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AQUACULTURE BUSINESS PLANNING

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A successful aquaculture business earns a profit by supplying products or services that meet the demands of a particular market. Many segments of the aquaculture market have business potential. Examples include, but are not limited to, the production of seed stock, grow-out of food-sized fish or aquatic plants, production of feed ingredients, manufacture of feed, fish healthcare, custom harvesting, processing, pond or facility construction, and the sale and service of equipment.

Developing a business plan is vital to operating a successful business. A business plan is an organized and structured document that describes the business opportunity, analyzes its market potential, and projects its financial performance. Extensive planning, management, and periodic evaluation of business plans are essential for the success of any business. Hence the central elements of a business plan are production or service plan, marketing plan, financial plan, and a detailed résumé of the borrower.

This fact sheet was designed to provide an introduction to marketing and financial performance concepts of planning an aquaculture business. Examples and a more detailed explanation of these concepts can be found in the reference section.

National and local regulatory bodies attempt to organize and structure usage licenses and permits to better meet the needs of people and the environment; thus there is an inherent dependency on accurate and current information from all users of resources (World Wildlife Fund, 2011). Be certain to identify and comply with all national and local regulations.

Any business decision should be based on a comprehensive market analysis (Engle & Neira, 2005). This requires an investment of time with market shareholders to understand their specific demands to address in a marketing plan. Marketing plans include but are not limited to the product or service to be offered, timescale for development of the business, customer identification/needs assessment, marketing strategy, securing capital or resources, and expected costs and returns (U.S. Peace Corps, 2019).

Once a market has been identified and the marketing plan developed, an assessment of the financial position should be performed. There are three distinct financial concepts that need to be independently assessed and monitored to determine the economic viability of a business: profitability, financial position, and liquidity (Engle, 2012d).

Profitability is the difference between total revenue and total cost. It determines if the business is profitable in the short and long term and is measured by an enterprise budget and income statement (Engle, 2012b). The enterprise budget provides an estimation of all revenues and costs and estimates breakeven prices (cost of production) that increase with volumes of production (variable), and those that do not (fixed). The income statement shows the accurate profit or loss earned by a business after accounting for returns to the four factors of production (land, labor, capital, and management).

The financial position of a business identifies the long-term ability of a business to generate net worth (pay off debts and accumulate wealth; Engle, 2012a). The balance sheet determines the financial position by

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establishing the difference between all business assets and liabilities. Assets are the monetary value of items owned by the business, and liabilities are monetary values of debts it owes.

Liquidity determines if the business can generate enough cash when needed to pay its debts and is measured by a cash-flow statement, which reports a company's inflows and outflows of cash (Engle, 2012c). This is a vital document that shows the available cash with the business and predicts future payments and borrowing needs.

All these financial documents are developed for a specified period (e.g., annually, quarterly, or monthly) and require timely reevaluation to identify potential pitfalls associated with various marketing, financial, and economic aspects of a business. Examples of each of these financial risk concepts were calculated for tilapia operations in Kenya (Engle, & Neira, 2005; Mwangi & Thordarson, 2007), Mozambique (Alda et al., 2008), and Rwanda (Hishamunda et al, 1998) and are referenced below.

A sound business plan can be developed by going to www.agplan.umn.edu. This fact sheet and other resources are available on the Feed the Future Innovation Lab for Fish website: www.fishinnovationlab.msstate.edu.

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ABOUT THE FISH INNOVATION LAB

The Fish Innovation Lab supports the United States Agency for International Development's agricultural research and capacity building work under Feed the Future, the U.S. Government's global hunger and food security initiative. Mississippi State University is the program's management entity. The University of Rhode Island, Texas State University, Washington University in St. Louis, and RTI International serve as management partners.

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