



MEKARN

Research Cooperation for

Livestock - Based Sustainable Farming Systems

in the Lower Mekong Basin

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Summaried

- **Started in 2001, funded by Sida Sweden**
- **Included 15 Universities and Research institutes in Cambodia, Laos, Thailand and Viet Nam.**
- **Coordinated by NLU, Ho Chi Minh City and SUAS, Sweden**
- **Main activities:**
 - **MSc & PhD training and special topics short courses training**
 - **Annual research funding in Mekarn network**
 - **Accelerate networking activities via workshop and research funding**
- **Phase 1: 2001 - 2003**
- **Phase 2: 2004 – 2007**
- **Phase 3: 2008-2011 (SU and HUA new partners)**

1. Background

- Laos, Cambodia and Vietnam are together with Myanmar the poorest countries in South East Asia and the majority of the population is depending on agriculture .
- Thailand is much better, agriculture is still important
- inequalities between the rural and urban populations is a big problem in those countries
- More government policies concentrate on improvement rural poor households.

1. Background

- Mekarn development and expanding based on the success of bilateral research cooperation Vietnam – Sweden: Sustainable livestock based farming systems (1991-2000)
- The program objective aims to improve human resources by training and research investment based on the actual situation of resources, constraints and challenges of the four collaborating countries.

2..Program research strategies

Mekam researches focus on:

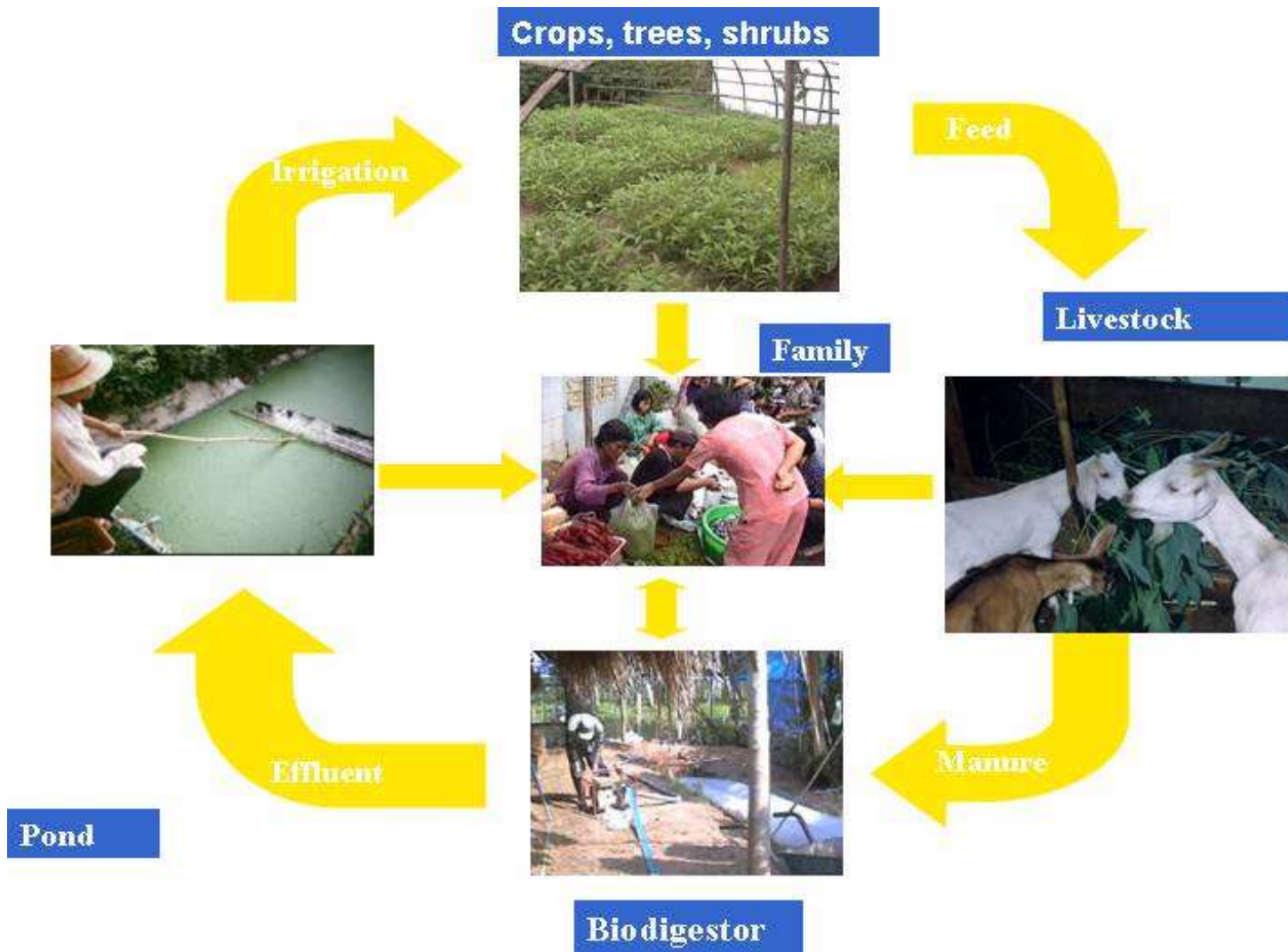
- **Contribute to poverty alleviation, and to improve the livelihood of poor farmers.**
- **Promote livestock as the epicentre of sustainable farming systems (phase 1)**
- **To emphasis on integrated agriculture and to develop a multitude of sustainable technologies for resource poor farmers in the region (phase 2)**
- **To develop animal based sustainable farming systems focussed on environment and climate change (phased 3)**

3. Research implementation

Nine year research focus on these strategies:

- In 8 years, 330 research proposals funded by MEKARN annual Research Fund**
- Research projects of 49 Mekarn graduated MSc students and 10 more ongoing MSc students.**
- Research projects of 11 Mekarn-SLU PhD (2 from Cambodia, 1 from Laos, 8 from Vietnam), 14 on-doing Mekarn-SLU PhD candidates (4 from Laos, 1 from Cambodia, 9 from Vietnam) and 2 Mekarn-HUAF PhD candidates (2 from Cambodia)**

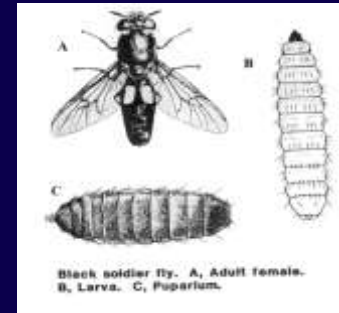
Integration of livestock with crops - trees - fishponds (duckweed) - biodigesters





Urea/nitrate supplement

Animal: Pig, duck, chicken, cattle, goat, rabbit, fish



Integrated systems in the lowland



Gliricidia
Erythrina
Plemingia



Sugarcane
Cassava
Sweet potato



Tithonia diversifolia
Paper mulberry
Trichanthera gigantea



Integrated systems in the upland

Objectives of the Workshop

- Review recent developments in the triple crisis facing the world: climate change, resource depletion and a deteriorating environment
- Promote strategies for development of agricultural practices that will respond to each of the above issues
- Emphasize the important role that live stock play in ensuring the sustainability of agricultural practices
- Explore ways to strengthen research for promoting sustainable agriculture

Workshop topics

- **Reducing methane emissions from live stock**
- **Recycling Live stock wastes**
- **Environmental impacts and mitigation measures for invasive weeds**
- **Improving soil fertility and reducing pollution by making better use of crop residues**

Acknowledgements

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Thank you for your attention!