

# Conflict between the Need for Income and the Necessity of Controlling Endemic Malaria

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## Abstract

Malaria control in Africa mainly explores top-down Government-led initiatives (vertical) rather than horizontal approaches, which normally embrace active participation of communities. African malaria mosquitoes mainly breed in man-made habitats such as brick-making pits, fishponds, irrigation channels etc. This underscores the need to have communities living in affected areas to understand their role in propagating malaria and henceforth, how to contribute in its control. Malaria disproportionately affects poor people whose need for income to support basic survival far exceeds other needs. It is therefore important to integrate income generation activities (IGA) into disease control interventions. A cross-sectional survey was conducted using a questionnaire with open and closed ended questions to determine the potential integration of fish farming and mosquito control on Nyabondo plateau in western Kenya. Some of the questions asked included reasons for fish pond construction, pond condition (whether well maintained in productive state or abandoned), pond ownership (self or group), challenges faced and the respondent's biodata. A total of 115 fish ponds were visited during the survey. Seventy percent of these were self-owned while 30% were owned by local groups. Ponds were either maintained in active productive state or abandoned depending on the education level of the owner. Abandoned fish ponds harbored more *Anopheles* (malaria) mosquito larvae than active ones. Ninety nine percent of the pond owners practiced fish farming solely for income generation. There were no observable indicators that active fish farming was integrated with mosquito control. There is need to create awareness among the local communities about the importance of deliberately directing fish farming practices for integrated vector management. This will ensure proper maintenance of the ponds, assure nutrition and improve the socio-economic status of malaria burdened rural communities.

**Keywords:** *Anopheles*; Fishponds; Income generation; integrated vector management; Western Kenya

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