



Marketing of Mushrooms

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INTRODUCTION

Edible mushrooms have been consumed by humans, not only as part of the normal diet but also to maintain health and increase longevity. For centuries, the Chinese have understood that foods have both preventive and therapeutic effects and are an essential part of good health. This view is now being increasingly adopted around the world. In addition, mushroom extracts were found to have profound health promoting benefits and, as a result, became essential components in many traditional Chinese medicines.

The overriding goal for investment in marketing and promotion and research and development programs is to create an environment that allows growers to maximise the return on their mushroom industry investments. This can be addressed by achieving market growth by developing an environment where there is a strong demand for mushrooms. It should also be ensured that people in the mushroom industry are appropriately skilled and supported. They should be provided regular information to increase efficiencies on farm and minimising the risks to the industry. The risks could be in terms of insect pests and disease infestation.

MARKETING AND EXPORTS

Marketing of fresh mushrooms is always done in the nearby city, especially Delhi, Bombay, Pune, Chennai, Chandigarh and others. Most of the produce from big commercial farms is canned in brine and exported to destinations outside India, especially USA. The quality of the mushrooms exported is excellent as most of the big commercial farms are growing hybrid strains of *A.bisporus* made available to them by multinational spawn companies like Sylvan, Amycel and others. The mushrooms are blanched and preserved in brine in large containers for shipment to distant destinations in containers, and are repacked at the final destination to suit local markets. A quantity is freeze-dried by the producer and exported at a good price. The mushrooms for freeze drying require to be picked as smaller buttons, hence reduced yields.

The retail price of fresh mushrooms in Indian ranges from Rs.100/- to Rs.200/- per kg, depending upon the season. In summer months the prices are higher than in winter months due to the high cost of electricity for cooling. Prices are lower in winter due to arrival of mushrooms into the market from seasonal growers. Prices of mushrooms in the marriage season go as high as Rs.200.00 per kg for a short period due to greater demand.

India being a tropical country, fresh marketing is at a premium, except for a brief winter period. The commonly used packaging is the polythene bag. Most of the mushrooms sold in fresh markets are treated with potassium metabisulphite due to market demand as mushrooms become extra white after the treatment and the casing adhering is also removed.

The export market for India is chiefly the USA, with some quantities going to UAE, Russia, The Netherlands, Germany, UK, Switzerland, Denmark, Israel, Sweden and other countries. There is no quota available from EU for India, and Indian exporters have to sell processed mushrooms in the EU with additional taxes levied as per the laws of the EU, which makes it difficult for the Indian exporters to compete in the EU market.

Poland was the world's largest exporter of fresh mushrooms in 2014, selling 203,530 tons, up from 195,380 tons in 2013. The Foreign Agricultural Markets Monitoring Team (FAMMU) reported, citing Primeur data, that globally 482,500 tons of fresh mushrooms were exported in 2014. According to the latest Primeur data, in 2014 the largest exporter proved to be Poland with a score of 203,530 tons. The biggest global importer is the United Kingdom, with about 108,000 tons. Among other major exporters of mushrooms is the Netherlands, which last year sent 69,160 tons (second place in the ranking), while third place went to Belarus, which exported 39,830 tons of mushrooms. Among the world's largest importers, apart from the UK, is Germany with 63,510 tons and Russia, which imported 42,110 tons of mushrooms in 2014.

CURRENT SCENARIO OF MARKETING IN INDIA

There is no denying the fact that production of mushrooms, especially of the white button mushroom, in India has gone up in the recent years but it has also exacerbated its marketing problems. There have been frequent reports of gluts in north Indian States during the winter months forcing the distress sale of the mushrooms. It should be borne in mind that efforts to increase the production without solving its marketing problems, would be counter-productive. The marketing of fresh mushrooms would determine the future of mushroom industry in India. Despite the changing currents, there is not yet much market for the processed foods and basically fresh vegetables and fruits are preferred in this country. Fresh mushrooms have very short shelf-life, cannot be transported to long distances without refrigerated transport facility and are sold in local markets in and around production areas. The cultivation of white button mushrooms

throughout the year under controlled condition is restricted to few commercial units and much of the production is being done under natural conditions during the winters. The problems of marketing are experienced in 2-3 winter months (Dec-Feb) when more than 75% of the annual production comes in market for sale in limited duration and market area. Farmers face the consequences of over-saturated market and are forced to sell their produce at highly unremunerative prices. Private processors, rather than coming to the rescue of the hapless growers, are tempted to take advantage of the situation.

Marketing of mushrooms in India is not yet organized. It is the simple system of producers selling directly to retailer or even to consumer, which has its own limitations. Unlike the other countries where 10% of the total cost is earmarked for marketing, mushroom growers have not given marketing



sufficient thought and investment. Per capita consumption of mushrooms in India is hardly 5g as against over a kg in some western countries. There has not been any serious effort to promote the product, to strengthen and expand the market in order to increase its consumption otherwise, even after consideration for poverty and limited buying power, there should not have been any difficulty with 700 million people. Mushroom is a novel food item for this country and what to ask of its flavour texture nutritive value, many are not aware of 'what is mushroom and whether vegetarian or non-vegetarian item?'

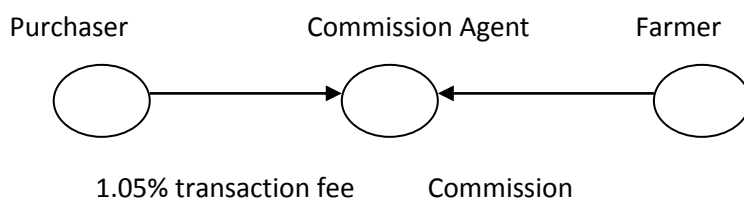
As mentioned above the marketing problem is experienced only in case of fresh white button mushrooms. In the coming years there is going to be good demand for processed and fast foods. Mushrooms may be canned to meet the demand in the off-season and in the non-producing areas. Product diversification should also be tried. Regarding the problems of sale/export of canned mushrooms, serious thought has to be given to bring down the cost of production of mushrooms and it's processing in order to compete in the international market.

There is not much problem in the sale of fresh Pleurotus due to low production but there have been problems in selling dried 'Dhingri' particularly its export and middlemen taken lion's share. Generally, the export orders are too big to be met by a single grower. Pleurotus growers may form a cooperative where they may pool their product and trade. Export cooperations in Central as well as State sectors would be too willing to help them once they are assured of sufficient consignment for export, for 2-3 years.

In some cases, a big producer, who sells compost to small growers (who do not have facilities for preparing pasteurized compost), buys back mushrooms from them. A similar case exists in Solan (HP) where a person sells compost to almost 20 growers regularly. They are free to sell the produce individually. In the event of surplus, they can sell the mushrooms to him. He will pay them the current price prevailing in the market. This way the growers are assured of a minimum price of their produce and they do not have to invest money in creating facilities for composting.

WORKING IN A TRADITIONAL MANDI

All the traders work on a commission basis. They have a fixed ceiling on the amount of commission that they can charge. This varies from commodity to commodity. The commission is charged on the selling price of the farmers. They are thus called **commission agents**. The purchaser pays a levy of 1.05% on the amount purchased to the commission agent. This includes a market fee of 1% and a 0.05% maintenance fee. Both the receipts are then forwarded to the market yard office by the commission office.



Therefore, if the farmer brings in 1000 kg of lady's finger priced at an "MRP" of Rs. 10 a kg. (Total value being Rs. 10,000), he will leave the yard receiving Rs. 9200 as the commission agent keeps the 8% commission. The rates vary from one category of produce to the other. For e.g. in case of flowers, it is at 1.08%. Of course, there is undercutting due to competitive pressures. There are other categories of people employed here – like the weighing man (**mapai**,) if the produce is sold based on the number of bunches and **tolai** if it is weight based) and the coolie (**hamaali**). The commissions of all these are deducted from the farmer's bill by the commission agent.

The commission agent is known as the **aadtey**. They are given a yearly license – Rs. 500 for maintenance and Rs. 100 as the license fees. The mushroom farmers come to this mandi from the surrounding villages like Januaji, Mashewar, Sadupul, Chail, Jatoli, Oachghat, Deothi, Kandaghat, Dharot etc. The complex is self-sufficient. There are facilities for the lodging of farmers who want to stay overnight. They can stay here for 12 hours by paying a minimal amount of twenty rupees. The capacity of this facility is 150 farmers. There is a parking lot for the trucks as well as the other vehicles of the farmers. There are also sanitary facilities for the farmers.

AN IDEAL SUBZI MANDI OF PUNE

About two years back, there used to be regular flights from, Bombay to Dubai (ten to fifteen per week). The plane used to carry pomegranates, bor, chiku, curry leaves, pineapples, mushrooms

etc. There was also a cold storage facility near the airport. However, there was a misunderstanding with the agent. Also, the plane used to return empty from the trip. Therefore, these exports were discontinued.

Visiting the market yard at the Chhatrapati Shivaji Market Yard, Gultekdi (Pune), which is the largest mandi of Asia, gives an idea of the future of the selling of agricultural produce in India. The efficient and organized manner of conducting business as well as the infrastructure on display is amazing. You see a tremendous amount of frantic buying and selling happening during the business hours. There ought to be many more such mandis all over India.

This mandi has its origin in the year 1974. It was earlier situated at a site 5 to 6 kms away. From 1976, the market gradually started shifting in phases to the present site in Gultekadi. The first section to be shifted was the vegetable section. It now covers 155 acres. It has the trading sections for all fruits, vegetables, rice, wheat, jowar, as well as a flower market section. It also has a petrol pump and weighing facility. There are 914 shops here. There is a governing office here that resolves all issues of disputes as well as looks into the daily functioning of the mandi. They also announce the prices of the major commodities at 9:00 am every day. The prices are flashed throughout the day on an electronic screen situated at the entrance to the market. The office keeps track of the rates in the mandi as well as the functioning of the weighing machines.

The purpose of mentioning these cases was to give a glimpse in to what is happening in the world of Indian agriculture today. A lot has been said about the reasons for the failure of food processing and agricultural marketing in India. The cases discussed above are stories of great marketing efforts in some traditional industries. The whole idea is to make these common products appeal to the buying people in a fresh way. These are not runaway success stories – these firms have withstood a lot of hardships in their quest for success.

MARKETING IN THE USA

The National Mushroom Growers' Association was established in 1985 in Illinois to promote the sale of fresh mushrooms nationally. This association targeted newspaper and magazines to promote the use of mushrooms. Success is credited to coverage in national women's magazines and newspapers. In 1990, the Mushroom Promotion, Research and Consumer Information Act (Mushroom Act) was passed by Congress (<http://mushroominfo.com>). The passage of this Act was based on the key findings that mushroom promotion, research, and consumer information are necessary to maintain and expand existing markets for mushrooms through the cooperative development, financing, and implementation of a coordinated program. This Act served to strengthen the mushroom industry's position in the marketplace, maintain and expand existing markets and uses for mushrooms, and develop new markets and uses for mushrooms.

POSSIBLE MARKETING SOLUTIONS

- Consumer awareness can be created by test marketing through sales persons and customer response to the product.
- Samples can be distributed in big malls and Variety stores.
- Awareness can also be created through outdoor publicity such as wall hoardings, banners, insertions in news papers etc.

Targeted Customers:

- * Hotels
- * Household sector
- * Restaurants
- * Industrial canteens
- Brand name of the company along with the product can also be highlighted to the customer by using the concept of event marketing.
- For different kinds of selling modes they can target different customer's Institutional sale:
 - Hotel / Restaurants/Industrial canteens
 - Individual sale: Household
- Approach to hotel industry can be made and product benefit can be shown to convince the customer. Mushroom related recipe booklet can be given to them for use.
- Can approach the T.V programs for Khana Khazana to show different recipes of Mushrooms in their shows.
- Dealer pushes through sales promotion campaign.
- Press meetings can be a way to consumer awareness. Editors, journalists of newspapers having maximum circulation can be contacted and samples to be distributed to them (such as 250 gm or 100 gm packs).
- Packaging should be attractive.

STEPS FOR SUCCESSFUL MARKETING

- Being aware of market demand by talking to buyers about volume and prices.
- Exploring various marketing options for fresh mushrooms – depending on transport infrastructure - selling directly to local customers, local traders, markets, intermediaries, regional wholesalers, local restaurants, shops or farmer cooperatives.
- Adding value and increasing the shelf-life of the mushrooms by creating processed products, including dried or pickled mushrooms, sauces, teas, extracts, etc.
 - Becoming organized and teaming-up with other producers, to bulk up on volume and the variety of mushrooms, and attract traders regularly to enable reliable sales of the perishable produce.
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- Sharing knowledge and experiences with other producers and, if a problem or constraint is consistent and widespread, collectively source external advice.
- Reducing initial capital investment by recycling pieces of equipment and sourcing locally, and sharing costs through informal or formal groupings.
- Identifying existing markets and trading routes, and identifying any niches to be filled (for example, organic mushrooms, fair trade or cooperative produce).

Successful marketing strategies differ according to region, transport infrastructure, market accessibility and consumer preferences. They are different for fresh and dried mushrooms, and are influenced by the species (see Case Study 6). For example, locally-grown oyster mushrooms have an advantage over imported ones because of their very limited shelf-life and their fragility, making it difficult to ship them easily. Similarly, mushrooms for fresh use tend to be grown near urban consumers, while farmers situated some distance away from their consumer base, market their product after processing. Establishing a good relationship with a buyer by delivering a reliable quality and quantity of product is fundamental. It is important to start modestly and secure a buyer or small network of buyers to whom one can deliver a reliable supply. The method of storage and presentation of mushrooms at the point of sale should be carefully managed and labelling produce – ‘fresh’ and ‘grown under controlled conditions’ – is a helpful marketing strategy. Unreliable claims printed on the cartons relating to the medicinal value of the mushrooms on sale should be avoided; such claims should be restricted to those species of mushrooms where substantial clinical data are available on their bioactive compounds.

GOVERNMENT SUPPORT LACKING

As it has been mentioned that many farmers have left mushroom growing due to problems faced for marketing of the produce. This is due to absence of any organized support to the mushroom industry for processing and marketing (regional as well as international). The EOUs (Export Oriented Units) have their own individual arrangement for marketing and the mushrooms are preserved in brine and canned in large containers of 3-5 litres or bigger capacity for export. Government support for mushroom marketing is not available in India, nor is any special/preferential quota available in the European Union as is available to certain other nations. Direct export to USA/Germany under some sort of arrangement is one alternative that could be considered. For this, growers will have to form a marketing cooperative. There are no processing plants devoted to providing support to this industry in India, except some limited support by NAFED to seasonal growers in the north-western plains of India. Such support is available to growers in China, where they are able to can the produce on a large scale at rail-accessible points

for export. Finance for infrastructure development for marketing and other facilities for farmers is available at lower interest rate.

STRICT RULES AND REGULATIONS FOR IMPORT IN EUROPEAN COUNTRIES

The rules and regulations for export to European countries are very strict and it is very difficult for any individual grower to conform to these standards and satisfy all the requirements desired. Following are some of the rules which have to be adhered to if a grower wants to export mushrooms:

Laws and Regulations

Depending on how they are used, mushroom imports are subject to the provisions of the Plant Protection Law, Food Sanitation Law, Law Concerning the Standardization and Proper Labeling of Agricultural and Forestry Products (JAS Law), Measurement Law, and Pharmaceutical Affairs Law.

Plant Protection Law

Imports of mushrooms attached with particles of soil are prohibited regardless of their use. Mushrooms intended as food such as matsutake, shiitake, and Jew's ear poses no potential harm to other plants and trees; therefore, imports of these mushrooms need not fulfill the requirements of this law. Any person or organization wishing to import other types of mushrooms, including those never imported before, must report the scientific name of these mushrooms to the plant protection station, which determines whether they can be imported into Japan or not.

Food Sanitation Law

Mushrooms imported as food are subject to the provisions of this law, which assures the safety of food items. Mushrooms imported from Europe (e.g., French truffles) remain subject to radiation check requirements instituted after the Chernobyl nuclear power plant accident. If the importer, however, submits results of radiation testing conducted by a testing laboratory of a government agency in the exporting countries, radiation testing may be omitted at Japanese customs. Importers must also submit a "Notification Form for Importation of Foods, etc." to the quarantine station at the port of entry. The station will examine the documents and may order inspections to be conducted. In February 1996, Japan set up a system for facilitating the monitoring of food imports. Under this system, quarantine officers of the Ministry of Health and Welfare, importers, and inspection organizations authorized by the Ministry are connected online. This system is designed to speed clearance procedures.

JAS Law

This law sets standards of quality labeling for fresh and dried shiitake mushrooms.

Pharmaceutical Affairs Law

Mushrooms such as hoelen and hog tuber are used as materials for making certain traditional Chinese herbal medicines. Mushrooms intended for such uses are subject to the provisions of the Pharmaceutical Affairs Law.

Measurement Law

Government regulations require certain products that come in sealed wrappers or other containers to indicate their content volume as well as the name and address of their manufacturer (or importer). The law also requires the content volume to be stated to a certain range of accuracy. Processed items such as dried shiitake mushrooms are subject to these requirements.

This law also sets ranges of standard deviation for measurements of mushrooms sold by the measure.

Government Initiatives

Steps have already been taken in India to harness the internet revolution in agriculture. Broadband facilities are being provided by the BSNL and other private players. This has improved the connectivity speed and sending/receiving of multimedia files is fast and so is the downloading. The first National Spot Exchange for Agriculture Production (NSEAP) was set up in February' 2005 paving the way for linking all Agricultural Produce Marketing Cooperatives (APMCs) and other physical market players on an electronic platform. An MOU has been signed among Financial Technologies India (FTIL), Multi-Commodity Exchange (MCX) and NAFED with the State Bank of India as the principal clearing and settlement bank of the exchange. This will integrate the whole nation into a single commodity market place.

The NSEAP has planned to act as an integrated market for all 7315 APMCs of the country dealing in 140 crops with a cumulative annual turnover of Rs. 3095 billion. It will result in major agro-business enterprises procuring directly from the production centres at very remunerative prices to the farmers. The present annual e-commerce related business has been estimated at Rs. 570 crores and is increasing every year at 50%. The Agricultural and Processed Food Products Export Development Authority (APEDA) is helping in marketing by promoting export of agriculture and allied industries. It is giving financial assistance for food transport and export, helps in getting licenses for export and maintains a directory of importers and exporters of agricultural commodities and processed foods. It lists the export statistics on the web site and the Virtual Booth Directory of Exporters on its site.

CONCLUSION

The campaign has to be multi-faceted and targeted towards consumers, retailers, food service operators, health professionals, researchers, etc. focussed on health, nutrition, taste, satiety and versatility. Health influencing outreach programmes need to be carried out where health professionals tell mushroom benefits to consumers through media, peer to peer studies, client-patient education and social media efforts.

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