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## Adoption and Diffusion of Fish Ponds in Malawi

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### Abstract

In face of a growing world population and declining fish stocks through overfishing, aquaculture can play a key role through the provision of high value protein affordable to poor people in developing countries. This situation is particularly true for Malawi whose problems and promises of fish farming development are representative for sub-Saharan Africa. Yet, the full potential of fish farming is far from being realised in Malawi although enough suitable dambo land (wetland on flat plateaus) is available.

The purpose of this study was twofold. Firstly, to identify perceived driving forces that lead to adoption of fish farming in earthen ponds in Malawi and inhibiting forces that hamper their sustainability and spread. Secondly, to compare farmers' situations in Malawi and Cameroon in view of the potential for future development of fish farming.

Everett ROGERS' (2003) 'variables determining the rate of adoption' are used as analytical framework and a farmer typology is constructed based on Susann KLUGE (2000) and BARTHON and LAZARFELD (1955).

Semi-directive interviews with fish farmers for qualitative and quantitative data collection were used. General patterns of decision-making processes and important driving and inhibiting forces were determined. Interviews with local experts provided background knowledge, completed the picture and helped to critically reflect preliminary results.

The outcome is the understanding of fish farmers' perceptions and decision-making through the analysis of fish farming as an innovation taking into account i.e. its farmer-perceived attributes. Based on representative farmer cases, the relative advantage of fish farming will be considered with the comparison of gross margins of alternative dambo crops. The typology of fish farmers in selected areas of Malawi is used to explain the current development of fish farming from a sociological point of view. In addition, the latest official Malawian aquaculture statistics are analysed in a comprehensive and critical manner.

The results will be discussed in view of recommendations for future promotion strategies.

**Keywords:** Adoption, aquaculture, diffusion, driving and inhibiting forces, fish farming, Malawi, relative advantage, typology