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Good Practice *IN DETAIL*

## Permaculture Promotion Using the Integrated Land Use Design (ILUD) Approach



**HORIZONT**  
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AUSTRIAN ORGANISATION  
FOR DEVELOPMENT COOPERATION

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## List of Abbreviations

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ADA	Austrian Development Agency
SDGs	Sustainable Development Goals
NGO	Non-governmental organization

## Imprint

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## 1. General Information

**Name, address and geographical region of the organisation or institution**

Agency For Integrated Rural Development- AFIRD

Nkoowe town, Wakiso District, P.O. Box 27193, Kampala, Uganda

### Purpose of the institution and area of work

AFIRD seeks to enable vulnerable smallholder farmers in increasingly urbanizing districts to be nutrition secure and to increase their income. AFIRD specifically targets young people in its work. AFIRD contributes to the implementation of sustainable farming, environmental sustainability and policy development.

### Name of the experience

The experience presented here in detail has been titled “Promoting Permaculture Using the Integrated Land Use Design (ILUD) Approach”.

### When was this experience made?

The experience started in 2014 and has been going on for five years already.

### Geographical range where the experience has been made/ the practice is applied

The experience was made within the sub-counties of Kakiiri, Gombe, Masulita and Mende in Wakiso District, Central Region, Uganda.



**Figure 1 Localisation of the experience**  
(Map of Wakiso District with region of experience encircled, Source: googlemaps)

### Why is this experience relevant?

Most of the youth in Uganda drop out of school without having alternative life skills and without a job. Unemployment forces the majority of rural youth to either migrate to urban areas or to become farmers with limited knowledge and skills. These young farmers employ poor

farming methods, which are characterised by low production and environmental destruction. Frustrated by the negative results some youth resort to criminal activities.

Therefore, AFIRD finds it crucial to work with various relevant stakeholders like schools, farming groups, and government agencies to improve farming practices and as a result increase income generation and reverse this scenario.

AFIRD promotes permaculture in schools as a hands-on training course that institutionalises farming skills transfer within schools and makes farming more attractive to young people. Permaculture is sustainable and leads to extra benefits such as improved nutrition.

## 2. Context of the Experience

### Reason for the experience/ practice to emerge; context (initial situation) and challenges

The project came into being when realising that two problems, which AFIRD had identified in its work, could be solved in one approach. In the past, AFIRD supported the provision of breakfast in schools using a top down approach, which was not sustainable because it had not produced ownership among the school communities. A new approach needed to include the schools from the design stage.

The other problem was that young people were not fully participating in agriculture because they did not appreciate farming as an important life skill and perceived it as a low- and slow-income generating activity. In order to improve farming skills and attractiveness of agriculture, the approach needed to teach good farming practices to youth. Hence the idea to promote permaculture in schools using the ILUD approach.

### Were gender and/or HIV/Aids aspects part of the initial challenge? If yes, explain how they affected the situation.

Among the communities’ in Wakiso, women are charged with collecting firewood for cooking. Due to deforestation, privatisation policies and unforeseen rapidly expanding urbanisation, women have to cover longer distances in search of firewood. Permaculture promotes

agroforestry in regions where trees are intercropped in farmland. This practice combined with the fact that girls gain farming skills in school that they can also apply for business or in their homes later in life has brought firewood closer to the women again. Furthermore, acquired knowledge and skills have enabled women to use small spaces at their houses productively for food production.



### 3. Main Characteristics of the Experience

**Where does the practice/ experience come from? How was it developed and by whom?**

Permaculture is the development of sustainable and self-sufficient agricultural ecosystems. Coined by Bill Mollison and David Holmgren in Australia in 1978, the term is a melding of two words—permanent and culture—and it has a set of ethics and principles that guide humans on how to live in harmony with the cycles and processes of nature. This holistic approach is suited for schools.

Permaculture as a practice involves turning a compound into a diverse, ecologically interconnected web of plants and animals that sustains—if not also restores—the very fabric of a healthy, viable community of life. Permaculture practices are organic farming, natural building, and composting, recycling and renewable energy.

The ILUD (Integrated Land Use Design) tool was developed by ReSCOPE, which stands for Regional Schools and Colleges Permaculture in Zimbabwe, in the 1990s to implement permaculture. ReSCOPE is a regional network for countries promoting permaculture in East and Southern Africa. ILUD was later adopted by SCOPE Uganda chapter of which AFIRD is a member.

The ILUD approach is participatory, creates ownership and spreads more easily into surrounding communities. It focuses on developing a school-community-led extension system to broaden the outreach and remain active even beyond the scope of a project.

**How did this experience evolve (the process/ history)? Describe the main steps and turning points. In which way was it a participatory process?**

AFIRD introduces the school stakeholders to the ILUD process that evolved through five stages:

1. Grounding: The stakeholders reconnected to their culture, history and environment. This enabled them to learn from the past, appreciate the valuable cultural diversity and creatively imitate nature to solve the multiple community challenges.

2. Situation analysis: The stakeholders identified the existing resources (land, access water, labor, energy, plants, animals, waste etc.) on the school compound and created a resource inventory.

3. Visioning: The stakeholders collectively designed a long term goal of how their school would appear in future. This was documented and displayed for every member in the school to appreciate.

4. Integral design: Based, on the vision, the stakeholders collectively developed a design indicating all elements (gardens, orchards, live fence, pathways, buildings, water reservoirs, waste management, etc.) intended to be installed. The design guided the implementation process.

5. Implementation and monitoring: The stakeholders developed work plans and selected a monitoring team which represented all stakeholders and kept records shared during parents and teacher meetings for improvements.

**Purpose/ Objective: Describe the purpose of your experience in a few sentences**

The permaculture approach was introduced for the following reasons:

- To enhance inclusive participation of various school stakeholders
- To support the youth through farming
- To improve the learning environment for better school performance and higher enrolment numbers
- To create schools as champions of traditional seed and food systems for improved nutrition in schools and their communities
- To create more potent examples of communities learning sustainable land use practices through ILUD/ permaculture

- To support young people in contributing towards their local communities and environmental resilience

**Methodology: Which tools, instruments/ methods and/or methodology are used in order to implement the experience and address the challenges?**

ILUD is a guiding tool used to implement Permaculture. AFIRD emphasises active participation of all school stakeholders for a successful and sustainable implementation. The integral designs are carried out during the school holidays in order not to interfere with the normal academic curriculum. Later the school stakeholders select a Participatory Impact Monitoring (PIM) committee tasked with monitoring the progress, challenges, and gaps and with recommending actions to be taken.



#### 4. Stakeholders and Partners – Roles and Responsibilities

**Beneficiaries: Who are the main beneficiaries of the experience/ practice?**

The beneficiaries of permaculture through ILUD approach are the pupils and their parents, the teachers, and the small-holder farming households in the community.

**Which parties/ institutions and groups of people are mainly involved in the implementation of the experience?**

- Local government interested in better performance and improved school-feeding. To execute her mandate, AFIRD needs local government to provide a conducive working environment.
- SCOPE aims at improving nutrition in school communities. It builds the capacity of AFIRD towards implementing ILUD/permaculture.
- School-management-committee/founder members are motivated by the better performance of the school in terms of enrolment, academic performance, welfare etc. It assists in mobilising stakeholders for ILUD/permaculture implementation.
- Teachers are motivated by the empowerment with permacultural skills and the ability to generate income from it. Teachers participate in the implementation and have

a supervisory role with pupils. They share the knowledge with parents and pupils.

- Parents are motivated by access to improved and nutritious food for their children in school and at home. They participate in implementing ILUD/permaculture at school and household level.
- Pupils gain access to improved and nutritious food in school and at home. They participate in the ILUD/permaculture and their implementation and share the knowledge with classmates, parents and other schools.



#### 5. Resources

**What kinds of resources are needed to carry out/ implement the experience? How much of every resource is needed?**

The resources needed to implement the experience are the costs of an ILUD/permaculture trainer and training related expenses and materials (stationary, demonstration materials etc.), the time dedicated by school-stakeholders (minimum of one planting season), land close to the school, water for the plants and animals, and starter tools such as hoes, watering cans, planting materials and animals.



#### 6. Impact of the Experience/ Practice

**What has been the impact of this experience on the beneficiaries' (both men and women) livelihoods? What has improved through the presented experience on the level of individuals, and on the organisational level?**

- Transformation of a bare school ground to a very productive green area.
- The school gardens are serving as living laboratories that have facilitated enhanced access to teaching aid, and practical learning of the pupils. They have improved the learning environment of the school.
- Some improvements in nutrition at school and pupils' homes.
- Changing mind-sets of teachers and pupils about agriculture.

- Beautification of the school compounds.
- Increased visibility and recognition of the schools and increased enrolment.
- Schools are serving as a learning centre and a source of planting materials for other community members.
- More harmonious relationship between community members and the schools. As shown in one example, where a parent who used to graze his animals at the school compound before Permaculture was introduced in that school. During the implementation workshop, the head teacher made sure that this same parent was part of the team and that way have him on board in terms of the project's goals. The parent later even became part of the PIM committee to monitor the project's work.



2014 before ILUD



2017 after ILUD

**Did the experience contribute to an innovation in the livelihoods of men and women? If yes, describe in which way.**

Permaculture is an innovation in the sense that it radically changes the relationship between communities and nature in the following ways.

Overall, permaculture has improved the environment in and around the project schools. The growth of plants (trees, herbs and

vegetables) has transformed the formerly bare and dusty compounds and has reduced dust and the damage and diseases it causes. Degraded land has been rehabilitated by using local resources: School stakeholders have dug water harvesting structures and the harvested water was used for crop production.

The confined vegetable gardening with herbs, medicinal plants and spices has contributed to improved nutrition and health and income generation both at school and household level since there is a market for them. The diversification of crop and animal production has improved the diet of the children and teachers and has decreased the expenses for buying vegetables from the markets.

The tree-nurseries have provided schools with multipurpose trees which have helped the schools to conserve the environment and generate income. By growing fruit-trees on the school ground the micro-climate changed positively and the trees supplied the children with fruits and heightened their environmental awareness.

Furthermore, schools have adopted improved waste management practices, whereby they separate plastics and bio-degradable waste. The bio-waste is taken to the vermi-compost unit (where earthworms are used to break down the bio-waste to benefit in fertile soil and liquid manure).



## 7. Lessons Learned and Recommendations

**What are the key messages and lessons learned from the experience?**

Permaculture science teaches schools to employ low cost and sustainable solutions to environment challenges and food and nutrition insecurity. When applying the permaculture approach, the community begins to consider life under the following aspects:

- Care for the Earth: Enhancing natural processes is a key ingredient to sustain life on earth.
- Care for the people: Looking after oneself, one's kin and community and meeting human needs in a simple and compassionate way. This builds linkages for stronger communities.

- Fair share: setting limits over resource consumption and always sharing surplus

**What would you suggest to someone in a similar situation?**

There are three key recommendations that can be drawn from this experience.

- During the selection of schools, much emphasis should be put on finding the most committed head-teacher and relevant school-stakeholders.
- There is need of active engagement of all teachers to avoid overload on the lead permaculture teacher and to keep institutional memory.
- The school-stakeholder should assign responsibility to parents, pupils and teachers who stay near the school to take lead in monitoring the school gardens during the long holiday.



## 8. Challenges

**What are the main challenges encountered by men and women?**

- The academic education system is not supporting the agriculture education.
- School gardening is seen as a form of child labour (by some people).
- During the long holidays school gardens are abandoned.

**How have the challenges been addressed?**

- AFIRD has started with the sensitisation of the relevant duty bearers towards inclusion of agriculture in the curriculum.
- The parents and the school-management-committee mobilise funds for the tedious work which is considered to be too heavy for the children.
- Parents, pupils and teachers who stay near the school are asked to take the lead for looking after the gardens during the long holidays.

**What are the remaining challenges with the implementation of the experience?**

This approach is only practiced among schools but also needs to be promoted among small-scale farmers.



## 9. Sustainability

**What are the elements required to be institutionally, socially, economically & environmentally sustainable?**

- Proper selection of schools
- Maximum participation of all school-stakeholders
- Active engagement of all teachers to avoid overload on the lead permaculture teacher and to keep institutional memory  
Experience Sharing/ Up-scaling

**What are the conditions (institutional, economic, social and environmental) that need to be in place for the practice to be replicated?**

Enough financial means and resources such as land and water as well as knowledge about permaculture are needed on an organisational level to promote ILUD. On an institutional level, support is needed from the state e.g. through the inclusion of permaculture and agricultural knowledge in the school curriculum. At community and school level the willingness to try out an innovation and dedicate work and time to it is needed for the permaculture to be successful.

**Did you already share your experience with other organisations or institutions?**

We have shared the experience with Save the Children, Uganda.

**Do you know any other institutions which have similar experiences or which have implemented similar practices?**

The Regional schools and colleges Permaculture (ReSCOPE) is a regional network from East and Southern Africa promoting permaculture with ILUD. ReSCOPE has a Uganda chapter of which AFIRD is a member.

**Which other group(s), institution(s) or organisation(s) could be interested in this experience/ practice? For whom do you think this experience could serve as a reference?**

This experience is particularly well suited for institutions concerned with the education of children and youth like schools and colleges.