



**Social Policy Ecology Research Institute  
Farmer Field School**



# **Hand Out Towards Organic Asia Study Tour 2012**

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# Human Ecology Practice Area Towards Organic Asia Study Tour 2012

## Training young leaders in Eco-farming

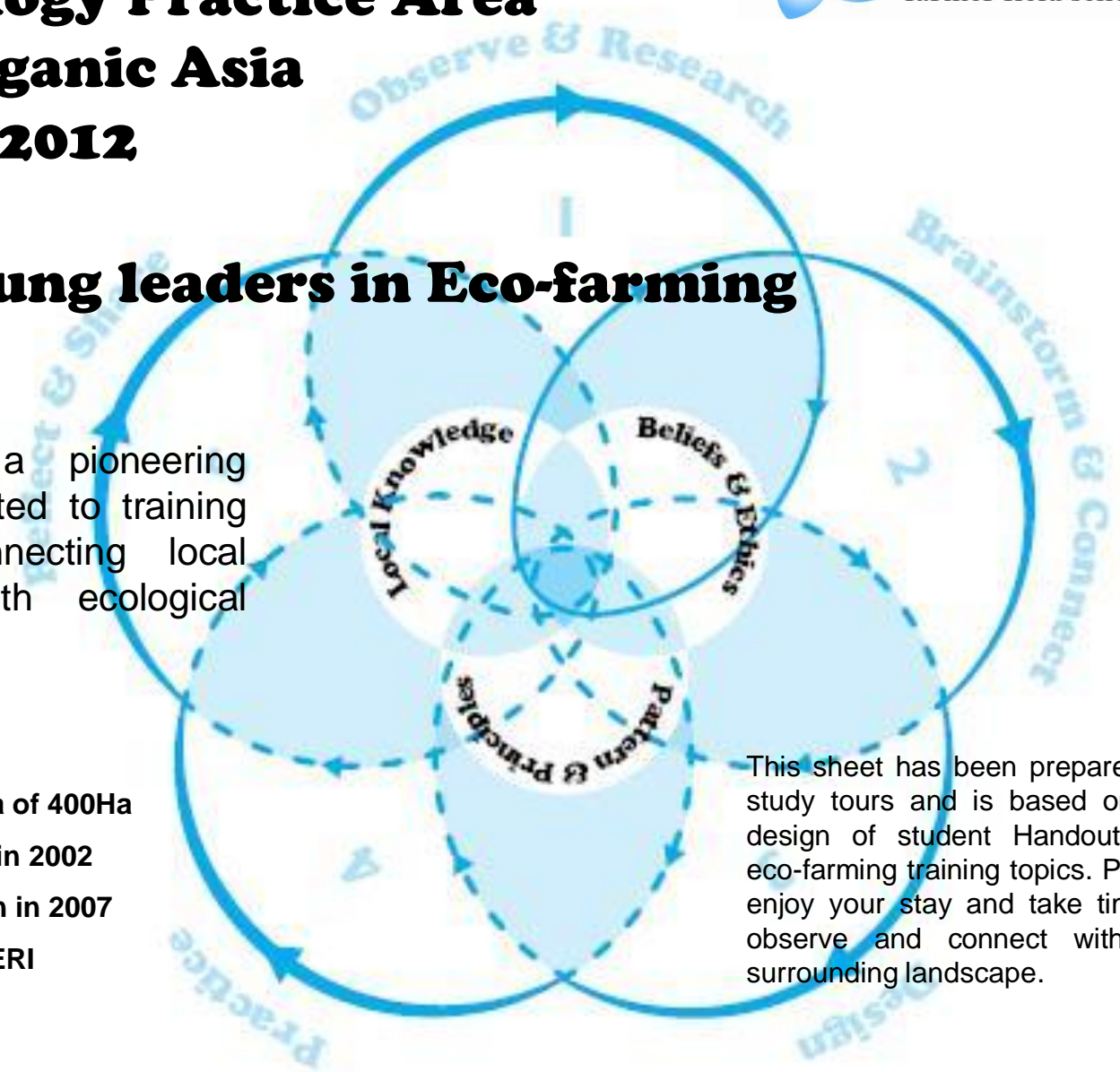
### Introduction

Welcome to HEPA, a pioneering education centre dedicated to training indigenous youth; connecting local organic knowledge with ecological principles.

### Introductory facts:

- The HEPA site covers an area of 400Ha
- Development in HEPA started in 2002
- The first training course began in 2007
- HEPA is the project site of SPERI

This sheet has been prepared for study tours and is based on the design of student Handouts for eco-farming training topics. Please enjoy your stay and take time to observe and connect with the surrounding landscape.



# Human Ecology and Land use planning

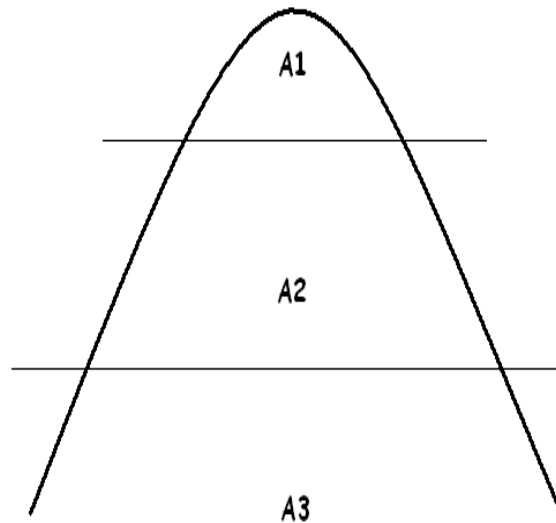
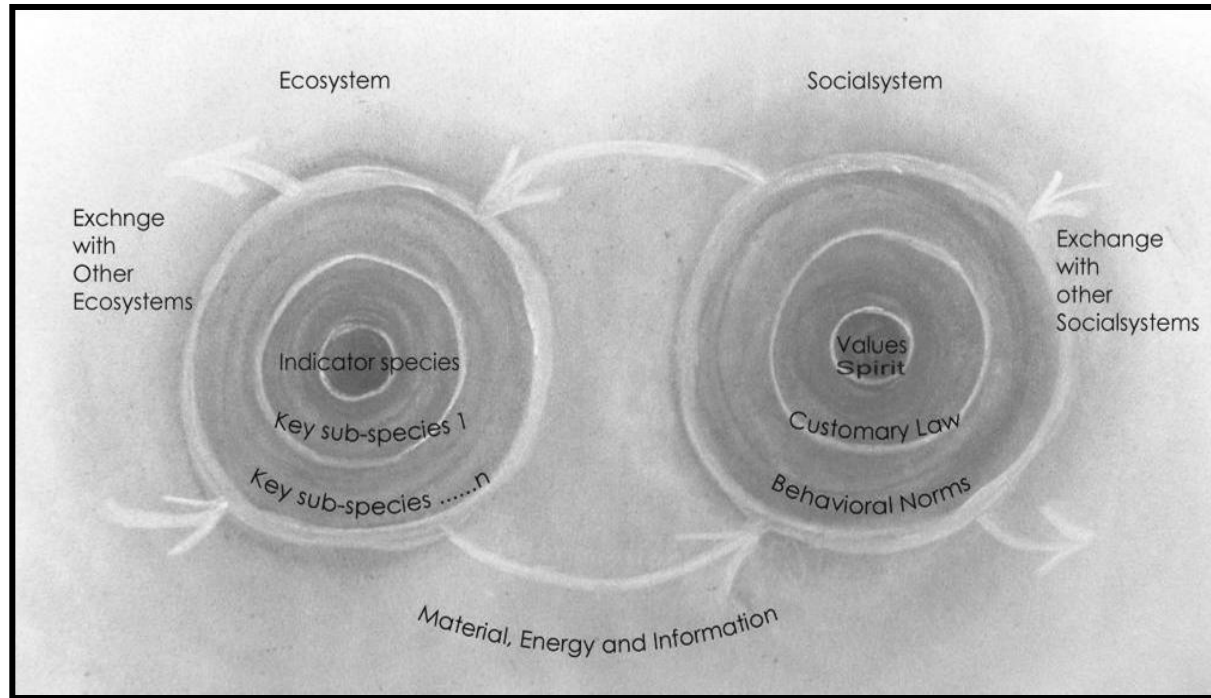
## Human Ecology – Tran Thi Lanh

HEPA is where we aim to practice Human Ecology through land stewardship, nurturing indigenous belief, healthy Human Nature relationships and Eco-farming.

Eco-farming is a synthesis of Permaculture design science, Human Ecology theory and traditional knowledge practices and beliefs. Organic agriculture is also connected to Eco-farming through similar methods, standards and techniques, though eco-farming focuses more on a whole systems approach.

## Land Use planning

HEPA provides different sites and areas, to practice Eco-farming, traditional culture / belief and biodiversity conservation. Each site shares common watershed areas and is connected through culturally relevant land use management practices that maintain and preserve life. This approach contrasts current destructive land practices based on market value, disconnection to the landscape and dependency. In practice Eco-farming helps to promote the rights of indigenous people to land and resources.



- A1 – Spiritual Practice and Belief / forest conservation:** Students, visitors and staff worship at the Da tree and the office spirit alter.
- A2 – Sustainable harvesting of forest products / forest management::** Supplying, Ratan, Bamboo, timber, food and medicine along with other products to farms. It also a place where we can learn from nature by observing natural patterns.
- A3 – Eco-farming demonstration and youth training:** A cultivated landscape where we apply the Design Process and Design Principles on Eco-farms..



# Students

## Young Indigenous Ethnic leadership strategy (YIELDS)



Our students come from Minority communities throughout the Mekong region; often from poor highland villages, where people suffer from lack of resources and threats to their traditional way of life and health. Use of agricultural chemicals is also becoming widespread in these areas leading to land degradation. Youth in these areas often lack opportunities to a higher formal education. Students come to HEPA to learn Eco-farming, to live together and share stories and will hopefully return to the village to create a healthier life with their community. In addition to ethnic minority students we also offer courses to groups of University students from Hanoi helping to raise awareness of eco-farming in the broader society.

YIELDS aims to form a group of core people in the community, youth with ground-breaking thought and determination, to voluntarily cooperate in promoting community development, equality and liberal / creative thinking through the Eco-farming model.

### OBJECTIVES:

1. **NETWORKING:** Build up a strong group of indigenous youth, to become professional and confident eco- farmers. Develop networks at all levels (a) household , (b) community, and (c) regional.
2. **TRAINING:** Continue upgrading systematic and practical-based training manuals and training new youth. Training material emphasizes the importance of local knowledge of indigenous communities.
3. **EXCHANGE:** Create different forums to discuss issues - share experiences on eco-farming and the dynamics and complexity of natural systems in relation to effective land use planning for long term livelihood strategies of farmers.

***Students develop creative and critical thinking as well as the techniques and skills to practice eco-logical agriculture. This is important in a world where we will have to adapt to a changing climate.***



# Teaching Methods



“*Teaching by Learning - Learning by Doing*” methodology of the Farmers Field School (FFS) of SPERI is a “Training of Trainers” system which is based on the Learners’ perception and interests; and applying an encouraging learning environment. It stands in contrast to inflexible and rigid learning structures and power based hierarchy prominent in mainstream Vietnamese school systems. The methodology attempts to create a free space for students to share their experience, creativity and ideas in the practice of eco-farming and beyond. To teach we must learn and through practice we develop our knowledge further.

Farmers and Elders can be seen to be the main teachers at HEPA, not only through sharing knowledge and technique but as giving living examples of the benefits of self directed learning and observation. HEPA Housing styles also provide students with an interactive learning environment, extending the indigenous community atmosphere and traditional design to HEPA.



**Observation** is a foundation for eco-farming education and design. Elders and local farmers are often keen observers of nature; they help to guide our eco-farming practice. We encourage students to observe carefully and develop critical thinking. We believe that nature is our best teacher and we can always discover new lessons that she has to offer. Please use your time at HEPA to discover your own insights and participate in collective observation of nature with our students.



**“Teaching by learning and learning by doing”**



# Eco-farming



Eco – farming is concerned principally with designing our agricultural systems based on patterns we see in nature and following lessons learned from traditional indigenous societies of the Mekong region. Through our observation of nature we can ascertain core principles that we may apply on our farms and in our communities. Through experimentation with these principles and interaction with plants, animals and each other we can refine our farming practice through action research to a state of harmony with our surrounding landscape, which can provide for all our material needs. Thus eco-farming is based on a '*learning by doing*' approach and we gain new insights through tangible experiences. We also learn from the age old wisdom of indigenous people, and discover how they have achieved a state of balance with the environment for generations. We look to integrate the best of modern eco – farming research, such as Permaculture design, with the lessons we have learned from the practice of local farmers and indigenous elders to rehabilitate and live within the limits of nature. By using local knowledge Eco-farming is a participatory approach when adapted to the community environment.

Eco farming is also concerned about nurturing a 'beautiful culture'. In addition to our material needs we also require non-material aspects of life, such as; a sense of community, companionship, artistic expression and communion with greater wholes beyond ourselves.



*Eco-farming is a method to promote the rights of ethnic minority people at the local level and can be used as a participatory community development approach.*

Eco-farming at HEPA focuses on three core values and ecological principles centered in the design process.

# Eco - Farming Core Values

To create harmonious human-nature relationships eco -farming encourages three core values. These three values are the core criteria of effective ecological design in the Mekong, to create healthy, safe and secure environments.

***Beliefs and Ethics: A healthy human - nature relationship depends on our beliefs and moral attitude.***

Through worship students and farmers give thanks to nature and engender their practice with respect and reverence. Worship extends throughout our social system (human system) to connect with and nurture ecosystems, as in human ecology theory. Spiritual belief is also an integral aspect of community life at field schools. Ethics refer to our intellectual commitment to care for people, the earth and give a fair share.

***Local Knowledge: Eco-farming encourages integration of ecological farming design with local knowledge and techniques.***

Students and farmers experiment with practices passed down from their communities, on holistically designed model farms. By working with Local knowledge we are encouraging practices that have sustained communities for generations, in harmony with nature. Students also get the chance to integrate local knowledge with Eco-tech solutions. Local knowledge acknowledges minority peoples rights for participation.

***Patterns and Principles: Eco-farming Principles help us follow nature through encouragement of holistic design methodology.***

By understanding the patterns we see around us in nature we can adapt our lives and practice in harmony with the landscape. Through observation of nature, we can learn principles that can be applied in practice on Eco-farms. Principles of Eco-farming support the science of ecological design.



# Principles of Eco-farming



***Principles help to guide us when making design decisions, we follow principles to develop our practice in harmony with nature There are nine design principles that we use at HEPA:***

**1 Diversity, 2 Connection, 3 Feed the Soil, 4 Natural succession, 5 Use the edge, 6 Save energy, 7 Multiple Functions, 8 Small and slow solutions, 9 Use biological / Local Resources**



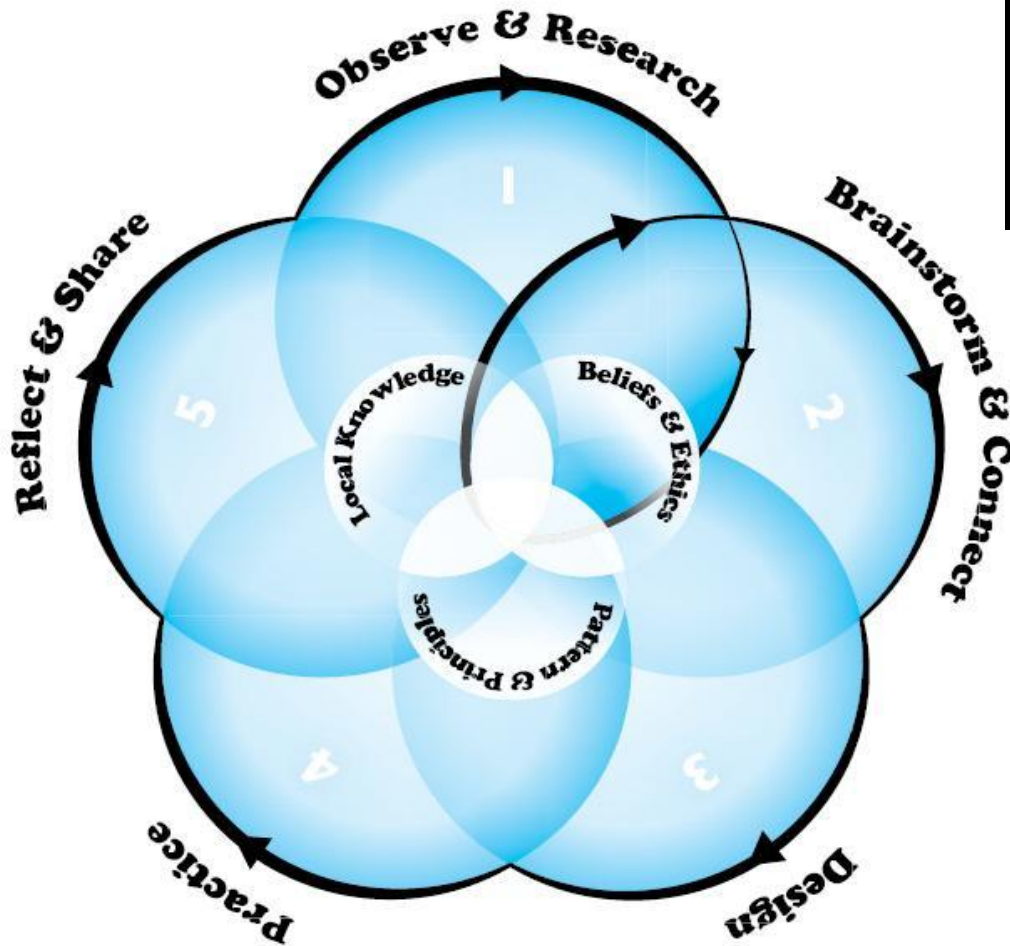




# The Design Process



*The design process can be envisioned as a seed that contains the essence of eco-farming and relates to all of the activities carried out at HEPA.*



**The core Values act at the center of a design process.** A key component of the educational program. An example of holistic thinking, connecting most aspects of our work at HEPA into a framework with a common theme.

Systematic design encourages creativity, critical thinking and problem solving. These are key attributes required by youth and farmers to overcome the challenges of the modern world and create a future in harmony with nature, while keeping grounded in culture. With these skills youth are able to make steps to become leaders and key members of their community and help disseminate Eco-farming while maximizing participation in community development.



# Design Methods and Practical Topics



In Eco-farming we use a number of methods to aid us when making holistic ecological designs, These Include:

## Sector Analysis

Through sector analysis we can analyze and understand the movement of natural energy through the farm, such forms of energy include: sun direction, wind movements and water flow.

## Zoning

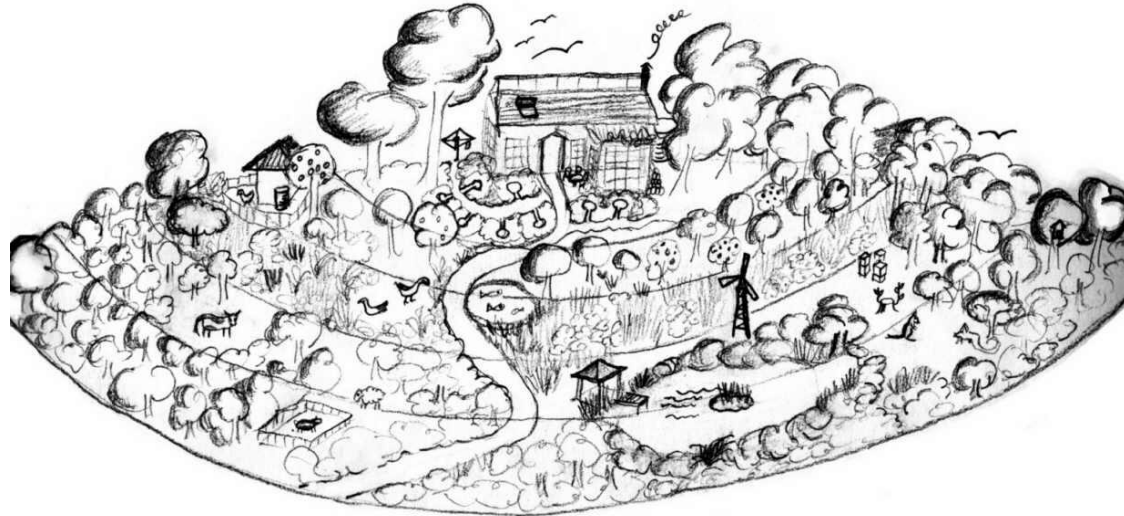
Through zoning we determine the characteristics and function of different areas on the farm based on how we use our energy. Usually zones start at 1 around the house - in energy intensive areas, to 5 in areas that are not frequently visited - where we use less energy.

## Transects

Transect are a cross sectional map of the landscape. A transect can help us see the lay of the land and help us design in reference to the slope and watershed management. We can place some elements higher or lower on the farm which can help to create connections between different systems.

## Mapping

Mapping of the landscape and drawing the design are key methods that help us create the image of the farm now and our vision for its future.



## Practical Topics

Different focus topics give us examples of using Eco-farming principles and the techniques and experience to place different elements on the farm. Practical topics are taught in workshops and students get a chance to share their experience with each other. Examples of practical topics include;

- Worm farms
- Composting
- Bio-fertilizer
- Integrated chicken raising
- Alley cropping
- Animal raising
- Bio-gas
- Mulching
- Diversity Garden beds / Functional plants



# Community



The HEPA community is an international and enthusiastic team of people working together with shared values, a respect for nature and a drive to make our world a better place.

At any one time there may be international experts, interns and volunteers, eco-farming minority students, university students, farmers, teachers and local staff at HEPA. We live and work on site with shared community spaces and classrooms. Through sharing and working together in such a diverse community, we can learn from each other and enjoy our life at HEPA.

*"HEPA has a beautiful environment like my old village once had. We learn to follow nature and use our local knowledge, learning by doing. I have never seen another school in Vietnam like it. People think that different ethnic minority groups can not work well together, however I'm from Thai ethnic group and I'm working here with H'Mong, Kh'mu, San Diu and foreign people from countries around the world, we are a community." Sam Viet Thanh*



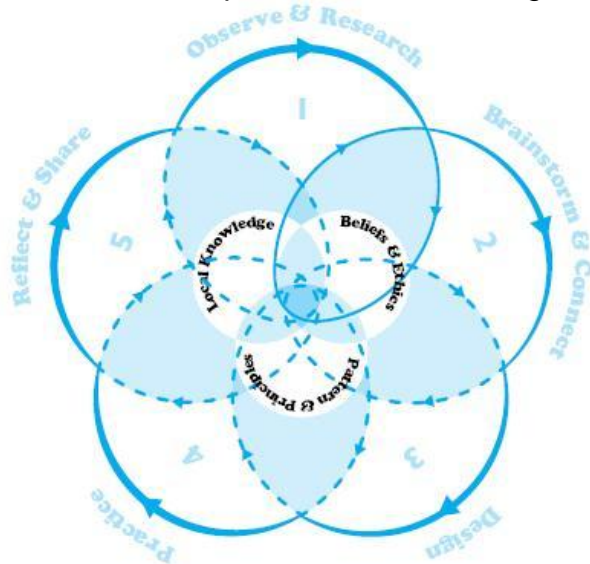


# Action Research



Action research is a participatory research model. In its simplest form it is a cycle that starts with planning an activity followed by practice, then reflection on what was done. This leads to the next cycle of action research and an improvement in the activity. Action research should take into account the complex and holistic nature of Eco-farming systems while also offering us useful insights that can be applied in practical situations in our work with farmers and students and to the development of sound eco-farming practice.

Students improve their practice through experimentation, observation, working on the farms and designing farm systems. The design process diagram and *student diaries* are examples of how students are practicing Action Research at HEPA. Farm models are a reflection of the students' Action Research in practice; lessons learned are retained in the evolving landscape and curriculum. SPERI has a long term objective of developing its research capabilities to professional standards, currently SPERI is an innovator and pioneer of eco-farming research in Vietnam.



**Healthy soil – healthy plants – healthy people**



# Notes

