CHAPTER 3

Marketing of traditional and functional foods for reach-out of nutrition

R.B. Smarta¹ and Dilip Ghosh^{2,3,4,5,6}

¹Interlink Marketing Consultancy Pvt. Ltd., Mumbai, India; Hon. Secretary, Health Foods And Dietary Supplements Association (HADSA), Mumbai, India

²Nutriconnect, Sydney, NSW, Australia

³Food Nutrition Partner, Auckland, New Zealand, New Zealand

⁴NICM, Western Sydney University, Sydney, NSW, Australia

⁵Health Foods and Dietary Supplements Association (HADSA), Mumbai, India

⁶Ambassador-Global Harmonization Initiatives, Vienna, Austria

Contents

| 3.1 | Introduction | 309 |
|------------|---|-----|
| 3.2 | South Asian overview | 310 |
| 3.3 | Traditional food and nutrients | 311 |
| 3.4 | Status of nutrition of South Asian countries and health issues | 312 |
| 3.5 | Marketing issues | 314 |
| | 3.5.1 Demographic, health, and food variables | 314 |
| | 3.5.2 Regulatory and other food policies for marketing and promotions | 314 |
| | 3.5.3 Proposal promise and credibility of marketing | 315 |
| 3.6 | Marketing challenges in traditional foods | 315 |
| | 3.6.1 Knowledge and use of traditional foods in modern society | 315 |
| | 3.6.2 Trust and evidence of the perceived quality of traditional and functional foods | 315 |
| | 3.6.3 The challenge of food safety | 316 |
| | 3.6.4 The research and development with the adaptation of technology | 316 |
| | 3.6.5 The challenge of communicating the holistic nature of traditional food | 316 |
| | 3.6.6 Personalized nutrition | 316 |
| | 3.6.7 Regulatory in terms of products, labels, claims, and promotions | 317 |
| 3.7 | The marketing platform for traditional foods | 317 |
| 3.8 | Commercial marketing models | 318 |
| References | | 319 |

3.1 Introduction

Food is associated with life processes, and the concept of the body accepting the food with the right mindset is considered as the sacred act of creating fullness in life. Foods can be classified in various ways, as ethnic, traditional, functional, contemporary, etc.; yet, the major role they play in the life of human beings is to create sufficient energy and satisfy the body, mind, and soul. In Indian tradition, the saying goes, "While taking the first morsel, chant the name of the Creator, which provides for easy digestion and eating does not remain merely an act of fulfilling the stomach but a sacred act of consuming a healthy meal and assimilating essential nutrients from a wholesome meal. So, be humble and be satisfied with the food."

Heritage foods of each country are sometimes not known outside the geographic regions, and the origin of such food is difficult to trace. Sometimes they evolve locally depending on the availability of raw ingredients and the environmental practices. Cultural issues and local food habits evolved through changing times have always impacted traditional foods. Philosophical and religious overtones played a prominent role in society and its evolvement, as in India, these overtones created several philosophies and religions that grew from these philosophies, interacted with each other, and made their impact on Indian traditional food cultures.

Diets were created by our ancestors originally to meet their survival needs. People of various Indian cultures gradually enriched them through long empirical experience using a variety of primary food materials, especially the locally available food grains and vegetables that nutritionally complement and supplement each other. This contributed to better health, better immunity, good digestibility, resistance to health disorders, and increased longevity.

3.2 South Asian overview

Among the South Asian countries, Sri Lanka has a variety of ethnic dishes that are nutrient dense. If we look at the example of the most popular plate known as *Pescatarian*, it is a plant-based recipe blended with good fats derived from coconuts and 100% grass-fed cow/ buffalo ghee. The ingredients used to prepare this plate have medicinal properties of reducing inflammatory processes in the body. Additionally, the authentic spices used in this cuisine take it to a higher level of taste and nutrition (Gulf News Asia, 2019). There are some traditional foods ingredients that are widely used in Sri Lanka, such as *kathuru murunga*, leaves of the hummingbird tree (source of vitamin and minerals), horse gram (high protein and calcium), tamarind, and spices (source of antioxidants) (Weerasekara et al., 2018).

In the case of Afghanistan, the cuisine is majorly influenced by Iran, Mongolia, and India. Although it has been influenced by neighboring countries, it has its own cuisine style. If we look at the climatic conditions of Afghanistan, then the use of fatty fishes is considered to be an important fuel in the freezing winters. Universally, Afghanistan is also considered to be one of the best countries for a variety of dry fruits, and the inclusion of these dry fruits is also an important aspect of their food habits. Pakistan, the neighboring country of India, shares common ethnic and traditional food. The food items that are listed under the Halal law specify what foods are allowed, and how the food must be prepared. This law is universally accepted and followed by food operators and pharmaceutical manufacturers. Bangladesh, being a coastal region, has rice and fish as their staple food. The indigenous fishes such as *ilish* (Hilsa fish) and *shutki* (dried fish) are widely consumed for its nutrient content. In Bhutan, the locals have rice as their staple food. Red rice cultivated in Bhutan is considered to be healthy for losing weight and for diabetics. The national dish of Bhutan is *Ema Datshi*, which is a blend of a spicy mix of chilies and local cheese known as *Datshi*. It is considered as a nutrient-dense cuisine. In addition, bamboo shoots are considered to be one of the delicacies in this region. The preparation for bamboo shoots involves stock and soups and these are also pickled for long time use. They are considered to be nutrient dense (mainly proteins, carbohydrates, and minerals) and have a low-fat content. Bamboo shoots are widely researched all over the globe for their phytosterols and a high amount of fiber that have cholesterol-lowering and anticarcinogenic activity and hence can be used as an ingredient for nutraceutical formulations. (Dahal et al., 2007).

The ancient wisdom of traditional foods is nowadays supported and promoted by modern scientific studies of its high degree of antioxidants, phytoestrogen, and vitamins. Nepal could be the best example as one of the indigenous communities from Nepal, named *Chepangs* or *Prajas*, has enormous knowledge about large numbers of plant species on which they have been dependent for centuries (The Himalaya Times, 2018). The plants such as aerial yam, wild edible yam, and deltoid yam have been found to contain five times more protein than potatoes and sweet potatoes. In addition, they are rich in dietary fibers and certain micronutrients that are recognized to combat cancer, diabetes, and heart diseases. Hence, these are considered to be potent "functional foods."

3.3 Traditional food and nutrients

One of the best examples of cereals grown in the Indian subcontinent is finger millet or *Ragi*. It has been grown since ages for its health benefits. Modern research has shown that finger millet has a high amount of calcium (344 mg%) and potassium (408 mg%). The study also revealed that it has higher dietary fiber, minerals, and sulfur-containing amino acids (Shobana et al., 2013). The fermented batter of various cereals and whole grains is considered to be nutrient-rich as it provides amino acids like lysine.

The gastrointestinal microflora in humans plays a key role in nutrition and health. The *Lactobacillus* in *Dahi* (Indian yogurt) is considered to be good bacteria that provide protection from colon cancer and increase overall immune-modulatory action. Various pickles are also considered to be a good source of vitamin C, minerals, and antioxidant components (Srinivasan, 2010). The North East region of India is well known for its meat-based delicacies. A survey conducted has shown that the recipes made by all three tribes of Meghalaya, namely *Khasi, Jaintia*, and *Garo* are healthy and highly nutritive in macro and micronutrients (Govindasamy et al., 2018).

Mango, grown from ancient times, is considered to be the king of all fruits by natives. It is a rich source of bioactive-like phenols and carotenoids, isoquercetin, ellagic acid, and β -glucogallin. The fruits such as gooseberry, tamarind, and *kokum* (*Garcinia indica*) are commonly used in Indian subcontinental cuisine to impart a desirable sour taste to certain food preparations. These fruits are rich in vitamin C and polyphenols. The dried fruit rinds of kokum commonly known as "*Malabar tamarind*," are liberally used in the coastal regions of India as a traditional food acidulant in culinary practices. The dark red fruit of *Garcinia indica* is valued for its nutritive value and outstanding medicinal properties. This fruit is known to reduce obesity and to beneficially regulate blood lipid chemistry.

The fresh green leaves of Betel vine, locally known as *Paan*, is traditionally used as a mouth freshener and for a digestive stimulating effect. The southern part of India is famous for spices. The spices such as *chilli*, ginger, turmeric, and garlic are considered to have high antioxidant properties with functional constituents such as curcumin, capsaicin, flavonoids, and essential oils.

In summary, with the heritage of traditional and functional foods, South Asian countries need clarity and understanding of its nutritional composition and effectiveness for fulfilling specific nutritional needs.

3.4 Status of nutrition of South Asian countries and health issues

Being home to a population of almost one-fifth of the world, South Asia is a vibrant, dynamic, and fast-growing region. Still, the region of strategic importance, South Asia, faces public health challenges. The core health issues of maternal and child health, infectious diseases, and access to health are still relevant. Globally, 2.6 million newborns died in 2016 and about 1 million (39%) of the world's newborn deaths occurred in the South Asia countries (UNICEF, 2016). The region has witnessed rapid urbanization with a concurrent rise in noncommunicable diseases, smoking, mental illnesses, injuries, conflicts, natural disasters, and infectious disease that has stalled progress on health indicators (BMJ, 2017). The region is under the stage of transition demographically, epidemiologically, environmentally, and economically. Food plays an important role in this situation. This transition has impacted the lifestyle of the population in such a way that physical activity and consumption of a calorie-dense diet have increased the risk of noncommunicable diseases.

The study conducted by the World Bank in the 52 countries all over the world has shown India, Nepal, Pakistan, Sri Lanka, and Bangladesh, to have adverse health conditions at an early age. These countries have a population that is at a high risk of getting their first heart attack at younger ages and also has high levels of other risk factors, such as diabetes, cardiovascular diseases, and early onset of cancers. Food based on tradition can make a big difference in combating these health issues (The Hindu, 2016). Studies conducted in this region have indicated that there is a high prevalence of noncommunicable diseases such as hypertension, cardiovascular diseases, psychosocial stress, and diabetes in the population. In addition, the age-standardized blood pressure and cholesterol levels have increased in South Asia over the past decades.

The incidences of communicable diseases such as tuberculosis and HIV/AIDS are second only to those of sub-Saharan Africa. Urban areas in these countries can at least receive timely primary healthcare, whereas rural areas do worse in life expectancy, immunization rates, maternal health, and malaria incidences.

With as many as 194.6 million (almost 15% of the total population) starving people, the country has been ranked as the most undernourished in the world by the Food and Agriculture Organization. As we have seen earlier, the undernourished population impacts a nation's economy adversely. An undernourished population suffers from numerous health disorders. Although child undernourishment rates have declined since 2006, this development is still well below to achieve global nutrition targets adopted by the World Health Assembly. The major risk among newborns and their mothers in India is loss of life. As India is second lowest in taking folic acid supplements during pregnancy, it leads to severe birth defects every year. With respect to children under 5 years old, it is noted that a large number of deaths (50%) occur mainly due to poor nutrition (TOI, 2015); moreover, those who manage to survive experience serious health problems in their adulthood. As shown in Fig. 3.1, in India, 39% of children above 5 years are stunted (low height for age) and 15% are wasted (low weight for height). As children grow into adolescence, problems of overweight (11%) and obesity (2%) are observed (Global Nutrition Report, 2018). Anemia is also prevalent with 56% of young girls and 30% of young boys in the age group 15-19 years (Fig. 3.1).

Hence, we can clearly see that entire South Asia is at a crossroads with economic disparity, access to quality and safe food, education, a growing share of unhealthy youth as well as the aging population, and health systems that are failing to adjust to people.

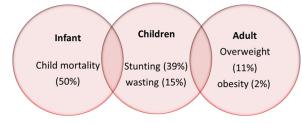


Figure 3.1 Indian health status.

As there are disparities and differences in nutritional status, there is a need to create awareness among the population, and there are countrywise preferences depending on agricultural and economic progress to promote traditional foods, and certain marketing issues have cropped up. Can traditional foods, their nutrition, and affordability offer any solution to these issues?

3.5 Marketing issues

To start the process of achieving benchmark targets and to reach out for the nutritional requirements, many countries take action on social marketing or other marketing methods. Before coming up with specific marketing strategies, based on the strengths and weaknesses of each country, there are core marketing issues that crop up. After analyzing South Asian countries and predominantly moving around India, following are the major issues that need attention before deciding a specific marketing strategy:

3.5.1 Demographic, health, and food variables

To advocate specific benefits of traditional foods and functional foods, it is very important to gather status and existing food habits of each country along with their socioeconomic, political, regulatory, and technological conditions. It is also equally important to look at certain deep-rooted beliefs and will to invest in social welfare, per capita food production, and food distribution issues as well as their concern for importing certain traditional foods. Besides these aspects, it is essential to arrive at existing disease burdens of the country that provides another point of view to work on required nutrition for a specific country.

3.5.2 Regulatory and other food policies for marketing and promotions

From a regulatory point of view, India comes first as enforcement has been fully achieved at the beginning of 2018 and it is considering to take the next steps for global harmonization. Codex Alimentarius has been accepted universally and in a proper way, it is pertinent to escalate these standards in each country provided there is no objection from the country. In fact, each country should welcome Codex Alimentarius regulations as it is beneficial for its citizens. In many Asian countries like the rest of the world, marketing methods and routes have certain laws and specifications such as for advertising, labels, Weights and Measures Act, and Magic Remedies Act that will enable or otherwise provide direction to marketing and promotional practices.

3.5.3 Proposal promise and credibility of marketing

Understanding fundamental deep-rooted beliefs and faith in certain foods, whether originated within the country, traditional foods, or widely available as functional foods, is of prime importance. On the basis of this, understanding whatever marketing strategy is adopted would either be accepted or totally rejected. Obviously, the right promotion with the right media selection will have to develop its promise in nutritional value and the basic strategic platform depending on the country's mindset.

To address these issues and to find out ways of marketing functional and traditional food to reach out nutrition, the marketing team has to undergo a few challenges in each country and South Asia is no exception.

3.6 Marketing challenges in traditional foods

Several challenges need to be considered by each country depending on its intensity. These ought to be considered concomitantly with the strategy, and marketing plan for each processed traditional food.

3.6.1 Knowledge and use of traditional foods in modern society

It is obvious that although there is a common platform of marketing at a strategic level, marketing in each country will be further customized on the basis of knowledge and usage as well as attitudes of citizens for existing traditional and functional foods and also modern functional foods that have taken an adequate shape through nutraceuticals in the world. In nutraceuticals, traditional ingredients are used as fortifying elements to make food as functional or fortified. There is a challenge in this, as individual countries may have different levels of attitudes, knowledge, usages, and conviction for each traditional or functional food. This insight can be generalized for a specific country on the basis of its demographics dependent on variables such as education, income, food habits, occupation, and per capita income.

3.6.2 Trust and evidence of the perceived quality of traditional and functional foods

When it comes to beliefs and faith, the best way to touch this delicate aspect is through scientific support for all traditional and functional foods. Hence, evidencebased perceived quality needs to be channeled in such a way that an old paradigm can resolve or evolve to a new paradigm without losing its essence or years of tradition and wisdom in food practices.

3.6.3 The challenge of food safety

Countries at different developmental stages of health and economy evolve from the acute phase to the prevention, growth, and developmental stage. There are a few countries where different levels of development are seen in different parts; hence, it is observed that unless a common factor such as food safety gets evolved, countries do not climb from one stage of development to the next. When many developmental stages are present concurrently in one country, there is bound to be an inequality in income, sanitation, as well as nutrition. This challenge has to be taken upfront with private—public participation (PPP) where the concern of the country is seen and understood by all citizens.

3.6.4 The research and development with the adaptation of technology

Conversion of traditional food products, as well as functional foods, is usually supported by new product development through R&D and also adding a technology edge for a delivery mechanism to ensure that tracking and tracing of claimed nutrition content are feasible at the level of consumer. This challenge influences each country's attitude toward R&D efforts of certain institutes and to provide concessional tariffs as they need such products for their citizens.

3.6.5 The challenge of communicating the holistic nature of traditional food

This challenge percolates to communication and messaging patterns that are different for each language and country. It needs to address the right target customer, probably a decision-maker in each family with their requirements so that its holistic nature is communicated and understood.

3.6.6 Personalized nutrition

To ensure that these foods are relevant and of utility to the society, adequate distribution outlets, as well as awareness camps, are essential besides communication and messages. Personalized nutrition would leverage relevance and utility and ensure that each individual is benefited once a belief level in every family is reached. This is typically a very difficult step unless there are active participation and a reasonable economic resource available to the family. If the food itself is scarce along with its socioeconomical aspects, it can take secondary consideration. In such a case, food is cooked for the entire family and would not become individualistic at all.

3.6.7 Regulatory in terms of products, labels, claims, and promotions

Some countries have fewer regulations with respect to traditional foods. To make food safe and healthy for each consumer, each country will have to evolve regulatory reforms and harmonization processes to deliver nutrition from traditional food through a consultative process. Although this process is time consuming, it will bring the benefits of traditional foods on a common platform.

3.7 The marketing platform for traditional foods

As there cannot be any individualistic marketing model for each country, based on a basic hypothesis on the South Asian region, it is possible to evolve a new holistic traditional functional food platform considering the issues of these countries. The platform would look like as shown in Fig. 3.2.

It is a conceptual model, and if adequately validated, it has possibilities and power to become a major platform on which marketing models will play.

One of the major cornerstones of this platform is to ensure that the wisdom and goodness of traditional and functional foods with their health benefits are communicated well. The second cornerstone is built upon the contribution of foods of different varieties for transferring the goodness of traditional foods to maintain the right nutritional balance and provide accessibility and diversity.

The third cornerstone is a customized one where it adds value to individual transactions and thereby facilitates the wisdom and goodness of traditional and functional foods coupled with the communication of nutritional value at the individual level. As it is a subjective and customized cornerstone for an individual country, it all depends on who takes part in this facilitation, for example, government and public sectors can take part in social marketing. Social marketing of milk, eggs, vaccines, etc. have been totally successful. Creatives and media options are open to private as well as public

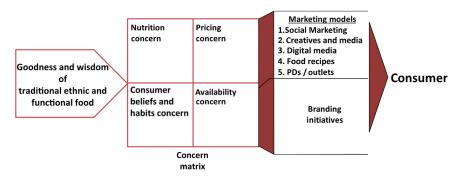


Figure 3.2 Holistic traditional and functional foods marketing platform.

sector organizations whereby they can reach individuals through digital marketing with the selection of the right media. Its accessibility can be further advanced by the overall creativity of promoting traditional foods and its nutrition.

For many countries, food security and food safety are important issues at the government level; hence, they have designed certain ways of public distribution systems and ensured that food is not scarce and available to everyone through specialized outlets. Specialized food packages are also prepared and distributed for the needy to correct severe imbalances, and it is in this area that traditional foods can play a very big role. Once it is done, it can be further supported by providing creative recipes and also personalized nutrition through the diversity of foods.

Branding is a level where traditional and functional foods get lifted from commodities to brand level once the same consumer starts getting value either through a convenient form, safety and trust of a brand owner and overall continuous reminder of the same along with its promise and performance. All these initiatives need to be taken to brand-specific solutions for increasing the consumption of traditional and functional foods at each country level.

3.8 Commercial marketing models

Based on holistic traditional and functional foods marketing platform, individual marketing models can be developed. Fig. 3.3 is a model that is adapted by Dr. R.B. Smarta (Interlink) from the consumer behavior model of Howard and Sheth.

This model has unique features in its different facets, and each facet is useful for a marketer to consider for its marketing ways, strategies, and tactics (Fig. 3.3).

This model is focused on consumers as a marketing platform and can be adopted for the marketing of traditional foods.

Once the consumer has access to information or gets influenced, his basic choice satisfies him for the promised claim and his needs. Thereon repeat transaction of his usage and purchase with his satisfaction helps to build brand consciousness. This process helps marketers to build brands.

As suggested, once marketing platforms and marketing models are operative, an evolution of traditional foods and functional foods to its newer form is observed. This is accepted by present-day consumers to bridge the gap of nutritional imbalance. This evolution could be quick-paced in a few countries, and it could be redefined as a revolution.

In conclusion, when it comes to heritage foods, food culture has become so diversified with numerous traditional and ethnic food preparations that over a period of time different dietary patterns have evolved. At the root of the miracle of biodiversity and agriculture, lies the customs, practices, and what is grown in that region sustainably.

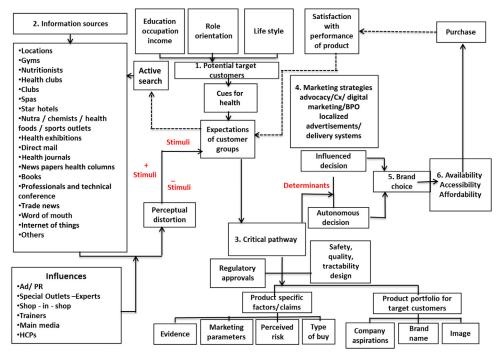


Figure 3.3 Traditional and functional food marketing model. *Adapted from the Howard–Sheth model of consumer behavior.*

References

BMJ, 2017. Health research priorities and gaps in South Asia_ BMJ (accessed 25.03.19.).

- Dahal, N.R., Karki, T.B., Swamylingappa, B., Li, Q., Gu, G., 2007. Traditional Foods and Beverages of Nepal—A Review. Taylor and Francis.
- Global Nutrition Report, 2018. https://globalnutritionreport.org/reports/global-nutrition-report-2018/ (accessed 25.03.19.).
- Govindasamy, K., Banerjee, B.B., Arun, A., Milton, P., Katiyar, R., Meitei, S., 2018. Meat-based ethnic delicacies of Meghalaya state in Eastern Himalaya: preparation methods and significance. J. Ethnic Foods 5.
- Gulf News Asia, 2019. Why Sri Lankan food is one of the healthiest ways of eating. https://gulfnews.com/world/asia/why-sri-lankan-food-is-one-of-the-healthiest-ways-of-eating-1.1549195011610 (accessed 15.03.19.).
- Shobana, S., Krishnaswamy, K., Sudha, V., Malleshi, N.G., Anjana, R.M., Palaniappan, L., et al., 2013. Finger Millet (Ragi, *Eleusine coracana* L.). A Review of Its Nutritional Properties, Processing, and Plausible Health Benefits. Elsevier.
- Srinivasan, K., 2010. Traditional Indian Functional Foods.
- The Himalaya Times, 2018. Wisdom of eating: Chepangs' food habits <<u>https://thehimalayantimes.com/</u>opinion/wisdom-of-eating-chepangs-food-habits/> (accessed 15.03.19.).
- The Hindu, 2016. South Asian countries facing "health crisis": World Bank. The Hindu, https://www.thehindu.com/sci-tech/health/South-Asian-countries-facing-ldquohealth-crisisrdquo-World-Bank/article15293137.ece (accessed 15.03.19.).

- TOI, 2015. India has highest number of deaths of children under five years of age. TOI, <<u>https://times</u>ofindia.indiatimes.com/india/India-has-highest-number-of-deaths-of-children-under-five-years-of-age/articleshow/46722307.cms> Accessed 25.03.19.
- UNICEF, 2016. The UNICEF Progress Report-Save Newborns. http://www.unicefrosaprogress report.org/savenewborns.html> (accessed 25.03.19.).
- Weerasekara, P.C., Withanachchi, C.R., Ginigaddara, G.A.S., Ploeger, A., 2018. Nutrition Transition and Traditional Food Cultural Changes in Sri Lanka During Colonization and Post-Colonization. Foods.