Analyzing aquaculture marketing systems conclusion

Organizational expansion

There are two main ways in which the marketing practice can grow in size, namely integration and growth by diversification.

Market integration (mi) - This is the grouping of firms that perform similar functions under one management. It enables marketing firms and agribusiness firms to grow in size and increase their marketing power. It is the process of expansion for marketing institutions through which additional agencies or functions are brought together under one management. There are two types of integration namely: Vertical Integration and Horizontal Integration.

Vertical integration (vi): This is one in which a firm combines activities which are not similar to its present function but related to them in sequence of marketing activities. The simplest meaning of vertical integration is "OWNERSHIP". This is when the initial marketers own two or more levels of production or marketing. A livestock/fisheries feed company which feeds its own fish rather than selling the feed alone is said to be vertical integration. Likewise, a fish packer which owns retail stores and sells fish directly to consumers falls under the same category.

Horizontal integration: This refers to a situation where a firm gains control over other firms performing similar activities at the same level in the marketing sequence. For example, small firms that handle processing fish could decide to merge with bigger firms in the same business. Such merges enable the firms involved to enjoy a wider market

share of the product and also to exercise greater market power.

Advantages of market integration

- It organizes or co-ordinate the marketing firms to obtain increased operating efficiency or wider market power over selling or buying process.
- It has effect of shortening the marketing chain between the producer and the final consumer. Integration thus helps to reduce marketing margin.
- Integration could increase the profit of a firm because it may place a firm in a more advantageous bargaining could help to firm to influence the market price.
- Integration could also enable a firm to operate with greater efficiency and lower cost. It guarantees steady supply of inputs to agribusiness firms and ensures uninterrupted flow of products to consumers.

Disadvantages of market integration

- The concentration of market power in a few firms. For example, vertical integration of a firm already possessing substantial market power may be anti-competitive because it may make entry more difficult for potential competitors.
- It gives the integrated firm the power to exert a prize squeeze.

Marketing efficiency

Marketing efficiency can be defined as the maximization of an input – output ratio, when the output is consumer satisfaction or utilities created in the marketing system and the inputs are the different resources (land, labour, capital, management, etc), used in marketing. It also can be defined as the movement of commodities at the least cost consistent with the services consumers want. Efficiency is defined within the context of the success of a firm to produce as large an output as possible from given sets of inputs. Efficiency in the agricultural industry is the most frequently used measure of market performance. Improved marketing efficiency is a common objective of farmers, food marketing firms, consumers and the society at large. Efficiency is an engineering terminology which is measured as a ratio of output to input. Marketing efficiency can be defined as the maximization of the ratio of output to input in marketing. Efficiency ratios can be expressed in physical term or in monetary terms. If monetary terms are used, the efficiency concept becomes a ratio of benefits to costs. Expressing marketing efficiency in both physical quantity and monetary terms we have:

Marketing efficiency (ME) = output/input = value of output/value of input

Marketing efficiency could be achieved in any of the following ways:

- Output remains constant while input decreases
- Output increases while input remains constant
- Output increases more than increase in input
- Output decreases more slowly than decrease in input

The higher the efficiency ratio the higher is the market efficiency.

Types of marketing efficiency

The performance of the firm is viewed as an input-output system; this makes the measures of efficiency easy as a ratio of output to input.

• Marketing efficiency can be broken down into the three concepts of;

i. Operational (technological),
ii. Pricing (economic) and
iii. Over-all efficiencies.

Factors for pricing inefficiency

- Lack of price information to consumers.
- Presence of firms that dominate marketing due to location or excellent personnel.

Conditions for price efficiency

- The consumers must be provided with numerous alternatives from which they can choose.
- The price must reflect the cost of providing the goods and services.
- Free entry into and exit from the marketing.

Prospects of fish marketing

Advancement in marketing will lead to development of other industries producing accessories for packaging rather than relying on used materials. This will subsequently lead to increase in employment and economic development. It will implore research into more techniques of fish preservation and preparation of various fish product so as to meet the different tastes of the consumers and subsequently lead to advancement and general development of the sector. Any expansion in the volume of trade occasioned by improved marketing will create for the government further incentives to provide additional infrastructure like road, storage facilities and warehouse etc. which will link up the villages to urban centres and improve the living standard of the participants which will subsequently enhance their performance. With good and efficient marketing set-up, fish supply can be guaranteed throughout the year with little variation in prices. This will favour the producer, consumer and even policy makers for appropriate economic planning in the country. Good fish marketing will ensure production of the right product at the right time and at the right place and form and in effect will ensure judicious use of resources to the best advantage of the fisher folk.

Analyzing market situation

Before embarking on the aquaculture business, it is important to have a good marketing strategy. A marketing strategy is a plan to achieve the financial goals set. The strategy should focus on the products, product prices, advertisement and where to sell. Ideally, the products must be sold for more than the production cost and quantities that allow the producer to make gains and remain in business. A good marketing strategy involves the following key points:

1. Analysing the market situation
2. Formulating marketing goals
3. Evaluating and selecting suitable marketing alternatives

I. Analysing market situation

To do this, the aquatic entrepreneur should have a good knowledge of:

- Who will the Potential customer will be?
- The modes available for marketing (e.g. do you need to draw agreements, do you have to go through brokers etc)
- What are the product prices and what is their seasonality?
- Product forms acceptable by the market
- Are there product quality requirements including regulation governing this?
- What are the consumer preferences?
- What are the Quantity requirements?
- What will the modes of payments be and their frequency?
- Are all costs involved?
- Who are the potential competitors and what are the competing products?
- Are there any other alternative markets?
- What is the history regarding the prices, demand, supply, product spoilage, product rejection etc.

II. Marketing goals

In formulating the marketing goals, the producer must ask and be able to answer the following critical questions:

- What is the targeted production?
- Is this achievable?
- What is the size of the target market in terms of geographical extent and consumer number?
- Is it possible to reach this market?

The goals must be realistic and achievable; otherwise, the producer will be groping in darkness without purpose.

III. Marketing alternatives

It is important to consider marketing alternatives to avoid disappointment where a target markets collapse. For the marketing alternatives chosen or considered, product volumes and size preferences, costs associated with the marketing, and relevant legislations should be considered very carefully.

Potential Markets for aquaculture products include:

i. Retail markets and fish shops including supermarkets: These could be out of reach of most small-scale producers because they might not meet the frequency and quantity requirement of such outlets. However, they can easily overcome this by forming marketing partnerships with other producers.
ii. Farm gate marketing or farmgate sales - this describes a direct marketing method whereby farmers sell agricultural produce – mostly food – in this case, fish directly to the consumer, to restaurants and caterers, and to independent retailers. Farm gate sales are a common type of marketing found throughout traditional small farming sector worldwide and, in some countries, accounts for the vast number of sales as far foodstuffs and livestock are concerned. As the name implies, farm gate sales is a marketing strategy undertaken by the producer near the location where the product is produced. Consumers come to the production unit or farm to buy produce and, in some cases, pick the produce themselves.
iii. Sales to whole sellers, fish processors and large institutions: The advantage here is that large quantities can be disposed off at once and terms of supply and payment are normally stipulated in a legal contract. But this is only suitable for large scale

Production techniques/strategy

When planning for commercial aquaculture, the following aspects of production must be considered very critically:

1. Fish to be produced
2. Production site
3. Production technology

I. Fish to be produced

The choice of what to produce will be guided by:

1. Market preference
2. Ecological requirements of the fish
3. Production technology of the fish
4. Resources available to produce

The fish to be produced must not only be marketable but also suited for the climate and be produced cost effectively. Different fish require different climatic conditions to perform optimally. For example:

- Nile tilapia and African catfish require warm water of more than 25°C.
- Growth of these fish is quite slow at elevations greater than 1600 meters because the water temperatures are very low

- For best performance, average water temperatures of about 28°C are best
- In Kenya, such regions are to be found in low land areas
- In areas where temperatures are lower than this, a larger pond surface area can compensate
- High sunlight intensity is also preferred for tilapia culture under semi-intensive production.
- Trout require cold water of less than 18°C for grow out and below 10°C for hatchery production. Such conditions in Kenya are to be found in high altitudes areas. The water must be adequate, clean and fast flowing.

It is also important to know whether the species selected for production is adaptable to intended culture conditions and there is adequate knowledge of the reproductive biology, nutritional requirements, common diseases and parasites of the species. Also important is to ascertain that the species proposed for production is being profitably produced at commercial levels by other producers.

Other issues to consider, which are equally important are:

- Is there a reliable supply of good quality juveniles at a reasonable price, for stocking?
- Are you capable of establishing your own seeds (juveniles or ova) production capacity?
- Is there quality feed for the species and are the prices cost effective?
- Do you have a reliable and affordable source for specialized production supplies and equipment?

A good species should have the following characteristics:

- Adaptable to culture conditions
- Fast growth rate, from egg to market size
- Simple and inexpensive dietary requirements
- Hardiness and resistance to diseases and parasites
- Producer can have full control over the life cycle processes in captivity
- Easy market acceptability
- Availability of advanced and proven production technology

II. Production site

The proposed site should have the following characteristics:

- Be located in a region suitable and allowed for aquaculture production
- Have a climate suitable for the species intended for production (preferably indigenous to the area)
- Be well drained and protected from floods
- The topography and the soils should be suitable for the construction of the proposed production system
- Have adequate and preferably free flowing good quality water This is the life line of aquaculture and is a must.
    - Water is the key to a good site

    - Water should be available throughout the year
    - Water must be free from pollution e.g., pesticides & other detrimental chemicals
- Accessible throughout the whole production cycle and have easy access to services and technical assistance
- Have adequate space for intended function and possible future expansion
- Located on site acceptable under local and environmental management legislations
- Have good Infrastructure like:
- Roads to bring supplies to the farm and take the products to the market?
- Air or water transport where export markets are the targeted
- Power where intensive production systems are proposed
- Telephone service may be needed to run the enterprise efficiently
- Have good security

III. Production technology

Aquaculture, compared to crop and animal farming, is much more diverse and varied. There are many different species that are cultured each with different ecological requirements. They therefore have different feeding and breeding requirements as well water quality. Aquaculture production is done at different management and intensity levels. Production systems have therefore been developed to meet both the economic needs of the producer and the requirements of the species to be cultured.

The choice of the production level will depend on:

- The species of choice
- Availability of the needed technology
- Prevailing prices of fish
- Available capital
- Availability of essential inputs for example feeds, power, skilled labour, professional expertise etc.

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