



Spice



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RISK COMMUNICATION OF AGRICULTURAL BIOTECHNOLOGY

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Agricultural biotechnology is a fundamental technology platform that can help transform the world food system and improve the environment. However, it has not got due recognition and appreciation from consumers in many parts of the world. Adverse consumer reaction to agricultural biotechnology in Europe has caught many stakeholders- scientists who developed the technology, biotech firms who championed it, policy makers and early adopters totally off guard. In India, even though consumers' reaction to this technology is not well documented, there has been a hostile response from some farmer groups opposing the introduction of this technology. In part, the cause of this negative response may be the nebulous communication and education given to the protestors about the advantages and risks involved in this new technology. From the effects of the public outcry about Genetically Modified Foods, it is clear that public response to a new technology can determine what aspects of that technology are implemented, how extensively the technology is introduced, and what directions future developments on that technology may take.

Amid these developments, it is important to understand that the general understanding of risk is different from "technical" conceptions of risk. The ability to effectively communicate about any technologically induced risk is an important part in any 'introduction' phase of new technology. Assessing the scientific risks of agri-food technologies must be coupled with appropriate, research-based risk management and communication activities, in order to provide consumers, the media, and others with a balanced, scientific assessment of both potential benefits and risks of a particular technology, and to have a positive impact on the development of public policy.

One of the most known cases of poor risk communication strategy is the strategy followed by the British government during incidence of Mad Cow disease in Britain. The statements by British Government that "British beef is perfectly safe" in spite of the seriousness of the problem, has resulted in a loss of confidence of the general public in regulatory agencies. The after-effects of this fiasco can be seen even now in the case of the controversy over Genetically Modified Foods in Europe. The European

consumers are not willing to accept the claims of the biotech companies about the safety of GM foods.

A body of knowledge has been created over the past decade that can help the general public understand agricultural biotechnology, how the media translates this information, and how the government, industry and other organizations can share risk information over a wide range of disciplines. Risk communication - the science of understanding scientific and technological risk and how it is communicated within a sociopolitical structure - is a relatively new scientific endeavor. The current state of risk management focuses on reducing, mitigating or minimizing a particular risk. In the absence of credible and honest messages about the nature of food-related risk, a vacuum will develop, that will then be filled from other sources of information. In the absence of credible messages on the nature of the risks in biotechnology and the efforts taken by regulators to reduce these risks, opponents of genetic engineering can fill the void with their own manipulative messages.

In this scenario, the Indian government and agribusiness firms should be careful in communicating about new technologies and particularly Genetically Modified Foods as they involve many emotive issues. The need of the hour is a productive discussion among scientists, educators, media, and the public at large to alleviate misunderstanding and to get to the heart of the issues, especially controversial issues.

ORGANIC FOOD - AN INSIGHT

Jhuma Kundu, Amit Singh
PGPABM (2nd year) 2003-05

"Yesterday repeats itself." This statement holds true even when we look into agriculture. Organic farming is not a new concept. Our ancestors practiced it, but the reasons were different. With a growing population and a growing demand for food came the concept of green revolution — but the use of chemicals did not prove sustainable and gave rise to a number of environment and food related problems.

As a result, since the last decade, agriculture across the world is witnessing a reversal to organic farming. However, there are certain questions that need to be answered. Can

organic farming feed the ever-growing population? Can it be remunerative to the farmers? And above all, is organic food really healthier?

Organic farming has less productivity compared to traditional farming systems. In addition to this, the conversion of land from traditional to organic farming is a time consuming procedure. Organic food is seen more as a luxury than a necessity, as masses cannot easily afford it — organic food being more expensive compared to normal food

For the farmers to gain from organic farming, it is essential that such produce is labeled, certified and given a premium. In India, the farmers face problems in getting the right price for their organic produce. This is because there is no separate market for organic produce and it cannot be identified separately from other products.

However, there is a good market for organic products in the developed countries because of greater health consciousness and affordability.

Table: International market for Organic food products

Sl. No.	Country	Sales in US bn \$	
		1997	2000
1	USA	4.2	8.0
2	Germany	1.8	2.5
3	Japan	1.2	2.5
4	Italy	0.75	1.1
5	France	0.72	1.25
6	Great Britain	0.45	0.9

Demand for organic food has increased by 55% between 1999 and 2000 and by 30% between 2000 and 2001. Organic products get a premium of 10 - 100% in the international market.

Very recently (in 2003) the claims that organic foods are healthier have been challenged by some findings of soil associations. It is said that organic foods increase the risk of food poisoning. It is also said that organic food cannot meet the demands to feed a hungry world.

However, organic foods have some nutritional benefits:

- ◆ They have statistically significant, higher levels of vitamin C, magnesium, iron and phosphorus.
- ◆ They have 15% lower nitrate levels. A higher nitrate level in vegetables is found to have correlation with gullet cancer. (Virginia Worthington, Nutritional quality of organic vs. conventional fruits, vegetables and grains 2001)
- ◆ They have higher levels of secondary nutrients.

The above discussion about organic foods has been on for years among agriculturists, nutritionalists and other scientists. At the same time, organic food is becoming popular more as a legacy than a necessity.

AGRIBUSINESS VISION 2020

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India is a resource-rich country. With its immense wealth, it can reach the pinnacle of success. Today India is categorised as a developing country. However, one can be quite sure that by the year 2020, India would be fully developed and will set a benchmark in all its operations for the whole world.

Agriculture has always been considered the mainstay of Indian economy in the past and is set to shoulder a great part of the economic success in the future too. Against this background, agri - business in the year 2020, will be the focus area, as its varied automatised operations will bring a revolution in the world.

Vision Statement:

“Feeding the world and protecting the earth with knowledge and demand driven agriculture”.

After attaining self- sufficiency within the country, Indian agriculture will aim to feed the world. Today, India has attained self- sufficiency and is also exporting agriculture produce, but the distribution of food grains within the country is not uniform. In this context, self-sufficiency would mean that no Indian starves.

The concept of ‘Demand Driven Agriculture’ is to produce food grains in sufficient quantity to meet the existing demand and forecasted emergencies, thus avoiding the problem of wastage and shortage of produce.

Turning the Indian farmer into an entrepreneur and bringing the Indian village on the global platform is not a difficult milestone to be achieved, and can be realised by the concept of *‘Model Village’*.

The Agri- Business domain consists of farmers as the key personnel, who require varied inputs, and different services and information from time to time to yield quality output. Without quality inputs and services, the farmer will be unable to produce quality output. At present, Indian farmers are facing many problems in getting quality inputs, services, and face problems in marketing his produce profitably. The model village in the year 2020 will take care of all these things.

Climatic conditions in the country vary from one region to another. The cropping pattern largely depends on these climatic conditions and so does agri-business. For better planning and execution of the model village, the country

can be divided into 15 agro - climatic zones. This will help in easy administration and execution of various activities within these regions and throughout the country.

These 15 agro- climatic regions will have one 'Sub- Hub' each, which will all be linked to centrally located 'Main Hub'. Each sub -hub will then have spokes at the village level, which will connect the villages to the sub- hub. Every operation in agriculture will be implemented through this model.

Finance is one of the major inputs in agriculture and is crucial in the Indian conditions as our farmers are relatively poor. In the plan for the "Model Village - 2020" farmers can easily opt for loans for different farm operations and for entrepreneurship. Each farmer will hold a credit card, which will make the transactions easier and faster. Farmers will be buffered with Crop Insurance, which will make their stake in the economy stronger.

The various cash transactions will take place through banks with the least involvement of the farmers. For example, if a farmer purchases seeds he need not pay in cash on the spot, his a/c will be debited after immediate reporting to the bank. These financial institutions will be placed at each spoke.

Besides finance, basic agricultural inputs like, seeds, organic fertilizers and bio-pesticides would be made easily available. In case of seeds, the sharing of germplasm data by each company at the hub will be a prime requisite. This will help in maintaining a database at each sub- hub and main hub. Before the advent of the sowing season, the farmers can lodge their requirement of specific variety and crop so that the company can easily produce the required amount of seeds only. These inputs will be provided to the farmers through one outlet at the village level.

Assured water supply is another important and basic requirement in agriculture. To meet this requirement, rainwater harvesting through watershed can be done in draught prone villages. Besides this, connecting all the major rivers throughout the country will boost agricultural operations.

Apart from these inputs, farmers also require other services and information. Maintaining Geographical Information System (GIS) can fulfill this. This GIS will take care of information on crop health, nutrient content of soil, meteorological data, pest and disease incidence, etc. To supplement this, VSAT (very small aperture terminal) will be set up, which will link the spokes to the sub hub and main hub. VSAT will also disseminate information from GIS to the villages. It will also give information on the future and commodity trading, which will also be easily accessible. Demand driven agriculture will inspire the

VSAT to chart out the ideal cropping patterns, which the farmers can follow in order to attain the forecasted demand.

With the help of quality inputs and appropriate information and services, the farmer will yield a bumper and quality crop. This quality output will then find its way to self-sufficiency within the local and different regions throughout the country. The surplus can be moved to the cold storage chains to cater to the forecasted demand. Perishable produce including horticulture produce can be processed and exported. Even high quality and graded farm output can be exported. The demand of different farm produce and prices in the market will be available at the spoke or even the sub hub and the main hub.

It will be left to the discretion of the farmer to sell his produce or store it— depending on the online prices, which he will be able to access from time to time.

Finally, the farmer in the year 2020 will be a successful entrepreneur with all quality inputs, services and information readily available. This will fulfill our vision of feeding the world and protecting the earth by projecting our villages on a global platform.

e-SOURCING - TRANSFORMING INDIAN BUSINESS

Vinod Kumar Ailani,
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e-Sourcing specialises in providing procurement and disposal solutions based on Online Bidding Events (OBEs). This business model is based on the click and mortar approach where the advantages of e-commerce and network enabled physical process help in achieving the best results in industrial business transactions. e-procurement or e- sourcing is driven by a renewed focus on cost cutting, different sourcing practices, maturing internet commerce and quantifiable benefits of implementations.

Benefits of e-sourcing

- ◆ Reduction in procurement costs
- ◆ Total transparency
- ◆ Faster time to market
- ◆ Shortened sourcing cycles
- ◆ Standardisation of sourcing practices
- ◆ Improved supplier and market knowledge
- ◆ Enhanced sourcing skills

Why has e-sourcing succeeded?

When the concept of e- sourcing first came to India, there was a lot of skepticism about the viability of the concept

as they related the concept to online marketplaces. e- marketplaces were portals that were primarily floated with the assumption that thousands of buyers and suppliers would transact business on the Net. However, this idea failed as companies rarely dealt with unknown suppliers. Unlike e-marketplaces, e-sourcing is a buyer-driven process where service providers like Free Markets Inc. work with the customer to get suppliers who meet their business needs. By getting more suppliers to jump into the fray, e-sourcing not only offers immense cost savings and transparency but also reduces the time taken to arrive at a particular price-as suppliers keep bidding and beating down prices.

Another important reason why e- sourcing has succeeded in India has been the timing. For instance, around three years ago, the Indian economy was in turmoil and many Indian corporates were looking at cutting costs to survive. This was a good opportunity for e-sourcing majors to enter the market and capitalise on the changing needs of the Indian corporate world. Today as most Indian organisations have started drawing global plans, e sourcing is no longer just an experiment, but a critical necessity.

Implementers of E-Sourcing

Dabur India

Dabur India, one of the largest FMCG companies in the country, has adopted a Rs 500-crore global e-sourcing strategy aimed at reducing costs and optimising procurement efficiencies. To implement the technology-enabled procurement process, Dabur has tied up with one of the leading providers of global supply management solutions — Free Markets Inc.

Dabur uses the technology to source products like, honey, spices, oils and even packaging. Earlier, Dabur was restricted to the domestic market for sourcing its products; however, the e-sourcing model has helped Dabur to reach out to international vendors. Today Dabur has not only managed to save costs but has also managed to bring in transparency in the complex and fragmented market of agri raw materials.

Tata Motors

About four years ago, Tata Motors was reeling under losses of about Rs 500 crores. Today, it has regained its former glory and is one of the top ten vehicle makers in the Asia-Pacific region, with profits close to Rs. 300 crores. How did this stunning turnaround come about? While most would say a resurgent economy and booming business has been the cause for the turnabout-the company initiated some bold moves to reduce costs. E-sourcing, a concept that has become a mantra today is credited as one of the major factors in Tata Motors' astonishing turnaround as it has helped the company cut costs.

Tata Motors and Dabur are among the few players in the Indian market who have adopted e-sourcing practices to cut costs and bring in transparency, and players like Free Markets are seeing growth rates of more than 100 percent year-on-year.

Key challenges

One of the biggest challenges e-sourcing vendors face is telling a well-entrenched supplier that he may lose his business. Most suppliers are not comfortable with the paradigm shift in doing business. They have to realise that the lowest price is not always the best price and must reflect on the value addition that the e-sourcing vendor provides. Another big challenge for e-sourcing solution providers is to make a high quality database of suppliers available for specific industry segments

Conclusion:

E sourcing is being seen not only as a tool to reduce costs but also as a strategic initiative to sustain savings and drive continuous improvements in sourcing. Companies will have to adopt strategic functionalities, including analyses on spending, sourcing collaboration, knowledge management and advanced bid analyses. Looking at the latest trends, one can safely conclude that E-sourcing is going to transform Indian businesses in the near future.

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