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GROWTH-ORIENTED MICROENTERPRISE DEVELOPMENT (GMED) PROGRAM

VALUE CHAIN ASSESSMENT REPORT: ORGANIC AGRICULTURE PRODUCTS

microREPORT #49

December 2004

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Henry Panlibuton, Rajiv Sahoo, and Ram Sundar
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LIST OF ACRONYMS AND ABBREVIATIONS

AFE	Action for Enterprise
APEDA	Agricultural Processing Export and Development Authority
AVANE	Association of Voluntary Agripreneurs for Natural Environment
EU	European Union
FiBL	Research Institute of Organic Agriculture (Switzerland)
GMED	Growth-Oriented Microenterprise Development
Ha	Hectare
ICCOA	International Competence Center for Organic Agriculture
ICS	Internal Control Systems
IFOAM	International Federation of Organic Agriculture Movements
MoC	Ministry of Commerce and Industry
MT	Metric ton
NGO	Nongovernmental Organization
NOP	National Organic Program (USDA)
NPOP	National Program for Organic Production
NSOP	National Standards for Organic Production
R&D	Research and Development
Rs	Indian Rupees
SHG	Self-help Group
SOAM	Society for Organic Agriculture Movement
USAID	United States Agency for International Development
USDA	United States Department of Agriculture

EXECUTIVE SUMMARY

Action for Enterprise (AFE) led a value chain analysis team to conduct an assessment of organic agriculture in Rajasthan from December 3–19, 2004. The principal objective of the assessment was to understand the functioning and dynamics of the value chain, identify key players and propose possible initiatives for the Growth-Oriented Microenterprise Development (GMED) program to promote increased enterprise income and employment. ACDI/VOCA's three-year India GMED aims to improve the commercial performance of growth-oriented microenterprises through fostering policy and regulatory reforms, strengthening business support services and facilitating the mobilization of financial services and credit.

Sector selection: Organically grown food products were selected for study based on several criteria including a large and growing market demand, high value, predominantly smallholder production, suitable agro-climatic conditions and close-knit value chains. Given the initial geographic GMED focus on Rajasthan for organic agriculture, the value chain team determined that organic oilseed crops, and sesame, specifically, held the most immediate growth potential. Although sesame is not one of the larger organic export crops, lessons learned from the development of organic sesame production and marketing in Rajasthan could be replicated in other states and regions for a wide range of organic crops. The key principles of organic agriculture include sustainability (ecological, economical, and social), traceability and natural productivity. Organic agriculture is not a new concept in India—farmers have been using organic farming techniques for centuries. These farmers could be considered “organic by default” but are not necessarily certified organic.

End markets: Europe is the main market for certified organic exports from India, although many Indian exporters see the U.S. organic market as the one with the highest export growth potential. However, global trade in organic agricultural products is very competitive and India is not considered a major organic player by international traders. In addition to the export market for organic products, opportunities exist in the domestic market, which primarily caters to a niche segment of upper/middle-class consumers in urban centers. Increasing concerns for food safety and health consciousness have also sparked growing mainstream consumer interest and specialty retail outlets for organic products. An emerging domestic demand for organic products offers opportunities for exporters and farmers to diversify and expand their market channels.

Enabling environment: The Ministry of Agriculture organized an organic task force in 2000, which in July 2002, issued formal guidelines for the promotion of organic farming and designed a promotion program that will begin in fiscal year 2004-2005. This program includes funding for the training of staff from certification agencies, inspection agencies and service providers, the establishment of 120 two-hectare model organic farms, and a 25 percent subsidy for organic inputs.

Inter-firm cooperation: The need to achieve organic certification determines everything from the types of seeds, fertilizers, pesticides, storage facilities and packing materials used to the detailed information shown on product labels. Unlike conventional agricultural production and marketing in India, there is a high degree of inter-firm cooperation among all participants and at all levels in the organic agricultural products value chain. Since traceability is a major principle of organic agriculture, the relationships between exporters, intermediaries and producers are very close. Not only does information flow down the chain, but access to inputs, the provision of technical extension and market intermediation are also embedded in these relationships. The organization of organic agricultural trade in India can be grouped into four general models: NGO intermediary, private intermediary, integrated producer and integrated exporter.

Supporting markets: Research and Development in organic agriculture has been conducted mostly by universities and research organizations, with funding support from state and national government agencies. Extension services, provided by the Ministry of Agriculture and by certain NGOs, are limited. The process for organic export certification is usually initiated and managed by the exporter, intermediary or medium/large-scale farms. Individual small-scale farmers do not have the economies of scale to justify export certification on their own.

Key value chain constraints and opportunities include:

- *Inconsistent quality of technical support and low farmer adoption*—There is a lack of documented best production practice for specific crops and agro-ecological zones, and the results of appropriate organic solutions (especially to pest/insect infestation) are not shared among stakeholders in the value chain. Farmers are still skeptical about the costs of and benefits from organic agriculture.
- *Weak systems for organic certification*—A standard, consistent organic internal control systems (ICS) does not appear to exist. Exporters and intermediaries usually develop their own ICS to meet specific certification requirements and require its adoption by all participating farmers. These systems can be overly burdensome, inefficient and too costly to implement.
- *Production versus market-led orientation*—Similar to its development in other countries, the organic movement in India grew from a primary focus on promoting more ecologically and environmentally sustainable farming practices. Thus, initiatives promoting organic agriculture (often led by NGOs) focused on producing organic products without a good understanding of true market needs and opportunities.

The assessment team therefore suggests that:

- Exporters, private intermediaries and medium/large-scale farmers provide embedded extension and technical support in organic agriculture to small-scale farmers.
- Exporters or private intermediaries deliver training/technical assistance to small-scale farmers in how to conform to ICS requirements for export certification.
- Exporters or private intermediaries provide access to markets for organic products with unmet market demand.

Given the breadth and limited time in-country for the value chain assessment, the assessment team was not able to discuss these solutions and interventions thoroughly with key market actors. It is therefore recommended that further validation take place through a stakeholder workshop or similar method and more detailed analysis be conducted before implementation begins.

Recommendations for GMED include:

- Document and disseminate existing best practices in private sector-led models for organic sesame production and export.
- Conduct a technical needs assessment with targeted implementers in Rajasthan and facilitate access to training and capacity building support on a cost-share basis. Identify technical training resources with relevant expertise.
- Work with selected providers to pilot activities linking organic production research with on-farm trials and application by small-scale farmers in Rajasthan. Consider using the GMED grant mechanism to solicit and award small “challenge grants” (with a one-to-one match) to selected providers to support them in conducting these trials.
- Identify training resources for ICS development and management to build the capacity of exporters and private sector intermediaries who support small-scale farmers to implement ICS for export certification.

- Facilitate exporter and private sector intermediary access to ICS training on a cost-share basis (a one-time offer to stimulate demand).
- Identify market information resources (e.g., websites, major international buyers and traders and key informants) and compile data to understand export and domestic market trends.
- Facilitate dissemination of this market information to exporters, retailers, intermediaries and farmers.
- Cost-share selected exporter participation at targeted organic product trade shows.

I. INTRODUCTION

A. GROWTH-ORIENTED MICROENTERPRISE DEVELOPMENT PROGRAM

The three-year India Growth-Oriented Microenterprise Development (GMED) Program aims to improve the commercial performance of growth-oriented microenterprises through fostering policy and regulatory reforms, strengthening business support services and facilitating the mobilization of financial services and credit. To accomplish this, GMED identifies constraints to business growth in specific industries and, in collaboration with industry stakeholders, devises and implements strategies aimed at overcoming these constraints.

According to USAID, “A growth-oriented microenterprise is dynamic and driven by motives of entrepreneurship, i.e., having potential for increasing economic opportunities and creating jobs as well as increasing asset accumulation for resource-poor entrepreneurs.” Entrepreneurs targeted under GMED are generally already operating commercially sustainable businesses but face barriers to further growth, such as lack of access to credit, markets, appropriate technology and/or relevant business services.

Much of the overall program strategy stems from the results of six separate market assessments conducted by GMED between mid-November and mid-December, 2004. The six assessment teams, comprising both expatriate and local consultants, addressed financial services, the policy and regulatory environment, and urban services; and carried out three value chain analyses, concentrating on the broiler industry and processed mango products for export in Maharashtra State and organic agriculture in Rajasthan State.

Organically grown food products meet several criteria that are particularly germane to GMED:

- There is a large and increasing international market.
- While the domestic market is still quite small, it is projected to show rapid growth over the next decade.
- Organically grown foods are high-value products that command a price premium in the marketplace.
- Most organic foods, with the exception of some of the plantation crops, are grown in India by smallholders.
- India, by virtue of its many different agro-climatic zones, is ideally placed to grow a wide variety of organic food products.
- Organic foods, due to the need for traceability, tend to be characterized by particularly close-knit value chains.

B. STUDY OBJECTIVES AND METHODOLOGY

The organic agriculture assessment team was led by Action for Enterprise (AFE) and field work was conducted December 3–19, 2004. The principal objectives of the assessment were to understand the functioning and dynamics of the value chain, identify key players and propose possible initiatives the GMED program could undertake to promote increased enterprise income and employment.

Specific activities completed during the value chain assessment included:

- compiled and reviewed available secondary data
- coordinated planning and training with the other value chain team leaders to ensure the use of a consistent analytical approach and reporting format

- conducted over 30 interviews with participants in the organic agricultural value chain (see text box 1 below)
- participated in a national seminar on “Organic Products: From Field to the Consumer” in Bangalore from December 13-14, 2004 organized by the International Competence Center for Organic Agriculture (ICCOA) in partnership with the Research Institute of Organic Agriculture (FiBL) of Switzerland

TEXT BOX I: ORGANIZATIONS AND COMPANIES INTERVIEWED

R&D/Extension

- Morarka Foundation
- AVANE (affiliate of Abha Ltd)
- Society for Organic Ag. Movement (SOAM)
- Rajasthan Dept. of Ag. (marketing, R&D, and market board divisions)

Input Supply

- NAFED
- Excel Industries
- Phalada Agro Research Ltd.

Production

- Organic farmers (Nawalgarh)
- “organic village” (Atawara)
- organic farmers (Tonk) [SOAM member]
- Ajit Grewal

Accreditation Agencies/Certification Firms

- Agricultural Processing Export and Development Authority (APEDA)
- SGS India
- Skal

Traders

- mandi traders (Kota and Bundi)
- mandi traders (Tonk)
- Agrocel Industries

Exporters

- Aryan Pvt. Ltd.
- Abha Pvt. Ltd
- Toshniwal Assoc. [conventional sesame]
- Phalada Agro-Research Pvt. Ltd.
- IQF Foods Ltd.
- Atik Pvt. Ltd. [+ manufacturer]
- ITC
- Fabindia [retailers]

Others (Miscellaneous)

- International Competence Center for Organic Agriculture (ICCOA)
- FAO (Organic Program Coordinator)
- Indian Institute of Rural Management
- Rajasthan Univ. (Agri-Research Center)
- Research Institute for Organic Ag. (FiBL)
- Uttaranchal Organic Commodity Board

The value chain assessment sought to analyze 1) *actors* in the chain—from input suppliers to retailers; 2) *factors* affecting the performance of the value chain, including end markets, the enabling environment, inter-firm cooperation and supporting markets (technical, financial and business services); and 3) the *relationships* between actors—the power dynamics between firms, their access to learning and innovation, and the distribution of benefits throughout the chain. Using this information, key constraints to and opportunities for increased competitiveness were to be identified, together with possible sustainable solutions to key constraints and actors with the incentives to implement these solutions. Finally, the assessment team was tasked with providing recommendations to GMED for potential interventions in support of these solutions.

In addition, during the initial planning workshop in New Delhi, the team identified informational gaps, including the relative competitiveness potential of the export and domestic markets and of various organic agricultural products, and the issue of whether conventional farmers of the selected crop would be able to convert to organic farming and benefit from organic market opportunities.

C. CROP SELECTION

According to the Government of India's National Program for Organic Production (NPOP), organic agriculture is defined as "a system of farm design and management to create an ecosystem, which can achieve sustainable productivity without the use of artificial external inputs such as chemical fertilizers and pesticides." The key principles of organic agriculture include sustainability (ecological, economical and social), traceability and natural productivity.

Organic agriculture is not a new concept in India: farmers have been using organic farming techniques for centuries. Although the Green Revolution dramatically increased agricultural productivity in India through its emphasis on agro-chemicals, many parts of the country—especially dry land areas with rain-fed production—continued to farm traditionally. Either by choice or individual circumstance, these farmers are considered to be "organic by default" but not necessarily certified organic.

Certification is an important issue in the marketing of organic products and assures both consumers and producers that a product was grown, processed and packaged in accordance with specified national or international standards. It should be noted that organic certification assesses the process (how it was produced) not the product itself (what was produced). All exports of organic products must be certified according to the organic standards and regulations relevant in the importing country.

The organic products available in the Indian domestic market are rice, wheat, tea, coffee, pulses and vegetables. These products are also exported, as are organic cashew nuts, cotton, oilseeds, various fruits and medicinal herbs. Estimates vary but the majority (75-85 percent) of total organic production in India is exported, with the balance consumed or sold locally. A list of the major organic crops produced in India is shown in Table 1.

TABLE 1: MAJOR ORGANIC PRODUCTS IN INDIA

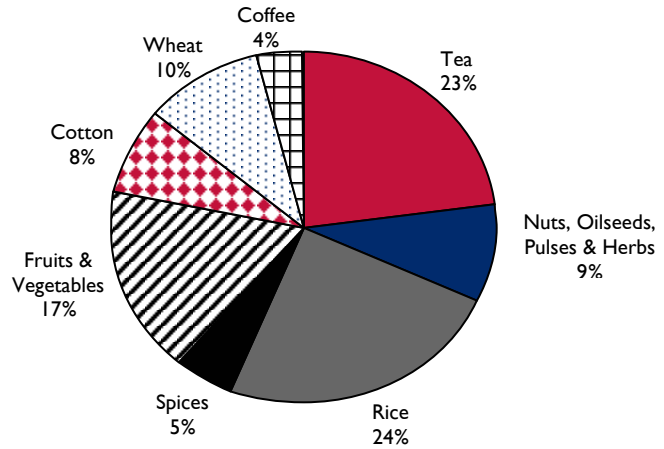
TYPE	PRODUCTS
Commodity	Tea, coffee, rice wheat
Spices	Cardamom, black pepper, white pepper, ginger, turmeric, vanilla, mustard, tamarind, clove, cinnamon, nutmeg, mace, chili
Pulses	Red gram, black gram
Fruits	Mango, banana, pineapple, passion fruit, sugarcane, orange
Nuts	Cashew nut, walnut
Vegetables	Okra, eggplant, garlic, onion, tomato, potato
Oil seeds	Sesame, castor, sunflower
Others	Cotton, herbal extracts

Source: *Market Opportunities and Challenges for Indian Organic Products*; Salvador V. Garibay, Katke Jyoti; Research Institute of Organic Agriculture (FiBL) and ACNielsen ORG-MARG; February 2003

Given the geographic focus on Rajasthan for this assessment, the value chain team determined, based on secondary data and key informant interviews, that organic oilseed crops—and sesame specifically—held the most immediate growth potential. There are already a growing number of farmers involved in both organic and conventional sesame and grain production, particularly in the dry land areas of Western Rajasthan. Sesame is the only extensively grown crop in Rajasthan with a large cultivated area already certified and a sizeable volume of product being exported.

The major certified organic export crops from India are currently tea, rice, spices, and fruits and vegetables (see figure 1). Although sesame is not one of the larger export crops, lessons learned from the development of organic sesame production and marketing in Rajasthan could be replicated in other states¹ and regions for a wide range of organic crops.

FIGURE 1: ORGANIC AGRICULTURE PRODUCTION IN INDIA (Based on Total Production Value)



Source: Garibay and Jyoti, 2003

¹ For example, Uttaranchal (one of the five targeted GMED states) is very active in promoting organic agriculture and could be a possible area for future GMED expansion.

II. VALUE CHAIN CHARACTERISTICS

A. END MARKETS

1. GLOBAL MARKET

The global market for certified organic food and drink, valued at \$23 billion in 2002, is primarily concentrated in the U.S., Europe, Japan and Australia. The concentration of demand for organic products in these regions can be attributed to two factors: 1) the price premium of organic products which restricts demand to consumers with higher purchasing power, and 2) the awareness of organic products and growing concern for health and food safety. However, regional and local markets are expected to grow as global production of organic products increases and affluent middle-class consumers begin to emerge in various countries.²

The U.S. is the largest market for organic products in the world, valued at \$11.75 billion in 2002.³ Import demand in the U.S. is mainly for organic fresh produce (fruit and vegetables) and bulk-packed organic raw material or ingredients for further processing or packing. Price premiums can range from 10-25 percent.⁴ The distribution of organic products in the U.S. has historically been through specialty retail stores but conventional supermarkets are now a larger part of the distribution channel as organic products have become more mainstream.

All products marketed in the U.S. as organic, whether imported or produced domestically, must meet the National Organic Program (NOP) standards of the United States Department of Agriculture (USDA). The NOP standards are regarded as some of the most stringent in the world, requiring a minimum three-year conversion period for newly certified farms.

Europe is currently the main destination for most Indian organic agricultural exports but is a relatively mature market with demand varying by country and product.⁵ Expansion of the European Union (EU) and intra-EU trade has increased competition between European countries producing organic products. Distribution of organic products is primarily through conventional supermarkets and specialty retail stores but direct retail to consumers is also a major distribution channel in some countries. The annual BioFach Fair in Germany is the biggest trade show for organic products in the world.

The three largest European markets for organic products from India are Germany, the Netherlands and Switzerland. The demand for organic fruits and vegetables in Europe is expected to continue to exceed supply. Since 1993, all EU countries have implemented EU 2092/91, which regulates production and importation standards for all organic products.

India is not currently a major supplier of organic agricultural products. Global data on areas under organic production is shown in Table 2 on the following page. In terms of organic sesame seed production, a few selected competitor countries are highlighted in the table. China is the largest supplier of organic sesame seed

² *The World of Organic Agriculture - Statistics and Emerging Trends 2004*; edited by Helga Willer and Minou Youssefi; 6th, revised edition 2004, p.21 (www.soel.de/inhalte/publikationen/s/s_74.pdf)

³ Ibid. p.23

⁴ *The United States Market for Organic Food and Beverages*, Rudy Kortbech-Olesen; International Trade Centre UNCTAD/WTO, March 2002.

⁵ Data on total volume and value of current Indian organic exports were not available.

in the world.⁶

TABLE 2: GLOBAL ORGANIC PRODUCTION (Partial List)

Country	Area under Organic Production (ha)	Percentage of Total Ag. Area	No. of Organic Farms	Avg. Organic Farm Size (ha)
Australia	10,000,000	2.2	1,380	7,246
Italy	1,168,212	8	49,489	24
USA	950,000	0.23	6,949	137
Brazil	841,769	0.24	19,003	44
Germany	696,978	4.1	15,628	45
China	301,295	0.06	2,910	104
Mexico	215,843	0.2	53,577	4
Sweden	187,000	6.09	3,530	53
Uganda	122,000	1.39	33,900	4
Switzerland	107,000	10	6,466	17
Turkey	57,001	0.14	18,385	3
Netherlands	42,610	2.19	1,560	27
India	37,050	0.03	5,147	7
Norway	32,546	3.13	2,303	14
Sri Lanka	15,215	0.65	3,301	5
Israel	5,030	0.9	420	12
WORLD TOTAL	24,070,010		462,475	52

2. DOMESTIC MARKET

There is a small but increasing domestic market for organic products in India, especially in urban centers with growing numbers of middle- and upper-middle class consumers (e.g., New Delhi, Mumbai, Hyderabad, Chennai and Bangalore). Although prices for organic products can be significantly higher, sometimes double those of conventional products, demand for organic alternatives among some Indian consumers with greater health consciousness and concern for food safety exists. General awareness of the availability and attributes of organic products, however, remains low.

In the 2002/2003 season, approximately 1,050 metric tons (MT) of organic products were sold domestically. Given the demographic trends and growth of the middle-class in India, it is estimated that the domestic market for organic products will grow by 25 percent over the next three years (compared to 3 percent growth

⁶ Kortbech-Olesen (2002)

forecasts for conventional products). However, organic products will always be a niche segment of the market and will not appeal to all consumers.

B. BUSINESS ENABLING ENVIRONMENT

1. NATIONAL AGRIBUSINESS ENABLING ENVIRONMENT

There are two existing policy measures that have greatly impacted agribusiness activities. These are the Essential Commodities Act (ECA) and the Agricultural Produce Marketing Act (APMA). The ECA limits the amount of notified commodities that can be owned or stored by individual traders (“notified commodities” are those designated under the Act). This in effect prevented the development of commodity futures markets. Recent policy reforms have eliminated most commodities from the EC notified list and specific exemptions to the Act permit the operation of futures markets. A National Development Council sub-committee is working toward the repeal of the EC.

The APMA is enacted and administered at the state level. It requires all agricultural produce to be purchased only through state government-operated markets (*mandis*), although a number of exceptions are currently being made by several states. As originally structured, the APMA bars farmers from selling produce directly to private buyers.

The Ministry of Agriculture in 2002 developed a model Marketing Act. The Act permits direct sales by farmers, provides for contract farming and incorporates other provisions further liberalizing agricultural marketing. The states are being encouraged to replace the APMC with the model Act. There is considerable resistance at the state level to adopting the new Act in full, however. There are concerns about loss of state revenue from purchase taxes. The fate of about 7,000 existing state-owned markets is also giving rise to considerable concern. Perhaps the greatest source of resistance is coming from the often politically linked private operators of these public markets.

Several states have enacted measures to at least partially address the marketing constraints posed by the APMA. These include exemption of taxes on commodities purchased for processing and export; privatizing existing public markets; allowing the establishment of privately owned markets on a case by case basis; and allowing market committees (charged with oversight of the public markets) to establish processing operations.

2. ORGANIC-SPECIFIC ENABLING ENVIRONMENT

All certified organic exports must meet prevailing organic standards of the importing country/region, and be validated by independent third party certification and inspection agencies. Accreditation bodies are responsible for the oversight and regulatory compliance of these certifying agencies. The International Federation of Organic Agriculture Movement (IFOAM) is a global organization promoting the worldwide development and adoption of basic organic standards and accreditation procedures. IFOAM has developed the international “IFOAM Basic Standard” and the “IFOAM Accreditation Criteria for Certifying Programs” to help provide a common framework as different countries develop their own national organic standards.

In India, an Accreditation Committee was constituted in 1966 under the Chairmanship of the Commerce Secretary in the Ministry of Commerce to consider development of organic standards and promotion of organic agriculture in India. This program was intended to deal exclusively with organically certified products for export. The “National Program for Organic Production” (NPOP), launched in March 2000, is responsible

for: (i) policies for development and certification of organic products, (ii) national standards for organic products and processes, (iii) accreditation of programs to be operated by Inspection and Certification Agencies, and (iv) certification of organic products. Members of the National Steering Committee for NPOP are drawn from the Ministries of Commerce and Agriculture, commodity boards and other government and private organizations associated with the organic movement. The Agricultural Processing Export and Development Authority (APEDA) serves as the Secretariat for the NPOP National Steering Committee.

There are six certification and inspection agencies currently accredited by NPOP to operate in India—five are multinational affiliates (SGS, IMO, Skal, Naturland and ECOCERT) and one is a local firm, Indocert. APEDA also regulates compliance with many other international food standards since organic products, in addition to complying with organic standards, must also comply with all other regulations governing international food products trade.

All promotional activities applicable to non-organic food production and processing for export are also available for organic products. The Ministry of Agriculture organized an organic task force in 2000. In July 2002, the task force issued formal guidelines for the promotion of organic farming and designed a promotion program, the “National Project on Organic Farming,” that will begin implementation in fiscal year 2004-2005. This program includes provisions for converting the National Bio-Fertilizer Development Centre into the National Centre of Organic Farming and provides funding for the training of staff from certification agencies, inspection agencies, service providers, organic firms and institutions engaged in quality control of organic inputs. The project also plans to establish field demonstrations of the utilization of enriched biogas slurry and 120 two-hectare model organic farms. The project will also provide a 25 percent credit-linked subsidy for organic inputs.

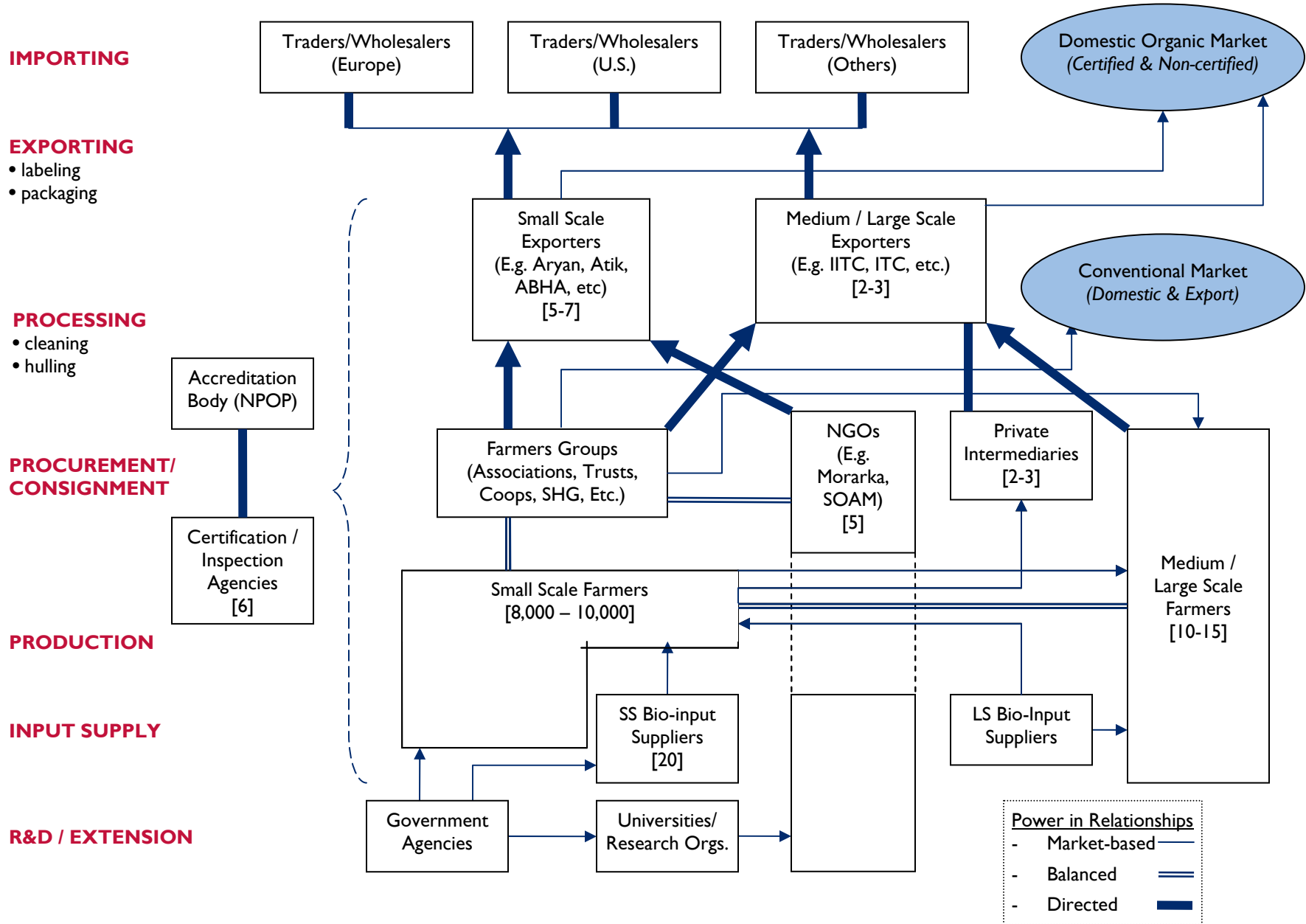
Various agriculture promotion programs offered by the Ministry of Food Processing Industries can be utilized by both government and the private sector to promote organic agriculture. According to Ministry representatives, they will be granting priority status to the organic sector when considering program proposals. A number of states have attempted to develop a regulatory and promotional framework for organic agriculture. None of these efforts appear to have been very productive, however.

Most commercial firms involved in organic development are working with internationally accredited certification firms in order to comply with international standards for the domestic market as well as for export. In Rajasthan, commercial firms and at least one NGO are particularly active in organic development. Morarka Foundation alone has introduced organic management on more than 100,000 acres. The nonprofit foundation has partnered with the private sector for certification, procurement and branded marketing of organic produce.

C. VALUE CHAIN MAP

A map of the value chain for organic sesame seed from Rajasthan is shown on the following page. It is a graphical representation or snapshot of the various functions in the value chain, key participants performing those functions and their dynamic inter-relationships. Although the map is primarily focused on organic sesame, many of the general functions and key participants would be the same for other certified organic agricultural products elsewhere in India.

FIGURE 2: ORGANIC SESAME SEED VALUE CHAIN MAP



D. VALUE CHAIN FUNCTIONS AND ACTORS

This section describes the functions in the value chain as well as key actors who perform those functions. It includes the key technical support services of (1) research and development/extension, (2) input supply and (3) certification, in addition to financial services. These descriptions, for the most part, apply to both organic sesame from Rajasthan as well as other organic crops in India.

Research & Development (R&D)/Extension: R&D in organic agriculture has been conducted mostly by universities and research organizations, with funding support from state and national government agencies. Some NGOs also conduct extensive research on organic production and post-harvest techniques (e.g. Morarka Foundation) and provide a range of technical extension and support directly to farmers. Public sector extension for organic agriculture from the Ministry of Agriculture is limited.

Input Supply: Organic farmers use a variety of bio-fertilizers (e.g. vermi-compost and farmyard waste) and bio-pesticides (e.g. neem-based products, cow urine, peppers and medicinal herbs) to improve productivity, but use of agro-chemicals is strictly prohibited. Farmers require on-going technical assistance in the proper preparation and application of these bio-inputs, especially when converting from conventional to organic production. Until these farmers are able to sufficiently produce their own inputs on-farm, they must purchase them from a variety of suppliers.

Local farmers and NGOs skilled in bio-input production techniques have become small-scale bio-input suppliers—selling excess production (especially vermi-compost and other bio-fertilizers) to neighboring farmers. Many of the large conventional agricultural input companies in India (e.g. NAFED, Hindustan Lever and Excel Industries) also sell a line of products suitable for organic production and act as large-scale bio-input suppliers. All inputs used in certified organic farming—including seeds, fertilizers and pesticides—must comply with the same standards for organic production. This is especially important for seeds used in organic production since international standards require strict seed traceability.

Production: Available data for organic agriculture in India is often inconsistent and contradictory, and should be considered illustrative only. It is estimated that approximately 5,147 farms in India are producing organic products on 37,050 total hectares (which is 0.03 percent of total agricultural area in the country).⁷ According to the latest statistics from ADEPA, India exported 31 different organic products which totaled 6,792 metric tons valued at Rs 7,123 *lakh* (\$16.1 million). Most of these organic products are grown by small-scale farmers (i.e., less than 5 ha farms), with the exception of tea and cotton which tend to be grown by more vertically-integrated medium- and large-scale farmers who market their production directly to domestic and export buyers.

Procurement/Consolidation: Organic products are typically procured from farmers and consolidated by the following market players:

- *Farmer groups*—These can be organized as associations, cooperatives, trusts or self-help groups (SHG). Many of these farmer groups receive direct technical and capacity building support from local NGOs.
- *NGO intermediaries*—These entities consolidate farmer production, check quality and facilitate delivery to export buyers.

⁷ Willer and Yussefi (2004)

- *Medium- and large-scale farmers (e.g., Amit Spinning)*—They play similar intermediation roles by consolidating their own production with adjacent small-scale farmers (often on a contract farming basis) and then selling directly to exporters.
- *Private intermediaries (e.g., Agrocel Industries)*—These entities do not have their own major sources of production but rely on procurement from small-scale farmers on a contract basis.

The majority of organic products are sold to exporters or to specialized domestic traders, but approximately 15-25 percent of total production is sold via the conventional *mandi* agricultural marketing system with little or no price premiums paid to the producers. The *mandis* are a government-regulated rural marketplace where agricultural commodities are sold by auction. Initially established by the government to facilitate direct trade for small-scale farmers, the *mandis* are now generally viewed as inefficient.

Processing: There are very few processed organic agricultural exports.⁸ There is some semi-processing (i.e., cleaning and hulling) of organic oilseed crops including sesame carried out by small- and medium/large-scale exporters in-house. Due to the certification requirements for processing of exports, it is not usually outsourced to stand-alone processors.

Exporting: There are a variety of exporters of certified organic agricultural products from India. The medium/large scale exporters are generally focused on specific organic products (e.g., IITC—tea and Maikaal bioRe—cotton) while smaller-scale exporters market a wider range of products. With a few exceptions (i.e., ITC), most organic exporters specialize in certified organic products and have limited trade in conventional agricultural products. Exporters also perform the function of labeling and packaging as these must also be certified.

Certification: The process for organic export certification is usually initiated and managed by the exporter, intermediary or medium/large-scale farms. They are the ones who pay for the inspection services of a certification firm. The cost to these firms of certifying smaller-scale farmers, especially those located on contiguous plots, can be reduced by pursuing group rather than individual farm certification (this entails conducting certification based on a statistical sampling of the grouped farms). Individual small-scale farmers do not have the economies of scale to justify export certification on their own.

Importing: The major buyers of organic agricultural products from India are traders/wholesalers in the importing countries. Although specialty retailers and supermarkets are important marketing channels for organic products in these countries, Indian exporters typically do not sell to them directly. Europe is the main market for certified organic exports from India but specific trade varies by country. The Netherlands is the biggest buyer of sesame, but many Indian exporters see the U.S. organic market as the one with the highest export growth potential.

International wholesalers/traders of organic agricultural products in the U.S. or Europe were not contacted directly during the value chain assessment, given the comprehensive information available in a recent study entitled “Market Opportunities and Challenges for Indian Organic Products” conducted by the FiBL and ACNielsen ORG-MARG in 2003.

Financial Services: Small business startups are generally funded with personal and/or family funds, and credit is available as an embedded service provided to contract producers by the contracting firm (see Inter-

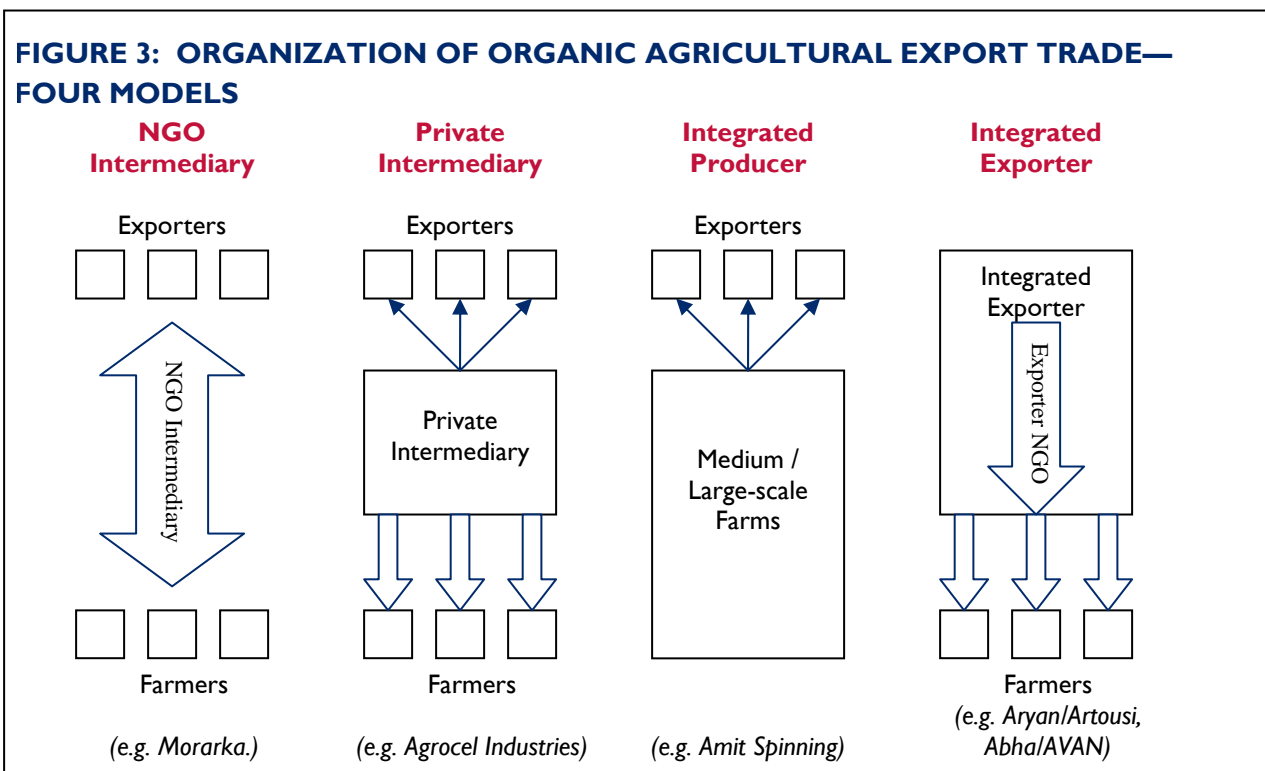
⁸ Very small volumes of certified organic frozen fruits and vegetable products have been exported from India. Processors complained that limited quantities of organic raw material make processed certified exports commercially unviable.

firm Cooperation, below). Bank financing is available to larger enterprises and to producers with assured markets. A number of the financial institutions have expressed an interest in lending to the small agribusiness enterprise sector, but currently lack knowledge of the sector and the ability to properly assess risk.

E. INTER-FIRM COOPERATION

All of the inputs, farming practices and processes used to produce an organic product must meet the organic standards of the importing country. Therefore, the need to achieve organic certification determines everything from the types of seeds, fertilizers, pesticides, storage facilities and packing materials used to the detailed information shown on product labels. The relationships between the various actors in the chain therefore serve as essential conduits for the flow of technical information. For example, buyers tell producers what crops to grow and how to grow them.

Unlike conventional agricultural production and marketing in India, there is a high degree of inter-firm cooperation among all participants and at all levels in the organic agricultural products value chain. Since traceability is a major principle of organic agriculture, the relationships between exporters, intermediaries and producers are very close. Not only does information flow down the chain, but access to inputs, the provision of technical extension and market intermediation are also embedded in these relationships. The organization of organic agricultural trade in India can be grouped into four general models: NGO intermediary, private intermediary, integrated producer and integrated exporter (see figure 3, below).



MODEL 1—NGO INTERMEDIARY

In this model, NGOs are the main intermediary between the farmers and exporters. These NGOs finance their activities in different ways including:

- *Public funding*—Many state governments provide funding to NGOs to provide technical assistance to farmers and to serve as an intermediary with buyers.
- *Charging fees*—For example, as part of an organic sesame initiative in Rajasthan, a local NGO is charging annual fees of Rs 2,500 (approximately \$56) per farmer to the commercial buyer for certification services, and the same amount to participating farmers for technical support services during the conversion period. In return, the NGO is providing participating farmers with access to bio-inputs and on-going technical advice, while the buyer is assured that producers have followed the necessary farming practices and procedures to fulfill organic certification requirements.
- *Margins on sales*—Some NGOs add a margin onto their selling price to exporters to help offset their costs of operation.

Some NGOs take a more active role in the procurement and consolidation of farmers' production (e.g., by directly signing supply contracts with exporters), while others perform more of a facilitation or market linkage role. The relationship between participating farmers and NGO intermediaries may or may not be formalized in a written contract.

MODEL 2—PRIVATE INTERMEDIARY

Unlike NGO intermediaries, the relationships between private intermediaries and farmers are more formal with roles and responsibilities detailed in a contract. As commercial private sector companies, private intermediaries do not receive public sector funding for their operations. They are able to provide a wider and often deeper range of technical support services to their farmer networks and buyer clients than publicly-funded NGO intermediaries.

Agrocel Industries is a major private intermediary and supplier of certified organic sesame in India (see text box 2 below). Agrocel's main business is the production and export of organic cotton and garments, but its network of certified farmers also produces significant volumes of other organic agricultural products, especially sesame. Agrocel directly exports approximately 25 percent of its certified organic sesame production through Fair Trade channels in the U.K. and sells the remaining 75 percent to other organic exporters.

MODEL 3—INTEGRATED PRODUCER

Integrated producers grow much of their organic products on their own medium- to large-scale farms (usually 25 ha or more). As integrated producers, they have the in-house technical capacity to closely monitor and track all production, processing and packaging operations. In addition, integrated producers often supplement their own production with organic production from certified small-scale farmers adjacent to their farms on a contract basis.

Vertically integrating forward from their farming base, integrated producers will also directly process, package and export their primary organic products but may sell most of their intercropped (secondary) production to other exporters or buyers. Amit Spinning is an example of a large integrated producer of certified organic cotton who is also a major supplier of organic sesame to other exporters.

TEXT BOX 2: AGROCEL INDUSTRIES—PRIVATE INTERMEDIARY EXAMPLE

Launched in 1998 as an offshoot of a major agro-chemicals supplier in India, Agrocel Industries was created to provide market access to farmers and increase their skills in integrated crop management. In association with a U.K.-based company (Vericott, Ltd.) that assisted in marketing and product design, and with funding from Shell Foundation, Agrocel started a small project to grow organic cotton in Gujarat. Based on the success of the project, it expanded to cover more districts in Gujarat and has now spread to Haryana, Maharashtra and Orissa states.

Agrocel uses a five-step program to help farmers transition from conventional farming to using integrated crop and pest management and then to eventual compliance with national/international organic standards. The five-step program can take up to five years to convert from traditional methods to fully certified organic production. During this conversion period, field officers visit farmers and provide technical advice on reducing crop disease, improving soil fertility, using less water and preparing their own farm inputs. If there is a secure buyer, Agrocel will sign “buy-back” contracts with farmers when the season begins. Farmers are recruited only if the market potential is deemed to be large enough to buy their produce.

Agrocel now supplies Marks and Spencer’s in the U.K. with organic cotton garments and has orders for garments and other organic cotton products in Belgium. Profits have grown from Rs 18 *lakh* (\$40,000) in 1988 to Rs 12.3 *crore* (\$2.8 million) last year. Although cotton is the main product line, Agrocel has a network of over 4,000 farmers also growing organic Basmati rice, various grains, mustard, wheat and sugar. Agrocel is also one of the largest producers and suppliers of organic sesame in the country.

Source: “Organic Cotton Weaves Profits” by Chitra Subramanyam, The Indian Express, June 17, 2004.

MODEL 4—INTEGRATED EXPORTER

Exporters who have integrated backward to provide direct production support and to procure directly from farmers are characterized as integrated exporters. These exporters have determined that direct on-going technical production assistance is critical to ensure product quality and quantity as well as reduce transaction costs. However, as a commercial private sector entity in India, it is difficult to procure directly from farmers as well as to provide them direct support services. There is a general perception by government agencies at all levels, and in some local communities, that farmers are better served by NGOs since they are “closer to the people.” Since NGOs are oftentimes the government’s preferred service provider and intermediary for small-scale farmers, integrated exporters have created their own “NGOs” to directly engage farmers, procure from them and provide a range of embedded services (e.g., extension, input supply, market access and pre-financing). To establish and maintain this direct link with farmers, significant financial and human resource investments by the exporter are required. Some of these costs can be recovered by seeking public sector funding for their NGO activities.

Despite the increased costs, however, some integrated exporters prefer dealing directly with the farmers (through their in-house NGO) as this helps ensure quality and reduces the risk of unreliable intermediaries. They therefore view this as a longer-term business investment. In the short-term however, integrated exporters will continue to procure the majority of their organic products through NGO intermediaries [Model 1], private intermediaries [Model 2], and/or integrated producers [Model 3].

TEXT BOX 3: ABHA PRECISION FARMING—INTEGRATED EXPORTER EXAMPLE

Abha Precision Farming Ltd. is a private company established three years ago in Rajasthan as a commercial marketing venture to build on, and further complement, the organic cultivation research and technical know-how of a local NGO. Over time, however, Abha began to see greater benefit by becoming more directly engaged in the provision of technical support to organic farmers. Based on Abha's experience in Punjab, they planned to expand the outreach of their activities and support small-scale wheat/sesame farmers in Western Rajasthan to supply certified organic products for export. As a private sector entity, however, the Rajasthan state government did not allow Abha to work directly with farmers.

Abha then established an NGO called the Association of Voluntary Agripreneurs for Natural Environment (AVANE) to serve as a technical service provider to small-scale organic farmers—fully owned and managed by the Abha Board of Directors. As a registered NGO, AVANE is now providing a range of support services (e.g. extension advice, provision of bio-inputs, market access and export certification management) to participating farmers in Western Rajasthan. AVANE is also eligible to receive public sector funding for some of its activities and currently recovers approximately 50 percent of its overall costs from government sources.

III. KEY CONSTRAINTS AND OPPORTUNITIES

India is a vast country with 21 agro-ecological zones (based on temperature, soil conditions and rainfall) capable of producing a wide variety of organic agricultural products. In addition to its production capacity, India has several other competitive advantages:⁹

- a reputation for high quality production of tea, spices, rice specialties, ayurvedic herbs, etc.
- a rich heritage of agricultural traditions suitable for organic production systems
- several regions (especially mountain areas) with no intensive use of agrochemicals
- relatively cheap labor compared to cost of agro-chemical inputs
- strong NGOs with established linkages to large numbers of small-scale farmers
- increasing government support to organic agriculture at various levels

Global trade in organic agricultural products is very competitive and India is not considered a major organic player by international traders. According to a recent report on market opportunities and challenges for organic products from India¹⁰—which interviewed 47 importers throughout Europe, the U.S. and Japan—international traders did not view India as a competitive organic supplier because of the following weaknesses:

- Traders do not know which products are available, in what quantities and who has certified them.
- Traders complained that price expectations for Indian organic products were too high and did not reflect dynamics of global trade.
- Quality is variable.
- Exporters can not consistently delivery according to specifications.
- Infrastructure and export procedures/policies are inadequate.

This section presents some of the key constraints and opportunities identified by the assessment team. These constraints, for the most part, apply to both organic sesame from Rajasthan as well as other organic crops in India. All of the constraints identified are illustrative of *weak supporting markets*.

A. WEAK AND LIMITED EXTENSION SERVICE PROVISION

The quality of technical support in organic agriculture for small-scale farmers is inconsistent. There are a number of NGOs and public sector organizations providing extension services and production advice in organic farming, but their outreach is limited. There is a lack of documented best production practice for specific crops and agro-ecological zones, leading to insufficient and contradictory advice. The development and application of appropriate organic solutions (especially to pest/insect infestation) appears to be on-going throughout India, but with weak linkages between supporting institutions, the results and effectiveness of these efforts have not been widely shared among stakeholders in the value chain. Lack of awareness and information sharing can result in various organizations duplicating efforts, or worse, repeating mistakes.

The reasons for low farmer adoption of technical advice must also be assessed. Rationally risk-averse, many farmers who have expressed interest in organic farming are still skeptical about the actual costs and benefits from organic agriculture. According to farmers, their major concerns about conversion to organic farming are

⁹ Garibay and Jyoti (2003)

¹⁰ Ibid.

the initial increases in production costs (due to limited availability of appropriate inputs including effective bio-pesticides and bio-fertilizers) and decreases in yield (due to soil fertility based on agro-chemicals).

A few studies have been conducted which demonstrate that actual conversion costs to organic agriculture will vary, based on the agro-ecological status and prevailing farming practices used in the area under conversion. For example, small-scale farmers producing rain-fed crops have generally not relied on heavy use of agro-chemicals and could be considered “organic by default.” The conversion costs for these farmers will not be as high as for those who have grown crops using conventional techniques and inputs. A comparison of production costs for organic and conventional wheat in Rajasthan is shown in Table 3, below.¹¹ Without competent service providers who are able to help farmers calculate the costs and potential benefits of the conversion to certified organic production, the rate of farmer adoption of technical advice will remain low.

TABLE 3: ANALYSIS OF ORGANIC CONVERSION COST—WHEAT

Various Scenarios/ Assumptions	Production Cost (conventional) (Rs)	Production Cost (organic) (Rs)	Year 1: Yield Loss (Rs)	Year 2: Yield Loss (Rs)	Year 3: Yield Loss (Rs)
Organic input produced by farmer	8,000	8,000	6,300-8,400	4,200	2,100
Part of organic inputs produced and purchased	8,000	12,000	10,300-12,400	8,200	6,100
Organic output purchased	8,000	16,000	14,300-16,400	16,200	14,100

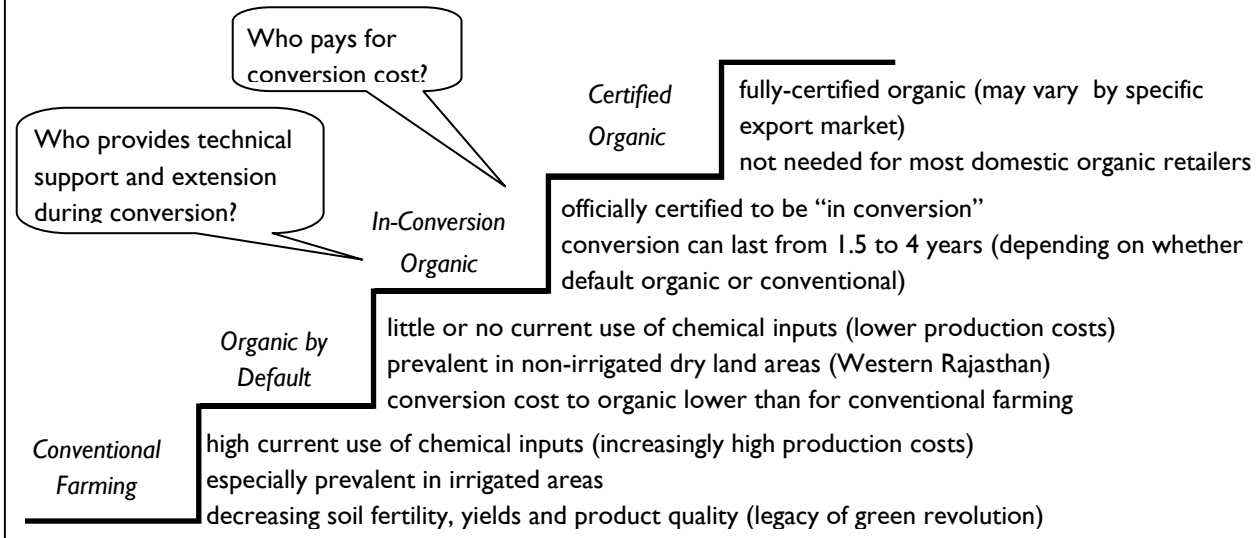
B. LACK OF INTERNAL CONTROL SYSTEM TRAINING SERVICES

A critical component of organic certification is the need for detailed product and process traceability. Certification and inspection agencies will critically review the internal control systems (ICS) used by farmers to document the inputs, farming practices and production processes used. Exporters and intermediaries usually develop their own ICS to meet specific certification requirements and require its adoption by all participating farmers. These systems can be overly burdensome, inefficient and too costly to implement.

Some exporters, especially integrated exporters, expressed the need to improve their ICS, including the technical capacity of their staff that is in direct contact with the farmers. Training services in ICS are not readily available.

¹¹ Assumptions: Production cost for conventional wheat is approximately Rs 8,000 (\$182) per hectare but organic wheat production ranges from Rs 8,000 to 16,000 (\$182-\$363) primarily based on the source of inputs (own sources, purchased from others, or a combination of the two). Organic wheat yield assumed to be 3 MT/hectare at Rs7,000 (\$160) per MT. Yield reduced in the first year by 30 to 40 percent (i.e., 1.8 to 2.1 MT) with net loss ranges from Rs 6,300 to 8,400 (\$143 to \$190). In addition, there are extra input costs during the conversion period.

FIGURE 4: STEPS TO ORGANIC CERTIFICATION



C. WEAK MARKET INFORMATION SYSTEMS

The link between organic production and marketing has historically been weak. Similar to its development in other countries, the organic movement in India grew from a primary focus on promoting more ecologically and environmentally sustainable farming practices. Thus, initiatives promoting organic agriculture (often led by NGOs) focused on producing organic products without a good understanding of true market needs and opportunities. Efforts were production-led with an emphasis on research, extension and input supply. Awareness and understanding of consumer preferences and market demand, both domestically and internationally, was, and remains, limited. This has resulted at times in the inability to successfully market some organically produced products as well as the inability to take advantage of true market opportunities.

In addition to the export market for organic products, opportunities exist in the domestic market, which primarily caters to a niche segment of upper/middle-class consumers in urban centers. However, increasing concerns for food safety and health consciousness have sparked growing mainstream consumer interest and specialty retail outlets for organic products. Currently, farmers in conversion to organic certification have few options other than selling to conventional buyers through the *mandi* system. Emerging domestic demand for organic products offers opportunities for exporters and farmers to diversify and expand into higher-value market channels.

Although there are websites that contain market information, within India there is a lack of information on organic demand, certification requirements and specifications in target export markets. Trader links with major international buyers are weak, limiting the availability and flow of organic market information. Exporters lack a forum in which to develop importer contacts.

IV. SUSTAINABLE SOLUTIONS & ILLUSTRATIVE INTERVENTIONS

Based on key constraints and opportunities in the value chain described above, this section identifies (i) possible sustainable solutions to the various constraints, (ii) actors with the incentives to implement these solutions, (iii) potential challenges they face in implementing these solutions, and (iv) illustrative program interventions for GMED consideration. While it is suggested that proposed interventions begin with organic sesame in Rajasthan, they also have relevance to other crops and other states.

Given the breadth and limited time in-country for the value chain assessment, the assessment team was not able to discuss these solutions and interventions thoroughly with key market actors. It is therefore recommended that further validation take place through a stakeholder workshop or similar method and more detailed analysis be conducted before implementation begins.

A. VALUE CHAIN CONSTRAINT 1

Limited and inconsistent quality extension services in organic agriculture for small-scale farmers, combined with smallholder inability to calculate costs and potential benefits, decreases adoption of extension advice.

Proposed Solution: Provision of (embedded) private sector-led extension and technical support in organic agriculture for small-scale farmers.

Solution Implementers: Exporters, private intermediaries and medium/large-scale farmers

Challenges to Solution Implementers:

- Some of the targeted implementers and their staff lack required technical skills in organic agriculture; others lack farmer organization and business skills.
- Implementers lack a forum where they can share experiences in promoting organic production/exports and learn from one another.
- Results of on-going organic agricultural research, typically conducted by public sector agencies or NGOs, are not widely available to targeted implementers.

Illustrative GMED Interventions:

- Document and disseminate (with targeted implementers) existing best practices in private sector-led models for organic sesame production and export.
- Conduct a technical needs assessment with targeted implementers in Rajasthan and facilitate access to training and capacity building support on a cost-share basis. Identify technical training resources with relevant expertise.
- Work with selected providers to pilot activities linking organic production research with on-farm trials and application by small-scale farmers in Rajasthan. Consider using the GMED grant mechanism to solicit and award small “challenge grants” (with a one-to-one match) to selected providers to support them in conducting these trials.

B. VALUE CHAIN CONSTRAINT 2

Training services in ICS are not readily available resulting in smallholder farmers being unable to conform to ICS standards for export certification.

Proposed Solution: Training/technical assistance to small-scale farmers in how to conform to ICS requirements for export certification.

Solution Implementers: Exporters or private intermediaries

Challenges to Solution Implementers:

- Systems necessary for organic certification are inconsistent and weak.
- Organic exporters and intermediaries often develop overly burdensome, inefficient or excessively costly ICS.

Illustrative GMED Interventions:

- Identify training resources for ICS development and management to build the capacity of exporters and private sector intermediaries who support small-scale farmers to implement ICS for export certification.
- Facilitate exporter and private sector intermediary access to ICS training on a cost-share basis (a one-time offer to stimulate demand).

C. VALUE CHAIN CONSTRAINT 3

Market information systems are weak, resulting in producers lacking information and knowledge about what organic products to produce that will meet unmet international and domestic market demand.

Proposed Solution: Strengthen market information systems and flows.

Solution Implementers: Exporters and private intermediaries

Challenges to Solution Implementers:

- The availability and flow of organic market information is limited.
- There is a lack of information on organic demand, certification requirements and specifications in target export markets.
- Exporter access to importer contacts and information on organic market opportunities is limited.

Illustrative GMED Interventions:

- Identify market information resources (e.g., websites, major international buyers and traders and key informants) and compile data to understand:
 - *export market trends*—What organic products are in demand, and in which countries? Can India competitively supply any of these organic products into those markets?
 - *domestic market trends*—What organic products are in demand? Where are these products sold and by whom?
- Facilitate strengthening of market information gathering skills among exporters, retailers, intermediaries and farmers.
- Cost-share selected exporter participation at targeted organic product trade shows.

GMED could explore the possibility of conducting many of these market information activities in collaboration with ICCOA—a nonprofit organization with members from the public and private sector dedicated to disseminating information and knowledge and building the capacity of the various stakeholders in the Indian organic agricultural sector.

V. NEXT STEPS

A. DEVELOP A COMPETITIVENESS STRATEGY

Ground-truth targeted solutions: Validation and further study of these solutions and illustrative interventions is necessary before GMED can effectively identify specific solution implementers and facilitation partners and begin implementation. A key activity would be to bring together all relevant stakeholders, including representatives of the major actors in the chain, service providers and institutions responsible for the legal, regulatory and policy environment and verify the findings of the assessment, prioritize constraints and develop initial strategies for their solutions. The end goal would be the development of a vision for a more competitive industry and a strategy to achieve that vision.

B. DEVELOP AN ACTION PLAN

Facilitate the development of private sector action plans: The competitiveness strategy could be used by subgroups of the value chain stakeholders to develop action plans to address priority constraints and exploit end market opportunities.

Develop implementation plans for GMED interventions: Based on the findings and results of the workshop and subsequent private sector action plans, GMED can refine and finalize specific program interventions to support stakeholder initiatives. GMED could also explore contracting with a local organization like ICCOA to conduct some of the program facilitation activities.

Conduct training/orientation for all GMED partners: It will be important for facilitation partners to fully understand GMED objectives and approach. Using private sector approaches to enterprise development is relatively new in India; collaborating facilitating organizations will need to be familiar with the program rationale and methodology.

Develop a monitoring and evaluation (M&E) system for organic agriculture interventions: Specific impact indicators will need to be developed for each of the proposed interventions. These indicators should fit into the overall results framework for GMED to track and monitor program contributions to increases in income and employment. Close collaboration and frequent contact with solution implementers will be important for monitoring and evaluation, especially in the early stages of implementation.

Conduct baseline survey: Once interventions have been selected and the implementation plan finalized, a baseline M&E survey should be designed and conducted. To the extent that exporters and intermediaries are targeted as solution implementers, they can become a principal source of M&E data since they will have information on their own networks of farmers.

Explore potential for other organic export crops: There are organic market opportunities in the U.S. for other crops currently grown in India, including guar gum (obtained from a legume—guar seed) and soybean. Although the U.S. is the world's largest producer of soybeans, the demand for soy and soy products that are not genetically-modified for use in organic and conventional food products is growing and could open new opportunities for Indian producers.

APPENDIX: Reference Documents and Resources

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Accelerated Microenterprise Advancement Project (AMAP) is a four-year contracting facility that USAID/Washington and Missions can use to acquire technical services to design, implement, or evaluate microenterprise development, which is an important tool for economic growth and poverty alleviation.

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Accelerated Microenterprise Advancement Project

Contract Number: GEG-I-00-02-00016-00

Task Order: India Growth-Oriented Microenterprise Development (GMED)

Task Order Number: 801

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Rajiv Sahoo is a development professional from CARE-India serving as the Technical Project Coordinator for Livelihoods projects. Mr. Sahoo has over 10 years experience in promoting sustainable livelihoods of rural producers in poverty alleviation schemes.

Ram Sundar Roy is a development professional from the Self Reliant Initiatives through Joint Action (SRIJAN), New Delhi. He heads its team for grassroots action projects in Jaisinagar block, Sagar district in collaboration with DPIP Madhya Pradesh.

Action for Enterprise (AFE) is a non-profit organization dedicated to private sector/enterprise development based in Arlington, Virginia.

CARE is an international relief and development organization.

Self Reliant Initiatives through Joint Action (SRIJAN) is a nonprofit organization.

ACDI/VOCA is a private, nonprofit international development organization based in Washington, DC.