MARCH 2010

REPORT

Conservation Science Africa

Zambia Eco Initiative

Entry Phase Workshops
Integrated Vermiculture and Organic Vegetable Production Courses

INTRODUCTION

As the entry phase to the Zambia Eco-Initiative, three Entry Phase Workshops were held in the South Luangwa National Park/Lupande Game Management Area in November/December 2009. Workshops were conducted at the following sites :

1. Mfuwe Lodge - 25 November to 28 November 2009
2. Chiwawatala School Bore-hole - 30 November to the 3 December 2009
3. Mambwe Village Bore-hole - 4 December to 7 December 2009

This entry phase workshop programme was then re-inforced and expanded through a second phase programme that was undertaken 1 to 12 March 2010.
Entry Phase Workshop Programme

Workshop 1- Mfuwe Lodge - 25 November to 28 November 2009

- This aim of this workshop was to start establishing a Conservation Outreach Centre at Mfuwe Lodge. This centre would serve to introduce Mfuwe lodge staff and employees to the concept and processes of the Zambia Eco-Initiative.
- The site selected was the Lodge Boma adjacent to the staff kitchen and lodge water tanks. This area provided the necessary shade under which to house the waste re-cycling worm beds and the forestry garden nursery. It also provides a degree of protection from elephants which frequently move through the lodge grounds.

Workshop modus operandi :

1. During the workshop period, the four-man CSA team, assisted by three members of the Lodge grounds team, started construction of the waste re-cycling worm beds and the forestry garden nursery.
2. During this building stage Lodge staff had the opportunity to visit the site as and when their duties allowed. Here staff members were introduced to the Eco-Initiative, and given the opportunity to register as Eco-Initiative participants. Registered members were issued with workshop print-outs containing all the course material.
3. During the workshop the following work was undertaken :
   - → Building two lodge composting/worm bed units for handling the lodge kitchen waste and converting it into vermicompost - an organic fertilizer. These two units were made up with a worm housing/ composting mix using top soil, humus, other organic material such as leaves and compost or anthill. Where available, elephant and buffalo dung can also be added.
   - → Installing three worm/cocoon tent incubators that were then filled with the worm housing/composting mix and used to hold the initial worm breeding stock – 1000 worms and 10,000 cocoons.
   - → Building a demonstration household worm/vegetable garden bed using the worm housing/composting mix (In the case of the lodge this would be used for indigenous tree seedling production).
   - → Marking out and starting the building of a forestry garden nursery bed using the worm housing/composting mix .

- → Marking out and starting the building of four additional demonstration household worm/vegetable garden beds (for indigenous tree seedling production at the lodge).
- → Marking out an additional lodge composting/worm bed.
- → The process of re-cycling all the lodge kitchen waste was immediately started once the building of the first lodge composting/worm bed unit had been completed.

Lodge participants registered :

- ZEPHANIAH MPHANDE
- VASCO PHIRI
- JULUIS KAONGA
- HENRY MWALE
- LANGFORD MWANZA
- WHISKY MWANDILA
- CHIKONDI MOYO
- GEORGE PHIRI
- HUDSON KAWINGA
- ZEBRON PHIRI
- ELIAS ZULU
- SHADRECK ZULU
- BARNABAS NJOBVU
- BENJAMIN MWALE
- FRANK SAKALA
- LOTTIE IKWENDA
- JOHN MBAO
- DAVISON NKHAZI
- SIMON NJOBVU
- NOAH BANDA
- RICHARD MSONI
- GEORGE NKHOMA
- GODFREY SUNDA
- HANNANIAH ZULU
- JACKSON MWILA
- SAMSON ZIMBA
- OSWALD KAMULEWE
- GOLIATH NJOBVU
- AGENT CHABUKA
- VERONICA-K MBEWE
- DESDELIO NKHOMA
- CHRISTOPHER TEMBO
- SHADRECK MWANZA
- ELIPHAS MWALE
- JACOB MBAWA
- GEOFFREY MWANZA.
- VICTOR CHULU
- GEORGE BANDA
- ISAIAH MVULA
- NASHON SAKALA
- BODWIN ZULU
- BISHED NJOBVU
- HASWELL NJOBVE
- DAMASCO CHULU
- BOSTON MWANZA
- JORDAN PHIRI
- LOVEMORE KASUMBARESA
- PAUL NKHOMA
- ALVIN KAPESA
- PATRICK BANDA
- HARRISON TEMBO
- ACKIM MWANZA
- JOSEPH PALANGA
- ROBERT MULIKITA

Registration involved collecting the following personal details from all participants :

- Full name, gender, age, and home village.
- Job description and national identification numbers
- Marital status
- Number of children and their ages
- The number of dependent elderly persons the participant takes care of.

All participants were given a name badge, and had their picture taken (for future use on a planned website where the Eco-Initiative process will be highlighted to gain support for participants).
Once participants had registered they were issued with workshop print-outs containing the following course material. This covered the following topics :

1. Overview of the Africa Eco-Initiative Process
2. Introduction to Eco-Farming
3. Worm Farming
4. Growing and Breeding Worms
5. Worm Vegetable Gardens
6. Eco-Farming Principles
7. Organic Growing and Organic Fertilizers
8. Community Conservation Businesses
9. How are the Community Conservation Businesses Set up?
10. REDD Project Principles and Carbon Credits

Registered Eco-Initiative participants are actively encouraged to participate by setting up their own household units on display at the Outreach Centre. In doing so, their work will be inspected, and if up to standard, these active participants will receive “Producer” Certificates and qualify for Eco-Initiative support to take their initiatives further.

Workshop 2 - Chiwawatala School - 30 November to the 3 December 2009

Workshop Plan

- Prior to the Chiwawatala School workshop, the Headmaster Mr. Zulu and a group of teachers from the school visited the Mfuwe Conservation Outreach Centre. This enabled them to see work in progress and the various composting/worm units and the forestry/tree seedling nursery.
- While visiting the Mfuwe Conservation Outreach Centre , the CSA team and School Group formulated a workshop plan so that the program could accommodate the schools teaching program.
- The workshop morning session was to be spent by the CSA team, assisted by 3 assistants(2 from the lodge, and the school handyman) building units at the school site.
- The workshop afternoon session focused on lectures and discussion groups, together with practical work.

Workshop Participants Registered

14 participants registered for the workshop at Chiwawatala School:

- CHARLES ZULU
- GUESSMAN PHIRI:
- MAXWELL MVULA:
- PATRICIA BANDA:
- MATILDA MUSANJA:
- ABUBAKA DAKA:
- BENNY PHIRI:
- JOHN MBEWE
- MOSES MWANZA:
- EMMANUEL MWANZA:
- STANLEY MWANZA:
- MACKINA MBEWE:
- ALICE ZULU:
- GRACE BANDA:

Workshop Site

The site selected was the area surrounding the school bore-hole. Water here is accessed using a hand-pump.

Workshop Output

1. On a daily basis throughout the four-day programme, between building work and practical demonstrations, short lecture/discussion groups on the course topics were held. The following topics were covered :

    → Lecture/Discussion Group 1 - Overview of the Africa Eco-Initiative Process

    → Lecture/Discussion Group 2 - Introduction to Eco-Farming

- → Lecture/Discussion Group 3 - Worm Farming
- → Lecture/Discussion Group 4 - Growing and Breeding Worms
- → Lecture/Discussion Group 5 - Worm Vegetable Gardens
- → Lecture/Discussion Group 6 - Eco-Farming Principles
- → Lecture/Discussion Group 7 - Organic Growing &Organic Fertilizers
- → Lecture/Discussion Group 8 - Community Conservation Businesses
- → Lecture/Discussion Group 9 - How are the Community Conservation Businesses Set up?
- → Lecture/Discussion Group 10 – REDD Project Principles & Carbon Credits

2. The following work was completed :
   - → One household composting/worm bed was built using the worm housing/composting mix
   - → Two household composting/vegetable beds were built using the worm housing/composting mix
   - → One forestry/vegetable garden nursery was marked out, and building started using the worm housing/composting mix
   - → After issuing each participant with a collapsible worm bin, a demonstration was given on the filling of this unit with the worm housing/composting mix, and maintenance and worm care in these units was covered.
   - → The two household composting/vegetable beds were planted out using direct seed sowing. A variety of different vegetable seed was sown and included spinach, kale, butternut, pumpkin, tomatoes. Mixed herbs and marigolds were also planted for insect control.

3. Worms
   - → 3,000 coccoons were allocated to the workshop. These were held for hatching at the Mfuwe Conservation Outreach Centre on behalf of the participants.
   - → As worms were naturally occurring in good numbers in the Lupande area, CSA offered to buy 2000 worms from each participant. Ownership of these worms would be by the participant, and would be the seed stock each participant would be provided with.
4. Equipment Supplied

   14 worm bins

Workshop 3 – Mambwe Village – 4 to 7 December 2009

Twenty four members of the village participated in the workshop :

- PETER ZULU
- TYSON MWANZA
- STANLEY C. PHIRI

- OLIVER KATINDIKA
- ABIUD MBEWE
- FRANCIS NJOBVU
- JOHNSON NGOMA
- CHIPAWGALA ZULU
- TYLON ZULU
- AGNES NYANGU
- MARGARET NGOMA
- RACHEL CHULU
- ANNA MBEWE
- LISTA BANDA
- GESTER BANDA
- RHODA ZULU
- JESSEY KAMANGA
- YOLAMU ZULU
- KEFASI KACHIKOTI
- KILIZA MBEWE
- GERTRUDE MWANZA
- MARTHA PHIRI
- PAULINA MASA PHIRI
- KHELIZA NJOBVU

Workshop Site

The site selected was in the vicinity of the bore-hole at the homestead of Peter Zulu, the Headman of Mambwe Village. Here a hand-pump is used here to access the water.

Workshop Output

1. On a daily basis throughout the four-day programme, between building work and practical demonstrations, 10 short lecture/discussion groups on the course topics were held as per the previous wokshop.

2. During the workshop period this group worked exceptionally hard and their output and due diligence was first class.

- → Working as a team, the group completed the building of one Forestry/Vegetable Garden Nursery which was covered with a screen-house. Here vegetable beds were made up using the worm housing/composting mix, and vegetable seed sown in all the beds. Direct seed sowing was used, and a variety of different vegetable seed was sown. This included spinach, kale, butternut, pumpkin, tomatoes, and onions. Mixed herbs and marigolds were also planted for insect control.
- → Split into 8 teams, each team constructed their own team household composting/vegetable garden beds. Vegetable seed of each teams choice was sown in all the beds. (Direct sowing).
- → After issuing the group 12 collapsible worm bins, a demonstration was given on the filling of this unit with the worm housing/composting mix, and maintenance and worm care in the bins was covered.

3. Worms

- → As worms were naturally occurring in good numbers in the Lupande area, CSA offered to buy 2000 worms from each participant. Ownership of these worms would be by the participant, and would be the seed stock each participant would be provided with.
- → 3,000 coccoons were allocated to the workshop. These were held for hatching at the Mfuwe Conservation Outreach Centre on behalf of the participants.

4. Equipment Supplied

- → 1 Screen House Tent
- → 14 worm bins

Round Two - Re-inforcing and Expansion Program

A two-man CSA team arrived at Mfuwe Lodge on 28 February 2010 for a second round workshop tour to re-inforce and expand on the first round workshops. Between 1 and 12 March the three original workshop sites were all assessed. Two sites were developed further (Mfuwe and Mambwe), and a remedial plan was made to develop the Chiwawatala School Site further. In addition two new villages (Kanyantha and Old Lupande) were introduced into the Eco-Initiative program.

SITE 1 – Conservation Outreach Centre – Mfuwe Lodge

Assessment

- → - The Conservation Outreach Centre had been taken well care off by Tyson Mwaza and the Mfuwe Lodge team working under his direction. (Tyson, a Lupande villager, had been engaged by CSA and Mfuwe Lodge to work as an Eco-Initiative Extension Officer. His terms of reference were to take charge of the Lodge Conservation Outreach Centre and also work in the Lupande area assisting Eco-Initiative members).
- → - The construction work on the two composting/worm beds and the five household composting/vegetable beds (started during last workshop) had all been completed. All work had been done to an excellent standard.
- → Four additional beds had been added : one composting/worm bed and three household composting/vegetable (tree) beds. All work had been done to an excellent standard.
- → 23,000 worms had been introduced through Eco-Initiative participants to the first composting/worm bed.
- → 2,000 worms had been introduced through Eco-Initiative participants to the first composting/vegetable (tree) bed.
- → Natural worm movement into all the beds had taken place, and all beds were inhabited by worms in good visible numbers.
- → All the lodge kitchen waste had been successfully handled for the three month period (December, January, February). This had been done in a three month cycle utilizing each of the 11 beds once.
- → Indigenous tree seedling planting had taken place through direct planting of wild seedlings into the first composting/worm bed and

three household composting/vegetable (tree) beds (beds 1, 3 and 6). All seedlings were healthy and growing well.

- → In emptying and assessing the three worm/cocoon tent incubators it was evident that the cocoon hatching was slow and irregular despite the good conditions. However the worms introduced had been growing and breeding well. There had been no predator problems within any of the incubators.

Certificates Awarded

Two certificates were awarded:

1. Tyson Mwaza was awarded an Extraordinary Certificate for his outstanding work on the Mfuwe Lodge site, as well as for his excellent community training and mobilization work. Here he had shown persistence and dedication in working on all 3 sites. He had also actively primed participants at 3 additional village sites.
2. Shadreck Zulu was awarded a Participants certificate for his diligence in transporting the lodge kitchens waste to the site daily, and for his efforts in seeing that all waste was disposed of on-site in the correct manner.

Additional Participant Registrations:

- Mfuwe Lodge was undergoing a major refurbishing exercise. As a result new participants that registered were largely made up of the workers from the Lupande community employed by the building teams.
- Thirty two new participants registered during the course of the workshop, when the CSA team was available on site in the Outreach Centre early every morning before construction work started.
  - → CLIFFORD TEMBO MSORO
  - → BEDENIGO BANDA
  - → DICKSON ONDIA
  - → JAMU NLOBVU
  - → MULENGA PHIRI
  - → ISAAC ZULU
  - → MAX MBAO
  - → MOSES ZULU
  - → SHADRECK NLOBVU
  - → BOYD PHIRI
  - → LUCKY NYENDWA
  - → DICKSON NEWA
  - → MIKE CHIBANGA
  - → DANIEL LIYONDA

- → PEARSON PHIRI
- → STEVEN PHIRI
- → MISEAL NGOMA
- → DAVID PHIRI
- → ALICK GAMA
- → RAPHAEL ZULU
- → LAWRENCE NGWERI
- → EZEKIEL PHIRI
- → JOFFIY ZULU
- → DAVID PHIRI
- → SAM BANDA
- → INNOCENT MBEWE
- → JOHN NKHOMA
- → MABEKA ZIMBA
- → KEPHIAS PHIRI
- → CHARLES NJOBVU
- → TAZA MTONGA
- → CHRIS BOTHA

After the completion of the second workshop tour to South Luangwa/Lupande the Mfuwe Outreach Centre has attracted a total of 86 registered Eco-Initiative participants.

Workshop Site Work Undertaken

1. Worm Management
2. Indigenous Tree Seedling Production
3. Unit Modifications
4. On-site Training

Worm Management

The 3 worm/cocoon tent incubators were emptied, and all the worms, coccoons and housing/composting material from these incubators was transferred to the central “heart” area of the forestry/vegetable-indigenous tree nursery. With this unit also serving as an open worm conservancy, it provided ideal conditions for the worms. This includes unlimited food, ideal moisture conditions and all other natural “soil-life” – the insects and all the micro-organisms (micro-fauna and flora). Such conditions naturally exist in above and below ground fertile soil ecosystems, where worms thrive and function in association with all the life the damp soil hosts.

Indigenous Tree Seedling Production

- All the wild indigenous tree seedlings that had been transplanted into the first composting/worm bed and three household composting/vegetable (tree) beds, were translocated into the forestry/vegetable-indigenous tree nursery. This was done by removing the seedlings from the bed and transplanting them into plastic seedling sleeves and translocating these potted seedlings into the forestry/vegetable-indigenous tree nursery.
- During the course of the CSA visit, the indigenous tree seedling planting exercise continued in the Outreach centre. On a daily basis, when time permitted, seedling pots were filled with compost from the worm units and positioned within the forestry/vegetable-indigenous tree nursery. Again, when time permitted these pots were planted out to indigenous seedlings transplanted from the wild.

Unit Modifications

- Household composting/vegetable (tree) bed five was converted into a 3 square meter household composting/worm bed. This will now serve as a demonstration model for the standard CSA household composting/worm bed in Eco-Village development.
- The original household composting/vegetable (tree) beds six and seven were consolidated into one 3 square meter bed. This will now serve as a demonstration model for the standard CSA household composting/vegetable (tree) bed in Eco-Village development. (All the first household composting/vegetable (tree) beds built in the Outreach Centre were units smaller than the now standard size of 3 square meters).
- Composting/worm bed two was modified and converted into a larger scale twin worm windrow composting unit.

On-site Training

- To enhance the Eco-Initiative Community Eco-Village Development Program, CSA, in association with Mfuwe Lodge, employed an assistant to help Tyson with his expanding work program both at the Outreach Centre and in the Lupande district.
- The worker employed was Mabaker, who, during the course of the CSA visit, started a CSA on-site training course at the Outreach Centre. In addition Tyson was given on-going lessons and coaching at the Outreach Centre throughout the CSA visit.

SITE 2 – Chiwawatala School

Assessment

- Post-workshop the household composting/worm bed had been worked on, and the surrounding composting trench had been completed and filled with composting material. The bed was damp with the moisture conditions good for worms. Good mulching of the in the bed had been done.
- The area housing the Eco-Initiative vegetable garden units had been adequately fenced using a grass fence.
- The two household composting/vegetable beds built during the last workshop had very poor vegetable stands and were a major disappointment. Again the overall impression was one of minimal maintenance and no attention to neatness or detail.
- Bed construction on the forestry/vegetable garden nursery that had been marked out during the previous workshop had been completed. The standard of work done was good, although the vegetable crop growing was sparse with minimal maintenance and signs of neglect.
- Three additional household composting/vegetable beds had been built post-workshop, and one did have a reasonable stand of spinach. In shape and size these new beds did not conform with the original two beds built.
- The worm bins were not seen, and no worm purchases were made from any of the course participants.

In assessing the site, the decision was made not to award any of the participants certificates due to the lack of effort put in.

Site Visits

- On Wednesday 3 March CSA met briefly with Mr. Zulu, the Headmaster and arranged to meet all the participants on site on Friday afternoon 5 March.
- At the meeting on Friday 5 March the turn-out was disappointing, with only two participants present. However four new villagers attended with a request to join the school team (as they lived close by and drew all their water from the school bore-hole). CSA suggested that the villagers seek clearance from the Headmaster to join the school group.
- At the Friday 5 March meeting the following equipment was handed over to the school : 1 wheel barrow, 1 watering can, 1 pick, 1 hoe and 1 rake.
- Tuesday 9 March CSA returned to the school to see if a decision had been made to accommodate the new villager members. No decision had been made, and without anyone to assist with expansion work, development on the site was postponed.
- Wednesday 10 March CSA returned to the school to see if a decision had been made to accommodate the new villager members. No decision had been made, and without anyone to assist with expansion work no site

development was possible.

Remedial Action

- On Friday 12 March, the CSA team, together with Andy Hogg and Haggai visited with the Headmaster to express their disappointment in the vegetable gardens.
- A productive meeting took place, with assurances from the Headmaster that the situation would be rectified. In addition, a new group of villagers would be permitted to join the school program and build their own gardens at the site.
- CSA agreed to continue fully supporting the school program, and provide immediate assistance through Tyson to supervise and guide the project forward.

SITE 3 – Mambwe Village

Assessment

- The CSA team visited Mambwe Village on Wednesday, 3rd March 2010 to assess the progress and site development. On arrival at the site, the reception from all the participants was amazing. The site was thriving, and all the participants were extremely proud of their achievements. They were all highly motivated, are were extremely keen to continue moving forward. As a group they had done a forward planning exercise, and were all ready to take this forward.
- Inside the protected Forestry/Vegetable Garden Nursery the plant growth was vigorous, and good vegetables and herbs had been produced (tomatoes, pumpkin, cucumber, spinach, butternut, melons and egg plant). An excellent stand of marigolds had been established around the outer perimeter of the Nursery screen-house.
- All 8 household composting/vegetable beds had been productive, and the plants here were mostly at the end of their producing stage. Good but heavy rains had occurred in the area, and pleasingly the site location had been spared of flooding. However the small size of the beds was not ideal under the heavy rainfall conditions, and the re-building of these into larger and more substantial beds was a priority.
- There had been good natural movement of wild worms into the garden site.
- The participants had all chosen to keep their worm bins at their own homes, where they had been fully utilized and were full of wild worms they had collected. In addition, the participants had supplied the Conservation Outreach Centre with 23,000 worms. (The number of worms supplied by each participant had been recorded).

Integrated Vermiculture and Organic Growing Certificates were issued to all of the participants.

- Extra-ordinary Certificate

  Peter Zulu
- First Class Certificates

  Francis Njobvu
  Margaret Ngoma
  Rhoda Zul
  Jessey Kamaga
  Kefasi Kachikoti
  Ristar Bada
  Stanley Phiri

- Second Class Certificates

  Agness Nyangu
  Oliver Katindika
  Chipawgala Zulu
  Johnson Ngoma
  Anna Mbewe

- Participant Certificates

  Tylon Zulu
  Abuid Mbewe
  Yolamu Zulu
  Rachel Zulu
  Egester Banda.

The certificates were presented at an on-site ceremony, officiated by Andy Hogg and Haggai, both members of Eco-Initiative Sponsors Team – Zambia.

Second Phase Re-Inforcing Plan

The participants had a proposal for CSA on expansion for their program, which CSA fully supported :

- The Forestry/Vegetable Garden Nursery Screen House would be used solely for producing team vegetable seedlings for transplanting into the villagers individual beds. It would also be used as a forest nursery prodcing indigenous tree seedlings for re-forestation programs.
- The 8 existing composting/vegetable beds would be increased in size to the standard 3 square meter bed recommended by CSA. In addition all available space within the fenced garden site to mark out the would be put to additional beds.

- A larger scale commercial vegetable garden be established. It was agreed that Peter Zulu's well site would be a suitable and readily accessible area, that was in close proximity to the existing garden site just established.
- In addition to the teams plan, CSA suggested building a household composting/worm bed at Peters home which was situated adjacent to the new vegetable garden. This would be the starting development of a worm and organic fertilizer "factory".

Second Phase Implementation Process

As a result of the participants proposals and CSA ideas, the following implementation process started during the CSA visit :
Existing Garden Site

- The Forestry/Vegetable Garden Nursery Screen House was put aside solely for producing team vegetable seedlings for transplanting into the villagers It would also be used as a forest nursery prodcing indigenous tree seedlings for re-forestation programs. This process would take place once the existing vegetable crop had been reaped.
- After deciding on the most suitable and practical bed size and lay-out, work on upgrading and re-aligning the existing beds started. 3 new standard 3m x 3m composting/vegetable beds were built, with more planned to fill up the fenced site.
- A 3m x 3m household composting/worm bed was constructed at Peter Zulu's homestead. This unit was housed under a "gazebo" cover, and enclosed with palm frond walls. Growing Marula tree truncheons were used as poles for supporting the "gazebo" roof and wall.
- Within this covered unit, a worm/coccoon tent incubator was positioned on top of the bed. This was filled with the standard composting/worm mix, and 23,000 worms were introduced by the team. These worms had been collected from the wild, and had been previously housed in the participants worm bins.
- All the participants also chose to house their worm bins within the "gazebo" once these has been re-filled with the composting/worm mix. Participants then brought in more worms to fill their bins.(The Lupande villagers provided the Eco-Initiative a total of 75,730 worms for the organic gardening/tree production process. CSA paid 2cents (US$) per worm, issuing each active participant 2000 worms as seed stock).
- A larger scale commercial vegetable garden was established in the fields adjacent to Peter Zulu's well site. Here a shade-house 6,5 meters x 3,5 meters in size was built and housed 8 standard 3m x 3m composting/ vegetable beds. All 8 beds were made up during the course of the CSA visit. (These were due to be planted once vegetable seedlings that were to

be grown in seedling crates were ready)

- The team were issued with 8 seedling crates, each with shade-clothe covers. These were to be used to produce seedlings that would be transplanted into all the beds in the original and new sites. A good supply of assorted vegetable seed was supplied to the team. (The decision was made to opt for seedling production/transplanting rather than direct seed sowing).
- Indigenous tree seedling production was initiated, and the process of transplanting wild tree seedlings into plastic seedling pots was started. These pots were housed in and around the worm "gazebo".

NEW SITES

Kanyantha Village

- A group of villagers from Kanyantha Village had expressed enthusiastic interest in joining the Eco-Initiative. Villagers had visited Tyson and both the Mfuwe Outreach Centre and Mambwe Village sites. With a request to join the Eco-Initiative process, CSA met with this group and agreed to include the Kanyantha Village group in the workshop programme.
- At a meeting held in the village On Friday, 5 March, CSA were introduced to the Kanyantha Group. After Andy Kockott , outlined the concept of the Eco-initiative, participant registration got under way.
- Although the plan was a starting group of 14 participants, forty eight participants registered. The decision to do this was made due to the fact that gardens could be built and completed with natural materials/ resources readily available and abundant in the area. As a result CSA would assist with building one household composting/worm bed and one 8 bed shade house unit. Thereafter the group would need to help themselves as much as possible, with support from CSA within the budget constraints.

Participants Registered :

- → NE MWANZA
- → LOVENESS NGOMA
- → ARNOLD ZULU
- → EUNICE MBEWE
- → LOVEMORE M DAKA
- → STELAI LUTANGA

- → PETER MWANZA
- → MARY ZULU
- → JOSAINE MWANZA
- → INESS CHIBANTILA
- → MUMBI CHILEKWA
- → EDINESS MBUZI
- → CHANDA MULENGA
- → STELIA BANDA
- → BWALA NYEDIDWA
- → MADILEEN NKHOMA
- → MARY CHULU
- → REBECCA DAKA
- → LEONARD ZULU
- → MUSA D BANDA
- → RUTH CHULU
- → BEATRICE MWANZA
- → ALICK MWANZA
- → CHIBALE M BELT
- → ESTER ZULU
- → JENALA BANDA
- → NELIA BANDA
- → DAISI NKHOMA
- → ELINA SAKARA
- → MARY BANDA
- → JOSEPHINE NJOBVU
- → ELINA PHIRI
- → CHARLES BANDA
- → CATHERINE MBO
- → VERONICA MWANZA
- → BWALYA NKHOMA
- → ANNA BANDA
- → HILD NACHINGA
- → BRIDGET MWALE
- → BEATRICE NAKAWALA
- → ESTELE MWALE
- → MATILDA BANDA
- → NGOZA NJOBU
- → MATRIDA MWALE
- → ESRA MWALA
- → CHILUBA NJOVU
- → CATUBET MWALE
- → JOSPHINE NAWTONGWE

- ➵ On Saturday, 6 March, discussions were held between the CSA team and the villagers as to the ideal site for the workshop to take place. Equipment was delivered to the village, which included; 1 wheel barrow, 1 gazebo unit, 1 worm/coccoon tent incubator, 1 watering can, 1 pick, 1 hoe, 1 rake and 14 worm crates.
- ➵ A 3m x 3m household composting/worm bed was constructed in close proximity to the Kanyantha Village bore-hole. This unit was housed under a “gazebo” cover, and enclosed with reed walls. Growing Marula tree truncheons were used as poles for supporting the “gazebo” roof and wall.
- ➵ Within this covered unit, the worm/coccoon tent incubator was positioned on top of the bed. This was filled with the standard composting/worm mix, and 600 worms were introduced by CSA.
- ➵ Tyson was left to mark out the 8 bed shade house unit, and oversee bed construction. CSA would then facilitate Tyson keeping the building and planting process moving forward until CSA’s next visit.

Old Lupande Village

- Villagers from Old Lupande had visited Tyson and all 3 original Eco-Initiative sites. Due to demand and enthusiastic interest, CSA included the Old Lupande Village into the Eco-Initiative process.
- ime constraints and other CSA commitments did not allow for a full workshop to be conducted during the CSA visit. However the workshop process was initiated and the following was carried out :
  - → CSA introduction to the Eco-Initiative process and participant registration.
  - → Although the plan was a starting group of 14 participants, 34 participants were registered. Again this decision was made due to the fact that gardens could be built and completed with natural materials and resources readily available in the area. The group would therefore need to help themselves as much as possible, with support from CSA within the budget constraints.
  - → CSA marked out and supervised the construction of one household composting/worm bed, and also provided 1 “gazebo” unit to enclose and protect the bed.
  - → When time permitted Tyson would mark out the 8 bed shade house unit, and oversee bed construction. CSA would then facilitate Tyson keeping the building and planting process moving forward until CSA’s next visit.
- Participants Registered :
  - → WILLIAM BANDA
  - → SAMSON NGOMA
  - → BRENDA MYNANZA
  - → ESTER PHIRI
  - → ESNAT PHIRI
  - → ISAAC PHIRI
  - → KAMWENDO NGOMA
  - → SAIMON NGOMA
  - → MONICA NYIRENDA
  - → SELINA NJOBVU
  - → LEBETINA TEMBO
  - → EVELINA BANDA
  - → BETHAN PHIRI
  - → GRACE MWANZA
  - → MARTHA PHIRI
  - → JOHN PHIRI
  - → NGOZA TEMBE
  - → HELLEN BANDA
  - → ROYCE TEMBE
  - → KINGS MWANZA
  - → JOSEPH SAKALA
  - → VICTORIA MWANZA
  - → EDINA BANDA
  - → MISOLI PHIRI
  - → ESTER BANDA
  - → LEONARD ZULU
  - → JUSTINA NTUTUMA
  - → VENNAN MSUMKO
  - → SUSAN PHIRI
  - → GIFT ZULU
  - → GERTRUDE PHIRI
  - → AVALESS MBEWE
  - → MARTHA PHIRI
  - → TESSA BANDA

SITES TOUR

On 12th March - the final day of the CSA visit - Andy Hogg and Haggai visited and inspected all the sites. During this tour, all participants qualifying for certificates were presented their certificates by Andy Hogg (MD – Zambia – Maji Africa).

Andy Kockott

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