Geophysical Research Abstracts
Vol. 16, EGU2014-1034, 2014
EGU General Assembly 2014

Afforestation for energy wood production – combining land rehabilitation with resilience targets for rural population

Klaus Ackermann (1), Steve Sepp (2), and Susanne Wallenoeffer (1)
(1) GIZ, Germany (klaus.ackermann@giz.de), (2) ECO-Consult, Germany (steve.sepp@eco-consult.com)

Abstract for a special session on Arid Lands Restoration & Combat of Desertification at the European Geosciences Union General Assembly in Vienna (27 April-02 May 2014).

Afforestation for energy wood production – combining land rehabilitation with resilience targets for rural population

Dr. Steve Sepp, ECO-Consult
Dr. Klaus Ackermann, GIZ
Susanne Wallenoeffer, GIZ

One of the main drivers for land degradation is the non-sustainable use of natural resources, caused mostly by agricultural and pastoral activities. At the same time, increasing demand for fuel wood, especially in the vicinity of urban areas, contributes considerably to deforestation and land degradation. According to scientists and development experts, wood energy will remain the main pillar of energy provision for large parts of the population in many countries of Subsahara Africa (SAA). Growing demand due to population growth will further aggravate land degradation and pressure on natural forests. Those will hardly be able to meet this demand due to their rather low production capacity and their decreasing areas.
On the other hand the potential for afforestation in SSA is enormous. ZOMER et al. calculated an estimated 195 million ha suitable for afforestation with the clean development mechanism - CDM, of which almost 70% is savanna area. Afforestation - especially on marginal, degraded land – constitutes a very interesting option for restoration and rehabilitation of degraded lands. Combined with a transfer of tenure and land-use rights to the local population there is also an enormous potential for the development of sustainable economic structures. Restoration and sustainable management of formerly degraded land for the provision of sustainably produced wood energy contributes to strengthening local markets, promoting the development of complex value chains and diversifying income options for the local population.
German Development Cooperation has strong experience in afforestation on degraded land in Madagascar. Together with the local communities, 7000 ha of energy wood plantations have been established which are the basic element in a holistic approach of modernization of the whole value chain. Apart from the restoration of degraded land, positive impacts of the rehabilitation activities are for instance the economic valorization as well as the protection against continuous overgrazing and burning of the land.
In conclusion land rehabilitation measures should whenever possible be combined with creating ownership of the local population through developing an economic incentive for the sustainable management of the land. This creates responsibility to maintain and improve the state of the land. Additional benefits include a reduced pressure on natural resources, followed by a reduction of land degradation, if more fuel wood and charcoal are produced sustainably. Creating innovative approaches and up scaling best practices for energy wood production on degraded land should be considered as a priority.