## **Project Update: July 2010**

As from May 2010, the project continued with the three CBOs (Weru Self Help Group (WeSeHG), Mwitethie Kiroone Women Group, and Gichera Environmental Program (GEP). The main activity was tending seedlings in their nurseries to be planted during the short rains later this year. Tending seedlings involves watering and addition of manure to ensure seedlings survive during the dry season. We have therefore, assisted the three CBOs to employ a nursery attendance to water the seedlings during the dry period. Currently GEP has 10, 000 trees, while WeSeHG and Mwitethie Kiroone Women Groups have 8,000 seedlings each of both fast growing and indigenous multipurpose trees.

Beekeeping activities are progressing well; so far 25 hybrid hives have been issued to the local communities. Ten hives are already occupied by bees and more are bound to be occupied since bees normally swarm from August to February in the project area. However, our plan of cost sharing in cash with farmers failed since most could not afford. Instead, we decided to issue hives free of charge but on condition that the farmers leave a portion of their land uncultivated and plant trees there. This is a win win situation as farmers will get honey to supplement their livelihood while bees and other pollinators benefit from their habitats being conserved. In addition to issuing hives and as an incentive we have given each CBO protective gears (two bee suits, two pairs of gloves, and two smokers).

Preliminary data on local knowledge and production of indigenous crops indicates that most farmers are aware of indigenous crops that were grown in their areas and a few farmers especially the older generation currently grow them on subsistence basis. They are also aware that these crops are less affected by weather and do not require intensive care as compared to introduced crops. Problems with indigenous crops that farmers cited were that the indigenous crops are being attacked by pests and diseases more than before and that the market value of indigenous crops has gone down. Our observations in the field indicate that many indigenous crops have been replaced by modern crops. For instance wild tomatoes have been phased out by modern tomato varieties, indigenous mangoes are being replaced by modern mango varieties. However, the introduced crops require an intensive care and are more susceptible to weather changes than indigenous crops. To this end, we continue to encourage and assist farmers to plant indigenous crops especially multipurpose fruit trees. We do this with the help of community members who help in training and coordination of activities at the grassroots level.

Monitoring of indicator species (butterflies, bees, and birds) is still continuing in our three study sites. Current data shows an increase in species and abundance of the indicator species in all sites this could have been due to the heavy rains that has fallen since last year that led to increase in foliage. In addition, we observed a mixed butterfly migrations in the three sites in May 2010 (genera Sallya, Junonia, and Bicyclus). The butterflies flew from the coffee-dominated sites towards the tea-dominated areas. These genera seemed to favour Sapium ellipticum trees as a food source for their larvae and had left many of these trees defoliated to the chagrin of farmers who use them as food for livestock. After many months of trying to acquire a stingless bee's colony, we were lucky in June 2010 to get colonies of Hypotrigona and Plebeina stingless bees in a tree log that had been cut by loggers who do

logging in farmlands. We are now studying and experimenting with the two colonies with a view to domesticating them for honey production.



A beekeeper being shown how to wear a new bee suit

A farmer inspecting his new bee hives, immediately after hanging

Gichera environmental programme tree seedling nursery