

Economy of Change:

The Organic Market as a Model for Agricultural Development in India

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Introduction

In India, 50% of children under five years of age are malnourished amidst a yearly surplus in grain production. Approximately 40% of food is lost in transport on a daily basis, yet the country has been able to prevent major famines for over 60 years. In a country with a GDP of 8-9% and an ever-growing presence on the international economic stage, these double standards cannot be tolerated. 260 million Indians live in extreme poverty, and 40% of those depend mainly on agricultural labor. This sector accounts for approximately 26% of India's GDP, and provides employment for about 70% of the workforce. Yet there is an agrarian crisis, with a collapse of employment growth, falling export prices, and a rising spiral of farm debt¹. Thus, in combating poverty, improving food security, and maintaining influence in international forums, it is vital to both stabilize and strengthen agriculture in the country. Growth in economic power also signals the need for natural resource management and conservation. The negative effects of the Green Revolution are already being felt by the nation's farmers, and modernization is taking its toll on access to water, power, and soil fertility. Therefore, strengthening the agricultural sector implies an environmentally sustainable approach. However, "by liberalizing agricultural trade, the depression in the global markets is being imported into the Indian economy," and thus pushing agriculture as an export market puts a fragile industry and many fragile lives at risk². In fact, it is argued that there is an inverse relationship between a primary export thrust and domestic food availability.³ With these considerations in mind, a domestic market for organic food can positively affect the lives of millions throughout India while maintain the rapid economic success of the nation.

¹ Patnaik, Utsa. Agrarian Change, Gender, and Land Rights, 2003.

² Ibid

³ Ibid

Access vs. Production

Perhaps the most highly contested issue concerning food security in India deals with access and production. National level plans, especially that of the Tenth Plan, have dealt specifically with improving inputs for farmers, and thus subsidizing several large inputs like fertilizer and pesticides. However, these policies have not only been detrimental to the environment by encouraging rapid and large scale mono-cropping and ignoring agro-climactic diversity, but they have not fared well juxtaposed against the reality of a massive grain surplus with insufficient storage and distribution. As well, it has been determined that “even a modest reduction in these subsidies, say, to the extent of 20% could enable the government to double its investment in agriculture.”⁴ Therefore, many organizations, international institutions, and farmers groups have encouraged a focus on access to food. The micro-level food insecurity is seen as a problem of infrastructure and corrupt systems of trade, which the government has taken an initiative to combat with national programs. Yet these programs, as discussed shortly, are severely limited in reaching those who need access to food the most. Thus, there must be another option that reaches the hungry. Daniel Gustafson writes of the importance of smallholder agriculture for both food security and poverty reduction:

“It is important not to confuse national self-sufficiency with food security. Since India has long been self-sufficient in food but a large part of the population remains food insecure, there is obviously more to the story. The second perspective that inadvertently downplays the importance of agricultural production in the food security equation is the belief that since national-level production per se is not a current problem, the main issues of food security relate to access, particularly to the Public Distribution System and other safety net programs. These have a crucial role to play but rural families’ own production continues to play the primary role in providing access to food.”⁵

⁴ Kapila, Uma. *Indian Economy*, 2007. Pg. 334

⁵ Gustafson, Daniel, “Building a Hunger-Free India from the Ground-Up,” Pg. 74

Thus, finding a way to encourage small scale production for self consumption as well as creating a marketable surplus is vital for the future of many of the hungry poor in India.

Public Distribution System

Currently, the government of India, as well as international agencies such as the United Nations World Food Programme, approach food insecurity with an initiative called the Public Distribution System (PDS), which organizes the allocation of basic staple foods to families based on their relative level below or above the poverty line. However, in a country with such size, diversity, and infrastructure problems, such centralized programs have proven ineffective in getting food to those who need it the most. Fair price shops (FPS) are often the local level distributors of PDS food, but have been found to abuse the system by charging PDS cardholders at a higher margin for personal profit, holding poor hours and harassing customers. FPS licensees themselves find obstacles to the PDS, as they are often denied access to credit to hold their shops open, and are victims to inconsistent supply from the central distribution centers.⁶

Although food subsidies in 2003-2004 totaled Rs. 270 billion⁷, each rupee of foodgrain to the poor costs the government Rs. 4.27⁸, reflecting the inefficiency of such expenditures.

A surplus stock of 65million tones of foodgrain⁹ implies two dominant concerns: first, methods of distribution are severely lacking, and although the PDS has done some successful work to alleviate such problems, the sheer vastness of the country creates doubt in investing in one centralized program. Second, this excess is a sign of falling

⁶ Sharma, Pravesh, "The Public Distribution System Works as a Safety Net," Pg. 79-112

⁷ Saxena, Naresh, "Food-Based Programmes as Safety Nets in India," Pg. 60

⁸ Sharma, Pravesh, "The Public Distribution System Works as a Safety Net," Pg. 80

⁹ Saxena, Naresh, "Food-Based Programmes as Safety Nets in India," Pg. 60

purchasing power by the poor, as farmers sell off their grain to the government at the mandated Minimum Support Price only when the market does not capture their goods. Purchasing power en masse has in fact decreased between 1990 and 2001, and so, contrary to the typical policy reaction of many developed nations, India cannot simply raise prices to deal with the surplus.¹⁰ By recognizing the issue of purchasing power rather than distribution concerns, the poor can use the market economy to their advantage instead of relying on external sources of assistance. As one representative of the World Food Programme mentioned, the concept of “charity” is new in India¹¹, and the idea of re-distribution of resources from the rich to the poor through public works is something looked on with suspicion, and consequently, often abused. The executive director of one NGO even commented as such when responding to the recent standard of preventing international NGOs from maintaining a strong presence in the country: “India wants a permanent seat in the United Nations Security Council, and so does not want to be seen as a charity nation. For that reason I am all behind this standard.”¹²

Therefore, a market based approach, where farmers are able to better gauge demand while incorporating more sustainable practices, is an effective method of increasing purchasing power for the farmer and thus establishing a consistent income that could potentially lift many out of poverty.

¹⁰ Patnaik, Utsa, Agrarian Change, Gender, and Land Rights, 2003.

¹¹ Interview: J.K. Raman, 4/19/07

Organic Farming

Currently, approximately 60% of farming in India is naturally organic, as most farmers are too poor to afford external inputs such as fertilizers and pesticides.¹³ However, those farmers that can afford such inputs, which are heavily subsidized by the government, are able to produce goods quickly and cheaply and have the distributive capacity to reach the *mandi* more efficiently, thus pushing out the small farmer. Due to lack of access to information on effective farming techniques, small farmers are often presented with schemes of wonder fertilizers and pesticides, which small retailers push, and after paying exorbitant rates for the inputs, farmers not only see smaller yields, but their soil fertility is worsened. If farmers are educated on effective organic farming practices, their production can rise while conserving natural resources such as water, on which chemically fertilized crops rely heavily. Thus, “the sustainability of small farms will depend on use of environmentally friendly energy and other inputs such as organic fertilizers and choice of crops which adapt to agro-climatic strengths.”¹⁴ Consequently, better production will allow farming families to consume a greater proportion of their own food and avoid issues of lack of sufficient income in a volatile food marketplace or an often abused public distribution system. According to the National Centre for Agricultural Economics and Policy Research, “the number of people farming in India is not viable now,”¹⁵ and so many young people are migrating into cities for employment for at least some portion of the year. As well, the Green Revolution transformed farming from extensive cultivation to intensive cultivation, thus cutting down labor. Because

¹² Interview: Mukesh Gupta, 3/23/07

¹³ FAO Market Study, 2006

¹⁴ Bapna, SL, “Agricultural Marketing and Price Policy in India: Perspectives for the 21st Century,” 2002. Pg. 755

organic farming is often considered to be more labor intensive, it gives farmers and their families the choice to migrate or remain with farming.

However, these positive aspects are inevitably balanced with negative effects, uncertainties, and myths that have prevented many from pursuing this method of agriculture. Interviews with farmers have revealed differing views on the effectiveness of natural inputs, as yields appear to increase for fruits and vegetables, decrease with cereals, and go down regardless of crop after the first year. Some farmers claim that hybrid seeds are less economically viable because they must be bought every year, while others say that they use less pesticides and water, so the costs balance out. Organic manure can often contain seeds of weeds that can destroy crops, but chemical pesticides destroy natural predators of pests and destroy the fertility of the soil. These confusions are compounded by market strategies. For example, with respect to the diminishing returns of fertilizer application, the economically optimal level is less than the technically optimal output. Some people believe that the visual appeal of organic fruits and vegetables increase with organic, while others claim that the produce looks unripe and dirty. Finally, judging the increase in income by having organically certified products is often difficult to weigh against simply using non-harmful techniques for the sake of preserving land. These are just some examples of the reasons why organic agriculture has not hit the mainstream in terms of determining the most effective and efficient forms of production.

¹⁵ Interview: B.C. Barah, 4/16/07

The Morarka Foundation

Certain non-government organizations (NGOs) are investing in rural agricultural communities, educating and supplying inputs for different methods of organic farming. The Morarka Foundation, based out of Jaipur, Rajasthan, has invested in vermi-culture as a livelihood for farmers throughout the region. These farmers use vermi-compost (recycled natural waste decomposed by earthworms) as natural fertilizers for their crops, as well as sources of income, as Morarka sells the largest amount of vermi-compost in the world, and sources it from the farmers that it trains and supports. The foundation has since created its own private firm to market organic certified products, recognizing the potential for a lucrative market. As well, as Mukesh Gupta, the executive director of Morarka has recognized, “small producers have a greater ability to comply with quality/organic standards,” and so the small farmer, often ousted from traditional markets, can find a niche in organic food production.¹⁶ According to Morarka, the cost of agriculture over the past decades has increased, making the sector as a whole unprofitable. Thus, they are “converting agriculture into agri-business, which is more economically viable and sustainable in the future.”¹⁷ In previous national efforts, the emphasis has been on increasing production as an improvement for the value chain, but that does not necessarily result in better income for farmers, thus validating the need for private enterprises within the NGO efforts for rural development.

Morarka has found that, although handling of organic products is more complex, there has been no constraint on farmers for transition to organic. Rather than emphasizing yields and production, Mr. Gupta focuses on the investment to return ratio,

¹⁶ Interview: Mukesh Gupta, 3/23/07

¹⁷ Ibid

which he has seen improve with organic farming. By partnering with the certification agency OneCert, Morarka has been able to certify its farmers, speeding up the transition from farm to retail. However, the company recognizes that the most difficult aspect of marketing such goods is in the pricing, and finding a reasonable margin of return. As Navin Kalra, the general manager of sales and marketing, pointed out, “the Indian consumer, mainly consisting of housewives and servants, is willing to compromise on health and quality if she would pay more otherwise.”¹⁸ Realizing that pricing will always be a bit higher for organic, Mr. Kalra stated the need for much higher customer awareness.¹⁹ It is this customer awareness that appears to be lacking throughout India, and many of these NGOs are relying on mass media and growing incomes to create a market. While the assumptions of such a market are not necessarily inaccurate, they are not to be relied upon when dealing with millions of struggling livelihoods. Thus, it is vital to examine the realities behind such a market, which will be looked at presently.

Gandhi Manav Kalyan Society

Another such NGO dealing with the duality of organic production and effective marketing is the Gandhi Manav Kalyan Society (MKS), located in the village of Oгна outside of Udaipur, Rajasthan. One main initiative of MKS is an organic farming training and research center called Dharamitra. According to MKS, production has doubled for farming incorporating organic farming techniques such as vermi-culture and natural pesticides and manure.²⁰ In this particular region, the main issue has been water management and so a particular emphasis is placed on low-water farming and well-

¹⁸ Interview: Navin Kalra, 3/22/07

¹⁹ Ibid

building through the help of a UK based NGO called Wells for India. MKS has provided the farmers with the initial organic inputs of seeds, earthworms, etc., which, according to the founder, Madan Nagda, costs “a little less” than non-organic inputs.²¹ With the donation of these inputs as an initial investment, farmers throughout the Oagna region have benefited, returning fertility to their soil, efficiently using water, and increasing their income. As one family noted, increased production has allowed them to use more food for personal consumption, as well as sell the rest at a higher price: with pesticides, one kilogram of wheat sold for Rs 7 at the local marketplace, but those without pesticides sold for Rs 10.²² However, the direct link between pesticide use and price for the product is uncertain, as market volatility and seasonability of certain products can be misleading. Within MKS, there are plans to create a “farmers support network” through the name of Dharamitra, which would entail branding organic products under the same name and opening them up to the Udaipur market.²³

Currently, MKS sources minor amounts of grains to five star hotels in Udaipur, where their wheat sells at about Rs 4 above market value. As well, MKS has the vision to enter the export market because of the potential profitability of such a move. The main obstacle to the growth of organic farming in Oagna, however, is the lack of certification. The high cost of Rs. 50,000 for certification for one farmer or a group of five to ten is simply too high for families in Oagna, even though certified organic wheat sells at about Rs 10-12 above market value.²⁴

²⁰ Interview: Rajeshji, 4/23/07

²¹ Interview: Madan Nagda, 4/23/07

²² Interview: Dalsingh Family, 4/15/07

²³ Interview: Madan Nagda, 4/23/07

²⁴ Ibid

As well, MKS, as do many other NGOs working in rural areas and relying on predominantly rural marketplaces, has a vision for the future that is not reconciled with the current market situation. Approximately 62% of the land within the region of the wells project is currently non-irrigated, and thus if the project is successful in irrigating all land, and assuming that land will have similar productive capacity, the amount of food grown could double. MKS has done no formal study on the absorptive capacity of the surrounding marketplace and the elasticity of demand for food. Without understanding the ideal amount of food needed for the area, MKS is risking time and money in encouraging all families to follow organic farming as a source of income.

MKS is convinced, however, that finding a market will not be a problem, as international markets, as well as middle and high income Indian consumers, present enormous potential.²⁵ Although international markets have extremely large returns when accessed, this is not the focus of the present study, and so the domestic market will be examined presently.

FAO Market Study²⁶

Several studies and market analyses have been conducted concerning the potential for a domestic organic market in India. Most have been done by private corporations and are thus difficult to access. However, the Food and Agriculture Organisation of the United Nations (FAO) compiled a similar report based on several years of research and surveys of the market for food in different levels of cities. According to the report, there is “a growing concern for healthy and natural products,” as well as “preventive

²⁵ Interview: Rajeshji, 4/23/07

²⁶ FAO Market Study, 2006

maintenance.” This increased awareness, as well as a large middle class of 300 million, growing at a rate of 30-40 million a year, sets the stage for a tremendous opportunity. According to the FAO, “given population figures, market potential estimates in the coming ten years could beat the European markets matured over two decades.” They estimate the total market potential at 2300 crore, with 1450 crore found in the top eight metropolitan cities in the country. The top niche end of the food market is particularly useful to observe, as this 2-5% of the food market has a value added of about Rs 1800 billion and has the highest capacity to spend more proportionally on food. However, it appears that “price will be the lynchpin; volumes must be built up so that the price decreases and market growth increases.” As several organic marketers have stated, the Indian consumer is incredibly sensitive to price changes, and thus, recognizing the difficulties in leveling the price with conventional goods, “educating the consumer seems to be the single largest requirement” for the success of the movement towards organic.

Mandi System

It appears that there are varying degrees of awareness throughout the different markets of India. In the local *mandis*, vendors focus mainly on appearance and feel of the good rather than presence of chemicals. They are fully aware that wholesalers will buy unripe fruit and use chemicals to ripen them quickly, or spray chemicals to improve the shine.²⁷ The vendors are under the impression that these chemicals are harmless, and one vendor mentioned that the only time people ask for chemical free goods is when they have a particular allergy.²⁸ Generally, these vendors have seen the same price between

²⁷ Interview: Banu Began, 4/29/07

²⁸ Ibid

organic and non-organic goods, and in fact find some organic foods more difficult to sell because of a green or unripe appearance. As well, according to several vendors and farmers in the Udaipur region, “everyone thinks that without chemical fertilizers and pesticides, you can’t grow food,” thus eradicating the desire to invest in an organic model.²⁹ However, consumers in the *mandi* acknowledge the health problems associated with chemicals, but do not ask about it in the marketplace because to them, there seems to be no presence of organic. Based on several informal conversations with average *mandi* shoppers in Udaipur, they would be willing to pay Rs 10 more for products with an organic certified stamp. However, they are not as willing to go to a supermarket or hypermarket to find such goods, as they trust the quality less than their local vendor, and find less variety. Also, most consumers feel that sufficient washing/boiling/steaming removes harmful chemicals from the food, so it is not as important to buy organic.³⁰ Nevertheless, as several vendors mentioned, in the past four or five years, selling has been good because the buying capacity of the average Indian has gone up, and more people are paying attention to fruits and vegetables, especially those engaged in less and less physical labor. Therefore, it is clear that even on an informal market level, there is a chance to capture the increased spending capability of the consumer, especially that of the middle and upper class, from which the *mandi* will eventually no longer be able to benefit. This is due to the fact that buying food has a limit, as more and more food comes with decreasing marginal utility, to the point where a person cannot consume more food simply because he or she has more money. Therefore, the increase in income can be spent on more expensive food, often better quality and often with better returns to the

²⁹ Interview: Manosh, 4/29/07

³⁰ Informal Interviews, 4/29/07

farmers. If companies and NGOs capture this excess income effectively, all ends of the supply chain can have tremendous success.

While NGOs such as the Morarka Foundation and MKS have captured a glimpse of this potential, they currently do not possess the marketing knowledge or the infrastructure capability to efficiently seize this opportunity. I interviewed several different organic food companies at varying scales, and will discuss their relevant experiences presently.

Dubdengreen³¹

Dubdengreen, based in New Delhi, is an organic company that has had tremendous success selling organic certified and natural goods. Started by corporate executives Jayashree and Ganesh Eashwar, they have a central store in a hidden corner of Shahpur Jat, and source to several specialty stores in Delhi, as well as Bangalore, where they plan on opening yet another store. The company began with their own organic farm outside of Bangalore, but currently source from other farms for their own brand. Most unique about Dubdengreen is the fact that they sell organic products of other brands from across the country, emphasizing their dedication to the organic model rather than simple profit. They recognized a demand for organic, stemming from looking after ecology, a visible transition to health, and paying more attention to the health and future of one's children. In years past, as the Eashwars assert, "health foods had been for the unhealthy, but now the healthy want healthy food as well." By using word of mouth, media, and user friendly showcasing Dubdengreen has increased organic awareness, as well as created a successful company. However, it is clear that their self sacrifice in this project, including

putting down the initial financial investment, is not a model that can be replicated on the large scale. Their response to the issue of sustainable models for organic included several points. First, they felt that “you need a variant- dedicated stores functioning on a small outlet level, where there is trust in the people,” and these variants can be found scattered throughout the country but have “not been brought under one umbrella collaboration.” However, one large corporation cannot foster the sense of trust that small units can, and the Eashwars claim that large companies in the food industry, such as Reliance Fresh, will dilute the product and overall standards of organic goods. On the other end of the spectrum, the organic sector has been predominantly an NGO activity rather than a consumer oriented activity, yet “while NGOs have been good at maintaining biodiversity, they have not been great at marketing.” As well, NGOs have had a different concept of time, often holding a “frustrated western mentality” in a sector that needs time to evolve and become more accessible.

The dominant issue with respect to accessibility concerns the certification process, to which Dubdengreen has evolved its opinion. While fundamentally, the Eashwars emphasize that “the onus is on us to make sure it’s organic,” they recognize the growing consumer need to see a stamp on the packaging, substantiated by some third party, be it government or private company. Although they state that certification costs are becoming more rational as time passes, there are major logistical difficulties, such as the fact that even the packaging must go through a certification process. Although their goal is to have as much processing and packaging work done in rural areas, the need to fulfill such standards cannot be reconciled with the inherent lack of training in many of these areas. The administrative responsibilities of organic certification are also somewhat

³¹ Interview: Jayashree and Ganesh Eashwar, 4/18/07

overwhelming for the average farming unit, and in order to maintain the detailed record keeping involved, many groups have to hire a new broker in the process to keep the records. This cost is frequently unmanageable. The certification process must be simplified, and must also recognize those farmers in transition so that they do not lose profit from the initial organic inputs. As well, it is important to clarify that, although these goods are more expensive than the bulk of goods in India, which are unbranded, organic certified products are inherently branded, and so relative to other branded products, organic prices are extremely competitive. While the price of organic goods does go down with time, “branded things are never for the lower class,” and so the desire to expand organic certified products to all classes would be ignoring fundamental issues of costs.

Mr. and Mrs. Eashwar affirmed that “no one knows what the offtake will be” for organic, and shortages will inevitably occur, thus explaining the caution that many companies are using in getting involved in the sector. However, they also feel that mass replication is not the issue for their company, as Mr. Eashwar explains: “If I affect 10,000 people in my life, then that’s successful.” Dubdengreen is committed to their work and the ideals exemplified in organic, and although this model may not change lives on a macro scale, they provide a provocative example of the future of organic in the country.

Fabindia³²

Fabindia, based in New Delhi, began in the 1950s as an export business and opened its first retail outlet in 1976 in Delhi, focusing on the craftsmanship of the desert region, especially that of Rajasthan. Since then, Fabindia has become one of the most

recognizable retail brands, and has expanded its range of products beyond textiles into home accessories, natural body products, and organic food. The food initiative was launched in July, 2004 as a continuation in the company's model of environmentally and socially sustainable practices. Mr. Jashwant Purohit, the head of business for organic foods, explained that "craftsmen in Rajasthan are essentially farmers, and the Green Revolution didn't come out to that region, nor did MNCs (multinational corporations), so natural farming is most common." Therefore, it made sense for Fabindia to invest in organic food in this region because of their existing relations with the craftsmen, and an extremely aware customer base. The structure of Fabindia as an established company that sells only within its own stores has been conducive to selling organic, as the consumer sees a trusted certification stamp but does not see a cheaper conventional good sitting next to it where price sensitivity would often come into play. Mr. Purohit explained that companies such as Reliance would not find it lucrative to invest in organic, as a supply chain at that scale is far too shaky, demand is uncertain, the industry is scattered and there are no economies of scale. However, he also stated that "there is a potential latent demand- if 1% of Delhi's population consumed organic, Fabindia wouldn't be able to supply them." Yet at this stage, Fabindia, according to Ashima Agarwal of the organic foods business department, "must be the largest, in an organized retail sense, seller of domestic organic," reflecting a definite gap between potential demand and current retail investment.

The structure of the organic model with Fabindia involves working with cooperatives and companies rather than the farmers themselves. They only work on marketing and retailing, leaving processing to the companies. They deal particularly in

³² Interview: Capt. Ashima Agarwal and Mr. Jashwant Purohit, 4/19/07

products that are not extremely common, and avoid produce because of the difficulties of stocking it organically. They also recognize the importance of in-conversion certification, and therefore have an “in-conversion” stamp as well as a “natural” stamp. All procurement occurs in the Delhi facility, where there are weekly shipments to their 56 stores, which they are planning on expanding by 100 within the next year. Most of their suppliers deal in bulk, and often in exports, so Fabindia is often an extremely small buyer, creating issues of bringing the price down on the shelf. As both Ms. Agarwal and Mr. Purohit emphasized, the Indian consumer is extremely sensitive to price, and there are serious issues of economies of scale in organics. With certification costs being very high, as well as scattered projects, small farms, lack of education, great distances, and varying climactic zones, Fabindia will have a difficult time keeping prices low. Even though, according to Mr. Purohit, the income is there for families to buy organic, the Indian lifestyle is such that consumers are unwilling to invest in more expensive food due to the fact that “servants, dogs, etc. eat the wheat flour and daal; it’s not for such personal use as soap for instance.” This observation, as well as the home delivery system with which branded companies cannot follow, creates a profound cultural obstacle to the future of organic as it currently exists. Yet with the current customer base of Fabindia, the organic food section is having success. In terms of mass replication, however, it is unclear as to the reliability of a larger organic consumer population.

Pure Restaurant, Taj Hotel³³

In the northern section of Mumbai, the neighborhood of Bandra is famous for housing and entertaining the most famous of Bollywood stars. The Taj Lands End Hotel is located in this area, where the restaurant Pure is housed. Pure is described by Taj as “India’s first international restaurant with a focus on organic ingredients.” Opened in March 2006, the restaurant is the most extreme example of Taj’s attempts to incorporate organic into its restaurants, an initiative rising from the demand of their predominantly upper class international clientele. As Chef Anup Gupta, the executive sous chef of Pure explained, the demand, along with the quality of the food and the desire to build the company’s image turned organic into “a quest, and it is an exercise that we are trying to do.” According to Chef Gupta, health and environmental sustainability were both thoughts in making the transition, and in the Indian scenario, products are primarily organic as it is, so price increases have not been as large as in the west. The farms that source their products all have certification, and approximately 60% of their food is domestically shipped; the dominant imported good is meat. People are becoming more and more health conscious, as they gain awareness of genetically modified organisms, chemical fertilizers and pesticides in their food. While it currently appears to be a “fashion statement,” it is this awareness that signals that organic “has to hit the mainstream.” While there certainly needs to be better norms, rules, and regulations, he explains that “the moment you see there is a demand, the supply chain gets alerted. The farmers, suppliers, and distributors will figure it out.” Thus, awareness is the key issue of concern for creating a strong domestic market. As well, the focus should be primarily on cities, as in rural areas, people are already leading a healthy life, even if there are not

³³ Interview: Chef Anup Gupta, 5/3/07

educated enough to be aware of such a reality. Proportional to the entire population, there is only a small chunk of people who are not eating organic, and they are primarily on a commercial level. Yet this section of consumer has incredible potential for the organic market, and Chef Gupta does not hesitate to recommend that farmers go organic because he has seen such success.

With respect to certification, Taj acknowledges the necessary involvement of a body that is a constant source of inspection. This body can be government based or private, but it must have credibility. Certification must be more accessible and cheaper, and infrastructure must be improved to make the supply chain work faster, and this often means incorporating less manpower. However, as food is the backbone of this society, the presence of a strong agricultural sector will remain, and small scale farming will continue to be the dominant structure, according to Chef Gupta. His confidence in such statements reflects his conviction for the future of organic in India.

Reliance Fresh

Reliance Industries Ltd. is a Fortune 100 global company, whose dominance in petroleum, petrochemicals, textiles and telecommunications has set the stage for it to be one of the most powerful companies in the world. As Indian incomes have risen and many sectors have become more formalized, Reliance, like many other large corporations, has recognized the demand for a more organized retail sector. They recently launched an entire retail initiative (with an initial investment of \$750 million and a total of \$5.6 billion in coming years), which included the announcement of a food retail

chain in June, 2006.³⁴ Since that time, approximately 150 stores have been opened under the name, Reliance Fresh.³⁵ While they currently only have a presence in large cities and have not in fact made a large dent in the food sector, they are symbolic of a transition to formalized retail, a transition that could or could not revolutionize the way that trade goes on throughout the country. After meeting with one employee and one senior member of the company, it became clear that Reliance Fresh is equally fluid in their interpretation of the future of the project. Currently, organized retail chains control only 3% of the market, but with the impending entrance of companies such as Wal-Mart, it is clear that Reliance's presence in retail is not temporary. As the senior member acknowledged, India is integrating with the world market, and thus demanding better quality products, giving Reliance motivation to give a better product, especially in fruits and vegetables. As 40% of food produced in the country is lost in waste (through transport, storage, and inefficient marketplaces), there is an opportunity to use the efficiency of a company such as Reliance and have a positive social impact through a business model. According to the senior member, the Food Corporation of India (FCI), which handles surplus food and the PDS, has a disastrous storage system, and people are dying as a result. As well, no one has dealt with cold chain system issues, which should technically be the government's job, and antiquated farming methods do not allow for progress in efficiency and rapidity of transactions. The Reliance Fresh model currently revolves around using the current *mandi* system to source its fresh products, although there are certain instances of working directly with the farmers, such as having collection centers in Rajasthan for procurement purposes. The company does not have any intention of producing its own food on private

³⁴ ANI. "Reliance to Invest 5.6 Billion Dollars in Retail."
<http://in.news.yahoo.com/060627/139/65fr5.html>, June 27, 2006.

farms as it does not want to get involved in such backward integration. However, although it is currently just an ordinary retailer, Reliance does imagine setting up its own private label with value added, but the details of this plan are still uncertain. Their bottom line is to reach “the masses, not just the rich; we want to serve ordinary consumers.” According to the senior member, Indian consumers are “the most value conscious people...value as defined as price and quality.” They determine quality by touch and feel, and do not really invest in understanding an appreciating “all these stamps” of quality, organic content, etc. Large corporations, such as Reliance and Wal-Mart, must recognize that “India is not branded,” and it has not been until recently, with “Indian housewives now working and less time to shop, there is a slow movement towards pre-packaged, branded goods.” Yet this transition has been extremely slow relative to the population of the country. And as “India is 24 countries, you can’t have just one strategy.”

In the state of Rajasthan, Mr. Prateek Tiwari, who handles the movement and distribution of fruits and vegetables, explains one such strategy.³⁶ For the increasing number of stores in Jaipur, as well as future outlets in Udaipur and Jodhpur, Mr. Tiwari sources food in three ways. First, he goes directly to large farms and makes the transaction directly. Second, he goes to the local *mandi*, where he deals with commission agents between the farmer and himself, which is the dominant method of procurement for the Reliance Fresh model as a whole. Third, there are several collection centers where smaller farmers bring their food and receive payment upfront. These collection centers serve as more than places of procurement, as they hold trainings for harvesting and

³⁵ Interview: Anonymous senior member of Reliance Fresh, 5/6/07

³⁶ Interview: Mr. Prateek Tiwari, 3/18/07

production techniques. As well, the payment system is set up such that the managers differentiate price to the farmer based on quality and thus the farmer develops a “quality consciousness” that, according to many farmers, vendors, and organic companies, does not exist at the *mandis* because there are set base prices. As Mr. Tiwari put it, there is “a lot of handholding” involved in working with farmers at these centers. Once the product is obtained, it is sent to a processing center in the city of Jaipur, where food is sorted, allocated to different stores, and where surplus is stored. This warehouse aspect emphasizes the efficiency in procurement that does not exist at the *mandi* level. Mr. Tiwari explained that “no farmer in India has a weighing scale,” and so approximate measurements are taken before leaving the farm. When arriving at the collection center, Reliance’s weighing scale will measure above weight, but will take the excess, understanding that the farmer cannot afford to bring the leftover produce to the local *mandi*, either because of lack of transportation or because of missing peak hours at the marketplace. Thus, this extra product is saved from waste.

Several farmers I spoke with at one particular collection center outside of Jaipur explained other reasons for selling to Reliance rather than going to the local *mandi*.³⁷ First, they are able to save on packing materials, which are returned to them rather than lost, which is what often occurs when spending all day at the local market. Second, less time is spent dropping food off at the collection center than at the *mandi*, and more produce is efficiently sold rather than stuck waiting in the frequent traffic line of trucks waiting to get into the market. Third, there is often an illegal tax levied on farmers using the *mandi*- the tax for this particular group of farmers was 4% of the total value of goods brought to the market each day. However, Mr. Tiwari and the farmers both clarify that

Reliance does not necessarily offer them the best price, but they offer a “better value proposition,” where hidden costs such as lost time, middlemen cartels and resource waste are lowered. The consistency of Reliance’s buying and investment in these rural areas has created a strong sense of trust in the company on the part of the farmers. When asked if they would go to a pharmacy set up by Reliance in the area, and if they will transfer all of their selling to Reliance if possible, they replied by saying that “no one has gone into our area and invested in it before- anything is better than what we have now.” There are immense implications to this type of relationship, especially when there are possibilities of Reliance selling chemical agri-inputs to the farmers at each collection center. However, these implications could have positive effects if Reliance invests in organic produce.

Currently, Reliance Fresh has not invested in organic products on any formal level, but as the senior member pointed out, “organic is a goldmine.”³⁸ What is most relevant in looking at the Reliance model is understanding the organized retail sector that focuses on selling branded products, under which organic certified falls. While Reliance certainly has the potential to revolutionize the sector, there are certain fundamental obstacles that the Indian consumer presents which will limit any rapid change. The service oriented nature of the small vendor, who will continue to do home deliveries and sell food on credit is something which the middle class needs and the large corporate model cannot provide. The common analysis that “Indians are extremely traditional, and old habits die hard” reflects the reality that the pushcart/*mandi* model will continue to

³⁷ Interview: Collection Center, 3/18/07

³⁸ Interview: Anonymous senior member of Reliance Fresh, 5/6/07

exist for some time.³⁹ Shrewdness in money, as well as a deeply entrenched system of small scale farming, middlemen, and pushcart vendors will be a challenge for a new branded model such as Reliance Fresh. Yet with investment in farm techniques, an efficient supply chain, and an understanding of the Indian consumer, this company could have an extremely large impact on the sector.

Although Reliance seems to have the most mass-replicable model for distribution of food on a private business level, it is also prone to some of the worst problems typically associated with corporate dominance. The dependency of farmers on the company, mixed with a trust that would have them invest in whatever inputs they sold, as well as the pushing out of wholesalers and vendors could streamline the system such that significant amounts of labor could be lost, and Reliance could gain a monopoly.

Recently, a violent protest of about 1,000 vegetable sellers against three Reliance Fresh stores in Ranchi reflects this growing problem.⁴⁰ This position of power would inevitably give them the freedom to set prices, and so although the initial intention may be to appeal to the average consumer, such dominance would allow them to manipulate the market. Reliance Industries Ltd. is currently the source of 2.8% of India's GDP⁴¹, and so they have an incredible stake in whatever industry they enter, and the Indian government would likely be quick to support them. As well, it is clear that the current choice of using *mandis* and small farmers as the main source of supply is not the long term model, but they also state that privately growing food is not the goal either.

Therefore, it is likely that, with increasing influence, Reliance will move to working with

³⁹ Ibid

⁴⁰ Reuters. "Street Vendors in Ranchi Attack Reliance Retail Chain's Stores." <http://in.news.yahoo.com/070512/137/6fpck.html>, May 13, 2007.

⁴¹ Reliance Industries Ltd. website, www.ril.com

larger farms, and this could lead to an increase in contract farming, which has proven to be detrimental to the lives of many farming families. As the Andhra Pradesh Vision 2020 plan has made clear, “small landholdings are to be amalgamated and farmed under intensive plantation style production for commercial seed and export markets, much of it using GM crops, and are to replace small-scale family-based farming with the loss of an estimated 20 million rural livelihoods.”⁴² Thus, it is risky to say that the large scale corporate model is the best way to pursue a branded system of retail. However, as seen with NGOs such as Morarka and MKS, small companies such as Dubdengreen, and specialty models such as Fabindia and Taj, the current system of organic certification will likely not affect a very large population. As Mr. Eashwar of Dubdengreen pointed out, this should not necessarily be the goal of pursuing a worthy cause, but it is one way of viewing the long term sustainability and success of the organic model.⁴³

Certification/ Participatory Guarantee System⁴⁴

The FAO market study addresses the issue of such a branded certification process, expressed as the third party system, which is not practiced by small farmers for the reasons mentioned above: high fees, low literacy and education levels, administrative difficulties, and large sized farming systems found in developed countries. According to the study, “the third party system is stifling the organic movement; less than .5% of farms in India are certified.” They propose a Participatory Guarantee System (PGS), which would make certification easier and be much more farmer proactive. Rather than just focus on the top niche end of the food market, the PGS would use a “mid mass-bottom

⁴² Woodin and Lucas, Green Alternatives to Globalisation, 2004. Pg. 151-152

⁴³ Interview: Jayashree and Ganesh Eashwar, 4/18/07

up” or “mass organic movement” method, riding on the fact that 60-75% of agriculture in the country is organic by default. This movement would incorporate a “mix of modern retail trade and intervention of national and state agencies, with an active contingent of farmer cooperatives and PGS groups.” The PGS would have to be backed by a foreign company or government institution, and a trusted brand name would have to be incorporated, based on the surveys taken for the study. However, this duality of a farmer proactive system and involvement of deeply entrenched bureaucracy appears difficult to achieve, especially in the Indian context. The study also suggests that organic retail be focused on marketing to the top metropolitan cities, as “71.7% of fruits and 74.5% of vegetables produced in the country are sold in the top ten cities.” Yet this emphasis could establish a dichotomy that currently exists on an international scale between developing countries that supply organic food and developed nations that source it. Thus, the level of farmer activity must be maintained on more levels of the supply chain, and by selling their own products in the same *mandis* from which they buy, there can be a better integration of the market and a quicker development of economies of scale, over which the farmers will have more power.

The bottom line of any such certification system is that rather than becoming a centralized system of dominance, agriculture must be valued as an equal level sector and thus the workers within it must be given fair access to benefits of the industry. As Amartya Sen writes, “food production must generate entitlements,” and thus there must be incentives for laborers to remain in agriculture, rather than be constrained to the sector for lack of more lucrative work.⁴⁵ As Mr. Barah of the National Centre for Agricultural

⁴⁴ FAO Market Study, 2006

⁴⁵ Dreze and Sen, Political Economy of Hunger, 1995.

Economics and Policy Research put it “from the supply side perspective, agricultural production must be remunerative; the farmer must either produce more or earn more.”⁴⁶

He also points out the dilemma of a certification system within a national structure that is frequently burdened by problems: “If certification adds too much income, it’ll be corrupted, and if too little, no one will listen.” While this is perhaps a somewhat negative perspective on the opportunities inherent in creating such a system, it is important to keep in mind when dealing with a country of one billion people and a sector that employs over half of them.

Conclusion

Amongst the varying levels of the food industry, both public and private, there is an ongoing battle between models, companies, and individuals. Throughout my interviews, I heard about lies over contracts, gossip over bleak reliability of particular companies, distrust of certifiers, dislike of NGOs, lack of competency in marketing, and miscommunication between levels of even the same firm. While it made me question the reliability of some of those with whom I spoke, I did not use these comments as a legitimate excuse to invalidate any of the information I received. That being said, it is quite clear that it is extremely difficult to find a common ground on the interpretation of certain ideas or the ideal model for organic agriculture. I simply used this time as an opportunity to survey the current initiatives, understand the obstacles that they face, and observe the strengths that could be replicated on a larger scale in the future.

There are several common threads to keep in mind when approaching the development of the organic food market in India. First, it is clear that farmers have some

⁴⁶ Interview: B.C. Barah, 4/16/07

recognition of the effects of environmental degradation, and so they have not chosen to use chemical inputs and GM seeds simply out of ignorance. However, as most farming families have very little savings and rely on upfront cash, they place primary import on finding a good price at the market. Because the local *mandi* is often inefficient, farmers will likely be eager to get involved with an organization that invests directly in their region, whether it be a corporation such as Reliance or and NGO such as MKS. If these organizations provide tools for effective organic farming and a consistent buyer of the goods, the farmers will be generally be proactive in making the transition. However, because of bad infrastructure and information acquisition, such organization must be a middleman or broker between farmer and buyer. While NGOs have been historically been extremely competent at dealing with the farmer, they have lacked the marketing skill, and thus there must be a partnership between public and private sectors. This partnership must be limited, as too many brokers, or too many outsourced elements of the supply chain creates bureaucratic problems and limits the profit maximization for the farmer. There must be a dual role for agriculture in the rural setting: primarily, it must serve as a source of food for the family, but there must be enough surplus to create an income, as cooperative self-sufficiency no longer exists in an era of school fees, electricity costs, and expensive marriage ceremonies.

From the demand side, it is apparent that there is some level of awareness by the average consumer that there are harmful chemicals on the food that he or she eats, but the incentive to look for organic is not yet strong enough, due to a number of factors. Most of these factors can be ameliorated over time with the development of the sector (more availability, affordable prices), but certain cultural norms pose obstacles for a traditional

branded, third party certification system where the product is sold on a formal retail level. Thus, options such as the PGS, better incorporation of the current pushcart vendor structure, and more consumer awareness concerning organic food are important ideas to be examined. Although price sensitivity is a constant concern, establishing economies of scale and evolving the target consumer should allow for the sector to flourish. The most vital issue then, is to return the highest margin possible to the farmer. The farmer can then be given the choice of what to do with his or her life, rather than be stuck in a cycle of unmarketable production and dependence on ineffective food aid. The farmer can then be the drive behind an economy of change.

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