand**

Presented by

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# Location

- Nong Sung District is in Mukdahan Province, Thailand. The total area is 424 Square kilometers subdivided into 6 Sub-districts with 44 Villages.



# Site Details

- **Accessibility of the site to capital city:** 52 Kilometers from the city of Mukdahan
- **Approximate Surface Area:** Approximately 424 Square kilometers (44,167 ha)
- **Agro-Ecological Zone:** A slightly elevated plateau, an average of 1,250 mm rainfall per annum. Principal land use is rain fed paddy rice, upland field crops, forest lands and grazing lands.
- **Topographic features:** Plateau with some mountainous areas covered with deciduous forests
- **Climate Type:** Tropical wet and dry
- **Approximate Population:** 21,000 inhabitants with density of 50 per Square kilometer
- **Main Source of Livelihoods:** Agriculture (rice cultivation, textile weaving, natural dyeing)
- **Ethnicity/Indigenous population:** Phu Thai Race (95%)

# I. Characteristics of the proposed GIAHS

- Mukdahan is one of the northeastern provinces of Thailand .It is located in the Mekong valley with dominant rice cultivation including Jasmine Rice that appears to be one of the original landraces of the region. The west part of the province is covered with dense primary forest of Phu Phan. The hilly Phu Pha Thoep National Park, also known as Mukdahan National Park, has a beautiful landscape and is scattered with unusual mushroom-shaped rock formations.
- Nong Sung District is of traditional farms with small holders and family farming with predominantly rice cultivation with Jasmine rice. Other rice varieties, vegetable, fruit trees with patches of forest trees witness an outstanding landscape rich in biodiversity.
- The principle occupation of the rural people is rice cultivation, and natural dyeing and textile weaving for silk, cotton and silk combined with cotton. The traditional techniques of using natural materials that come from local plants and mud have been passed down through the generations and are an inspirational example of the conservation of knowledge and heritage values.

# 1) Food and livelihood security

## 1) Farming

- Rice Paddy fields covers an areas of 6,080 hectares which consists of varieties of rice
  - Jasmine Rice, Glutinous rice (5000 hectare), One of the best quality Jasmine rice, 90 hectare of certified organic rice production and it is increasing.
  - Khao Dok Mali 105 (1,200 hectare)
  - Rice berry (pink color) (100 hectare).
- The Cassava “variety Rayong5” (544 hectare)
- The Sugar cane (with an area of about 100 hectare)
- The rubber tree plantation (1,200 hectares)
- The animal husbandry and fish farming (catfish, tilapia, frog), good and healthy beef production in semi intensive production system exist in many farms. A mixed of local breeds and Charolaise breed (French) was observed both in the field and barn. Native chicken and pig raising is also popular.
- Community collection of local seeds and plants for food, especially for material for dyeing silk and cotton is normal practice.

# 1) Food and livelihood security

- 375 households in Mukdahan province work on silk rearing with mulberry planting in an areas of 176 hectares.
- 97 households in Nong Sung District work on silk weaving.



- The silk is died with natural color like trees barks, wild fruit of different plants.
- Different silk, cotton cloth and other artefacts are woven by women and sold in the community market or sent to cities such as Bangkok.
- Some buyers from outside the country order their products directly.

## 2) Biodiversity and ecosystem function

- The topography of Nong sung district is mainly plateau with mountainous areas covered with deciduous dipterocarp forest, tropical evergreen forest, mixed deciduous forest. The areas are also parts of 5 national reserved forests and Mukdaharn National Park.



- The forest and mountain areas cover as much as 16,000 hectare with many native forest species and various wild animals that live in the national preserved forests.
- Important plants in the forests are Takien Hin tree (*Hopea ferrea* Laness), Yang Na tree (*Dipterocarpus alatus* Roxb.), Pa Yoong tree. Also the plants that provide natural colors used for silk/cotton dyeing, and herbal plants can be found in the forests.
- There are a large number of herbal diversity with well-known medicinal plants, for examples Ma Klue, Khonthaa, Samo Thai. The region is occupied mainly by Phu Thai people who rely and practice the traditional healing methods depending on Yao ritual practitioners, traditional healers who can contact sacred spirits in order to cure harsh illnesses.

### 3) Knowledge systems and adapted technologies

- Nong Sung communities have maintained ingenious and invaluable local wisdom and knowledge systems on:
  - native food and culinary art
  - traditional massage and healing
  - traditional doctor using herbal plants
  - various types of handicrafts
  - silk reeling and rearing, silk yarn dyeing and textile weaving.



- The silk weaving group has been set up since 1983. The degummed silk yarn is dyed with natural materials (plants and mud) and process of dyeing and weaving are much elaborated. The pattern design is unique and associated with the origin reflecting the traditional and culture of Mukdahan people.
- The silk weaving group has been supported by the Bureau of the Royal Household. The Nong sung district has 35 silk weaving groups, each group comprises 25-30 members. A total of about 875-1,050 farmers who work on silk weaving.

## 4. Cultures, value systems and social organisations (Agri-Culture)

- Dances and chanting ceremonies is regularly organized based on the local calendar such as planting and the harvest but also at the occasion of organized visit of tourist groups.
- Several community development centers are in place and functional, and direct participation of young children to these ceremonies is encouraged. Organized learning centers and classes for teaching the young children is regularly practiced.
- The Nong sung community is managed by an administrative body in each village where the Sufficiency Economy philosophy management is implemented.
- Phu Thai Heritage culture and morality management and cultural conservation is promoted. The school is a place for training younger generation on conserving cultural heritage and morality
- The Queen Sirikit Department of Sericulture and the people at Nong Sung communities have collaborated on establishing local wisdom knowledge Learning Center to transfer the local wisdom on silk dyeing. The school of mulberry plantation are promoted for students to learn on silk weaving, and natural dyeing. Also the silk producers group has also monitored and controlled the quality of silk dyeing.

## 5. Remarkable landscapes, land and water resources management features

- Nong sung district is mainly plateau with some mountainous areas covered with deciduous dipterocarp forest, tropical evergreen forest, mixed deciduous forest.



- Nong Sung District has 6 small creeks run through. The areas cover as much as 16,000 hectare of mountain and forest with many native forest species and various wild animals that live in the National preserved forests and Mukdahan National Park.

## **II. Other social and cultural characteristics pertinent to the management of the agricultural system**

- Nong Sung is promoted for ecotourism. Visitors will have a chance to see the performance of traditional Phu Thai, try Phu Thai dishes, and learn Phu Thai culture in Bann Phu Learning Center. This also supports and strengthens the community in transferring their culture to the new generation.
- Nong Sung is also a place for Sacred Grove as several temples exist in this forest. An impressive stone carved Buddha and important old and new tourist infrastructure is in place.

### III. Historic relevance

- Phu Thai people migrated to Nong Sung area from Savannakhét (Province of Laos) since the time of King Rama III (A.D.1844). Phu Thai people are peaceful and generous. The tone of their dialect is pleasant to listen. They respect sacred spirits and believe in knowledge on traditional herbal medicine and treatments/ massages provided by Phu Thai traditional doctors.



- They introduced the natural dye culture and maintain the use of locally available materials for natural silk/cotton dyeing. The value of silk is high which can create sustainable income for the local people and young generation. Phu Thai people has developed the agricultural knowledge and technologies. The heritage culture has been preserved and passed down from generation to generation, and it remained sustained and showed its resilience in the face of environmental and socio-economic changes over time.

## IV. Contemporary relevance

- The Nong sung community is managed by an administrative body in each village where the Sufficiency Economy Philosophy management is implemented.
- The Queen Sirikit Department of Sericulture and the people at Nong Sung communities have collaborated on establishing local wisdom knowledge Learning Center to train the local people especially the rural youth on the traditional silk dyeing, and silk weaving, which creates employment opportunity and income for women and young population.
- This initiative has not only benefited the local community by providing a sustainable occupation, but it has also galvanized the people in their social organization, infrastructure development by promoting cooperation among villagers, sharing and exchanging their experiences and knowledge.

# V. Threats and challenges

- Way of life at Nong sung is changing due to modernization and globalization.
- The number of households who work on agricultural occupations are declining.
- The rural urban migration is important with the risk of loss of traditional culture and knowledge
- Modern parents send their children to cities to get higher education with the hope to get high incomes and lead better lives as compared to hard work and low incomes in the agriculture sector.

# VI. Practical considerations

## a) Ongoing efforts to promote GIAHS

- GIAHS National Committee involved officials from line Ministries concerned: Ministry of Agriculture and Cooperatives, Ministry of Natural Resources and Environment, Ministry of Interior, Ministry of Social Development and Human Security. The Committee is chaired by the Permanent Secretary of MOAC.
- GIAHS Working Group is established chaired by the Inspector General of MOAC, and the members includes involved officials from line Departments: Department of Agriculture, Department of Agriculture Extension, Cooperatives Promotion Department, Land Development Department, Queen Sirikit Department of Sericulture, Rice Departments and others.

## b) Potentials and opportunities for sustainability and management of GIAHS

- GIAHS site would be managed under MOAC authorization, and is supported by the local authorities in Mukdahan Province and in Nong Sung District.

## c) Expected impacts of GIAHS on society and ecology

- Increasing income of the community, young generation will continue their agricultural occupations, strengthen the local community, their livelihoods, and save the environment.

## d) Motivation of the local community, the local/national authorities and other relevant stakeholders

- Local community is motivated and enthusiastic on GIAHS. Activities on agriculture wisdom conservation are promoted in various channels i.e., traditional silk weaving community enterprise to transfer the knowledge on silk rearing and dyeing, farmer school to transfer the knowledge on soil improvement, seed collection, organic fertilizer, and tree bank to reserve the forests.
- Community learning center on build the capacity of local people on household accounting, saving, natural resources conservation and socail safety net.