

MARKETING OF AQUACULTURE PRODUCTS (TILAPIA)

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To Produce or Not To Produce?

Do not produce aquaculture products because:

1. it sounds like a fun business;
2. it's a new business and there just aren't many people doing it;
3. the neighbor is producing aquaculture products;
4. you are an expert in livestock production;
5. new technology intrigues you;
6. people who attend aquaculture conferences intrigue you;
7. you need extra money to send the kids to college;
8. corn and soybeans are cheap;
9. nobody at the coffee shop ever sells corn and soybeans at a higher price than you;
10. your spouse is under-employed.

Do produce aquaculture products because:

1. customers *need* what you *can* produce, and;
2. in *most* years those customers are willing and able to pay a price that covers your costs of production and marketing, including the opportunity cost of your labor, management, and invested capital.

Management and Marketing

In a light-hearted way, the ten reasons not to produce aquaculture products represent first steps on paths to business failure. In contrast to the firm that is doomed to fail, the successful firm is built upon successful management, and successful management is built upon good decision making. Superlative marketing skills probably cannot rescue a firm that was established as a result of poor decision making. On the other hand, aquaculture producers must have good marketing skills in order to maintain a prosperous business, regardless of how efficiently they produce their products. The most efficient recirculating system is nothing more than a technological curiosity if the product cannot be sold at a profitable price. Peter Drucker advised that "Marketing is so basic that it cannot be considered a separate function.... It is the whole business seen from the point of view of its final result, that is from the customer's point of view." (Kotler, p. 1)

In order to be economically successful, the owners of aquaculture firms must shift their strategic visions or focus from *a*) producing fish to *b*) satisfying customers with products the customers did not realize they needed. Companies often fail to take advantage of marketing opportunities because they do not define themselves in terms of the benefits they can provide to customers (Hiam and Schewe, p. 16). Note that among the ten reasons not to produce aquaculture products, there is no sign of the word "customer."

Since marketing falls under the umbrella of business management, it is typically associated with the following management functions (Anderson):

1. planning,
2. organizing,
3. directing,
4. staffing, and
5. controlling,

which require some degree of each of the following management skills:

1. goal setting,
2. decision making, and
3. interpersonal relationships.

The importance of directing and staffing will vary depending upon the size of the firm and the number of employees. Planning, organizing, and controlling, on the other hand, are of utmost importance to all businesses all of the time, whether they are a one-person operation selling live fish from a roadside stand or a firm with dozens of employees selling filleted fish to a wholesaler. Anderson (pp. 19-23) provides the following definitions:

Planning - Deciding on a future course of action for the organization.

Organizing - Arranging the resources of an organization, department, or job in order to achieve objectives.

Controlling - Establishing performance standards, developing performance measures, and taking steps to correct deviations from standards.

While all functions are important, managers generally agree that planning is the core function, and the remaining four support achievement of goals established by planning. A well-worn phrase that applies to aquaculture management, marketing included, is *failing to plan means planning to fail*.

Planning: Establishing a Marketing Plan

According to Downey and Ericson (p. 32), the planning process should include the following steps:

1. Gather facts and information that have a bearing on the situation.
2. Analyze what the situation is and what problems are involved.
3. Forecast future developments.
4. Set goals, the benchmarks for achieving objectives.
5. Develop alternative courses of action and select those that are most suitable.
6. Develop a means of evaluating progress, and readjust one's sights as the planning process moves along.

Aquaculture producers must begin development of a marketing plan by **gathering facts and information**. How much information should be collected? Lee Iacocca of Chrysler Corporation had no definitive answer to that question, but he suggested that even though intuition appears to play a key role in management decision making, intuition should always be supported by facts. At the same time information is subject to diminishing returns; therefore, most important decisions must involve a certain amount of risk. Economically speaking, it is not feasible or desirable to know everything. The cost of gathering additional information, including the value of the information gatherer's time, should always be less than or equal to the additional revenue generated by that information.

The Internet is a source of vast amounts of information about aquaculture, some of which would be useful when developing a marketing plan. Aquaculture producers who have access to the Internet should attend Internet workshops or visit with extension personnel who have expertise on using the Internet in order to make the most efficient use of their time while logged on. Other sources of information include aquaculture magazines, aquaculture associations, aquaculture conferences and workshops, cooperative extension services, universities that are conducting aquaculture research, and other producers. Information pertaining specifically to markets may come from live-haulers, chambers of commerce, supermarket chain purchasing agents, restaurants, and other fish and seafood retail outlets.

When **analyzing the situation and pinpointing problems**, the following questions should be answered (Beem and Hobbs):

1. Who are the potential customers?
2. What do the customers want?
3. Who are the competitors?
4. What prices are being paid, and what prices have been paid?
5. What are the projected production and marketing costs?

In aquaculture, the *potential* customers may be numerous but unknown. This is because the markets for aquaculture products are vastly different from the markets for commodities such as corn, soybeans, hogs, and cattle where information concerning market outlets and prices is abundant and easily accessible. It is typically the job of the aquaculture producer to identify existing customers or even cultivate future customers through product promotion. In fact, aquaculture producers might have to be more creative when they are developing their customer base than when they are developing their production system because there are no engineers to direct them in marketing development. Hiam and Schewe (p. 15) refer to "marketing imagination" as an essential element in satisfying the latent needs of a customer, in other words, the customer's need for things he doesn't yet realize he needs.

In response to the question about what customers want, Willis (p. 62) states that a customer buys a product and a group of services provided with the product which might include convenience, quality, performance, service, and reputation. It is wise for the producer to remember that the customer is always purchasing a bundle of product attributes rather than just a physical product. Convenience to the customer might include such things as delivery of the product to the customer's door, being able to place a phone order with a human being rather than an answering machine, or being able to buy a product in a form that requires limited handling and preparation. Customers generally seek a quality product, but it is up to

the seller to determine the customer's quality requirements. Performance means that the product continuously satisfies the needs of the customer. The demand for service might be satisfied by providing assistance in using the product, for example preparation and serving hints or recipes. Reputation reflects dependability and integrity which must be established over time and should be monitored periodically.

Collection of useful information about potential customers and customer wants will be strongly influenced by the producer's interpersonal relationship skills. If the producer does not have an entrepreneurial spirit and sufficient time to commit to the business, critical information will be lacking.

Competition among sellers often gives rise to marketing warfare. McDonalds, Wendys, Burger King, and Hardees are constantly involved in marketing warfare because they are selling similar products to a large group of customers whose tastes and preferences are constantly changing. In many cases, aquacultural marketing is more appropriately described as guerrilla warfare. Aquacultural producers may not know where the competition is, what the competition is doing, or even who the competition is.

Aquaculture firms compete primarily with other firms that produce the same species, but they are also competing with all other producers of aquacultural products and ultimately with all firms that sell food products. In the North Central Region, there are only a few tilapia producers, but most of them find that marketing their product at a profitable price is a daunting task. Tilapia producers are competing among themselves as well as with tilapia producers in other regions of the country and the world. The live-haul tilapia market for Detroit, Chicago, and St. Louis can stretch for several hundred miles outside the North Central Region borders. Frozen product can be shipped from Southeast Asia and sold competitively in the U.S. as can fresh fillets from Central America.

Reliable price information is not easy to obtain due to the fragmentation of aquaculture markets. Because producers are often trying to protect markets they have developed, they hesitate to provide information about their marketing. The tilapia market in particular has evolved into a series of sometimes overlapping niche markets where selling prices are typically based upon what the market will bear. Available price information may come from public agencies such as state cooperative extension services, some of which list prices periodically on the Internet, and private firms such as supermarket chain purchasing agents, fish and seafood wholesalers, and restaurants.

It is essential that aquaculture producers project production and marketing costs so that they can project break-even selling prices. Similar to other agricultural enterprises, aquaculture is subject to production risks; therefore, production and marketing costs per pound or hundredweight are difficult to pin down. However, major financial problems can be averted if production is terminated because selling prices are unlikely to cover production and marketing costs. Computerized spreadsheets can be very beneficial at this point, since they allow rapid analysis of multiple outcomes.

A third step in the development of a marketing plan is **forecasting future events**. Anticipating what consumers will want in the future and anticipating problems is a cornerstone of good management. Useful forecasts are dependent upon a combination of personal forecasting skills, the amount of time available to think about the future, and the quality of information which has been previously collected. Hiam and Schewe (p. 137) correctly point out that "There are no sure forecasts - in fact, the only certainty is that the forecast will be wrong, and the key question is by how much it will be wrong."

A fourth step in developing a marketing plan is **setting goals** or establishing benchmarks. These goals should be based upon information gathered in steps 1 through 3, they should focus on how the firm can most effectively satisfy customers, and they should be written. The goals should be flexible so that the firm can adjust to take advantage of new opportunities that arise. Most importantly, there should be a description of how each goal will be achieved. Lee Iacocca stated that the vexing problems in management and marketing are often associated with answering *how* questions rather than *what* questions. It is often easier to establish a goal than to decide how that goal should be achieved.

Examples of production oriented goals include survival rate, feed conversion ratio, and pounds produced per week. Examples of marketing goals would be to sell so many pounds of product at a specified price per pound or to increase sales by a certain percent each year. Other less common goals might include contacting and surveying all current customers regarding product satisfaction, and contacting and surveying a certain number of potential customers regarding future product needs. A brief product/service survey that would provide customer satisfaction scores could be developed. An additional goal could be to increase the satisfaction score by a given percent each year.

A fifth step in developing a marketing plan would be to **develop alternative courses of action** and select those that are most suitable. The alternative courses of action should be driven by the goals established for the firm, and they should address the four P's of marketing - product, place, promotion, and price (see Fact Sheet AS-464, Aquaculture Extension, Illinois - Indiana Sea Grant Program and Technical Bulletin Series #107, North Central Regional Aquaculture Center, both of which are authored by Swann and Riepe, for detailed discussions of the 4 P's of marketing). Given the structure of aquaculture markets in the North Central Region and the necessary person-to-person contact between buyer and seller, most decisions and actions related to place, promotion, and price will be influenced by the interpersonal relationship skills of the producer. Personal promotion and selling generally require most, if not all, of the following characteristics: self-motivation, enthusiasm, determination, ability to communicate, and ability to negotiate.

Part of the process of developing alternative courses of action should include some form of "crisis" planning. Crisis planning is often done for the technical components of an aquaculture business, and there is no good reason why a crisis plan should not be developed for marketing. Johnson and Johnson successfully utilized a brainstorming procedure in which management: 1) made a list of *all* the bad things that *could* happen and ranked them according to probability of occurrence, 2) developed a most effective response to each possible event, and 3) discussed ways of reducing the probability of each event occurring. Anticipating the future and developing contingency plans can sometimes be the difference between disaster and outstanding profits (Hiam and Schewe, p. 50).

The sixth and final step is to **develop a means of evaluating progress** and readjusting goals as necessary. This step is absolutely necessary since planning is a continuous process that must include continuous evaluation of the environment. Just as water quality must be continually monitored, oftentimes with electronic alarms to warn of unexpected changes, so must the marketing environment be monitored. "The firm that monitors its environment best is most likely to be prepared for such [unpredictable] events." (Hiam and Schewe, p. 48) To evaluate progress, information about the current situation must be collected, analyzed, and compared to the goals which have been established for the business.

Conclusions

Management and marketing decisions of aquaculture producers should be driven by customer needs including latent customer needs. The strategic vision and related goals of the firm should focus on what the customer will be buying rather than what the firm is producing. In addition, producers must possess skills in decision making, interpersonal relations, and goal setting so that they can successfully plan, organize, and control as well as staff and direct when necessary. Collecting and analyzing useful information are the nuts and bolts of good decision making which allow skilled managers to make the right decisions at the right times.

References

- Anderson, Carl R. Management: Skills, Functions, and Organization Performance. Boston: Allyn and Bacon, Inc., 1988.
- Beem, Marley and J. C. Hobbs. "Recirculating Aquaculture Systems: Questions to Ask Before You Invest," OSU Extension Facts F-9207, Oklahoma Cooperative Extension Service, Division of Agricultural Sciences and Natural Resources.
- Downey, W. David and Steven P. Ericson. Agribusiness Management. St. Louis: McGraw-Hill Book Co., 1987.
- Hiam, Alexander and Charles D. Schewe. The Portable MBA in Marketing. New York: John Wiley & Sons, Inc., 1992.
- Iacocca, Lee (with William Novak). Iacocca: An Autobiography. New York: Bantam Books, 1984.
- Kotler, Philip. Marketing Management, 5th Edition. Englewood Cliffs, NJ: Prentice-Hall, 1984.
- Willis, Walter J. Introduction to Agricultural Sales. Reston, VA: Reston Publishing Co., Inc., 1983.

