

UNIVERSITY OF HOHENHEIM



Institute for Social Sciences in Agriculture

Department of Agricultural Communication and Extension (430a)

Prof. Dr. V. Hoffmann

**History, Present State of the Art and Adoption of Aquaculture
Technology in the Eastern Region of Ghana**

Submitted by:

Moro Bukari

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Summary

The importance of fish in the daily lives of Ghanaians is undisputable. With a per capita consumption of about 25 kg per annum, fish is the preferred source of animal protein of Ghanaians contributing about 60% of total animal protein consumption and 5% of the gross domestic product FAO (2006). In the past, marine and inland fresh water fishing were the only sources of fish in the country. Bounded by a stretch of coastline of nearly 550 km, marine fishing is the most important source of fish in Ghana accounting for 80% of total domestic output with inland fishing and aquaculture contributing the rest of the 20% (FAO, 2006).

The modern form of aquaculture was introduced into the country in the 1950s by the British colonialist. After gaining independence in 1957, successive governments realising the high potential of aquaculture in the country embraced it and started promoting small pond and culture based fish farming throughout the length and breadth of Ghana. The idea was to turn the relatively new venture into a self propelling and sustainable nationwide alternative source of fish in order to bridge the ever dwindling marine catch. About nine major projects and programmes have been implemented to promote aquaculture in the country since 1991. Over 50 years down the lane, aquaculture contributes less than 1% of domestic inland fish production. Moreover, the adoption of fish farming is yet to be a self propelling process, and only rises and falls with programmes and projects that are meant to promote it.

This study assessed the present state and adoption of fish farming in the Eastern region of Ghana through the qualitative approach. It adopted an assets based approach in order to understand the complex relationships that characterise the adoption decision-making process of household in the region. The study investigated the suitability of the innovation of aquaculture for households in the region. It assessed the influence of assets of households on the adoption of aquaculture in the region. It further investigated the inhibiting forces that hinder the adoption of aquaculture in the area.

The results indicated that there has been a renewed interest in the promotion of the aquaculture in the region and Ghana at large. Since 2002, the government made new policies geared towards making aquaculture attractive with particular emphasis on the technical and economic aspect of aquaculture. However, the people who are targeted as the potential adopters have not been considered much in the new strategies. The majority of the promoting institutions have focused on how to get individuals attracted to the aquaculture, rather than providing advisory information on aquaculture to help potential adoption in their decision making.

The research found that the Eastern region has both the required biophysical conditions required for fish farming and the proximity to market for fish in the country. The results revealed that the majority (80%) of adopters of aquaculture in the region practice small scale non-commercial fish farming. It showed a positive relationship between the level of assets of adopters and the type of fish farms they operate.

The results showed that most of the adopter had only limited information regarding the inputs and output of fish farming before adopting the innovation. Over three quarters of

fish farmers contacted were unable to provide a quantitative estimate of the amount they actually invested into their ponds and the expected yield of fish thereof. The results further showed that profitability of fish farming in the area depends on the size of the farm as well as the level of intensification of culture.

The results of the study indicated that the enhancement of people's assets through policies and by institutions, change the livelihood options of people and reduce their vulnerabilities towards adopting new technologies. An asset based promotion of fish farming will therefore reduce the inhibiting forces that militate against the sustainable adoption of fish farming in the Eastern region and Ghana as a whole.