



JUNE 2010

REPORT



Kenya Eco Initiative

Third Phase Workshops
Integrated Vermiculture and Organic Vegetable Production Courses

Executive Summary

The Kenya Eco-Initiative was launched on the Maji Moto Group Ranch in October 2009 as the community component of a planned REDD Project.

The goals of this Eco-Initiative are to encourage resident Maji Moto Group Ranch communities to manage and utilize their rangelands in a sustainable manner, and to avoid deforestation and land degradation.

As the entry phase to Eco-Initiative, community workshops were held between 15 and 26 October at 3 workshop sites :

- Workshop Site 1. Ng'Oswani Village Windmill
- Workshop Site 2. Enkare Nairowua School
- Workshop Site 3. Maji Moto Spring

These workshops focused on assisting families improve food security and prosperity at household level through integrated vermiculture and organic vegetable growing practices.

In February 2010, a second round workshop tour was undertaken by a 3-man CSA team between 6 and 19 February. The purpose of this second round program was to:

- Assess the progress and development of the first round entry phase workshops
- Re-inforce and expand on the entry phase workshop capacity building process.

After the February workshops, Simba (the CSA extension officer) remained at Olarro until 3 May. His task was to assist the community with the Eco-Initiative activities on the Maji Moto Group Ranch.

In May 2010, a third round workshop tour was undertaken by a 3-man CSA team between 8 and 17 May. During this tour the following was undertaken in conjunction with the Olarro Community Team:

- All the Eco-Initiative sites were visited and site inspections and assessments were carried out
- The 3 original entry phase workshop sites were developed further to re-inforce the Eco-Initiative program

- ✦ Work commenced on an individual “enkang” (homestead) vegetable growing program
- ✦ The workshop program was expanded with a fourth workshop site being opened at Enkui School.

During this workshop tour, Debbie Paul, participating as a CSA team member, assisted Chania Frost in a hand-over/take-over exercise. This was to ensure the momentum and smooth running of the community programs continued without disruptions. (Chania Frost had taken over from Debbie Paul in leading the Olarro Community Team).

After the May workshops, Andason (CSA extension officer) remained at Olarro until 28 May to assist the Olarro Community Team to complete the planned workshop program.

Site Assessments & Development

Workshop Site 1 – Ng’Osuanu Village Borehole

Assessment

- ✦ The participants had performed well, with the vegetable garden site yielding a good vegetable crop for the bed owners.
- ✦ Of all the varieties of vegetables grown, “Managu” Black Nightshade and Masai spinach had performed best under the often deficient water supply conditions.



- No major pest problems had been experienced, and where pests had occurred they were in the beds where plants were stressed from lack of water.
- Ready access to water is a major limiting factor at the site as the entire village draws their water from one tank with a single tap at the windmill site.
- 3 new windrows had been built with shadecloth covers provided
- The standard of worm windrow maintenance and care was good with cocoons hatching and lots of young worms to be seen.

Site Developments

- A 5000L water tank was provided on-site, and post-workshop, a water supply to the tank was installed together with a tap for water off-take to the vegetable garden site.
- The construction of one large shadehouse was completed, which covered and protected the entire vegetable garden site.



Workshop Site 2 – Enkare Nairowua Primary School

- In March, a workshop was conducted on site by Simba (CSA) and the Olarro Community Team. As the workshop participants (a group of 8 teachers and school employees) did not have adequate time to commit to the workshop, the bed building work was undertaken by the CSA/Olarro team.
- The site was re-modelled with the 32 bed configuration of the Maji Moto Spring Workshop Site being replicated.
- To enable the teachers keep to their normal work routine, workshop lectures and discussion groups took place for no more than half an hour each day.

- ✦ With the School workshop group not having time to work on the garden, a decision to delay planting these beds out until the May CSA workshop tour was made.
- ✦ In the interim period, the CSA/Olarro Community Team took responsibility for maintaining and weeding the beds, with the school participants taking care of the worms and worm units.

Assessment

- ✦ The participant involvement and commitment to the project was not satisfactory.

Remedial Action

- ✦ A meeting was held with the Headmaster and teachers to identify the problem hindering participant project commitment.
- ✦ The possibility of teachers being transferred (and therefore not benefitting from the garden) was identified as the principle problem.
- ✦ A joint school/Olarro Team decision was made to hand over the project to the Grade 7 and 8 pupils.
- ✦ A workshop would be held for the pupils and site developments would continue as planned.
- ✦ On Friday 14 May the site was handed over to the Grade 7 and 8 pupils after a brief introductory lecture was given on worms and organic gardening.
- ✦ Plans were made to hold a series of short workshop practicals and lessons, during which pupils would be assisted to plant all the beds and take care of the worms. In doing so the pupils would assume ownership of the site.

Site Development

- ✦ The construction of one large shadehouse was completed, which covered and protected the entire vegetable garden site.
- ✦ One small cocoon/worm incubator tent was allocated to the site, and incorporated into the worm tunnel



Workshop Site 3 – Majii Moto Spring

Assessment

- ✦ Sowing of the beds had been delayed until the May CSA workshop tour, when the construction of a shadehouse was planned to protect the new garden site
- ✦ The beds had been well maintained, and were tidy and well weeded, and ready for planting
- ✦ The worm and windrow care had been sub-standard. Both the windrows were too dry, and insufficient food had been provided for the worms. The number of worms surviving was disappointing

Site Development

- ✦ A 5000L water tank was provided on-site, and post-workshop, a water supply to the tank was installed together with a tap for water off-take to the vegetable garden site.
- ✦ The construction of one large shadehouse was completed, which covered and protected the entire vegetable garden site.
- ✦ Planting of the vegetable beds commenced after a direct seed planting demonstration by CSA. The participants then all sowed their own beds, working in pairs, with the Olarro team, Blackfire, Joseph, Junior and Chania providing guidance.
- ✦ Butternut, pumpkin, tomato, beans, chillies, kale, rape, spinach and manangu black nightshade were planted. In between the vegetable planting lines marigolds, basil and mixed herbs were planted as pest deterrents.
- ✦ The pentagon screen-house on the first garden site was removed for repairs.

Eco-Initiative Site 4 - Kurash's Worm Farm

- ✦ Kurash was a participant from the Enkare Nairowua School Workshop held on CSAs first workshop tour in October 2009. During this workshop Kurash produced some of his own worms and offered to supply the Eco-Initiative with worms.
- ✦ As a result Kurash's enthusiasm and efforts, CSA started providing Kurash with assistance and encouragement :
 - He was supplied with a worm bin in which to house his worms.
 - Using his own resources, Kurash built a replica of the small open worm conservancy that CSA had built at Olarro in August 2009.
- ✦ By December 2009, Kurash had an impressive open worm conservancy. However with the onset of the December 2009 floods, his unit came under threat as it was exposed to both the rain and flooding. (Kurash's unit was not under cover as was the Olarro open worm conservancy which was housed in a shadehouse tunnel).
- ✦ To assist Kurash the shadehouse tunnel at Olarro was moved to Kurash's worm conservancy, and emergency work was undertaken to raise the worm conservancy above the water level. These



measures saved Kurash's worm conservancy.

- Through extension services support, Kurash incorporated a small worm/cocoon incubator tent and a covered composting/worm bed unit into his worm farm.
- Kurash became a regular supplier of worms to the Eco-Initiative.

Assessment

- Good care was being taken of the worms in all Kurash's worm units.
- The small worm/cocoon incubator tent was badly damaged through exposure to the elements. As a result Kurash was provided with a new tent which was incorporated into his covered household composting/worm bed. In return Kurash donated 4000 worms to the Olarro Open Worm Conservancy

Eco-Initiative Site 5 - Individual Enkang Units

- In April, as demonstration models for homesteads, the construction of 2 household worm/vegetable garden bed units started at the homes of Joseph Taek and Nolari Ntokoiwan
- During the May workshop tour these Enkang units were developed further and put under cover using the gazebo units.



Eco-Initiative Site 6 – Olarro Open Worm Conservancy

Assessment

- ✦ The open worm conservancy was functioning well, with the worms thriving and breeding well.
 - In August 2009, this open worm conservancy was set up at Olarro Lodge during the CSA preliminary survey visit to Maji Moto Group Ranch.
 - This unit was used as an Eco-Village demonstration model, serving as a waste to resource recycling unit that used earthworms to convert all the lodge organic waste into vermi-compost, a valuable organic fertilizer.
- ✦ The on-site worm breeding demonstration models using a small worm/cocoon incubator tent, the stacked crate system and “Neverfill” units functioning well.
- ✦ The worm conservancy was providing a good supply of worms, vermicast and vermi-compost for the Eco-Initiative workshop sites.
- ✦ The open worm conservancy was also used as a breeding ground for the worms that CSA were providing to Eco-Initiative participants and the workshop sites
- ✦ The conservancy was also serving as a forest nursery with indigenous tree seedlings being grown on site in seedling sleeves.
- ✦ Leleshwa cuttings had been collected and the first mini ‘wood lot’ trial was underway at the conservancy site.



Eco-Initiative Site 7 - The New Olarro Vegetable Garden

- In April a new organic vegetable garden was built at Olarro Lodge under the supervision and guidance of Simba/CSA.
- The site, 35m X 25m in area, housed a total of 37 beds, each 11m x 1m in size.
- The new vegetable garden site was impressive. Enclosed within a good wire mesh fence, the bed layout was neat, tidy and straight. The standard of workmanship had been high in building this vegetable garden.
- At the beginning of May all these beds had been sown to seed using the direct sowing method. Good germination had started in most of these beds.
- The garden site had a good supply of recycled water, and the beds were all being well watered, weeded and cared for daily.

Eco-Initiative Site 8- Enkui School

- On Friday 14 May the CSA and Olarro Community teams visited Enkiu School to investigate establishing at Eco-Initiative site at the school.
- No reliable water supply existed at the school. However the National Water Project had visited the school and demarcated an area to sink a bore hole. It was at this borehole site that the Headmaster/teachers/CSA and Olarro Community Team decided on as a suitable vegetable garden site
- A shadehouse 16m x 4m in size was constructed as the start to the development of the Eco-Initiative site







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