North Marmanet Forest Restoration

Project Name:	North Marmanet Forest Restoration through Agroforestry
Project Duration:	3 years (January 2016 – December 2018)
Organization:	Kijani Forests for Change
Location:	North Marmanet (Laikipia County)
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Introduction

Agroforestry is a land use management system where trees are grown with crops. It's a combination of forestry and agricultural techniques, which in the long term bring to birth diverse, productive, profitable, and sustainable land use systems. Agroforestry can be used in rehabilitation of degraded forests. The name of this approach varies from one country to another. In Kenya, it's called PELIS or TELIS (Plantation/Tree Establishment for Livelihood Improvement Systems) depending on what is grown first, either the crops or the trees.

Kijani has adopted this approach to design a forest restoration model that would aid in rehabilitation of North Marmanet forest in Laikipia County. This forest has been faced with serious degradation challenges that have led to loss of over 90% forest cover — over 40 000 ha. Our model aims to promote sustainable forest restoration through livelihoods establishment. A survey done by Kijani shows that 96% of the community members own 0–5 acres, while 4% own 6–10 acres. Land ownership and production is the most important aspect of rural livelihoods in Kenya and this model would increase land for livelihoods production.

It is worth noting that while North Marmanet is a government forest, 62% of the sample households believe that the forest 'belongs' to the community. This is because the forest is very vital to the livelihoods of the surrounding community, providing a source of clean water and land for controlled grazing. Therefore, any benefits and profits generated from the forest must be channeled back towards the community to promote a positive attitude towards conservation and community involvement and participation in the protection and sustainable rehabilitation of the forest.

Rationale

Continuous forest cover has reduced by over 75% since 1980 in Kenya. Forest degradation has become a major challenge with many degraded forests in need of well thought reforestation plans. The government has stepped in, and set the goal of achieving 10% continuous forest cover by 2030 as part of its Vision for the country. Today, development partners, government entities, and existing environmental organizations (CBOs, NGOs, Trusts) have developed strategies to address forest degradation challenges. The underlying gap, however, is the under-development of sustainable forest rehabilitation and conservation models that can ensure tree growth and survival. This has been attributed to lack of community participation, inadequate resources, inadequate monitoring and evaluation systems, inadequate environmental

awareness among community members, and poverty that leads to dependence and pressure on forest resources.

Fortunately, with the establishment of the Forest Act 2005 which further lead to the establishment of Kenya Forest Service (KFS), the Vision 2030 of the Kenyan government, and a new constitution which include forest rehabilitation and 10% forest cover as mandates there is a more enabling legal environment for groups with the right approach to embark on forest restoration efforts. Kijani has signed a renewable lease agreement with KFS for 100 hectares over 6 years and aims to implement a sustainable approach to forest rehabilitation that can be scaled to rehabilitation of North Marmanet forest (which has 5000 acres of gazetted forest land in total), and replicated in other parts of the country.

It is important to note that for any forest rehabilitation effort to be successful the local community needs to be on board. The use of agroforestry as a model for sustainable forest rehabilitation is viable since it is a strategy that addresses community interests, and therefore leads to active community involvement and further participation in sustainable forest management and the establishment and improvement of livelihoods. Furthermore it also addresses the challenge of youth unemployment, which is at over 60% in Kenya and even higher in rural areas (78% in North Marmanet for example) where young people see few opportunities, leading to increasing migration into urban areas which is associated with many problems like urban poverty. Attractive development opportunities in rural areas are therefore crucial for sustainable and self-determined development of Kenya.

The recent baseline survey which was conducted by Kijani in the project area shows that a majority (57%) of the population are young people of age 26–35 (36%) and 15–26 (21%). The forestry sector presents an opportunity to provide prospects for young people to build sustainable livelihoods. Gaining knowledge about ecosystems can lead to tremendous growth in the agricultural sector via the introduction of non-timber forest products (NTFPs) and improvement of soil nutrients and water supply through joined forest rehabilitation efforts. This model therefore aims at growing back the indigenous forest by empowering the local youths and community members through training in agroforestry and the cultivation of NTFPs like honey and medicinal crops.

Innovations within the Model

As an organization we value creativity and we are certain that innovation of already existing ideas can avail tremendous success not only in our work but also for personal growth of the organization and individuals employees. Agroforestry as a model has

been used for several decades and proofed successful. But there is still much room for improvement by incorporating other agricultural techniques which can bring benefits both to the environment and to the community members.

Our agroforestry model will involve trial layouts and conservation agriculture. The trials will serve to improve different aspects of the reforestation and agroforestry model design. For example, with trials we will involve testing variations in tree spacing and variety of trees and shrubs. This allows us to continuously adapt and improve our model through evaluation of key impact parameters — such as tree growth and survival, crop production, and profit from crops for community members — which we will monitor continuously.

The model seeks to engage 30 selected community members in cultivating 1 acre plots each with crops, trees, and shrubs according to trial specifications for that plot. Community members will be trained to monitor the basic impact parameters themselves and also learn about basic tree care and maintenance. This model will include, among other things, a tree tagging system that allows us to track the growth and survival of each planted tree over time. The other aspect of the model is conservation agriculture. This is a sustainable way of farming that utilizes natural ways of improving crop yields and reducing soil carbon emission through the usage of basic techniques such as mulching, minimum tillage, and the incorporation of agroforestry tree species. Conservation agriculture provides a good learning platform for the community members to appreciate the value of nature in crop production and sustainable forest management.

Finally, Kijani's vision is to develop a system for knowledge sharing and research. The two key aspects of our model — trial designs and conservation agriculture — will form a basis for research and involvement of students during internships and exchange programs. This shared learning can contribute to understanding the role agroforestry can play in the restoration of forests in a manner that is sustainable and profitable for the local community.

Organizational Background

Kijani Forests for Change is registered in Kenya under the NGOs Act of Kenya. It was founded by young Kenyans to promote youth engagement in sustainable forestation in Kenya. Kijani has signed a 6 year renewable lease agreement with KFS for reforestation in North Marmanet, Laikipia County.

Kijani believes that only the inclusion of economic benefits for forest adjacent communities can ensure the long-term survival of its reforestation effort. Our low-cost forest rehabilitation model spreads the responsibility and benefits of forest rehabilitation to local communities, eliminating the trade-offs between forest rehabilitation and economic benefits for forest adjacent communities. We believe that such an approach is at the heart of sustainable development and is the key to restoring our planet while providing for the needs of future generations.

Kijani is supported by young people in Germany and the USA and aims to create exchange between young researchers and conservationists in Kenya and internationally. We offer internships that provide an opportunity to gain practical experiences in applying innovations in agriculture and forest management.

We are piloting our model in the North Marmanet forest to grow back parts of the indigenous forest by empowering the local community, especially the youth, through training in agroforestry, conservation agriculture, and monitoring mechanisms that enable continuous tracking of impact over time.

Objectives

GENERAL

To develop and implement a simple, cost effective forest rehabilitation model that can achieve sustainable forest management and community livelihood establishment.

SPECIFIC

1. Involve and empower 30 community members in forest rehabilitation and livelihood establishment through agroforestry beginning in 2016. (20 women and 10 men, of whom 18 will be youths, i.e. under the age of 34)
2. Rehabilitate 30 acres of North Marmanet forest over the next 3 years and start rehabilitation of other areas within the 100 hectares.
3. Develop a clear and simple model that spearheads increased forest cover in North Marmanet and the surrounding Marmanet forests to 15% (1000 ha) by 2030.

EXPECTED OUTPUTS

1. Clear understanding of agroforestry and forest conservation by the 30 selected community members.

2. 6000 indigenous seedlings distributed to 30 members for planting and rehabilitation of the 30 acres of North Marmanet forest.
3. Livelihoods of the 30 selected community members improved and conservation agriculture techniques learned and applied.
4. Management and legal agreements established between KFS, Kijani and the 30 community members in 2016.
5. Documentation of a transferable agroforestry reforestation model that incorporates lessons learned.
6. Guideline of proven monitoring and evaluation system for the agroforestry reforestation model, developed in collaboration with community members.

EXPECTED OUTCOMES

Short-term (January 2016 – June 2016)

1. 6000 seedlings secured from the local community for planting
2. A guide for participatory monitoring and evaluation designed to assist the community members in active participation
3. 30 selected community members trained and involved in participatory monitoring and evaluation according to agroforestry and forestation metrics and impact parameters
4. Trials methodology designed; and adopted by the 30 community members
5. 30 selected community members trained on agroforestry, tree care and maintenance, and conservation agriculture
6. Quarterly meetings held between Kijani, KFS and the North Marmanet Community Forest Association (CFA) for continuous improvement on North Marmanet forest restoration programme, and development of an improved Participatory Forest Management Plan (PfmP) for North Marmanet

Long-term (July 2016 – December 2018)

1. 6000 seedlings planted with an 80% tree survival rate in the 30 acres leading to the sustainable rehabilitation of Phase 1 forestation area (30 acres)
2. Documentation of a scalable model created for transferability of the methodology
3. Improved understanding and implementation of the agroforestry model by 30 Community members in 3 years of Phase 1, allowing for knowledge dissemination for Phase 2 farmers as the program expands
4. Improvement of livelihoods status at the community household level by $120 per annum for each involved community member
5. Participatory Forest Management Plan (PFMP) restructured and approved by KFS
6. Success stories documented in Kijani website, quarterly newsletters, and other promotional outlets

INDICATORS

1. Number of community members trained in agroforestry and conservation agriculture
2. Acres of forest area rehabilitated in 3 years
3. Number of young people engaged in training and rehabilitation
4. Increase in average income of engaged households per annum
5. Quality and frequency of meetings held with KFS and CFA
6. Number of seedlings planted
7. Tree survival rate of planted seedlings each year
8. Tree growth rate
9. Crop yield in agroforestry plots within the 30 acres.
10. Number of community members trained and involved in participatory monitoring
11. Specificity and applicability of the documented model
12. Specificity and applicability of guide for participatory monitoring and evaluation
13. Changes to model based on lessons learned during implementation
14. Performance of community members through sharing of experiences
15. Results from questionnaire of engaged community members about their training
16. Effectiveness of protection from elephants

Implementation Process

The implementation process of this Agroforestry model is simple, precise, and realistic both in plan and in carrying out the specific activities and tasks. This process therefore outlines activities and steps, which will be explored to actualize the model.
Although the trees will exist for several decades after planting, the steps in the implementation process comprise of activities of the first three year phase of the project. It should also be noted that of all the steps listed monitoring and evaluation will remain as the main overlapping activity even after the trees have gained maturity. Kijani will engage 30 community members from North Marmanet of which 20 will be women and 10 men, and in total 18 will be youths (under 34). The 30 acre forestation area for phase 1 will be parceled out into portions of 1 acre each with each community member being responsible for 1 acre. The community members will be organized into 3 groups of 10 members each. Each group will select a group leader and secretary. This will help to organize the community members as the leaders will be responsible for keeping records and be available as contact people in case of information sharing and coordination between Kijani and the community members.

Phase one of the project will include the following steps:

1. Selection of Community Members

2. Orientation Workshop
3. Development and Signing of the Management Agreement
4. Land Demarcation and Tagging
5. Training on Conservation Agriculture and Agroforestry
6. Land Preparation
7. Tree and Crop Planting
8. Protection from Elephants
9. Documentation and Reporting
10. Monitoring and Evaluation

SELECTION OF COMMUNITY MEMBERS

The selection of the 30 community members will be based on the following criteria:

1. **Youths —** According to our baseline survey, 78% of youth are unemployed. Partly because of a lack of higher education. For us this provides an opportunity to engage young people in our project, as they are eager to find work and qualify themselves.
2. **CFA membership —** To ensure the representation of community interests in the restoration process, we will engage the North Marmanet Community Forest Association (CFA). The CFA is a community-based organization bestowed with the mandate of co-managing government forests in Kenya right at the community level in conjunction with the Kenya Forest Service. It is a consortium of different forest user groups from the community surrounding the forest. Our collaboration will strengthen the existing CFA through meaningful engagement in a forest restoration program and livelihood establishment.
3. **Ethnic Balance —** Our baseline survey revealed that the area has a multiethnic composition. Turkana represent more than half (55%) of all households in the community, followed by Kalenjin (27%), Kikuyu (8%), Samburu (4%) Maasai (4%) and Luhya (2%). This creates unique dynamics in implementation of new ideas because of all the different cultural expectations that are represented. We will ensure ethnic balance in the selection of the 30 community members and promote cohesion and harmonious coexistence of the multiethnic group of community members involved in the restoration process.

This project aims at conferring the following benefits to community members:

- improved livelihoods at the household level,
- increased crop production and economic improvement of families,
- understanding of forest benefits in crop production and livelihood establishment,
- restoration of forest goods and services (e.g. fuel wood, NTFPs, fodder), and
- engagement of youth and empowerment for a sustainable life style.

ORIENTATION WORKSHOP

After the selection, Kijani and KFS will take the 30 community members through the basics of the agroforestry model and implementation plan. In a participatory process, they will assist in drafting rules of engagement that will guide their operations during phase 1 of the project from January 2016 to December 2018. Every member will then be given ample time to go through and understand the resulting documentation of the rules of engagement which will at least entail the following:

- no squatting of any forest land,
- fulfillment of tasks such as tree care and maintenance,
- implementation of monitoring and evaluation practices, and
- repercussions for non-compliance, such as removal from land.

The aim of these agreements is to promote transparency, set clear expectations and mitigate potential conflict in implementation.

Our baseline study revealed that 40% of the population has no education at all, 46% have some primary education (class 1 to 8), and 14% have completed secondary education. We conclude that the literacy level in the community is very low and greatly compromises clear understandings on livelihood improvements and forest restoration techniques. In a situation where a member is illiterate or has low level of education, guidance will be offered to them to enable them go through and understand the rules. If they feel comfortable, the rules will be adopted to be binding. Care will be taken to properly orient community members when it comes to training around the agroforestry model, with regard for illiteracy.

DEVELOPMENT AND SIGNING OF THE MANAGEMENT AGREEMENT

The management agreement is a government document, it is usually issued by KFS and contains rules and guidelines of conducting activities in the forest. Based on the established rules of conduct a management agreement will be developed between KFS, Kijani, and the North Marmanet CFA. This being a government forest, legality has to be given great concern. During signing of the documents a Kijani representative, KFS official, and CFA leadership members, especially the chairperson, will be required to be present as witnesses and sign the agreement so that the 3 parties ensure sustainable forest management as indicated in this project plan as well as the management agreements.

LAND DEMARCATION AND TAGGING

In a situation where the government allows community members to farm in the forest for rehabilitation and restoration purposes, land demarcation is used as a method of

marking and giving out small portion of land of not more than 1 acre to community farmers. In our case we will first demarcate 30 acres and further sub-demarcate the 30 acres into 1 acre plots, which will be given to the 30 farmers of phase 1 of the project. Kijani, KFS, and the CFA will work together during demarcation to ensure equal distribution of plots to the 30 farmers. KFS officials will demarcate the land using the tape measure, the thumb rule during demarcation will be getting thirty equal plots. The land will be demarcated equally in the presence of all involved parties to mitigate conflict which might arise from community farmers who might consider other people who got supposedly bigger plots as favored.

After land demarcation, the plots will be tagged for easy identification. Each plot will have a tag under the name of the farmer responsible for it for easy monitoring and evaluation purposes. This step also involves aligning one plot tag to one farmer.

TRAINING ON CONSERVATION AGRICULTURE AND AGROFORESTRY

Conservation agriculture involves increased crop production level and contributes to conserving the environment. Its characteristics are minimum or zero tillage and mulching and diversified crop rotation. Agroforestry is planting of crops along side with trees. Since we are going to apply two techniques, community members will be trained on both conservation agriculture and agroforestry. After tagging the farmers will get training on conservation farming and agroforestry. We partner with Bright World Hope an NGO experienced in providing training to farmers in East Africa to provide this training.

The aim of this training will be twofold: Firstly it will help in smooth implementation of our model for forest restoration, secondly the training will help farmers to get higher yields and hence motivate them to become more committed, passionate, and enlightened about agroforestry not only in relation to rehabilitation of forest, but also in relation to crop yield which will further increase the economic status of families involved in our project.

LAND PREPARATION

In this stage vegetation will be cleared to leave the land bear for tilling. In this regard farmers will clear the land before pitting. Clearing will be done using machetes, slashes, and to some point hoes. Since conservation is at the centre stage of the project, tilling will not be comprehensive and general as it is done in other forms of farming, leaving the soil structure intact.

After the clearing and tillage is completed, the 30 thirty farmers will first plant their crops, after crop planting they will make holes (pitting) for the seedlings. Farmers will make holes for the seedlings after planting their crops. The concrete timeline will be adjusted to weather patterns. The holes should be made ready early so that the moisture content needed for planting a tree is attained inside the hole. Kijani tree nursery specialist will instruct the farmer in this process.

TREE AND CROP PLANTING

In this stage seedlings are planted alongside the crops. After planting crops three special days will be set for planting trees. Each group will plant their seedlings in a single day. Before this, trainings will be conducted. The trainings will involve the development of a simple community guide on the following: agroforestry, conservation agriculture, and participatory monitoring and evaluation. Each community member will also be provided with the trial specifications and layout for their 1 acre plot and with instructions on how to prepare for planting according to their trial layout.

PROTECTION FROM ELEPHANTS

North Marmanet is a major migration corridor for elephants that can disrupt forest restoration efforts. To address this challenge the community members will deploy 3 main ecological ways of dealing with the issue:

The 30 community members will dig trenches around the 30 acres of land. This will be an easy way of preventing elephants from interfering with the planted trees and crops.

The community will develop a system to enable them to work in shifts and notify each other incase of elephant's interference. This will involve the appointing of one scout per group to monitor elephant movements and notify the rest in case of a threat. They will use local methods of scaring elephants like sing fires.

After the successful launch of the project, we are planning to start a second pilot project by 2017 where community members will be given beehives. Elephants are scared of bees so that the strategic placement of beehives around the farms can form a natural fence against the elephants. Bees also produce honey which is a non-timber forest product with a good market in Kenya and contributes to improvements in crop performance through pollination.

DOCUMENTATION AND REPORTING

The experiences during the project implementation will be documented in yearly project reports, which shall be archived in Kijani's digital library and shared publicly. Some lessons learned and interesting experiences will be captured and shared through our blog and social media channels to inspire how local communities and young people can be actively engaged in sustainable land use and forest restoration. In the third year a comprehensive documentation of the proven model will be compiled that will include all the lessons learned and be aimed to show how the model can be scaled and transferred to similar regions.

MONITORING AND EVALUATION

Monitoring and evaluation systems will be developed with the community members. They will be trained how to monitor tree growth and soil performance on both crops and trees. The trained community members will observe the following parameters:

1. **Tree Growth —** The height of the trees every three months will be measured — indigenous trees grow slowly and take long time to mature.
2. **Rate of tree survival —** The number of trees will be counted monthly to determine how many have died and how many are still alive. Monthly reports by the selected group heads will be used in determining, how many trees died and need to be replaced and how many trees are of good health.
3. **Rate of crop Production** — During harvest the number of bags per acre will be counted to determine whether there is a change in crop yield. This will help us to determine how to improve yields in this specific region in the next project phase.
4. **Impact of training on Agroforestry and Conservation Agriculture —** Our initial step will be to train 30 community members on agroforestry and conservation farming. All the names and contacts of community members who will finish the training will be kept in records for evaluation purposes, a monitoring will be done to determine the understanding of this training and how it has impacted the community members in the project as well as on how they are applying the knowledge, and if there are difficulties in application of the knowledge in the project.
5. **Increase in average income of engaged households per annum —** In the early stages of the project and after each year income records of individual farmers will be taken to determine increase or decrease in income.
6. **Youth engagement in the project rehabilitation** — Record of all young people who will be trained will be kept. We will also survey the uptake of the knowledge, change of attitude, and active engagement in the project.

7. **Effectiveness of protection from elephants** — After digging trenches for crop protection against elephants, records and reports from community members on how many times the elephants have encroached the area will be used to determine the effectiveness of the methods used and to derive more ecological ways of keeping away the elephants from interfering with the restoration process.

Tree Planting Plan

With the agroforestry model we intend to develop a tree planting strategy that would incorporate multiple benefits. These include: provision of medicine, soil enrichment, fodder, and bee forage among others. To successfully achieve these, species must be carefully selected in consideration of the community needs, intended livelihood options, ecological conditions, and availability of seedlings and seeds for nursery establishment.

In this project phase each of the 30 acres will accommodate approximately 200 tree seedlings. This translates to about 6000 seedlings in total. 5 different combinations of tree species and crops will be planted on the 30 plots (2 plots of each type in each of the 3 groups of 10 plots). This allows us to determine the most effective agroforestry and forestation strategies for the region over time through our soil, crop, and tree performance monitoring.

The seedlings will be given to the farmers to integrate with their farming system in the 30 acres of land where they are expected to plant maize, beans, and potatoes. The tree planting will be done in April 2016 during the onset of long rains. This time allows for securing of the required 6000 indigenous tree seedlings form the tree nurseries we have established in the local community.

Each tree will be tagged for monitoring and evaluation. Participants will record health and growth parameters for each tree, such as tree height and crop yield. This will make it easy to determine growth rates. In addition, community members will record if they have watered trees during the dry season or if it has rained on a daily basis. The records will be collected by the group leaders and submitted to Kijani's project officer. The project officer will see if there are any problems in the field. He will also have a database on his computer to monitor impact metrics such as tree growth on a monthly basis for advising different groups on how they can improve. This data will be used to improve our model in the future.

AGROFORESTRY TREE SPECIES

The below list shows the 10 tree and shrub species and their main purposes that we have preselected for the agroforestry system to enable the community members achieve maximum benefits.

4. ***Calliandra calothyrsus*** — nitrogen fixing, ornamental, soil improvement, intercropping
5. ***Leucaena leucocephala*** — intercropping
6. ***Faidherbia albidae*** — intercropping, medicine, soil improvement, ornamental
7. ***Teclea nobilis*** — soil improvement, fuel
8. ***Nuxia congesta*** — erosion control, apiculture, medicine
9. ***Rhus natalensis*** — fuel, foliage, medicine, ornamental, shade and shelter
10. ***Tephrosia vogelii*** — nitrogen fixing, ornamental, shade and shelter
11. ***Hibiscus subdariffa*** — apiculture, fiber, lipids, medicine, intercropping
12. ***Vitex keniensis*** — soil improvement, ornamental, shade and shelter
13. ***Juniperus procera*** — apiculture, timber

Community Involvement

Sustainability has proved to be one of the challenges facing organizations and even government entities while rolling out development projects. This has been experienced in different areas and levels due to a lack of community participation in project planning and implementation. Making projects less impactful than their initial intended goals.

In order to make this project sustainable, Kijani will explore the following to ensure that sustainability is not compromised:

- The project will promote a high level of ownership of the processes and results of the activities that will be undertaken together with the communities. Communities will be encouraged to actively participate in trainings and other activities so that they can acquire skills that they can continue to use after the project is over.
- Design and implementation of the agroforestry conservation model will be simple and cost-effective. Community members with limited resources available will easily continue to implement the model, as it will involve use of local knowledge, resources and local partnerships.
- The model incorporates an agricultural component that is aimed at improving the livelihoods of the selected community members at the household level. This is

expected to increase the production at the local level-creating surplus for the market that can contribute to economic empowerment of the community.
- Capacity building and training of the involved community members on agroforestry and sustainable forest conservation will strengthen the knowledge gap that will enable the communities to apply this knowledge in the implementation of the model and its continuous advancing in different phases.

Financial Sustainability

Our aim is to become a financially self sufficient organization in the long term. So our core work in the future will not collapse even if donor or grant funding is withdrawn, ceases, or stops flowing due to uncertainties which we cannot foresee. As an organization we value sustainability to become an example of self-reliance. In that regard the following two paths will be develop to ensure our long-term financial sustainability.

SHARING OF CROP YIELDS

In Marmanet an acre can produce approximately forty bags of maize. Kijani will develop structures and mechanisms where the farmers could share 5% (2 bags) of their yearly yields with us. These 60 bags from the 30 farmer will be sold for about KSh 2000 each and the resultingg money (KSh 120 000 about $1200) will be channeled towards the implementation of the next phase of the project. Kijani will also negotiate with the CFA and KFS about sharing the benefits.

VALUE GENERATING TREE NURSERY

We have already set up a value generating tree nursery in our project area and another one is being set up in our headquarters in Nairobi. The two nurseries will act as a source of income for the project. We intend to sell purely indigenous tree seedlings at a profit. Each seedlings cost KSh 50 and with an intention of producing 10 000 seedlings annually, this will help to finance the next phase of the project. The community members will also be encouraged and empowered through the CFA to develop and establish a tree nursery that could help generate money for the CFA hence this cost would be shared between the CFA and Kijani with an aim of generating finances for the project continuity.

Timeline

The timeline outlines the overview of how the key activities will be spread out throughout the three years of the project implementation, most of the activities will take place during the first year, including the initiation workshop, capacity building, land preparation, and tree planting. Monitoring and evaluation will run through the three years of the project starting in quarter 3 of the first year after the preparation has been completed. Quarterly reports will be produced and shared through Kijani's website and mailinglist.

A project lead board is attached that outlines how and by when each activity will be undertaken by the project implementers. The lead board will assist in tracking progress on the project implementation and hold project implementers accountable of their actions in ensuring the smooth running and success of the project.

Project Officers

The implementation of the project will be coordinated by two key people with the help of KFS and the community members. David Oyaga will be the project officer who engages the community members in training capacity building and implementation of the project model. He will be assisted by Erick Ogallo who will assist in project coordination and implementation especially in the area of forestation by ensuring acquisition of tree seedlings, actualization of the agroforestry model, and provision of technical knowledge required in phase 1 of the project initiation and implementation.

Since the project implementation will be participatory, more inputs and local knowledge from the community members will be given priority as this is aimed at achieving ownership and sustainability of the future engagement and replication of the model to other area within the area of Kijani's lease.

A short curriculum vitae of the two key implementers is provided in the following.

DAVID OYAGA — PROJECT OFFICER

David was born and partly raised in the tiny little Island of Mfangano, his dad being a wood seller made him appreciate trees as part of the eco-system and source of income to their family.

Due to his upbringing in the rural area where every person in the

community has a responsibility to care for each other, he pursued Community Development in college. He is currently anticipating his diploma. David has worked as a community organizer in Nairobi slums driving campaigns of taking destitute and humble children back to school through government agencies and NGOs. David's strong participation in environmental matters earned him invitation to attend the Plant for the Planet Climate Youth Summit in Tutzing, Germany in May 2015. David is currently the manager of community engagement with Kijani and is also organizing tree planting academies for school children with Plant for the Planet, a German NGO working across the globe. He represents Kijani as a youth representative at the National Forestry Program workshops by the Kenyan Ministry of Environment.

ERICK OGALLO — COORDINATOR, FOREST RESTORATION

Erick holds a B.A. in Environmental Resource Conservation (ERC) from Kenyatta University, Nairobi, Kenya. He has a passion for forestry and Environmental Education for Sustainable Development (ECD) for the young generations. He has participated in national dialogues, forums and community meetings. His past experience includes working at the Millennium Community Development Initiatives (MCDI) as a Project Officer, coordinating projects in Integrated Water Resource Management (IWRM) and environmental advocacy. In the past he has worked with Rural Development Solutions (RDS) and currently volunteers with Kijani as manager of forestation. In that tole he has represented Kijani at the FAO World Forestry Congress in September 2015, where we were invited as a representative of youth engagement in forestation efforts. He is coordinator of the Mother Earth Network (M-E-Net), a faith based Environmental Trust Organization. He possesses knowledge and skills in research, planning and organizing, reporting, coordination, analysis, and Project Management.