



GROUND UP

Volume 5 No. 23

Price: US\$1.50

November 2009

A PELUM publication promoting sustainable community development



Permaculture in a changing global context: successes, challenges and potential

Inside this Issue

communities through schools

PELUM Association

Participatory. Ecological. Land. Use. Management

EDITORIAL

Ground UP is a regional magazine of the Participatory Ecological Land Use Management (PELUM) Association. The magazine is produced at the PELUM Association regional offices in Lusaka-Zambia with contributions from members in east, central and southern Africa and correspondents throughout the region and beyond.

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This GroundUp magazine is published in partnership with PANOS Southern Africa (PSAf) with funding support from the following PELUM's partners:

Bread for the World
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Subscription/Advertising:
All enquiries are to be submitted to the editor on the above address.

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Welcome to the November issue of the GroundUp Magazine. We hope that you will find this issue informative. This issue is dedicated to the Permaculture.

Permaculture is not really new to Africa. It has been practiced unknowingly by farmers. Permaculture is *Permanent Agriculture*. It is characterized by the low cost of inputs and does not rely on inorganic inputs. It maximises the use of the smallest possible piece of land. It promotes the use of sustainable technologies. Permaculture is also a principle that looks into water conservation and recycling of resources as critical components of sustainability.

In Permaculture, inter-cropping is practiced as opposed to monocropping. Perennials and annuals are intercropped, ensuring food security throughout the year. In Permaculture, herbs are frequently used due to their repellent, culinary, medicinal, nutritional, aromatic, and ornamental properties. They are also used in pest control and are essential for healthier diets. Permaculture also encourages income generation through the marketing of excess produce. However, there is still needs more efforts in promoting Permaculture.

In this issue of the magazine, you will find experiences, the potential and challenges of Permaculture from various organisations and individuals. Permaculturists across the world will gather for the 9th International Permaculture Conference in the Malawian capital Lilongwe from the 2nd to the 6th of November 2009. With the theme *Plan Africa ~ Food and Empowerment*, it is hoped that the conference inspire, inform and enable an alternative development strategy for Africa.

We hope you will enjoy the magazine. If you have any comments, questions or suggestions, please do not hesitate to get in touch with the editor.

Marjorie Chola Chonya
Editor

PERMACULTURE: FROM A FARMER,S PERSPECTIVE



use resources as effectively as possible. All natural resources are used effectively in the production of food and even building houses. It also allows for optimising the use of water and supplies people with healthy food and



and limestone, among others.

He lives on a 10 acre plot of land about 8 kilometres out of Kafue town, 40 kilometres from the Zambia capital, Lusaka. He has been living on this farm for about two years now. The plot had not been used for a long time before he moved in. It was bushes of acacia and grasses. At the moment, along with his wife and two girls of five and two years, he utilizes the 2½ acres of the 10 acres plot of land with his trust in Permaculture.

Resting on a chair under a tree, relaxing with confidence, 31 year old Sebastian Guy Scott, the Permaculture enthusiast, smoothly narrates how much he appreciates practicing permaculture.

Why this type of farming?

“Originally, I started doing this type of farming because I wanted to contribute positively to the socio-economic situation of my country using a bottom up approach. And here I am now, educating others to learn and see with their own eyes what organic farming and Permaculture has to offer to people. I am also enjoying what I am doing because it is a nice way of living, a better way of life”, Scott says.

“In my understanding, Permaculture empowers people to

lifestyle. The fact that people take care of the environment and the environment provides the necessary food gives me a peace of mind”, he added.

Scott thinks that the main thing about any farming is how the farm is being managed.

“Management is the key. Understanding the natural system, observing it, taking lessons from it and applying everything to your situation are important. If one element is healthy, the environment is good and there is good nutrition then each and all will be in good condition. If things are not balanced, any one of the elements can get diseases. Farming is a b o u t management. If t h e management is perfect, then h e a l t h y products are guaranteed and vice versa” he clarifies.

Scott's uses fertility greening methods, manure use, composite

“Organic vegetables need a lot of nutrients. But one needs to start up the biological system working first. Once the right balance is achieved, the farm starts to take care of itself. You need to feed the soil, which conventional farming does not do as it destroys this balance in the soil”, fascinatingly he said. In every soil apart from sandy, there are mineral that can be used to feed into crops. However these minerals are locked in the soil and one has to get the biological system working. A lot of the nutrition needed is in the soil, so one needs to work towards getting the best out of the



soil.

He narrates with fervour, “For anyone that wants to grow crops, organic farming takes good

Cont'd from page



management and understanding, just like conventional farming. One needs to look at the plant, check whether the nutritional levels are satisfactory, water is enough and weeding should be done properly and in time. There is need to be more active, learn what your crops needs! In the beginning, one spends a lot of time taking care of the farm. After few years, you get to know your soil. It takes about three years to get out full production. Once that is reached, the system becomes cheaper and more efficient".

What is produced and where is it sold?

"We currently produce organic vegetables like onion, green paper, chilli potatoes, rape Chinese cabbage, amaranthus, green beans, green maize, pumpkin leaves, okra, sweet potato leaves, broccoli, cauliflower, salad vegetables (lettuce and herbs) and several traditional vegetables. And we also keep chickens", humbly he revealed.

He said they experiment on as many vegetables as possible and see how the market responds to the products.

"The response so far has been



very good. The consumers have responded very well. We sell our products at Kafue estates farmers' market which is about 4-5kilometers away from our farm. The farmer's market days are held twice a week on Tuesdays and Fridays. We also sell to individuals in Lusaka", he said

For customers in Lusaka, Scott and family packs a combination of different products in boxes (small and big family boxes). Customer subscriptions are





quality. He advertises the products he produces when he is selling. He boasts of people wanting more of his products thereby creating the challenge of satisfying the expanding list of customers.

confirmed a few days before the supply is made through short messaging service (sms). Supply is done twice a month. The boxes are sold at K15000 (approximately US \$3.3) and K25 000 (approximately US \$5.5) for

“We grow our chickens organically. Chickens are feed on organic grown maize and soya beans and let out as free range in the garden. We have also been experimenting on growing wheat and letting the chickens feed on the wheat field. This allows chicken spreading manures for fertilizer”, he explained.



“Chickens are quite profitable because the feed is cheap and aside from that I have the

the small and big boxes respectively. The chickens are sold at about 10 weeks minimum, weighing about 2.5 kilograms and 3.5 kilograms. The chickens are sold at K14000 ((approximately US \$3) per kilogramme for live chickens and K20000 (approximately US \$4.4) for a kilogramme of dressed chickens.

knowledge in producing feeds which I learnt from my previous work in a feed processing company”, he added.

Scott is very resourceful. He grows bananas that are being produced using



tissue culture to avoid diseases. The bananas were planted in late November 2008 and are expected to bear fruits soon.

Two donkeys can be found on the farm too. Donkeys, like chickens, provide manure that is ploughed back into the field.

Why the interest in farming?

“I developed an interest in farming when I was 18 years old. Being a Zambian, I wanted to find and come up with solutions to the socio-economic problems of my country. I thought that starting from the bottom is the solution. I studied organic farming in different colleges while I was working in organic and Permaculture farms in the United Kingdom and Australia. I have read and bought several books on organic farming and Permaculture, which have been a good source of information. I have also done some internship at Kasisi Agricultural Training Centre as well as attended a short course there. This has made me eager to pursue my interest in permaculture” he reveals passionately.

“In Australia, I experienced waking up at 4:30 am, hitch hike lifts to a local town and hitch hike another lift up to the camp where the course was taking place” he said.



His first endeavour in organic farming was for almost six years. He rented a farm, but unfortunately he left because of land ownership problem. At the moment, the farm he is cultivating and where he is settled with his family is on rent, though he is in the process of getting ownership of the land. Along with his wife, he hires one man from the community to assist in the farm work, especially if there is any construction work to be done. They manage to divide the work in the field, do some

basic research, accounting and construction.

"We are coping quite well. In conventional farming, more people are hired to work on a similar piece of land. The main point in Permaculture is to try as much as possible to use the resources within your reach and using labour efficiently. All aspects of the system should flow, including the family and resources," he said in a modest way.

extension officers not available. It is not easy to find reliable information in producing organic vegetables and crops. One needs to be resilient though. Patience is important", he ended the conversation with hopes that most farmers will appreciate and pursue the similar efforts in promoting permaculture.



Any challenges?

"There is limited access to information, extension materials and

1ha Permaculture zone 3 dryland trial in Zambia

The idea for a 1 hectare permaculture zone 3 dryland trial at Kasisi Agricultural Training Centre, Zambia, grew out of a small planning session

to manage the day to day supervision, implementation and record keeping of the trial. Bridget O'Connor, a Permaculture diploma holder,

the Kasisi library.

The piece of land allocated had been a pasture for many years and results of soil tests (see



Penias Planting Moringa

of permaculturists from Africa (Walter Nyika, John Nzira, Nic Heinemann and Bridget O'Connor) and Permaculture Latin America (PAL) (Ali Sharif) in Johannesburg in June 2008.

The trial aims to demonstrate with scientifically verifiable data that much more value can be produced than from monocrop of maize often aimed for in conventional farming. The Faculty of Agriculture at the University of Zambia agreed to corroborate the trial data and assist in research analysis. The trial is looking at food security, health benefits and monetary surplus. It is applicable to the African landscape, utilising crops like pumpkin, cowpeas, pigeon pea, sweet potato, sorghum, beans, millet, maize, comfrey, Artemesia, Moringa.

is the overall on site coordinator of the project. Rosemary Morrow has kindly sent her books "The Earth Users Guide to Permaculture" as well as the trainers handbook. Bill Mollison's books "Introduction to Permaculture" and "The Designers Handbook" are in

attached) revealed that the quality of the soil is very poor. It is anticipated that this trial needs to run over a number of years to bring the land to its full health and potential productivity.

The plot is between planted rows of *Faidherbia albida* trees (Winter Thorn) and locally



Starting to plant – from mid November 2008
The team: Jimmy Nkomanga, Stephen Ngombe, Evans Fonso and manager Doreen Mudenda

Doreen Mudenda, a KATC staffmember, has been assigned



known as Musangu. This is a soil improvement tree which loses its leaves during summer rains and therefore does not

fruits, medicinals and other plant and tree species.



Doreen explains Permaculture to Zambia's 1st President, Dr. Kenneth Kaunda

compete with the crops. These hedgerows are to become an abundant resource of various

There were problems. More rain than usual (figures

See the plot design attached which resulted from a workshop in September 2008 of Kasisi staff and University lectures assigned to this trial and was led by John Nzira who put the final design on to computer.

supplied) brought snails. A combination of Stalk borer, termites and rain began to fell some of the maize. Birds, blister beetles.. Botanical and other remedies were tried with mixed success. Much was learnt for better preparedness next season.

The many visitors inspired and excited by the plot have included farmers, students and the First President of Zambia, Dr Kenneth Kaunda. There have been periodic monitoring visits by Plan Africa and the University of Zambia team members. The University is undertaking nutritional and soil analysis and Kasisi and the UNZA team will be producing a final report. Data is being continuously collected by Kasisi on inputs and the output.



Cassava/Beans, Cleome.. from north end of field

Harvesting commenced as rains ended in April. In June, still green is the velvet bean planted into maize plots in February, sweet potato, cassava and pigeon pea. Planning is commencing for 2009-10 season.

PaNthunzi: Providing training and sharing experiences in Permaculture

Permaculture is the Heart and Soul of PaNthunzi business. The major focus is on training and demonstration. This is done to share experiences and opportunities with as many individuals and organisations as possible. It is also done to show that through permaculture there are many other ways in which we can live our lives without destroying our environment.

Presently, PaNthunzi is in the process of developing *The Glass House* as a Permaculture Training and Resource Centre with demonstration gardens, catering, meeting facilities and plant sales. The intention is to create the centre situated in the heart of the city, to be a living

example of what can be achieved through imaginative design.

Whilst developing the centre, PaNthunzi is also working with the Group Village Headman and a recently formed community committee. It is hoped that the first urban permaculture project in Malawi will be developed with the community living as neighbours to *The Glass House*. This is potentially a population of 120,000!

At *The Glass House*, PaNthunzi hosts a Natural Health movement known as Action for Natural Medicine

(ANAMED). ANAMED has its origins in Europe through its founder Hans Martin Hurt. PaNthunzi is also developing a sister movement ANAMOYO (this, in some ways translates as Action for Natural Life) which promotes indigenous natural medicines. Through both, PaNthunzi is able to encourage the growth of diverse food sources, as many foods are medicines, and promote the inclusion of medicinal plants as permanent features within designs.

Recently, PaNthunzi was involved in the National School Health and Nutrition Programme as technical advisors. It provided assistance in PDC training courses,





developed a Permaculture Awareness Course and provided on site guidance to 10 primary schools in Thyolo and Mulanje districts. It is also in the preliminary discussion stages of a Permaculture initiative with a major Tea Company, which owns 18 estates and employ up to 5000 staff during peak season. The Company is committed to diversifying the productivity of the estates and maximising land design and use to provide for the lives and needs of their employees.

It has established a partnership with a faith based organisation and a United States of America partners to provide training and support to a local youth project operated through the church, and a secondary school that has recently been acquired.

It will be participating in a community initiative around Mulanje Mountain through Mulanje Mountain Conservation Trust. It will be assisting with the diversification of vegetable crop production and improved land use for communities living on or near the slopes of the mountain

Every moment in the world of Permaculture is a constant learning experience, never a day goes by without something new being observed or practiced. There is something for everyone in Permaculture!

There are a range of responses and reactions to Permaculture. Broadly speaking, there can be quite stubborn resistance from

some, especially bureaucrats and officials who have had more formal, western education that tends to be prescriptive towards land use and life in general. Majority of people show a lot of interest and enthusiasm which sometimes translates into small scale action. Once in a while, you find individuals and groups who are natural Permaculturists. Also we are finding an ever increasing number of organisations that value the physical and practical aspects of permaculture, which gives them something tangible to achieve.

As PaNthunzi develops appropriate training courses, the appeal of Permaculture grows. The PDC tends to be too complex for many. The

learning curve is almost vertical and there is just too much to absorb and comprehend. Typically practical application tends to be in zone 1 and occasionally zone 2 and our minds are still very fixated on mono-cropping. As a movement in Malawi, we still have a long way to go especially being able to demonstrate on larger areas of land. We are constantly being challenged to give proof, especially for levels of productivity.

Presently in Malawi, there is a somewhat obsession with the basics of food production to attempt to meet daily nutrition needs. The products are the usual fruits and vegetables, mainly seasonal and any surplus is sold through local markets. Nothing is processed or given added value.

Permaculture is sustainable, low input, uses traditional knowledge and is definitely one of the best solutions towards a better Africa. No exclusion of other farming practices is done and the nature of Permaculture enables individuals to adapt and make their own choices. Realistically an assessment of options naturally tends to tilt towards a Permaculture approach as it is available, affordable and achievable.

Very importantly, a person who cannot read has never taken an exam in his or her life, possibly has not even had a single day in school could make the finest permaculturist. The structure of Permaculture enables anyone

to learn, to share, to experience and to grow more easily than any other form of equivalent training.

Another significant aspect of Permaculture is that, by its very nature, it opens the pathways for each of us as individuals, groups or organisations to be able to put back. Giving back something to mother earth. People are innately so conditioned to only take from the natural environment, that they have become the planet's great destroyers. The permanence in Permaculture offers us the chance to be re-creators, to give something towards our children's and our planet's future.

The year 2030 and 2050 as deadlines! Possibly the biggest challenge is encouraging people to adapt their mindsets to the reality that there is need for urgent change. People have difficulties quantifying how much can be produced and is actually being produced in Permaculture systems. It is simple with a mono-crop but not so easy in a complex multi seasonal arrangement. Another challenge is achieving diversity and nutrition security in a nation which politically and socially recognises the term 'food' to mean maize. The economics in sustaining this obsession is unethical and as a nation we need to be encouraged towards more sustainable practices. To achieve this,

there has to be political will and passionate leadership.

The potential for permaculture is unlimited. In Malawi, it is growing from strength to strength. If every child leaving primary school in Africa had sound training in Permaculture, this would be a very different continent. It is important, over the next few years, that many more African Permaculturists, of all races and faiths are trained. They will form a new breed of earth carers who will be able to make life for humans beyond 2050 a reality.

When individuals live in physical and spiritual communion with the earth that nurtures their very existence, they begin a journey that ultimately leads to their demise. Along with them they will often take their followers, their community and ultimately their culture. When we lose our culture we become insignificant members of the mass of humanity. Africa has no desire to part from its culture; much of it is still with us. By anchoring our roots to the ground we can hold on to our past, whilst maintaining a dignified presence for a lasting future.

Thank you Bill Mollison and all who have followed for opening our eyes and minds to what we can achieve. Long Live "A Designers' Manual" woye!

Global Resource Alliance-Tanzania and Permaculture

Locating Permaculture in the broad arena of Land-Use

By John Wilson

My working definition of Permaculture is:

"Drawing inspiration from Nature, Permaculture is the practice of designing interconnected landscapes for diversity, production and efficient use of energy."

Permaculture is an ecological design approach that emphasises designing land for functional use, in other words for food and energy and not for aesthetic reasons. Arriving in the late 1970s/early 80s, Permaculture brought something to the land-use arena that was lacking until then, this design-for-functional-use aspect. Up until that time, some of the main categories of land-use were:

1. Traditional farming practices: these were practices developed over centuries in different specific climates and situations. Traditional practices are tightly linked with people's culture and are based on local knowledge, resources and ecology.
2. Conventional industrial agriculture: Industrial agriculture first developed in temperate climates and, first colonial influence and then commercial interests spread its practice around the world. It involves 'efficient' monocropping, use of a lot of external inputs such as fossil-energy derived fertilisers and pesticides, and removes most if not all trees from fields. It applies the principles of industrialisation to the land. There is an element of farm planning in conventional agriculture but it is a far-cry from designing land-use based on ecosystem principles and maximising beneficial connections. In less

For Global Resource Alliance-Tanzania (GRA-TZ), Permaculture is a natural, sustainable design method for poor rural communities to get the most out of the abundant, though often unused, local resources. It is the use of local resources available for them to improve their quality of life now and for future generations – including food production, energy production, water resource management and environmental regeneration.



are not available yet. Various products such as chillies, beans, papayas, bananas, mangoes, maize; leaf vegetables like chinese cabbage, lettuce, amaranth and spinach; fruit vegetables like okra and egg plant are produced.

GRA-TZ has focussed on Permaculture design rather than other farming practices because of the broad scope of its application – encompassing all aspects of the human environment – and its emphasis on harmonious collaboration with the forces of nature. Many of the areas where GRA-TZ operates in have experienced environmental degradation, and permaculture addresses this situation in a simple, effective and affordable manner. By minimizing inputs and maximizing outputs, permaculture is an ideal approach for poor rural villages.

Introducing new ideas and methods always takes time. There is always resistance to change and fear of the unknown. Therefore farmers who are used to subsidized chemical fertilizers and pesticides are reluctant to try new methods. Even in GRA-TZ's demonstration plots, the transition from old practices to new Permaculture methods has been gradual. Finding experienced permaculture practitioners to help train local staff is also more challenging in rural East Africa than it is in other parts of the world. Fortunately, GRA-TZ has received a slow stream of experienced volunteers from abroad, and is discovering more good contacts in Tanzania and neighbouring countries.

Permaculture has enormous potential in rural East Africa, because it is a way of thinking and designing that is adaptable to almost any situation and scope, especially those in which financial resources are extremely limited. When you work in cooperation with the Laws of Nature, rather than in opposition, all true needs for a life of dignity and abundance can be met, and in a way that also benefits the surrounding environment.

Currently, GRA-TZ maintains two Permaculture pilot plots in Musoma and Kinesi. These are the venues for visits, demonstration and training for local residents and volunteers. They also provide food for staff members of GRA-TZ in Musoma and UVIMAKI Rural Development in Kinesi Village. GRA-TZ is now in the process of planning a larger scale plot of approximately 10 acres to train and provide food for 75 families taking care of orphans in Kinesi Village.

Since GRA –TZ hosted Musoma's first Permaculture Design Course in October 2007, a lot of interest and enthusiasm have been demonstrated by local residents and volunteers coming from all over the world to see Permaculture in an East African setting. The visitors also participate in the development of Permaculture in the Musoma area. The principles and techniques of Permaculture are very effective in this area and good results have accrued from applying these principles and techniques.

GRA –TZ and UVIMAKI Kinesi project is in its initial stages, and currently the produce are good for staff consumption. Products for marketing

Locating Permaculture: Cont'd from page 10

industrialised countries it is often associated with so-called 'green revolutions'.

3. Organic agriculture: In its narrow sense organic farming in the 1970s was still very peripheral, with small associations mostly in industrialised countries, offering organic farming as an alternative to conventional agriculture. Organic farming uses virtually no fossil energy derived chemicals and makes a conscious effort to improve the health of the land. Organic farming has long been tied to marketing initiatives.

4. Sustainable agriculture: this is similar to organic farming since the emphasis is on using techniques that make use of local resources, minimising use of external inputs. This has tended to be the term used more in less industrialised countries, though in recent years the interest in organic agriculture has grown, often linked to marketing efforts. Within sustainable agriculture there are other terms such as

bio-intensive agriculture, aimed specifically at intensive production from small pieces of land.

5. Landscape architecture: all of the above focus on the use of techniques (ploughing, fertilising, composting, mixed cropping, slash and burn and so on). Landscape architecture is about *designing* use of land. However, it is purely an aesthetic approach and is often linked to relatively wealthy situations. The dictionary definition is: "the art and practice of designing the outdoor environment especially designing parks or gardens with buildings and roads".

6. Urban and rural planning: this is a huge area with whole faculties and government departments devoted to it. Nearly all urban and rural planning can be characterised as modern and mechanistic. It applies the 'efficiency' of industrial engineering approaches and

often lacks social and ecological dimensions. It usually fails many sustainability tests and in fact is very inefficient when it comes to energy use, having grown up during a unique time in human history of cheap fossil fuels.

To some extent, Permaculture brings together landscape architecture and farming, but goes much further because it is based on a growing understanding of nature (the ecosystem processes). Ecological design for food and energy production and genuinely efficient use is Permaculture's unique offering to the world. The literature on Permaculture is rich in this. While Permaculture has tended to be associated with small-scale farming, the principles apply to any use of land, including whole villages and towns. It also includes the appropriate design of buildings. There is little doubt that as people turn more and more to sustainability that Permaculture principles, whether under the name Permaculture or not, will come to the fore.

Seeding Integrated Land Use Design into communities through schools

By Mugove Walter Nyika, ReSCOPE Programme

Take a walk to your local school and find out the situation there. More often, you will be told that the school is very poor, it does not have enough classrooms, desks, learning materials and that the learners are hungry. You will be told that the community is doing nothing to support the school, instead they are destroying the little that the school has... Does the picture below look familiar?

Take a step back and look at the resources that your local school or the school in the picture above has got. Plenty of land, lots of water run off from the classrooms, play areas, paths and roads, many hands, a farming community around the school with knowledge, skills, energy, seeds, seedlings, and animals. What better set of resources would one need to turn around the situation described in the first



Thanthwe primary school, Blantyre, Malawi



Visitors listening to the teacher's story, Nkaombe school, Thylo, Malawi. paragraph and illustrated in the photograph above?

on their future landscape and to map the future landscape. Finally help the group to develop a plan of action for implementing a n d monitoring their new school design as they work towards their defined goal using the resources at their disposal.

dusty bare grounds to food forests with lots of opportunities for teaching and learning using locally available resources (TALULAR) right across the curriculum. Lessons from the SCOPE Programme and from other related programmes in the region are now being shared with the help of the Regional Schools and Colleges Permaculture Programme (ReSCOPE) which has a growing number of partners in eastern and southern Africa.

The pictures below illustrate some of the success stories that are

Now invite all interested stakeholders to meet at the school for a couple of afternoons. Let them describe their 'whole' school, carry out resource and transect walks, map their school and in the process develop a common understanding of the existing situation at their school. Ask them to state the purpose of developing the school, the values that they cherish and to describe the future landscape that they would like to see at the school and in the process help them to write down their vision for the school or 'holisticgoal'. On another afternoon get them to make connections between the elements

The process described above happening at the school is called Integrated Land Use Design (ILUD) and has been used by the Schools and Colleges Permaculture (SCOPE) Programme of Zimbabwe since 1994. ILUD has been used to transform schools across the country from

Below shows learners in the Mtubatuba area of Kwa Zulu Natal, South Africa in their home garden which they developed using the skills acquired while participating in the school garden activities at school. These gardens are low input and the produce is organic, diverse and tasty!



coming out of the sustainable land use work that is happening in schools in the region. Schools that implement these projects successfully report of reduced drop out rates, increased enrolments, positive attitudes among the learners, teachers and the parents and stronger school – community linkages. Figure 2 below shows a teacher's house at Nkaombe primary school, Thyolo, Malawi a year after the teacher had been trained in Permaculture. Please note the exposed foundations around the house which are a legacy of decades of sweeping the previous bare ground around the house every morning!



Roof rain water harvesting tanks at Kyamukoona primary school, Mubende district, Uganda. The school uses the water in an extensive orchard garden whose development was supported by Kulika Uganda under the supervision of a local key farmer trainer (KFT).

Permaculture: definition, ethics and principles

What is Permaculture?

The term Permaculture comes from *Permanent, Agriculture*. Permaculture is primarily a thinking tool for designing low carbon, highly productive systems but its influence can be very pervasive. It is a means of connecting each of us more deeply to nature's patterns and wisdom and practically applying that understanding in our daily lives.

The discipline of Permaculture design is based on observing what makes natural systems endure, establishing simple yet effective principles, and using them to mirror nature in whatever we choose to design. This can be gardens, farms, buildings, woodlands, communities, businesses, even towns and cities.

Permaculture is essentially about creating beneficial relationships between individual elements and making sure energy is captured in, rather than lost from a system. Permaculture is not just a green way of living or a guiding system of ethics, it is a way of designing using nature's principles as a model.

Therefore Permaculture is a holistic design science that is being used as a tool for promoting sustainable living. Permaculture applies techniques, ethics and principles. The three ethics are; earth care, people care and fair share. They are not exclusive to permaculture and were derived from the commonalities of many worldwide views and beliefs. Permaculture tries to make the ethics explicit within a design process.

The Ethics in Permaculture
Earth Care/Care for the Earth: Imagine the devastating effects of conventional agriculture on the fragile soil of your landscape. Alien agriculture has the capacity to turn a delicately balanced ecology into a desert. You now need to respond by designing a permanent agriculture system with different elements in it. The soil is left untilled to establish its own robust micro-ecology. Key to this is that the land must be bio-diverse and stable for future generations. This ethic of earth care is the basic of Permaculture design. It must be looked at holistically as it is pointless to have a good garden design while at the same time being involved in activities that are ecologically damaging. One third of our ecological footprint is taken up by the food we buy, so even growing a small amount in a city allotment in a container garden can make a difference. Permaculture is all about making a difference.

People Care: Fundamental to Permaculture is the concept of Permaculture culture. How can we develop a Permaculture if our people are expendable and uncared for? People care is about basic needs such as food, shelter, education, employment and healthy, and ensuring these are met. There should be no exclusion, all members of the community must be taken into account. At the core of people care is an understanding of the power of community. If we can change our lives as individuals and make incremental differences; think what we can do as a community. Expand your

capacity to live sustainably and become more self-reliant by establishing good networks as no one knows everything.

Fair Share: The last ethic synthesises the first two. It acknowledges that we only have one earth and we have to share it with all living things and future generations. There is no point in designing a sustainable family unit, community or nation whilst others languish without clean water, clean air, food and shelter. The North uses the resources of at least three earths and much of the South languishes in poverty. A fair share is an acknowledgement of this terrible imbalance and a call to limit consumption (especially of natural resources) in the North. Permaculture fundamentally respects the industrial growth model of the global North at the core of its ethics and aspires to design fairer, more equitable systems that take into account the limits of the planets resources and the deeds of all living beings

Permaculture Principles

Permaculture principles are thinking tools that when used together, allow us to creatively redesign our environment and our behaviour in a world of less energy and resources. These principles are seen as universal, although the method used to express will vary greatly according to the place and situation. They are applicable to our personal, economic, social and political reorganisation.

Permaculture principles are channels, values, doctrines or ideology that could be followed to implement permaculture effectively.

- Everything should be connected to something, which means nothing lives in isolation; everything needs something to lean on.
- One element should serve many functions. At least whatever resource or element should provide more than three.
- Start small and grow big. Applies to new Permaculture practitioners. In order to succeed, start by a small portion and expand gradually.

Other principles

- Observe and interact (Beauty is in the eye of the beholder)
- Catch and store energy (Make hay while the sun shines)
- Obtain a yield (You can't work on an empty stomach)
- Apply self-regulation and accept feedback (The sins of the fathers are visited on the children unto the seventh generation)
- Use and value Renewable resources and services (Let nature take its course.)
- Produce no Waste (A stitch in time saves nine)
- Design from Patterns on Details (Can't see the wood for the tree, Waste not, want not)
- Integrate rather than segregate (Many hands make light work)
- Use small and slow solutions (The bigger they are the harder they fall, Slow and steady wins the race)
- Use and Value diversity (Don't put all your eggs in one basket)
- Use Edges and Value the Marginal (Don't think you are on the right track just because it is a well-beaten path)
- Creatively Use and respond to change (Vision is not seeing things as they are but as they will be)

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OUR LOST HERITAGE
 I recall vividly, the dawn
 Dawn of my youth the heydays long
 gone
 When we used to fill our tummies to the
 brim
 Stuffed with fauna and flora
 In the arms and lap of nature
 Suckling its breast the sweetest milk and
 honey
 That groomed us and our fruits
 In exchange its guards we were
 Against ruthless bulldozers
 And fauna natality
 Those were the days really
 The days of the yester era
 The days of joy and tranquility.
 I remember those times
 I remember our values and nature
 Uhuru
 The days we used to share our homes
 with livestock
 Those we ate amaranthus, ants and
 pumpkins
 The days we could plan and tell seasons
 Those when our bodies would be
 victorious without a pinch of aspirin
 The days seasons of the bygone era
 The seasons of happiness
 I recall the days we used to bath and
 bask by the sweet crisp waters of
 Nyahake rivers and rivulets
 The days we could harvest barbels and
 lilies from the deep ponds of our
 inheritance
 The days we used to breathe virgin air
 And listen to our ancestors' vituperative
 advice
 Of initiation discipline and adulthood
 Those were the days we could guide our
 pumpkins
 Those were the days when order,
 respect, relationships prevailed as life
 banners
 The days we could grow old and see our
 shoots
 The days we could ask for ancestors'
 and God's clemency
 To return our tears through torrents
 after appeasements
 Those were the days before the
 southern willy-willy came
 The heydays we bled our heritage and
 prosperity
 And labelled our identity and culture as
 outcasts
 The then we waved goodbye to our
 breast
 To languish in these incessant droughts,
 poverty whims and qualms
 And we were weaned from the pures
 Those were the days I always lament
 And will cherish forever and ever.

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THE RESCOPE PROGRAMME: WHO? WHAT? HOW? WHEN? WHERE? WHY? IN BRIEF



By Mugove Walter Nyika, Regional Coordinator.
Who we are, where and when

Established in December 2006 as the Regional Schools and Colleges Permaculture (ReSCOPE) Programme, we are a regional support service for in-country initiatives that work with schools to develop productive school environments in Africa. Our Regional office is in Blantyre, Malawi but our partners have projects running in Kenya, Malawi, South Africa, Uganda, Zambia and Zimbabwe.

Our purpose

To transform schools in Africa to become productive centres that are rich in agro-ecological resources for their communities. We would like to empower schools with integrated land use design skills and other tools so that they can fulfil their potential role of becoming resource-rich centres that can contribute significantly towards an improved quality of life in their communities.

Our goal

We would like to see school

communities producing nutritious food and useful products; providing countless learning possibilities for the curricula; serving as resource centres within communities; and contributing to the development of the whole person. We see schools as effective entry

points into communities as they nurture the future generations at the same being potential centres for community activities. We also see school communities as being made up of not only the learners and teachers, but also the parents who in most cases in Africa, are small scale farmers.

How we function: Our structure Our regional support service is run by a Board that is made up of one member representing the lead organization in each participating country. The Board elects a three member Management Committee made up of the Chair, Vice Chair and Treasurer that meets every six months. The host country member serves the function of Treasurer in both the Management Committee and the Board. In addition two Trustees from the host country

serve as signatories to the accounts and are members of the Finance Committee together with the treasurer. The day to day running of the regional office is the responsibility of a small but dynamic secretariat that is headed by a Regional Coordinator.

Each country has several partner organizations and a vibrant platform that elects a lead organization who represents the country at the regional level. Each partner organization also has direct access to the regional office for a demand driven technical support.

How we work: The partnerships We are in partnership with organizations across the continent that share our vision for productive school environments that benefit the school communities in numerous ways including food, land use skills and education. The partnerships are based on commitment to land-use activities that are ecologically sound, socially just and economically viable. This commitment must be seen through the allocation of resources to such activities by the partner organization. The work of SIEDI/ ReSCOPE is focused on fostering partnerships and sharing experiences on sustainable land-use in schools. Partner organizations of this initiative must

A young boy shows visitors his budding Permaculture garden within the family garden in Thyolo, Malawi



be engaged in practical work with schools in promotion of productive and healthy environments and must be committed to environmentally friendly practices in their work.

Among other things the partner organizations will have free access to a technical support service, receive a newsletter and participate at meetings, capacity building workshops and other activities organised by the regional entity. As part of their contribution to the partnership, partner organizations will be expected most of the time to transport themselves to and from the ReSCOPE meetings and other activities and provide any allowances that may be due to the participants participating as such occasions. This initiative is neither a donor organization nor a membership one. It is about partnerships for supporting sustainable land-use for school communities.

Strategic objectives

ReSCOPE/SIEDI provides technical support to partners in each participating country to design and implement relevant programmes and projects. We seek to work closely with relevant government Ministries, NGO's and CBO's. The partners will be assisted to establish In-country networks, partnerships and

programmes that will enhance the implementation and monitoring of their work.

The regional support service facilitates the sharing of relevant information between partners in their countries. It is therefore not an implementing partner in itself but provides technical support to the implementing partners in the participating countries. The regional office and its partners are have committed themselves to achieve the following strategic objectives by the end of 2012:

- ü Each participating country will have a functional and vibrant country platform
- ü We will have a pool of Integrated Land Use Design (ILUD) facilitators establishing centres of excellence in schools in the participating countries
- ü The regional office, the country platforms, the partner organizations and the participating school communities will have developed a culture of effective documentation
- ü The regional office will have in place systems and structures that are able to stimulate the innovative growth of the partnerships

- ü The regional office will have developed strategic alliances and productive relationships with a range of partners

Our values charter

The regional office, country platforms, partner organizations and participating school communities are committed to upholding the following values:

- ^a Caring for the earth and respect for all forms of life
- ^a Children as the custodians of the future
- ^a Integrity, transparency and accountability
- ^a Partnerships, empowerment, Democracy and Sharing
- ^a Creativity, innovation and fun
- ^a Non discrimination

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Plan Africa Food & Empowerment: International Permaculture Conference & Convergence

Compiled by Stacia Nordin and Eston Mgala, Lilongwe, Malawi

The 9th International Permaculture Conference and Convergence (IPC 9) will be held in Africa in October and November of 2009. The conference is held every two years since 1996, with past host sites including Australia, USA, New Zealand, Scandinavia, Nepal, Croatia and Brazil.

IPC9 comes at a critical time for Africa's development where existing ways of living are being challenged and there is an ever-increasing demand on the planet's resources. Permaculture provides a practical and common sense approach to identifying and maximizing our available natural and social capital, to empower a New African Era. The global community organizes a biennial conference and convergence to share experiences, network and fast track development solutions.

The theme for IPC9 is *Plan Africa ~ Food and Empowerment* and is based on inspiring, informing and enabling a development strategy for Africa that seeks to understand our natural heritage and the inherent wealth that it contains and find ways of unlocking value so as to create strong sustainable regional economies that are in harmony with nature.



In Southern Africa, the Permaculture movement has been steadily growing since the early 1990s, with key players becoming more professional, embracing a wide range of issues from food production to utilizing Permaculture as a developmental planning tool for large-scale earth restoration and social regeneration. There are Permaculture projects in our schools, prisons, clinics and communities all over Southern Africa.

After the Convergence and Conference, a site tour of Permaculture projects will begin in Malawi on the 7th of November and will take the participants through Zimbabwe and finally end in Johannesburg, South Africa on the 30th of November. The trip will take the participants to at least ten Permaculture sites in Malawi and at least five each in Zimbabwe and South Africa.

The Convergence will bring together the global Permaculture movement with African Permaculturalists standing out proud. It is envisioned that the participants will come from all five continents with the majority being from the African states.

The Conference, Training courses and Site tours are aimed at development workers, health professionals, green architects and designers, farmers, academics, extension workers, development workers, media personnel, policymakers, Permaculture trainers and practitioners, African government ministers, bureaucrats, company decision



makers, strategic planners, non governmental and civil society organizations and businesses. The conference will include speakers, demonstrations and displays. It is envisioned that the conference will be attended by about 500 people.

Relationship Building

The IPC9 Conference is an opportunity to build relationships between civil society, government and business. It has the potential to unlock new ways of dealing with age-old problems at a time when we are battling to find a way forward.

We are looking to develop relationships with a key sponsor or sponsors who feel they can align with our mission to create a sustainable Africa that preserves our natural heritage and builds our people and our collective dreams in a truly sustainable way.

This conference provides an opportunity for Africa to vision the future it wants. It is time for the Permaculture community to focus on the reality that we want to live, design it thoroughly and implement the visions. The time is now; it is up to us...

Organic Farming: a Panacea to Poverty Eradication and Food Security?

By Mushimbwe Chitalu, OPPAZ, Zambia

The organic fraternity and the small scale producers constitute majority households employed in the agricultural sector. In Zambia, 80% of the agriculture households, contributing 96% to Zambian food needs inclusive of crops and livestock are employed in this sector. The Zambian government has adopted conservation farming technologies to enhance agriculture production. This is after realization that fertilizer support initiatives cater for only 11% of the Zambian farming households. The remaining majority need other forms of support such as promoting the adoption of organic agriculture.

The environmental benefits of organic agriculture have been acknowledged in Africa. The organic farming communities in Zambia are in fact calling on government to enshrine organic agriculture in their policies, statutes and programmes. To this effect they proposed both tax and non-tax policy measures to position organic agriculture as central to agriculture development.

On the account of increasing biodiversity, abating climate change and stopping mono

culture as exhibited in conventional agriculture, the farmers are calling for a forest-focused approach to agriculture development. This will see increased biodiversity of pollinators, decomposers and microbial elements in the environment. All these thoughts and initiatives are not based on demand from Europe or elsewhere. These are initiatives that have emanated from farmers themselves without influence from outsiders.

Production levels on organic farms have exceeded the national average for conventional production for small scale farmers and do better in drier years. This is true for maize, cotton, honey, groundnuts, cassava, sunflower and the host of indigenous vegetables and fruits. Organic farmers in Zambia

have also acquired more assets than their conventional counterparts and can afford to pay for health, education and other social services as well as acquiring solar energy and rural transportation.

Organic agriculture has led to breaking up of cultural taboos that promote gender inequalities in Africa. In Zambia, both men and women participate equally and are able to exploit opportunities without shame. One spectacular example has been in bee keeping which, because of the available knowledge and local technologies, has become an activity even for women. This is good for women empowerment and fighting gender based poverty and other inequalities.

For Africa, organic agriculture is a panacea to poverty eradication and a solution to prevention of environment degradation.



of a Permaculture enthusiast

Coming into contact with Permaculture:

Twenty-five years ago my family and I lived on a small farm in the eastern highlands of Zimbabwe. We were setting up a new rural day secondary school as well as developing our small farm. Those were the days when anything seemed possible in Zimbabwe and education and health services were expanding exponentially. It was a time of great optimism and energy.

There was even a distance library serving rural areas by post. I used it regularly and on their list I saw a book called Permaculture One. The name grabbed my attention and I ordered it. I plunged into its complicated language and intriguing drawings and diagrams and I must admit that I struggled to understand it, but sensed there was something very useful somewhere in there.

We continued to develop our small organic farm of a few acres. It was fairly productive but when I look back, the way we planned things, was a bit random.

In 1987, I took part in a small countrywide study with a view to setting up a farm-related training centre. In the same year a colleague and I attended a two week Permaculture course in Serowe, Botswana led by Bill Mollison, who along with David Holmgren, originated the Permaculture concept. From then on, I became a Permaculture enthusiast, recognising the potential of this novel design approach to land use.

Finding an entry point:

In 1988, a team of us set up Fambidzanai Centre in Zimbabwe

to promote ecological agriculture. Permaculture gave us a useful tool with which to plan the training and development of the centre. We held courses in Permaculture, nursery management, organic gardening and other such topics. We started doing outreach work wherever there was demand. Sustainable agriculture initiatives were springing up across east and southern Africa, using lots of different names. In those days 'sustainable' still had a meaning. Nowadays its meaning has been diluted badly by widespread and often inappropriate use.

We at Fambidzanai realised that there was a good entry point for Permaculture in schools. Hundreds came into existence across Zimbabwe during the 1980s. Most damaged their land as they put up buildings, with the school grounds often ending up as dust bowls. The schools had little idea about how to plan the use of their land. We linked Permaculture with the goal formation from holistic management and with participatory methods from the budding PRA to create the Integrated Land Use Design (ILUD) process.

Linking different approaches

I have always seen Permaculture as a tool that brings the design dimension to the sustainable living tool-kit. At the same time, I have felt that it is extremely important to keep linking different innovative approaches. In the early 90s, a small group of sustainable agriculture and natural resources management practitioners from east and southern Africa held a series of

meetings to develop a comprehensive curriculum that would link the different approaches. This culminated in the launch of the PELUM Association in October 1995 after four years of planning.

One or two doubts about Permaculture:

In 1993, I attended the International Permaculture conference in Denmark. It was stimulating and exciting to meet up with many others using Permaculture in their work. The only thing that bothered me was the sense that Permaculture was/is some kind of movement. I think there are many people who still see it this way. It may be appropriate in Europe or Australia or America, but in Africa, I feel that it is not useful to see Permaculture as a movement. The movement must be and is much bigger than Permaculture or any other tool or method. If tools and methods become their own movements they end up as enclaves. The way the uptake of Permaculture will spread is when people recognise its potential as a land-use design tool. In the end it does not matter whether we use the term Permaculture or not, what matters is the spread of ecological design skills.

Worshipping technology:

These are critical times in Africa, let alone the world. The western industrial model of development is proving itself unsustainable ecologically, socially and now economically. What does this mean for our continent, which has been trying to follow in the footsteps of the west? Oil, which has been the driving force of industrial development, is likely to

become more and more of a luxury in the near future. What does that mean?

At the same time, in the name of development, there is big money coming into the continent via the Gates/Rockefeller 'green revolution' initiative and now more recently via the Group of Eight (G8 (the world's leading industrialized nations)). Yet again, these powerful interests who keep pushing their own agenda on the world are looking to technology as the solution. Technology has become a modern religion for the west. It is seen as mankind's saviour. What is the west's approach to solving climate change: technological solutions? What has the west decided is the best for Africa's hunger problem: technology. Part of this, of course, relates to the fact that there is also lots of money to be made out of selling the technological products.

If African countries continue to go down this route they will continue to let others decide their 'development' for them.

Knowledge, confidence and togetherness:

It is not technology that will ensure the sustainable production of food in Africa. It is knowledge, confidence, and togetherness. Farmers need to believe that they can take the lead in moving their lives forward towards the kind of life they want. They need ways in which they can keep developing their own knowledge and a resilience that can withstand the unpredictability of the changing climate that can overcome exploitation by middlemen, and that can withstand outsiders who keep imposing technology oriented solutions on them; solutions that make them more

dependant than ever on outside inputs and knowledge.

None of this precludes appropriate technological input. But farmers themselves must test very carefully which of these technological inputs are appropriate for their own wellbeing and sustainability. And not assume that western and western-trained scientists know what is best for them. Farmers need a range of 'tools', which empower them and help them make these decisions and which stimulate their creative ability to adapt and thrive, including recognition of the knowledge that exists within their own communities. I see Permaculture as one of these tools and as a Permaculture enthusiast I look forward to its principles and practices enriching the movement towards sustainable living in Africa.

Seeding Sustainable Land Use in Communities through Schools

By Mugove Walter Nyika, Regional Coordinator, ReSCOPE Programme, Blantyre, Malawi

Introduction

One of the most powerful tools for sustainable land management to emerge in the last century is Permaculture. Permaculture is a design system for creating sustainable human environments. The land design skills in Permaculture have been used in pilot programmes in the region to unlock the potential that African farmers have to use local resources to sustain their farming systems. In support of this approach, projects have also been undertaken to empower schools to demonstrate and carry messages to farming communities about sustainable land management. Many of these innovative projects mainly in South Africa, Zimbabwe and Malawi have managed to build the capacity of local farmers to live off

the land and to transform the participating schools from bare grounds to multi-purpose productive centres that are rich in agro-ecological resources. One of these programmes has developed the Integrated Land Used Design (ILUD) approach which is a step by step process which schools can use to transform their school land into a diverse multi-purpose and functional landscape.

Background

It all started with the establishment of Fambidzanai Permaculture Centre (FPC) near Harare, Zimbabwe in 1988 following the training workshop facilitated by Bill Mollison, the co-originator of Permaculture in Botswana a year earlier. In 1994 FPC teamed up with other not for

profit organizations and with the Ministry of Education in Zimbabwe to set up the Schools and Colleges Permaculture (SCOPE) Programme. The goal was to assist schools to benefit from the multiple outcomes that arose from a re-design of school environments using the Permaculture approach. Permaculture has been defined as a design system for creating sustainable human environments (Mollison 1991). It is a design based framework for sustainable living that can be used to transform lives and landscapes in a manner that is ecologically sound, economically viable and socially just.

Integrated Land Use Design (ILUD)

The Schools and Colleges



Some pupils at St Margaret's Chigodora primary school in Hwedza district of Zimbabwe demonstrate to visitors how they make planting pockets for seedlings using banana stems and bark.

Permaculture (SCOPE) Programme developed a tool that schools can use for planning and implementing a very productive, healthy and ecologically sustainable environmental management system on school land. The system is developed with the active involvement of the whole school community and will then be a good model for replication in the community. The tool is called Integrated Land Use Design (ILUD) and it has been applied in over 200 schools in Zimbabwe since 1994 with exciting results. In addition to Permaculture, the development of the ILUD process was informed by thinking from a number of contemporary theories and techniques such as holistic management, participatory methodology and practical rural appraisal.

In the ILUD process, parents (farmers), teachers and learners

put their heads together to plan and redesign their school land in a manner that is ecologically sound and participatory. In the first step they use various observation skills to assess the existing situation at the school for current land use problems and potential resources in order to develop a common understanding of their starting point. In the next step they describe their vision for sustainable land management at the school in the form of a holistic goal. In the third step they use functional land use design skills to redesign the school grounds and they then follow this through with a detailed plan for implementing and monitoring their new design.

These stakeholders to the school land then pool their resources together to establish demonstrations of their ISLM

project under the supervision of two teachers who would have been trained in Integrated Land Use Design. Relevant messages

vision for the school environment

- ❖ Integrated design The stakeholders re-design their land by creating connections between the various elements in their environment
- ❖ Plan of action The stakeholders draw up an implementation and monitoring plan for their project

The integrated land-use design process is thus a tool for a holistic approach to the management of the school environment. Schools can benefit from a wide range of physical and socio-economic outputs of the ILUD process if they implement it successfully. Appendix 1 below is a list of some of the benefits that accrue to schools that use this tool to implement Permaculture well. The schools then become conduits for passing on relevant messages on ISLM to the local farmers through the children.

Implementation process

The implementation process begins with the identification of interested schools with the involvement of the Ministry of Education. The leadership around the schools identified is then sensitized about the programme in order to build ownership and support for the initiative. This is followed by the training in Permaculture of selected teachers sometimes with representatives of local farmers. Those who are trained will become the lead implementers at their respective schools. Representatives of all stakeholders to each school are next invited to a week-long ILUD planning session at their school. The outcomes of this planning session include a holistic goal or vision statement, a new functional design of the school grounds and a plan for implementing and monitoring the new design. These

stakeholders are then left to implement their new designs with occasional back up and monitoring support.

School and community links

During the implementation of these projects there will be two way movement of information and resources between the school and local farmers. In the initial stages of the implementation of the new school designs, local farmers assist by contributing local seeds and seedlings for planting at their local school. Representatives of local farmers participate in all consultative and training sessions at their local school. When the rest of the farmers go to their local school they learn the new land use techniques and the children take home both the skills and the seeds and seedlings that they may not have at their homes. In the process local farmers are gradually capacitated in natural resource management techniques.

Challenges

The main challenge faced in the implementation of these projects has been the prejudices and negative attitudes towards the new ideas and indigenous farming techniques. The other challenge is the protection of the newly planted areas from livestock and the care of these plants during the school holidays. There is also limited knowledge of local plants in schools even though the elders in the community have the relevant knowledge. Sometimes there are problems when the teachers that would have been trained in Permaculture are transferred to other schools.

Conclusion

The work of promoting sustainable land use in communities by implementing

Permaculture through the ILUD process in schools has over the years attracted the attention of an increasing number of organizations across the region of Eastern and Southern Africa. These organizations have formed a network called the Regional Schools and Colleges Permaculture (ReSCOPE) Programme whose regional desk provides ongoing technical support to member organizations. In addition members are provided with opportunities for sharing experiences both through a newsletter and meetings. The ReSCOPE Programme is described in a separate article.

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MELCA scoops the Green Hero Award

The Movement for Ecological Learning and Community Action (MELCA) Bale Project was on July 21st 2009 awarded the Ethiopia's Green Hero 2008 award. The award that was given by his Excellency Girma W-Giorgis, the President of the Federal Democratic Republic of Ethiopia, was for MELCA's remarkable achievements in the conservation and rehabilitation of degraded areas around Bale Mountains National Park.

Before this National Green Award Programme held at Hilton Hotel, the project was also recognised as an outstanding winner from the Oromiya Regional State. The project's winning is based on its Social Empowerment through Group and Nature Interaction (SEGNI) programme and tree planting activities.

In 2005, MELCA introduced its innovative way of linking elders and youths as a way of contributing to the intergenerational transfer of traditional ecological knowledge, reducing the degradation of the environment and culture, and protecting the few remaining wilderness areas through SEGNI. The SEGNI program takes youths into the wilderness, "on trail", to experience nature, learn about traditional knowledge of biodiversity and conservation, and promote leadership. The wilderness trails provided by the programme involve five-night wilderness treks in national parks and forests under the tutelage of elders.

The main objective of the program is to provide a genuine experience on nature and culture for children and youth who will be the future agents in environmental thinking and action. So far, more than 30 courses or trails, have been conducted involving over 735 students and teachers from elementary schools, colleges and universities. Local decision makers have also participated in the trails. Those who have passed through this process have shown marked improvement in their behaviour towards the environment and have already taken self initiated activities including the planting of thousands of tree seedlings.

In addition to the SEGNI programme, the project is honoured for its wide range of tree planting activities and rehabilitation of degraded areas. In the last couple of years, MELCA has established a big nursery site on 11,205.75m² plot of land and produced more than 500,000 indigenous tree seedlings including *Juniper (Juniperus procera)* and *Hagenia (Hagenia abyssinica)*. These tree seedlings have been distributed to local communities and planted around degraded land with the active participation of local communities. The survival rate of the planted trees is more than 75%.

MELCA's Bale Project was the winner of the 2009 Green Award in the NGO Category. The National Green Award Program is organized by a local NGO in Ethiopia called Forum for Environment.

THE STORY OF ST. VINCENT'S DEVELOPMENT OF THEIR LANDSCAPE

By John Wilson

Soon after independence in Zimbabwe in 1980, parents in a certain corner of Goromonzi District answered the call by government to build a new secondary school so that their children would not have to walk prohibitive distances to school. Until then only 15% of black Zimbabweans had the opportunity to go to a secondary school. After independence there was a big drive all over the country to build new schools. Parents supplied the bricks and labour, and government provided cement and roofing sheets.

So, St. Vincent's secondary school came about. At the site, parents worked hard to mould bricks and chopped the trees to burn the bricks. Within a couple of years there was a set of buildings surrounded by a bare environment. The arrival of many children at the school walking about at random made the bareness all the worse. When it rained, because it was on a slope, the water rushed off, taking soil with it, making the bareness worse still. This was typical of what happened in many schools.

In 1989, the headmaster of St. Vincent's' approached Fambidzanai Permaculture Centre (FPC) to work with the school on developing a land use design. FPC used the Integrated Land Use Design (ILUD) approach. The first step was to stimulate the involvement of staff, students and teachers. This was done with a variety of mostly visual exercises with a representative group in order to assess the current situation. The land was mapped including what species were growing there, how things had changed, the problem with water run-off and soil erosion. A thorough picture of the existing situation was gotten, where the wind came from, the sun and the sources of water run-off, among others.

The holistic goal formation process was used as a guide for making decisions about the future use of the land. This is a thorough process that starts with 'how we want our lives to be in the school, based on what we value most.' The final part of this holistic goal process described how the landscape should look far into the future. The group brought up points like: the school environment should be cool and well shaded with all the soil covered; access should be clearly marked; there should be not a drop of water run-off from the school; there should be a great variety of species.

The next step was to come up with a design that would start to take the school towards their holistic goal. To do this, Permaculture approach was used. The school started implementing their design shortly before the rainy season of 1989. Fairly quickly they transformed the bare hard soil with few species into a forest of diversity. There was much hard work and commitment. They dug ditches to harvest all the water from roofs and roads and paths, as well as the run-off coming in from outside the property.

By the second year, not a drop of water was leaving the school grounds as run-off. They designed the access routes so that students would not be wandering everywhere and compacting the soil. They planted a variety of trees, all placed carefully and thoughtfully according to the design they had developed, as well as nurturing indigenous trees that reappeared. The motivation and will to implement came from being clear as a whole school community about where they were going. This clarity came from i) the initial assessment work, ii) the formation of the holistic goal together based first and foremost on their values, and then iii) developing the design based on Permaculture principles.

Philippines govt urged to promote organic farming

By Jonathan L. Mayuga / Correspondent

ALARMED by the poor performance of the agriculture sector, a consortium of non-government organizations promoting organic farming in the Philippines urged the government to implement programmes that will help increase food production to mitigate hunger and help fight poverty in the countryside.

Aside from the different support services that the Department of Agriculture (DA) and Department of Agrarian Reform normally provide to farmers to help boost agricultural production, Efren Moncupa, a lawyer and lead convenor of Go Organic! Philippines, said government programmes that offer a lasting solution to farmers' woes should be prioritized.

In particular, he said the DA should promote sustainable agriculture through organic farming, which does not only promote sustainable agriculture, but helps fight global warming and climate change.

"To start with, organic farming does not require big capital," said Moncupa, a former agrarian-reform undersecretary.

"It actually helps reduce

greenhouse-gas (GHG) emissions," he said.

GHG is a major contributor to global warming. Agriculture contributes 30 percent to the total GHG emitted into the atmosphere.

According to Moncupa, organic farming is key to sustainable agriculture, as it helps farmers veer away from the excessive use of chemical fertilizers.

Organic farming makes use of indigenous materials that can be found in farms to produce plant-growth boosters which farmers can use in lieu of the expensive chemical fertilizers currently utilized in conventional farming.

Moncupa expressed alarm over reports that the agriculture sector grew by a slower rate of 2.02 percent in the first quarter of 2009 and that the trend will unlikely improve because of a number of factors, among them climate change.

The government has forecast that agriculture production will rise by 4 percent this year, nearly the same pace as last year's when output rose 3.9 percent.

"The government needs to

address this food security concern as soon as possible. If the agriculture sector continues with its poor performance, the Philippines is facing yet another serious food crisis," Moncupa said.

Climate change, which triggers super typhoons, severe flooding and drought, affects agricultural production. The natural calamities destroy hundreds of hectares of farms, thereby resulting in huge losses on the part of farmers.

Abrupt change in weather patterns as a result of climate change makes it more difficult for farmers when to plant or harvest their crops, thereby adversely affecting farm-production output.

Aside from climate change, Moncupa blamed the agriculture sector's poor performance to the high cost of doing business in farms. Fertilizer prices, he said, remain high and farmers barely have enough money for their families' three square meals a day.

Roland Cabigas, managing director of La Liga Policy Institute and a convenor of Go Organic! Philippines, said government programs should be geared toward building the individual and collective capacities of farmers to produce organic fertilizers and eventually, shift to organic farming.

He said more farmers are willing to learn how to produce and use their own organic fertilizer, realizing the many benefits of going organic.

Aside from an increase in the farmers' income, organic farming also promotes better health and safer environment for all.

"The DA should continue to implement its programs to train more farmers on various organic-farming systems and technologies," he said.

S o u r c e :
<http://www.businessmirror.com.ph/component/content/article/53-agri-commodities/13087-ngos-urge-govt-to-promote-organic-farming.html>



The story of a termite mound

John Wilson,

Permaculture draws its inspiration from nature and in Africa there is little more inspirational than the ins and outs of a termite mound.

The heat had been building up each day since the last rainstorm three weeks previously. The landscape had a green tinge from the first rains. The clouds were grey and black and ominous. Rain was imminent. The lightning flashed and the thunder rumbled, again and again. A prelude. Large drops of rain fell, in random single file. Each one breaking forth a smell of damp earth. One could sense the life-giving properties of this coming performance.

Then the rain burst forth, driving hard to the ground in a smothering sheet. For an hour it pelted down. Everything else was still. Then as quickly as it had started, it stopped and the sun came out. And with it came a throng of wings. The message had got through. This was the time for the termites to fly. Kings and queens poured forth and everything else swarmed in to enjoy the feast - frogs, birds, people, jackals..... Nothing could miss this feast.

Nearly all the flying ants were gobbled up in a frenzy of eating. A very few managed to escape and king met queen and quickly burrowed into the earth, single minded in their quest. From their union came forth worker ants by the thousands. Some of these workers dug deep to the water table, in effect digging their well. Others dug outwards creating a maze of channels in such a way that air circulated and kept the

temperature constant within their termite mound. These same channels harvested rain and run-off water into their well. Others dug down and brought up minerals. Yet others brought in grasses and leaves, which they mixed with a secretion, making 'termite compost'. On this compost they grew fungi, their food.

With the water, air, minerals, and organic matter they created a perfect place for a garden, following the age-old laws of nature. A bird flew over depositing droppings and in the droppings were seeds of a berry plant in fruit. These seeds germinated and the strongest survived and grew strong and vigorous. Seeds of grasses blew in and grew well in this well-prepared garden. More birds flew over, settling on the shrubs already growing and dropped further seeds.

By now there was good groundcover and the perfect environment for seeds to germinate and flourish. The termite mound was thickly covered with a variety of species, many of them pioneers at this early stage. Field mice moved into the shelter, followed by snakes, followed by a mongoose that set up its base in this flourishing community of species. As the years went by the trees grew and creepers climbed the trees, some taller, some shorter. A colony of bees settled in the hollow of a tree. Birds made their nests on the outer branches of thorny trees, enjoying protection from predators of their eggs or chicks.

In the dry season most trees dropped their leaves, providing good mulch. Every so often a herd of animals passed through, eating the grass and dropping their manure and knocking any old grass to the ground as mulch. The grass plants grew back vigorously, needing to be eaten from time to time.

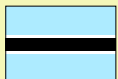
Termite mounds are an incredible gathering of a diversity of species - a natural garden of abundance and complementarity. They recycle nutrients and water very efficiently, losing few nutrients to leaching and harvesting all rainfall for their own use or, when there is excess, discharging it safely into the ground water. As a result of this efficient nutrient and water management, they harvest large amounts of the sun's energy via photosynthesis. They have been doing this for millions of years.

The challenge that people have is to create the same gardens of abundance and complementarity that harvest lots of the sun's energy by ensuring effective nutrient and water cycling. The only difference being that people select species and elements that are useful to them. The termites have done it for themselves - so too can people for themselves if they apply wisdom based on the age-old laws of nature.

Mick Pearce, the architect for Harare's largest building, Eastgate, draws much of his inspiration from the air circulation system of termite mounds. Eastgate has no need for air conditioning because of its design.

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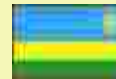
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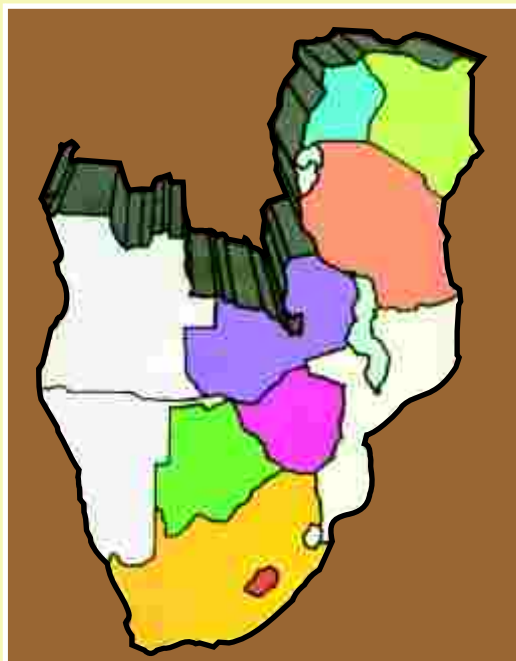


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About PELUM Association

We are a network of civil society organisations operating in east and southern Africa.

We have come together to facilitate learning, networking and advocacy in sustainable agriculture, natural resources management and household food security so as to achieve community development among small holder families in the region.

We learn through linking our experiences, alternative approaches to agriculture and participatory development. We bring our strengths together and generate added value to what each member strives to achieve.

Our key strategies include information sifting and distribution, advocacy, networking and short and long-term training.

This, we hope, will contribute towards food security and increase small holder farmer income. And for our own sake as an institution, we do consultancies that bring some income towards our sustainability.

We run workshops to train community development workers, identify and distribute useful books and articles and other relevant information materials and also work to facilitate networking among ourselves and with like-minded outside organisations.

The development and subsequent adoption of a policy on advocacy has also been completed.

We have a dream: "sustainable communities in east and southern Africa", and it is towards this that our energies, talents and resources have been, and will continue to be, channeled.

The Association was founded by 25 members in 1995. Today over 160 member organisations in ten countries in east and southern Africa make up the Association. These are mainly NGOs working towards rural development.

The magazine, Ground Up, is produced at the Association's regional office in Lusaka, Zambia. It is an avenue of sharing information and experiences among the members and between the members and other stakeholders in community development. Ground Up represents what PELUM stands for: genuine and bottom up approaches to community development.

