

# Commercialization Of Fishery And Aquaculture Products In India - Problems And Solutions

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## INTRODUCTION

Fish forms the main source of animal protein for people around the world and provides employment for some 35 million workers. Production of fish, in particular of farmed fish (aquaculture), is growing and the real market prices for fresh and frozen fish have increased since World War II, contrary to most other food products. It is not price considerations but taste and growing health concerns among consumers around the world that has resulted in a shift from beef and pork consumption to poultry and fish (Brown et al, 2003). Fish consumption is growing rapidly and to cater to this increasing demand, global fish trade is growing as well and currently, 40% of the world's fish production worth over US \$ 52 billion is traded internationally (Dommen, 1999). Global fish trade amounted to US\$ 55.2 billion in 2000, equal to about 33% of the total fish production (an increase of 52% from 1990-2000, Anderson, 2003a). Currently, China is the leading fish exporting country in value terms, taking over from Thailand (FAO, 2004), while Japan is the main single importing country (US\$ 15.8 billion) and the EU the largest market for fish imports. In terms of volume, the international fisheries trade is dominated by a few fish products only - notably shrimp (both cultured and wild), tuna, as well as fish meal and fish oil.

Fish consumption is particularly growing in richer countries and per-capita seafood consumption in Japan, USA and Europe is considerably higher than in most developing countries. Nevertheless, fish remains an essential source of animal protein for poor people living in developing countries. The average per capita fish consumption at the global level has increased from about 9 kilograms per annum in 1970 to 16 kilograms in 1997 (7.8 kg/capita in least developed countries and 27.8 kg/capita in developed countries). The growing world population, the increased presence of fresh and frozen fish against affordable prices and changes in consumer attitudes ('consuming fish is healthier than even chicken due to absence of bad cholesterol in the former'), as well as more traditional cultural traits and geographical characteristics are important driving factors behind the growing consumption of fish (Trondsen et al, 2004).

The world is shrinking rapidly with the advent of faster communication, transportation, and financial flows. International trade is booming and global competition is intensifying. Higher risks have appeared with globalization. Many companies have made the world their market so much so that effective marketing and sales promotion has become the secret of success of all successful entrepreneurs the world over. Fisheries in India, generated ₹ 8363.53 crore or \$ 1852.93 as annual export earnings from fish and shellfish in 2006-2007 (Source: Marine Products Export Development Authority) accounting for 21% of agricultural exports and 3% of the total exports of the country. Producing about 5% of the world's fish, India trades to the extent of 2.5% in the global fish market, with an annual growth rate of 20% by quantity and 15% by rupee value (Source : MPEDA). The Indian export market in fishery products is being diversified in terms of surimi and ready to eat products and the markets are also being enlarged in recent years with well equipped processing units conforming to the standards laid down by importing countries so as to keep up with the global competitive markets. However, distribution and marketing system of fishery products is still in a very nascent stage. Fish processing techniques in India have improved to an extent that value addition has become the buzzword of the day. Value addition not only helps to utilize non commercial low value edible fish, but also provides much needed profit to manufacturers as well as retailers. Hence, there is an urgent need to commercialize and market fishery based products in the domestic market through effective communication channels such as press and broadcast. In this context, creation of domestic market through effective positive publicity of marketable products is of paramount importance since domestic markets are far more stable than ephemeral export markets which are subject to several international market risks and protectionist policies.

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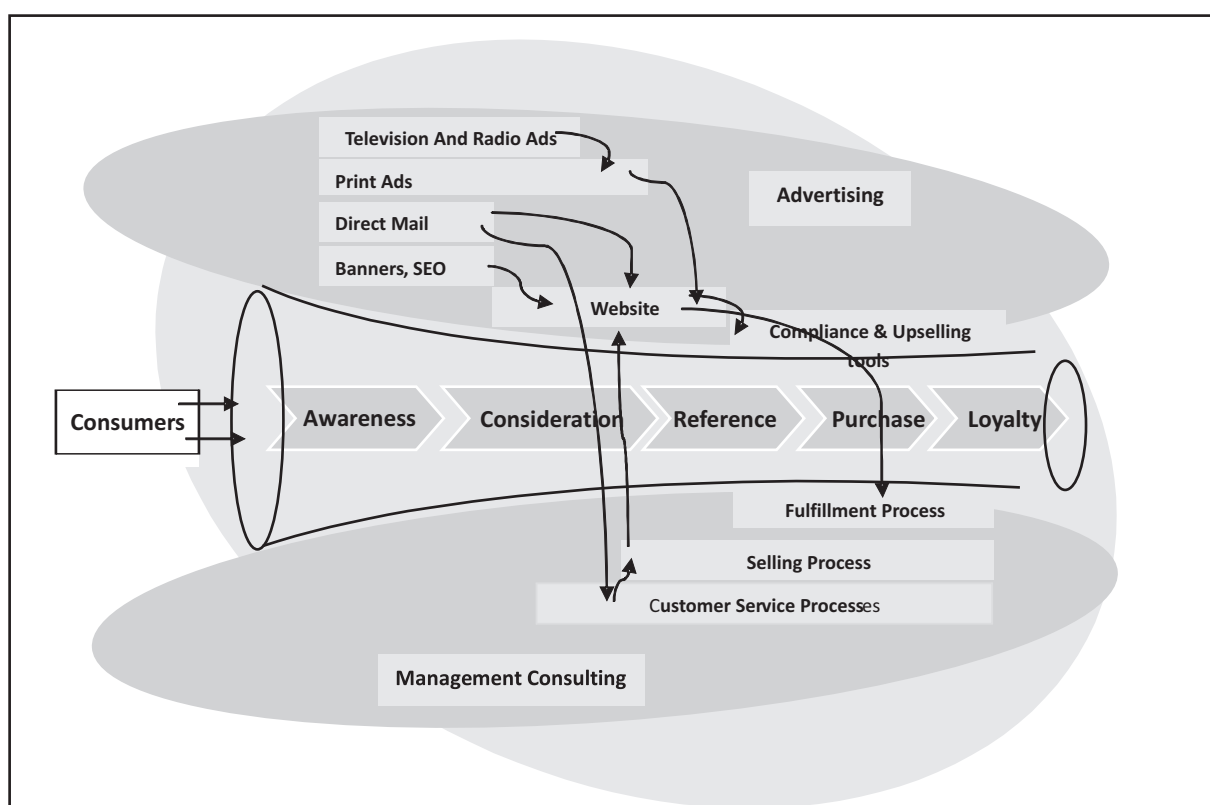
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## ROLE OF ADVERTISING AND SALES PROMOTION

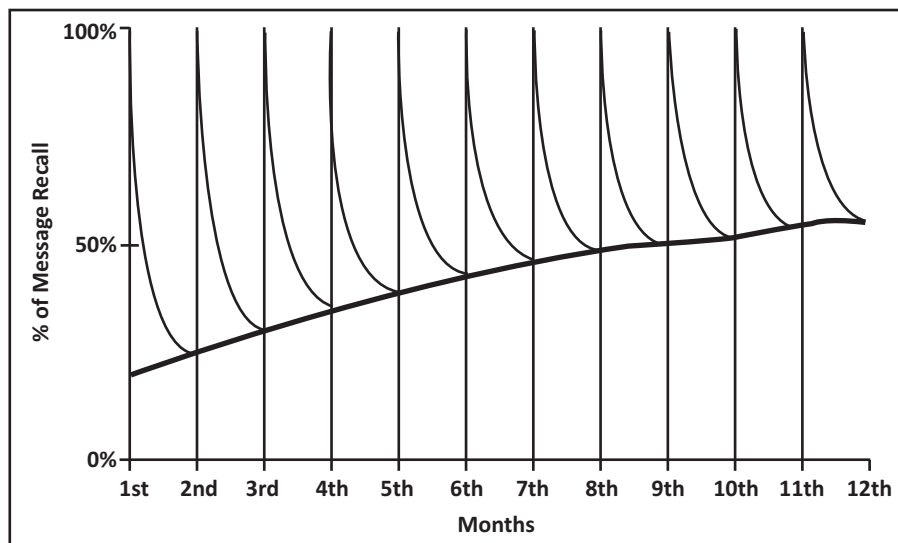
Today, the media plays an influential and inseparable part in all walks of life and media earnings are largely contributed by advertisements. Hence, fishery products in all their different forms of value addition need to be advertised just like other agro-food products, through effective channels of the mass communication, i.e. print, audio, visual, audiovisual, direct mail and the World Wide Web. Lately, tasteful creativity in digitalized design and animation techniques have brought about a radical change in the quality of advertisements of manufactured products, making them appear more realistic than ever before, especially on the audio visual media. Attractive slogans and catch lines have further helped to create a lasting impression in the mind of the consumer. Amul's slogan for its butter campaign '*Utterly butterly delicious*', can be pointed out as an ideal example in this case. The resulting impact on the common man, in turn, has boosted up the sales of this product. Figure 1 demonstrates the conversion funnel, which shows how the cycle of advertising and sales promotion works in terms of consumer satisfaction. The increased urbanization of population has resulted in a shift towards consumption of high value products and concomitant lifestyle changes. Alongside the change in food demand, newer forms of retail also have arisen. These large retail outlets, known as supermarkets and hypermarkets, are better suited to handle high-value foods and are designed to cater to modern lifestyles. The changes in dietary and living habits and the changes in the forms of food retail tend to mutually reinforce each other. Hence, the time is not far off when consumers will have an inclination to buy only those products which have been adequately advertised for the simple reason that advertisements help to create consumer awareness about the product as a whole, about the quality and ingredients used in them as well as their places of availability.

**Figure 1 : The Conversion Funnel**



According to the Ebbinghaus curve (which gives the guiding idea of mass marketing and sales promotion in modern times), the resonance effect of subsequent reminders increases the percentage of message recall. Therefore, awareness and preference in consumers can be created by continuous reminders through a mix of media. (Figure 2). Needless to say, that in the ongoing century, commercialization of attractively packaged, ready-to-eat fishery products through advertisements will be the only way for such products to find their way into the common man's plate, since time consuming recipes are soon going to be a thing of the past with double income families being able to spare less and less time for domestic chores.

**Figure 2: The Ebbinghaus Curve**



Advertising is the promotion of a product or service and is extremely pervasive in contemporary society. To maximize sales, companies are ready to pay a premium for wide exposure through the mass media and the industry is constantly finding new ways to advertise. In this regard, creating a brand name for oneself and advertising numerous products using the common brand umbrella is as important. The advantages of having a popular brand name are many, one of which is that the brand itself spells quality and the product is able to get consumer preference and loyalty. Popular brand names such as Al kabeer of Al kabeer Industries, Venky's of Venkateshwara Hatcheries Ltd. and Amul of Gujarat Co-operative Milk Marketing Federation Ltd. speak for themselves. The United States has the largest advertising market, accounting for half of the world's advertising expenditures followed by Japan. However, advertising alone is not enough to commercialize products unless it is backed by suitable sales promotion and marketing strategies. Marketing is an organizational function and set of processes for creating, communicating, and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders. (American Management Association, updated in 2004). Producers must have good marketing skills in order to maintain a prosperous business, regardless of how efficiently they produce their products. 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, i.e. from the customer's point of view."* (Kotler, 1984). The customer or the consumer is, therefore, at the tip of the pyramid of advertising, sales promotion and marketing. In order to be economically successful, the entrepreneurs of the fishery industry 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 promotional (such as 'buy and get one free') and marketing opportunities because they do not define themselves in terms of the benefits they can provide to customers (Hiam and Schewe, 1984 & 1992). It must not be forgotten that effective profits are a result of effective sales and effective sales are a result of effective advertising, sales promotion and marketing and effective sales promotion, marketing are a result of a lot of market research.

## **ADVERTISEMENT AND PROMOTION BY GCMMF: A CASE EXAMPLE**

Across India, every morning, millions wake up to the taste of Amul, the flagship brand name for a variety of dairy products marketed by the Gujarat Co-operative Milk Marketing Federation (GCMMF), the sole marketing agency for the products produced by the different milk co-operative member societies of the State of Gujarat and for those of other States marketing their products under the Amul brand name. In the 1940s, in the district of Kaira in the State of Gujarat, a unique experiment was conducted that became one of the most celebrated success stories of India. Many experiments that followed finally gave shape to what became later known as the GCMMF (Gujarat Co-operative Milk Marketing Federation), a co-operative society which had, as its members (ordinary share holders), the district level milk unions. Starting from a daily procurement of 250 litres per day in 1946, it has become a milk giant with the milk procurement at

about 4 million litres per day by 1999 with 12 dairy plants all over the State of Gujarat.

GCMMF has shown itself to be remarkably savvy in its advertisement and promotion campaigns, thus adding more feathers to its cap. It had coined truly memorable slogans such as the one for butter: *"Utterly Butterly Delicious"*; for edible oils: *"Dhara, Shudh Dhara"*, emphasizing its purity<sup>1</sup>; a campaign titled "The Taste of India" for all its products, featuring Indian recipes and lifestyle; a campaign to promote drinking of milk, purely based on the nutritional value and the taste. It was the first Indian company to put up advertisement hoardings (bill boards) based on a topical and current news item that almost brought traffic to a stop. The hoardings, started in 1967, and handled by the advertising agency, daCunha Associates, were changed weekly and every week, it had a current and a new theme. They have continued till this day. For example, during the emergency in 1976-77, when forced sterilizations were done under government compulsion, the Amul hoarding read: *"We have always practiced compulsory sterilization"*. When UK was having the problem of the Mad Cows' Disease, GCMMF came out with an ad titled *"Union Jacked by Mad cows"*. These ads, topical, witty and humorous, served the purpose of high recall, powerful appeal and a sustained awareness of the products.

In ice creams, GCMMF emphasized in its advertisements that its ice cream was entirely vegetarian, made of pure milk and that it did not have any gelatin content unlike that made by many of its competitors (Indian ice creams usually contained vegetable oils and gelatin in addition to milk, so that in a sense, they were frozen desserts rather than ice creams). The aim of the advertisements was not merely to stimulate interest, but also to expand the markets so that ice creams would not be seen as a food for the rich. As a part of Amul's successful endeavor to capture the market through indirect means, GCMMF sponsored television programmes, campaigns and feature films as well. Among the former were the widely watched 'Surabhi' and 'Amul India Show', feature films titled *"Manthan"* (featuring the exploitation of village farmers and the formation of co-operatives) and *"Sardar"* featuring the life of Sardar Vallabhbhai Patel. In addition, GCMMF had produced a number of TV campaigns of 30 to 60 seconds' duration, on some or many of its products. Amul can thus be the perfect example of a success primarily based on untiring promotional efforts and suitably time tested diversification and marketing strategies.

## ESTABLISHING A MARKETING PLAN

Since marketing falls under the umbrella of business management, it is typically associated with the following management functions (Anderson 1988): **Planning, Organizing, Directing, Staffing And Controlling**, which require some degree of each of management skills such as goal setting, decision making and interpersonal relationships. 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-said phrase that applies to fisheries management and commercialization, is *failing to plan means planning to fail*. Following planning, organizing, and controlling, are of utmost importance whether it is a one-person operation selling live fish from a roadside stand or a firm with dozens of employees selling filleted fish to a wholesaler.

According to Downey and Ericson (1987), 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.

## GATHERING FACTS AND INFORMATION (MARKET RESEARCH)

Producers of fishery and aquaculture products must begin development of a marketing plan by gathering facts and information which may otherwise be known as undertaking extensive market research. How much information should be collected is, however, a relevant question. A lot of experts suggest 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. The Internet

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<sup>1</sup>"Shudh" in Hindi means pure.

is a source of vast amounts of information on marketing of finished food products, some of which would be useful when developing a marketing plan for fishery products as well. Other sources of information include magazines, fishery and aquaculture associations, conferences and workshops, cooperative extension services, universities conducting fisheries 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.

## **ANALYZING THE SITUATION AND PROBLEMS INVOLVED**

Market research involves analyzing the situation and pinpointing problems, which in turn needs certain pertinent questions to be answered (Beem and Hobbs, 1987) about who are the potential customers (knowing the target market), what do the customers want (What type of ingredients, packaging and quality are the target market expecting), where and when does target market look for information or what is the most effective means of reaching the target market (for example, hoardings will be more effective in small towns whereas audio visual and print media advertising will be effective in big cities), who are the competitors (gauging competition by participating in trade shows), what prices are being or have been paid (past and present market trend to guess future markets) and ultimately, what are the projected production and marketing costs.

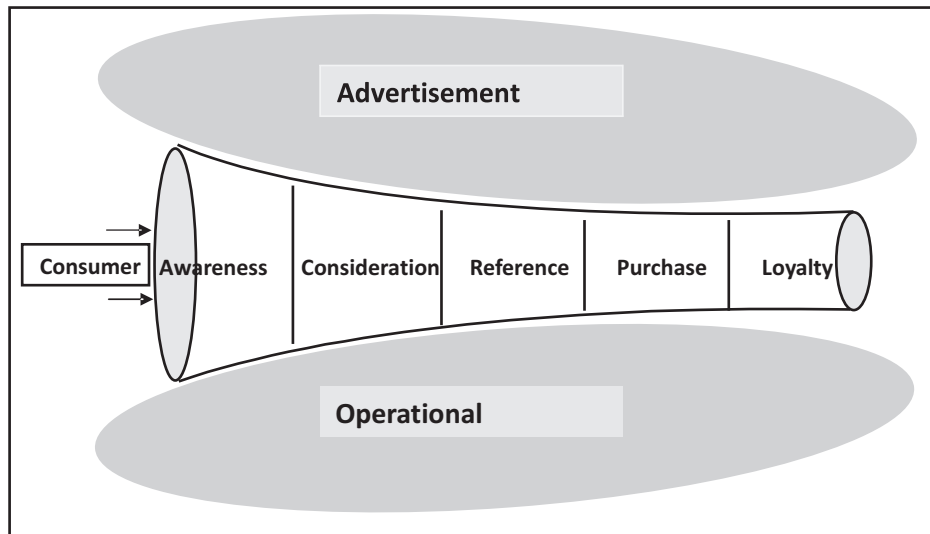
In fisheries, the potential customers may be numerous but unknown. This is because the markets for fishery products are vastly different from the markets for food commodities such as corn, soybeans, chicken and meat where information concerning market outlets and prices is abundant and easily accessible. It is typically the job of the fishery and aquaculture producer to identify existing customers or even cultivate future customers through product promotion. In fact, fish 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, 1984 & 1992 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, 1983 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. In other words, reputation can be built on strong footage if there is resonance between advertising promises and operational fulfillment (Figure 3). Collection of useful information about potential customers and customer wants will be strongly influenced by the producer's interpersonal relationship skills, his awareness about the market and his idea of evolution and diversification to cater to the needs of the market. A lot of the process of creating consumer satisfaction is encompassed by building good buyer-seller relationship, which in turn creates consumer preference, purchase and loyalty towards the promoted product. In the dairy sector, the example of Amul India can be cited as a skillful player in terms of performance wherein gradual and meticulous upgradation of their products in terms of quality and diversification has helped them to maintain their pioneering position in the market in spite of entry of many other players such as Britannia and Vijaya.

Competition among sellers often gives rise to marketing warfare. Producers of similar products 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, fish marketing is more appropriately described as guerrilla warfare. Fish 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. Reliable price information is not easy to obtain due to the fragmentation of fishery and aquaculture markets. Because



**Figure 3 : Resonance Between Advertisement Promises And Operational Fulfilment Creates Reputation And Dependability Of Product In The Eyes Of Consumer**



producers are often trying to protect markets they have developed, they hesitate to provide information about their marketing. For example, the tilapia market in the U. S. 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 fishery and aquaculture producers project production and marketing costs so that they can project break-even selling prices. Similar to other agricultural enterprises, capture fishery and aquaculture is subject to production risks; therefore, production and marketing costs per kilogram 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.

### **FORECASTING FUTURE EVENTS IN FISH MARKETING**

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, 1984 & 1992 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.”*

### **SETTING GOALS OR ESTABLISHING BENCHMARKS**

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. More often, 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 in a value added fishery product project are timely availability of raw material, its availability in the required quality and quantity, efficiency of the production process which ensures quality and quantity of finished product that can be supplied in a specific time frame and timely supply of the finished product to the marketing chains. Production oriented goals in an aquaculture project include survival rate, feed conversion ratio, and pounds produced per week. Examples of marketing goals would be to sell so many tones of product at a specified price per tonne or

kilogram 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.

## DEVELOPING ALTERNATIVE COURSES OF ACTION

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**. Given the structure of fishery product markets all over the world 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 a fishery or 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 the 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, 1984 & 1992).

## DEVELOPING A MEANS OF EVALUATING PROGRESS

The sixth and final step is to 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, 1984 & 1992) To evaluate progress, information about the current situation must be collected, analyzed, and compared to the goals which have been established for the business.

## CONCLUSION

The key, therefore, is to set the ball rolling in order to start a positive change towards commercialization of high value and value added fish products in India, keeping all of the above mentioned strategies in mind. However, this change is not easy to bring about; neither can it take place within a specified time period. Efforts are needed to be initiated stepwise where research and development organizations need to be first integrated with public and private sector enterprises such that technology & expertise generated in the former should be made available in the open market so as to enable the latter to purchase the same and put it to effective use with direct liaison with fish producers. Management and marketing decisions of fishery and aquaculture producers should be driven by customer needs including latent customer needs. The strategic vision and related goals of the producer should focus on what the customer will be buying rather than what it 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. The latter, in turn, shall advertise and effectively promote the manufactured products harnessing their technical expertise and monetary power. This trickle down process will be doubly beneficial for resource scarce research organizations in terms of resource generation and the end products, creatively advertised, promoted and marketed, shall earn due consumer preference.

But all this said much needs to be done. Effective integration of the public and private sector can make such a vision come true. Private companies and multinational firms need to come forward to buy the technology and R&D

organizations in turn need to part with their technologies so that they can be put to use by the former. This cycle, in turn, shall help circulate expertise and resources in a way that will ensure a bright future for the fishery industry and bring the industry in the limelight.

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