

MOUNT SUSWA BIODIVERSITY ACTION DAY



To celebrate the International Biodiversity Day (IBD) which takes place every year on 22nd of May, the Promotion of Private Sector Development in Agriculture (PSDA) programme implemented by the German Technical Cooperation (GTZ) together with the Ministry of Agriculture (MoA), and the Lake Naivasha Landscape Project of the World Wide Fund of Nature (WWF) organized a local Biodiversity Action Day at Mount Suswa Kisharu Primary School on 15 May.

The aim of the Biodiversity Action Day was to contribute to this year's theme "Biodiversity and Development" by creating awareness about the importance of biodiversity for the development of the Mount Suswa area, as also sustainable development opportunities for the Maasai communities. Due to population increase and unfavorable weather conditions, in the last years,

it became difficult for the Maasai to live in harmony with the nature. Increasing demand for firewood as well as land for livestock and agriculture, all essential for their surviving, resulted in deforestation and high pressure on the Mt. Suswa ecosystem and its biodiversity. The Action Day at Mt. Suswa was not only to create awareness and to inform about benefits of biodiversity and ecosystems, but also to demonstrate opportunities of how to solve this dilemma between development and sustainability.

For this purpose, PSDA, WWF, the Mount Suswa Conservation Trust, the Centre for Pastoral Development (CEPAD), and SUSTAINET, a network promoting conservation agriculture, together with the elders of the Maasai community and teachers of Kisharu Primary School, organized the Action Day at the compound of Kisharu Primary School. Over 250 Maasai joined the event that consisted of group activities, poem and painting contests, as well as several speeches. Five different group activities to create awareness and exchange experiences were conducted:

Group Activity 1: Bird- and other Wildlife Monitoring

While hiking from Kisharu Primary School to the inner crater of Muswa, the group observed the bird-

and wildlife found in Mt. Suswa and discussed their values to the Maasai communities. Besides several birds (Rufous Naped Lark, Augur Buzzard, Superb and Hildebrandt's Starling, Variable Sunbird) many insects and also several reptiles were seen. The rains that Mt. Suswa received in the previous days and weeks provided for the vegetation to recover from the drought conditions that shaped most parts of the year 2009 in the area. A good example for tangible benefit humans receive from birdlife is the control of pest levels by feeding on insects.



The migrant White Stork (*Ciconia ciconia*) who is breeding in Europe and Asia usually arrives in East Africa from October and departs between March and May. During the stork's last stay in Kenya, mainly in the Rift Valley areas around Lake Naivasha and Lake Nakuru, their presence came just at the right time to face large numbers of the Army Worm (*Spodoptera exempta*).

This African moth is capable of destroying large areas of agricultural crops and pasture, and has only very few natural enemies. The White Stork however is feeding on them in great numbers, contributing considerably to regulating the occurrence of the

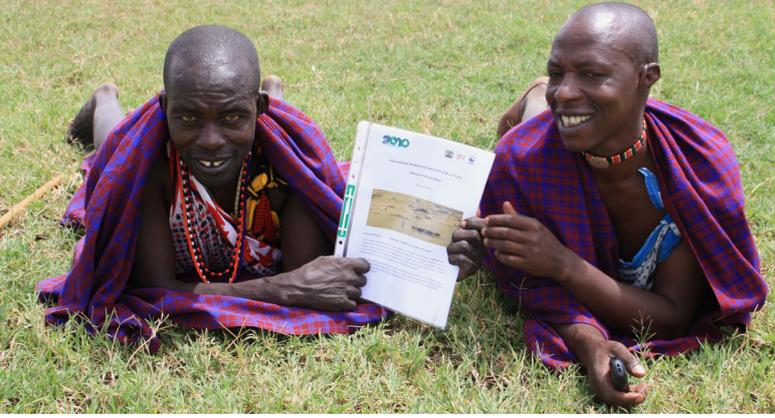
Army Worm, a benefit that has also been acknowledged and enjoyed by the Masai in Mt. Suswa.

Group Activity 2: Cave exploration

The "Baboons' parliament" and bats Members of the Mt. Suswa Conservation Trust and the Centre for Pastoralist Development (CEPAD) went exploring parts of the Mt. Suswa lava tube cave system that consists of more than 40 collapsed holes in an area of less than 278 ha. These rare volcanic lava caves are home to a large family group of baboons (*Papio anubis*) that retrieve to the caves over night.

The rock formations are used by the baboons as seats, hence the "baboon parliament", and there is even a speaker's chair! Other wildlife found in the cave are various bats (e.g. Martienssen's Mastiff Bat, *Otomops martiensseni*), and various animals regularly visit the cave system such as lion (*Panthera leo*), leopard (*Panthera pardus*), spotted hyaena (*Crocuta crocuta*), civet cat (*Civettictis civetta*), and Barn owls (*Tyto alba*). The participants also discussed the potential of Mt. Suswa with its wide variety of micro ecosystems and unique landscape of the Mt. Suswa caldera double crater.





Other group activities aimed to point out solutions how to connect biodiversity with development.

Group Activity 3: Firewood Saving Stoves

The group converged next to the newly built school kitchen that has been completed with a new institutional rocket brick stove and two kisasa stoves. On the display were metal clad jiko kisasa, a fireless cooker, posters, brochures and jiko calenders.



The participants were sensitized about GTZ/PS-DA's activities on energy-saving stoves, and trained on consumer education using the recently installed institutional rocket brick stove and two kisasa stoves in the school kitchen. A marked difference was noted between the fuel wood used by three stones and the improved three stone which were all lit at the same time. Demonstration on how to use a fireless cooker was on rice preparation.

Rice was brought to boil and then placed in the fireless cooker. After 30 minutes all the water had been absorbed and the rice was completely cooked. The group agreed to purchase fireless cooker materials and contact PSDA for training. Finally, two nearby homes with installed jiko kisasa were visited. The Maasai home owners confessed that when using three stone fireplace they used to fetch firewood eight times as compared to only two visits to the forest to fetch firewood since they installed kisasa jikos. They also said they have less eye problems due to significantly reduced smoke emissions in their manyatta. Then more sensitization on how to maintain and use jikos was done.

Group Activity 4: Potentials of Conservation Farming

While visiting two maize shambas, the concept of Conservation Agriculture was introduced to the group as a mitigation strategy towards enhancing their resilience to effects of climate change. The importance of biodiversity in so far as conserving soil micro organisms through CA hence leading to increased soil fertility, better and sustainable yields. The job planter brought a lot of enthusiasm to the farmers especially due to the ease with which it



is able to undertake precision planting and fertilizer placement, the labour saving and better yield as a result of high germination percentage. The Maasai farmers were explained about the practical application of Conservation Agriculture and how it would bring a difference with regard to profitability of their farm business. In the shambas visited, the owners had planted maize and a small section of Irish potato. The farmer also had plenty of manure from the cowshed which they did not know how to use it to improve soil fertility.

It was impressive to hear the farmers ask pertinent agronomic questions and seeking further clarification on the benefits of conservation farming. At the end of our group discussion, the farmer from Kisheru village expressed a lot of interest in trying out CA albeit in a small demonstration plot for start.

Entry point for SUSTAINET to support conservation agriculture

With the presence of Energy saving stoves in the area, SUSTAINET can initiate Conservation Agriculture activities by establishing a demonstration plot to be operated alongside ongoing activities. Immediately we can establish *Tephrosia* spp which is a fast growing leguminous cover crop that can provide fire wood, improve soil fertility and be used as a fallow crop.

There is abundance of fresh manure which is just spread on the surface of the farm, this is neither beneficial to the soil nor to the environment, we can sensitize the farmers on composting before application on the farm. The Irish potato was doing very well hence growing the crop under CA would reduce the labour, increase the yield and enhance profitability.



Group Activity 5: Planting of Trees

With the over 200 tree seedlings provided by the Centre for Pastoralist Development (CEPAD), experts from WWF advised the school children and other guests on the correct planting of the trees. With fences provided by the organizers, the trees will be protected against the sheep and goats that are on their constant search for vegetation. The trees will provide shade around the Kisharu Primary School, and contribute to cleaning air and water, prevent erosion which is a serious and widespread phenomenon in Mt. Suswa, and serve insects and birds as micro-habitat.





and students presented their paintings and poems about biodiversity. The proud winners and the school itself were awarded with wildlife education books and a GTZ sponsored trip to the International Biodiversity Day in Nairobi on the following weekend.

All participants showed great interest and enjoyed the different activities. During and after the traditional lunch (grilled goat), biodiversity was the main topic of conversations. Children asked questions and read information papers, adults discussed about the benefits of energy saving stoves, sustainable agriculture, and observed changes of the flora and fauna. The rich exchange of information and awareness building created an inspiring and joyful atmosphere. The Elders appealed in their speeches to take the problems of environment seriously, experts underlined the

After a whole day of actions, everybody returned back home, enriched by new knowledge and experiences of how fragile the hidden beauty of Mount Suswa is and why it needs to be protected.

