Entering the U.S. Saffron Market

DACAAR/ICARDA/MAI National Workshop on Saffron
Herat, Afghanistan. November 14-16, 2006
Trends in saffron imports: strong for the US . . .

Data from: US Dept. of Commerce via USDA Foreign Ag. Service: www.fas.usda.gov
and also for the EU

EU (extra) Saffron Imports - Quantity

Note: Data on trade in saffron often shows apparent anomalies (here Other EU imports for 2005)

EU (extra): trade with countries outside the EU
EU 15 and EU 25 figures are the same

Data from Eurostat: http://epp.eurostat.ec.europa.eu
There is an increased preference for natural over artificial flavorings and colorings.
Saffron being expensive, demand can be expected to rise as incomes rise.
Interest in saffron’s health (or “nutraceutical”) benefits may grow.

There are no particular factors likely to cause a decline in demand.
Production in Spain has fallen to low levels, though yields/ha are up.

Data from MAPA: Ministerio de Agricultura, Pesca y Alimentación (in Spain): [www.mapa.es](http://www.mapa.es)
Most U.S. imports purport to come from Spain.

Data from US Dept. of Commerce via USDA Foreign Ag. Service: [www.fas.usda.gov](http://www.fas.usda.gov)
But Spanish production is not enough to cover Spanish exports.
(even imports + production are apparently less than exports)

Data from MAPA: Ministerio de Agricultura, Pesca y Alimentación (de España): www.mapa.es
Most Spanish saffron comes from Iran.

Data from Eurostat: http://epp.eurostat.ec.europa.eu
But as Spain’s reputation dominates the market, for Afghan saffron to make inroads, there must be a clear strategy.

---

SPEANISH SAFFRON

Over 70% of the world’s saffron production is grown on the high Castilian plateau known as La Mancha, a region which is famous for the quality and flavor of its saffron. One of the most precious spices in the world, there are many low quality or plain fraudulent saffron available on the market. Ours saffron is guaranteed to be artisan quality from producers we have visited ourselves.
Two sets of considerations relevant to entering the US market:

- **Steps that must be taken**
  (US government regulations)

- **Steps that can be taken**
  (Marketing strategy)
Meeting U.S. government regulations:

With the US Food and Drug Administration (FDA):

1. Register processing and storage facilities in both Afghanistan and the United States.
2. Provide prior warning of each shipment of saffron to the United States.

Both procedures are absolutely essential but neither appears particularly onerous. Both should be done online. Plenty of advice is available online from the FDA.

3. For packages, provide labels with required information.
1. Registering facilities

- Register all processing and storage facilities in Afghanistan from which saffron is shipped to the US. (If grading takes place on multiple farms but is all shipped from a central facility in Herat, only the latter must register.)

- Register all facilities in the US to which saffron is shipped. (They are probably already registered and their registration number may be needed for prior notice of saffron shipments.)
1. Registering facilities (continued)

Information required:

- Name, address(es) (physical location & mailing), telephone of the foreign facility.
- Name, address, telephone of foreign facility’s owner.
- Trade names (“doing business as …”)
- Name, address, telephone of the U.S. agent
- Activity carried out at the facility (“warehouse”, “labeler”, “packer”)
- Food product category (“29. Spices, flavors, and salts”)
2. Prior Notice of Imported Food

Send notice of shipment from 5 days to 4 hours (if by air) before arrival in the U.S.

Examples of information required:

- Name, address, etc. of shipper and importer
- Identity of product, quantity, lot number
- Country(ies) of production and shipment.
- Shipment information (carrier, arrival time, etc.)
3. Labeling

- Show content *(saffron, quality classification)* including additives *(presumably none)*
- Net weight of contents
- Name, address, telephone, e-mail of importer *(must be clear who to contact if there is a problem)*
- *(For quality control)* Lot number to identify source, as close to origin as possible.

For promotional reasons:
- *identify exporting Afghan food facility*
Strategic market considerations

- Two kinds of final consumer:
  - Chefs/restaurants
  - Home cooks

- Some wholesalers & retailers happy with current (“Spanish”, Greek, New Zealand, etc.) suppliers. Some willing to try Afghan saffron (a good cause).

- Same probably true of chefs and home cooks. For some, Afghan saffron will distinguish their cooking.

- Quality and price important to both. Chefs more commonly have real understanding of quality.
Quality

Meet recognized standards:

- ISO 3632 (taste, fragrance, color, floral waste, foreign matter, moisture)
- HACCP analysis or ISO 22000 (food safety; complements Good Agricultural / Hygienic / Storage Practices)
- Organic (additional option)
In the US consistent, reliable standards are important, actual certification usually less so.

Labels can say, This product “meets” or “processed according to” ISO or HACCP standards.

The market runs on trust. Standards provide useful guidelines and reference points. (Some buyers may use ISO criteria to specify a higher quality (for example, a color reading of 230))
## ISO: key standards

Laboratory tests (including UV spectrometric measurements) required for ISO measurements.

<table>
<thead>
<tr>
<th></th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
</tr>
<tr>
<td>Moisture (% max, filaments)</td>
<td>12</td>
</tr>
<tr>
<td>Foreign matter (% max)</td>
<td>0.1</td>
</tr>
<tr>
<td>Absorbance</td>
<td></td>
</tr>
<tr>
<td>Taste (257 nm, min) (picorcrocine)</td>
<td>70</td>
</tr>
<tr>
<td>Fragrance (330 nm, min) (safranal)</td>
<td>20 - 50</td>
</tr>
<tr>
<td>Color (440 nm, min) (crocines)</td>
<td>190</td>
</tr>
</tbody>
</table>

A buyer might insist on a color reading of 230, instead
HACCP (Hazard Analysis & Critical Control Point)

7 HACCP principles. Applicable to each farm facility in harvesting, processing, packaging.

1. Conduct a hazard analysis (draw up a flow diagram, determine where contaminants could enter the process and affect product safety)

2. Determine critical control points (CCPs, points where hazards can be eliminated or reduced to an acceptable level)
HACCP (continued)

Establish:

3. **Critical limits** for each CCP (usually quantitative, for saffron may be qualitative, *e.g.*, availability of adequate hand washing facilities, rules for proper hand washing)

4. **Monitoring procedures** for CCPs (to ensure controls are in place and monitoring occurs)

5. **Corrective actions** when limits are not met. (Separate the “failing” lot from the last good lot and test its safety before releasing for sale. Fix source of problem and verify.)

6. **Procedures to verify** HACCP system is working

7. **Effective record keeping** (to document the entire HACCP process and its implementation)
Organic (US Dept of Agriculture)

Detailed regulations available online.

Examples:

- No synthetic fertilizer or pesticide (except for approved list), and none applied for three years before current crop.

- No animal manure within 90 days of harvest (of products not in contact with soil)

- Seed (including corm) must be organic

- Crop rotation required
To make practical use of standards (for US market)

- Establish system for allocating lot numbers and reliable tracking as close to origin as possible.
- ISO: Use as basis for grading.
  - Start with color (using color panels calibrated in lab.). Note: one large potential buyer wants reading of 230.
  - Test samples over time to learn which sources supply saffron meeting taste and fragrance standards.
- HACCP: Use as basis for ensuring food safety.
- Organic: Will increase number of potential buyers.
More practical possibilities

- Rather than have every farmer dry and sort into grades, establish a few facilities that can be well trained.
- As ISO testing takes technical expertise, establish the laboratory in the University of Herat.
Prices highly variable

Price/gram (Shipping, quality sometimes vary)
1oz = 28.35 g. 1lb = 435.6g

<table>
<thead>
<tr>
<th>Supplier location</th>
<th>Oct-Nov 2006</th>
<th>May 2005</th>
<th>Unit sold</th>
<th>Saffron source</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco, CA</td>
<td>$1.02</td>
<td>$1.27</td>
<td>1 oz</td>
<td>Iran.</td>
</tr>
<tr>
<td>Williamsburg, VA</td>
<td>$2.05</td>
<td>$1.57</td>
<td>1 oz</td>
<td>Spain.</td>
</tr>
<tr>
<td>Detroit, MI</td>
<td>$1.23</td>
<td>$1.23</td>
<td>1 oz</td>
<td>Spain.</td>
</tr>
<tr>
<td>San Francisco, CA</td>
<td>$2.40</td>
<td>$2.05</td>
<td>1g</td>
<td>Spain.</td>
</tr>
<tr>
<td>$1.17</td>
<td>$1.01</td>
<td>1 oz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toledo, OH</td>
<td>$1.30</td>
<td>$1.30</td>
<td>oz</td>
<td>Iran.</td>
</tr>
<tr>
<td>$1.17</td>
<td>$1.17</td>
<td>lb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seattle, WA</td>
<td>$9.95</td>
<td>$1.57</td>
<td>1 g</td>
<td>Spain</td>
</tr>
<tr>
<td>Brookfield, WI</td>
<td>$8.46</td>
<td>$8.18</td>
<td>¼ oz</td>
<td>Kashmir</td>
</tr>
<tr>
<td>$4.80</td>
<td>$4.79</td>
<td>¼ oz</td>
<td></td>
<td>Spain</td>
</tr>
<tr>
<td>$6.18</td>
<td>$5.92</td>
<td>¼ oz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$8.50</td>
<td>$8.50</td>
<td>1g</td>
<td>Switzerland</td>
<td>Romania</td>
</tr>
<tr>
<td>$7.00</td>
<td>$7.00</td>
<td>5g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$2.47</td>
<td>$2.47</td>
<td>1 oz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$1.32</td>
<td>$1.32</td>
<td>1 lb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$12.50</td>
<td>$12.50</td>
<td>1 g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$8.29</td>
<td>$8.29</td>
<td>12 g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$5.15</td>
<td>$5.15</td>
<td>1g</td>
<td>USA</td>
<td>Spain</td>
</tr>
</tbody>
</table>
Pricing

Prices are determined by negotiation between seller and buyer.

Two possible approaches for Afghan exporters:

1. Price high to signal high quality (and get good revenue)
2. Price competitively to similar qualities (and sell larger quantities).

Second is more likely to entice buyers away from existing suppliers. Chefs know quality independently of price.
Promotion (US market)

Methods:

- Label to assure quality and make it harder to pirate Afghan identity. (Dari name that could be registered and exclusive to producers who sell Afghanistan.)
- Cold calls to potential buyers.
- Web site and brochure promoting Afghan saffron with links to companies that have bought from Herat. (Avoid direct competition with them.)
- Exhibit at US food fairs. (e.g. Fancy Food Shows in San Francisco, New York, Chicago. Expensive. Best results from consistent attendance.)
Distribution

Among contacts with potential buyers two seem very promising. A third says he is.

- They will take small amounts to begin with to see how well Afghan saffron is received.
- One may set up a web site for Afghan saffron.
- Each likely to want his own label, but hopefully will accept joint labeling with Herat producers.
- Exclusive distribution rights have not yet been raised. (They should be resisted.)
Final considerations

- Volumes sold in US market will start low.
- Rate sales build up will depend on quality (not necessarily certified), price, and willingness of buyers to switch sources. May be slow.
- Start as soon as possible.
- Low initial volumes will make it easier to get good quality control systems in place.
Final considerations (continued)

- Always follow “The Marketing Concept”: Find out what the customer wants and supply those wants more effectively than your competitors.