Mangroves and livelihood - An assessment of livelihood projects in the mangrove ecosystems along the Kenyan coast

Hamza Amina Juma^{1, 2}, James Kairo¹, Nico Koedam² and Farid Dahdouh-Guebas^{2, 3}

- ¹ Kenya Marine and Fisheries Research Institute, PO Box 81651-80100, Mombasa, Kenya E-mail: amina_j2002@yahoo.com
- ² Laboratory of Plant Biology and Nature Management, Faculty of Sciences and Bio-engineering Sciences, Vrije Universiteit Brussel (VUB), Pleinlaan 2, B-1050 Brussels, Belgium
- ³ Laboratory of Systems Ecology and Resource Management, Department of Organism Biology, Faculty of Sciences, Université Libre de Bruxelles (ULB), Av. F.D. Roosevelt 50, B-1050 Brussels, Belgium

The combined pressure on fishery resources and critical habitats presents a challenge to community livelihood along the Kenyan coast. To counter declining fishery and destruction of habitats several alternative livelihood activities have been initiated. These include ecotourism, mariculture, apiculture, and agro-forestry among others. The present study aimed at assessing the feasibility and sustainability of ecotourism, mariculture and beekeeping projects practiced in mangrove areas in the Kenyan coast. Focus group discussions with project proponents, local interviews and online Delphi survey with project stakeholders were conducted on projects found in Mida and Majaoni in the north; and Makongeni, Gazi and Wasini in the south coast of Kenya. A total of 209 local people were interviewed and 65% of invited stakeholders responded for the Delphi survey. A SWOT analysis identified the presence of a healthy mangrove forest and support from local stakeholders as projects strengths; and lack of technical skills as a weakness of the projects. Diversification of the livelihood projects was seen to be an opportunity; and illegal cutting of mangrove was found to be a major threat to the projects. The study found significant differences in causes of project failure in the five sites. The study also established lack of transparency and accountability, inadequate marketing, and lack of commitment among members as some of the factors contributing to failure of these livelihood projects. This study provides recommendations on how to improve on efficiency and effectiveness of the initiatives so as to help in wise management of the mangrove ecosystem.