

A Strategy for Promoting Afghan Saffron Exports

Peter Wyeth* and Najib Malik**

*Associate Economist, International Programs Research and Development, Washington State University, Pullman, Washington, USA

**RALF (Research in Alternative Livelihoods Fund) Program Manager, ICARDA, Aleppo, Syria



The RALF Program

The research that provides the basis for this report was funded by the United Kingdom Department for International Development (DFID) through the Research in Alternative Livelihoods Fund (RALF), managed by the International Center for Research in Dry Areas (ICARDA), and implemented by the Danish Committee for Aid to Afghan Refugees (DACAAR)¹ in the northwestern Herat Province of Afghanistan. RALF is a 4-year applied research program and there are 11 projects being implemented by ICARDA and more than 20 national and international partners in 17 provinces of Afghanistan. A brief background on the RALF Program is presented below.

Objectives

The purpose of RALF is to develop and promote innovative alternative livelihood options for rural Afghans who are currently or have previously been economically dependent on opium poppy cultivation.

Background

Afghanistan has been the world's major supplier of illicit opium for a decade. The production and processing of narcotic drugs grossly distorts the economy of Afghanistan, and jeopardizes the security and stability of the region involved as well as the development of Afghanistan. The Islamic State of Afghanistan adopted a National Drug Control Strategy (NDCS) for 2003–2008, which has the objectives of reducing poppy cultivation by 70% in 5 years and complete elimination in 10 years.

However, the livelihoods of a significant number of rural Afghans currently depend on growing opium poppy. If both the development and counter-narcotics objectives of the Government are to be achieved, sustainable alternative livelihoods must be identified for those who are currently engaged in illicit drug production.

The United Kingdom is the G8 lead nation on counter-narcotics. A 'UK Plan to Support Implementation of the Afghan National Drug Control Strategy', with objectives and implementation plans that parallel those of the NDCS, has been formally adopted. DFID contributes to this overall objective by focusing, *inter alia*, on supporting the development of sustainable livelihoods for poor Afghans. Without such support, there would be a substantial increase in poverty resulting from the elimination of the opium economy. A sustainable reduction in poverty depends on building the enabling environment and institutional base from which licit livelihoods can develop.

More than 20 years of conflict and neglect has left Afghanistan's system for research and extension devastated. The capacity and facilities that are currently available in Afghanistan are inadequate to respond to the challenge of finding viable alternatives to an entrenched economy based on an illicit crop. RALF helps to address this capacity gap by involving research institutions outside Afghanistan, non-government organizations (NGOs) with Afghanistan experience, as well as the Ministry of Agriculture, Irrigation and Livestock

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(MAIL) and Afghan universities. The program aims to contribute to MAIL capacity building by involvement in project selection, project implementation, in monitoring activities at the field level, communication/dissemination activities and in program review.

Outputs of the Program

The outcome of RALF will be licit alternatives to opium production that are practicable in the socio-economic environment of Afghanistan, and that are accessible to rural people. The beneficiaries will be the predominantly poor, farming population and casual workers who currently depend, or have been dependent in the past, on the illicit activity of growing poppies for their livelihoods.

RALF operates through the mechanism of a competitive research fund (CRF), managed by ICARDA, to mobilize innovative ideas for the development and promotion of alternative livelihood opportunities in Afghanistan. Projects are proposed and implemented by 'mini-consortia' comprising a partnership that includes an international or non-Afghan research institution and an Afghan-based partner with experience in the area in which fieldwork is to be carried out. This combination is intended to maximize synergy between international research practice and knowledge of the local Afghan context.

Projects are also intended to include a significant element of capacity building for the Afghan Government, Afghan universities and the Afghan staff of the NGO collaborators.

OUTPUT 1: Establish a Competitive Research Funding Mechanism

A CRF mechanism is in place for funding innovative applied research projects tailored to the Program purpose. The experience gained through the CRF mechanism is being transferred to MAIL and Ministry of Counter Narcotics through thematic workshops and development of new research proposals under the Counter Narcotics Trust Fund.

RALF Website: <http://www.icarda.cgiar.org/RALFweb/RALF.htm>

Establishment of RALF Steering Committee: A Steering Committee that includes the DFID-Afghanistan Livelihoods Program, ICARDA and the senior management at MAIL was established on 14 July 2005. The Steering Committee has an oversight and advisory function and participates in key monitoring functions.

Creation of RALF E-Database: An Electronic Database has been established, which is now up and running. The records of all Project Agreements, Progress Reports, Financial Reports, as well as historical records of Project Proposals, are now residing on the E-Database. The E-Database is accessible to MAIL, Ministry of Counter-Narcotics, and DFID and would be accessible to other donors on request.

OUTPUT 2: Recommended Technologies and Support Services, Tested and Available for Implementation

International–Afghan ‘Partnerships’

Proposals were requested from 'mini-consortia', including an international research institution and an Afghan partner. Twenty-one proposals were received in response to the first RFP and 20 Concept Notes were received in response to the second RFP. Eleven

Projects in all were approved for funding.

Progress in Achieving Outputs

Research is progressing, and there are early indications that the projects funded by RALF are yielding results that will translate into new technologies/practicable recommendations that can be used to improve incomes or food security, or provide employment and replace poppy cultivation, if adopted after a scale-up phase. A few tangible examples are:

- The establishment of 94 “Self-Help Groups” (SHGs), including 34 Women’s SHGs, as a sustainable source of micro-credit in Badakhshan, as part of a pilot financial scheme.
- Production, processing and marketing of saffron in Herat, and establishment of men’s and women’s saffron producer associations.
- New forage/fodder crops and increased rural income from dairy products in Baghlan.
- New oilseed crops in the northern provinces.
- Introduction of the concept of Conservation Agriculture in wheat-based cropping systems and potential increases in crop yields.
- Adoption of poly-tunnels and drip irrigation for out-of-season production of vegetable crops in Helmand and Kandahar.
- Commercial production of mint and value-added products, and establishment of men’s and women’s associations as micro-agro-enterprises in Kabul, Kunduz, Nangarhar and Helmand.
- Assistance for women to set up micro agro-enterprises (nursery production, sericulture, canning and food processing, saffron, mint and dairy products) in Ghor, Herat and other regions.

OUTPUT 3: Improved Capacity for Applied Research and Extension in Government, Afghan Universities and NGO Partners

- **Capacity Building at MAIL:** Provincial research and extension officials have been working in close collaboration with Project partners in several provinces. MAIL officials are receiving training in Sustainable Livelihoods Analysis, Gender and Poverty Analysis, and Participatory Research.
- **Capacity Building within RALF Projects:** Each project has conducted training activities for the development of its own staff as well as MAIL officials, both in the capital, as well as in the provinces.
- **Capacity Building at Afghan Universities:** The RALF Projects have provided opportunities for practical training of Afghan students and agricultural faculty members at Kabul, Herat, Balkh, Nangarhar, Baghlan and Nangarhar universities.
- **“Lesson-Sharing and Dissemination”** workshops have been held for the benefit of RALF Partners, MAIL officials and the agricultural faculty members of universities.

OUTPUT 4: Communication and Dissemination of the Research Results of RALF Projects

- A **“Communication Strategy”** has been developed for RALF. In order to build the capacity for communication in Afghan institutions, the research results of RALF are being disseminated through the journal publications of MAIL and Afghan universities.

Saffron marketing: prospects and practicalities

The Attraction of Saffron

Saffron, pronounced “Zaafaran” in Dari, Farsi, Pushtu, Arabic and other Middle Eastern languages, is a highly priced spice used in cooking for color and delicate flavoring. It comes from the red stigmas of a flower, *Crocus sativa*, a perennial that grows from a bulb (or, more accurately, a corm). (The flower is pictured below left; the yellow stamens are not saffron and have no value.) Saffron is worth US\$ 250–400 per kilogram and more at the farm level (well above that in 2006 as a poor harvest drove prices up) and, because its production is well suited to conditions in western Afghanistan, it is seen as an excellent potential income source for small- and medium-scale farmers.² There is demand for saffron within Afghanistan, but the market elsewhere is much greater and export potential is considerable in India, Dubai, Europe and the USA. Because the product is light and has a high value per kilo, it can easily and economically be transported from villages to towns and by air to these destinations.

The reason why saffron has such a high value is that a vast amount of labor is required in harvesting and on-farm processing. The flowers are taken from the field in the early morning as soon as they open and are transported to a farmhouse or other location where the stigmas are separated from the blossoms. It takes some 450,000 stigmas to make up a kilogram of saffron and, as a flower has only three stigmas, workers must process 150,000 blossoms to produce that amount. Stigmas are attached to the flowers by yellow filaments called styles (visible in the photo on the right). They, like the stamens, are worthless as spice and many merchants prefer to buy only pure saffron, requiring that the stigmas be separated from the styles, which also has to be done by hand. Finally, the saffron is dried, with careful attention to preserving quality and cleanliness. All this work makes the saffron expensive, and also means that a large number of people, especially women, can find employment in its production. Fortunately, harvesting and processing take place in late autumn and early winter, so saffron production does not have to compete for labor with many other farm activities. The plants also require irrigating but, at times when other crops have little or no need of it, so that, again, saffron does not compete with them for resources.



Photo 1. *Crocus sativa* blooms



Photo 2. Saffron

In spite of saffron’s suitability to western Afghanistan – and also just across the border in Iran, which produces most of the world’s supply – the spice is new to Afghanistan, and both

² The original impetus was a desire to find viable alternatives to opium poppy, and this certainly remains an interest, but this report will look at saffron production and marketing as an enterprise in its own right.

production and marketing have had to begin almost from scratch. The aim of this report is to outline a strategy for promoting Afghan saffron exports. The next section will present data on the markets in Europe and the USA, providing background to the subsequent sections, which will follow the traditional but very practical marketing-management approach and classify strategic considerations under four headings: the product itself, and its distribution, pricing and promotion.

Regarding import regulations and the demands of saffron buyers, more information is provided in this report on the US market than on the European and Indian markets. The reason for this is simply that obtaining information on the European and Indian markets is considerably more difficult than for the US market. The authors hope to provide at least some information on the European and Indian markets later in a revised version of this report. In the meantime, the greater focus on the USA should not be a significant constraint on progress in promoting Afghan saffron. This is because, as will become clear in following sections, the US market offers prices as good as any and US buyers are interested in purchasing as much saffron from Afghanistan as the country is likely to have in the next few years. The overall strategy is not tailored to the USA and is applicable wherever Afghan farmers sell their saffron.

The World Saffron Market

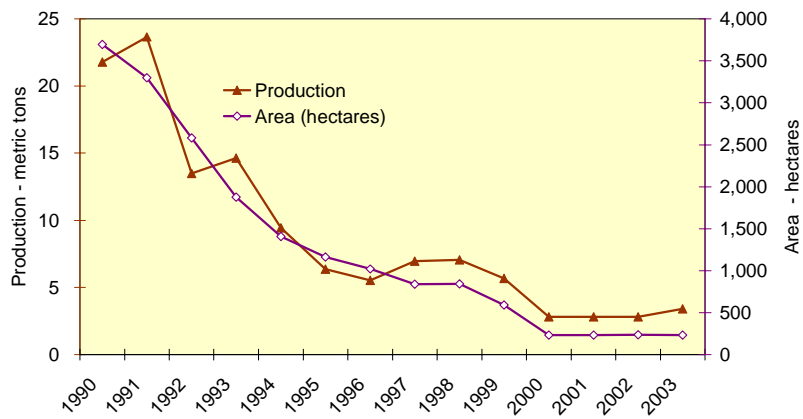
At present, a widespread misapprehension drives the world saffron market and, as will be explained shortly, it is one that has implications for how Afghan saffron might best be promoted. The misunderstanding is that, although Iran is by far the world's largest producer of saffron, with production reaching more than 200 metric tons in a normal year³, the country that is most closely associated with the spice is Spain – in fact, a particular region of Spain, La Mancha. A casual purchaser of saffron on the internet will find Spain and La Mancha mentioned far more often than Iran. The impression is one that suppliers commonly foster by routing saffron from Iran through Spain. Other countries in which saffron has been produced for a long time are India (in Kashmir), Greece, Italy, France and Morocco. China is also developing saffron production now. The authors have not found data on quantities produced in these other countries, although amounts are likely to be small by comparison with Iran.

The following are observations on the saffron market based on data from the EU and the USA:

- ***In Spain, the area planted to saffron and production have fallen considerably since 1991*** (Figure 1). Production was 21.8 metric tons in 1990 and just 3.4 metric tons in 2003, which is between 1% and 2% of the total world production. Yield has increased, so production has fallen less than the area planted. (Data in Figure 1 are from Spain's Ministry of Agriculture, Fisheries and Food, or MAFF.)

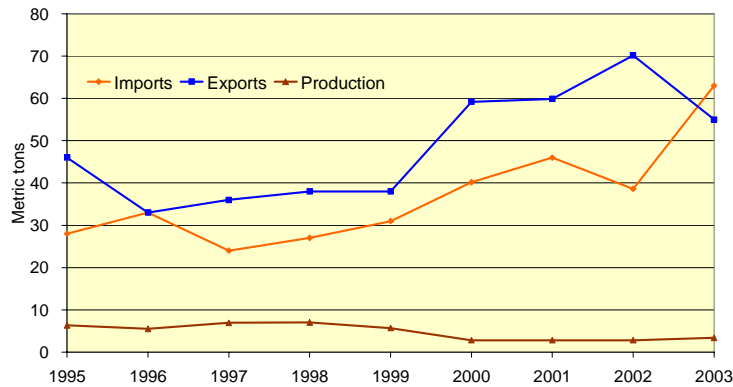
³ A. Mollafilabi, "Production technology and processing of saffron (*Crocus sativus* L.) in Iran." Presentation at the National Workshop on Saffron: Production, Processing, Quality Control and Marketing, Herat, Afghanistan, November 2006.

Figure 1. Spanish Saffron - Production and Area Planted



Data from Ministry of Agriculture, Fisheries and Food (of Spain), "Anuario 2004"

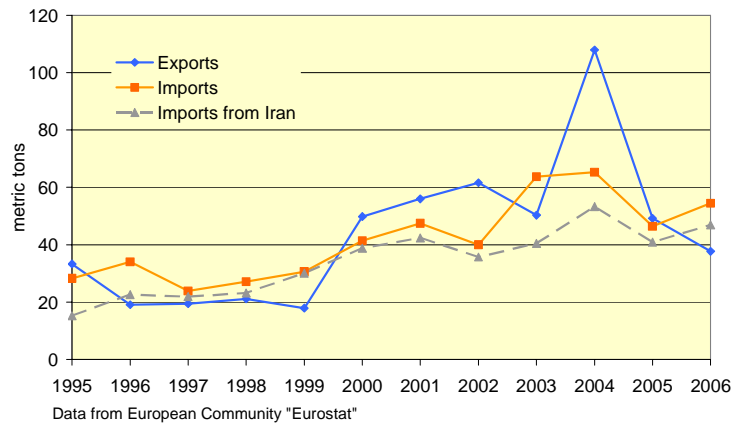
Figure 2. Spanish Saffron - Imports, Exports & Production



Data from Ministry of Agriculture, Fisheries and Food (of Spain), "Anuario 2004"

- In spite of the decline in Spanish production, Spanish exports have risen rather than declined, which has been made possible by imports, which have increased correspondingly.*** (Figures 2, 3 and 4.) In Figure 2, the difference between exports and imports is greater than the volume of production. All three sets of data in this chart are from the Spanish MAFF, so the discrepancy is puzzling. Data in Figures 3 and 4 are from the EU. Note that EU data go up to 2006, whereas Spanish data stop in 2003.

Figure 3. Quantity of Spanish Saffron Imports & Exports - 1995-2006



Data from European Community "Eurostat"

- **Nearly all Spanish imports come from Iran** (Figures 3 and 4). Since 1999, the proportion has been more than 90%. (Data from the EU.)

Figure 4. Total Value of Spanish Saffron Imports & Exports - 1995-2006

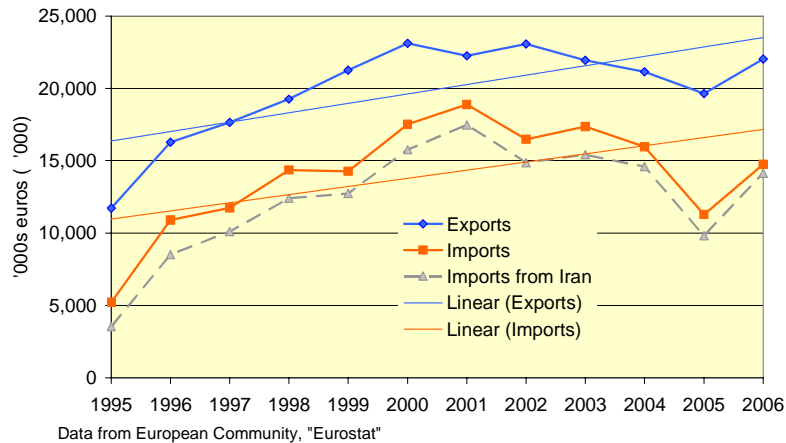


Figure 5. EU 15 Saffron Exporters - Quantity
Average metric tonnage & percent of EU total 1995-2006
Data from European Community, "Eurostat"

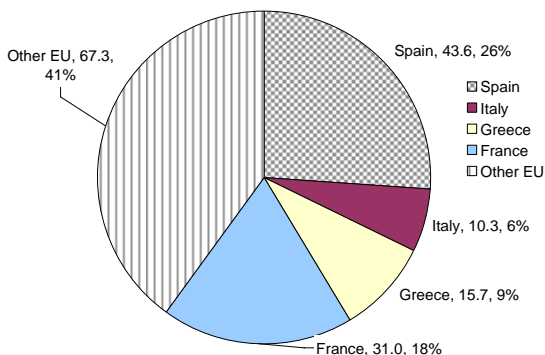
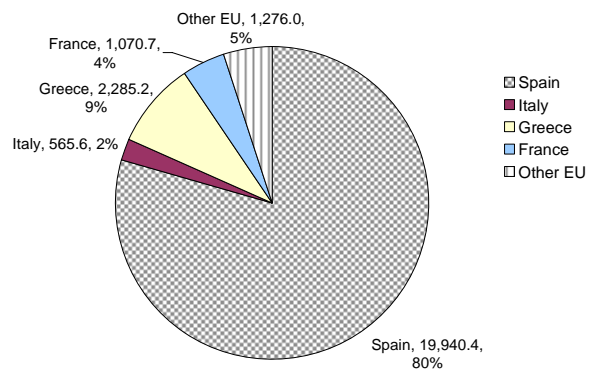


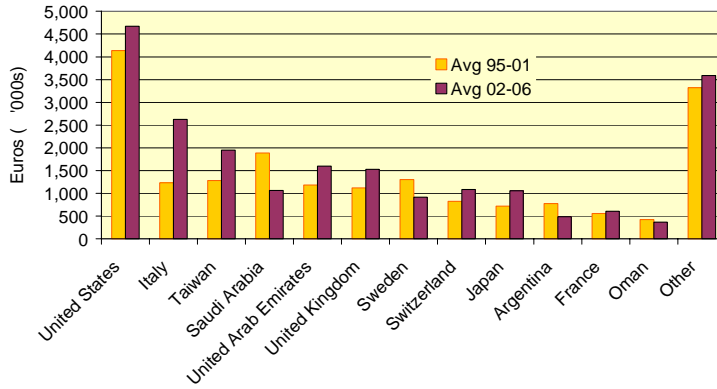
Figure 6. EU 15 Saffron Exporters - Total Value
Average thousands of euros and percent of EU total 1995-2006
Data source: European Community, "Eurostat"



- **Spain accounts for a much larger percentage of EU saffron exports, as measured in value rather than in tons** (Figures 5 and 6. Data from the EU). Over the period 1995 to 2006, Italy, Greece and France combined accounted for 33% of EU exports of saffron in terms of tonnage but only 15% in terms of value, whereas Spain exported just 26% of the EU's volume of saffron but 80% of the total value. Per kilogram, Spain's exports are clearly particularly valuable, either because quality is higher or its reputation is worth more, or both. Either way, these relationships are worth bearing in mind when devising an export strategy for Afghanistan.
- **Spain exports much more saffron to the USA than any other country.** From 1995 to 2001, the top three destinations for Spanish saffron exports were the USA, Saudi Arabia and Taiwan. Over the next 7 years, they were the USA, Italy and Taiwan (Figures 7 and 8. Data from the EU). It is probable that Saudi Arabia did not so much reduce saffron consumption as switch its source to the United Arab Emirates, or UAE, whose share was also up in the later period.

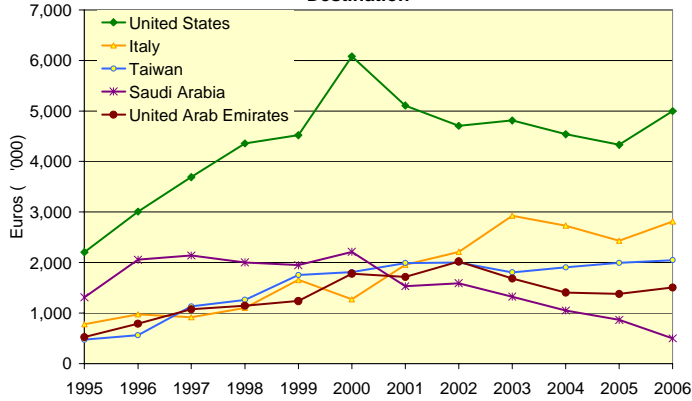
Figure 7. Total Value Spanish Saffron Exports - Top 10 Destinations

(Annual averages 1995-2001 and 2002-2006)



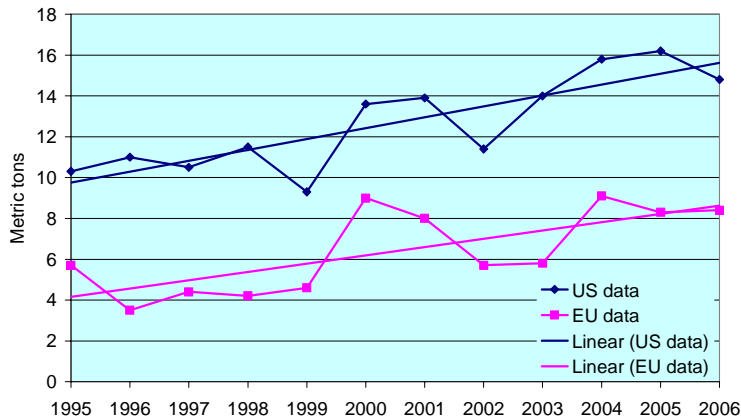
Data from European Community "Eurostat".

Figure 8. Total Value of Spanish Saffron Exports - Trends by Destination



Data from European Community "Eurostat".

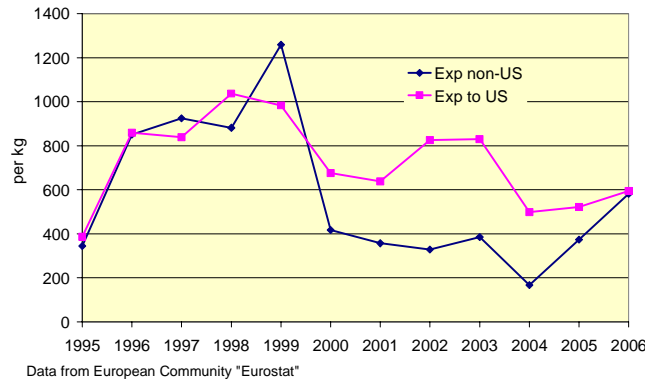
Figure 9. US Saffron Import Quantities - US and EU Data



Data from Department of Commerce, U.S. Census Bureau, Foreign Trade Statistics

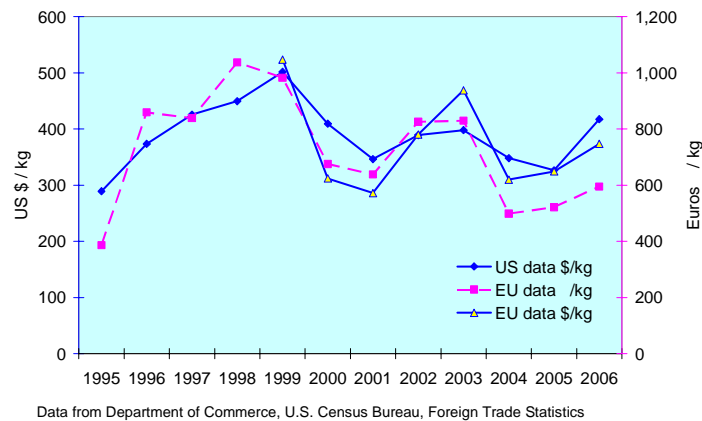
- US data show higher figures for quantities imported than do EU data, but the pattern of year-to-year variation is similar and there is a perceptible upward trend in each.** (Figure 9, data from the US Department of Commerce, US Census Bureau, Foreign Trade Statistics.)

Figure 10. Value per Kilogram of Spanish Saffron Exports, US and non-US



- **The US market is as good or better as that in other countries in terms of price as well as volume, as the value per kilo of Spanish exports to the USA is as high as or better than the average value per kilo of Spanish exports to other countries.** (Figure 10. Data from the EU).

Figure 11. Value per Kilogram of US Saffron Imports - US and EU Data



- **The average value per kilo for saffron imports to the USA has been between US\$ 350 and US\$ 450 in most years according to US data.** EU data show higher average values, from US\$ 600 to US\$ 1,000 in most years since 1999. (Figure 11. Dollar to Euro exchange rates are not available before 1999, when the Euro was first used in bank transactions. Data from US Foreign Trade Statistics.)

The Current Production and Marketing Situation

A handful of Afghan farmers who spent some time in Iran as refugees were the first to plant the crop when they came back to their homes in the western part of Afghanistan. Since then, a number of NGOs, such as DACAAR and Catholic Relief Services, and the government of Afghanistan, have begun to promote saffron, also chiefly in the Herat province in the west. DACAAR has probably worked with the largest number of producers. In 2005, it helped to establish a saffron producers' association in the Pashtun Zarghun district, with 102 members, and provided 53 of them with corm, resulting in 6.5 jeribs of land being planted. (A jerib is one-fifth of a hectare or about half an acre.) Ninety-nine more farmers joined the association in 2006 and it split into three along geographical lines. DACAAR provided corm to 119 farmers that year and they planted 28.2 jeribs. At present, there are around 250 farmers in the three associations in the Pashtun Zarghun district, and women in Pashtun Zarghun South have

now formed a fourth association of their own. The number of farmers producing saffron in other districts is said to be more than 800.

A good yield from a jerib of land once the plants are well established is about 2 kg per jerib, although in the first year yields can be expected to be less. As many fields are new, and the total area planted to saffron is still low, total production is still very modest: around 20 kg in 2006 in Pashtun Zarghun and 120 kg in the Herat Province as a whole. However, prices in 2006 were much higher than normal because yields even in older fields were lower than they normally are, not only in Afghanistan but also in Iran. Farmers earned US\$ 400–450 per kg as opposed to about US\$ 300 per kg in 2005. This is certainly encouraging to farmers and, no doubt, production will continue to grow.

Although saffron production is new to Afghanistan and the market is nearly all outside the country, simply selling the product has not been a problem. With the world's largest producer just across the border, merchants in Herat City can buy from Afghan farmers and then sell in Iran. By this route, Afghan saffron reaches world markets as Iranian saffron and, as the volume of production in Afghanistan is currently insignificant compared with that in Iran, this channel can easily absorb any amount of saffron that Afghanistan can produce in the foreseeable future. However, Afghan producers have not been in a good bargaining position when negotiating prices with traders selling in Iran because they have had no alternative outlet. They would be in a stronger position and could obtain a higher price if they could establish their own links with the world market. The next section provides an overview of the strategy. Subsequent sections consider it in more detail under four headings: the product itself including packaging (the longest section), pricing, distribution and promotion. Throughout, the general concept applies, on which all marketing strategies are based: find out what the customers want and provide it more effectively than competitors.

Marketing Strategy – Overview

There are two main elements to the strategy outlined here, which aims to give Afghan saffron producers the possibility of earning the highest possible prices. The first is to establish a separate identity for Afghan saffron, one that is entirely separate from produce from Iran or any other country, and to couple it with a reputation for high quality. At the moment, in economic terms, Afghan saffron is simply an unbranded commodity and, because buyers⁴ have no particular reason to purchase it in preference to saffron from anywhere else, producers have very little scope for negotiating prices. If Afghan saffron were recognized as special because of its quality, producers could ask for more than buyers pay for saffron from other countries. Afghan saffron is largely unknown at the moment and if producers take care to export only good-quality saffron, spice buyers will learn to appreciate it.

The second element in the strategy is to put producers or, more specifically, their representatives, in direct touch with buyers overseas. Producers would then clearly understand what world market conditions are, and will know who is offering the best prices and how to sell to them. At present, producers sell to local traders and have to trust what they are told, again putting themselves in a poor negotiating position. This is not to suggest that each producer should have his own contacts with foreign buyers, which would be impractical. Producer groups are already organized and a few members with an aptitude for marketing could be given training in how the market operates and how to make contact with buyers. As an ability to communicate in English or some other European language will be necessary, the

⁴ In this report, the term “buyer” generally refers to those who would buy directly from Afghan producers, such as importers, wholesalers, retailers and chefs in restaurants. People who buy small amounts from stores or on the internet are referred to as “final consumers”.

producers are still likely to have to work with intermediaries of some kind, but if the producers know the market themselves, they will be able to ensure that, whoever the intermediaries are, they are working for the producers' benefit and not their own.

Marketing Strategy: The Product and Product Packaging

In appearance, saffron is a simple product, being a single part of a single plant. However, quality can vary considerably and so can prices. In practice, high prices and high quality are not perfectly correlated – some highly priced saffron is of poor quality and the reverse can also be true. The aim of the strategy presented in this report is that high quality should bring high prices for farmers in Herat. Certainly, the most knowledgeable buyers will seek out high-quality saffron and be willing to pay a good price for it. Furthermore, producers who grow only medium- or poor-quality saffron will generally have to look harder for good prices, except perhaps in years when production is unusually low. On the other hand, although the product is simple and its processing involves only drying and the separation of stigmas from styles, pursuing quality requires taking account of several points:

1. Saffron is a delicate spice and its most crucial characteristics of color, taste and aroma can only objectively be measured through testing in laboratories by trained technicians.
2. Although producing saffron is not inherently complicated, good-quality output requires close attention to detail in growing and post-harvest processing.
3. Many consumers and even some buyers do not fully understand what produces good quality and, in particular, they do not know that the styles are useless.
4. As something that is eaten, quality includes food safety considerations associated with cleanliness. The cleanliness issue is, fortunately, minimized by the fact that saffron is only consumed when cooked, but it cannot be ignored and ensuring safety can be turned into a selling point.
5. Some consumers are particularly interested in organically produced saffron. Others are willing to pay more for “fair-trade” produce, which certifies that the producers are receiving a fair price for what they grow. Afghan farmers, as they are just beginning to produce saffron, are well positioned to grow it organically and, because they are organized into producers' groups, probably also fulfill the criteria to qualify as fair-trade producers, but both designations require certification processes that might not be easy to organize.

The next sections will look at how each of these concerns might be addressed, except for the second, on consumer understanding, which will be dealt with later under the heading of Marketing Strategy – Promotion. This section on marketing strategy as it applies to products will end with a few observations on packaging, including labeling.

Saffron's quality characteristics

It does not take a lot of practice to discern good-quality saffron and producers' groups will soon learn which of their members produce high-quality spice and which do not. The important question is how producers can best convince buyers that the saffron coming from Afghanistan is of high quality. There are two ways to do this: one is to send samples to prospective buyers and the other is to have the saffron objectively tested. Some buyers want to have test results, whereas others are most concerned about seeing the saffron for themselves, so it is necessary to pursue both methods.

Little needs to be said about sending samples. The amounts do not have to be large – generally, a few grams. There are three points to make: (1) find out from the buyer what minimum sample size they will accept; (2) do not charge for the sample or shipping – the small cost involved is an investment and part of the cost of doing business; (3) ensure that, when a buyer agrees to purchase on the basis of a sample, the follow-up shipment of saffron is of at least as good quality. Good business relations depend on trust and when buyers find that the quality of a shipment is not as good as the quality of the sample that they received, they are not likely to buy from that source ever again.

Testing needs more explanation. Some governments of saffron-producing countries (e.g. Spain, Iran) have defined standards for their producers. Although these standards may be helpful to those governments themselves – for example, if they have programs to support saffron producers through buying saffron when prices fall below minimum levels – they are not really necessary for marketing purposes. International standards have been defined by the International Standards Office (ISO) based in Switzerland, and it would take time for buyers to learn that they can trust a different set of government standards. (Nevertheless, standards defined by producer groups may be helpful and are mentioned below.) Where the government of the importing country has regulations, these will certainly have to be respected by producers who export, and if there is a conflict between the regulations in the home country and regulations in the importing country, it is the latter that are the more important. Where the USA is concerned, the regulations that affect saffron are fortunately very few, touching on organic produce, labeling and import procedures, which will be described briefly later.

There are two sets of international standards that producer groups need to be aware of: ISO 3632 and HACCP. The HACCP standards will be described later under the heading of food safety. ISO 3632 refers to standards specifically for saffron that are set by the International Standards Office and can be downloaded, after payment, from the ISO web site, www.iso.org. (Prices are denominated in Swiss francs: CHF 56 for specifications and CHF 126 for test methods. As of the time of writing, May 2007, CHF 1.22 = US\$ 1.) In the USA, some wholesalers and retailers are interested in ISO-defined measurements but many are not. Several of the US wholesale or retail buyers who were contacted by the authors were not even aware of them.

ISO standards can be handled in one of two ways. One is actually to obtain certification by the ISO that the organization's standards are being met by producers. The other is simply to adhere to those standards that are most important without actually getting the certification. For the US market, the latter is likely to be all that is necessary. The European market might be more demanding but it is recommended that producers confirm this before working to obtain certification, because the process is time-consuming and expensive. Otherwise, it is much cheaper and easier to have some tests run to find out how the saffron being sold compares with ISO standards, and let prospective buyers know what the results are.

With this latter approach in mind, samples of saffron from a major Herat producer were sent for testing to the Food Science and Human Nutrition Department at Washington State University. Two tests were run, one with styles and one without. The focus here is on those characteristics that determine color, taste and aroma, but the ISO also defines standards with regard to moisture, floral waste and foreign matter. The test results are shown in Table 1. Category I is the highest of the three different grades of saffron that ISO 3632 defines. Differences between the two sets of results illustrate how much the inclusion of the styles brings down quality. The results for the tests on almost pure stigmas indicate that the saffron is of high quality, being well above the minimum for Category I.

Table 1. ISO criteria for Category I (best) saffron and test results* for a saffron sample from Herat

	ISO 3632 Category I	With styles	Stigmas only
Picrocrocine (flavor – bitterness)	70	60.05	88.67
Safranal (aroma)	20–50	25.42	35.03
Crocines (color)	190	141.12	244.195

* Figures show light absorbance at specified wavelengths.

It is not likely that all Afghan saffron will be this good and, if producers offer lower grades at lower prices, it will improve the trust that prospective buyers have for Afghan. To define their grades, producers’ groups can use the three ISO categories. This is where producer-defined grades might come in. Because lab tests are needed to get information on all the characteristics above, strict adherence to ISO standards can be a burden. A practical alternative would be for producers’ groups to introduce a grading system that uses the ISO criteria as a basis but allows visual sorting. Of the three characteristics in Table 1, the one that would allow this is color and this could be handled with a template that any farmer or member of his family could use with a little training. As the test results above show the saffron to be a long way above the minimum standard for ISO’s category I, it may do the best Afghan saffron more justice to add a grade above that, with perhaps a color rating of 230, and calling it, for example, “premium grade”. Laboratory tests would have to be carried out from time to time to ensure that the visual grading system is maintaining reasonable consistency with ISO standards. Below, it is suggested that the MAIL Urdu-Khan Research Station in Herat or the Faculty of Agriculture at University of Herat should have this facility if funds can be found for it.



Growing and processing for good quality

As the focus of this report is not on the agronomics of saffron, the topic will be covered here very briefly, but producing well is such an important element in any marketing strategy that it is worth mentioning the following general guidelines. Organic production raises additional points that are described briefly later.

- Begin with good corm, at least 6 grams in weight and 2.5–3 cm in diameter. This is important not only for producing good stigmas but also for efficiency reasons. Good corms can produce 5 flowers each, poor corm less or none, when yields per corm are poor so are yields per jerib and per investment in fertilizer and the labor used in cultivation. Good corms also generate new corms of good quality, and farmers can

profitably sell surplus corms if they are good but should feed them to livestock if they are not.

- Adhere to growing recommendations, such as:
 - Planting at proper depth and spacing (e.g. 15–20 cm deep and 15 × 20 cm spacing). Seeding rates are also important. In Afghanistan, rates are 1,600–5,000 kg per hectare, sometimes less depending on soil conditions.
 - Adequate irrigation (testing is needed to find rates best adapted to Afghanistan.)
 - Ridges or raised beds for good drainage.
 - Proper fertilization, including the application of animal manure to build up the proportion of organic matter, which is often low in Afghanistan.
 - Mulching to keep down weeds.
- Harvest flowers in a timely manner, which means before 9:00 in the morning on the first day that they open. Quality deteriorates in the sun, and, when the crocuses re-open, the stigmas are exposed to dust.
- Separate stigmas from flowers in a clean environment.
 - Ensure that the place where stigmas are separated from flowers is as free from dust as possible.
 - Ensure that the people who do this work keep their hands clean at all times, washing thoroughly with antibacterial soap or, if water is scarce, using antiseptic gel. (Keeping hands clean is probably more realistic and effective in rural Afghanistan than wearing latex gloves, which have to be ordered from a long way off and may not be changed as often as they should be.)
- Separate the stigmas from the styles, unless buyers do not want this. There are some wholesalers and retailers who prefer the styles to be included when they are not well mixed with the stigmas and are easy to separate out. (See Photo 2, for example, at the beginning of the report.) Because saffron is so expensive, some suppliers are tempted to adulterate it with cheaper material and dye it all red to pass it off as pure. If buyers can see the styles, they know this is unlikely to have happened. They can then separate the styles from the stigmas themselves and sell the saffron under their own labels, confident that it is pure. Some saffron is tied in small bunches by the producers for presentation purposes, which is attractive but takes a lot of labor and producers should ask for a correspondingly higher price (see Photo 3).
- Drying is best done with artificial heat. In Afghanistan, most saffron is currently air-dried, which takes days and almost inevitably results in contamination by dust. Artificial drying takes minutes rather than days and makes it easier to control the moisture level of the saffron – too moist and it will deteriorate, too dry and it will break and reduce weight below what it has to be, losing money for farmers. Electric driers or microwave ovens can be used but, where there are no funds for these or electricity is not available, simple driers heated with propane and especially made for saffron are available. They have recently been introduced in Herat with good results.



Photo 3. Saffron bunches

- Store the saffron in tightly sealed tins. Plastic bags, commonly used now, are very poor containers and should not be used because the aroma seeps through them and the saffron can too easily be exposed to light.



Food safety

That saffron should be safe to eat is an aspect of quality. The chief concern is that Afghan saffron should not carry disease. In practice, consumers are not likely to become ill from saffron because it is used in cooking rather than eaten raw, but there is always the possibility that someone will think it can be eaten without cooking or that a child will get hold of it and eat it out of a jar. Again, there is a set of international standards. They are referred to as HACCP (Hazard Analysis and Critical Control Points) principles and they apply to all food processing. There are seven such principles and, together, they outline a set of procedures. When followed, these indicate (1) that the producer is aware of critical points in processing operations where foreign matter could dangerously contaminate the food; (2) that steps are taken to monitor processing at those points; and (3) that actions have been specified ahead of time to deal with contamination if it arises.⁵

HACCP principles are very simple and practical and are recognized and incorporated into their own standards by a number of government bodies and international organizations, including the ISO, United States Food and Drug Administration (FDA), and the Codex Alimentarius of the United Nations Food and Agriculture Organization and the World Health Organization. Many government bodies certify food-processing operations, including those in other countries that export to them. However, in the case of the USA, such certification is not required for products such as saffron. Nevertheless, it would be prudent for Afghan producers to follow the HACCP principles and document the fact to ensure that their saffron really is safe. As food producers around the world have found, an outbreak of illness resulting from contaminated food results in extremely expensive losses. In the case of Afghan saffron, the chief concern is contamination from fecal matter. Certainly, the application of nightsoil, which farmers in Afghanistan often use as fertilizer, should be absolutely ruled out. However, manure from livestock, which farmers also use and which is permissible, can also carry disease. Experts on food safety could train the producers' groups to apply the HACCP principles and take reasonable precautions.

⁵ The seven HACCP principles are as follows: (1) Conduct a hazard analysis; (2) Determine the critical control points; (3) Establish critical limits; (4) Establish monitoring procedures; (5) Establish corrective actions; (6) Establish verification procedures; (7) Establish record-keeping and documentation procedures.

Organic and fair-trade saffron

Organic. There is increasing interest in organic produce, including saffron, and those farmers in Afghanistan who have not used fertilizer and pesticides for some years are in a good position to take advantage of this fact. In the USA, the Department of Agriculture has regulations under the National Organic Program (NOP) that define what foodstuffs can be marketed as organic. These can be downloaded without cost from www.ams.usda.gov/NOP. Although the standards are set by the USDA, certification itself is carried out by state, non-profit and private for-profit entities that the USDA licenses. Key aspects of the standards are:

- No synthetic fertilizer or pesticide (except for approved list) to be applied for 3 years before the harvested crop.
- No animal manure to be applied within 90 days of harvest where the product to be consumed is not incorporated into the soil (as saffron is not).
- Seed (including corm) must also be organically produced.
- Crop rotation is required. (The corms from which the crocus grows should be dug up and replanted at least every 5–7 years anyway. This requirement means that they should be replanted where saffron has not been grown for at least 1 year.)

These requirements are not complicated but they are also not flexible. One concern is that current guidelines for growing saffron in Afghanistan do not include pesticides but they do call for the application of chemical fertilizer and, where producers plan to be able to export organic produce, they will have to stop doing this and wait 3 years before being in compliance with the regulations. Another concern is associated with the practice of applying animal manure. The rule about not applying it for at least 90 days must be observed to reduce the chance that the saffron will be contaminated with disease-carrying fecal matter. A number of bodies associated with IFOAM (International Federation of Organic Agriculture Movements, www.ifoam.org) and the International Organic Accreditation Service (www.ioas.org) can conduct the certification. (The inspectors' expenses would have to be paid.)⁶

Fair trade. The aim of fair trade standards is to ensure that farmers receive a fair price for their produce. Typically, they must receive at least a specified minimum price and, where they are members of a cooperative or producers' group, it must be democratically run. In addition to this protection of workers, certification also usually requires adherence to certain standards associated with sustainable agriculture. Often, a great deal of documentation is needed. Certification is granted not by governments but NGOs. There are many of these, grouped into a number of umbrella associations of which perhaps the best known is Fair Trade Labeling Organizations International, commonly known as FLO, which is based in Germany (www.fairtrade.net). TransFair USA (www.transfairusa.org), the only certifier of fair-trade products in the USA, is a member of FLO. FLO has both generic and product criteria that must be met. Herbs and spices are among the products for which there are specific criteria, but saffron and Afghanistan are not yet among the spices and countries for which minimum prices are set.

Certification by the producer groups. Certification of organic production or fair trade by producer groups in Afghanistan will not be enough to convince some, or perhaps very many buyers at all, that Afghan saffron merits these designations. However, if it proves difficult to organize the process of certification, either because the certifying entities do not want to be

⁶ The Washington State Department of Agriculture, which is among the 36 certification bodies listed at the IOAS site, has been contacted. It might be willing to conduct certification in Afghanistan if expenses were paid.

responsible for certification in Afghanistan or, in the case of fair trade, because saffron is not a product that the entities cover, the producer groups in Afghanistan could still take useful steps towards gaining respect in these areas. For organic production, as in the case of the HACCP principles and ISO standards, the producer groups could follow an informal but rigorous monitoring of organic practices that are consistent with the regulations by which they wish eventually to be certified. They could then publicize what they are doing on a web site (the web site being part of promotion discussed below). Not all production needs to be organic and farmers should decide for themselves whether they wish to produce organically or not, and rigorous procedures should be observed to keep organic and non-organic produce separate throughout production, processing, and distribution. Similarly, the web site should explain how the saffron is marketed and how farmers are paid, thus indicating that the saffron is fair trade in practical terms even if it has not been certified.

Researching and developing quality

The sections above might seem to suggest that there is no uncertainty about how best to grow and process saffron. Certainly, much is known and people who are experts have much to teach producers. However, there is room for improving our knowledge. For example, assertions are made that corms available in Afghanistan are of inferior quality and better corms should be imported to improve yields and quality. Counter-assertions are made that this is not so. There may also be differences of opinion regarding the best planting date, how often corms should be dug up and replanted, and what precautions, suitable to the resources of Afghan farmers, best promote food safety. These and many other questions are best researched in conditions that most saffron growers in Afghanistan would recognize; currently, this means the Herat Province. The Faculty of Agriculture at the University of Herat and MAIL-Herat each has research facilities and they are the obvious institutions to carry out this work. One or both of them could also have the equipment and training necessary to conduct tests according to ISO standards. Both would have to be funded and proposals to promote saffron development in Afghanistan should include provisions for it.

Packaging and labeling

Ideally, saffron should be packed in containers that are sealed and will keep out light. Tins and dark glass are both good, but tins are lighter to ship. Because saffron is pleasing to the eye, and some assessment of quality can be made visually, retailers often market it in clear glass containers. This is acceptable if the containers are stored in the dark until sold, but consumers who purchase it should be told that they should keep it away from the light or it will deteriorate. Most plastic bags and solid plastic containers are highly unsuitable. Even when they are apparently sealed, you can smell the saffron through them, indicating that the spice is losing its aroma.

When foods are packaged, government regulations state what information must be on the labels and these regulations vary from country to country. In the USA, such regulations are not onerous for spices. The labels should specify:

- The package contents (saffron and its quality classification)
- Any additives (presumably none in the case of saffron)
- Net weight of contents
- Name, address, telephone, e-mail of importer (i.e. who to contact if there is a problem with the saffron)

- A lot number to identify the source of the saffron, as close to origin as possible (to trace the cause of any problem)
- An expiration date (which will vary depending on the type of container).

In the USA, some importers like to receive saffron in bulk and package it themselves in their own containers with their own labels. Others prefer to receive the saffron already packaged so that they do not have to be registered as a packing plant and go through the trouble and expense that registration entails. The easiest way to accommodate both is to have a logo or emblem that designates the saffron as coming from Afghanistan and Herat. This could then be incorporated into the importer's label or put on a separate label on the container. Which approach is taken will depend on negotiation with the importers.

Marketing lower-quality saffron products

Not all the saffron produced by Afghan farmers will be up to the standard of the top-quality grades. There are three ways of selling it:

1. Through those traders that buy Afghan saffron now and sell it through Iran. In this case, the traders will have to be trusted not to market the product with an Afghan identity that will harm the reputation of the country's high-quality product.
2. Directly to foreign buyers as low-quality but pure saffron, again without the Afghan identity or logo attached, and again these buyers will have to be trusted not to associate it with high-quality product.
3. To companies who do not sell spices but products that incorporate saffron in them, such as packaged cooked foods, dyed textiles, and cosmetics.

This latter option is probably the safest but may require amounts that will not be available for some years.

Marketing Strategy – Price

The prices that farmers receive are determined in negotiations that they conduct with the traders to whom they sell. This is a good system, as long as the farmers or their representatives have a clear strategy in mind and are well informed about market conditions. There are at least three possibilities, of which the second seems the most appropriate:

1. Prestige pricing: Set the price at the top end or above to indicate luxury quality. This is a possibility. It works where volume is small (as it is at present in the case of Afghan saffron) and it brings good profits. However, before it is feasible, a reputation has to be established for the brand as much as the product, and Afghan saffron does not yet have this.
2. Value pricing: Provide good quality and set the price to cover costs and make a good profit, but low enough so that customers feel they are getting good value for their money.
3. Penetration pricing: Set the price low enough to attract customers on the basis of price alone, with quality considerations being secondary at best. This strategy is not as profitable as the other two, unless producers have large volumes to sell. This is not recommended for Afghan saffron.

Value pricing amounts to setting prices slightly below the top of the range applicable to the grades that the Afghan farmers are selling. The only real difficulty with this approach in the case of saffron is knowing what the relevant price range is and, as saffron prices appear to be

somewhat erratic, this is where understanding the market becomes important. The following three tables illustrate this. Table 2 shows prices collected on the internet for saffron that is being sold by vendors in the USA. It is difficult to make close comparisons between the prices because there are variations in whether shipping is included, what the packaging is, and saffron quality. However, close comparisons are not needed because, even allowing for these factors, there is a considerable difference between the prices.

Table 2. Saffron prices: US sources on the internet
(US\$/gram. Shipping, packaging and quality sometimes vary)

	Oct– Nov 2006	May 2005	Unit sold*	Supplier location	Saffron source
www.saffron.com	\$ 1.02	\$ 1.27	1 oz	San Francisco, CA	Iran
www.tienda.com	\$ 2.05	\$ 1.57	1 oz	Williamsburg, VA	Spain
www.butcher-packer.com	\$ 1.23	\$ 1.23	1 oz	Detroit, MI	Spain
www.sfherb.com	\$ 2.40	\$ 2.05	1 g	San Francisco, CA	Spain
	\$ 1.17	\$ 1.01	1 oz		
www.bulkfoods.com	\$ 1.30	\$ 1.30	1 oz	Toledo, OH	
	\$ 1.17	\$ 1.17	1 lb		
www.amazon.com	\$ 9.95	\$ 1.57	1 g	Seattle, WA	Spain
www.penzeys.com	\$ 8.46	\$ 8.18	¼ oz	Brookfield, WI	Kashmir
	\$ 4.80	\$ 4.79	¼ oz		Spain
	\$ 6.18	\$ 5.92	¼ oz		
www.purespice.com	\$ 5.15	\$ 5.15	1 g	USA	Spain

* 1 oz = 28.35 g, 1 lb = 435.6 g. Data collected by the author.

Table 3, which refers to prices gathered in Dubai's "Gold Souq" – well known for its saffron traders, tells a similar story, although the general level of prices is clearly lower than in the USA.

Table 3. Saffron prices: retail boutiques in "Gold Souq", Dubai
(UAE Dirhams & US\$ per gram. Prices are negotiable. Taken 15 Nov 2005)

	Description	DH/1g	US\$/1 g*	Source
Shop 1	Red, whole	DH 3.0	\$ 0.82	Iran
Shop 2	Crushed red	DH 1.0	\$ 0.27	Iran
	Mixed red, yellow	DH 5.0	\$ 1.37	Iran
	Red, whole (Khorasan)	DH 3.0	\$ 0.82	Iran
	"Best" (with styles)	DH 6.0	\$ 1.64	Iran
Shop 3	Red, whole	DH 3.5	\$ 0.96	Iran
	"Second quality"	DH 2.0	\$ 0.55	Spain
Shop 4	SAFINTER (sealed box)	DH 4.0	\$ 1.10	Spain
	Red, whole	DH 1.9	\$ 0.52	Iran
Shop 5	Red, whole (Badiiee, Zabihi)	DH 1.4	\$ 0.38	Iran
Shop 6	Red, whole	DH 1.5	\$ 0.41	Iran
	Mixed red, yellow	DH 1.3	\$ 0.36	Iran

* US\$ 1 = 3.65 DH. Data collected by Ali Gohar (then of DACAAR) and the author.

Only occasionally in Dubai was there any packaging, and (with one exception) we were able to inspect the quality, which depended chiefly on the quantity of styles mixed in with the stigmas. The uncertainty in making comparisons in these cases was due to the fact that buyers and sellers bargain before settling on a price. We tried to elicit a realistic price by explaining our research objective but there is no way of knowing if we were always successful. As in the case of the USA prices, there appeared to be a large random element in the pattern. Price should be lower the greater the proportion of styles, but any relationship between price and quality appeared to us to be very rough. Table 4 shows the data behind some of the charts shown earlier: average values per kilogram of saffron imported into the EU 15, three EU members and the USA. As noted when those charts were discussed, the value of Spanish imports is higher than the average value of imports for the EU 15 as a whole, the value per

kilo of Italian imports is even higher and the value of French imports below the average for the EU 15.

Table 4. Value per kilogram of US and some EU saffron imports
(euros and US\$ per kilogram)

	EU 15	Spain	Italy	France	US (EU data)	US (US data)	US (EU data)
						\$	\$
1995	35	184	559	27	387	289	
1996	136	320	676	47	859	373	
1997	148	491	912	86	839	426	
1998	182	530	635	150	1,037	450	
1999	102	466	616	149	983	502	1,048
2000	92	423	543	131	675	409	624
2001	138	397	537	115	638	346	572
2002	177	412	536	90	825	389	781
2003	105	272	407	39	829	398	938
2004	98	244	425	64	499	348	620
2005	54	243	306	127	522	326	649
2006	61	271	236	159	595	418	747

US data from the Department of Commerce, US Census Bureau, Foreign Trade Statistics
EU 15 data from European Community "Eurostat".

Two conclusions follow from the examination of this data:

- Given the kind of variation that exists in retail prices, there are presumably similar differences in the prices that farmers are able to get from the buyers to whom they sell. This means that high quality and a good reputation will not automatically lead to higher prices for Afghan farmers. They must be negotiated by people who understand the market well.
- Notwithstanding the variations just referred to, it seems likely that selling saffron in some countries will bring higher prices than selling in other countries. For farmers to benefit from this fact, it will be good for them and their representatives to know which countries offer the best prospects so that they can focus on those.

These points have implications for how producers and distribution are organized, which is the topic of the next section.

Marketing Strategy – Distribution

Distribution refers to the channels, made up of traders of various kinds (exporters, importers, wholesalers, and retailers), along which saffron is passed by buying and selling until it reaches the final consumer. For farmers to earn the most that they possibly can from their saffron, the distribution channel should be short, meaning that there should be as few intermediaries as possible. In addition, farmers should be able to control as much of the chain themselves as they can. With exports, farmers cannot realistically expect to control distribution channels outside of Afghanistan, but there is no reason why they should not control that part of the distribution channel within the country. At present, because they have no communication themselves with buyers in other countries, they have to sell to traders who do. When demand is good and supply short, those traders have an incentive to keep this information from farmers rather than pass it on to them. Even when farmers are able to learn that conditions are favorable to them, their ability to negotiate is limited because they have not been able to bypass local traders and sell directly overseas.

It has already been pointed out that it would hardly be practical for all producers to have their own foreign contacts. It is not even necessary for each producers' group to have its own contacts. Producers' groups could form an association at the provincial level with leaders elected by the producers' groups so that they are as much in tune as possible with farmers' interests. If donor funding can be found, these leaders could receive training in marketing and, with sufficient funds, visit markets in other countries. Saffron from Herat could be linked to promotion materials with this association, who could register a brand and a logo or emblem that would identify it on saffron containers. The association would assist producers' groups to oversee quality and grading issues.

The provincial association could earn income from fees charged for drying, grading, and packing. It need not take ownership of the saffron itself but could instead act as a broker, putting producers, through their groups, in touch with potential buyers it has found. For this, it could earn a commission on sales. Leaving the final sales decisions at the producer level would help producers to build trust in the association. Also, to avoid any perception of coercion, the project should leave producers free to sell their saffron to whomever they like, bypassing the whole system and going straight to merchants in Herat if they prefer. Producers should voluntarily choose to make use of the provincial association's services because that is the way to earn the highest returns.

Although this may seem a rather elaborate vision, it is one that can be approached step by step. However, there is one very important decision that can be made and adhered to from the outset at no cost, and that is for farmers to maintain control of their saffron for themselves. There are likely to be, if there have not already been, suggestions that one trader or another should have exclusive rights of some kind, such as exporting from Afghanistan or importing to the USA, Europe or some other market. Superficially attractive inducements might be offered, such as a guaranteed price or a guaranteed minimum purchase every year. However, all offers, suggestions or inducements, from any source, for exclusive rights at any point along the distribution chain, should be refused. Wherever the suggestion comes from, although the person or entity making the offer may genuinely be interested in benefiting the saffron growers, their own interests will nevertheless come first. No one will have as strong an incentive to look after the interests of saffron growers as they do themselves.

Marketing Strategy – Promotion

The most important aspect of the promotional strategy is already clear from what has already been said: develop a quality product and offer it at a price that gives value for money. This section focuses on getting the word out that Afghan saffron is available and informing people of its characteristics and appeal.

There are several possibilities:

- A good web site with information about saffron from the Afghan producers' association. (More on this below.)
- Visits to the retailers in Dubai's Gold Souq where saffron is sold. An alternative would be to establish an outlet in the Gold Souq that sells a variety of goods from Afghanistan, including saffron, spreading the cost of maintaining the outlet and increasing the total benefit generated for the country.
- Telephone calls to potential buyers. (E-mails will often be ignored.)

- A brochure with some of the same information that is on the web site, including how to order Afghan saffron, that can be left on visits with retailers or sent to people who are telephoned.
- Exhibits at food fairs such as the Fancy Food Fairs in New York, San Francisco, and Chicago, and their European equivalents. This is an expensive operation and probably not worthwhile until the volume of Afghan saffron production is much larger than it is now.

Consumer understanding of saffron quality

This was mentioned earlier when product quality was discussed. There are two main points for buyers and consumers to understand:

1. Although the impression is commonly given that nearly all saffron, especially good saffron, is grown in Spain, most saffron comes from elsewhere. Furthermore, climate and soil conditions for it are excellent in Afghanistan and Afghan farmers grow it well.
2. The spice is in the red stigmas, not the yellow styles.

The better informed consumers and buyers are on these matters, the more willing they will be to pay well for good quality. The quickest and cheapest way to begin to educate consumers is to establish a good web site. At present, there are at least two for Afghan saffron that have been set up by traders, but the proposal here is for a web site that is for the producers' groups and promotes their saffron in particular. It should have graphics and a user interface of high quality to reflect the high quality of the saffron. Good promotional information would include:

- How to tell good-quality from poor-quality saffron.
- What is done to ensure that Afghan saffron is among the best.
- Information about the area of Afghanistan where the producers are located.
- A few facts about the producers' groups and how they are run, indicating to prospective buyers interested in fair trade that the saffron comes from organizations that they would want to support.
- A few facts about the producers themselves, with photographs of the fields and some of the producers.
- How the saffron can be ordered in wholesale quantities from Afghanistan and which retail outlets on the internet and in Dubai sell it in retail quantities.

As far as quality goes, the issue on which consumers, and even some buyers, might be most confused concerns the impact on value of including the styles with the stigmas. Mixing styles with the stigmas should lower the price of the saffron but, as mentioned earlier, it does not always do so because some buyers do not realize that the styles are of no use and the retailers are sometimes happy not to tell them. The lack of value about styles is one of the facts about which a web site can inform consumers.

Conclusions and Implications

The two main elements of the strategy outlined here are to establish an identity for Afghan saffron based on quality and to ensure that the farmers who produce the saffron are well informed about market prices and can control sales and distribution themselves. Both of these

are consistent with the fundamental marketing concept of finding what consumers want and providing it more efficiently than competitors do. In the saffron market, prices are in practice somewhat erratic, so high quality may not always bring high prices. However, if farmers are well informed about market conditions and in direct contact with buyers in other countries, they will be able to look after their own interests effectively and obtain the best possible prices. The following are the implications of these general points:

- Effective promotion starts with high-quality saffron produced by following expert recommendations both on how it should be grown in the field and on how it should be processed.
- Quality can also be encouraged by training farmers in ISO 3632 standards and food safety (HACCP) principles. An effective grading system would be a good bargaining point when saffron prices are negotiated. Actual certification can be expensive and, before it is obtained, a provincial association controlled by producers could define grades that are consistent with ISO 3632 and HACCP rules and monitor compliance.
- Producing organic saffron and organizing producer groups in a manner consistent with fair trade principles will also increase the appeal of Afghan saffron and the prices paid for it. As in the case of ISO and HACCP principles, operating in compliance with these from the outset and publicizing the fact is worthwhile even if it takes some time to obtain actual certification. Not all production needs to be organic and each farmer should decide individually whether to produce organically or not.
- A good pricing strategy, consistent with other aspects of the approach to promoting Afghan saffron that are outlined here, is “value pricing”. In principle, this means providing a good-quality product and setting the price to cover all costs and a good profit, but low enough so that customers feel they are getting good value for their money. In practice, it means determining what prices are commonly paid on the world market for saffron of quality similar to that produced in Afghanistan and asking for just less than that. Poorer qualities of saffron should be labeled as such and offered at lower prices. The prices that farmers receive should closely reflect the prices that their saffron fetches on the world market.
- The more producers understand market conditions, and the better the links they themselves have with potential buyers, the better they will be able to promote their own interests. They should begin to establish contact between producers and overseas buyers as soon as possible. Contact information for three buyers in the USA who are definitely interested in Afghan saffron is provided in Annex B.
- Because it is not necessary for all farmers to be involved in marketing and contacting overseas buyers, they could delegate the responsibility to a few from among their own number whom they trust. A good practical approach would be for the existing producer groups to form a provincial association that would act on their behalf. As well as making and maintaining contacts with buyers, this association could define and implement the grading system mentioned above. It could be financed through a small commission or levy taken on export sales.
- To foster trust and effectiveness in the producers’ groups and the provincial association, it should not be compulsory for farmers to sell through them. Individual farmers should continue to be permitted to sell to whomever they want so that they sell through the groups and the association only because that way they receive the best possible prices.

- Farmers should store their saffron in air-tight containers such as tins that protect the saffron from direct light.
- A label and emblem or logo should be developed for Afghan saffron and registered in the name of the provincial association. The label and logo should be attached only to the better grades of saffron.
- A web site with a good user interface and quality graphics would be an effective promotional tool for the provincial association and Afghan saffron. It could provide information on identifying quality saffron, explain how Afghan farmers produce and process it to ensure quality, offer interesting facts about the areas in Afghanistan where the saffron is grown, the farmers who grow it and their producers' groups and provincial association. It could also provide links to places on the internet where Afghan saffron can be bought and information on how to order from the provincial association.

Some steps, such as obtaining ISO, organic and fair trade certification, are demanding in terms of time and money. Setting up a web site is much more easily, cheaply and quickly done. Making direct contact with foreign buyers is easier still and should begin as soon as farmers have planted enough saffron to have significant quantities to sell.

This report has provided more information on the USA than India or Europe because of the ease of accessing information about the USA. However, all of the points above are relevant to all markets. For the time being, US buyers, who offer prices at least as good as any in Europe or India, are willing to buy as much saffron as Afghan farmers can supply, and the suggestions in this report are designed to help them derive the maximum possible income from it.

Annex A. Importing into the USA

Importing saffron into the USA is not complicated. There are just three sets of regulations that must be met, both with the US Food and Drug Administration (FDA):

1. Register processing and storage facilities in both Afghanistan and the USA.
2. Provide prior warning of each shipment of saffron to the USA.
3. When the saffron is sent from Afghanistan in packages that will be sold to consumers, they must provide the information mentioned above in the section on packaging and labeling.

Both of the first two procedures should be done online. Advice, as well as the necessary forms, are available from the FDA web site. (There are three booklets available, one on registration, one on keeping records, and one on prior notice. The web site is: www.cfsan.fda.gov/~dms/fsbtbook.html. Click on “Registration and Prior Notice”. The forms that have to be submitted are there too.) These are recent regulations designed to provide information that will make it harder to export deliberately contaminated food to the USA.

Regarding the registering facilities:

- Register all processing and storage facilities in Afghanistan from which saffron is shipped to the USA. (If grading takes place on multiple farms but is all shipped from a central facility in Herat, only the latter must register.) The information requested is straightforward:
 - Name, address(es) (physical location & mailing), telephone number of the foreign facility
 - Name, address, telephone number of foreign facility’s owner
 - Trade names (“doing business as ...”)
 - Name, address, telephone number of the US agent
 - Activity carried out at the facility (“warehouse”, “labeler”, “packer”)
 - Food product category (“29. Spices, flavors, and salts”).
- Register all facilities in the USA to which saffron is shipped, providing similar information. US facilities are probably already registered and their registration number may be needed for prior notice of saffron shipments.

To provide prior notice of imported food:

- Send notice of shipment from 5 days to 4 hours (if by air) before arrival in the USA, with the following information:
 - Name, address, etc. of shipper and importer
 - Identity of product, quantity, lot number
 - Country/countries of production and shipment
 - Shipment information (carrier, arrival time, etc.)

Annex B. Contact Information for Selected US Buyers

Among the saffron buyers contacted, those who expressed the most interest in Afghan saffron were the following, in alphabetical order by last name:

Buddy Born

Bacstrom Import Co. (www.bacstrom.com)

P.O. Box 1047

El Cerrito, CA 94530

USA

Tel. +1 (510) 236-2131

Fax: +1 (510) 236-6402

E-mail info@bacstrom.com

Jonathan Hoffman

Direct Aid International (www.directaidinternational.org),

P.O. Box 394,

Northfield VT 05663

USA

E-mail: hoffman@directaidinternational.org

Juan San Mames

Vanilla, Saffron Imports (www.saffron.com)

949 Valencia St.

San Francisco, CA. 94110

USA

Tel. (415) 648-8990

Fax: (415) 648-2240

E-mail: saffron@saffron.com