UMOJA ORPHANAGE KENYA

RAWCS project number: 51/2011-12

Registered Charity Number: CH2110

VOLUNTEER REPORT

JANUARY, 2015: TEAM D

Compiled by Umoja Team Member Cathy Booth

With much thanks to Permaculture Design Course sponsored by

BASE TITANIUM

1. **INTRODUCTION**

   This report is provided by Volunteer Team Leader Cathy Booth (Umoja Founder and Director) for Ian Lomas – Project Volunteer Coordinator, Western Region, RAWCS. E-mail: mopoke@westnet.com.au & Colin Forbes, Base Titanium Mining Company, Kenya.

2. **BACKGROUND**

   A need for an orphanage/schooling facility was established during volunteer visits to Kenya and Tanzania by Cathy Booth and several of Cathy's supporting associates during 2010/11. Contact with the various departments of the Government of Kenya was made and full approval obtained to operate in the KWALE District which is just South of Mombasa on the Kenyan Coast, East Africa. A parcel of land next to the township of UKUNDA was purchased and the early planning done. A caretaker/storeroom building was completed in 2012 and construction of a well, guttering and water tank connected to caretaker's house. In 2013 the 15 acre perimeter fence was completed by Australian volunteers and Kenyan locals who were trained in fencing.

3. **VOLUNTEER TEAM**

   1 team member, including one team leader, visited Kenya from December 30th 2014 – 13th January 2015. Both volunteers were rotary members.

Cathy Booth	cathy@umojahome.com	Rotary E-Club NextGen
Sharon Kinraid	sharon@netspeed.com.au	Tennant Creek Rotary Club

4. **OBJECTIVES**

   As the Umoja project is still in the early stages of construction and continuing to fundraise to complete first children's home, the purpose of this trip was to continue with the self-sustainability part of the project which was funded by Base Titanium Mining Company, and achieve the following objectives:

a) ***Begin a tree nursery****:* plant tree seeds (which can be later harvested to sell wood & for medicinal purposes).

b) ***Continue to plant a food forest****:* plant a variety of fruit and nut trees to create an edible garden to edible garden to feed our future children and staff and sell surplus to the surrounding community. Plant further crops and create a seedling nursery.

c) ***Improve soil fertility:*** create compost piles for later distribution into the soil.

d) ***Complete composting toilet:*** finish construction which began in April 2014.

e) ***Provide training and employment opportunities for locals:*** empower locals with farming skills to help them break the cycle of poverty and provide for their families through employment on the project.

f) ***Experience the local Kenyan situation*****:** visit towns of Mombasa and Ukunda to assess housing and living conditions, tourist attractions, beaches and safari parks.

g) ***Visualise the need:*** visit Kikambala Children's Feeding Station, local village, local shopping centres, local care efforts and Maasai village.

h) ***Visit one other successful orphanages/school:*** observe operations and compare ideas and strategies - the Good Life Orphanage.

i) ***Assess feedback and advice:*** create recommendations for the project and volunteer program.

5. **LOCAL SITUATION**

Mombasa is the main city with a very busy harbour and it is the only entry point for Kenyan and Ugandan imports and so the Mombasa – Nairobi highway carries large numbers of trucks.

There are numerous beach resorts along this section of the Kenyan Coast from Malindi, North of Mombasa down towards the Tanzanian border.

Ukunda is a larger town, approximately thirty minutes South of Mombasa and servicing the nearby Tiwi and Diani Beach Resorts. This part of Kenya is approximately 3^{o} south of the equator and therefore has storms, rain seasons and dry seasons, but is immune from cyclones being so close to the equator.

There is a developed road half a kilometre from the beach and another Main Highway driving south towards Tanzania a further 3 km inland. Diani Beach Village is on the beach road and Ukunda is on the main south highway. In Real Estate terms, the beach strip- between the beach and the first road (**Beach One**) is top value and contains the 5 star resorts.

Beach Two – between the two roads – contains the secondary resorts and other businesses and **Beach Three** is the strip further from the sea and west of the main highway south.

Ukunda is on either side of the main road. The land purchased for the Umoja Orphanage is just west of the Main Highway and Ukunda and in Beach Three. The Kenyatta University has developed a sizeable annexe and farm area nearby also in Beach Three. There is also a new 2 story secondary school built on the way to the orphanage land.

African housing in Ukunda is mainly in single storey unreinforced concrete masonry with the building blocks made of various grades and dimensions of stone coral, mortared together and rendered with sand-cement mix. A residence may be one or two rooms in such a building, and has a communal bathroom and toilet for the whole building.

The more affluent live in stand-alone houses on small plots of land.

Crime is mostly theft and all operations/houses have fencing in various forms from high masonry walls topped with broken glass to barbed wire and netting. If your land is unfenced then people commence other uses on it and it may take monetary compensation to move them off – even though you own the title.
Other than the beach resorts, most tourists come to Kenya for the wildlife in the National Parks. Safari drives through these parks range from 3 stars to 5 stars, depending on the accommodation and vehicle choice. There is a small game park just west of Ukunda at Shimba Hills about an hour drive from the Umoja Orphanage site, but the main Tsavo parks are 4 hours away and Amboseli (Mt Killimanjaro) 6 hours. Massai Mara is about 15 hour's drive from Mombasa. Other parks are nearer Nairobi, the capital which is the primary arrival airport for Kenya.

SELF-SUSTAINABILITY PROJECT AND VOLUNTEER TOUR STATISTICS

Umoja Children's Village – Ukunda is working towards self-sustainability. The Umoja mission is to build a self-sustainable children's village to enable us to generate our own income and food and reduce our dependency on donations. Kenya has a long history in sustainable agriculture, but like many places, the traditional knowledge is getting lost. This is why we have chosen to work with the Permaculture Research Institute of Kenya to incorporate Permaculture principles and techniques to create a self-sufficient environment that is resilient to climate change. By working harmoniously with the environment we can create a system that produces food and energy in a sustainable way. We can also empower the local community by providing training in Permaculture practices to operate their own sustainable food gardens to provide for their families. Setting up our self-sustainability project during this first stage of construction is crucial to the future of the Umoja Orphanage project and our on-going relationship with our neighbouring community.

- 34 local Kenyans including 7 women were employed each day to assist with agricultural tasks and be trained in permaculture practices sponsored by Base Titanium Mining Company.
- 3 female cooks were hired for the 5 day permaculture training course to feed lunch to participants.
- Locals from 2014 year returned to work on the project being hired casually.
- Helped feed approximately 900 children at the Kikambala Children's Feeding Station.
- Volunteer Sharon donated extra funds to purchase a 5000 litre water tank and concrete base for tank.
- **Appendix (a)** is feedback from the trainees after they completed the course, and in depth details of the Permaculture Design Course and what was planted.
- **Appendix (b)** Results of Feedback forms given to trainees at completion of PDC.

AUSTRALIAN VOLUNTEERS

NAME	DATES	VOLUNTEERING	HOURS WORKED
Cathy (Team Leader)	29th December 2014 to 29th January 2015 28 days @ 12 hours per day	Facilitating, purchasing, meetings, planting, mulching, moving materials, organising, photography, inventory, feeding station, observing best practice	336 hours
Sharon	31st December 2014 to 10th January 2015 11 days @ 8 hours per day	Planting, composting, mulching moving materials, supervision of locals, meetings, children's feeding station, observing best practice at Goodlife Orphanage	88 hours
TOTAL HOURS WORKED BY VOLUNTEERS			**424 hours**

KENYAN VOLUNTEERS

NAME	DATES	VOLUNTEERING	HOURS
Patrick	11 days @ 12 hours per day	Purchasing, meetings, water project, hiring workers, overseeing	132 hours
Rachael	4 days @ 6 hours per day	Planting, mulching	24 hours
TOTAL HOURS WORKED BY KENYAN VOLUNTEERS			**156 hours**

VOLUNTEER DAILY WORK

DAY 1 – ORIENTATION WEDNESDAY 31.12.14

- 3 Base Titanium Mining representatives on site. Mining company agreed to sponsor for all of training. Agreed on numbers who will be coming from around Lunga Lunga. Volunteer Sharon sat in on meeting.
- Orientated representatives and volunteer Sharon around the project and what we will be doing while she is here.
- Drove to Mombasa as we had no potting mix and can't buy in Ukunda, and we needed more trays. Purchased 30 trays to pot seeds.
- Hired 15 casual labourers to begin clearing vegetation near our waterhole for planting of crops
- New Year celebrations.

The casual labourers begin clearing the land around our water hole for planting of crops

DAY 2 – VOLUNTEERING ON LAND THURSDAY 01.01.15

- Potting 26 trays of seeds with 70 seedlings in each tray.
- Planted cucumber, corn, brown onions, pawpaw, shallots, lettuce, cabbage, cauliflower, broccoli, carrots, sunflowers, spinach, red and yellow capsicums, pumpkins & watermelons.
- Our casual labourers helped pot the seeds when finished slashing.
- Purchased meat, salt, tomatoes, potatoes, and maize flour for lunches – a good experience for Sharon to go shopping with me in Ukunda.
- Hired again 15 labourers to continue clearing vegetation near our waterhole for planting of crops, and to dig in preparation for planting.
- Hired local man Rama to slash around all around live fence around perimeter & around prior planted fruit trees.
- Milked cow

Planting our seeds, clearing around the waterhole and ready to collect mulch for compost heaps

DAY 3 – VOLUNTEERING ON LAND FRIDAY 02.01.15

- Planted banana saplings and arrowroot plants
- Prepared 4 garden beds
- Weeded existing garden beds
- Removed eggplant plants that are now expired and prepared garden
- Hired again 15 labourers to continue clearing vegetation near our waterhole for planting of crops, and to dig in preparation for planting
- Hired local man Rama to slash around all around live fence around perimeter & around prior planted fruit trees
- Milked cow

Collecting mulch, weeding, preparing garden beds for Permaculture Design Course

DAY 4 – VOLUNTEERING ON LAND SATURDAY 03.01.15

- Prepared 4 more garden beds
- Weeded existing garden beds
- Gathered requirements for compositing
- Removed okra plants that are now expired and prepared garden
- Hired again 15 labourers to continue clearing vegetation near our waterhole for planting of crops, and to dig in preparation for planting
- Hired local man Rama to slash around all around live fence around perimeter & around prior planted fruit trees
- Milked cow

Planting our seeds, garden bed preparation & clearing around the waterhole

DAY 5 – VOLUNTEERING AT GOODLIFE ORPHANAGE AND KIKAMBALA CHILDREN'S FEEDING STATION SUNDAY 04.01.15 & FIRST DAY OF PERMACULTURE DESIGN COURSE

Today was the beginning of our permaculture design course training for 34 local Kenyan villagers surrounding the Umoja Project & volunteer Sharon Kinraid and myself. We once again contracted 2 Kenyan Permaculture Trainers Joseph & Priscilla from Permaculture Research Institute Kenya to train the local villagers. The course was sponsored by Base Titanium Mining Company which is situated approximately 40km from Umoja Project.
We were exceptionally pleased to see the return of 12 people who had participated in our first course in April 2014, plus a large turn up of villagers keen to learn more. We had to turn away many who had come to learn each day, as we could not take any more.

It was also a huge day for Sharon and myself, as I organised the group, then left the course to travel to Goodlife Orphanage & school for a guided tour and volunteer with the babies, and help feed approximately 900 children at Kikambala children's feeding station and return to the course in the afternoon until late.

COURSE PROGRAM

- Permaculture- Why don't you practice farming?
- What are the problems?
- Solutions
- Discussions
- Review of day
- Visit by delegates of sponsors – Base Titanium Mining Company
- Hired Rama to slash around all around live fence around perimeter & around prior planted fruit trees

Visiting Kikambala Childrens' Feeding Station, Our Permaculture Trainers, and the course begins

DAY 6 – VOLUNTEERING ON LAND **<u>Permaculture Design Course</u>** **MONDAY 05.01.15**

We had to turn away again today many more villagers who had come to learn, but we could not take any more.

COURSE PROGRAM

- What is permaculture?
- Permaculture design principles
- Permaculture ethics
- Element analysis
- Group discussions
- How to make compost
- How to make liquid manure
- Review of day
- Visit by delegates of sponsors – Base Titanium Mining Company
- Hired Rama to slash around all around live fence around perimeter & around prior planted fruit trees

Theory and practicals, how to make compost, group work and beginning our tree nursery

DAY 7 – VOLUNTEERING ON LAND **<u>Permaculture Design Course</u>** **TUESDAY 06.01.15**

We had to turn away again today many more villagers who had come to learn, but we could not take any more.

COURSE PROGRAM

- Permaculture theory
- Grafting of citrus
- Permaculture design
- What are genetically modified organisms?
- Disadvantages of genetically modified organisms
- Practicals
- Review of day
- Visit by delegates of sponsors – Base Titanium Mining Company
- Hired Rama to slash around all around live fence around perimeter & around prior planted fruit trees

Theory, citrus grafting, beginning our tree nursery, sharing after group work

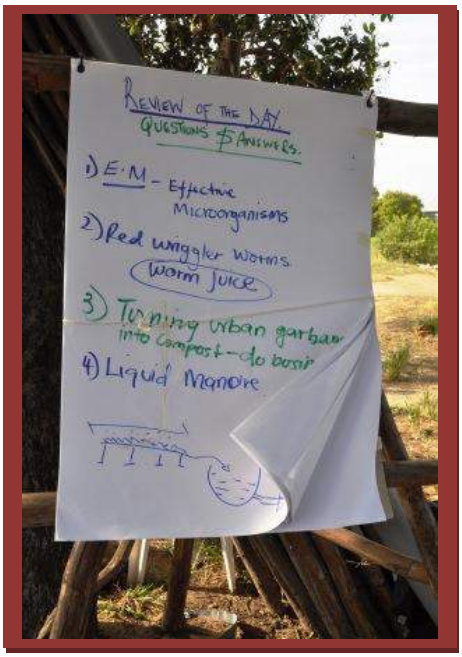
DAY 8 – VOLUNTEERING ON LAND **<u>Permaculture Design Course</u>** **WEDNESDAY 07.01.15**

We had to turn away again today many more villagers who had come to learn, but we could not take any more.

COURSE PROGRAM

- Vegetative propagation
- Tree nursery establishment
- Seed saving
- Seed bulking and banking
- Formulas
- Seed collecting and harvesting
- Farm zones
- Practicals
- Review of day
- Visit by delegates of sponsors – Base Titanium Mining Company
- Hired Rama to slash around all around live fence around perimeter & around prior planted fruit trees

Theory & practicals

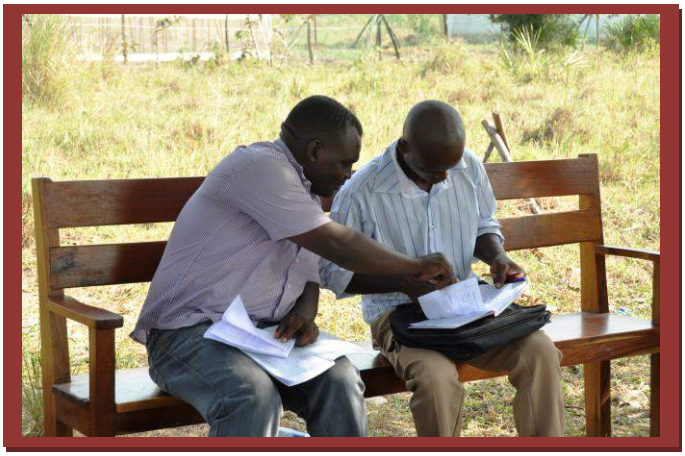


DAY 9 – VOLUNTEERING ON LAND **Permaculture Design Course** **THURSDAY 08.01.15**

We had to turn away again today many more villagers who had come to learn, but we could not take any more.

COURSE PROGAM

- Planted Arrowroot, beans (legumes), cassava, pineapple, bananas
- Watered Compost, tree nursery, food forest trees, green grams (cow peas)
- Theory – insecticide management
- Practical - making bio-pesticides
- Experiment - moringa seeds ground up into dirty water – cleans water, but not bacteria in water
- Review of day
- Visit by delegates of sponsors – Base Titanium Mining Company
- Hired Rama to slash around all around live fence around perimeter & around prior planted fruit trees



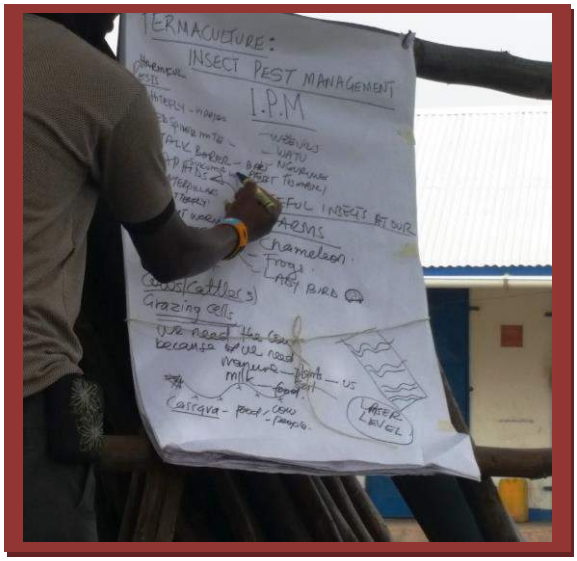
Planting arrowroot, visit from Base Titanium delegate, identifying pests, making bio-pesticides, moringa seed experiment (purifying water) & helping each other

DAY 10 – VOLUNTEERING ON LAND **<u>Permaculture Design Course</u>** **FRIDAY 09 .01.15**

We had to turn away again today many more villagers who had come to learn, but we could not take any more.

COURSE PROGRAM

- Starting a permaculture garden
- Home garden permaculture principles - Diversity – grow flowers, small medicinal plants & herbs amongst other vegetables
- Energy planning - Make swales or terraced gardens on sloped land to catch water
- Energy recycling - Compost all of gardens
- Scale - Start with a few small garden beds and make more over time
- Biological resources - Use ducks or chicken tractors for pest control and fertilizing
- Multiple functions - Plant living legumes fences that provide nitrogen, mulch, animal fodder and structure for vines
- Observation - Watch for pests and for predators (eat pests)
- Permaculture & Nutrition & types of gardens – Kitchen garden, Double dug bed, 5/9 hole, permaculture home gardens, types of kitchen gardens
- Compost toilets and their benefits
- Use of bio-pesticides
- Marketing organic products
- How do we identify pests?
- Practicals
- Filling out of feedback forms
- Completion of course and handing out of certificates
- Celebration and slaughtering of goat
- Visit by delegates of sponsors – Base Titanium Mining Company
- Hired Rama to slash around all around live fence around perimeter & around prior planted fruit trees



Kitchen gardens, planting citrus, completing a group task, planting cow peas, looking at harmful pests on crops, theory on insect pest management

SUMMARY OF OBJECTIVES

- ✓ ***Begin a tree nursery****:* plant tree seeds (which can be later harvested to sell wood & for medicinal purposes).

  The Umoja Children's Village –*Ukunda* has a perimeter fence made of cemented wood poles and barbed wire, and two entry gates, around the entire 15 acres. The purpose of this fence is to mark the boundary and stop animals grazing on the land. The Permaculture consultants refer to this as a 'dead fence' as it doesn't use anything from nature or add to the sustainability of the land.
  A tree nursery of 78 moringa trees were propagated. The moringa tree is a tree widely used in Kenya for its medicinal purposes. Permaculture participants created the potting mix and planted the seeds. The seeds were covered in mulch and watered.

- ✓ ***Continue to plant a food forest****:* plant a variety of fruit and nut trees to create an edible garden to feed our future children and staff and sell surplus to the surrounding villages. Plant further crops and create a crop seedling nursery.

  Umoja Children's Village – Ukunda will be a home for children and staff that need a well-balanced diet. Food will be produced at Umoja in food forests and permaculture gardens. Umoja's goal is to have a food forest to supply its needs in a range of diverse food that is needed to attain self-sustainability to our project. The goal of the Umoja Food Forest will be to bring the richly varied community together by fostering a

Permaculture Tree Guild approach to urban farming land stewardship. By building a community around sharing food with the public we hope to be inclusive to all in need of food.
Fruit tree seedlings that included citrus (oranges, lemons), paw paws, guava, avocadoes and coconut were planted during the training 5 days. Around our waterhole land was cleared and dug up and arrowroot, a variety of legumes, sweet corn & sunflowers were planted. We planted seeds of cucumber, corn, brown onions, paw paw, shallots, lettuce, cabbage, cauliflower, broccoli, carrots, sunflowers, spinach, red and yellow capsicums, pumpkins & watermelons and were able to transplant most of these out into our prepared gardens after 8 days.
The locals were able to reproduce the planting techniques they had learnt in practicals in permaculture design course. They quickly picked up the process and communicated to trainer that they would use the layered planting techniques (upper and lower level plants) to make an edible garden in their community.

- ✓ **Improve soil fertility: create compost piles and banana circles.**

Ensuring soil fertility is essential for a blossoming garden. Soil fertility can be improved or maintained by composting, mulching, planting nitrogen fixers and making liquid manures.
Joseph demonstrated to permaculture training participants how to create **a banana/pawpaw circle.** This is an excellent way to grow fine fruit and root vegetables while using up excess water and organic waste. A lot of water was being wasted underneath the water tank. The bananas and pawpaws were planted around the edge because they grow well in a circle. These plants will thrive on the nutrients from scraps and recycled water.

Priscilla and the locals created **two compost piles** during the training. The piles were created by alternating thin layers of 'greens' (moist materials like green leaves and grass that are high in nitrogen and rot quickly) with 'browns' (dried materials like leaves and branches that are high in carbon and rot slowly) on top of a pile of branches. Soil and water were also used to keep the compost moist. A long stick placed in the centre of the compost can be used the test the temperature of the pile to know when it is ready to use.
After Priscilla and Joseph had left the locals created two more piles, which demonstrated they were able to recreate the Permaculture techniques they had been taught during the training. The locals also promised to create compost in their own home compounds to improve the fertility of the soil in their communities. One local has been employed to come turn the compost piles and use the compost to mix with the soil for further planting.

- ✓ ***Complete composting toilet:*** finish construction which began in April 2014

The composting toilet was further worked on by the volunteer and also the permaculture trainees, but extra funds had to be added to complete. A composting toilet and shower will allow us to turn human waste into fertiliser for the soil and recycle the grey water from the shower for plants. The toilet has been built close to the cow shed. This will make it easy to recycle both the waste from the toilet and the fodder from the cows. Their close proximity also allowed a water pipe to be connected to both structures from the water well.

- ✓ **Provide training and employment opportunities for locals: empower locals with farming and building skills to help them break the cycle of poverty and provide for their families.**

  There were many opportunities for locals to learn skills during the Umoja training week:
  Please see our daily timetable as to what locals learnt.
  Working together and training the local Kenyans was a **very** rewarding experience for our volunteer. Their work ethic and passion to get involved and try anything was very inspiring to us all. Sharon our volunteer was constantly amazed at the commitment, physical strength and long hours our Kenyan workers contributed to the project. Sharon also built very worthwhile relationships with the Kenyans. Their thirst for knowledge and initiative to learn as much as they could while we were there, despite language barriers shows the value and power of education for people who have been denied the opportunity to learn. Education is the key to breaking the cycle of poverty in the community and we are extremely proud to be contributing to this change whilst building long lasting relationships and potential employment to these trainees.

- ✓ **Experience the local Kenyan situation: visit towns of Mombasa and Ukunda to assess housing and living conditions, tourist attractions, beaches and safari parks.**

  Volunteer Sharon was able to witness the difficulties of living in a developing country in which our project has abject poverty. She experienced a range of living conditions of the local people while in Kenya.

- ✓ **Visualise the need: visit Kikambala Feeding Station, local village, local shopping centres, local care efforts and Maasai village.**

  Sharon visited Tsavo East,Tsavo West, and Salt Lick game parks a 4 day, 3 night safari experience. Sharon saw 4 of the big 5, unfortunately missing out on seeing a rhino as they are highly endangered.

- ✓ **Visit two other successful orphanages/schools: observe operations and compare ideas and strategies as the Good Life Orphanage and Footprints Orphanage.**

  Volunteer Sharon and myself travelled to Mtwapa on the north coast of Mombasa to visit out mentor Orphanage: The Good Life Orphanage. Irish owner Kevin was at the orphanage and gave Sharon a good tour around the project. Their orphanage houses 68 children and we were able to spend time with little triplet orphaned girls who were only 2 months old. Their mother had died in childbirth and there were another

5 brothers and sisters who also were orphaned. The orphanage project is managed by Kenyans trained in the skills to run such a facility.

She saw the two-storey accommodation the children live in and met the House Mothers and Aunties that care for the children—a style of care that Umoja hopes to emulate. She was also able to see their food garden and animal sheds to be able to compare to the use of our land and future plans. She was very impressed with this first-class facility and could see the potential of our project and where we hope to be in the future. Umoja Project has 12 more acres of land than the whole of Goodlife Orphanage facility.
We proceeded onto Kikambala Children's Feeding Station where we fed around 900 children, helping with the preparation and feeding. It was quite confronting and overwhelming to Sharon.

✓ **Assess feedback and advice: create recommendations for the project and volunteer program.**

Sharon could not think of any way we could improve the volunteer experience as she enjoyed every moment of it, organisation, volunteering part and safari segment.

WHERE TO FROM HERE IN 2015

- Preparation of September 2015 volunteer tour
- Apply for further grants for funding
- Continued public speaking
- Continued fundraising
- Follow up with Australian Company Base Titanium in Kenya in regards to train the trainer support for sustainable projects and training for selected community members who will then transfer their skills to their village and community
- Commencement of *Umoja Tour and Safari Company* which will generate its profits back into Umoja Orphanage
- Project contributing to self-sustainability
- Intake of our first children once children's home is complete
- Transport of container load of donations in kind to project from Australia
- Begin fundraising for our volunteer accommodation
- Complete landscaping design

The Umoja Vision is for countries to work together to create a self-sustainable children's village. We are now well on the way to not only providing food for future orphans and staff but also enabling an income stream from the sale of surplus meat, milk and produce.
The orphanage project is much more than the name suggests. It also provides employment opportunities for the local people. This in turn puts food on their tables, gives access to better health care for their family and builds self-esteem through their acquiring of new skills and feelings of personal empowerment. As volunteers I believe that in a small way on this volunteer trip that we have enabled individuals to help themselves a little to escape the cycle of poverty while working towards our self-sustainability. For us personally the most rewarding part of the volunteer program was working alongside the local people and witnessing the pleasure and excitement they got from developing their skills with us Australians.
Returning to the land after the safari finished and since returning to Australia, to see that the men & women had kept up their tireless work ethic and made much progress was simply inspiring. They were so proud of their work and this was immensely satisfying to witness.

Together we are achieving the extraordinary

CREATING A SELF-SUSTAINABLE CHILDREN'S VILLAGE

AND EMPOWERING A LOCAL COMMUNITY

THROUGH EDUCATION

APPENDIX A

PERMACULTURE DESIGN COURSE

5th – 9th January 2015

Participants

1. Mama Ibraim
2. Mama Sulimu
3. Mama Rashidi
4. Mama Ashimu
5. Mama Ali
6. Mama Saidie
7. Mohomed Ali
8. Salim Omari
9. Rama Saide
10. Mwana Tumu Hamisi
11. Hasman Rama
12. Mohamed Saidie
13. Rashid Idi
14. Nasoro Mamsuri
15. Nasoro Mamsuri
16. Omari Salim
17. Abdala Mohamed Mwateza
18. Hamisi Kode
19. Matano Saidie
20. Mohamed Juma
21. Matano Juma
22. Rashid Omari
23. Yasri Omari
24. Mzera Harrison
25. Saidie Saidie
26. Patrick Kea
27. Peter Kisima
28. Pius Malita Wgema
29. Abdala Ali Tumbu
30. Martin Klambona
31. Mohomed Omar Mzemu
32. Ramadhani Rashidi
33. Joseph Kinya
34. Kennedy Kinya

Others that came to watch at various practical sessions from around Umoja Orphanage Kenya Project

1. Hasibu Rashidie
2. Otieno Ognitu
3. Abdulah Hassan
4. Hamisi Salim
5. Mwinya Yusef
6. Hassana Mohomed
7. Sudi Mwasalo
8. Gilbert Moslu
9. Rachael Matasa

Day 1 – 5th January 2015

INTRODUCTION

Questions

Why don't you practice farming?

Answers

- Insufficient initial capital
- Lack of materials due to lack of diversity crop
- Land ownership – some don't have farms
- Insufficient knowledge in agricultural farming
- Family disagreements and lack of support from family members in this labour intensive activity
- Laziness
- Expensive inputs
- Disease and pest problems
- Lack of marketing knowledge

Solution

- Cohesion (self-help groups), merry go rounds to support each other and access funds from county governments (eg Vwezo funds) and other organisations
- Theory and practical lessons, permaculture
- Diversified farming
- Water harvesting and water use efficiency
- Creativity and value addition

Song

Klakulima ongezeni kitimo

Klananchi wote wawe na Africa born

- Planted sunflower seeds and arrowroot plants
- Review of the day

Day 2 – 6th January2015

WHAT IS PERMACULTURE?

A sustainable human system to fix our problems.

PERMACULTURE ETHICS

- Care of earth
- Care of people
- Care of surplus (money, knowledge/input)

PERMACULTURE DESIGN PRINCIPLES

- Observe and interact
- Obtain yield
- Creatively use & respond to change
- Use small & slow solutions
- Produce no waste
- Use & value diversity
- Catch & store energy

ELEMENT ANALYSIS – CHICKEN

Input	**Output**
Feed traps – house	eggs
Patching – food	meat
Security – rooster	manure
Grit – treatment	money
Water	insect control
	feathers
	reproduction

GROUP DISCUSSIONS

- Environmental challenges we face daily in our communities.
- Each group to write down answers & present to whole group
- Shida za mazingira tunayo kumbana nazo kila siku kwa jamii zetu

***GROUP* 2**

1. Farming skills
2. Deforestation – Shimba Hills (microclimate)
3. Lack of farm product – market (common crop)
4. Lack of funds to do water harvesting
5. Lack of commitment to learn (group work)

GROUP 3

1. Water shortage
2. Rubbish disposal
3. Lack of money
4. Lack of knowledge
5. Lack of seeds
6. A lot of insects / disease in crops
7. Deforestation
8. Burning of vegetation
9. Lack of farming equipment
10. Unnecessary use of chemicals

GROUP 1

1. Climate change – erratic rains
2. Poverty
3. Disease to animals, plants & people
4. Deforestation
5. Poor transportation- bad roads, no means of transport
6. Lack of knowledge & skills
7. Workforce – youth not happy to work – gone to urban centres

KNOWLEDGE IS POWER
UNTIED WE STAND, DIVIDED WE FALL

COMPOSTING

Why do we compost? To feed the soil, so soil feeds the plants, plants feed humans.

Ingredients

- Green matter
- Ash
- Dry matter (leaves, grass etc.)
- Water
- Top soil
- Thermometer
- Shaded site
- Twigs, straw
- Kitchen waste/organic

Method

1. Select the site where there is shade from too much sun, rain, wind
2. Loose the soil and level it
3. Lay twigs/straw
4. Add dry matter
5. Sprinkle water
6. Green matter to be decomposed
7. Add manure/fresh dung
8. Top soil
9. Ash (sprinkle for PH)
10. Re water the whole lot – repeat layering
11. Heap after layering
12. Turn every 21 days
13. Ready in 63 days

LIQUID MANURE

Ingredients

- Compost
- FYM (kuku mbuzi ngombe)
- Drum
- Stick
- Rope/sisal
- Water

Ready in 14 days

DAY REVIEW

1. E.M. effective microorganisms
2. Red wriggler worms (worm juice)
3. Turning urban garbage into compost – do business
4. Liquid manure

PETER KISIMA'S INSTRUCTIONS FOR GRAFTING

Vegative propogation -Why propagate?

To get a designed type of fruit tree, but short and manageable

Types of grafting

1. Grafting – wedge (v-grafting) Root stock + scion
2. Budding – side budding off. L Budding eg. Oranges
3. Layering
4. Cuttings

How to graft citrus trees

Need secators and scalpel

1. Cut inverted or straight "T" of root stock
2. Remove back partially
3. Cut a scion from required type of citrus (clean cut)
4. Insert scion into root stock carefully
5. Tie (wrap the scion into root stock leaving space for breathing)
6. Water the plant in case of drought
7. Cut the top part of the plant partially (root stock)
8. Be checking the condition of scion
9. If it gives a small healthy shoot (2-3 leaves) remove the tape

Day 3 – 7th January 2015

PERMACULTURE DESIGN – MUUNDO

- Zones & Sector Analysis

AIMS

- Understand the importance of zone sector & elevation
- Examine the correct placement of elements
- Understand the harvesting of natural resources

A-FRAME

- Swales – marked contours
- Sunken bed
- Double dug bed

WHAT ARE GMO'S? Genetically modified organisms (plants & animals)

DISADVANTAGES OF GMO'S

- Cost
- Seed problems
- Environmental damage
- Loss of health & markets
- Land damage
- Promote unsustainable mono culture
- Can pollute other indigenous seed varieties

VEGETATIVE PROOGATION

- Grafting
- Budding
- Layering
- Cuttings

TREE NURSERY ESTABLISHMENT

- Select site protected from stray animals, wind, sun & frost
- Good rich forest soil
- Water source
- Seed
- Potting bags
- Access path assured
- Design & zone nursery

SEED SAVING

What seed problems do we have?

- Unhealthy seeds/diseased
- Expired seeds
- Immature seeds
- Seed preservation
- Poorly producing seeds in 4th generation (subsequent generations)
- Hybrid from agrotect

SEED BULKING & BUNKING

Important for seed/food security & sovereignty

FORMULAR

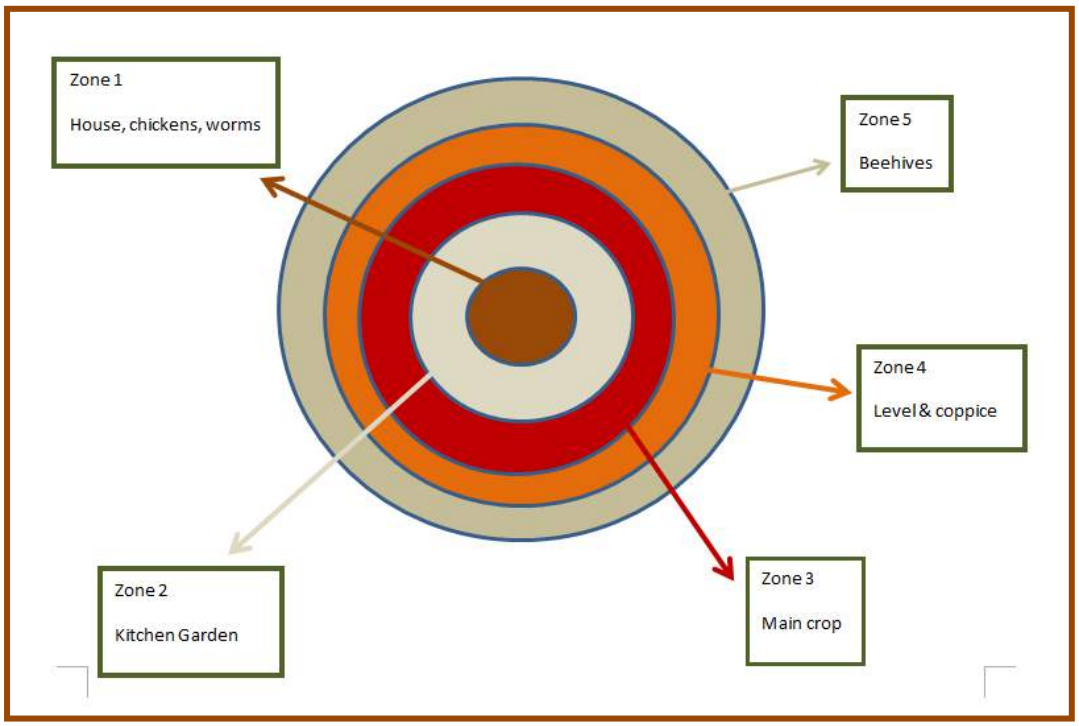
- Share seed knowledge
- Divide group activities
- Store seeds together
- Share seeds & benefits in cash/in kind

SEED COLLECTING & HARVESTING

- Seed preparation & cleaning
- Seed drying
- Seed storage
    - Air
    - Water
    - Dry

FARM ZONES

Farm analysis – planning your farm 5 zones



Planted

- arrowroot
- beans (legumes)
- cassava
- pineapple
- bananas

Watered

- Compost
- Tree nursery
- Food forest trees
- Green grams (cow peas)

Theory

- insecticide management

Practical

- making biopestides

Experiment

- moringa seeds ground up into dirty water – cleans water, but not bacteria in water

DAY 5 – 9th January 2015

Home garden permaculture principles

Diversity – grow flowers, small medicinal plants & herbs amongst other vegetables

Energy planning

Make swales or terraced gardens on sloped land to catch water

Energy recycling

Compost all of gardens

Scale

Start with a few small garden beds and make more over time

Biological resources

Use ducks or chicken tractors for pest control and fertilizing

Multiple functions

Plant living legumes fences that provide nitrogen, mulch, animal fodder and structure for vines

Observation

Watch for pests and for predators (eat pests)

Permaculture & Nutrition

If the doctors of today do not become nutritionalists, the nutrition of today will become the doctors of tomorrow.

Promote eat and remain healthy. Eg. plant guild of pumpkin (live mulch, zinc, vitamins), beans (nutrition fixer & protein), maize (carbohydrates & trellis)

Eat right. Practice value addition – for beans and pumpkin prepare pumpkin soup

Kitchen Garden

What is a kitchen garden? A garden around or near the kitchen. It is meant to supply family with vegetables, herbs, medicinal plants, herbs, teas plus earn income, protein, vitamins, fibre etc.

Double dug bed

Tools needed are Jembe, and spade.

5/9 hole bed

5 holes or 9 holes of companion planting, eg corn, pumpkin (for live mulch), and beans for climbing up stalk of corn.

Permaculture home gardens

The home garden plots and community garden plots are the basis for good health & self-sufficiency. It is good to start small and make a garden that works well, and is protected from animals, then expand your garden as you need.

Growing a wide range of vegetables, grains, nuts provide important nutritional needs for families, especially for children.

The most important time period for babies for good nutrition is when mothers are pregnant and for babies.

Good nutrition leads to:

- fewer health problems
- faster recovery after illness
- longer lives
- ability to learn
- concentration increases with good nutrition

Types of kitchen gardens

- Story gardens/bag gardens
- Hanging gardens (verandahs)
- Sunken beds
- Raised beds
- Double dug beds
- 5/9 hole garden

Compost toilets and their benefits

Use of biopesticides

Ingredients

1. Chillies – irritative to soft bodied insects – ½ kilo
2. Garlic ¼ - ½ kilo
3. Tephrosia veggolli seeds – ¼ kilo
4. Aloe leaves – ¼ kilo
5. Argettes minuta (Mexican marigold) – 2 stems
6. Leaves of spring onion – 1 plant
7. Eucalyptus leaves – ½ kilo
8. Tobacco
19. Leaves
9. Neem tree leaves (maurabaini)
10. Ashes
11. Soap
12. Water
13. Fire
14. Bowl
15. Knapsack 2000 400 20 litres
16. Motar
17. Panga
18. Sufuria

Method

1. Warm 10 litres of water
2. Chop all the ingredients
3. Put warm water in bucket + 10 litres of cool water
4. Add chopped materials
5. Close bucket and wait 30 minutes
6. Active ingredients are absorbed
7. Sieve solution and add another 10 litres of water cold
8. Soak bar soap in solution 20 litres
9. Mix in 20 litre knapsack sprayer
10. Spray
11. Do as soon as seedlings come up – once a week.

Other methods of controlling pests

- Biological control – use of other pests to control harmful pests
- Physical control – hand picking or spraying water with head of knapsack pressure
- Use of biopesticides

How do we identify pests?

Insect scouting

Practicals

Group 1

- Collect neem leaves
- Find chillies and pound
- Collect Mexican marigold

Group 2

- Seive ashes
- Warm water
- Pound garlic

Group 3

- Pound chillies
- Pound soap

Add all to mix and spray in greenhouse or plants outside.

REVIEW OF DAY

1. Starting a permaculture garden
2. Biopesticides – how to make and how to make use of
3. Use of milk to control blight, nutrient deficiency
4. Harmful pests (aphid) and beneficial pests (ladybird)
5. Marketing organic products – variety/biodiversity/organic markets
6. Preservation and storage of products (value addition)
7. Ash – cutworms – nutrilizes soil ph
8. Fill out feedback forms in either English or Swahili
9. Completion of course and handing out certificates

Personal interviews conducted on day 5 throughout the day by trainer Priscilla. These trainees showed great interest in the theory and practicals and were identified as good leaders for further training. "What are you going to do now with your knowledge?"

Martin Klamona

- Has root stock and will make an A-frame
- Waiting for budding and will try budding and grafting
- Will make a tree and vegetable nursery
- Will make a kitchen garden

Mohomed Juma

- Is already planning to grow pineapple, bananas, mangoes and oranges
- Wants to train others in the village
- Will plant tomatoes
- To try grafting
- Will mulch for water conservation
- Will establish kitchen garden for the family

Pius Mvema

- To apply the knowledge eg. Biopesticides
- To create a kitchen garden
- To train community members in the neighbourhood

Mohomed Ali

- To start a home garden
- To do composting
- To start a citrus tree nursery and scale up to include other trees
- Will train others and demonstrate my learning

Peter Kisima

- To start a permaculture home garden
- To include storey/bag garden
- Train my family, children and senior members
- Do seed selection, seed bulking and banking
- Improve family nutrition diversity
- Would like to train further

Rama Saide

- Now in standard 8
- To do composting
- Wants to train others

Yasri Omari

- Already now using the knowledge and will scale up and do more with my knowledge
- To train other people and apply practicals in my garden and to demonstrate to others
- Will try grafting, story garden

Ramadhan

- To start my own garden in my flat garden
- To plant beans not in line
- To start a nursery
- To try grafting, making bio-pesticides
- To train others also through example

Omar Salim

- Already have a garden with cassava, sweet potatoes
- To prepare a new site for beans, nuts in line
- To try budding and grafting
- To form a group with Malzwe, Rama, Saidie to plant ground nuts

Saidie Saidie

- Has ready maize and cassava and will try everything as I work for Umoja Orphanage
- Will diversify to include other crops like kale, tomatoes, amaranth
- Will train other people
- Will try budding and grafting

APPENDIX B

RESPONSES FROM EVALUATION FORM PERMACULTURE DESIGN COURSE JANUARY 2015

STUDENT BACKGROUND

1. ***Name and age of student?***

Patrick Kea
Mohammed Juma (nickname Moddy Moddy)
Mwinyi Yusef
Kennedy Kimtua Tidambiri
Peter Kisina
Martin Wamela
Mahmoud Omari Massemeh
Yasri Omari Dzivwa
Abdula Tumbo
Matano Juma Mwatebe
Joseph Kinyua Mugo
Sharon Kinraid
Mohommed Saidi Rashidi

2. ***What is your nationality?***

All Kenyan + 1 Australian volunteer

3. ***What is your age?***

30 – 50 years
32 years
Doesn't know age
30-50 years
67 years
44 years
30-50 years
20 – 30 years
+ 50
35 years
30 years
67 years
20 years

COURSE ADVERTISEMENT

4. ***How did you hear about the course?***

Cathy Booth – my employer
Well done
Well done
Fantastic and well done
Through Base Titanium Mine
Through Base Titanium Mine
Umoja Orphanage volunteer program (Cathy Booth)
Through Base Titanium Mine
I was asked by Cathy and I wanted to attend
Base Titanium Mine
Umoja Orphanage Project
My employer – Goodlife Orphanage
Through Umoja Orphanage

5. ***Can you recommend places where we should advertise in the future?***

Organisations
Websites
Websites
Websites
Recommend websites
Recommend websites
Organisations
I think internet information spreads faster
Organisations
Organisations
Organisations
Australian websites targeting indigenous Australians
Organisations

PRE COURSE COMMUNICATION

6. ***How did you find the registration process?***

Easy	Very easy	Easy
Challenging	Easy	Easy
Challenging	Easy	Easy
Easy	Easy	
Very easy	Easy	

7. ***How could the registration process have been improved?***

It was good, but the period was too short.
To learn more skills and teaching the rest at home
Trying the methods at their farms
By informing the participants early enough for proper preparations
By informing the participants early enough for proper preparations
Through organisations
Registration is easy. I think in the future everyone should be given cards so we know who is registered rather than marking a roll
Through organisations advertising
Through learning even more different skills
It is for the participants to tell about it even in prayer places

8. ***How could the scholarship process have been improved?***

N/A
Increase out of pocket money – those who come from far in case they are sponsored
Increase out of pocket money – those who come from far in case they are sponsored
To be repeated every 4 months
Next time take us to different parts to learn problems facing other regions
Through regular teachings
Those who are being helped are the ones who are going to benefit together with their families
Planning
For the ones going through this course should use their knowledge

PRE COURSE INFORMATION

9. ***How was the information provided to you before the course?***

Excellent	Good	Good
Excellent	Good	Good
Excellent	Excellent	Excellent
Good	Good	
Okay	Excellent	

10. ***What additional information would you have liked to have received before the course?***

Early information
Grafting, how to do sunken bed and more
No answer

To go out to some communities that have permaculture practice and research there
The mode of facilitation ought to be known by participants early
The mode of facilitation ought to be known by participants early. I need more about composting
Everything was fine
Through allowing more different tribes to come together to get the same information
We are praying to god and also singing our traditional anthem
To make my own practicals at home
No answer
I would like to learn more about permaculture

ACCOMMODATION

11. How was the accommodation?

The accommodation and meals were excellent
I used to spend my night at my home, because the course was nearby
I used to spend my night at home
Was very Ok. I appreciate everything was provided
Accommodation was excellent
Accommodation was excellent
I had a mosquito net and slept comfortable
I am from around so I sleep at my place
Good
Good
Very comfortable and good and god bless you very much and thanks
Wonderful as I was part of the Umoja volunteer program
Good

12. Please provide additional comments how things could be improved?

Everything was OK
In my opinion the course should continue to get more skills
To stay in peace
Most of us were poor about knowing about permaculture farms. I too.
To have tours (educational) for comparison
To have tours (educational) for comparison
The class should be improved for future usage
I think the class was Okay, good fresh air is good
We could have learnt in class instead of under a tree
Have plans to make a classroom
To be together
Everything was great
Outdoor classroom appeared very suitable to the participants
Through listening and communication

13. How were the meals throughout the course?

Great	Great	
Great	Great	
Could have been better	Could have been better	
Great	Great	Great
Great	Great	
Great	Great	

14. Please provide additional comments on how meals could be improved

No comments, the meals were great
Should be eating a balanced diet of food
To control with milk right
We should all be vegetarians ourselves
Each participant to have his/her own plate
Each participant to have his/her own plate
We start with breakfast, lunch and dinner for us to be together all the time
Maybe after a meal people should have some fruits to balance the diet
To have a balanced diet
Meals were good
To have organic meals
Meals were good
All good

SITE TOURS AND GUEST LECTURERS

15. Did the site tours and guest lecturers enhance your learning?

No site tours		
Yes	Yes	Yes
Yes	Yes	Yes
Yes	Yes	Yes
Yes	Yes	Yes

16. Which site tour or guest lecturer did you learn the most from or enjoy the most?

Both	Both	Both
Both	Both	Both
Both	Both	Both
Both	Both	

Milk can be used to spray plants to help them to grow
I learned and enjoyed most from Joseph Lentunyoi
Both Joseph and Priscilla were great and were easily understandable

17. Do you wish to suggest future site tours of guest lecturers?

Yes
Yes
Yes
Yes
Yes, I do suggest future site tours and guest lecturers
Yes I suggest future site tours and lecturers
Yes
Yes
Yes
Yes to explore more
Yes in Kilifi County

COURSE INSTRUCTOR

18. Was the course easy to understand?

No problems
Minor challenges
Minor challenges
Minor challenges
No problems
No problems
No problems
No problems
Not very easy
Yes
No problems
Minor challenges
Minor challenges

19. Please provide details of how your understanding could have been improved?

I can practise permaculture practically
It will change your life
What I have taken from Umoja Permaculture Course I will be going to try them at Goodlife Orphanage
I had no problems with understanding the course material and presentations
By doing so many practicals while on the field
More practicals and longer training because permaculture is very, very wise
Through seminars
It has been improved because now I know about tree nurseries, and manure
Through lessons
As English speaking only, as the course was in English and Swahili, some knowledge of gardening, course was not too difficult
I would like to travel to different places learning about permaculture

20. Was your instructor easy to understand?

No problem
Minor challenges
Minor challenges
No problems
No problems
No problems
No problems
No problems
Some problems
No problems
No problems
Yes

21. Please provide comments about the instructors

I would prefer another visit for the instructor for him to see what I will be doing practically
She and he were perfect
The teachers were perfect
The instructors were approachable, understanding and experienced in subject matter
The instructors were approachable, understanding and experienced in subject matter

Joseph was open on teaching us very comparative and teaches us until you understand
Good instructions and easy to understand, then easy to apply when you understand
He was a laughter teacher
They were great
They were great
Very knowledgeable course content, hands on demonstrations were excellent
He is Ok and I would like to stay near Joseph to learn more about permaculture

COURSE CURRICULUM

22. Did the course meet your expectations?

Met them	Met them	Met them
Exceeded them	Exceeded them	Exceeded them
Exceeded them	Met them	Exceeded them
Met them	Yes	
Met them	Exceeded them	

23. What lesson/s did you enjoy the most?

About steps of making bio-pesticides
Mulching, grafting and how to plant peas nearer and more
Home garden, grafting pieces at our farm, seed banking and farm zone
Milk and what can be sprayed on the plants for pests
Compost manure making, Kitchen garden and its management, the permaculture principles
Compost manure making, Kitchen garden and its management, the permaculture principles
Permaculture ethics, composting, insect pest management
Pests and disease management, planning of the land, grafting, interacting with other people, harmful pests and useful insects, better diet and nutrition
Making insecticides through the plants we are growing
Home gardens, community gardens are the basic for good health
Lessons on how to save seeds
All the sessions were informative and very thorough
Controlling pests using bio-pesticides, kitchen gardens, and seed bulking

24. If anything, what would you have liked to have learnt more about?

To be a permaculture trainer to teach others at our village
Farm zoning, care of earth, composting, seed saving
Yes, I will do
To know more about natural medicines (herbal) and how to use them
Insects and pest management
Anything that I don't know about permaculture
Learning about greenhouses and how to grow in them
About agriculture
What I learnt was great
I would like to learn more about agriculture

25. If anything what was the biggest challenge for you during the course?

No challenges
The challenges were there
Challenges there were many
Nothing was challenging in the course
No major one
No major one
On my side I found no challenges. I feel now very free
Nothing was a challenge, everything was flowing
Sitting outside in a windy place
There was no problem
Nothing big – not speaking Swahili was my problem (Australian volunteer)
Lack of experience

26. How was the class schedule?

Just right	Just right	Just right
Just right	Not enough	Just right
Just right	Just right	Just right
Too busy	Not better	
Just right	Just right	

27. How was the class size?

Just right	Just right	Too big
Just right	Too small	Just right
Just right	Just right	Just right
Too small	Too small	
Just right	Just right	

28. How was the practical component?

Just right	Just right	Just right
Just right	Enough	Just right
Just right	Just right	Just right
Just right	Just right	
Just right	Enough	

29. What suggestions do you have for improving the course?

More lecturers
More lecturers
To practice what I have got from this course to develop in my farming
To have longer time in practicals, and to have the course go for more days
To have longer time in practicals, and to have the course go for more days
More practicals
A longer period of training and more teaching
More practicals
Through more practical components
I would like to have this class 3 times a year and learn more about it in detail

YOUR PERMACULTURE FUTURE

30. Where will you use the skills you learnt in this course?

I will use the skills in my small piece of land

At home	On my farm	In my garden
At home	At my village	In my village
On my farm	No answer	

I work as farm manager where I am working so the farm will become different

At my farm and my village

Yes and even teach others who don't know about permaculture

For personal use and to share with my 'greenie' friend of mine

31. How many people and who (children, adults, women etc.,) in your community do you think will benefit from what you have learnt in this course?

More than 40 people will benefit from what I have learnt

Both of them	The elders	Almost all people I
Both of them	Several – about 20	know

As many as I can

Several people, especially women, and mostly children

All adults and children I know

My family members and my neighbours and then the whole community and everywhere

All – even the whole nation of Kenya

Australian indigenous people could benefit greatly from these courses and such a course

32. Are you interested in pursuing your permaculture training to become a trainer and/or consultant? If yes then please list your experience, other relevant education and availability.

Yes, I would like to pursue my permaculture training to be a teacher

I am interested in permaculture subject but I don't think I am able to become a teacher due to my age.

Yes

Yes – 0718607765

I am very much interested in permaculture and becoming a teacher of it

I have to do it on my field first and if beneficial I will learn more and become a teacher to teach others

Yes I would like to become a teacher and more about seed bulking and methods of controlling harmful pests, insects pest management, making bio-pesticides and making compost

No

FUTURE COURSES

33. Based on what you have learnt about PRI Kenya, would you like to see other courses offered, and if yes, what courses?

About solar knowledge	Yes
Doctor and a good turn in the future	Yes

Yes, leadership and group dynamics

In future I would like to know more about home gardens

Yes, more courses on how to generate electricity using the sun is a more simpler way

Keeping animals and more practicals
Permaculture garden types of kitchen garden
As I love my land I would like many more courses
I think ongoing courses are very important. The more people educated must be beneficial to any community

34. Would you recommend this course to others?

Yes	Yes	Yes
Yes	Yes	Yes
Yes	Yes	Yes
Yes	Yes	Yes

35. Please provide us with any final comments, or perhaps a quote that we may be able to use to advertise future courses.

- It is my desire for anyone on his or her free time to learn about permaculture course, so as to achieve more skills on how to do with our gardens and crops.
- I want to become a permaculture teacher
- To me farming is backbone to the community and the secret is nutritional resource. If the community try permaculture farming, they can take this for type of farming and we will all be healthier. It is harmful to our health the type of pesticides we use and not getting enough benefits out of farming and nutrition. It is Ok for me permaculture and community so I preside to use it now and in the future
- There should be a livestock training component in the teaching courses, also more teaching on water conservation. The trainers have to make plans for follow ups to the participants.
- Base Titanium
- Permaculture for health and future
- Those who got the opportunity to learn should tell others of the benefits of permaculture when it should be taught again. Use the internet to advertise for future courses. Print papers and advertisement logos. Have stamps. Tell local leaders to inform others and that is advertisement. yasri@yahoo.com
- Permaculture high and higher
- Umoja permaculture training is good
- It has been a great miracle to me, coming to know on how to make compost, on how to make liquid manure, on how to make double dug garden beds, saving the seeds, making kitchen gardens and many more. God with us – Amen.
- As an observer all participants were motivated and keen to participate. They actively engaged in activities, asked questions, and shared their own knowledge. With me the course was good, each individual got a lot from the course, and they will tell people and the word of permaculture will spread. I think further courses and opportunities are important. I would like the opportunity to sponsor participants to further training in March and April. Please advise me if this will be possible. Thank you Priscilla and Joseph for the opportunity to participate and learn from you over the past 5 days. Fantastic. My best wishes for future permaculture, I have learnt a lot, thank you.
- I would like more teachers to come, and also more hours in teaching us and we want to learn more.