Organic Farming in Tropical Fruits : Potential & Strategies

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Definition of Organic Farming

- Products labeled as "Organic" are those certified as having been produced through clearly defined organic production methods.
- In other words "Organic" is a claim on the production process rather than a claim on the product itself.

According to the definition of the Codex Alimentarius –

"Organic agriculture is a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles and soil biological activity".

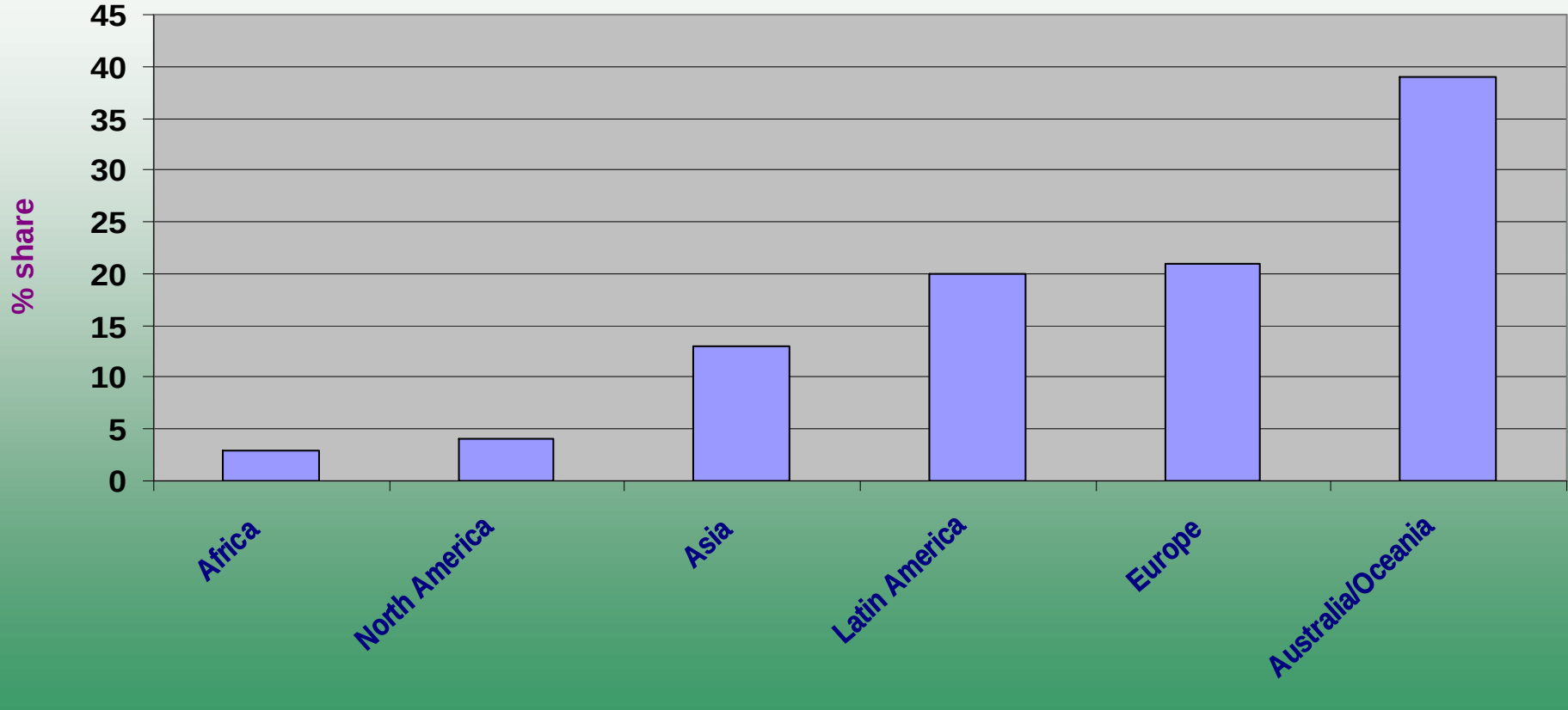
Basic Criteria for the Production, Storage & Transport of Organic Fruits

- Existence of production standards and certification procedures
- The International Federation of Organic Agriculture Movement (IFOAM), a non-governmental organization promoting organic agriculture internationally, has established guidelines that have been widely adopted for organic production and processing
- These guidelines are commonly considered as "minimum standards" leaving room for more detailed requirements, depending on regional or local situation.

• *Contd....*

- Many developed countries have defined their own organic standards
- EC countries have endorsed a common organic standard which is spelt out in Regulation EEC2092/91
- FAO/WHO Codex Alimentarius Commission adopted – “Guidelines for the Production, Processing, Labeling and Marketing of Organically produced Foods” in 1999.

Situation of Organic Farming in different Countries



Australia

- Annual growth : 20-24%
- Total farm Gate Sale : $127.9 M
- Fruits & Nuts : $ 21.4 M (16.7%)
- Organic fruits : apple, avocado, banana, grape fruit, lemon, watermelon, olives, orange, papaya, litchi, rambutan
- During the three years transition phase, produce is labeled as “in conversion”
- In 2001, 1600 t (0.6%) of banana produced organically.

United Kingdom

- Market growth 2005: app. +30%
- Share organic sold via conventional retailers: 76%
- Multiple retailers with 31% growth organic market engine
- Organic box schemes with 22% growth also important
- Nearly all multiple retailers start with own organic home delivery services
- 66% of multiple retailer sales from domestic sources
- **Trend assortments:** snack foods (+75%); wholefoods (+54%) natural cosmetics and care products (+49%); ready meals (+46%); organic textile products

Germany

- Organic Market Sales 2006: app. € 4.5 billion
- Growth 2006: app.15%
- Share organic sold via conventional retailers: 55%
- Altogether the market penetration of organic food grew tremendously over the last two years
- All discounters provide between 20 – 50 organic items
- Discounters not only provide they just promote organic as the most relevant theme next to the price issue (e.g. Lidl, Plus, Aldi Sued)
- Conventional retail chain REWE with 3 organic supermarkets (Vier Linden)


Austria

- ☆ Market growth 2006/05: +18%
- ☆ Share organic sold via conventional retailers: 65%
- ☆ Discounters which provide organic: growing
- ☆ Growing awareness of "regional" organic products in discounters
- ☆ Biggest chain (REWE/Billa) promised change from price to quality oriented marketing policy
- ☆ **Trend Assortments:** convenience; frozen food; natural cosmetics

Taiwan

- Pilot project started in 1995
- In 2006, 110 organic farms, 207 ha
- 34 fruit species grown as organic :

citrus, banana, pineapple, guava, grape, papaya

- 4 indipendent private certification bodies
  - *Mokichi Okada Association (MOA)
  - *Tse-Xin Organic Agricultural Foundation (TOAF)
  - *Taiwan Organic Production Association (TOPA)
  - *Taiwan Formosa Organic Association (FOA)
- Annual imports : US $ 9.7 M

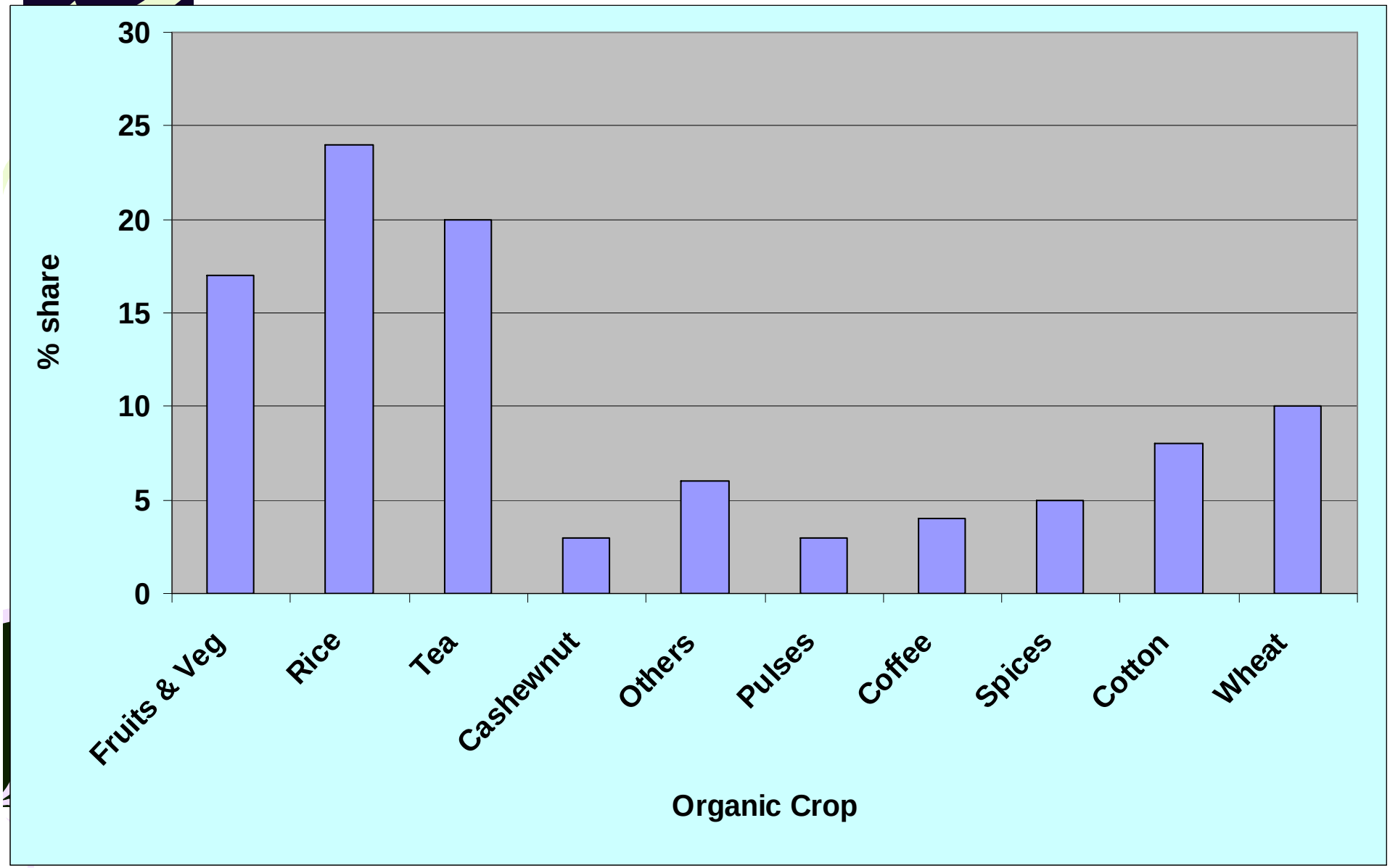
Mexico

- Total area under organic : 30,000 ha
- Growth : 27 % annually
- 85% organic produce for export market
- Export destination : Germany, France, Holland, England, Switzerland, USA & Canada
- Organic produce : Coffee - 45.26 %, Tropical & Subtropical fruits – 2%
- Organic fruits : avocado, banana, mango, pineapple, papaya, anona, litchi, lemon, sapota, coconut, carambola, tamarind
- Certification : Around 20 organization.

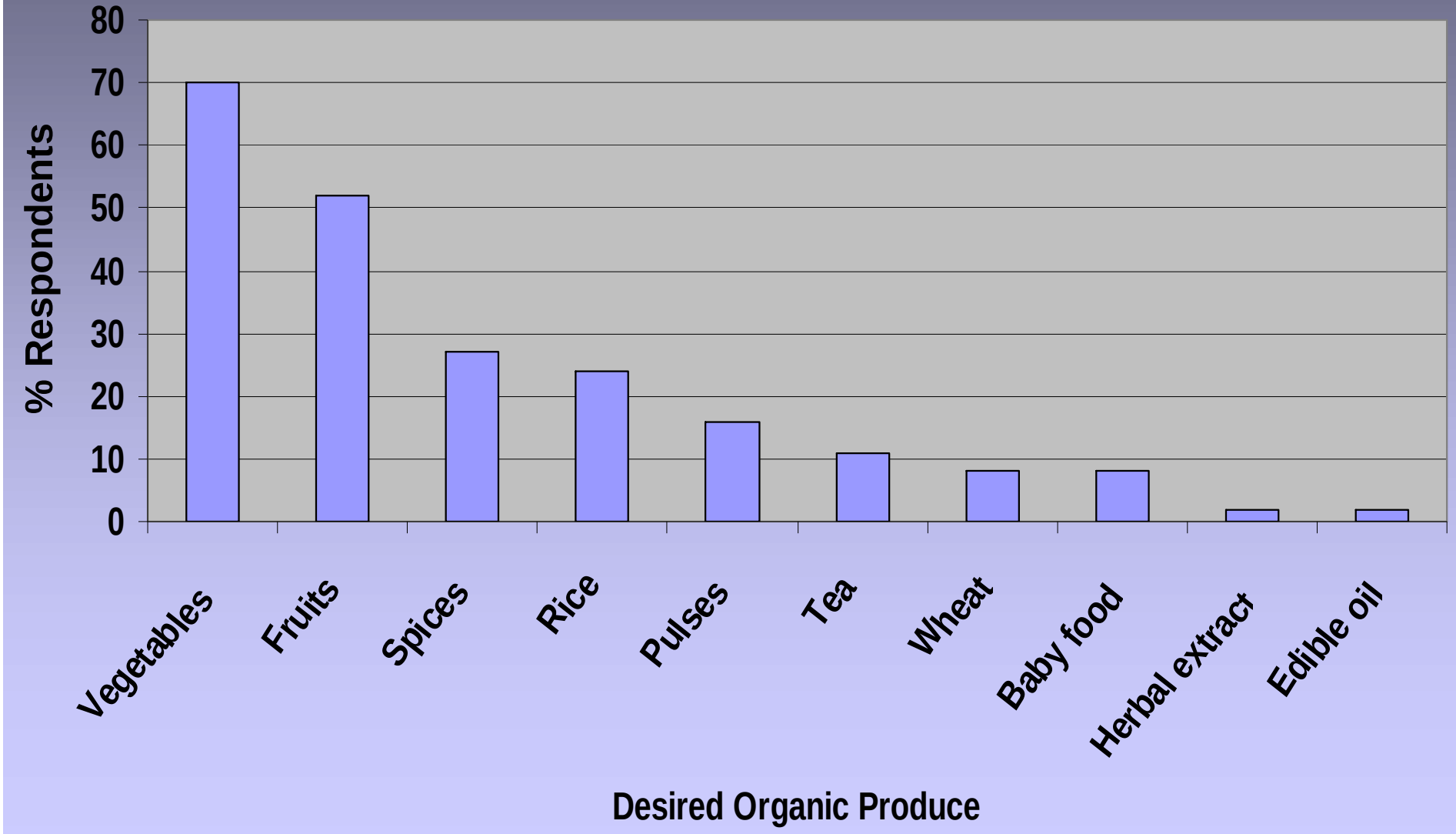
Turkey

- Olive and olive oil in Canakkale, Izmir, Manisa, Balikesir, Mugla
- Dry and table fig in Aydin, Yalova, Istanbul
- Citrus in Adana, Mersin, Izmir, Mulga, Hatay
- Pomegranate in Adana, Mulga, Antalya
- Kiwi in Istanbul, Trabzon, Yalova
- Loquat in Tarsus (Mersin)
- Banana in Bozyazi
- Mango in Anamur

India : Organic Crops



Desire of Indian Consumers for Indian Organic Produces



Advantage India

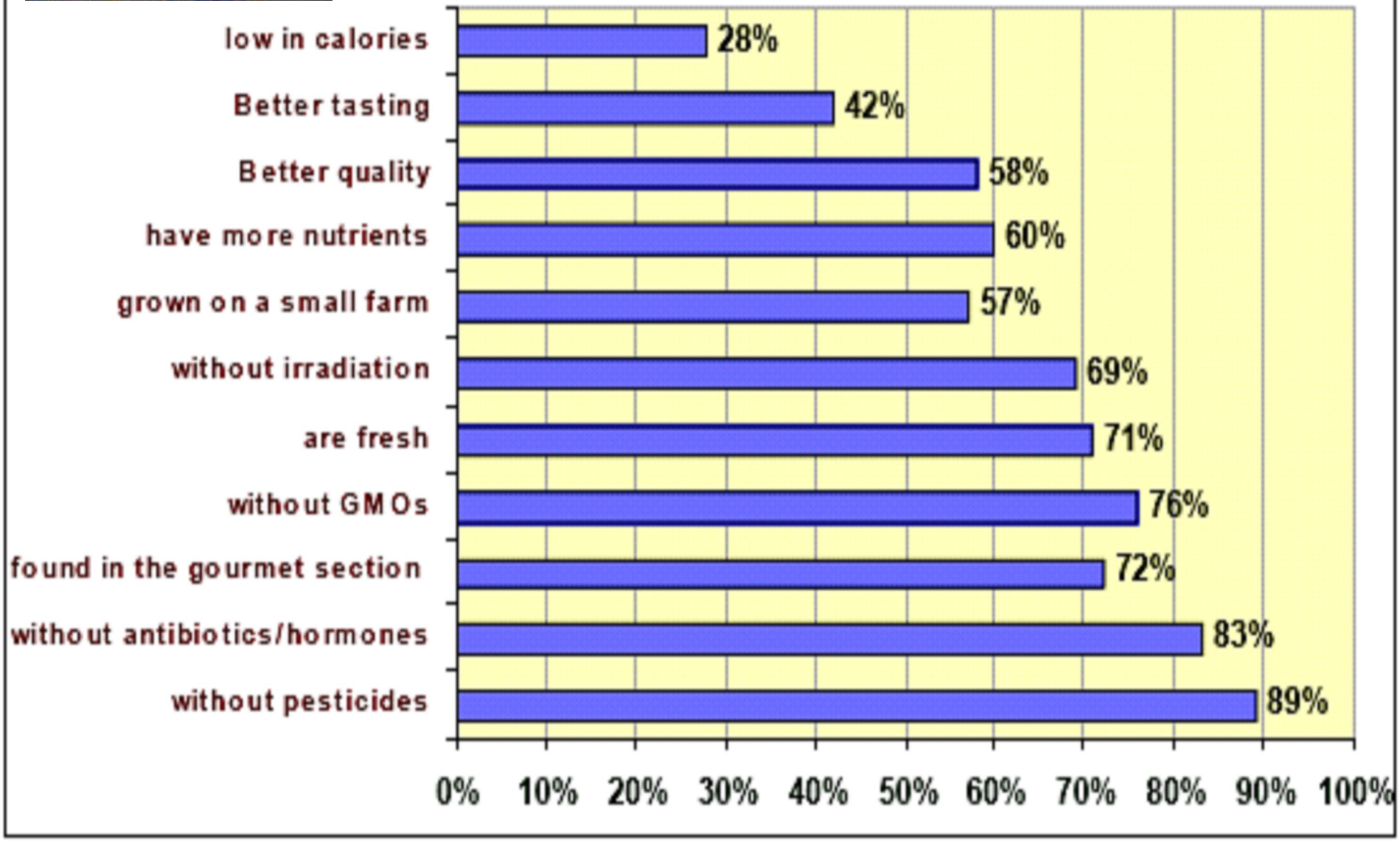
- Recognition of Indian standards by the European Commission
- Potential to produce & supply varied product categories
- Vast farm land available for conversion
- Progressive farmers
- Rich knowledge base
- Government initiatives in promotion of organic products

What Kind of Demand for Organic Food Grows More ?

- Fresh fruits & vegetables represent 40% of sales and this sector grows about 10% annually.
- Dairy products, cereals, breads, fast foods, frozen foods & baby foods represent 60% of the sales and the average growth is about 40% annually.

Consumers who buy organics agree that organics are:

2003 Whole foods Market Organic trends Tracker Survey)



Organic Market Leader among Conventional retail Chains

Germany	:	Tegut
Switzerland	:	COOP
UK	:	Waitrose
Austria	:	Billa
Italy	:	Esselunga
The Netherlands	:	Albert Heijn

Consumer share and price premiums in key demand centers in Europe, Japan and USA.

Market	Consumer share (% Buying regularly)	Price premium (% Above conventional)
Austria	20	25-30
Denmark	32	20-30
France	10	25-35
Germany	32	20-50
Italy	4	35-100
The Netherlands	5	15-20
Sweden	15	20-40
Switzerland	40	10-40
United Kingdom	25	30-50
Japan	4-36	10-20
United States	9-19	10-30

Summary of provisions of some standards

USA - National Organic Programme

- Certification by USDA accredited agents is mandatory.
- US government enforcement with civil penalty for violations.
- 36 months land transition - no exceptions.
- No synthetic pesticides or fertilizers.
- No GMO's or their products.
- Organic seed required.
- Annual farm plan.
- National materials list.

Europe – EEC 2092/91 and Beyond

- Foundation standard is EU Council Regulation 2092/91, published in 1991.
- In each member state a 'competent authority' interprets the basic standard and accredits certifiers.
- Many certifiers in Europe have established standards that are more restrictive than the basic standard.
- European certifiers often do not recognize each other.
- Products from outside EU (and exempt 'second countries') must receive an import authorization from the competent authority.
- The EU has initiated, in early 2002, bilateral negotiations with the USDA for equivalency.

Japan Agricultural Standards

- Implemented by Japan Ministry of Agriculture, Forestry & Fisheries (MAFF) in April 2001.
- Product sold as organic must bear the JAS seal.
- In March 2002, MAFF recognized the US National Organic Programme as equivalent for plant-based ingredients.
- JAS mark must be affixed by JAS certified entity.

ORGANIZATIONS PROMOTING ORGANIC CONCEPT

International Federation of Organic Agriculture Movement (IFOAM)

The Soil Association Certification Ltd (SAC) UK

The United Kingdom Register of Organic Food Standards (UKROFS)

The California Certified Organic Farmers (CCOF) in USA

Ecocert, Germany,

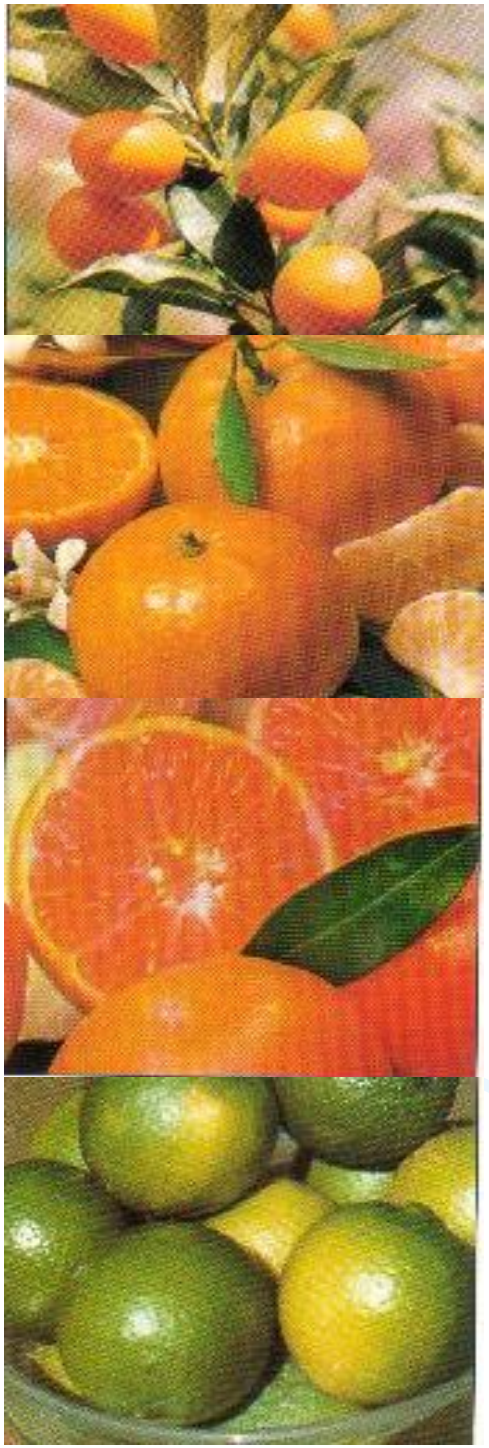
Demeter Bund, e. V., Germany

SKAL, Zwolle, The Netherlands,

Bio Suisse, Switzerland

Institute of Marketecology (IMO), Switzerland etc.

For further details log on to http://www.ioas.org



Key Issues

- High certification costs
- Lack of support during conversion period
- Availability and cost issues of organic inputs
- Infrastructure constraints
- Non-tarriff barriers
- Lack of research & development
- Lack of structured domestic distribution channel

Percentage Decline in Mineral Content of U.S. and British Crops in the 60 Years Period under Conventional Farming

Mineral	U.S. 1963-1992 (13 fruits & vegetables)	Britain 1936-1987 (20 fruits & 20 vegetables)
Calcium	-29	-19
Magnesum	-21	-35
Sodium	N/A	-43
Potassium	-6	-14
Phosphorus	-11	-6
Iron	-32	-22
Copper	N/A	-81

N/A= Not analyzed

Source: *U.S. (Bergner, 1997) and British (Mayer, 1997)

POINTS OF INTERVENTION

- Lack of Awareness
- Output Marketing Problems
- Shortage of Bio-mass
- Inadequate Supporting Infrastructure
- High Input Costs
- Marketing Problems of Organic Inputs
- Lack of Financial Support
- Low Yields
- Inability to Meet the Export Demand
- Lack of Quality Standards for Bio-manures

Strategies and Recommendations

A) Focus on Value Added Organic export

- **Focus on specific/niche varieties to maximize organic premiums at the farm level**
- **Processing at source**
- **Direct tie up with buyers**

B) Incentives & Promotional Support

- **Certification support/incentive**
- **Support/incentives for in-conversion organic farms**
- **Awareness and training programmes**
- **Joint programme across commodities**
- **Support for production of organic agri-inputs**

C) Creation of a Nodal Agency

- **Creation of an organic market & knowledge repository**
  - **Markets**
  - **Regulations**
  - **Identification of prospects**
  - **Monitoring**
- **Awareness building**
- **Interface with the commodity Boards, associations etc. with Government**

Inspection and Certification

- Certification is the process by which a farm is officially certified as 'organic‘
- This guarantees customers that the produce from the certified farm is in fact organic and free from chemicals, pesticides, and insecticides.

- The certification process involves
  - contacting a certifying agency,
  - contracting with them for an inspection of your farm by their inspector,
  - and upon passing their inspection, an issuance of a Certified Document. These certificates are subject to renewal.

- If you wish to enter the global market, your farm must be certified organic. Increasingly the domestic market in India is also insisting upon certified organic produce.

- India is working with international organic farming agencies to facilitate an internationally recognized set of standards to be used during the inspection of farms desiring organic certification.


INDOCERT
INDIAN ORGANIC CERTIFICATION AGENCY
IMO control
OneCert
demeter
ECO CERT
DEMETER
Skal
INTERNATIONAL
Naturland
anerkannt ökologischer Landbau
WHEN YOU NEED TO BE SURE
SGS

Future strategies

- Emphasis should be given to organic farming research in fruit crops
- Development of organic farming systems with diversified crops and enterprises
- Direct and indirect benefits of organic farming on a long term basis needs to be quantified
- More effective ways of converting organic wastes into manures are to be evolved
- Information on economic viability of organic farming system should be elucidated

- Promotion of bio-fertilizers and bio-pesticides
- Dependable marketing infrastructure for organically grown produce
- Demonstrations for spreading the concept and technologies of organic farming

Troubleshooting

Availability of organic manures	:	Evaluation of different Organic substrates
Alternate renewable organic sources	:	Identification of crop rotation, residues, mulches, GMC, BF etc.
Use of urban wastes & heavy metals content	:	Development of Technologies for elimination of heavy metals
Ground water quality & pollution	:	Proper monitoring is highly essential
Evidences on quality of Organic produces	:	Evaluation of comparative quality
Bio-pesticides & bio-control agents	:	Production & commercialization
Cropping pattern, crop rotation, multi-tier cropping etc.	:	Standardization of different crops
Organic materials & composting	:	Production, commercialization & price fixation
Complicated certification process	:	The process should be Simplified
Proper marketing of Organic produces	:	Establishment of Cooperatives/ Boards for organic marketing

What did a Fruit Grower have to do to Access the Organic Market ?

- Good quality
- Constant supply
- Compliance with organic standards
- Good organization & logistics capacities
- Organic certification

What do Growers Think about It ?

- **Costly**
- **Complicated** (industry tailored, guided by developed countries)
- **Duplication** (lack of harmonisation/recognition)
- **Impossible to satisfy** (even more stringent & detailed)

Opportunities for Developing Countries

- **Products, mostly tropical, that are not produced in United States, EU & Japan**
- **Off-season Products :** unmet demand during certain periods
- **In-season Products :** temporary or more regular shortage because of strong & increasing demand
- **Novelty or Specialty Products :** organic wines, ethnic food products

Market Entry Tips for Developing Countries

- Get in early
- Develop a strong supply base
- Collaborate with peers
- Check & comply with technical requirements
- Choose the right distributor (s)
- Stay up-to-date
- Develop the local market
- Partner with the export market

Conclusion

- Demand for organic foods is growing rapidly in most developed countries, and mostly in double digit figures.
- The growth in demand has not only been in the quantity consumed but also in the breadth & depth of range of organic product.
- Organics has moved from being a small niche market, specialty product, to being a mainstream food category.
- Growth of the Global market for organics is being complicated by the large number of regulatory & labelling schemes that exits.

• *Contd….*

- **Factors which are likely to be the predictors for the propensity to buy organic foods/products and therefore longer term demand are :**

- products which have a heavy use of chemicals in their regular production system

- products eaten with minimum preparation or cooking

- products which have naturally defined taste & flavour profiles and which are primarily eaten for enjoyment.

- products which are seen to have health benefits

- products for infants & children. ***Contd....***

- **There are market opportunities for organic tropical and sub-tropical fruits and products from low cost producing countries of the Southeast Asian Region.**

- **The identified fruits / fruit products with great potentiality includes mango, banana, litchi, longan, papaya, pineapple, guava, carambola & melon.**


Concentration on “target –centre”
dissolves complexity at periphery.
THANK YOU
Ian Anderson Design