



PD/A CRSP SEVENTEENTH ANNUAL TECHNICAL REPORT

DEVELOPMENT OF CENTRAL AMERICAN MARKETS FOR TILAPIA PRODUCED IN THE REGION

*Ninth Work Plan, Marketing and Economic Analysis Research 3 (9MEAR3)
Progress Report*

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ABSTRACT

Marketing studies will be conducted in Honduras in Year 1 of this project to identify and characterize existing market channels for fish and seafood in Honduras. Profiles will be developed of the types of markets that currently sell tilapia in Honduras, and the factors related to increased tilapia sales will be determined. The factors that affect the likelihood of other markets adding tilapia products also will be determined. The survey instrument for the supermarket survey has been developed and is currently under review. The pre-test of the survey instruments will be conducted in August 1999. Contacts have been made with Escuela Agrícola Panamericana (Zamorano) and the Universidad Tecnológica de Honduras to identify a potential graduate student and enumerators to assist with the project. Interviews with candidates will be conducted in August 1999, and the surveys will be conducted from September through December 1999.

INTRODUCTION

Tilapia culture was initiated in Honduras in the late 1970s (Teichert-Coddington and Green, 1997). In the early years, tilapia production was primarily a small-scale, family operation that was managed either extensively or semi-intensively as a supplemental agricultural activity. In 1995, Sarmiento and Lanza Nuñez found a total of 113.6 ha of small-scale, family-level fish ponds (2,738 ponds) operated in every department (province) of Honduras.

Export-oriented production of tilapia began in 1990 and has grown rapidly since 1991-1992 (Teichert-Coddington and Green, 1997). In 1997, there were 15 tilapia farms with a total water surface of 185.3 ha that produced for export and domestic markets. These farms produce tilapia exclusively and are owned by individuals, local investors, and international investors (Green and Engle, in press). Exports of tilapia to the US from Honduras have grown consistently since 1992.

The rapid growth in tilapia production is expected to generate supply that could be available domestically in Honduras. The development of a strong domestic market for tilapia in Honduras could diversify market opportunities for tilapia growers and serve to stabilize this young aquaculture industry from the external shocks common in export-oriented markets. Furthermore, the development of a domestic market could enhance the income-generating potential of small-scale tilapia production.

A limited amount of work has been done on markets for finfish in Central America. The few studies that have been carried out focused on the catch from commercial fisheries in Panama (Matton, 1981) and in Costa Rica (Schied and Sutinen, 1979). Head et al. (1994) developed market guidelines for saltwater-cultured Florida red tilapia in Puerto Rico. Several studies conducted in the US have examined the potential to develop markets for tilapia (Crawford et al., 1978; Nelson et al., 1983;

Galbreath and Barnes, 1981). More recently, Swanson (1995) described US market requirements for tilapia. Engle (1997b) interviewed intermediate seafood buyers in the US to determine the potential to increase sales of fresh and frozen tilapia fillets in the US. However, virtually no work has been done on the potential to develop domestic markets in Central America for tilapia. Engle (1997a) describes the domestic markets that have emerged in Colombia for Colombian- and Ecuadorian-produced tilapia.

METHODS AND MATERIALS

The survey instrument for the supermarket survey has been developed and is currently under review. The pre-test of the survey instruments will be conducted in August 1999. Contacts have been made with Escuela Agrícola Panamericano (Zamorano) and the Universidad Tecnológica de Honduras to identify a potential graduate student and enumerators to assist with the project. Interviews with candidates will be conducted in August 1999, and the surveys will be conducted from September through December 1999.

Profiles will be developed of the types of markets that currently sell tilapia in Honduras, and the factors related to increased tilapia sales will be determined. The factors that affect the likelihood of other markets adding tilapia products also will be determined.

Analyses planned include logit and ordered probit analyses of maximum likelihood factors and variables, although the survey response rate may dictate the analyses used. The use of direct personal interviews by Honduran economists and their students is expected to generate an acceptable response rate that will allow us to perform logit and ordered probit analyses.

Descriptive reports summarizing key results of the cross-tabulations conducted will be prepared in both English and Spanish.

RESULTS AND DISCUSSION

We are entering the data collection phase of the project and there are, as yet, no results to be reported.

ANTICIPATED BENEFITS

This activity will provide guidelines to develop domestic markets for tilapia in Central America and reduce market risk by developing more diverse marketing strategies. More comprehensive market information will provide opportunities for Central American tilapia producers to take advantage of reduced transportation, storage, and handling costs by understanding volume, packing, and labeling requirements of the most important domestic market channels. This activity will provide information that will allow the tilapia industry in Central America to develop and access new markets, increase the volume of goods sold, diversify marketing strategies, and improve financial success of tilapia growers. Results of this activity will be published in English and in Spanish.

The primary direct beneficiary of this study will be the Central American tilapia industry. Tilapia growers will benefit from the market information made available to them and from the training on marketing strategies that will be provided through this activity. At the present time, growers are struggling to develop and maintain export markets without the benefit of comprehensive market information and in competition with other tilapia-exporting countries. This is particularly true for small-scale growers who have greater difficulty in meeting the volume and size requirements of export markets. The proposed training workshop will teach tilapia growers, small and large, how to develop and maintain markets so that they will be capable of adapting to changing market conditions. While the primary focus is on the Central American industry, information on how to develop a domestic tilapia market will also be of interest to Thailand, other Asian countries, and African nations wishing to develop domestic markets for new or non-traditional species as well as tilapia. The PD/A CRSP will be a secondary beneficiary because improvements in market development will result in industry expansion that will allow for greater adoption and need for PD/A CRSP research results. The overall impact of the PD/A CRSP will be greater as the industry grows in Central America. Honduran university students will also benefit from the experience and skills gained through participating in this project.

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