

Cover Sheet

Project Number: Title: Green school program for Biodiversity Conservation and Improvement of Livelihoods of the Communities in Usambara Mountain Magamba Nature reserve Tanga Tanzania East Africa:		Date: 26 October 2015
Applicant Organization Name: Friends of Usambara Society	Name, Qualification(s) and Title of Responsible Person(s) and Address: <ul style="list-style-type: none"> • Julius Mwanyelo Forest assistance officer Tanzania tree seed agency & Member of Friends of Usambara Environmental rescue group • Yassin Madiwa Program Coordinator Eco tourism and community Development officer. 	Phone: 0272660132 Mobile: 0655 094725
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Legal Structure/Type of Organization: Non Governmental organization		Year that Organization Created: 1997
Project location: Target Region(s), District(s), Wards, Villages: Region: Tanga District: Lushoto Wards: Lushoto Villages: Kwembago, Kitopeni and Kwesimu Villages		Mode of Project Implementation and Information about Collaborators: Friends of Usambara Society and also implemented by FOU and Primary schools to the targeted communities and implemented by Primary school kids under technical support from Friends of Usambara Society
Purpose ,Objectives, Expected Outcomes, Outputs/Deliverables and Main Activities: Purpose: The purpose of the project is to make contribution in sustainable conservation and management of the Magamba nature reserve and Jegetal water source as well as planting fruit trees in order to reduce pressure on dependence of forest reserve for fruits while crating income for the school. Objectives: The objective of the project is to enhance tree planting in villages adjacent to Magamba Nature reserve and conserve Jegestal water sources so as to reduce pressure on the degradation of the natural resources whilst assured adequate fruits availability to		

communities adjacent to Usambara Mountains especially on Magamba Nature reserve so as to encourage self-esteemed fruits planting habit among the communities while generating income for the three schools hence improving living standards to the community.

Expected Outcomes:

Schools and village communities will be aware on sustainable conservation of their Environment and their health status will be improved through use of fruits from planted trees, not only that but also availability of forest products in the adjacent villages and surrounding the water sources hence reduce dependency on the Magamba for forest resources

Outputs/Deliverables:

- On-farm fruit trees
- Availability of fruits in the target school and villages
- Improved health status of the community
- Income generation for the schools
- On-farm trees and well conserved of the Jegetal water source

Planned activities:

- Establish tree nurseries, in the three schools and , planting and maintenance; Measured by existing of the for nurseries three at school and at the villages with tree seedling of about 83300 to each school
- Distribute tree seedlings to each pupils and farmland adjacent to Magamba Nature reserve and; Measured by each pupil to be given 100 seedlings per students to 600 students to plant at their homes as well as public area such as along the roads for erosion control.
- To plant tree around Magamba nature reserve and Jegetal water source; Measured by 6000 seedlings to be planted by school kids and villagers around this water source
- 17,300 seedlings for each school to be used as income generating for school to sustain the projects shall be monitored by schools and Environmental clubs
- Monitoring of implementation of carried out activities
- To train environmental clubs on fruit tree planting and management
- To prepare and distribute project awareness materials

Project status: New Project

Total Project Cost (USD): USD 8,914	Total Amount Requested from TO: USD 7412.00	Other contributions including In-kind (USD): USD 1500.00
Length of Project Duration in Months, Proposed start and end months and years: 12 months (May, 2015 – May, 2016)	Amount Requested this Financial Year (2015) USD: USD 8914.00	Project Merits, Rationale and Justification: <p>Merits:Regeneration of degraded areas in the forest reserve and increased income to households could be enhanced through provision of income generating activities for schools as well as the communities around.The Friends of Usambara have enough technical capacity to undertake this proposed project. Tree planting in Lushoto District is a business venture like any other undertaking private and government institution and to this extended and those communities are ready to implement the project.</p> <p>Rationale: Enhancement of communities especially youths in primary and secondary school kids to produce more fruits and access markets would reduce their poverty and therefore reduce pressure on the degradation of the reserve and preservation of Environmental in general. Though planting trees is National and International agenda but villagers has no enough resources to implement the project of this kind, the ARC support is vital for the success of the project.</p> <p>Justification: Poverty is directly related to biodiversity degradation in the project area. By improving livelihood status of the communities in the area, they would reduce pressure of destructing the reserve through illegal activities such as extraction of wild fruits. However implementation of the proposed project will enhance local communities in the target villages to plant trees so as to improve their livelihoods in the future and also to</p>

		reduce dependence on Magamba nature Reserve Contributing to the climate Change while accelerate the transition to sustainable living.
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Project summary

The Green School Program:

Planting a tree nowadays matters a lot to the development agenda for the world and especially in the attainment of Millennium Development Goals. The Green School Program seeks to show that by involving children and especially schools in tree planting we can make substantial contribution to the conservation of Magamba nature reserve as well as Millennium Development Goals and lastly, the Green Schools Program marks a turning point in recognizing the true value and importance of going Green and strengthens our commitment to respond to the need for a collective struggle against the phenomenon of climate change and global warming. The project “Green School Project” is a tree planting exercise and capacity building project intended to plant over 250,000 trees in 3 Primary Schools both surroundings the Magamba nature reserve and 6000 trees around one water catchment distribute tree seedlings to each pupils and farmland adjacent to Magamba Nature reserve and by each pupil to be given 100 seedlings per students to 600 students per school to plant at their homes as well as public area such as along the roads for erosion control while the rest of tree seedlings amounted to 17300 per each school and all these trees will be raised and planted by children in order to stimulate sustainable natural resource management thus, improving access to water, mitigating climate change and global warming. The principal activities consist of putting at the forefront youths who are the leaders of tomorrow to take part in sustainable protective measures and creations of superb ambassadors who will participate fully into conserving Magamba nature reserve and the world in general.

This pilot phase is to transform educational institutions into a vehicle of transmission to the communities and reduce the pressure on watersheds orchestrated by the abusive planting of eucalyptus and other exotic trees species, grazing and farming activities in Usambara Mountains adjacent to the Magamba nature reserve. If this project will be funded and implemented, it will empower youths in agro forestry techniques and advocate for zero chemicals, the selection of tree fruit planting project is to provide vitamins to the students and villagers not be disturbed going far distance to find such food. The project intends to support students and farmers with fruit tree seeds so as to establish their own nurseries for planting on their farms. The fruits tree seeds in consideration include Apples Avocados, macadamia nuts, peas and Peaches. The 4h groups in school will manage and run such project when coordinated and supported with inputs needed and technical know-how in the field operations. The project will undertake fruits Management and environment conservation activities outside the forest reserve through community participation approach. The increase of population in project villages exerts pressure of fruits search on Usambara Forest Reserve. For that matter, people need more horticultural activities such as fruit growing which will suffice the need of nutrients that will divert the community dependence on the nearby nature reserve and generating income for the schools and create a small forest for each school to maintain and thus giving children the ability to plant more trees when they leave school. Not only that but also children will think of alternatives means of income generating activities and eradicate the thought of being employed by the Government. Tree planting will protect water

catchments that have been exposed due to deforestation and overgrazing leading to the proper protection of the Magamba nature reserve

The tree species to be planted include moringa obovata, acacia senegal, greveia robusta and ficus sir. Tree species to be planted shall be produced by Lushoto tree seed center and TAFORI (Tanzania Forestry Research institute. The schools to benefit from the pilot of phase of the project are: Kitopeni and Kwesimu, Government Primary Schools as well as St. Clause Secondary school. The chosen water sources to be preserved is Lushoto Jegestal Water Catchment which is supplying water in Lushoto Township approximate to have over 20,000 people

Project purposes

The overall purposes of the project is conserve the Magamba nature reserve and to mitigate climate change through support for ecological balance, economic and social significances of tree planting which will go a long way to improve the living conditions of the direct and indirect beneficiaries by providing potable water to people of Lushoto town and surroundings' villages.

This project is also an effective instrument to combat deforestation, global warming and redress water shortage in Lushoto district. It also seeks to reestablish the link between Magamba natural resource management and nature as well as remove the people out of the old day practices that led to loss of biodiversity. This project if given consideration will go a long way to stimulate tree planting, Support fruit seedlings to the communities. This will assure availability of fruits production within the village. Creating awareness amongst the 4h students in schools and farmers on fruits tree farm establishment and management of fruit farms against wildfires. Monitoring and spot check of field activities to ensure that established fruit farms are implemented accordingly to attain the goal of conserving environment, thus goes along with reforestation and encourage community actions against the phenomenon of climate change and then more importantly, restore hope in a population that for the past 20 years has witnessed a drastic drop in potable and destruction of the Magamba nature reserve. It is also a very important tool for the enhancement of community organization and it also gives children and the population the aptness to participate in saving lives since planting a tree is considered as a precious gift a child can offer to the conservation of Magamba nature reserve and the world as whole. Once the project is funded it will lead to the following:

Act as an effective tool to fight poverty and miseries in our communities, Stabilize the water level and eradicate draught and bring back water in stand taps in our communities during dry season while foster conservation practices and, Stimulate children to participate in tree planting, Off-set CO2 and give oxygen, Act as a powerful tool that directly and indirectly ensures survival and reduces the pressure on the small patches of forest, Empower school environmental clubs hence discourage abusive planting of eucalyptus trees near watersheds and running streams, Empower youth leaders on tree planting , maintenance techniques and encourage the development of community tree nurseries, Curb rural exodus, Encourage zero chemical along water catchments and stimulate the replacement of eucalyptus trees with native tree species in farmlands ,Encourage the planting of environmental friendly tree species in wetlands and emphasize on the importance of wetland protection, Setup a base for community action in the fight against climate change and act as a vehicle of information between farmers, grazers and the administration in conservation strategies, Demonstrate the role of the children in fostering sustainable development and educate communities about the value of proper landscaping to reduce non-point source pollution at the water source, Reduce erosion and stabilize stream banks in the running streams, Foster environmental stewardship

and interest members of the community and raising public awareness about the treasures and threats to their watershed.

Analysis of Actual Situation of Watersheds in Lushoto Jegetal

The geographical area that collects all the water that falls on it into a single stream or river is called a watershed'. A watershed is thus a natural demarcation of the land, and the appropriate unit for many development activities. 'Watershed development' is a critical intervention in Tanzania especially the Usambara mountains Lushoto District where deforestation, and the abusive cultivation of eucalyptus trees have invaded the watersheds.

Desertification is a Global challenge, particularly in Africa where 66% of the surface area is arid lands or deserts and approximately 70% of the agricultural land is almost degraded. And besides, for some years now, watersheds have been under serious pressure from manmade activities, the pressure from farmers and grazers as well as the phenomenon of climate change continue to act as a threat to humanity. Furthermore, out of ignorance, farmers and grazers continue to practice "slash and burnt" commonly known as "*Uchomaji Moto Ovyo*" as well as bushfire that act as agents of deforestation. Consequently, hundreds of hectares of indigenous forests are burnt down resulting to soil pollution, degradation and frequent water shortage.

Even at the time of writing this project, many villages in Lushoto district do not have access to potable water. And with the impending cholera threat, there is every reason for schools to Go Green in order to improve on access to water as part of the MDGs. This is deplorable because of the abusive cultivation of eucalyptus tree around the main watersheds. Taking into consideration that it has been proven that a mature eucalyptus tree consumes at least 400 liters of water a day, these trees have also contributed to the nightmare the population undergoes during the months of March, April and May in search of water.

The truth is that this problem could also be solved if children could plant trees in public places, schools and watersheds. It will raise awareness as well. Besides, the pressure on the small patches of forest found in the watersheds have made them to disappear at a very geometric rate and it is evidence that we continue to lose trees the size of two football fields every year and the effects are already heavy and drastic in our villages.

The issue at stake is that these activities lead to pollution, soil degradation, dry-off springs/wetlands and frequently drastic water shortage. Poverty, scarcity of water, drought, and floods, poor harvests, soil erosion etc seem to take control of the future of our dynamic population. To salvage the situation, children have to be motivated to plant trees. This project if implemented will boost natural resource management and stimulate every child to plant a tree. Above all, communities will understand during the implementation phase of the project that it is not by pouring libations in drying-off streams that water will come back, it is only through planting trees, eradicating eucalyptus in watersheds and wetlands that the drastic changes could be overcome.

Strategic objectives and performance measure

To assure adequate fruits availability of fruits so as to encourage self-esteemed fruits planting habit among the communities by; Planting of fruit trees on bare areas within villages and thus reduce dependence most of the time forest products/fruits in Usambara Mountains and nearby Forest Reserve of the Eastern Arc Mountains. This will be measured through increased number of fruit trees raised and planted during monitoring and evaluation as well as improvement of health living

standards of the people. However apart from conserve the Magamba Nature reserve, the global objective of this project is to improve access to potable water and contribute to proper protection of this unique reserve and the MDGs. It demonstrates that the ecosystem upon which all humanity depends is at risk due to climate change, partly because of some of our negative actions such as forest fire which sometimes caused by people are making charcoal and even cutting timber to sustained their life. Consequently, the children as leaders of tomorrow also have the corporate responsibility to seek solutions in order to bequeath a better environment and a better standard of living for the population.

Tree planting is the major components of the project and the fact that over 250,000 seedlings will be planted further strengthens our commitment in fighting environmental hazards. Besides, each tree planted is expected to provide Oxygen to two people for the rest of their lives so much so that they could live and function normally. At the level of the children who are the main actors in the project, planting a tree is not just a gift to humanity but performing God's work. Trees when mature, act as windbreakers and cleansers apart from stabilizing the water level that is also badly needed for human survival. These trees will also remove other pollutants and they are the better solution to mitigate the effect of climate change yet contribution 100 percent on conserving the Magamba nature reserve and eastern arc mountains as a whole.

Methodology for implementing the project

The methodology that will be used is to consist of putting at the forefront youths who are the leaders of tomorrow to take part in sustainable protective measures and creations of superb ambassadors who will participate fully into conserving Magamba nature reserve and the world in general. Project implementation will be generally based on community participation approach. Successful implementation of the project activities will involve multi- sectorial approach which require very strong commitment, close collaboration and smooth Coordination of all stakeholders in the implementation of the project activities. Green School Project” encourages and demonstrates the essence of collective measures in the fight against climate change. It revamps lives in school children given that in our contemporary society a tree is life as well as binds together all socio-economic development initiatives that foster sustainable development and the MDGs.

Key success factor

Friends of Usambara Society shall work with heads of schools, environment environmental clubs for the sustainability of the school forests and the village water management committee for the catchment. They shall oversee that all the trees planted by kids are taken care of. Positive attitude of the community adjacent the reserve environmental conservation, existing Environmental conservation Rescue groups in Friends of Usambara who will work close with environmental clubs in the schools; support with various equipment's and training to the formulated groups for sustainability of the projects; the vision of the project in the improvement of rural live hood of the people; since the communities in the project area are living below standard, it is anticipated that all the activities and or interventions of the project will be highly accepted; adequate experienced and qualified personnel in schools as well as in Friends of Friends of Usambara Society; the availability of the mentioned staff in all sectors in the District such as District forest officer who accepted to give full support during project implementation as well as school teachers and students who assured the facilitation and close supervision of the activities to be implemented in the project area. All activities will be coordinated under the existing Friends of Usambara Environmental rescue

group in the organization structure as well as availability of working facilities which will be provided with donor fund;

Why Tree Planting by Children

Trees planted anywhere in the watershed help to improve water quality by slowing down storm water runoff and reducing soil erosion. They also help lessen flooding. In the woods, trees trap and use up excess nutrients. The forest floor is made up of many layers of decaying leaves, twigs and branches. The absence of trees that provide these organic materials to act as a natural sponge is completely absent. Forests are such an efficient infiltration system that they can filter six inches of water or more each hour. Trees s planted along the marshy plots will act as a buffer, retaining as much as 89% of the nitrogen and 80% of the phosphorous that runs off the adjacent land. Vegetation helps to stabilize the stream banks by reducing erosion caused by water, debris and direct rainfall. In addition, falling leaves decompose in the water and provide food for many aquatic insects that, in turn, becomes food for fish. Trees provide shade, food and cover for wildlife and brighten a drab landscape.

Description of the beneficiaries

The project entails the design of activities which contribute both protection and assurance of sustainable field increase so as to meet the demand for fruits products while at the sometime contribute to the increase in the living standards (income) of the communities using these resources. This also implies integration of health department, agriculture and other support extension services. Development of self – esteemed communities in management of established fruits growth effectively as the project demand originated from the community itself according to their priority. The targeted project beneficiaries of the project proposal are local communities, Magamba nature reserve and government, the three schools and over 20,000 people livings in Lushoto town. Local communities will be the beneficiaries of the project; local people will be integrated in the project with the direct and indirect employment in the youth by establishing environmental business in their villages.

Primary and Secondary Schools	Number of nurseries			Planned participants
	Planned	Male	Female	Total
Kwesimu Primary School	15	50	60	110
Kitopeni Primary School	15	50	60	110
St:Clause Secondary School	20	60	60	120
Total	50	160	180	340

Planned activities

Activity	Indicator	Measures	Time frame for implementing the activity
Establish tree nurseries, in the three schools and Organize training of tree raising, planting and maintenance;	Number of tree seedlings raised	-Reports	December 2015
Distribute tree seedlings to each pupils and farmland adjacent to Magamba Nature reserve and; Measured by each pupil to be given 100 seedlings per students to 600 students to plant at their homes as well as public area such as along the roads for erosion control.	Number of visits	-Reports	March 2016
To plant tree around to conserve Water sources in Lushoto Jegetal; Measured by 6000 indigenous species planted by school kids and villagers around this water source	Number of farmers trained	-Reports	March , 2016
To prepare and install signboards and leaflets for awareness raising about the project ARC	Number of billboards and leaflets	-Reports	July , 2016

PROJECT SUSTAINABILITY PLAN

For the project to sustainable the following approaches will be used; group approach and participatory approach and cost sharing:

Group Approach, Environmental clubs will be formed in each school so as to get group of students who will take care the nurseries and minimize costs hence ensure the sustainability of the project by using over 20 per cent of tree seedling to be sold to the farmers as income generation for schools.

Participatory Approaches, The student in all schools will be involved in the implementation of the project by participate in the planned activities.

Use Group Approach

For the purpose of minimizing costs a group approach will be used in all activities like training on technical skills and group organization capacity building.

Cost Sharing Principles

Farmers shall contribute in kind in various activities like in the nurseries participation in fire extinguish inside and outside forest reserve in case it happens and various conservation activities. District Council will provide transport as well as make available all technical staff required.

BUDGET

The total budget for the proposed project is **USD 10347.00** as shown in the budget summary below

Budget summary

S/N	ACTIVITY DESCRIPTION	AMOUNT (USD)
1	Problem Identification/clubs identification	372.00
2	Establish tree nurseries, in the three schools and Organize training of tree raising, planting and maintenance	7,700.00
3	Distribute tree seedlings to each pupils and farmland adjacent to Magamba Nature reserve and; by each pupil to be given 100 seedlings per students to 600 students to plant at their homes as well as public area such as along the roads for erosion control	300.00
4	Monitoring the performance of activities and assessing impact of project activities.	300.00
5	To prepare and install signboards for awareness raising about ARC project	242.00
GRAND TOTAL		8,914.00

NB: SEE ATTACHED BUDGET