
Organic Production and Processing Systems

Module Objectives:

Obtain familiarity with the structure, basic elements, and principles of organic processing and production systems



Session Overview

- Basics of organic production certification systems
- Basics of organic processing certification systems
- Overview of major differences between principal organic standards
- Structure of organic certification systems
- Fundamentals of organic inspection systems



Organic Market Growth

- Organic farming is practiced in approximately 100 countries throughout the world ⁽¹⁾
- Market for organic foods is growing by nearly 20% per year ⁽²⁾
- Global organic food sales are projected at \$80 billion by 2008 ⁽³⁾
- 2/3 of American consumers purchased organic food in 2005 despite higher prices ⁽⁴⁾

(1) <http://www.ota.com/organic/mt/business.html>

(2) <http://www.organicconsumers.org/organic/growing112904.cfm>

(3) <http://www.foodnavigator.com/news/ng.asp?id=42201-global-organic-market>

(4) <http://www.consumerreports.org/cro/food/organic-products-206/overview.htm>



Principal Requirements of Certified Organic Production Facilities (1)

- Organic production and handling system plan
- Clearly defined parallel and split production
- Fertility management system
- Appropriate use of seeds and seedlings



Principal Requirements of Certified Organic Production Facilities (2)

- Weed, Pest and Disease Management
- Land Stewardship
- Risk Assessment
- Sampling



Principal Requirements of Certified Organic Production Facilities (3)

- Harvesting
- Post-Harvest Handling
- Lot Numbers



Principal Requirements of Certified Organic Production Facilities (4)

- Storage
- Transportation
- Marketing
- Production Audit Trail



Principal Requirements of Certified Organic Processing Facilities (1)

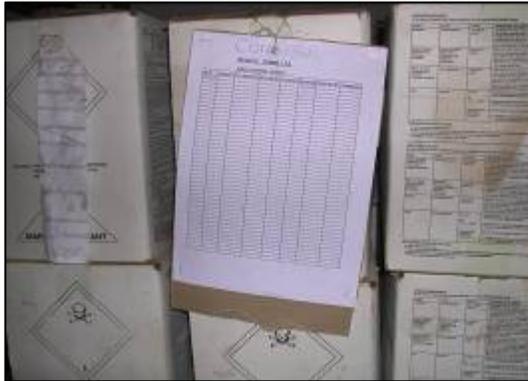


- Processing Facility Background
- Permits, Registrations & Inspections
- Ingredients & Processing Aids
- Processing Water

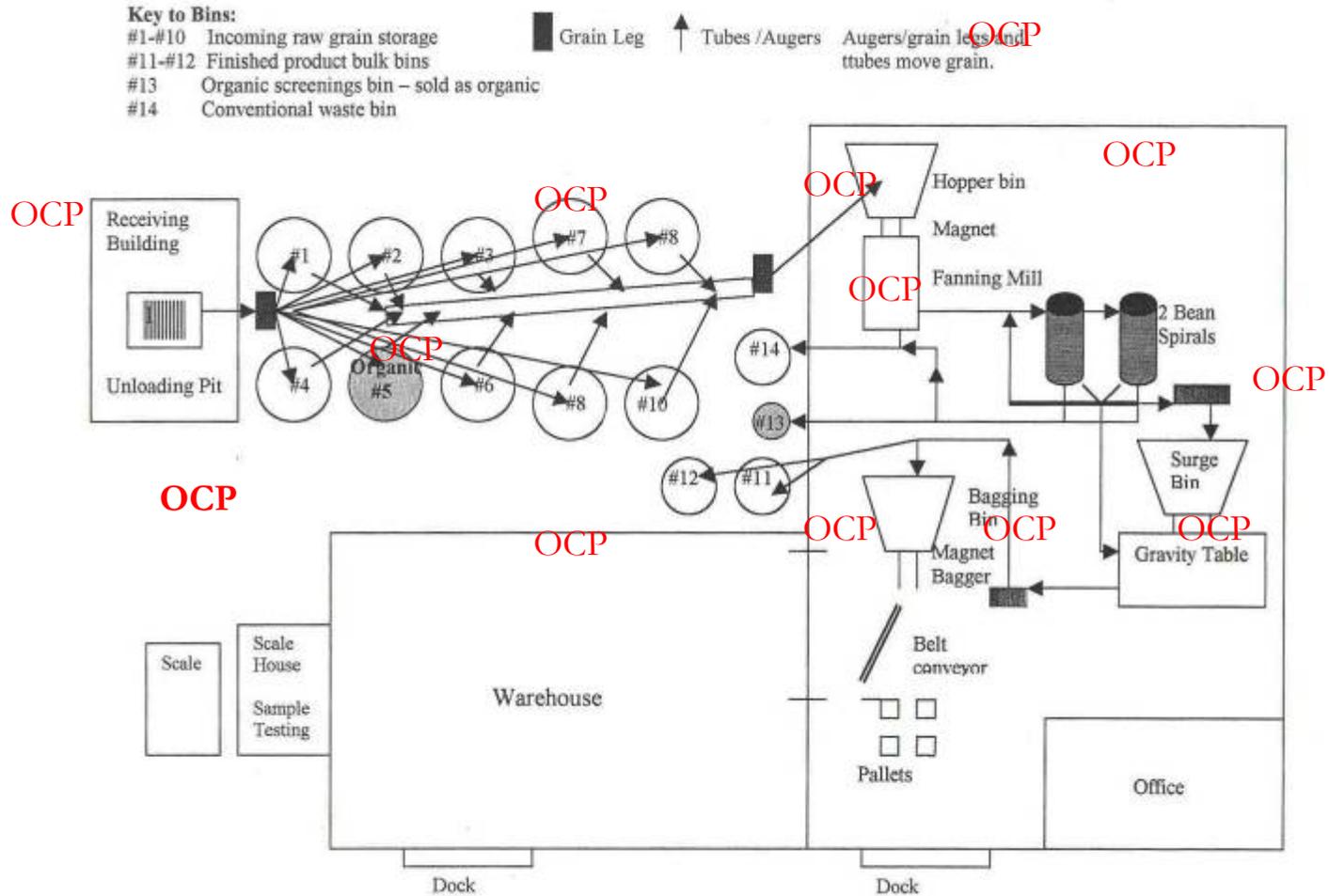


Principal Requirements of Certified Organic Processing Facilities (2)

- Product Flow & Equipment
- Audit Control & Balance
 - Sales - Inventory = \sum Ingredients – Losses
- Quality Assurance



Product Flow Chart



Source: IFOAM/IOAN International Organic Inspection Manual

Grain Commodities, Inc.: Facility Map



Principal Requirements of Certified Organic Processing Facilities (3)

- Storage & Handling Equipment
- Sanitation
- Pest Management
- Mass balance



Principal Requirements of Certified Organic Processing Facilities (4)

- Packaging, marketing and product sampling
- Transportation
- Waste management



Major Differences Between Standards(1)

	NOP	EU	Suisse	JAS
Labeling	100% organic, 95% organic, made with organic	No 100%, 95% say organic, restrictions between 70-95%	No 100%, 95% say organic, restrictions between 70- 95%	No organic labeling for less than 95%
Split Ops	Mixed Ops OK	Mixed Ops OK, no annual crops of same variety	Perennials Only	Mixed Ops OK
Conversion	3 years from harvest	Two years for sowed crops and 3 for perennials	2 calendar years	3 years from harvest
Soil Fertility	Improve or maintain	Specifics on N requirements	Specifics on N requirements	Improve or maintain
Raw Manure	Any thing goes per timing	No factory farm, N requirements and animals per acre	N and P requirements with proof of need	Any thing goes per timing



Major Differences Between Standards (2)

Requirement	NOP	EU	Suisse	JAS
Biodiversity	N/A	Implied	7% Set Aside	N/A
Seeds, etc	Per NOP	Same as NOP	All perennials must be organic	Same as NOP
Crop Rotations	Per NOP	Same as NOP	Detailed about % of cover crops	Same as NOP
Organic Handling	Per NOP	Same as NOP	Must come by land or sea	Same as NOP
Materials list	Per NOP	Many differences	Many differences	Many differences
Beekeeping and mushroom production	N/A	Detailed rules	N/A	N/A



Requirements for Achieving Organic Certification

- Identify appropriate organic accreditation system for export market
- Identify appropriate certifying body
- Develop facility systems required for organic certification per identified certifying body
- Acquire organic certification



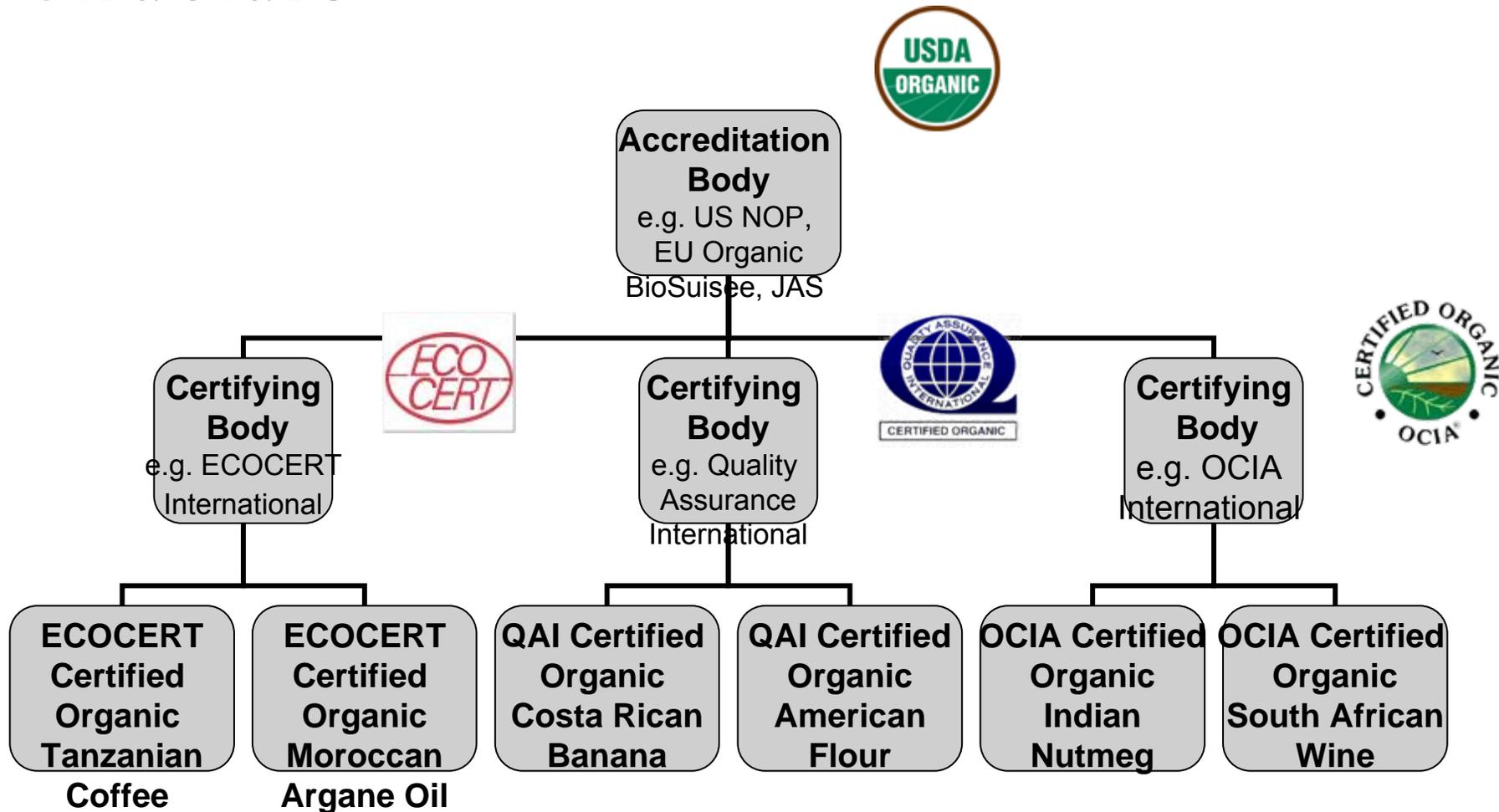
Taxonomy of Standards

Accreditation Bodies **ACCREDIT** Certification Bodies
to
AN INTERNATIONAL **ACCREDITATION** STANDARD

Certification Bodies **CERTIFY** Suppliers
to
AN INTERNATIONAL **FOOD STANDARD**



International Organic Certification Structure



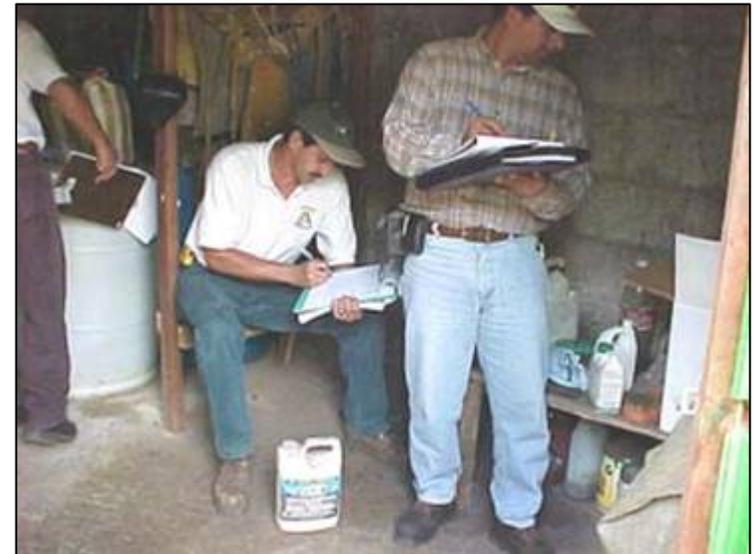
Inspection Systems | 5 Step Process

- Contact certifying body
- Complete and submit application for certification to specific organic standards to certifying body
- Certifying body approves application and sends organic inspector to facility
- Upon completion of inspection organic inspector sends inspection report to certifying body and facility for review
- Certifying body will award organic certification if facility is found to be in compliance



Inspection Systems | Who

- Inspection conducted by accredited certifying body inspectors
- Inspectors normally work for multiple certifying bodies
- Inspectors may not be capable of inspecting to all standards that a certifying body is accredited to



Inspection Systems | When

- Apply for certification when:
 - ❑ No unapproved substances for three years
 - ❑ Organic handling and system plan in place and followed
 - ❑ Staff trained on requirements of organic system
 - ❑ Contamination and commingling does not occur
 - ❑ Document management plan implemented



Inspection Systems | What

- Inspector is not a consultant and cannot offer advice to achieve requirement of the standard
- Inspector will review facility based upon applicable standard
- Inspection of every aspect of facility including employees



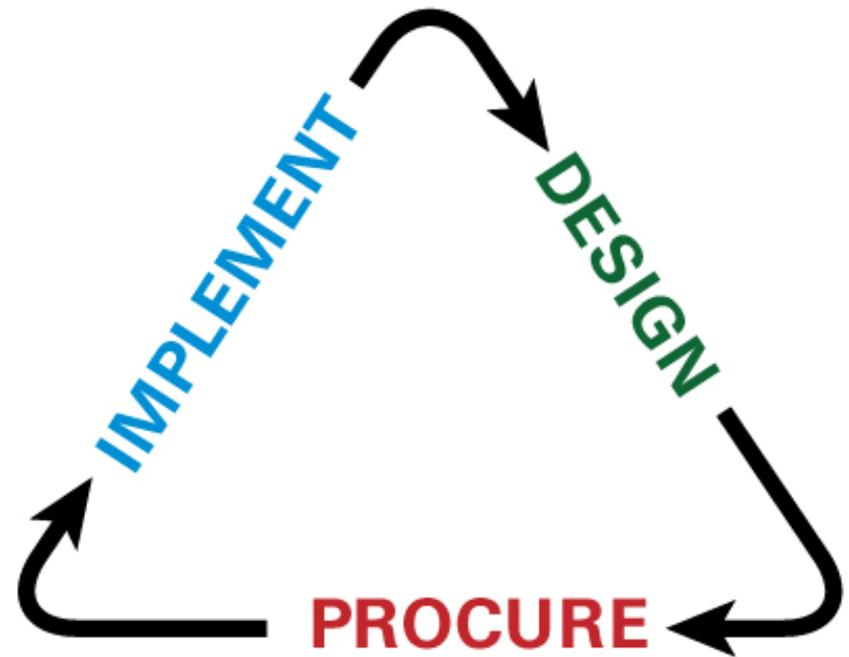
Problem Areas In Organics

- Certifier relations
- Non-approved inputs
- Documentation of approved inputs
- Record keeping
- Organic plan deficiencies
- Commingling and contamination



Module Recap

- Standards are legal and voluntary requirements
- Standards are market dependent
- Organic ICS is key to conformity, traceability and labeling
- Accreditation and inspection capacity is key to success



Small Group Exercise

- Based upon the information presented in this module and the case study from Bosnia discuss three reasons for and three reasons against the promotion of an organic intervention within one of the projects represented at your table

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CASE STUDY

Organic Mushroom Sales Blossom

A small grant helps a company acquire new equipment and increase capacity



PHOTO: USAID
An employee of Mushroom, in Celinac, Bosnia-Herzegovina, shows off one of her company's more impressive harvests.

Challenge

Milan Zoric and Boran Maglov dreamed of building their own business exporting high-quality organic mushrooms from Bosnia-Herzegovina. They eventually established a small company called *Mushroom* in the town of Celinac, combining Milan's 20 years of experience as a bank credit officer with Boran's many years of experience working with plants. They decided from the beginning to become organically certified through the Institute for Market Ecology in Switzerland, which required that all its mushroom gatherers be certified. Because the company put so much effort into quality, by the end of 2003, the company was receiving more orders than it could fill. To satisfy demand from Switzerland, Austria and Italy, *Mushroom* needed to increase its capacity.

Initiative

Since fresh mushrooms are made up of 90 percent water, they are usually dried for longer life and easier shipping. USAID provided *Mushroom* with a grant that enabled the company to expand its production facility and purchase a new dryer and cooler. Nihad Hodzic and his mother are among the company's most productive mushroom gatherers. Well trained and hard working, the Hodzic family receives a significant portion of its annual income from *Mushroom*. With USAID's support, *Mushroom* was able to supply them with a small drier that they could use at the collection point, which simultaneously adds value to their harvest and reduces their transportation costs.

Results

With these improvements, *Mushroom* was able to increase its sales from 13 tons of dried mushrooms in 2003 to 19 tons in 2004. The company expects its sales to blossom further, to 25-30 tons in 2005. Added processing capacity and increased sales have also increased the number of workers *Mushroom* employs; full-time workers have increased from 3 to 4, part-time workers from 50 to 60 and gatherers from 300 to 400.

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