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Title: Small-scale fish farming in Rwanda: Economic characteristics

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Abstract: A survey was conducted of 156 cooperative and 111 individual Rwandan fish farmers to estimate the costs and returns of aquacultural and agricultural crops. Enterprise budgets were developed for both individually and cooperatively produced fish, sweet potatoes, Irish potatoes, cassava, taro, sorghum, maize, peas, beans, soybeans, peanuts, rice, and cabbage. With the exception of Irish potatoes, all enterprises showed positive income above variable costs and positive net returns to land, labor, and management. Fish production yielded the highest income above variable costs and the highest net returns if fingerlings could be sold. If only food fish could be sold, cabbage was the most profitable crop. Sweet potatoes produced the highest yield of carbohydrates and soybeans were the least expensive source of protein. This study demonstrated that the cash income per unit of land generated by fish production is superior to other crops raised in the marais in Rwanda. While aquaculture is often considered a source of animal protein for household consumption, a high potential also exists for cash income generation.

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