INDIGENOUS KNOWLEDGE IS IMPORTANT FOR **EFFECTIVE MANGROVE CONSERVATION - THE CASE**

OF RUFIJI DELTA | By Loyce N. Ntibona, Mwanahija S. Shalli and Mwita M. Mangora



Local community participation in natural resource conservation is gaining interest and is encouraged as an effective approach to ensure sustainability. This is due to the growing recognition that Indigenous knowledge should be blended with contemporary conservation techniques to enhance the capacity to carry out long-term natural resource conservation plans.

However, it is evident that local communities in different areas have not actively participated in conservation programme planning and decision-making due to several reasons.

The Tanzanian Forestry Policy of 1998 and Forest Act of 2002 emphasize participatory management to achieve sustainable forest management through the Participatory Forest Management (PFM) framework. The PFM has two strategies; Community-Based Forest Management (CBFM) and Joint Forest Management (JFM). In CBFM, a community becomes the forest owner and duty bearers of forest management, while JFM requires a community to sign an agreement with the government and other forest owners regarding forest management.

Sharing benefits and revenues

However, CBFM and JFM strategies in Tanzania have not been successful, not only in mangrove forests but in other terrestrial forest reserves where attempts have been made. This is because there are no clear or binding agreements on how forest benefits and revenues should be shared between the government and local communities.

JFM has enabled higher levels of local governance, particularly the functions of Village Natural Resource Committees (VNRCs) but fell short in improving the livelihoods of local communities participating in JFM, calling into question long-term sustainability.

An adequate understanding of drivers influencing community willingness to participate in conservation in the Rufiji Delta is important for designing and implementing effective community-based mangrove conservation.

Key findings

- The local community is ready to become partners in conservation programmes because they are natives of the area, with local knowledge of the Delta, and are the primary implementers of the initiated conservation activities. Local community participation reduces conservation costs in terms of time and money by eliminating the need for outside technical expertise and human resources.
- There is increased awareness of the importance of mangrove conservation as a result of several awareness training programmes by conservation organizations.
- Mangrove restoration was regarded as a key conservation activity initiated by several conservation organizations in the Delta.
- community participation is contingent on incentives and benefits.
- · Conservation activities should ensure the socioeconomic and sociocultural well-being of local communities, which are essential for maintaining conservation development.
- The age of the household head, education level, source of income and awareness of mangrove governing laws are significant factors and were positively associated with community willingness to participate

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Recommendation and management implications

For effective conservation, it is important for responsible conservation authorities to recognize and include the local community in conservation activities.

government should strengthen implementation of participatory forest management approaches as emphasized by the National Forest Policy of 1998, the National Forest Policy Implementation Strategy of 2018-2028 and the Forest Act of 2002.

Local communities should be provided with incentives to encourage them to develop the capacity and desire to sustainably manage conservation programmes. These could include payment to mangrove planters, donation of livestock to poor households, rewards to reporters of illegal use, revenue sharing, the establishment of local mangrove protection teams supporting training.



