

## **Traditional Seeds Saving Learning Site: An Experiential Learning for Food Security and Community's Sufficiency Economy in a World Heritage Site, Thailand**

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The European Conference on Education 2023  
Official Conference Proceedings

### **Abstract**

This research aims to study the design of the local seed conservation learning centre of the Pwo Karen community and to study a learning model through villagers' experience in maintaining food security and community economy in the world heritage. Data were collected by a survey and interviews with nineteen people and then analysed. The results showed that the process of designing a community learning centre consists of 1) Selecting learning centre areas 2) Collecting data in the community areas, 3) Coordinating with experts to exchange landscape design ideas 4) Sharing experiences in developing the learning centre 5) Proposing indigenous tradition seed saving as a learning centre for people in the community. They learn through planting practice and experience, preserving local seeds with traditional wisdom of ethnic group, developing a learning site bringing cultural capital to generate income and engaging in sharing the form of learning through experiences from four communities: 1) Ui Kure Learning site teaches about plants from the forest, seed collecting, coffee production and cooking 2) Lung Joong Learning site teaches about medicinal plants, herbal medicine preparation and natural healing health care(workshop) 3) Aoy Learning site teaches to grow local food crops, cooking the traditional Karen food style, food processing from local vegetables, beliefs, traditions, eating cultures and food in Karen ritual. 4) Srifah(blue) Learning site teaches to process naturally used items. Make food and drinks from local seeds and plants. This education leads to sustainable development, reducing inequality for people in the community and supports lifelong learning.

Keywords: Learning Sites, Seeds Saving, Experiential Learning, World Heritage

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## Introduction

This study was under the Conservation of Traditional Seeds and Local vegetables Project for economic development and cultural ecology of communities in Thungyai Naresuan-Huai Kha Khaeng Wildlife Sanctuary, a World Heritage Site in Thailand. This research promotes local people to learn through their experiences. Cultural capital in the community was implemented to create an economy as a sufficiency economy and interdependence based participatory using natural resources to generate income and prestige. The community has a geo-cultural database including community history, cultural traditions, local plays and games, costumes, way of life and natural resources community map. These are the ways to raise awareness of the production to distribution of traditional seeds, which are the source of food and security for the community. The design of the local farm was created by an expert to connect education and learning of local people to make an effect for the preservation of local seeds. Including the production of food processing linkage to the way of preserving local vegetable and traditional seeds of the ethnic group "*Pwo Karen*" (Malisa Marchitelli, 2019) in areas located in the natural world heritage, Thailand. Learning experiential was promoted in their community. The ethnic learns through diverse methods to conserve the local seeds as classification species, preservation, utilization, consumption, food processing, cooking local food as herbs and medicine and health care healing to save tradition and generate local income. This research collected data to analyse the strengths of the design of learning resources and the experiential learning process to conserve the traditional seeds of the ethnic group. This study studied cultural landscape management process that develops learning centres to save local plants and seeds in their experience. Twelve plots of agricultural farms, traditional seed sources, were areas of local peoples dream and wisdom. Learning through experience starts from thought, an interest of the owner of an agricultural farm who's ready to develop areas and management which lead to a learning place base. Every farm owner is ready to develop their own land to transform the original farm into a learning space that tells stories and lives of ethnic people and their culture community, they're a source of learning and convey the meaning of seed capitals and Pwo Karen culture. The traditional seeds conservation of ethnic linked to community's nonformal education system. Learning sites that leads to social entrepreneurship and food security, co-existence, survival, value living. The experiential learning model from this research will be applied to the practice agriculture and live in nature to maintain food and economic security of the community through learning from the experiences of people in the community. This will be beneficial to the farmer and local people that conservation of traditional seeds will sustain the food and economic security for the future.

## Objectives

1. Design the learning site to promote traditional seeds conservation of the ethnic group in wildlife sanctuary, world heritage site, Thailand.
2. Develop the experiential learning model in the community's learning site to promote food security and local community sufficiency economy.

## Program and Study Context

1. Scope of content of the study consisted of; 1) the conservation of traditional seeds and their utilization for food security and community-based economy 2) the concept of learning resources management, model patterns and components of local vegetable and traditional seed preservation in learning centres 3) experiential learning processes

and community participation in designing of learning centres site activities based on cultural ecology of the community.

2. Scope of study area was farmland of ethnic group, Pwo Karen, people in Thungyai Naresuan-Huai Kha Khaeng Wildlife Sanctuary, world heritage site, Thailand, there were agricultural areas in four communities.
3. Scope of time: Research project was action between August 2019 to July 2020.

### **Mutual Partnership and Mutual Benefits**

This research collaborative with the Royal Initiative Area-Based Rural Development Program, invites provincial and district staffs to act as the focal points of the project with active contribution of people which are from an ethnic group in each community to participate in all levels from brainstorming to conducting all activities such as indigenous and local people capacity development, career development, community network building and sustainable living.

Benefits from this research were 1) A model of learning process through experience and the participation of people in the community in designing a learning centre for traditional seeds saving. It is a continuation and extension of the economy by cultural capital generating income. 2) Guidelines for usage of natural resource capitals, traditional seeds, local vegetables in the community and learning management for raising awareness of traditional/indigenous seeds and preserving in ethnic people culture including the well-being of local communities. 3) The community of ethnic groups, Pwo Karen, had learning sites to conserve their traditional seeds and maintain local vegetables' biodiversity in the local farms as a food security area and conservation activities, which will be a kitchen of the world, which will support and reduce poverty and achieve sustainable development SDGs.

### **Literature Review**

There are many diverse types of learning. Experiential learning is an activity in multi-level education settings. Learning takes place in the classroom, to learn from communication, interaction between people. Learning takes place in the physical space, or the virtual space contributes to learning. There is an exchange of learning from grouping together, exploring, creating cooperation, discussion (Oblinger, 2006:12). Learning can be done throughout life anytime, anywhere. From experiences in life through different ages and times, there is the development of knowledge, management, creation of things. Learning site is a place to study and discover new things that cause learning. Learning resources will have learning activities through hands-on, play or both and extra-curricular activities, both formal and informal, learning activities e-learning, lectures, and presentations (TK Park, 2015: 34). Components of learning resources are content or sources of knowledge, learning process, learning place, learning materials. The knowledgeable person who educates the learners and evaluates what the learners get and what needs to be improved and developed the learning resources. The National Education Act of Thailand, Section 25 mentions legal learning resources as the state must promote the operation and establishment of all forms of lifelong learning resources, such as public libraries, museums, art galleries, zoos, parks, botanical gardens, science and technology park, Sport and recreation centres, information sources, and other sources of learning adequately and efficiently (Education Act Thailand, Prime Minister's Office, 1999). Learning spaces are both physical spaces and virtual spaces. Physical spaces are to display light, have sound, and the quality of the environment and atmosphere for learning. Virtual spaces will show availability and how to access information technology. Present learning and

future learning are connections between physical and virtual spaces. Outside the classroom that should be considered are the space between “in-between” spaces, which may be between classrooms, between buildings on campus or even between cities as social spaces where learners can interact to each other, support informal and formal learning (Jiroj Sorapun, 2013).

Information about Indigenous seeds or traditional seeds savings shown since 1903, ninety-six percent of vegetable seeds had been lost from the earth. Seed collectors, farmers, scientists, and indigenous peoples can't fight with a few big seed business corporations. Which are controlling the food production in the world. In Thailand, more than seventy types of seeds that the seed collectors have preserved and still exist, there are a few seeds left. By this, the seeds ninety-four percent already lost, and lost along with wisdom, nutrients, medicine. These may be the cause of the extinction of other species. The seed must have been saved and maintained as an inheritance for human beings.

The search about Seed Saver Exchange (SSE) is a non-profit seed bank based in northeastern Iowa. The research focused on how SSE conceives of seeds and nature more broadly. The analysis moves to understand how the ideas of nature shape the materiality that is conserved. Understanding of traditional seeds and nature must be learnt in a wider range. Determining what to preserve and the document analysis shows the value of seed conservation. All policies and practices guidelines are based on norm and normative assumptions about the types of nature that should be conserved. The description of documents that show the value associated with the Seed Saver Exchange (SSE) will be used as content to instill people's commitment to conservation together. Specifically, seed conservation consists of 1) the concept of nature, 2) the materiality being conserved, and 3) the values embedded in all conservation practices. This is a trialectic of conservation (Michael S. Carolan, 2007: 739). As learning process to achieve the preservation of traditional seeds.

From the review document, it was concluded that the storage, conservation of local seeds caused persistence of a variety of seeds cultivation for livelihood with a variety of plants. It is a source of food for people in the community and the world, reducing hunger and creating sustainable development. Local communities can be self-sufficient from the diverse resources in nature. This will prevent a monopoly planting economy that causes the loss of seeds. In addition, the creation of community learning. Preserving cultural traditions, cultivation and food will help strengthen the community through learning from practical experience and designing learning resources that meet the needs of people in the community.

## **Methodology**

1. Area of study; four agriculture farms in the communities in Thungyai Naresuan-Huai Kha Kheng wildlife sanctuary, world heritage site, Thailand was selected.
2. Keys Informants from purposive sampling were farm owners, they were divided and in the first group were five villagers that do farming and homestay businesses. And they gave importance to saving the traditional seeds, the second group were 14 villagers who were interested in developing their farm area to be a learning site and develop the local economy as a sufficiency economy based on cultural ecology.

## Data Collection

The research's tools were **Community Mapping**, where the selected target groups learn together, bringing their experiences together to create a community map. The map shows the production and distribution of local traditional seeds in the community. **Community cultural calendar**, the target group participation, brings their experiences and information to share and learn the community's cultural traditions, they would have to review the important rituals and traditions in the community they had during the year including planting period in the calendar. These are learning source and development information to promote the conservation of local vegetable, traditional seeds through the year. In **in-depth interviews**, the researcher interviewed key informants to get information about area details and the needs of agricultural plantation of farm owners for developing learning centres to promote traditional seeds saving. The farm owner has expressed their ideas for developing a learning centre. The researchers also share their ideas and analyse the needs of people in the community to create a community learning centre. **Transect Walk**, to explore community areas together with the villagers and the farm owners, learned from eye seeing to gain experience in designing and share what stakeholders learn from the community by walk and observation. **Stakeholders Analysis**, both insider and outsider to make a clearer goal. To start the network and cooperation on seed saving and make learning sites and think more about learning activities and experiential learning. This creates an analytical experience for the villagers, who have done it, who will be able to take advantage of the learning resources. **Photography**, to record the farm place, spaces, which are agricultural fields will become a learning site. Record learning activities in the sites. All record photos would be reflected for the target group to review the learning of the community. Photos were visualized and created an understanding of learning activities to gain more experience. **Sound recording**, interviews with the target group were recorded. This was taken to remove the details of the information that match the truth by both recording images and sound recording. Researcher will obtain informed consent from the informants and community members who participate in all activities.

## Data Analysis

Interviews were analysed by content analysis followed by research purpose. 1) Design of learning sites. Using the information from the experiences of the target groups as information to design and present traditional seed conservation learning centre model. 2) learning from farming experiences, seed conservation learning process and the actual learning experience of the target group as a way of life and learning participation in research projects. Descriptive data analysis results were presented.

## Findings

### 1. The Design of a Learning Centre to Promote the Conservation of Traditional Seeds of Pwo Karen Ethnic Communities

The process of designing the Pwo Karen Ethnic Community Seed Learning Centre and learning from the experiences as follows:

1.1 Area's selection by a meeting with people in the community. Develop guidelines of work for designing learning sites. Started from selecting suitable areas to developing a learning based preserving traditional seeds, plants and vegetables. Upgrading to be a learning site in

the community with areas selection criteria; 1) Area linked to the use of traditional seeds of the Pwo Karen people, preserve biodiversity of local species 2) Area that the farm owner is interested in development to preserve the seed and local wisdom knowledge, wisdom of caring seeds and plants according to ethnic folkway. 3) Area that the farm owner has a dream and want to develop their farm to a learning site. 4) Prototype area, using existing cultural capital or costs from the community to generate local people's income to support community economy and culture. 5) Area that creates participation of local people to get direct and indirect benefits sharing for landowners, people in the community, and people outside the community. Four locations can tell stories about seeds, planting, and utilization in different contexts in ethnic culture according to the areas of interest of agricultural farm owners. From surveys, interviews, areas, and ideas were found to be developed as learning centres. See in Table-1.

**Table- 1:** Community Learning Site's Content for Traditional Seeds Saving

LS	Learning Site Content	Farm Owner	Location
1	Forest Recipes	UK	Ban Taiy Community
2	Herbs Pots	LJ	Ban Khlong Salao Community
3	Pwo Karen Kitchen	AO	BanMai Khlong Angwa Community
4	Traditional Seeds-Food processing	SF	Baan Emad-Esai Community

1.2 Contact an expert in architecture and landscape design, who came to design the research area's landscape and bring the wisdom of the community to design and communicate the stories and contents in the community learning centre. The process was to explore the target areas and design the community learning centre.

1.3 Data were collected from key informants. The researcher had explored the landscape of the farm and the trees and the planting of all agricultural farm and transfer the surveyed data to a specialist to design the farm areas and encourage people in the community to participate by holding regular meetings with researchers, experts and villagers. They were participating in the research project periodically to share and exchange their experience.

1.4 Space design specialist surveyed communities' areas to examine information and discussion with the selected farm area's owners and draw up a landscape plan design of the learning sites with content and details in each site. Four learning centres already designed and handed over to the researcher to fulfil 1st objective of the research project.

1.5 Present learning sites area maps. The preliminary draft of the learning site was considered in a focus group of specialists and stakeholders. The learning site area maps were sent to the farm owner for initial consideration, and to reflect their opinion on the learning site area map. Then the focus group managed to discuss and exchange the search results together with the management team of The Royal Initiative Discovery Foundation, Integration of the Royal Initiative Projects for the Country's Sustainable Development (*Phid Thong lang Pra*) who granted funding support for this research project.

1.6 Search the guideline of learning sites. In the meeting, there was an analysis showing the further development of agricultural farms in the selected areas, the guidelines, and methods that will lead to the development of traditional seeds saving learning sites in substantial.

## 2. Experiential Learning Model in Community Learning Sites to Promote Food Security and Sufficiency Economy in Wildlife Sanctuary, World Heritage Site, Thailand

Learning Sites, Concepts, Design and Experiential Learning of people in the community “Pwo Karen” ethnic group whose way of life depends on natural and agricultural environment. Traditional seeds in their community are for sufficient use. This research has proposed learning from experience in traditional and present ways of ethnic life as follows:

### 2.1. Ui Kure Learning Site (LS1-UK)

Experiential learning by planting fruits and trees, people in the community or outsiders learn how to grow fruits and trees by themselves. Learn how to live in nature and in the forest, also people can learn about food from forest in all seasons.

The materials in this learning site were provided 1) First Ponds show fertile water sources, edible plants, vegetables, and ornamental plants. Which is an ecosystem of plants around the pond. 2) Second Pond shows local traditional plants brought for food is the main purpose. 3) Coffee pavilion surrounded by the beautiful view and the areas full of coffee trees and fruits. 4) Traditional seeds pavilion for meeting and exhibition.

#### *Learning Process and Activities*

Experiential learning on Ui Kure learning site, learners will learn about plants from forest, and ways how to collect the seeds in the forest. Cooking from ingredients picked up from the forest. Learn how to make coffee products and various local fruits. Learn how to make coffee from picking coffee seeds from trees, dry, roast, crush, brew, and drink as self-service. This is the cultural ecology lifestyle for a sufficiency economy. Meeting also as part of experience that learners can learn from network and action. Exhibitions provided by raw material and poster exhibition tell stories and development of Pwo Karen’s community. See photo 1- 2.



**Photo-1:** Forest recipes, LS1-Ui Kure.



**Photo-2:** Design of Ui Kure learning site.

### 2.2. Lung Joong Learning Site (LS2-LJ)

Experiential learning by planting herbs for traditional treatment. People in the community or outsiders can come and learn the pros and cons of monoculture(monocrop). Search for a variety of herbs in the forest. Plant herbs. Build a herbs house on a farm. Learn how to produce herb medicine and treatment from local wisdom.

The materials in this learning site were provided 1) herbs food and herbs medicine plant site. Design categories as main herbs, herbs tea, herbs foods from forest grow with fruits along

wetlands 2) garden near little creeks, plant various herbs from lower level to high level farm area. Growing plants as steps access to the top of the high area, and flat area on top of the farm. Banana trees around a star watching area. 3) herbs pavilion and traditional seed saving space for research and study.

### ***Learning Process and Activities***

Experiential learning in Lung Joong learning Site. Learners will learn about herbs and food from the forest by walking to natural study trails. Learn how to collect the various herb seeds. Learn how to develop the site in the local area, plant banana trees, and in the future will be a place for stars watching. Listen to Pwo Karen stories telling. Health and body healing and training for local people. Studying and doing research, exhibitions, demonstrating how to make herbs, medicine process, herb food process, herb tea and beverage process. Outsiders can learn by doing, get experience about herb plants, natural disease cure, herb medicine process (crush, boil, sauna). Learning how to build *Karen* traditional bamboo house without nails. Workshop on herb; natural therapy for body and health (facial spa, hand spa, feet spa, herb sauna, herb meal, herb medicine) and basic healthcare. **See photo 3- 4.**



**Photo-3:** Herb pots, LS3-Lung Joong.



**Photo-4:** Design of Lung Joong Learning Site.

### **2.3. Aoy Learning Site (LS3-AO)**

Experiential learning by cooking traditional food, joining and participating in “*Pwo traditional food*” cooking in small groups or in class. Learn to start up business by opening the local restaurant “*Krua Karen*” that services indigenous food. Tell stories about indigenous plantation products and cooking recipes. Natural food for medicine. Create a tiny space of seeds and plants networking in the local community and product market. Indigenous food processing (fruits, bread, and syrups). Indigenous botanical learning centre for local people and visitors.

The materials in the learning site were 1) vegetables plantation plots and indigenous veggie nursery greenhouse. 2) Antique Karen Kitchen pavilion and cooking stuff.

### ***Learning Process and Activities***

Experiential learning in Aoy learning Site. People learn through folklore, stories of indigenous food. Taste of indigenous food. Learn how to cook, food processing, processing fruits, wildflowers and plants parts for main dishes and beverages. Join the meeting on the topic "plant genetic conservation". Learn to produce local products and local market management.

“Karen kitchen” is a space for learning about ethnic food and participation in cooking, social entrepreneurships, share experiences, indigenous herbs food and medicine, culture, and lifestyles of *Pwo Karen* that related plants and believe, eating tradition, food in ritual, traditional seeds saving process, this is support lifelong learning for everyone. See photo 5-6.



**Photo-5:** Design of Aoy Learning Site.



**Photo-6:** “Karen kitchen” experiential learning, LS3-Aoy.

### **2.4. Srifah Learning Site (LS4-SF)**

Experiential learning by surveying organic vegetables farms. Area design for indigenous seed saving model. Winter plantation plots design. Indigenous seed saving check-in points and local culture environment.

The materials were provided 1) Organic vegetable and fruits plots pick and resting area. 2) Vegetable and fruit pavilion in a farm.

### ***Learning Process and Activities***

Experiential learning in Srifah learning Site. Learner will have relaxing activities in this site where they can sit and drink juice while they listen to the stories of traditional seeds and Pwo

Karen ways of life from local wisdom. Learner can visit organic strawberries plots and pick them. Knowing seed saving and traditional plants and products. Learn how to grow traditional seeds and practice local plants processing as soap, scrub, herbs, foods syrups, herbs, and strawberries drink. See photo 7-8.



**Photo-7:** Food processing, LS-4 Srifah.



**Photo-8:** Design of Srifah Learning Site.

From the four farms to the design of learning sites centre to promote conservation of traditional seeds of Pwo Karen communities had steps to design the seed saving learning sites based participatory and learning from experiences as follows:

1. **Area's selection** by community participation.
2. **Contact learning spaces designer** as an architect and a landscape designer to design research areas landscape from applied local community wisdom as contents in learning sites.
3. **Researchers and villager's participation in data collected** by exploring the selected farms in the research, survey landscape, the maintaining and planting trees in the areas.
4. **Space design by specialist** to draw four map plans of 4 learning sites.
5. **Presenting** the learning sites design on areas map.
6. **Guidelines** to detailed learning resources lead to the development of traditional seeds saving learning sites in substantial amounts.
7. Learning sites based experiential learning showed the learning process and activities that guide people to learning freely and able to save their traditional seeds and culture in local and non-formal education. See in Table-2.

**Table-2:** Learning Sites Based Experiential Learning

<b>Learning Sites (LS)</b>	<b>Experiential Learning</b>	<b>Learning Processes &amp; Activities</b>
<b>LS1-UK</b>	-Plant fruits and trees -Live in forest & nature -Find food from forest in all seasons -Learn cultural ecology lifestyle & sufficiency economy	-Collecting seeds in the forest -Cooking ingredients from forest -Make coffee products and various local fruits
<b>LS2-LJ</b>	-Plant herbs & traditional treatment -Know herbs in the forest -Produce herb medicine & treatment for local people	-Walking on natural study trails -Collect the various herb seeds -Pwo Karen stories telling -Health and body healing and training -Research, exhibitions, demonstrating local herbs -Medicine, herb food & beverage produce -Natural therapy -Build a traditional house without nails

<b>LS3-AO</b>	<ul style="list-style-type: none"> <li>-Cooking traditional food (indigenous food)</li> <li>-Natural food selected for medicine</li> <li>-Startup business, local restaurant “<i>Krua Karen</i>” (Karen Kitchen)</li> <li>-Create Tiny space of seeds and plants network in local community &amp; product market</li> </ul>	<ul style="list-style-type: none"> <li>-Tell stories of indigenous food</li> <li>-Taste indigenous food</li> <li>-Community participation</li> <li>-Social entrepreneurs creating</li> <li>-Share experiences in culture and lifestyles</li> </ul>
<b>LS4-SF</b>	<ul style="list-style-type: none"> <li>-Survey non-toxic safe vegetable farm</li> <li>-Observe indigenous seed saving model in a world heritage</li> <li>-Winter plantation plots &amp; checkpoint for tourist</li> </ul>	<ul style="list-style-type: none"> <li>-Relaxation activities</li> <li>-Visit organic strawberries plots and pick them</li> <li>-Grow traditional seeds and local plants veggies fruits processing</li> </ul>

An experiential learning model for food and economic security of communities in wildlife sanctuary, world heritage site. “Pwo Karen” ethnic group whose way of life depends on nature, environment and agriculture. They are keeping and saving traditional seeds for sufficient use. This research has proposed learning from experience in traditional and alternative learning choice to their ways of life.

## Conclusion

Traditional seeds and plants learning sites design process in Pwo Karen community, natural world heritage site, Thailand has a process for designing a learning centre as follows: 1) Select areas in research criteria by farm areas linked to local wisdom, emphasize traditional local seeds usage as plantations, preserving local species and biodiversity in the community where location is in natural world heritage site. There were four farms, where the farm owner was interested in traditional local seeds saving. He/she had knowledge and wisdom in caring for their seeds and plants of Pwo Karen in ethnic ways of life. There were spaces where the farm owner had a dream and needed to develop his/her own space as a source of learning to a learning site. To make a model area for using existing social capital in the community to generate income for local people in the community. It is an area that encourages people to save seeds and learn participation in the community. And to share the benefits from the research activities. 2) Contact a landscape design expert for plans to integrate local community wisdom to design seeds conservation landscape in the selected farms. 3) Collecting data and analysing. 4) Designing the farm areas 5) Proposing a map plan of the farm that is to be designed for learning sites 6) Guidelines as finding ways to develop learning site and activities of learning to support local people in the community to lifelong learning through their traditional seed, saving for food security and sufficiency economy. According to the research on crop diversity in Japan which is on the ebb, eroded by factors such as the raise of industrialised agriculture and a dearth of knowledge transmission between generations. Japanese farmers follow a practice vital to fostering agrobiodiversity: seed saving. Researcher tracked diverse seed governance and sharing system across four groups of producers: traditional, organic and lifestyle farmers and local community members, found difference in the way seeds are valued-cultural, economic, right-based, familial, or personal-that influence approaches to saving and sharing seeds. Organic and traditional farmers and

community growers, for instance, tightly regulate seed distribution, and part-time producer are far keener to actively share seeds. The researcher concluded that a plurality of practices, like crop diversity itself, builds in resilience by spreading risk and offering a range of responses to future uncertainties (Ayako Kawai, 2022). The seed saving learning designed from this research aim to support people in the community to active learning and learning from their experience to reduce risk of food security to future uncertainties as the same, learning experiential from this research should be promote.

Pwo Karen ethnic group, seed saving learning centre in natural world heritage site. This research, learning sites and areas were distributed in four villages. There were four learning sites in four agricultural farms to promote experiential learning local people in community and outsiders and together with the researchers and those who are involved. Data Collection were started from learning together with the farm owner and the local wisdom people in the village to cultivate local seeds, native plants, and diversity of seeds. Design of seed storage areas according to the Pwo Karen culture and the way of utilizing seeds and products from planting in agricultural fields and bringing it to further learning and more experience. Developed a learning site to maintain knowledge and the way of life of Pwo Karen and their culture. Encourage local people through Learning from experience, exchange information, ideas, knowledge among each other. Learning to develop self-awareness in nature, appreciating the value of culture and wisdom related with nature and environment which are existing in their community. Develop seed saving learning sites and natural resources to promote the community-based sufficiency economy. Learning centre that provided ethnic culture, wisdom, knowledge and creative design in natural world heritage site to further learning and biodiversity conservation to reduce global warming crisis. Indigenous people bring cultural capital in their community to learn and develop their community and save the natural environment through culture. This is an experiential learning, an alternative model for developing the economic and education and learning for local community, that directly corresponds to solving the problems and the needs of the local community, which are obtained from findings from this research.

## **Research Funding**

This Research funding is supported by “*The Royal Initiative Discovery Institute (RIDI)*” Integration of the Royal Initiative Projects for the Country’s Sustainable Development, Thailand.

This Research is in-kind support by Srinakharinwirot University, Thailand.

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