

## AFGHANISTAN'S NATIONAL EXPORT STRATEGY 2018-2022

## **SAFFRON SECTOR**

Spicing up Afghan exports







ITC is the joint agency of the World Trade Organization and the United Nations. As part of ITC's mandate of fostering sustainable development through increased trade opportunities, the Chief Economist and Export Strategy section offers a suite of trade-related strategy solutions to maximize the development pay-offs from trade. ITC-facilitated trade development strategies and roadmaps are oriented to the trade objectives of a country or region and can be tailored to high-level economic goals, specific development targets or particular sectors, allowing policymakers to choose their preferred level of engagement.

The views expressed herein do not reflect the official opinion of ITC. Mention of firms, products and product brands does not imply the endorsement of ITC. This document has not been formally edited by ITC.

#### © International Trade Centre 2018

ITC encourages reprints and translations for wider dissemination. Short extracts may be freely reproduced, with due acknowledgement, using the suggestion citation.

For more extensive reprints or translations, please contact ITC, using the online permission request form: http://www.intracen.org/Reproduction-Permission-Request/

The International Trade Centre (ITC)

Street address: ITC, 54-56, rue de Montbrillant, 1202 Geneva, Switzerland

Postal address: ITC Palais des Nations 1211 Geneva, Switzerland

Telephone: + 41-22 730 0111

Postal address: ITC, Palais des Nations, 1211 Geneva, Switzerland

Email: itcreg@intracen.org
Internet: http://www.intracen.org

Layout: Jesús Alés – www.sputnix.es

# AFGHANISTAN NATIONAL EXPORT STRATEGY 2018-2022 SAFFRON SECTOR











#### **ACKNOWLEDGEMENTS**

The Saffron Strategy forms an integral part of Afghanistan's National Export Strategy (NES). It was developed under the aegis of the Islamic Republic of Afghanistan, and the leadership of the Ministry of Industry and Commerce (MoIC) and the Afghanistan Chamber of Commerce and Industry (ACCI), in close collaboration with the Ministry of Agriculture, Irrigation and Livestock (MAIL), the Afghanistan National Standards Authority (ANSA) and the Afghanistan Women Chamber of Commerce and Industry (AWCCI). The strategy builds on the work done by the Saffron Development National Committee and benefited from the contributions of sector stakeholders and associations, who played an important role in the consultative process. This Strategy was elaborated thanks to the technical assistance of the International Trade Centre (ITC) and falls under the framework of the European Union (EU)-funded 'Advancing Afghan Trade: EU Trade Related Assistance' project.

This document reflects the ambitions of the public and private stakeholders who defined the enhancements and future orientations for the sector in view of increasing export performance and social dividends.

#### NOTE TO THE READER

The Afghanistan NES was developed on the basis of a participatory approach, during which over 500 Afghan industry leaders, small business owners, farmers and public sector representatives held consultations to reach consensus on key sector competitiveness issues and priority activities. These inclusive consultations were held throughout the country, including in Mazar-e-Sharif, Herat, Kandahar and Kabul, with participation of stakeholders coming from Nangarhār Province.

Besides in-depth research and value chain analysis, these consultations were complemented by:

- Factory visits where supply chain assessments were carried out to gain further knowledge on key issues such as quality procedures, technical skills, lean management, quality of raw materials, access to markets, etc.
- Interviews with domestic, regional and international buyers to guide the NES with strategic insights and market intelligence as well as buyers' requirements in terms of quality standards, food safety, packaging, buying cycles, distribution channels, prices, etc.
- Donor coordination meetings to identify synergies with ongoing/planned initiatives of development partners so that collaboration can occur during implementation.

In spirit and in action: The NES is aligned with existing national and sector-specific plans and policies and builds on ongoing initiatives in areas related to private sector development, regional integration, investment and economic empowerment of youth and women. Equally importantly, the NES initiative already accommodates budgeting to support implementation of critical pilot activities identified during the design process. This will ensure that impact and momentum are generated from early on, and support further resource mobilization and confidence-building.

The principal outputs of the NES Afghanistan design initiative are endorsed, coherent and comprehensive export Strategy documents with a five-year detailed plan of action (PoA) and implementation management framework. These documents include:

- A main NES document, which contains trade support functional strategies, offering critical support across value chains and acting as enablers for sector development.
- 2. Individual NES priority sector strategies packaged as separate documents but in alignment with the main NES findings and overarching strategic objectives.

#### **NES Afghanistan**

### Main NES document comprising Trade Support Functional Strategies:

- Quality management
- Trade facilitation
- Trade information and promotion
- Skills development
- Business and professional services
- Access to finance

#### Individual NES priority sector documents:

- Saffron
- Fresh fruits and vegetables
- Dried fruits and nuts
- Carpets
- Marble and granite
- Precious stones and jewellery

### **CONTENTS**

Acknowledgements  Note to the reader	iii iv
EXECUTIVE SUMMARY	1
RED GOLD: DISSECTING SAFFRON'S CONTINUED DOMINANCE IN THE GLOBAL SPICES SECTOR	3
THE VERSATILE QUEEN OF SPICES: SAFFRON PRODUCT MAP	3
LEAD PLAYERS AND THEIR MARKET DYNAMICS, PRICING STRUCTURES AND DISTRIBUTION APPROACHES	5
KEY GLOBAL TRENDS	7
STIGMAS FOR PROSPERITY: PLANNING A ROBUST FUTURE FOR AFGHAN SAFFRON	9
A CURRENT VALUE CHAIN WITH HIGH POTENTIAL FOR GROWTH AND SCALABILITY Production of saffron Saffron processing Distribution	9 9 9
A SECTOR HARBOURING MULTIPLE COMPARATIVE ADVANTAGES FOR AFGHANISTAN	12
HIGH INITIAL COSTS AND LONG PROFIT GESTATION ARE BARRIERS TO ENTRY FOR PROSPECTIVE SAFFRON FARMERS	13
A HIGHLY SEASONAL AND LABOUR-INTENSIVE SECTOR (ESPECIALLY FOR WOMEN)	14
PROMISING EXPORT PERFORMANCE OF AFGHAN SAFFRON	15
OVERCOMING HURDLES FOR GROWTH: KEY COMPETITIVENESS CONSTRAINTS	17
ASSESSING AFGHANISTAN'S POSITIONING VIS-À-VIS THE GLOBAL SAFFRON VALUE CHAIN	27
FACTORS DRIVING GROWTH FOR THE AFGHAN SAFFRON VALUE CHAIN	27
Short-term: Compete on quality and cultivate relationships with leading importers, especially in the EU and Middle East  Long-term: capitalize on established brand and advance up the value chain	27 28

MARKET POSITIONING: PREMIUM AND HIGH-QUALITY SEGMENTS	28
Short-term priority markets (1–3 years)	28
Medium-to-long term (+3 years)	32
ACHIEVING THE GOALS:VISION AND STRATEGIC OBJECTIVES	35
VISION	35
Strategic objective 1: Increase production and productivity through improved supply-side conditions.	35
<b>Strategic objective 2:</b> Strengthen the organization of the sector's ecosystem through greater collaboration and efficiency.	37
<b>Strategic objective 3:</b> Spur market penetration and development through integrated quality management, packaging and branding operations.	39
MOVING TO ACTION	41
KEY REQUIREMENTS FOR EFFECTIVE IMPLEMENTATION	41
Establish and operationalize a public and private sector coordinating body and executive secretariat	41
PLAN OF ACTION	43
REFERENCES	53

## **FIGURES**

Figure 1: Afghanistan's saffron export strategy: theory of change	2
Figure 2: World consumption trends, 2007–2016	5
Figure 3: World's top exporters of saffron (2016)	6
Figure 4: World's top importers of saffron, 2016	7
Figure 5: Current value chain	11
Figure 6: Afghan saffron: enabling and dissuading factors	12
Figure 7: Exported value of Afghan saffron, 2005–2016 (US\$ thousands)	15
Figure 8: Top 10 export destinations of Afghan saffron, 2012 (US\$ thousands)	16
Figure 9: Top 10 export destinations of Afghan saffron, 2016 (US\$ thousands)	16
Figure 10: Problem tree – challenges to compete	20
Figure 11: Problem tree – challenges to connect	22
Figure 12: Problem tree – challenges to change	25
Figure 13: Iranian saffron export dynamics	30
Figure 14: Afghanistan exports of spices excluding saffron (2012-2016) in US\$ thousands	34
Figure 15: Future value chain – strategic objective 1	36
Figure 16: Future value chain – strategic objective 2	38
Figure 17: Future value chain – strategic objective 3	40

## **TABLES**

Table 1: Uses of saffron – final concentration of saffron in parts per million in the final product	4
Table 2: Target market: India	29
Table 3: Target market: Europe	31
Table 4: Target market: United States	32

## **BOXES**

Box 1: Saffron in food	4
Box 2: What explains the high price of saffron in global markets?	8
Box 3: Saffron versus opium poppy cultivation	14
Box 4: The role of Afghan women in saffron production	14



#### **ACRONYMS**

#### The following abbreviations are used:

ABA Afghanistan Banks Association

**ACCI** Afghanistan Chamber of Commerce and Industries

**ANSA** Afghanistan National Standards Authority

**ARIA** Agriculture Research Institute of Afghanistan

**AWCCI** Afghanistan Women Chamber of Commerce and Industry

**DAB** Da Afghanistan Bank

**EU** European Union

**ISO** International Organization for Standardization

ITC International Trade Centre

MAIL Ministry of Agriculture, Irrigation and Livestock

**MoCl** Ministry of Commerce and Industries

**MoF** Ministry of Finance

**MoFA** Ministry of Foreign Affairs

**MoHE** Ministry of Higher Education

**NES** National Export Strategy

**PoA** Plan of Action

**SMEs** Small and medium-sized enterprises

**SPS** Sanitary and Phytosanitary

**UAE** United Arab Emirates

**UNIDO** United Nations Industrial Development Organization

**USAID** United States Agency for International Development



## **EXECUTIVE SUMMARY**

The Afghan adage, 'drop by drop a river is made' holds especially true for the saffron sector. Although labour-intensive to produce, with a long wait between planting and harvesting, saffron offers ample rewards for those who invest in its production; kilo for kilo, saffron is the highest-value spice in the world.

While saffron production in Afghanistan dates back more than 100 years, cultivation remained marginal until a few decades ago. Saffron is experiencing a revival in the country for a number of reasons. First, the high value that it commands in the international market bolsters its attractiveness because it has a high value-to-volume ratio, making it easy and profitable to export. Second, agronomic and climatic conditions make Afghanistan an ideal location to grow high-quality saffron. The distinct attractiveness of Afghan saffron has been validated on numerous occasions, most recently in 2016, when Afghan saffron was ranked first out of 30 competing regions at the International Taste and Quality Institute of Brussels.

From the perspective of socioeconomic development, the high labour requirements of the saffron industry offer employment opportunities in both peak and off-peak seasons (especially for women). Additionally, the high profitability of saffron provides incentives for farmers to cultivate it instead of opium. As a result of these factors, there is wide consensus among leaders in the Afghan public and private sectors, as well as the international development community, that there are significant economic and social benefits to increased saffron production in Afghanistan. In this regard, the Government has embarked in a five-year national plan for saffron development, led by MAIL.

At present, the saffron sector's export potential is constrained by supply-side challenges in Afghanistan's business environment as well as difficulties penetrating new markets. To overcome these hurdles, improvements are needed across the value chain in areas ranging from planting techniques to harvesting methods to packaging.

Accordingly, the Strategy aims to achieve the following impact, with the overarching goal of strengthening Afghan saffron's value proposition to international buyers:

- Increase saffron exports in terms of volume and value
- Gradual migration to the production of high-quality saffron from medium/low-quality saffron
- Increase income and socioeconomic benefits to actors across the value chain
- Position Afghan saffron as a prized product with a recognizable and lasting brand in international markets.

This Strategy is driven by the following overall vision:



To achieve this vision, the Strategy focuses on three strategic objectives.

#### **Strategic objective 1:** Increase production and productivity through improved supply-side conditions.

This strategic objective consists of progressively professionalizing and standardizing both farming and processing practices to achieve larger-scale production while being rigorous and systematic in managing issues related to quality. It is also about encouraging structural change by facilitating the purchase of additional inputs (land, buildings), allowing for adjustment and economies of scale.

#### **Strategic objective 2:** Strengthen the organization of the sector's ecosystem through greater collaboration and efficiency.

This strategic objective will focus on how coordination and institutional support can be enhanced between the various actors involved in the value chain, including farmers, intermediaries, exporters, researchers and other actors. Success in this area will be achieved through improved sector governance, institutional strengthening and empowered sector associations, with particular focus on women-led organizations. Moreover, the strategy will also support the government's ongoing efforts to expand countrywide the cultivation and harvest of saffron through the 'Five Years National Saffron Development Program'.

## **Strategic objective 3:** Spur market penetration and development through integrated quality management, packaging and branding operations.

The aim of this objective is to build on the historical but fragile achievements of Afghan saffron to cement its premium reputation in international markets. This can be done by supporting an integrated approach through which quality procedures, packaging equipment and branding strategies are bundled together to best promote and commercialize Afghanistan's unique offering. As the last line of defence in protecting the reputation of Afghan saffron, institutions that test quality will need to be supported.

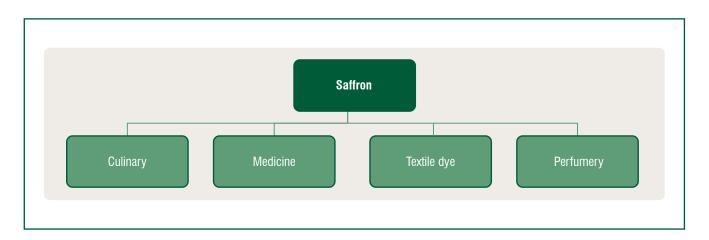
Finally, this component of the Strategy will focus on building the capacity of select enterprises to modernize their brand and thereby appeal to a larger pool of potential buyers, in addition to developing the analytical ability to identify and adapt to dynamic global trends.

Figure 1: Afghanistan's saffron export strategy: theory of change

· Increased saffron exports in terms of volumes and value • Gradual migration to the standardization and certification of quality saffron production IMPACT • Increased income and socio-economic benefits to actors across the value chain, afforded by the growth in production and exports • Positioning of Afghan saffron as a highly prized product commanding a lasting brand in international marketst **Vision** Saffron: spicing up STRATEGIC OBJECTIVES Afghan exports K 2. Strengthen the 3. Spur market organization of the sector's penetration and eco-system through greater 1. Increase production and development through productivity through collaboration and integrated quality improved supply-side efficiency and management, packaging conditions appropriate skills and branding operations upgrading STRATEGIC THRUSTS **Enabling strong** Improving socio-Increasing absolute market linkages economic situation with the tight volumes, while Differentiating via of farmers, global distribution especially women improving quality robust brand channels workers levels management IMPACT A high potential sector requiring broad support across the value chain Compete Connect Change High prices and low availability of corm limit and · Weak ability of enterprises Lack of extension services tailored to the secto to connect with foreign Insufficient investment in development, dissemination SITUATION ANALYSIS Underdeveloped marketing · Small-scale saffron production difficult to of Afghan saffron in and practical implementation achieve economies of scale international markets of sector- focused research Low productivity levels Weak organization among Limited access to credit Weak packaging and quality producers and limited Insufficient support services services provided to targeting women throughout the value chain Limited coordination and dialogue among value chain

## RED GOLD: DISSECTING SAFFRON'S CONTINUED DOMINANCE IN THE GLOBAL SPICES SECTOR

#### THE VERSATILE QUEEN OF SPICES: SAFFRON PRODUCT MAP



Saffron is used in an ever-increasing number of applications and industries and it is likely that the full potential of saffron is far from understood. At present, there are four primary applications of saffron worth mentioning here (with more detail provided below). Saffron is used as: a cooking spice and an herbal remedy, and in textile dyeing and perfumery.

Food industry: Saffron enjoys a coveted and highly valued status in the culinary world. It is widely used as a seasoning in European/Mediterranean, Middle Eastern, North African and Asian cuisines. Saffron is used as an herb and a spice as well as a flavouring ingredient. It is also increasingly used as an alternative to chemical additives, especially in western markets.

Medicine: Saffron has been used in traditional medicine in Persia, Egypt and Europe for millenniums. In the age of modern medicine, pharmaceutical firms are researching the potential of saffron as a health supplement. A recent United Nations Industrial Development Organization (UNIDO) report summarizes the medicinal benefits of saffron as follows:

There is some evidence that saffron may have anti-cancer effects and may help lower cholesterol and triglycerides. Saffron is also sometimes used to help with certain conditions, such as baldness. Its effect on strengthening male fertility is also known. In addition, it has some positive effects on amyotrophic lateral sclerosis disease.<sup>1</sup>

**Textile dye:** Saffron is used as a fabric dye, primarily in Asian countries such as India and China. Although not particularly cost-effective or stable (with colours fluctuating over time), the popularity of saffron as a dye stems from the status it conveys, a trait that endures to the present day.

**Perfumery:** The attractive quality of saffron's complex aroma has also been recognized by the perfumery world, although this is not a significant market segment yet.

<sup>1.—</sup> UNIDO (2014). Saffron Industry Value Chain Development in Iran: Diagnostic Study Report. Available from https://open.unido.org/api/documents/4672742/download/Saffron%20Industry%20Value%20 Chain%20Development%20In%20Islamic%20Republic%20of%20Iran%20-%20Diagnostic%20Study%20Report...



Photo: ITC

#### Box 1: Saffron in food

Saffron is used as a culinary seasoning and to colour cottage cheese, chicken and meat, rice, mayonnaise, liquors and cordials. It is also used in specialty breads, cakes, confectionaries and Mughlai dishes. Saffron is also used as a perfume in cosmetics.

In medicine, saffron is used in fevers, melancholia, and enlargement of liver and spleen. In Ayurvedic medicine it is used to heal arthritis, impotence and infertility. It has a wide range of uses in Chinese and Tibetan medicines.

Source: Spices Board of India.

Table 1 indicates the different use of saffron.

Table 1: Uses of saffron - final concentration of saffron in parts per million in the final product

	Uses of saffron	Saffron powder	Saffron extract
1	Baked goods	10	1.9–14.0
2	Non-alcoholic beverages	1.3	1.3 to 7.5
3	Ice-cream	_	1.3 to 9
4	Meats	260	_
5	Alcoholic beverages	200	_
6	Condiments		50

Source: Sampathu, S.R. and others (1984).

## LEAD PLAYERS AND THEIR MARKET DYNAMICS, PRICING STRUCTURES AND DISTRIBUTION APPROACHES

The global market size of the saffron sector was US\$213 million in 2016 (imports). While saffron's exports in value have continuously increased since 2013, the exported quantity has decreased since 2014. This indicates an increase in saffron prices, which is partly caused by the exchange rate fluctuations faced by the Islamic Republic of Iran, which is the greatest producer of saffron worldwide.

Although the Islamic Republic of Iran produces more than 90% of the world's saffron, it only accounts for 40% of global exports. This is due to the influence of prestigious re-exporters such as Spain, France and Italy, which add value to Iranian bulk imports and then resell the saffron at a higher price. Countries such as Spain, Italy and France all produce saffron; however, their domestic production is marginal compared with the quantities that they export.

While Afghan saffron is a new entrant in the global market, Afghanistan became one of the largest exporters of saffron in 2016. Based on its remarkable growth rate of 36% annually between 2012 and 2016, Afghanistan could be a serious competitor against other major exporters with much lower growth rates. A new entrant and fast-growing exporter of saffron is Hong Kong (China), which marked an exported value of US\$5.2 million in 2016 and export growth of 123% between 2012 and 2016.



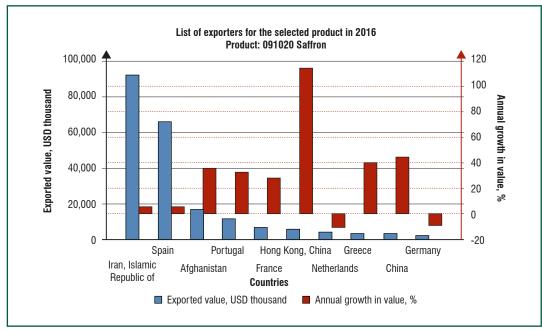
Photo: By Safa Daneshvar (Own work) [CC BY-SA 3.0 (https-creativecommons.org\_licenses\_by-sa\_3.0)], via Wikimedia Commons.

**World Consumption Trends** 6,000 350,000 300,000 5,000 250,000 4,000 200,000 3,000 150,000 2,000 100,000 1,000 50,000 2008 2009 2010 2011 2012 2013 2014 2015 2016 ■ World Consumption (USD Millions) Quantity (Tons)

Figure 2: World consumption trends, 2007-2016

Source: ITC Trade Map.

Figure 3: World's top exporters of saffron (2016)



Source: ITC Trade Map.

Islamic Republic of Iran: Approximately 90% of the world's saffron is produced in the Islamic Republic of Iran<sup>2</sup> and there is a high correlation between the volume of Iranian saffron exports and the overall increase in saffron exports in the world. Although currency fluctuations in recent years have affected the dollar value of overall exports, the Islamic Republic of Iran remains the global leader in terms of both volume and exported value of saffron. Most Iranian saffron is exported in bulk and then packaged, marketed and distributed through established trade networks of re-exporters. Few of the 120 Iranian saffron processing and packaging enterprises are exporters, as most limit their focus to supplying the domestic market. The majority of Iranian exporting companies use very basic packaging, which requires repackaging afterwards by re-exporters according to the final export destination.

Growth drivers

• Limited proficiency in packaging, branding and distribution of non-bulk forms
• Capable and experienced sector in terms of production capabilities

• Cretain quality and sanitary and

phytosanitary (SPS) issues persist

· Political tensions affecting trade

relationships

Spain: Spain is currently positioned as the second-largest global exporter of saffron, with a total recorded value of saffron exports reaching US\$66 million in 2016. Global trade statistics do not distinguish between domestically produced exports and re-exports, and Spain's position as the second-largest saffron exporter is undoubtedly tied to its position as the world's largest *importer* of saffron. Over half of all Iranian saffron exports (56%) made their way to Spain in 2016. Imported saffron is not only consumed domestically but is also further processed, re-packaged and re-exported with high-end branding and quality assurances.



- Highly proficient in repackaging and re-exporting
- Sophisticated grading and quality standards have led to a strong brand
- · Developed trade channels
- Gradually declining production owing to rises in the cost of production structure (wages)

India: After the Islamic Republic of Iran, India ranks as the second-largest producer of saffron, with the spice cultivated primarily in the Kashmir region. As a saffron exporter, though, India's performance is less commanding; it is only ranked twelfth among global saffron exporters. With a spice-loving population that tops 1 billion, India's impressive production levels are still insufficient to meet domestic demand. To satisfy this demand, US\$14.9 million in saffron was imported to India in 2016, making it the world's fourth-largest importer. This indicates that India predominantly imports for consumption and not for re-exporting, unlike other major saffron exporters.

2.- *Ibid*., p. 1.

Large domestic market

Spanish / Italian firms

· Joint venture initiatives with



- Large domestic market
- · Investment and institutional capacities
- · Private sector interest
- Increasing domestic demand limits exports, as production is largely consumed domestically

Italy: Italy is the second-largest European exporter of saffron after Spain. Like Spain, it has a rich heritage of saffron production that continues to the present day, driven by high demand for the spice in Italian kitchens. Also like Spain, Italy has recognized the profit-generating opportunities in re-exporting saffron. It is the second-largest importer after Spain, with an unknown (though likely substantial) portion of that import volume undergoing value added processing and rebranding, followed by re-export.



- Investment and institutional capacities
- · Developed trade channels
- Production is progressively decreasing

Greece: Another key player in the European saffron trade is Greece. For several years Greece's saffron exports were damaged by an economic crisis and poor yields but it has since reversed these negative trends. Greece is now the world's third-largest producer of saffron and eighth-largest exporter, with significant export growth recorded over the last five years.



European re-exporters: Portugal, the Netherlands, Germany, Switzerland, Austria and the United Kingdom of Great Britain and Northern Ireland are not saffron producers but this has not prevented them from operating as major re-exporters and end users. Anecdotal evidence suggests that approximately 95% of the saffron branded and exported by European countries is supplied by the Islamic Republic of Iran.<sup>3</sup>

#### **KEY GLOBAL TRENDS**

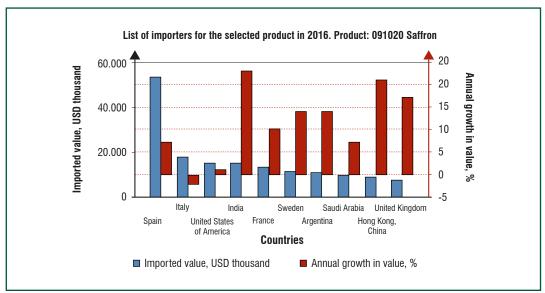
#### Global demand is increasing

Global imports of saffron grew 7% annually between 2012 and 2016, indicating that the industry has long-term sustainable growth potential. Most of the current leading importers in Europe appear enthusiastic about importing ever-greater quantities of saffron for the demonstrated profits generated from re-exports. Turkey, the United Arab Emirates (UAE) and Hong Kong (China) have also recognized the profit potential of saffron processing and re-export and are increasing their import volumes accordingly.

In South Asia, strong growth in saffron demand is coming from the fourth-largest saffron importer, India. India's explosive economic growth has made saffron accessible for an ever-increasing number of middle- and high-income households. The result has been a 23% annual increase in demand during the past five years.

3.- Ibid., p. 3.





Source: ITC Trade Map.

Other fast-growing economies such as Argentina, Saudi Arabia, Kuwait and China have contributed to the increased worldwide demand for saffron. Fast-paced growth in the global south has meant more saffron in more kitchens in more countries, with the trend likely to continue. With high levels of demand assured for years to come, future increases in Afghan saffron production will be quickly absorbed by the global market.

## Branding and distribution channels strongly controlled by Italy and Spain, while the regional market is controlled by the Islamic Republic of Iran

The main value of the world's saffron harvest is captured by re-exporters such as Spain, France and Italy, which have sophisticated, well-established packaging methods and distribution channels. The latter applies as well to the Islamic Republic of Iran, which maintains well-established trade networks. For emerging producer nations such as Afghanistan, it remains a challenge finding a niche in the market independent of the existing distribution channels controlled by re-exporters.

## Re-exports are increasing based on growing worldwide demand for high-quality saffron

The UAE is a significant re-exporter of imported saffron, along with Spain, Turkey, Portugal, the United States of America, the Netherlands, Germany, Switzerland, Austria and the United Kingdom, among others. Some of these countries do not produce saffron at all (as is the case with the UAE), while others such as Spain are producers, consumers and re-exporters. The level of profitability in saffron re-exports is a function of strategic geographic location, sophistication of packaging methods, creative branding and strong market links.

## High per capita retail prices are expected to remain stable in the long term

World saffron prices at wholesale and retail level range from US\$1,100 to US\$11,000 per kilo, depending on the quality of the saffron and the sales market.<sup>4</sup> Kilo for kilo, it is the most expensive spice in the world, a status that has led industry insiders to refer to saffron as 'red gold'. Price trends are gravitating upward, a phenomenon that has motivated exporters to increase the volume of exports in recent years.

#### Box 2: What explains the high price of saffron in global markets?

Saffron is a highly labour-intensive crop, especially during the harvesting stage of the value chain. Industry research has not yet identified a reliable way to remove the thread-like stigmas from the saffron flower using automation. As a result, among both developed and developing producer nations, the harvesting process is undertaken by hand. As labour costs in Europe have risen, production has been increasingly pushed to developing countries.

Another reason for the high price point of saffron is that global demand for saffron has been increasing at a greater pace than supply. Even increased saffron yields per acre—achieved through

improved growing and harvesting methods—have not been sufficient to meet this rising demand. Part of the reason for rising demand is an increase in the use of saffron in niche segments, including pharmaceuticals and cosmetics. Marketing and business development activities of lead firms in the sector have also contributed to growing awareness of the uses and benefits of saffron, thereby attracting new consumers. Finally, higher incomes in China, India and other sizeable, fast-growing economies have resulted in more households that can afford to use saffron on a regular basis.

<sup>4.–</sup> Afghanistan Public Policy Research Organization (2011). Gender and the Agricultural Innovation System in Rural Afghanistan: Barriers and Bridges. Available from: https://reliefweb.int/sites/reliefweb.int/files/resources/Full%20Report\_46.pdf.

## STIGMAS FOR PROSPERITY: PLANNING A ROBUST FUTURE FOR AFGHAN SAFFRON

## A CURRENT VALUE CHAIN WITH HIGH POTENTIAL FOR GROWTH AND SCALABILITY

#### PRODUCTION OF SAFFRON

Saffron production starts with field preparations; one heavy tilling is required to prepare each plot for planting. Following the tilling, saffron farmers will use between 20 and 100 tons of fertilizer per hectare to prime the fields. Typically, this step is performed in autumn or winter in anticipation of planting the following year. The time window for planting saffron corms starts at the first half of June and lasts until late summer. A rough guideline for planting is 50 corms per square metre.

The irrigation phase lasts from beginning of October to May, when the provision of water spurs the growth of the saffron plants and directly impacts the volume of flower blossoming. Notably, during winter, the rain and snow water can be used for irrigation. Harvesting begins roughly 10 to 25 days after initial irrigation, taking place from October to November. Weeding is particularly important after the harvesting stage and is a labour-intensive task.

The harvesting period is the most labour-intensive step in saffron production, as saffron flowers have a 48-hour lifespan. Ideally, field workers will begin picking flowers early in the morning, as soon as the flowers blossom. The substantial cost of labour during harvesting is a major contributing factor to saffron's high global prices: 150,000–170,000 flowers are required to produce a single kilogram of saffron.

The main production inputs include:

 Corms (also commonly referred to as 'bulbs' or 'saffron onions'): a one-jerib (0.2 hectare) plot will require 500 kg to 800 kg of corms, costing between US\$3 and US\$4 per kg.<sup>5</sup>

- Water: minimal amount required, during the irrigation phase only.
- Plots: optimal soil for saffron cultivation is sandy loam rich in calcium, with high organic content.
- Ammonia fertilizers: quality of fertilizer directly impacts yields.
- Nitrate fertilizers: preferably organic.
- Other fertilizers: traditionally animal manure.
- Drying equipment: used to dry stigmas after separation from flowers.
- Packaging material: necessary for transportation and marketing, preferably airtight.

High-quality corms are often imported from neighbouring countries, as domestic supply varies in quality due to lack of input control, although this situation seems to be improving thanks to increase availability of domestic corm in the country. Saffron farmers are especially attentive to corm size, as it is a significant indicator of future productivity. Farmers also prefer imported ammonia fertilizers rather than domestic brands due to similar concerns about quality. Electrical drying equipment needed during the postharvest, processing phase is available but scarce in some regions because most of these machines are imported. Packaging materials are also largely imported.

#### SAFFRON PROCESSING

While harvesting is ongoing, the harvested saffron flowers are stored for a short period in cool, shaded storage areas. The flowers are stacked no deeper than 10 cm, to prevent crushing of the flowers and damage to the valuable stigmas.

The flowers are then transported to processing facilities where the stigma is carefully separated from the flower. After separation, stigmas are dried through air-drying (the traditional method) or by using electronic driers and

<sup>5.—</sup> Afghanistan Public Policy Research Organization (2010). Value Chain Governance and Gender: Saffron Production in Afghanistan. Available from http://appro.org.af/wp-content/uploads/2017/03/131206754-Value-Chain-Governance-and-Gender-Saffron-Production-in-Afghanistan.pdf.



Photo: (CC BY-NC-ND 2.0) World Bank Photo Collection @flickr.

dehydrators. Air-drying can take up to a week to complete, and as a result machine-assisted drying –with processing times measured in minutes, rather than days – has become the preferred method.

The final step of the process is sorting, in which the dried stigmas are graded based on colour, odour, length and shape. Samples of fully processed saffron are sent to laboratories for quality testing. Only saffron passing a certain quality standard is designated for branding and marketing. As domestic and international end users are sensitive to taste and quality, quality testing laboratories are crucial for the future success of Afghan saffron.

#### DISTRIBUTION

#### Domestic market

In 2008, there were approximately 15 traders<sup>6</sup> who distributed Afghan saffron to domestic consumers and retailers. In 2017, there were approximately 43 companies<sup>7</sup>, while it is estimated that there were more than 30 traders of saffron, Domestically, Afghan traders and consumers have adopted the grading terminology of their Iranian neighbours. The grade of sargol, which literally translates from Persian to 'head of the flower', denotes the best quality. Saffron has a cherished place in Afghan homes, where it is used as a tea

for special occasions as well as a spice in the culinary arts. It retails at about US\$1,500 per kilogram.<sup>8</sup> Due to the high price, though, most demand comes from high-end restaurants and hotels.

#### International market

Exporters usually demand samples from processors for quality checking with foreign buyers. They store and sort the goods for the international market and sometimes even retest Afghan saffron to make sure that the product meets international quality standards. In 2016, Afghanistan exported US\$17 million of saffron to international markets. Major destinations were India (US\$14 million), France (US\$1.2 million), Saudi Arabia (US\$1.2 million), the United States of American (US\$238,000) and Bahrain (US\$110,000).9 Notably, informal trade of Afghan saffron reaches the Iranian market, where it is labelled as Iranian, and thus a large amount of Afghan exports of this product goes unreported.

In the last several years, Afghan saffron has attracted more and more attention in the European high-end market, based on its unique taste and high quality. This trend indicates remarkable future export opportunities for Afghan saffron, as long as the reputation of the Afghan saffron brand can be protected through the implementation of quality control measures. As Afghan saffron has managed to make its way to different markets, different dynamics and requirements must be taken into account by exporters. More efforts to strengthen market development and penetration are required.

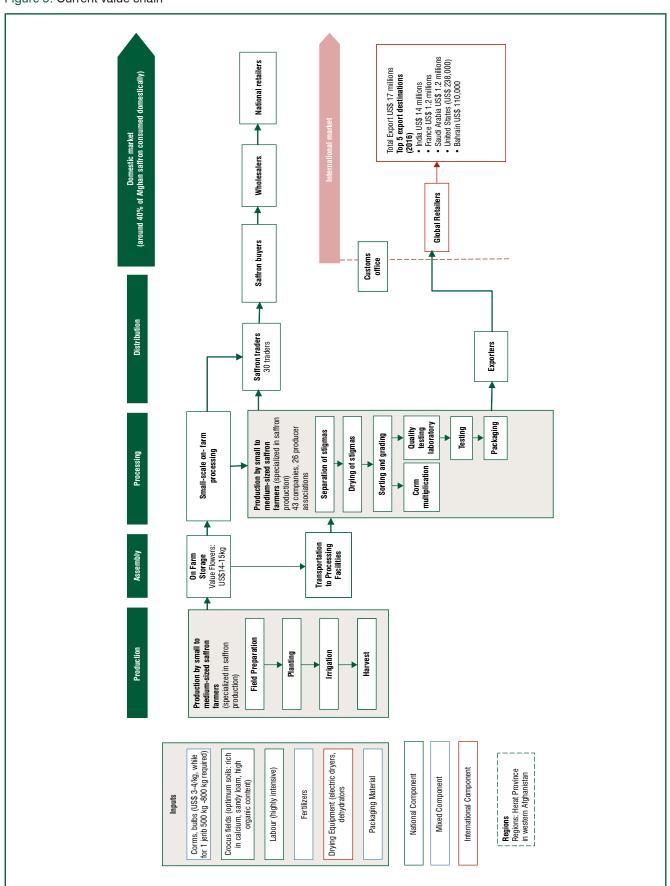
<sup>6.–</sup> USAID (2010). Afghanistan Agricultural Finance Market Research. Washington, D.C., p. 123.

<sup>7.–</sup> Ghafoory, Besmellah and Yuksei, Isahn (2017). Competitive Strategy in Afghanistan's Saffron Sector, Proceedings of 9th European Business Research Conference 7 - 8 September 2017, Hotel Intercontinental, Madrid, Spain ISBN: 978-1-925488-43-2. Available from: https://wbiworldconpro.com/uploads/madrid-spain-conference-september-2017/economics/1504157616.pdf

<sup>8.—</sup> Afghanistan, Ministry of Counter Narcotics (2015). Afghanistan Drug Price Monitoring Monthly Report, September. Ministry of Counter Narcotics, Islamic Republic of Afghanistan and United Nations Office on Drugs and Crime. Kabul. Available from http://mcn.gov.af/Content/files/ Afghanistan%20Price%20Monitoring%20September%20%202015.pdf.

<sup>9.-</sup> Based on Comtrade mirror data

Figure 5: Current value chain



## A SECTOR HARBOURING MULTIPLE COMPARATIVE ADVANTAGES FOR AFGHANISTAN

Figure 6 reveals the key comparative advantages of saffron production in Afghanistan. Saffron benefits from stable high prices; growing demand in international markets; high resistance to extreme temperatures, diseases and irregular supply of inputs; and is relatively easy to handle and transport. Saffron's high value-to-weight ratio is especially appealing for Afghan traders, as it opens up air transport as a viable, cost-effective shipping option.

In terms of social benefits, saffron production is highly labour-intensive, with women capturing a high share of labour-related income. Even in culturally conservative Afghanistan, there is the perception that the detail-oriented work involved in saffron crop maintenance and harvesting/processing is especially suitable for female workers. Additionally, saffron is

harvested in autumn, after the harvesting period of other local crops. The result is high availability of seasonal workers who are able to boost their annual income during a period where they may otherwise be idle.

Another social benefit is saffron's ability to compete with opium in terms of income generation. In a country where the crime of opium production is rarely prosecuted, a farmer must have economic incentives to pivot away from this illicit narcotic. The proven profit-generating ability of saffron cultivation provides this incentive.

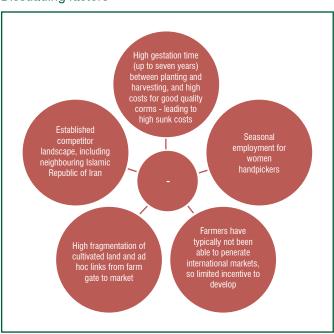
On the market side, Afghan saffron is highly regarded among international spice connoisseurs and has consistently received high rankings when compared with the saffron of other world producers.

Figure 6: Afghan saffron: enabling and dissuading factors

#### **Enabling factors**

#### Resistant to inputs such as Stable and substitute for water high prices in international Relatively easy ample available and handling equipment requirements Afghan saffron High potential is highly for providing regarded in employment international

#### Dissuading factors



With European saffron-producing countries like Spain, Greece and Italy experiencing difficulty finding cost-effective labour options, Afghanistan may be able to fill the gap created by their declining output. Afghanistan has a strong surplus of readily available labour, especially when it comes to capable female workers.

With all factors taken into consideration, the business case for growing saffron in Afghanistan is strong. The Ministry of Agriculture estimates that the Afghan saffron industry could reach a value between US\$200 million and US\$300 million. However, a number of recent developments point to favourable growth prospects:

- Saffron production has reached 31 provinces<sup>10</sup> (out of 34 total), from just one province a decade ago.
- For the third year in a row, the International Taste and Quality Institute in Brussels, Belgium, certified Afghan saffron as one of the world's best.<sup>11</sup>
- The area under saffron cultivation has increased to more than 5,200 hectares in 2017, exhibiting a steady rise over the last several years.<sup>12</sup>
- MAIL is currently planning the deployment of a largescale training programme aimed at saffron farmers.

10.- MAIL.

11.— International Taste and Quality Institute (2013). Afghan saffron company ranked 1st by International Taste and Quality Institute, 22 June. Available from www.itqi.com/en/about-itqi/press-archives/afghan-saffroncompany-superior-taste-award-2013/.

12.- Ministry of Agriculture.



Photo: ITC

## HIGH INITIAL COSTS AND LONG PROFIT GESTATION ARE BARRIERS TO ENTRY FOR PROSPECTIVE SAFFRON FARMERS

At present, engaging in saffron cultivation in Afghanistan is restricted as a result of the high capital requirements. At the initial stage, farmers must have sufficient capital available to purchase enough saffron corms to populate a plot. With demand for corms high (and increasing every year), this can require a sizeable investment. Once the corms are purchased and planted, a saffron farmer must have enough savings, financial backing or other sources of income to wait nearly two years for the saffron plants to blossom in sufficient quantities to harvest. Maximum output is only achieved after several years tending to the same plot of saffron plants. The first harvest season will generate zero revenue for the saffron farmer. New research results shows that using new appropriate technics, it is possible to increase saffron production up to 30 - 40 kilos per hectare during a period of 4 years (6 to 8 kilos/year).

Once a farmer has secured the initial capital to begin saffron cultivation, operating costs are minimal. Although saffron production is labour-intensive, it is also highly seasonal and requires minimal investment in machinery. Most activities tending the plants can be carried out manually, with a high degree of attention necessary only during the first year after planting. The typical life cycle of a saffron plant is seven years in total.

Besides labour, there are additional inputs involved in cultivation, which include fertilizer, fungicide and water. Fortunately, saffron has a low water requirement, an especially critical factor for Afghanistan where irrigated land is scarce. Estimated annual costs for these items are US\$90 per *jerib* (US\$450 per hectare).

While saffron is a highly profitable crop in the long term, significant returns are only obtained in the medium term. Profitability is generally achieved only after the third year of production, as output from production increases. Maximum yields are achieved between the third and fifth year of production.

In Afghanistan, where personal savings are minimal and access to finance is scarce, the capital requirements for saffron production are a significant barrier to entry. To date, this has limited saffron production to male landholders who have already accrued some degree of wealth or who are able to access the wealth of immediate family members.



Photo: ITC

#### Box 3: Saffron versus opium poppy cultivation

Saffron production is not new to Afghanistan, as there are historical testimonies indicating the country cultivated it at least 2,000 years ago, particularly in Herat Province. However, it is only 30 years ago that saffron started being grown in the country for trial purposes. In the early 1990s, saffron production was mainly undertaken by returnees from the Islamic Republic of Iran who reentered Afghanistan bringing saffron corms and work experience in Iranian saffron fields. In the early 2000s, saffron production started blooming as a result of the end of the civil war and the efforts of both Government and development partners, who observed

good results and high returns in trials. Notably, saffron cultivation is being encouraged through corm distribution, giving rise to the idea that it can be an economically viable alternative to poppy production and a more effective policy than burning poppy fields.

As is explained in subsequent sections, several factors account for the narrow scalability of saffron production vis-à-vis poppy cultivation. One of the main reasons is that for saffron income to be relatively higher than opium income, farmers must wait until the third year of cultivation.

## A HIGHLY SEASONAL AND LABOUR-INTENSIVE SECTOR (ESPECIALLY FOR WOMEN)

Over the last decade, saffron cultivation has steadily spread across Afghanistan. In Herat Province, Afghanistan's saffron production hub, it is estimated that more than 11,000 farmers are involved in cultivating roughly 5,200 hectares of saffron plots.<sup>13</sup>

Aside from the year-round work of farmers tending to their saffron plots, the harvesting of the saffron flowers between October and November each year requires an enormous mobilization of labour. The saffron flowers must be picked within their 48-hour lifespan to prevent damage to the valuable stigmas contained within, and should ideally be picked within hours of blooming at sunrise. The flowers

must then be taken to a processing facility where the three thread-like stigmas in each flower are delicately removed. The work is not finished until the stigmas are sorted and packaged, preferably in airtight containers. In aggregate, harvesting and processing each saffron plot requires 20-30 days of intensive labour.

One kilogram of saffron –roughly 450,000 stigmas – demands approximately 40 hours of labour. Estimates indicate workers pick on average 10 kg of saffron flowers per day, while earning roughly AFN 25 (US\$0.38) per kg. or US\$4 to US\$6 per day. Importantly, the timing of the saffron harvest does not create any opportunity costs for seasonal workers. As saffron is the final harvest before winter sets in, labourers who commit themselves to it would likely have few other income-generating opportunities at that time of year.

13.- Ministry of Agriculture

#### Box 4: The role of Afghan women in saffron production

Afghan women play a critical role in the saffron value chain, particularly in the harvesting and processing stages of production. It is estimated that 80% of activities in the production of Afghan saffron are undertaken by women. In part, the heavy involvement of women in the saffron harvest is explained by the low wages that female workers are willing to accept. While the wages may be low, the enticement of cash payments is enough to mobilize the female populations of saffron-producing communities. For these women, it may be their last opportunity to contribute to household income before the unforgiving Afghan winter sets in.

To date, Afghan women's role in saffron production has been largely limited to the manual labour required for harvesting and postharvest processing. There are promising signs, though, that these gender barriers in the saffron sector are gradually breaking down. Women's saffron producer associations exist today, a fact that would have seemed inconceivable in the not-so-distant past. These associations have provided spaces for women to share experiences and know-how, and will hopefully contribute to more women serving in more prominent roles in the Afghan saffron value chain.

#### PROMISING EXPORT PERFORMANCE OF AFGHAN SAFFRON

Prior to 2001, Afghan production of saffron was minimal, with export figures at or close to zero. While the condition of the saffron sector in 2001 may have appeared dismal, the foundation for future success was already in place. Afghan refugees with experience in the Iranian saffron sector had returned to Herat Province in the early 1990s and had started cultivating their own distinctive brand of saffron. By the late 1990s, this nascent community of saffron farmers was receiving various forms of support from international development agencies that recognized the sector's potential.

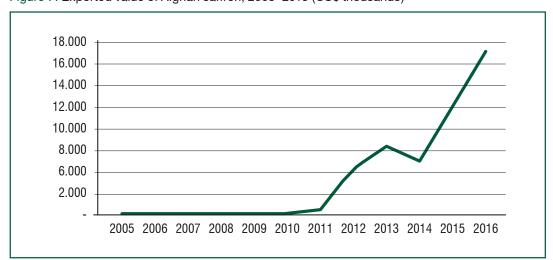
The export of Afghan saffron to Europe and North America – impossible under the Taliban – became a reality in the mid-2000s as production levels grew. After the first shipments of Afghan saffron reached Western markets, the reputation of Afghan saffron steadily grew as a result of its unique flavour. Since then, the exported value of Afghan saffron has kept growing and reached US\$ 17 million in 2016. This resulted from steep export growth of 36% annually in the last five years. The growth was supported by export diversification and access to new markets in Europe, the Middle East and Asia.

Afghanistan's export basket was valued at US\$421 million in 2016.<sup>15</sup> Among traditional export products such as dried and fresh fruits and vegetables, saffron ranked fifth in the export basket with an exported share of 5% in 2016. Looking at the export basket's composition in 2008, saffron did not appear as one of Afghanistan's most exported products. The comparison between the two years again highlights the strong growth of Afghan saffron exports in a short period.

When Afghan saffron exports started to grow rapidly, the majority of the product reached Italy in 2012. Other first receivers of Afghan saffron were the United Arab Emirates, Germany and the United States in the same year. Within only five years, India became the greatest importer of Afghan saffron, followed by European countries and Saudi Arabia in 2016. The exported value also jumped from US\$4.6 million in 2012 to US\$17 million in 2016<sup>16</sup>. This shows the high ability and potential of Afghan saffron to quickly penetrate and establish reputation in new export destinations based on its premium quality and unique taste. Notably, Italian imports of Afghan saffron show a remarkable decrease, owing to issues related to SPS, and the quality and traceability of Afghan production.

14.- Based on Comtrade mirror data.

Figure 7: Exported value of Afghan saffron, 2005-2016 (US\$ thousands)

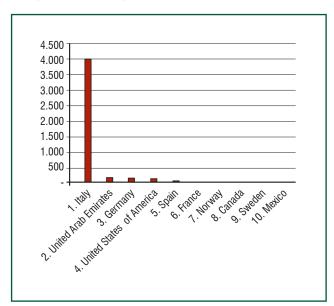


Source: ITC Trade Map. Based on Comtrade mirror data

<sup>15.-</sup> Based on Comtrade mirror data.

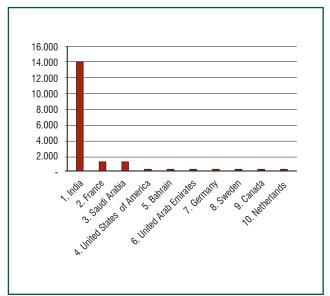
<sup>16.-</sup> Based on Comtrade mirror data

Figure 8: Top 10 export destinations of Afghan saffron, 2012 (US\$ thousands)



Source: ITC Trade Map.

Figure 9: Top 10 export destinations of Afghan saffron, 2016 (US\$ thousands)



Source: ITC Trade Map.



Photo: ITC

## OVERCOMING HURDLES FOR GROWTH: KEY COMPETITIVENESS CONSTRAINTS

#### Key issues constraining the sector's ability to compete, connect and change

The following section analyses sector challenges across three dimensions: firm capabilities; institutional and trade support; and national environment, policy and regulations.

**Compete:** Issues limiting the sector's capacity to compete in national and foreign markets. This includes challenges related to access to inputs, productivity, quality management, national infrastructure and compliance with standards, among others.

**Connect:** Issues restraining connectivity to suppliers, markets and clients. This dimension includes challenges related to market

information, marketing, trade promotion, branding and trade agreements, among others.

**Change:** Issues limiting the sector's capacity to change, innovate and tap into emerging trends. This dimension relates to challenges related to access to trained/skilled labour, intellectual property protection, institutional support to innovate, investment promotion and protection, corporate social responsibility, and youth and women employment, among other issues.

#### Compete

The competitiveness of the Afghan saffron industry is constrained by its limited ability to achieve economies of scale. Moreover, despite Afghan saffron's international reputation for quality, the majority of producers have not been certified by the International Organization for Standardization (ISO) (ISO 3632-1:2011 and ISO 3632-2:2010). The sales prospects of Afghan saffron traders are further diminished by non-standard packaging, which decreases the product's appeal in international markets.

#### High prices and low availability of corms limit new entrants

The rising price of corms is a critical barrier to entry for Afghan farmers interested in engaging in saffron production. The relatively small number of Afghan saffron farmers, in turn, prevents the sector as a whole from achieving economies of scale.

Following a period when saffron corms were imported (and in many cases, smuggled) almost exclusively from the Islamic Republic of Iran, the Afghan saffron sector was able to reach a stage where corms could be produced domestically. The total supply of saffron corms from domestic and foreign sources (including corms provided by international development agencies) remains insufficient to meet demand among Afghan farmers. The natural consequence is high prices for saffron corms in Afghanistan, which can be as much as 30% higher than in neighbouring Islamic Republic of Iran. The cross-border price discrepancy for this

key input places Afghan producers at a severe competitive disadvantage vis-à-vis Iranian saffron enterprises.

In Afghanistan, the cost of planting saffron corm is estimated to be around US\$2,000<sup>17</sup> per *jerib* (half acre) of land, (cost calculated using an estimate of 500kg of corms per acre), an expensive investment for most Afghan farmers. The high prices of saffron corms have caused some Afghan saffron farmers to focus on corm production, a development that may increase the capacity of the sector in the long term.

Value chain segment	Inputs/production
Severity	• • • • 0
PoA reference	Activities 2.4.1 to 2.4.4

#### Economies of scale are difficult to achieve due to small-scale saffron production

Saffron cultivation in Afghanistan is characteristically undertaken on small plots between 1.5 and 2 *jeribs*<sup>18</sup> (0.3 to 0.4 hectares). Moreover, saffron cultivation is usually undertaken alongside other crops such as vegetables or fruits. The instinct of Afghan farmers to hedge risk is one of the main reasons behind the small scale of production. The expensive initial investment required for saffron production, along with

<sup>17.–</sup> Afghanistan Public Policy Research Organization (2010). *Value Chain Governance and Gender: Saffron Production in Afghanistan*. Available from http://appro.org.af/wp-content/uploads/2017/03/131206754-Value-Chain-Governance-and-Gender-Saffron-Production-in-Afghanistan.pdf.

<sup>18.–</sup> World Bank (2011). *Understanding Gender in Agricultural Value Chains: the Cases of Grapes/Raisins, Almonds and Saffron in Afghanistan*. Washington D.C.

a long wait (typically three years) to reach the investment break-even point, leads farmers to diversify production with other crops.

Furthermore, the perennial nature of the saffron plant means that once a plot has been dedicated to saffron, it cannot be used to 'rotate in' other seasonal crops. Even when a saffron field may appear inactive, the bulbs are still lie dormant beneath the surface. The consequence is that increased saffron production can only be achieved by opening up more land to its cultivation, rather than by looking for more efficient crop rotation systems.

Value chain segment	Production
Severity	● ● ● ○ ○
PoA reference	Activities 1.2.1 to 1.2.5

#### Poor farming practices lead to low productivity

As saffron is still a relatively new crop in Afghanistan, efforts need to be made to elevate the technical expertise of saffron farmers. Particularly, training is needed to help Afghan farmers recognize optimal bulb weight and size at planting, as well as introducing adequate spacing between plants. Training in pest and disease control would also be enormously beneficial to the sector, as saffron plants are vulnerable to insects, worms and animals, as well as some fungal diseases.

Value chain segment	Production
Severity	$\bullet$ $\bullet$ $\bullet$ $\circ$ $\circ$
PoA reference	Activities 1.1.1, 1.1.2, 2.1.4, and 2.1.5

#### Incentives to cultivate other crops, especially opium, are higher

Saffron cultivation has been strongly advocated by the Afghan Government and its development partners, such as the EU and the United Kingdom, as an economically viable and legal alternative to opium production.

Despite the best efforts of these entities, several factors can explain the relatively higher preference among farmers to cultivate other crops, particularly opium poppy. While opium provides near-term profits (and often even credit assistance in the form of advance payments from buyers), saffron cultivation is characterized by a longer-term period for investment return that typically spans several years (with zero revenue in the first year).

Another risk factor for saffron producers (compared with opium farming) is difficulty connecting to international buyers. While the price of saffron may be high in official reports and publications, this does not necessarily mean that Afghan saffron traders are able to access the buyers who are willing to pay premium prices for premium saffron.

The risk for saffron traders of selling their product below market prices has likely resulted in a situation where farmers are paid less than expected for their saffron yields. In addition, concerns from farmers regarding the marketability of produced saffron is a hindering factor that favours the production of poppy. While saffron exporters struggle to connect with international buyers, opium traders directly contact farmers and they even provide them with substantial support for growing poppy, including credit assistance. Finally, Herat farmers struggle with pressures from insurgents to switch saffron production for poppy cultivation.

Value chain segment	Production
Severity	$\bullet$ $\bullet$ $\bullet$ $\circ$
PoA reference	Activities 1.3.1 to 1.3.5, 2.2.1, 2.2.2, 3.4.1, 3.4.2

#### Weak packaging capacity reduces the market price and limits market-entry

The limited capacity of packaging services is partly explained by the lack of packaging equipment and materials available, which in turn restrains the capacity of firms to ship consignments to overseas markets and reduces the market price of the final product. Purchasing packaging equipment is a prohibitively costly investment for producers given the current small scale of production.

Weak marketing skills among producers and insufficient access to market intelligence are also factors that weaken the sales prospects of Afghan saffron traders. The limited understanding of international market regulations regarding proper packaging – such as the International Standards For Phytosanitary Measures 15 packaging standards – can impact the volume of imports to highly regulated markets like the EU. The unprofessional packaging of Afghan saffron also decreases its attractiveness to potential buyers in the domestic market, leaving it vulnerable to competition from imported Iranian saffron.

Value chain segment	Marketing/distribution
Severity	$\bullet$ $\bullet$ $\bullet$ $\circ$
PoA reference	Activities 1.2.2, 1.2.4, 3.2.1 to 3.2.4, 3.3.2, 3.3.4, 3.3.5

#### Weak ability to ensure the quality of saffron is a barrier to export to highly regulated markets

Providing credible assurances of the quality of Afghan saffron is a prerequisite to enter highly regulated markets such as the Netherlands, United States, Australia and Italy. The current shortcomings related to quality control in the Afghan saffron sector exist at both firm level and Government level.

At the enterprise level, irregular quality at the production level is explained by low awareness among producers



Photo: Hand processing saffron (CC BY-NC-ND 2.0) World Bank Photo Collection @flickr.

regarding international standards and the irregular quality of saffron corms. Despite these problems, some producers grow outstanding saffron. Both domestic and imported corms vary in quality. Inexperienced saffron farmers are susceptible to the allure of lower cost, lower quality corms because they lack sufficient training to grade the corms and recognize a bad sales proposition.

At the processing stage, traditional methods for drying saffron – exposure to the open air and charcoal-fuelled ovens – are still being used, which degrades the quality of the saffron. Long periods spent drying exposes the saffron to contaminating agents like dust and sand. The low uptake of improved methods of drying, such as electric driers and microwave ovens, is due to the limited (and highly irregular) access to electricity across the country. Saffron processing centres with laboratory conditions for drying and sorting could drastically improve quality but the construction of such centres has not yet attracted the interest of investors.

When it comes to the regulatory framework within Afghanistan, the Afghan Government has little to no capacity to effectively regulate the quality of exports. Quality certificates for saffron are issued by an agency under MoCl but samples are provided by the traders themselves, with no random sampling. Anecdotal evidence suggests that many Afghan saffron traders have learned the hard way about the importance of quality control – when they find their shipments being rejected at EU border control points. Insufficient testing facilities and trained technicians available to objectively measure key saffron attributes such as colour, taste and aroma are major challenges for quality assurance.

Value chain segment	All segments
Severity	• • • •
PoA reference	Activities 1.1.1 to 1.1.3, 2.1.4, 2.1.5, 3.1.1 to 3.1.7, 3.3.4, 3.3.5

Figure 10: Problem tree - challenges to compete regulations for No standard processing production Weak capacity to provide quality compliance (institutional-level) assurance and food safety technicians to objectively measure prevents entrance to interested markets such as Netherlands, United States, Australia, France, Spain and Italy saffron's characteristics testing facilities and trained Weak capability to ensure quality of saffron Insufficient produced nation of knowledge on technical issues related Low level/dissemito proper drying of stigmas Saffron mainly dried by traditional methods, which exposes it to more contaminants Low uptake of upgraded technologies enforced system of barcodes to Production of «fake» saffron-Lack of an prevent fraud Compete: Low levels of production and weak ability to ensure quality diminishes the competitiveness of Afghan requirements for importing plant materials and reliance on certificates provided by country of origin practices result in saffron quality not marketable in first-tier countries Lack of specific (enterprise-level) production and among producers regarding international standards Inadequate postharvest awareness Irregular quality at the production level(institu-tional-level) training of farmers to enable them to identify good quality Insufficient Irregular quality of corms understanding/ low technical knowledge related to packaging approaches for international knowledge about sorting and grading saffron Weak packaging capacity reduces the market price and limits market entry markets Poor Low Domestic supply of corm varies in quality localized investment in Production is too small for packaging consignments to international markets Lack of packaging equipment for organizing High cost/ low quality packaging produce packaging demanded by High cost of industrial packaging machines to saffron in international markets Western markets Lack of capital to buy saffron harvest from farmers crops, e.g. opium poppy, are higher Incentives to cultivate other higher cost of a saffron bulb vis-a-vis an opium poppy seed Relatively growing saffron with full production realized in the third year opium poppy are more maturation period required for Medium-term immediate than for saffron Returns on Small plot areas makes investment in items like capacity-buil-ding difficult Weak organization among producers are pressuring Herat farmers to switch to growing poppy instead of saffron Insurgents Insufficient/ inadequate extension Poor farming management practices lead to lower productivity groups, Need for adaptation of training materials for farmers capacity-buil-ding provided to producers on best farming management literacy levels among producer Limited Insufficient practices Often corm is provided to farmers by org., without proper use of land for other crops) production does not allow the Land issues Aggravated by difficult lease of land, particularly for women for women (saffron Small plot areas of production, lack of specialization in saffron Costs related to initial purchasing of bulbs are high services – compliant with Islamic beliefs- are needed Difficult access to loans Saffron-specific financial High costs of importing corms and bulbs Strong demand has pushed an increase in corm prices artificial High prices and low availability of corm limit new entrants Current corm banks cannot farmers' demand meet

#### Connect

Afghan saffron, despite outstanding performances at prominent spice tasting events, continues to have low visibility in international markets. Explanatory factors include the weak ability of enterprises to connect with foreign buyers, and as yet unsuccessful efforts to build an Afghan brand for saffron in overseas markets. In addition, value chain actors are not adequately connecting with each other.

#### Afghan companies struggle to create business connections with international buyers

Afghan saffron enterprises lack the skills and knowledge to market their products abroad. Limited market intelligence support hinders the ability of Afghan saffron traders to identify export opportunities.

Apart from weak formal export support provided by public and private sector institutions, existing producer associations are also failing to provide expected market connections and market intelligence to members. Most information is provided by individual firms and may or not be vetted and accurate. Further dissemination of information on market dynamics, pricing structures and marketing methods is required. More efforts are also needed to publicize the benefits and tariff preferences accorded by bilateral and preferential trade agreements, such as the EU's Generalized Scheme of Preferences. These special preferences afforded to Afghanistan should (in theory) give Afghan saffron traders a price advantage vis-à-vis their competitors.

Finally, Afghan saffron companies have low participation rates in relevant trade fairs such as Gulfood Dubai. To overcome all of these weaknesses, Afghan saffron traders require tailored services to help them identify and connect with business partners in target international markets.

Value chain segment	Marketing/distribution
Severity	
PoA reference	Activities 3.3.1 to 3.3.6

#### Underdeveloped marketing of Afghan saffron in international markets

One of the primary reasons that Afghan saffron enterprises continue to struggle attracting recognition in international markets is that a portion of Afghanistan's saffron is marketed abroad as an Iranian product. Commonly, Iranian merchants smuggle saffron corms to farmers in Afghanistan for saffron production. After the valuable saffron stigmas are harvested, they are sent to the Islamic Republic of Iran to be further processed and packaged. The saffron is labelled as an Iranian product and then exported to Europe and other markets.

It should also be noted that many Afghan saffron traders also complain of the opposite scenario plaguing the sector; lower-quality Iranian saffron being smuggled into Afghanistan, mixed with Afghan saffron, and then sold under the label of Afghan saffron. Both types of adulteration, by both Afghan and Iranian saffron traders, weaken the position of the Afghan saffron sector as a whole. Corruption and inefficiencies at the Afghan/Iranian border allow for seemingly effortless smuggling of saffron between the two countries.

Value chain segment	Marketing/distribution
Severity	• • • • ○
PoA reference	Activities 1.2.2, 1.2.4, 3.2.1 to 3.2.4, 3.3.2, 3.3.4, 3.3.5

#### Weak organization among producers and limited services provided by associations

Weak organization among saffron producers not only limits the potential to achieve economies of scale but also hinders farmers' ability to receive technical support. The registration procedures to form associations are perceived as highly bureaucratic and discretionary, given that processes often require personal connections and networks, which favours elites within villages. Existing associations have a narrow focus in terms of services provided to members because they concentrate their efforts on supply-side production issues, while provision of services to support post-production and international marketing has been limited (or non-existent).

Value chain segment	All segments
Severity	• • • • ○
PoA reference	Activities 2.2.1 to 2.2.3

#### Limited coordination between value chain stakeholders

Weak coordination and information-sharing by value chain actors hinders the development of the saffron industry in Afghanistan. Although a National Saffron Coordination and Support Committee exists, increased dialogue and cooperation between public and private sector staleholders is needed at both national and provincial levels. Currently, there are insufficient efforts to coordinate systematic information-sharing meetings between relevant stakeholders. The Committee, as well, lacks empowerment to advocate for the definition and subsequent execution of its legal status within the system.

Value chain segment	All segments
Severity	$\bullet$ $\bullet$ $\bullet$ $\circ$
PoA reference	Activities 2.1.1 to 2.1.5

Figure 11: Problem tree - challenges to connect -ack of a privatecoordination and mechanism for between value sharing at the provincial and national levels public sector stakeholders informationcoordination Limited (favouring elites within villages) associations often require connections **Procedures** personal to form Weak organization among producers in order to be able to receive technical support are highly bureaucratic Procedures associations to form Connect: Afghan saffron is unrecognized and unbranded in the international market Burdensome procedures custom at customs **Bottlenecks** procedures Limited access to markets from production areas with customs in coordination neighbouring countries nearby markets Few means of and poor road infrastructure transport to High levels of corruption marketed as Iranian Afghan saffron production is Currently part of product sent to Iran/Turkey to be further and packaged processed Afghan services available in Afghanistan Insufficient packaging trade fairs and companies in target markets participation exhibitions of Afghan support in saffron in-market Limited Low associations do connections to the members not provide The few existing expected producer market Afghan companies struggle to create business connections with international buyers market access awareness of agreements (EU-GSP) Lack of Limited market intelligence support Lack of skills in marketing enterprises among

#### Change

The Afghan saffron industry exhibits a low level of adoption of modern production and processing techniques, owing to diverse factors such as low availability of skilled labour specializing in saffron, basic infrastructure constraints and insufficient investment in advanced saffron research. Additionally, the capacity of the sector to change is hindered by a minimal effort to provide support services for women throughout the value chain.

#### Few agricultural extension workers with specific training in saffron production

In order to advance the saffron sector, current suboptimal agronomic methods must be replaced with modern production techniques. Expertise is required in such areas as plot preparation, row spacing, timing of irrigation, and the quantity and composition of fertilizer to be applied. To improve the level of support, the agricultural extension workers deployed by MAIL must be trained specifically in saffron production. At present, MAIL's extension workers possess little in the way of actionable insights to assist saffron farmers.

Increasing the level of expertise in saffron requires the development of saffron-focused programmes at Afghanistan's undergraduate-level agricultural education institutions. Such a measure would require the training of expert-level faculty members, as well as a curriculum that covers all components of the saffron value chain.

Value chain segment	Production
Severity	• • • • 0
PoA reference	Activities 1.1.1, 2.3.5

#### Limited ability to change/upgrade existing processing methods

At present, the Afghan saffron sector is woefully underdeveloped when it comes to international best practices for handling and processing saffron. Especially relevant is the ability (or lack thereof) of saffron producers to ensure the hygienic handling of stigmas and protection from dust and other contaminants. Afghan saffron producers also tend to lack awareness of packaging methods that conserve the spice's aroma and flavour, factors which increase sales prospects during off-season trade.

When it comes to drying the saffron stigmas immediately after the harvest, Afghan producers continue to use traditional air-drying methods. Air-drying is not considered a saffron processing best practice, as the length of time – typically around one week – increases the likelihood of contamination while also limiting precision in terms of achieving the optimal level of stigma dryness.

The continued practice of air-drying is likely the result of the high cost of electrical drying equipment, as well as

the high operational costs necessary to power such equipment. Government-supplied power in Afghanistan is erratic (if available at all) and running auxiliary generators is expensive. In a promising development, the establishment of 10 saffron processing centres was announced by the Afghan Government in early 2017.<sup>19</sup>

Value chain segment	Processing
Severity	● ● ● ○ ○
PoA reference	Activities 1.1.1, 1.1.2, 1.2.2 to 1.2.5

#### Limited access to credit that fits the needs of the sector

Considering the high initial investment required for saffron cultivation, along with the three years required to break even, saffron farmers require financial services that can accommodate their needs. There are currently no financing instruments available that are structured to support saffron farmers.

Value chain segment	All segments
Severity	• • • • 0
PoA reference	Activities 1.3.1 to 1.3.5

#### Need for saffron-related research and dissemination of (accessible) information on saffron

Further research is needed to support the Afghan saffron sector, particularly in the areas of agronomic methods, pest and disease control, socioeconomic relations along the value chain, processing and packaging with the objective of improving volume, and methods to increase the quality of the finished saffron product. Moreover, existing studies undertaken by the relevant ministries, development partners and research institutions have not been disseminated widely enough among key stakeholders in the value chain, especially in a way that is accessible to those with limited educations.

Value chain segment	All segments
Severity	$\bullet$ $\bullet$ $\bullet$ $\circ$
PoA reference	Activities 2.3.1 to 2.3.7, 2.4.3

#### Insufficient support services targeting women across the value chain

Women play an outsized role in the Afghan saffron value chain, especially during the harvesting and processing stages. In fact, women are estimated to make up as much as 80% of the saffron sector's workforce.

<sup>19.-</sup> MAIL announcement in March, 2017.



Photo: ITC

Despite the extraordinary contribution of women to the Afghan saffron sector, there is limited support to elevate their capacity. At the production level, MAIL agricultural extension services focusing on women are lacking. Social norms in Afghanistan require extension services to be provided from women to women. However, a shortage of women saffron specialists is a barrier for the provision of women-tailored technical training.

In terms of institutional support for women-owned/operated saffron production enterprises, women's saffron associations face challenges unknown to their male counterparts. Although women's associations have been established in Herat, prospective female members require the permission of a male relative to register. In general, women's saffron associations remain weak, limiting their ability

to engage in capacity-building interventions, disseminate market information or pool financial resources to fund corm banks or community processing facilities.

Lastly, there are few women-only spaces for saffron trade in Afghanistan, owing to the social constraints that limit the mobility of women. As a consequence, Afghan women depend on local traders to inform them about saffron prices instead of directly obtaining pricing information from their own investigations. As a result, women's negotiating power over prices is diminished.

Value chain segment	All segments
Severity	$\bullet$ $\bullet$ $\bullet$ $\circ$
PoA reference	Activities 1.3.1 to 1.3.5, and 2.2.3

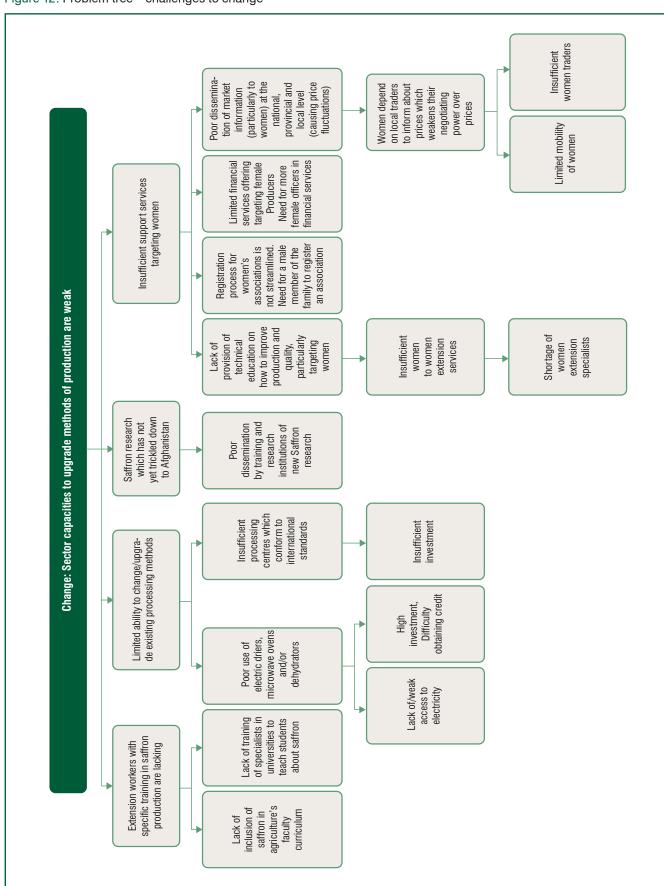


Figure 12: Problem tree - challenges to change



# ASSESSING AFGHANISTAN'S POSITIONING VIS-À-VIS THE GLOBAL SAFFRON VALUE CHAIN

This Strategy aims to achieve the following objectives:

- Increased saffron exports in terms of volume and value.
- Gradual migration to the production of high-quality saffron from medium/low-quality saffron.
- Increased income and socioeconomic benefits to actors across the value chain, afforded by the growth in production and exports.
- Positioning of Afghan saffron as a highly prized product with a lasting brand in international markets.

# FACTORS DRIVING GROWTH FOR THE AFGHAN SAFFRON VALUE CHAIN

- In terms of characteristics, Afghan saffron inherently possesses a high degree of quality on a par with or better than industry leaders Islamic Republic of Iran and Spain. Recent Government efforts to resolve the long-standing problem of good quality corms is a step in the right direction. A focus on quality management –a make-or-break requirement for the international retail segment has also started emerging fast.
- The weather, agronomic conditions and availability of labour are all well-suited for cultivating saffron in Afghanistan.
- International firms with Afghan operations, such as Rumi Spice, have started promoting Afghan saffron and spurring interest in the sector.
- Recent understanding among policymakers and donors of the socioeconomic importance of the sector.
- The global markets are not price-sensitive and the high demand ensures that prices stay high. The global saffron market has been growing at an average rate of 30% per annum in recent years.
- Political risk stemming from the threat of sanctions on the Islamic Republic of Iran. Although a distant possibility, this is a high political risk for the Republic's customers such as Spain, who may look to diversify supply channels if the risk increases. Afghanistan has an opportunity

- here, provided production output is stable and quality control is achieved.
- The high availability of labour (particularly female workers) during the off-peak months ensures that adequate pairs of hands are available.
- Recent developments in terms of the air corridor between Afghanistan and India bode well for export logistics.
- The saffron supply chain (producers, traders, processors, financiers) inside the country is relatively fragmented. However, quality management efforts can be more effective if the supply chain is better organized inside the country.

#### SHORT-TERM: COMPETE ON QUALITY AND CULTIVATE RELATIONSHIPS WITH LEADING IMPORTERS, ESPECIALLY IN THE EU AND MIDDLE EAST

Afghanistan can position itself to compete on quality in the short/medium term by investing in quality management across regulatory institutions and saffron enterprises. Ensuring a stringent focus on the premium and high-quality segment will also help build a culture of quality within the sector. For market-leading retailers, especially in the EU, quality is the make-or-break parameter. Afghan exporters must build strong relationships and a brand based on quality with these importers and their networks. This entails that SPS and other quality-based requirements are fully addressed before the product leaves Afghanistan.

As discussed earlier in the Strategy, the global distribution of saffron is controlled by select large importers and resellers in EU countries like Spain, Italy and France. Closer to home, the UAE is similarly important as a re-exporter. A concerted focus on these countries is therefore required to build relationships with clients that have strong distribution channels.

Additionally, in the short-to-medium term, Afghanistan must look at both the demand and supply sides of the domestic market. Estimates indicate that domestic Afghan demand for saffron could be as high as three tons annually. This provides a strong base of clientele for Afghan saffron producers, albeit at lower prices.

#### LONG-TERM: CAPITALIZE ON ESTABLISHED BRAND AND ADVANCE UP THE VALUE CHAIN

In terms of volumes, Afghanistan is and will continue to be a smaller player in the global saffron industry for at least the next 10–15 years. However, through a concerted effort to increase/aggregate/scale up the amount of land dedicated to saffron cultivation, as well as improve overall productivity, the sector will be able to increase absolute export volumes. If quality and volume levels are improved and Afghan saffron becomes a recognized brand in international markets, then Afghan saffron producers will be able to move up the value chain closer to the end consumers. In some cases, Afghan exporters may also find it viable to directly reach consumers using e-commerce platforms.

# MARKET POSITIONING: PREMIUM AND HIGH-QUALITY SEGMENTS

The following analysis divides into two broad phases: one related to the immediate, short-term perspective and the other to the medium/long-term outlook. By the latter period, it is expected that a significant portion of the NES – as well as the sector PoAs – will have been implemented. This phased approach is aimed at staging interventions in alignment with the evolving capacities of each sector's trade and investment support institutions and sector enterprises as NES implementation moves forward.

The following product-market combinations are further prioritized. These recommendations should not deter individual enterprises from acting on their own strengths and weaknesses, and in fact they are likely to benefit equally from the support and structural improvements to the value chain which should result from implementation of this Strategy.

# SHORT-TERM PRIORITY MARKETS (1–3 YEARS)

Short-term priority markets are product—market combinations which are already exporting well but could either: a) perform better with implementation of shorter-term improvements recommended in this Strategy; or b) be translated into quick success with promising variations on other successful products.

#### Domestic market

Domestic: About 40% of the saffron produced in Afghanistan is consumed domestically, with distribution through retail outlets in Herat and Kabul.<sup>20</sup> The spice has a stable market in Afghanistan, with growing use in Afghan cuisine. Domestic demand mainly comes from high-income households in Afghanistan's urban centres, restaurants and hotels. At present, the local market is dominated by imported Iranian saffron. As the Afghan saffron sector develops (and with domestic demand trends remaining at the current pace), there is a sizeable opportunity for Afghan saffron producers to capture market share from their Iranian competitors.

#### Strategy for the domestic market:

- Substitute Iranian saffron: supply the domestic market with domestic saffron.
- Promotions creating customer awareness on the properties and uses of saffron.

<sup>20.-</sup> Abadia, A. (2012) Analysis of the Saffron Industry in Afghanistan and Introduction to Export Promotion Strategies for Saffron. Slide 11, USAID

There are around 43 saffron trading companies supplying major saffron buyers in Afghanistan. Most of the traders are growers themselves or have alliances with farmers and farmers' associations. Three major companies control the domestic market share, two of which are located in Herat and one in Kabul. The major companies are keen to sell their product to international buyers using so-called 'friendship channels' (i.e. to friends, relatives or business partners who have the means and interest to sell saffron in foreign trading hubs), which are relatively efficient for small-scale exports. As the high-value commodity can be easily shipped and does not require special treatment in store and no special items beyond what is needed to properly present it to clients, the saffron industry is not investment-driven. Local companies are thus able to sell abroad with little cost, which shifts the Afghan saffron sector's focus to foreign markets instead of domestic supply.

#### South Asia (India)

India: Population growth, increased urbanization and higher household incomes have driven the growth of saffron consumption in India. While India has the largest area under saffron cultivation after the Islamic Republic of Iran, it is insufficient to meet this growing demand. As a result, saffron imports to India have risen 23% annually over the past five years.

Afghanistan has had remarkable success penetrating the Indian market; according to United Nations Comtrade data, India imported US\$15 million of saffron in 2016, with US\$14 million supplied by Afghanistan. This success comes despite a 35% tariff for saffron imports<sup>21</sup> and may be explained, in part, by lower quality standards among Indian consumers and government regulators. To better understand the Indian market, the Afghanistan Rural Enterprise Development Programme has also supported exposure visits to India for about six saffron enterprises from Herat to enhance market links.

Saffron is primarily consumed by high-income households comprised of the elite. However, based on economic development, more and more middle-income households have started to demand the high-end spice.



Photo: ITC

The world's greatest spice-consuming country also welcomes medium-quality saffron, which makes the Indian market more accessible. The main demand is segmented by the private sector, ranging from households to restaurants and hotel chains. Afghan saffron exporters have been able to capitalize on India's growth, developing strong relationships with wholesalers and retailers. The geographic proximity and growing market size of the destination market have helped in the development of these relationships. In the short term, it is expected that these relationships will stay stable and even become stronger, considering the rapid growth of the Indian market. Therefore, export to India brings significant potential for further market penetration and stable export opportunities.

#### Strategy for the Indian market:

- Increase production volumes to allow for stable, bulk shipments of saffron to India.
- Improve packaging standards to further enhance the reputation of Afghan saffron among Indian wholesalers and retailers.
- Enhance legal business relationships between Afghan sellers and Indian buyers to counter the allure of smuggling (considering the interest of both parties in avoiding the 35% tariff).

Table 2: Target market: India

India Private households, and businesses Wholesalers, retailers 14 million 25%	Target market	Market segment	Distribution channel	Afghan saffron exports to markets, 2016 (US\$)	
	India	Private households, and businesses	Wholesalers, retailers	14 million	25%

<sup>21.–</sup> UNIDO (2014). Saffron Industry Value Chain Development in Iran: Diagnostic Study Report. Available from https://open.unido.org/api/documents/4672742/download/Saffron%20Industry%20Value%20 Chain%20Development%20In%20Islamic%20Republic%20of%20Iran%20-%20Diagnostic%20Study%20Report, p.12.

#### Europe

The European market provides the best short-term opportunities for market diversification. The region saw growth in saffron imports of 7% annually between 2012 and 2016. Notably, a marginal amount of Europe's saffron imports are currently arriving from Afghanistan, meaning that Afghanistan has enormous potential to capture a larger percentage of market share in the dominant European markets. This depends, critically, on whether or not Afghanistan can address its quality control issues. European importers are willing to pay premium prices for premium-grade saffron but accessing these buyers is contingent on a rock-solid reputation for quality, as well as the application of SPS best practices at all stages of the production value chain.

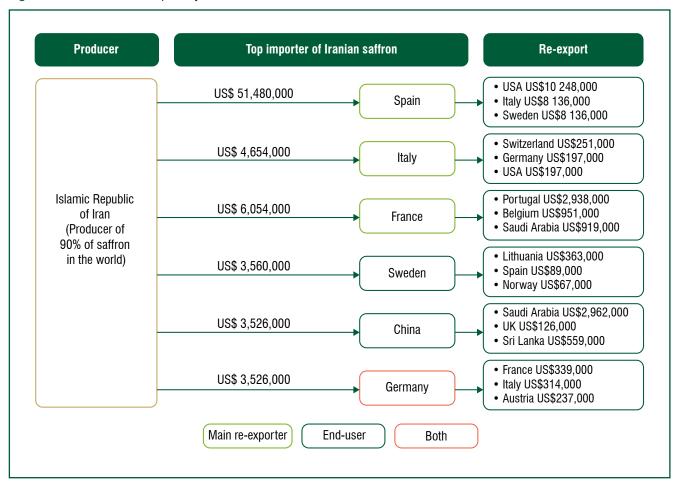
European markets also act as re-exporters for prestige quality from all over the world. Therefore, re-exporters with a strong network serve as important export destinations, as they have high interest in high-quality saffron. The International Taste and Quality Institute in Brussels has rated Afghan saffron as the best in the world, which has further contributed to the high reputation of Afghan saffron

in Europe and enabled greater access to re-exporting countries. The award and certificate of the Institute is valid for three years and the certificate holder can export its products to international markets. Consequently, the recognition of Afghan saffron by the Institute operated as a gate opener for international trade.

Saffron is widely used for consumption but also as a fragrance or dye, and in medicine. Its health benefits and unique flavour are widely known in Europe. Studies show that individuals/households consume more than 50% of saffron (mostly in the form of powder or threads).<sup>22</sup> Estimates indicate that 20% is used by food and drink companies and the rest in the medical and cosmetic industries.<sup>23</sup> Saffron is mainly distributed to European households through supermarkets, and to industries through wholesalers and reexporters. Besides the classical distribution channels, online supply has started to emerge as another popular way to access Afghan saffron.

22.- *Ibid.*, p. 63. 23.- *Ibid*.

Figure 13: Iranian saffron export dynamics



France: France has been a stable destination market for Afghan saffron, with US\$1.2 million of imports recorded in 2016. While 72% of imported saffron is consumed domestically, 24 high volumes are also re-exported to Portugal, Belgium and Saudi Arabia. France's imports of saffron from international exporters grew 5% annually between 2012 and 2016, with re-export increasing by 28% annually during the same period. This bodes well for Afghan saffron exporters, who have seen their shipments to France increase at an average annual rate of 116% over the past five years.

Germany: An initial assessment of Afghan saffron's prospects in Germany may not seem particularly positive; over the last several years the volume of Germany's saffron imports (and subsequent re-exports) has declined. Furthermore, Afghanistan's saffron exports to Germany stood at only US\$53,000 in 2016, a relatively paltry sum. Nevertheless, opportunities exist to increase that figure. The presence of a sizeable Afghan diaspora in Germany could be the foundation for 'friendship channels' that facilitate the distribution of Afghan saffron in the German market.

Spain: Spain is the world's largest re-exporter of saffron, supplying much of Europe with 'Spanish' branded saffron that is, in fact, grown in North Africa, the Middle East or Asia. Saffron imported to Spain undergoes advanced processing and packaging. Afghan saffron exports to Spain peaked at US\$611,000 in 2013. After 2013, the exported value started to decline. The main reason for this decrease is related to contamination (i.e. *Escherichia coli* and salmonella) detected in Afghan saffron. The relief of sanctions on the Islamic Republic of Iran affected saffron exports to Spain, as Iranian saffron substituted Afghan exports. Due to lack of knowledge of the regulatory requirements and the inability of Afghan firms to provide the large amounts that Spanish importers requested, Afghan saffron lost in the competition against Iranian rivals.

Italy: Similar to Spain, Italy is a prominent re-exporter of saffron to the European market. Italy mainly resells saffron to Switzerland, Germany and the United States. Italy cultivates saffron domestically, but as in case of Spain, its domestic yields constitute a minority of its export volume. Considering Italy's wide saffron trade network and high

demand for saffron in Italian kitchens, Italy is an attractive market for Afghanistan.

#### Requirements for saffron in the EU market: Legal requirements – "musts"

- Use the network of re-exporters: Link with retail distribution networks through a branded chain retailer network.
- Food safety: Full compliance with European laws regarding safe food production (EC Regulation No. 852/2004), in particular:
  - » Hazard Analysis and Critical Control Points and hygienic measures
  - » Traceability from farmer to final packing ready for export
  - » Compliance of packaging materials to EU laws.
  - » Meet legal EU requirements mentioned in the Quality Minima Document of the European Spice Association.
- Regulations to meet: Association, General Food Law Regulation EU 178/2004, Microbiological Criteria for Foodstuffs Regulation 20783/2005, Traceability Regulation EU No. 178/2004, and Regulation 1169/2011 on Labelling and Allergens.
- Meet strict EU labelling requirements by developing delivery of adequately packaged saffron, or consider entry into the EU market with unpackaged products and leave packaging to the destination market in order to meet standards and requirements

#### Non-legal requirements - "good to have"

- Certification according to international standards, such as food safety standards (British Retail Consortium, International Featured Standards, ISO 22000, Food Safety System Certification, etc.).
- Organic certification, according to EU laws Regulation No. 834/2007 and Regulation (EC) No. 889/2008.

24.- Ibid., p.13.

Table 3: Target market: Europe

Target market	Market segment	Distribution channel	Afghan saffron exports to markets 2016 (US\$)	Annual growth of sector imports (2012–2016)
France	Re-exporters, wholesalers, saffron processors	Wholesalers, retailers, resellers	1.2 million	0%
Germany	Supermarkets, shops/pharmacies, Internet	Wholesalers, retailers	57,000	-24%
Spain	Re-exporters, wholesalers, saffron processors	Wholesalers, retailers, resellers	0	
Italy	Re-exporters, wholesalers, saffron processors	Wholesalers, retailers, resellers	0	

#### North America

United States: Afghan saffron exports to the United States currently rely on 'friendship channels' between the exporters and members of the 300,000-strong Afghan diaspora living in the United States, of which the majority is concentrated in the San Francisco Bay Area. The 'friendship channels' strategy obviously brings great expansion opportunities and should be stretched as much as possible. Afghan saffron exports to the United States were valued between US\$111,000 and US\$256,000 in the past five years. Moreover, a start-up from Chicago found by American veterans, which cooperates with Afghan farmers in Herat in the production, processing and distribution of saffron to the United States, recently received a US\$250,000 investment from an American investor. The United States also shows positive trends in saffron imports, which brings opportunities for Afghanistan to meet the country's increasing demand.

Outside of the 'friendship channels', major Afghan saffron enterprises have established solid ties with American saffron distributors. The majority of Afghan saffron exported to the United States is distributed to supermarkets and industrial clients through wholesalers. Besides traditional distribution channels, online sales platforms have emerged as another popular means to purchase Afghan saffron.

The United States market is increasingly interested in organic products and further research should be conducted to establish if Afghan saffron qualifies as 'organic' according to American regulators. As noted earlier in this report, saffron farmers in Afghanistan have been advised to use fertilizers as an input in the first year of planting. Following the initial planting stage, though, chemical inputs such as

fertilizers and pesticides are kept to a minimum (if used at all). If Afghan saffron is able to meet standards set by the National Organic Programme issued by the United States Department of Agriculture, thereby earning its 'organic' certification, then this may allow Afghan exporters to corner the niche organic saffron market.

#### Strategy and requirements for the United States market:

- Produce a logo or emblem to distinguish Afghan saffron in the United States market.
- Meet preferences of United States importers, whether this entails shipments in bulk, packaging or retail-ready packaging.
- Registration with the United States Food and Drug Administration, with a designated agent closely coordinating with Administration regulators on SPS, health and quality compliance issues.
- Meet key standards and regulations for food safety.
- Meet regulations issued by the United States Food and Drug Administration, Department of Agriculture and Environmental Protection Agency.
- Obtain certification for quality standards.
- Strengthen production and marketing of organic saffron.

Table 4: Target market: United States

Target market	Market segment	Distribution channel	Afghan saffron exports to markets 2016 (US\$)	Annual growth of sector imports (2012–2016)
United States	Supermarkets, shops/pharmacies, Internet	Wholesalers, retailers	256,000	14%

#### MEDIUM-TO-LONG TERM (+3 YEARS)

The markets listed in the short-term section will also hold export potential in the medium/long-term. Assigning markets to the medium/long-term category is an acknowledgement that additional market understanding, product development and Strategy implementation is required and is unlikely to be completed in a time frame of less than two years.

#### East Asia (China, Japan)

China: Geographic proximity, strong economic growth and a large population make China a high-potential export

destination for Afghan saffron producers. Building on historical Silk Road relationships between China and Afghanistan, Afghan saffron brings great opportunities to boost business and people-to-people relationships with China. In 2016, Afghanistan signed six significant agreements and memorandums of understanding with China aiming to boost business and diplomatic relationships. Auspiciously, one of these agreements was specifically related to saffron exports to China.

With the recently signed agreements, Afghanistan has the opportunity to benefit from China's growing demand for saffron. China currently imports saffron from the Islamic Republic of Iran and Germany but distributors will

probably welcome more diversification in sourcing considering the whopping 49% annual growth in demand since 2012. Afghan saffron enterprises received a degree of exposure in the Chinese market after participating in one of the largest and most prominent Chinese food and beverage exhibitions in Guangzhou. Concerted efforts must still be made if Afghanistan wishes to establish itself as a major supplier of saffron to the Chinese market.

Japan: Japan is a particularly enticing market due to the high demand for premium products coming from a large base of high-income consumers. The market prefers to import saffron in bulk, likely due to the preference for Japanese-language retail packaging. Growth in saffron imports averaged 6% annually between 2012 and 2016. That increase in the Japanese taste for saffron has not, unfortunately, translated into high sales for Afghan traders; exports of Afghan saffron to Japan stood at only US\$5,000 in 2016. This leaves quite a bit of room for growth, which perhaps explains the decision of Afghan Saffron (one of the major saffron companies in Afghanistan) to open an office in Kyoto.

Japan's planned development assistance to Afghanistan, in the form of a recently announced US\$8.7 million programme to improve the agricultural value chain in Herat Province, may have a secondary benefit of connecting Afghan saffron enterprises with Japanese wholesalers. It will likely take several years for relationships to grow between Afghan saffron traders and Japanese buyers, during which time Afghan saffron producers should ensure that their product is ready to pass Japan's stringent quality and SPS standards.

Online marketing in both countries brings great opportunities to spread knowledge about Afghan saffron in East Asian countries. Additionally, strengthening visibility of the product through participation at Asia trade fairs would help to establish the reputation of Afghan saffron in Asian markets.

#### Europe

On a medium- and long-term basis, the best approach for the European market is to increase the sales volume of high-quality Afghan saffron to the most dominant re-exporting countries, namely Spain, Italy and France. After an initial period focusing on bulk shipments, Afghan saffron enterprises can focus on moving up the value chain by establishing relationships with local distributors and national supermarket chains. Success in this area will require a significant improvement in Afghan packaging standards, along with credible quality certification. A well-developed national stamp may help to demonstrate the quality of Afghan saffron in the long term.

Other European countries such as Sweden, the Netherlands, Austria, the Czech Republic, Belgium, Hungary and Switzerland have recently shown interest in Afghan



Photo: ITC

saffron. Buyers in all of these countries made small-scale purchases of saffron in 2016, according to United Nations Comtrade data. Further penetration of these markets may involve a period of 'test' trade, in which wholesalers and retailers determine the level of domestic demand, as well as feel out their Afghan partners for reliability and quality control.

#### Middle East

Demand for saffron in Middle Eastern countries, in particular the UAE and Saudi Arabia, has seen steady growth since 2012. While distinctive culinary traditions exist in different regions of the Middle East, all are familiar with saffron and its applications in the kitchen. While Spain and the Islamic Republic of Iran dominate the Middle Eastern market (unsurprisingly), Afghan saffron has been making promising gains. In 2016, Saudi Arabia imported US\$1.2 million of Afghan saffron, making it one of the top markets for Afghanistan's saffron producers. Middle Eastern countries are (relatively) accessible for Afghan traders in terms of geographic proximity and visa requirements, and have a significant demographic of consumers who are attracted to high-priced luxury goods. To continue increasing market share throughout this region, Afghan saffron producers must invest in the development of attractive packaging and branding to attract luxury shoppers.

#### Other spices and medicinal plants hold significant export potential for Afghanistan

Afghanistan is particularly suited for the production of a wide array of uncommon plants and spices owed to its semiarid climate and favourable soil conditions.

Some of the most important medicinal plants and spices produced in the country for domestic consumption and exports include asafoetida (or hing), oleo-gum-resin, liquorice (Glycyrrhiza glabra and G. uralensis) root, caraway fruit (Carum carvi), cumin (Cuminum cyminum) and jujube (Ziziphus jujube) fruit, besides saffron.

The top export destination for Afghan exports of spices (except saffron) was India (2016). The most significant sub-products exported to the Indian market were cumin at an exported value of US\$7 million, followed by green caraway (US\$ 2,8 million), kajak caraway (US\$1,3 million) and black caraway (US\$738,000) in 2015. Other major destinations are Pakistan, Germany, the UAE and the United States.

Among the medicinal plants, asafoetida, an aromatic gum-resin, is of particular importance for Afghan regional trade. Afghanistan's main market for this product is India. Afghanistan's exported value of asafoetida to the Indian market reached US\$ 70 million in 2016. In India, this product is used in spices, especially in the south, and

in traditional medicines all over the country. The price of this crop in international markets is relatively high, due to the limited areas of production, mainly in Afghanistan and the Islamic Republic of Iran. India also re-exports asafoetida to the UAE, the United States and Singapore, among others. These are markets, which could be explored by Afghanistan.

Another medicinal plant holding significant export potential for Afghanistan is liquorice. This plant has also several applications in the food industry (confectionary, beverages, etc.). The EU is an important market for liquorice due to growing scarcity in supplies. Value addition, as most European buyers import liquorice extract and compliance with legal requirements (Ochratoxin A levels) are important for this market.

The global market for spices and herbs is expected to continue growing in the near future. Several challenges prevent Afghanistan from seizing the existing market opportunities for these products. One of the main constraints is the weak capacity for postharvest-value addition (processing and packaging) of these products within the country. Some improvements in this area are starting to occur, as Afghanistan is now producing essential oil distillation from rose (Rosa spp.) flowers.

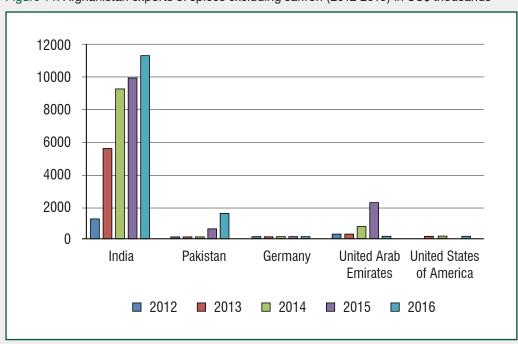


Figure 14: Afghanistan exports of spices excluding saffron (2012-2016) in US\$ thousands

Source: ITC Trade Map. Based on Comtrade mirror data

# ACHIEVING THE GOALS: VISION AND STRATEGIC OBJECTIVES

#### **VISION**

The Afghan saffron sector is united by the following vision:



In order to fulfil this ambitious vision, the following strategic objectives have been identified. These objectives provide a framework for developing solutions over a five-year time frame. The strategic objectives agreed on by stakeholders to uphold the vision are as follows.

#### STRATEGIC OBJECTIVE 1: INCREASE PRODUCTION AND PRODUCTIVITY THROUGH IMPROVED SUPPLY-SIDE CONDITIONS.

Supply-side conditions for saffron production need to be improved, particularly in the areas of access to inputs, finance, skilled labour and land for cultivation. This integrated approach will aim to increase the absolute production levels as well as productivity over the long term.

Farmer field schools and master trainer programmes will be developed and implemented to encourage the adoption of best practices in the production, harvesting and processing stages. On the inputs side, farmer access to good quality corms will be improved through a variety of initiatives, including pilot programmes to increase corm multiplication. Ongoing Government-led initiatives to distribute corms on a large scale will also be supported through the Strategy.

Industry-academic links and research in the areas of saffron will be improved. The potential to develop academic degree programmes, as well as technical and vocational education and training certificate programmes focusing on saffron, will be explored. The research dimension is especially



Photo: ITC

important given the relative lack of experience with saffron until recently in Afghanistan. Research will identify options for expanding land under saffron cultivation, among other objectives.

With the understanding that knowledge transfer and best practices often organically accompany investments, this strategic objective will focus on spurring investment in the sector through investment promotion efforts.

Activities falling under this strategic objective will also focus on improving access to finance, as this has been identified as a major constraint. Expanding access to working and investment capital for women will be especially important.

Figure 15: Future value chain - strategic objective 1 Top 5 export destinations (2016)

(2016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016)

(1016) National retailers (around 40% of Afghan saffron consumed domestically) Total Export US\$ 17 millions **Domestic market** International market Wholesalers **Global Retailers** Strategic objective 1: Increase production and productivity through improved supply-side conditions. Saffron buyers Customs office Promote investment in the processing stages of the saffron value chain: incentive packages, targeted initiative to attract investment in sector Saffron traders Exporters Design and support credit schemes: Workshop to sensitize bank officers to sector and women's financial needs Quality testing laboratory Packaging Modern processing centres with modern technology Testing Separation of stigmas Small-scale on- farm processing Sorting and grading Drying of stigmas Processing multiplication Corm Dev. Supply chain R&D for corm multiplication of corm companies Transportation to Processing Facilities On Farm Storage Assembly Access to high quality corms Information sharing of saffron-focused Collaboration with institutions with saffron expertise Saffron education research Production by small to medium-sized saffron Field Preparation (specialized in saffron Irrigation Planting Harvest in quality and food safety issues Master programme R&D saffron agenda production) Crocus fields (optimum soils: rich in calcium, sandy loam, high organic content) Corms, bulbs (US\$ 3-4/kg, while for 1 jerib 500 kg -800 kg required) Drying Equipment (electric dryers, dehydrators Extensive adaptation studies for identification of suitable areas for production Labour (highly intensive) Packaging Material Access to high quality corms



Photo: ITC

#### STRATEGIC OBJECTIVE 2: STRENGTHEN THE ORGANIZATION OF THE SECTOR'S ECOSYSTEM THROUGH GREATER COLLABORATION AND EFFICIENCY.

The Afghan saffron sector stands to benefit from improved coordination between the various actors involved in the value chain, including farmers, intermediaries, exporters and researchers, among others. The high degree of fragmentation at the cultivation level stems from small per capita plot size, although farmers bonding together at the processing and marketing stages can be immensely useful in offsetting this challenge.

Capacity-building initiatives will be undertaken for farmers' associations and other stakeholder groups in the sector. The Strategy will focus on strengthening existing and developing new international institutional links in the sector. This will include building research ties to academic institutions in India, the Islamic Republic of Iran, Spain and Italy, among other countries.

Activities falling under this strategic objective will include a concerted effort to organize and/or enhance producer groups, including farmers' associations, at the local, provincial and national levels. These associations will assist in the deployment of targeted technical assistance, and at the same time improve cohesiveness between farmers.

Figure 16: Future value chain - strategic objective 2 Total Export US\$ 17 millions
Top 5 export destinations
(2016)
• Inda US\$ 14 millions
• France US\$ 1.2 millions
• Saudi Araba US\$ 1.2 millions
• United States (US\$ 238,000)
• Bahrain US\$ 110,000 National retailers (around 40% of Afghan saffron consumed domestically) International market Wholesalers Strategic objective 2: Strengthen the organization of the sector's ecosystem through greater collaboration and efficiency. **Global Retailers** Strengthen south-south cooperation in the saffron sector Saffron buyers Customs office Saffron traders Exporters Provincial and national coordination committees formed by relevant stakeholders Capacitate farmers' associations leaders to enhance their leadership skills Quality testing laboratory Packaging Modern processing centres with modern technology Testing Small-scale on- farm processing Separation of stigmas Sorting and grading **Drying of stigmas** nultiplication Corm Transportation to Processing Facilities **Assembly** On Farm Storage Farmer field schools for saffron Production by small to medium-sized saffron farmers Strengthen research-extension-farmer links Field Preparation (specialized in saffron production) Irrigation production Planting Harvest Corms, bulbs (US\$ 3-4/kg, while for 1 jerib 500 kg -800 kg required) Crocus fields (optimum soils: rich in calcium, sandy loam, high organic content) Drying Equipment (electric dryers, dehydrators Labour (highly intensive) Packaging Material Fertilizers



Photo: ITC

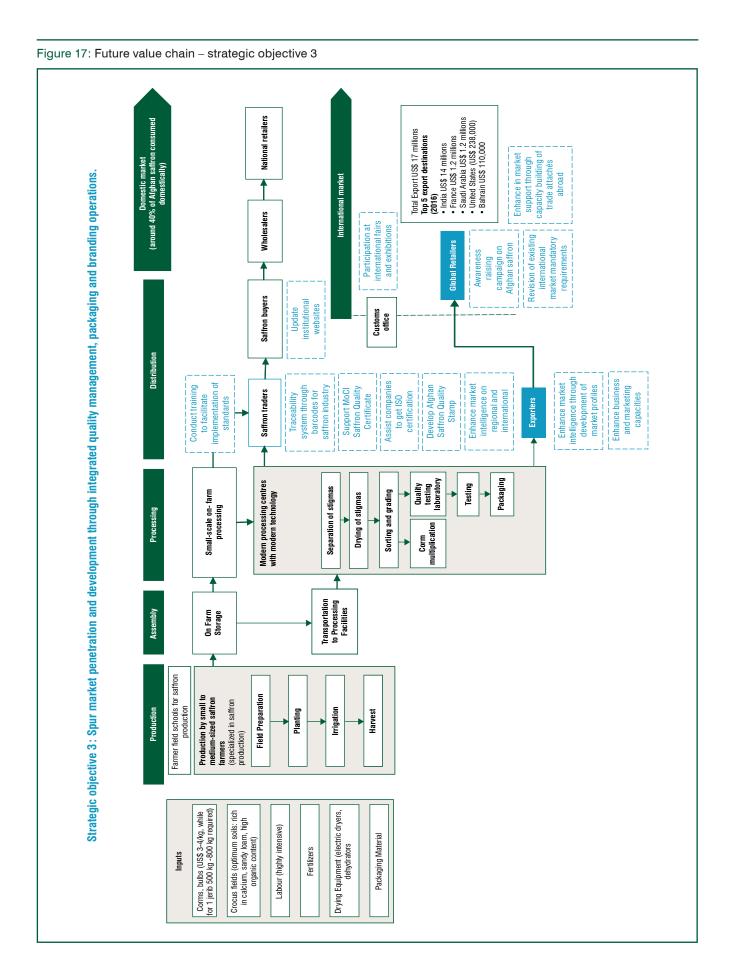
#### STRATEGIC OBJECTIVE 3: SPUR MARKET PENETRATION AND DEVELOPMENT THROUGH INTEGRATED QUALITY MANAGEMENT, PACKAGING AND BRANDING OPERATIONS.

Building an Afghan saffron brand that is renowned for its high quality will be paramount. Achieving success in this area requires reforms across the entire span of the saffron value chain, in terms of how corms are sourced and graded, planting techniques, harvesting techniques and postharvest processing. Standards development, adoption and enforcement will be undertaken as well. Capacity-building will also be provided for quality testing institutions and systems.

Keeping in mind that e-commerce is a fast-emerging medium to access retailers and end users, the Strategy will lend support to exploring the feasibility of e-commerce options for Afghan saffron exporters. Technical assistance may be provided for pilot e-commerce efforts if this sales medium shows potential to boost saffron exports.

Exporters will be provided critical in-market support to promote Afghan saffron at the regional and international levels. Activities will also focus on increasing the accessibility of market intelligence through support for the development and dissemination of profiles and guides for existing and potential markets.

In a highly competitive landscape, packaging aesthetics are a critical consideration. Given the low awareness and capacity of Afghan saffron producers in this area, activities will focus on access to packaging equipment and support for domestic packaging facilities.



# MOVING TO ACTION

#### KEY REQUIREMENTS FOR EFFECTIVE IMPLEMENTATION

The development of the future value chain for the Afghan saffron sector is a five-year project defined through a consultative process between Afghan public and private sector stakeholders. Achieving the strategic objectives and realizing the future value chain depends heavily on the ability of sector stakeholders to start implementing and coordinating the activities defined in the Strategy's PoA.

The Strategy in and of itself will not alone suffice to ensure the sector's sustainable development. Such development will require the coordination of various activities. While the execution of these activities will allow for the Strategy's targets to be achieved, success will ultimately depend on the ability of stakeholders to plan and coordinate actions in a tactical manner. Seemingly unrelated activities must be synchronized across entities in the public sector, private sector and non-governmental organizations, along with the participation of local communities, in order to create sustainable results.

To ensure the success of the Strategy, it is necessary to create an appropriate framework for implementation. The following section presents some of the key conditions considered necessary for successful implementation.

#### ESTABLISH AND OPERATIONALIZE A PUBLIC AND PRIVATE SECTOR COORDINATING BODY AND EXECUTIVE SECRETARIAT

#### Saffron sector steering committee

A key success criterion for the Strategy is the ability to coordinate activities, monitor progress and mobilize resources for implementation. It is recommended that a steering committee comprised of the key public and private sector entities be formed or supported (if a similar entity already exists). This will function as a platform with balanced representation of all major saffron stakeholders to share information.

Overall it is proposed that the steering committee be responsible for the following tasks related to Strategy implementation:

- Coordinate and monitor the implementation of the Strategy by the Government, private sector, institutions or international organizations to ensure implementation is on track;
- Identify and recommend allocation of resources necessary for the implementation of the Strategy;
- Assess the effectiveness and impact of the Strategy;
- Ensure consistency with the Government's existing policies, plans and strategies, and align institutions' and agencies' internal plans and interventions with the Strategy PoA;
- Elaborate and recommend revisions and enhancements to the Strategy so that it continues to best respond to the needs and long-term interests of the national business and export community;
- Propose key policy changes to be undertaken, based on Strategy priorities, and promote these policy changes among national decision makers;
- Guide the sector secretariat for the monitoring, coordination, resource mobilization, policy advocacy and communication functions to enable effective implementation of the Strategy;
- Provide the sector secretariat with the mandate and the necessary resources to fulfil its functions in an effective manner.

### Composition of the saffron sector steering committee

It is recommended that the steering committee be comprised of key entities involved in the sector, with special focus on ensuring equitable involvement of both the public and the private sector.

#### Secretariat

A secretariat will assist the saffron sector steering committee in acting as an operational body responsible for the daily coordination, monitoring and mobilization of resources for implementing the PoA. It is proposed that it take on this role with technical support from key ministries and technical agencies. The secretariat will be composed of 2–3 technical operators.

The core responsibilities of the secretariat should be to:

- Support functioning of the steering committee;
- Collect and manage data to monitor the progress and impact of Strategy implementation;
- Liaise with and coordinate development partners for Strategy implementation;
- Elaborate project proposals and build partnerships to mobilize resources to implement the Strategy;
- Follow up on policy advocacy recommendations from the steering committee;
- Ensure effective communication and networking for successful Strategy implementation.

Both the steering committee and its secretariat will work hand-in-hand with existing entities established to streamline Government operations and enhance donor operations. These include the NES secretariat and others. It may be determined that the secretariat is accommodated as part of an existing entity with an extended mandate and resources allocated to it.



Photo: ITC

# PLAN OF ACTION

Operational objectives	Operational objectives Activities	Priority	Imple	Implementation period		Target	Lead and supporting
		1=high 2=med 3=low		2019 2020 2021	2022		implementers
1.1. Impart training aimed at promulgation of best farming and processing practices.	<ul> <li>1.1.1. Develop a master training programme on best farming and processing practices, including on issues related to quality and food safety.</li> <li>Develop curricula and teaching materials for the master training programme in the form of a guiding manual (in light of the Saffron Operation Manual developed by the Danish Committee for Aid to Afghan Refugees and World Bank) in line with markets' requirements, using regional experience and partnering with international buyers' quality departments (e.g. McCormick).</li> <li>Set up proper institutional framework and technical support functions to operationalize the master training programme, allowing for a multiplier effect, through extension services and farmer field schools.</li> <li>Identify and select key farmers' organizations, cooperatives and processing entities (Herat and Faryab) to serve as nuclei for pilot initiatives. Evaluate the reach of farmers' organizations, their current performance and their past work in the saffron value chain, and assess their market readiness. Evaluate the implementation capacity of selected organizations and craite a profile for each organization.</li> <li>Select, sensitize and train programme ambasseadors and trainers. Topics to include: <ul> <li>Technical knowledge on saffron best farming practices, with an emphasis on quality and food safety principles;</li> <li>Developing participatory and discovery-based learning and management skills;</li> <li>Organizing periodical briefs from trainers to key local / provincial stakeholders in order to improve flows of information and knowledge-sharing.</li> </ul> </li> </ul>	-				Institutional and technical framework set up and operational     At least 5–10 farmers organizations / cooperatives identified, assessed and profiles created     Fifty ambassadors / trainers are capacitated     Quarterly briefings from trainers organized every year	MAIL (Agriculture Research Institute of Afghanistan (ARIA), MoCl, ACCI, Danish Committee for Aid to Afghan Refugees
	1.1.2. Roll out the master training programme with particular focus on factors affecting the quality and preciousness of saffron.  • Pre-harvesting:  - Sorting of corms and identification of good quality corms for production  - Pest and disease control  - Fertilizers (discourage the use of night soil, which is negatively perceived in EU and United States markets)  - Best farming practices (e.g. soil and water management, bed preparation).  • Harvesting and postharvest:  - Quality standards for saffron production, e.g. ISO 3632 and food safety principles, e.g. Hazard Analysis and Critical Control Points  - Stock / warehousing methods  - Stock / warehousing and transportation of saffron flower from field to processing centres.  - Spice separation method  - Spice separation method  - Sorting and grading  - Product quality tests (factors under consideration for saffron quality)  - Use of dryers  - Packaging.	-			-	Master training programme operational and benefiting 4,000 farmers. In early stages the focus to be on Herat and Faryab provinces.	MAIL (ARIA),ACCI, MoCI, ANSA
	1.1.3. Carry out awareness-raising and advisory campaigns to promote the use of best practices. Using foolage from of the master training programme, carry out awareness-raising campaigns showing good (versus bad) practices and related economic and social benefits. Pilot advisory campaigns targeted at farms and owners of processing factories to provide practical recommendations for quality and productivity enhancement. <ul> <li>Based on lessons learned, broaden the campaign using posters, leaflets and booklets, both printed</li> </ul>	ო			-	One annual comprehensive campaign     per year developed in Herat / Faryab     before harvesting season	MAIL (ARIA) in collaboration with National Radio Television of Afghanistan, MAIL, ACCI, ANSA

	Strategic objective 1: increase production and productivity through improved supply-side conditions.	y through improv	ed supply	r-side con	ditions.		
Operational objectives	Activities	Priority	Impleme	Implementation period	poi	Target	Lead and supporting
		1=high 2=med 3=low	2018	5050	2021	=	implementers
1.2. Support the scaling up of both farming and processing	1.2.1. Encourage structural change by facilitating the purchase of additional inputs (land, buildings), allowing for adjustment and economies of scale.	2					Afghanistan Land Authority (Arazi), MoCl, MAIL, ACCI,
operations.	<ul> <li>Plan readjustment and rearrangement of land parcels and their ownership to form larger and more rational land holdings (with a view to improving rural infrastructure and to implement developmental and environmental policies) while building and strengthening links with smallholders.</li> <li>Encourage investment by ensuring ownership (secure right to land), transferability and transform- ability of capital through good governance and rule of law.</li> </ul>					ment of land, in alignment with MAIL's national saffron programme	Ministry of Justice
	Promote farm-level investment through land consolidation to enable farmers to attain a level of income adequate for positive savings and reinvested earnings.						
	1.2.2. Provide incentives and investment support to lower the price of capital in order to facilitate investment in new equipment / technologies (e.g. dryers, processing trays, packaging machinery).	2				At least 20 successful agricultural N loans per year	Ministry of Finance (MoF), Da Afghanistan Bank
	<ul> <li>Put in place measures to improve adoption of innovation, such as credit for investment in farm- level or firm-level innovation, incentives to adopt specific technologies and practices, support to scale-up activities, etc.</li> </ul>						(DAB), Afghanistan Banks Association (ABA), ACCI
	1.2.3. Identify and develop opportunities for joint ventures with the aim to:	-				supported	DAB, MoF, MoCI, ACCI,
	<ul> <li>Access new markets and distribution networks</li> <li>Expand capacity and diversify products</li> </ul>					to establish joint ventures	Ministry of Economy
	<ul> <li>Access greater resources, including know-how, technology and finance.</li> </ul>						
	In light of joint ventures, set up in the Islamic Republic of Iran with Spanish and Italian firms. The joint venture model will have to be very flexible, with a limited lifespan and guarantee mechanisms, thus limiting the commitment for both parties and the business' exposure.						
	<ul> <li>Identify and select possible types of joint venture models</li> <li>Select a few pilot Afghan companies based on capacity and performance</li> </ul>						
	Assess irms readiness for a joint venture     Plant the joint venture relationship						
	Chaste a joint venture agreement     Accompany the set-in of the inint venture relationship						
	1.2.4. Support, through public investment, the establishment of new processing and packaging centres or the upgrading of existing ones in line with international standards and norms. Following are examples of requirements:	2				<ul> <li>At least 5–10 new processing and N packaging centres established / P upgraded</li> </ul>	MoF, MAIL, MoCI, ANSA, ACCI
	Place (room), with a marble floor and tiled walls, for storing/sorting flowers and separation of spices, arranged with tables and chairs.						
	<ul> <li>Urying and sterntation room for sarron spices with an area of 25mc.</li> <li>Storage for dried saffron with an area of 30m2 and arranged with scaffolding.</li> <li>Laboratory room for physical, chemical, sterile and microbiological tests with an area of 50m2.</li> </ul>						

tions.	od Target Lead and supporting implementers	2022	Investment promotion strategy is developed and rolled out oveloped and rolled out aveloped and rolled out aveloped and rolled out opportunities identified opportunities identified are two sector-specific investment promotion programmes established (one targeting national investors and the other targeting international investors and the other targeting national material per programme  Four investment missions organized per year	Two workshops conducted per year DAB, MoF, MAIL, ACCI and AWCI	Ten successful agricultural loans DAB, MoF, MAIL, ABA, ACCI per year	Ten female-only workshops ACCI, AWCCI, MoCI, MoF, conducted     MAIL, ABA	Measures integrated in initiatives     Measures integrated in initiatives	Two campaigns carried out per year MAIL, ABA, DAB, ACCI in key provinces, including Herat and Faryab
through improved supply-side cond	Priority Implementation period	2017 2019 2019	2	2	2	2	2	m
Strategic objective 1: increase production and productivity through improved supply-side conditions.	Activities P	2.2.3	<ul> <li>1.2.5. Improve the investment climate and develop promotional materials.</li> <li>Develop a specific and practical investment promotion strategy for saffron, including promotional materials and programmes for investment promotion strategy for saffron, including promotional with an emphasis on elements such as supplier development and joint venture matchmaking.</li> <li>Develop an incentive package for investors which could include: <ul> <li>The revision of policies to support local investors.</li> <li>The provision of infrastructural incentives, such as land for lease at affordable rates.</li> <li>The provision of tax incentives for investors in saffron processing.</li> <li>Launch a targeted initiative to attract investment in the sector.</li> <li>Develop as shortlist of investment attraction opportunities.</li> <li>Develop as shortlist of investment attraction opportunities.</li> <li>Create promotional materials, such as market factsheets, and awareness-raising programmes to promote investment in issions and exhibitions (e.g. Italy, Spain, India) to showcase sector potential and facilitate investment mortunities.</li> </ul> </li> </ul>	1.3.1. Conduct workshops to sensitize bank officers to both sector and women's financial needs and encourage them to develop new loan instruments. The loan terms and conditions should be according to the ability of the larmers. Consider providing long-term loans of at least for three years with a lower interest rate.	1.3.2. Assist banks in developing financial products tailored to female value chain stakeholders and in compliance with Islamic beliefs. Besign loans which accommodate the saffron growing season and address social and cultural barriers to women (e.g. limited interaction and mobility). Explore the possibility of developing mobile financial services to address limited mobility.	1.3.3. Link women farmers and women farmers' associations with financial institutions to enhance the flow of information on available financial products. Links to be created through awareness-rais- ing programmes by credit providers through female-only community-level workshops, delivered by women agents.	<ul> <li>1.3.4. Strengthen existing financial services targeting female farmers.</li> <li>Map and evaluate the performance of existing financial services for women in the saffron sector (e.g. Zahra).</li> <li>In collaboration with key stakeholders, develop and implement measures to strengthen and/or expand existing financial services, in accordance with the performance study.</li> </ul>	1.3.5. Conduct awareness-raising workshops to promote existing financial services. Through a series of workshops, radio programmes and the development of outreach material such as brochures, create awareness among farmers and local communities of relevant and available financial services for the sector in Islamic banking.
	Operational objectives		1.2. Support the scaling up of both farming and processing operations.	1.3. Design, support and promote new and existing credit schemes (specifically for women farmers) to increase	financial access for saffron production.			

on alegic objective z. otten	orrategic objective 2: Strengmen the organization of the sector's ecosystem through greater conadoration and emiciency.				
Operational objectives	Activities	Priority	Implementation period	Target	Lead and supporting implementers
		1=ngn 2=med 3=low	2019 2019 2020 2021 2021 2021		
2.1. Reinforce sector coordination to favour productivity enhancement and policy advocacy.	2.1.1. Set up a high-level public—private partnership platform (e.g. Afghanistan saffron board) to represent the interests of the industry, with a view to enhancing sector productivity and advocacy. The partnership platform should comprise representatives of public agencies, farmers' associations and lead exporting firms. It should build on the work of the Saffron Development National Committee (MAIL).	-		High-level public—private partner- ship platform established	ACCI, MoCI, MAIL, Saffron Development National Committee, sector associa- tions, High Economic Council, Ministry of Economy
	2.1.2. The partnership platform contributes to securing implementation, mobilizing resources and advocating for this NES Saffron Strategy, and puts in place the proper mechanisms to monitor and audit its execution.	-		Monitoring mechanism designed and implemented	ACCI, MoCI, MAIL, Saffron Development National Committee, sector associations
	2.1.3. Members of the high-level partnership platform are supported to build a common position on key issues affecting the sector and build the necessary advocacy to support required policy or regulation changes.	2		At least five documents produced to convey common position (dec- larations, white papers, etc.)	ACCI, MoCI, MAIL, Saffron Development National Committee, sector associations, Ministry of Economy
	2.1.4. Create technical commissions within the high-level platform, to oversee the development, implementation and operation of technical activities within the field of their specific commission. Establish two technical commissions on the following areas:	2		Technical commission on best farming practices and quality man- agement set up	MAIL (ARIA), ACCI, MoCI, ANSA
	<ul> <li>Technical commission on best farming practices and quality management (ISO certification, etc.).</li> <li>Technical commission on sales (including prices) and marketing (marketing board). The committee should include traders, exporters and experts on marketing and international relations for saffron.</li> </ul>			Technical commission on sales and marketing set up	
	2.1.5. Based on standards for skills development set through the established master training programme, the platform coordinates the development of curricula and training modules and materials through its technical commission on best farming practices and quality management. The operation manual is a living document and will be adopted, modified or expanded from the learning	-		Course curricula developed, along with training materials	ACCI, MoCI, MAIL (ARIA), Saffron Development National Committee
	during implementation.				
2.2. Strengthen sector associations.	2.2.1. Carry out an institutional benchmarking programme for sector associations to improve their performance by measuring the effectiveness and efficiency of their business practices. The programme should survey all activity areas, including strategy and governance, resources and processes, products and services, and results measurement.	2		Institutional benchmarking pro- gramme carried out and providing technical capacity to at least five sector associations	MAIL (ARIA), ACCI
	2.2.2. Capacitate farmers' associations leaders to enhance their leadership skills and advocate for the sector.	2		<ul> <li>Two training workshops per year targeting leaders of farmers'</li> </ul>	MAIL, ACCI, Ministry of Higher Education (MoHE)
	Impart coaching to farmers' associations to enhance their leadership and management skills and to provide member-oriented services.			associations	
	Capacitate leaders to reduce the sourcing costs of association members through collective sourcing of non-competitive inputs (i.e. bulk orders to ensure the best possible prices for all players).				
	Train leaders of farmers' associations to mediate with external resource institutions, such as the Government and financial institutions.				
	2.2.3. Develop a pilot project targeting women's associations to strengthen their position in the sector.	က		Pilot project developed and op-	AWCCI, ACCI, Ministry of
	Impart women-to-women coaching on leadership, business management and marketing.  Capacitate female leaders of associations to advocate for the provision of more technical trainings to			erational, behaving at reast times women's associations in the sector	
	women: Reinforce their capacities in fundraising and resource mobilization, directing public and donor funds to- words the actablishment of processing and papelaging pentres for women among public and donor funds to-				

Operational objectives	Operational objectives Activities	Priority	Implen	Implementation period	Target	Lead and supporting
		1=high 2=med 3=low	2017	2020 2021 2021		implementers
2.3. Develop and capitalize on regional / international cooperation to improve research outcomes.	2.3.1. Enhance policy efforts and mechanisms to encourage cross-country and international collaboration. Strengthen existing / develop new links for south-south cooperation in the saffron sector. Identity international public sector and research institutions already collaborating/operating in the saffron sector in Afghanistan. Conduct a quick assessment of current activities and reinforce/expand relevant activities as required.	2			Ten institutions identified     Initiatives of identified institutions revised     Recommendations developed and integrated	ACCI, MoCI (commercial attacticles), MAIL, Ministry of Foreign Affairs (MoFA)
	2.3.2. At the international level, create partnerships with governments, regional organizations, academia and the private sector for the mutual sharing of knowledge, skills and technical know-how, and exchange of development solutions related to saffron (e.g. Morocco, India).	m			At least two memorandums of un- derstanding with international in- stitutions signed	ACCI, MoCI, MAIL (ARIA), MoFA
	<ul> <li>2.3.3. Enhance sharing of information on saffron-focused research.</li> <li>Conduct an inventory of existing research projects undertaken by relevant stakeholders – e.g. universities, private companies – on saffron production and agronomic practices at the national and regional / international levels (e.g. India, Islamic Republic of Iran, Morocco).</li> <li>Disseminate research findings and provide access to relevant stakeholders through a variety of mediums (farmer field schools, extension services and radio programmes, among others).</li> </ul>	5			Develop a research database available to sector stakeholders     Two annual workshops organized targeting farmer field school facilitators and extension services providers to update them on sectorfocused research developments	ACCI, MoCl, MAIL (ARIA), MoHE
	2.3.4. Based on inventory, conduct a gap analysis on research needs for the saffron sector and implement a saffron research and development agenda in collaboration with key stakeholders, such as relevant universities (e.g. Herat University) and the forthcoming Saffron Institute	m			Research gap analysis conducted     Research agenda developed	MAIL, ACCI, MoHE, Ministry of Education, ARIA, Herat University
	<ul> <li>Identify research gaps on saffron studies. Topics can include:         <ul> <li>Water and soil management;</li> <li>Identification of agroecological areas at the national level with optimum characteristics (e.g. water, soil, weather) for high-quality saffron production;</li> <li>Technological innovations across the value chain.</li> <li>In collaboration with identified research and development providers, create a research agenda, prioritizing the most urgent topics. Implement the research agenda and bring identified / developed technology and knowledge to the saffron value chain through upscaling in demonstration activities and flagship projects.</li> </ul> </li> </ul>					
	2.3.5. Strengthen research—extension—farmer links through dissemination of new technology to farmers, better taking into account local specificities. Based on the developed inventory of saffron research in the country, establish mechanisms for continuous dissemination of research findings to relevant stakeholders. Mechanisms can include: Demonstrations for farmers	es			Dissemination mechanisms estab- lished, including development of communication material     Ten research studies conducted on different topics	MAIL, ACO, and MoHE
	<ul> <li>Flagship projects</li> <li>Field days</li> <li>Permanent exhibitions</li> <li>Short courses, hands-on training</li> <li>Extension services</li> <li>Among others, including the development of communication materials such as fact sheets, posters.</li> </ul>				Five pilot demonstrations per year     Two flagship projects per year     Two trainings of trainers carried out per year to disseminate research results to extension services agents	
	2.3.6. Conduct extensive adaptation studies in agro- and sub-ecozones to identify suitable areas for saf- fron production in Afghanistan.	က			Five adaptation studies are con- ducted and five pilot initiatives developed accordingly	MAIL
	2.3.7. Assess options for supporting the development of specialized courses (short-term) as well as Masters and PhD level courses in Afghan universities (e.g. Kabul University, Herat University), focusing on saffron studies. As a short-term option, introduce saffron education in the curricula of vocational schools focusing on agriculture.	m			Module developed and integrated at 10 vocational schools / institutes	MAIL (ARIA), MOHE, MoCl

Strategic objective 2: Stren	Strategic objective 2: Strengthen the organization of the sector's ecosystem through greater collaboration and efficiency.			
Operational objectives	Activities	Priority Im	Implementation period	Target Lead and supporting
		1=high 2=med 3=low	2020 2020 2021 2021	implementers
2.4. Facilitate access to	2.4.1. Conduct a study to establish the effective demand for saffron corms per season.	2		One study conducted and dissemi- MAIL, Ministry of Economy
nign-quality corms and bulbs at competitive prices.	<ul> <li>The study should include medium-to-long term forecasting. The study will serve as a baseline study to feed into the due diligence required for other activities.</li> </ul>			nated to key stakeholders
	2.4.2. Monitor and lend support to the MAIL initiative to distribute 500 tons of saffron corms in 30 provinces across the country.	-		<ul> <li>Establish a monitoring framework MAIL for saffron corms distribution</li> </ul>
	2.4.3. In collaboration with research institutions, launch an initiative to produce and multiply better-quality corms.	2		<ul> <li>Technical study conducted</li> <li>Proposal for the establishment of</li> </ul>
	<ul> <li>Conduct a technical study to assess multiplication methods for good-quality corms.</li> <li>Assess the feasibility of establishing a corm bank in a key location. The corm bank will maintain a certain layed of stock and anoung availability of mediad multiply corms for farmers.</li> </ul>			a corm bank developed  • Ten pilot initiatives for corm multi- plication in Herat. Farvab and other
	<ul> <li>Establish public—private partnerships wherein seed (corm) firms will be invited to invest in a corm multiplication mencampa</li> </ul>			key areas  Thirty demonstration plots estab-
	Undertake a quality commutiplication programme through pilot initiatives in Herat and in other identification to the intermediate and			lished per year, on methods to ob- tain hinher-mulity corms
	ned areas with potential for ringit-quarity sarifori production.  • Pilot initiatives can take the form of public—private nurseries.			Assessment of current corm mul-
	<ul> <li>Develop demonstration plots linked to the farmer field school initiative to ensure correct planting and harvest methods of quality corms. Create demonstration plots to enable farmers to understand the ben-</li> </ul>			tiplication initiatives undertaken and corrective measures integrated
	efits of planting higher-quality corms.  • Strengthen existing corm multiplication initiatives. Conduct an assessment beforehand to identify specific needs of current initiatives.			
	2.4.4. Provide technical support to strengthen / develop a supply chain of seed companies to get involved in saffron corm production.	က		<ul> <li>Five technical studies to develop a MAIL, ANSA supply chain of seed companies in</li> </ul>
				key provinces of Herat, Faryab and other selected locations

Operational objectives	onacego cuporate e. open manket penetration and development anough megrated quanty management, packaging and pranting operations.  Operational objectives Activities Priority	Priority	Implement	Implementation period	Target	get	Lead and supporting
		1=high 2=med 3=low	2018 2018	2020	2022		implementers
3.1. Improve the ability of the sector to meet international quality standards.	3.1.1. Conduct a revision of existing international market mandatory requirements and identify institutional and enterprise challenges in meeting these standards, especially regarding compliance with hygiene, traceability, reliability and consistency standards.	-			• •	At least 5–10 key markets are assessed (i.e. market requirements) At least 20–50 saffron companies are surveyed	MoCI, ACCI, ANSA
	3.1.2. Conduct trainings (through the master training programme initiative) for key sector stakeholders (producers, exporters) to facilitate the implementation of standards and disseminate key information. Support existing initiatives, e.g. CARD-F, focused on training processing enterprises in standards of processing technology	<del>-</del>			•	Two trainings conducted per year through each farmer field school	MoHE, Ministry of Education, ANSA, MALL (ARIA)
	<ul> <li>3.1.3. Establish testing laboratories for quality control and certification.</li> <li>Assess existing laboratory facilities for quality control and certification.</li> <li>Develop a state of the art laboratory, sampling and festing facilities in Herat.</li> </ul>	2			•	One laboratory facility (re) ANSA, MAIL established	ANSA, MAIL
	3.1.4. Assist saffron companies to get ISO certification through the provision of technical support.	2			•	<ul> <li>Twenty companies receive techni- ANSA, MAIL cal support to get ISO certification</li> </ul>	ANSA, MAIL
	3.1.5. Lend support to the MoCl initiative to issue voluntary saffron quality certificates as part of the National Saffron Development Programme.	2			•	Framework to issue saffron quality ANSA, MoCl certificates is established	ANSA, MoCi
	3.1.6. Develop an Afghan saffron quality stamp.	က			•	Afghan saffron quality stamp ANSA, MAIL, MoCl	ANSA, MAIL, MoCI
	<ul> <li>Communicate the associated requirements, incentives and benefits that accompany the stamp to exporters.</li> <li>Launch a strong campaign to promote the quality stamp in international markets.</li> </ul>				• • •	developed Two information sessions targeting small and medium-sized enterpris- es (SMEs) per year One annual campaign rolled out in four key target markets	
	3.1.7. Implement a traceability system through barcodes for the saffron industry.	m			•	One feasibility study conducted	ANSA, MAIL, ACCI, MoCI
	<ul> <li>Conduct a feasibility study to identify widely used barcodes in the saffron industry and to assess requirements for the adoption of barcode technology in the saffron industry.</li> <li>Create links with key technical institutions and providers to request technical support for creating barcodes and verifying the print quality of barcodes.</li> </ul>				•	A traceability system is set in place and applied for saffron	
3.2. Improve access to packaging.	3.2.1. Conduct a brief assessment of packaging suppliers in the three project locations, involving the following activities:	2			•	Mapping and assessment are con- MoCI, MAIL, ANSA ducted in three selected locations	MoCI, MAIL, ANSA
	<ul> <li>Map packaging suppliers in the three locations with a comprehensive assessment of their capacities to suit saffron SMEs through factory visits and interviews.</li> <li>Assess challenges faced by suppliers in terms of sourcing inputs for their supply chain, and technical and financial challenges.</li> <li>Based on the findings of the due diligence study, packaging suppliers will be provided assistance across their supply chain. This activity will likely involve a broader scope to cover other sectors also.</li> </ul>				•	Five packaging suppliers are supported	
	3.2.2. A cohort of packaging firms will be inducted in a training programme involving targeted training and workshops ranging from basic / awareness-raising to highly specialized programmes for trainers, advisers and SMEs, using the internationally-recognized PACKit modules (including methodologies and tools). Select topics will include:	2			• • •	Five packaging firms receive training Financial grant / loan system set up and oberational	ANSA, MoCl, ACCl, Ministry of Public Health
	<ul> <li>Packaging regulation and compliance</li> <li>Distribution and packaging</li> <li>Traceability, bar coding and radio frequency identification</li> <li>Packaging of targeted sectors, including saffron</li> <li>Packaging design principles</li> <li>Sourcing of raw materials and their quality assurance</li> </ul>				•	Revision of legal and import duty framework for importing packaging materials. Policies are (re)formulat- ed, accordingly	
	<ul> <li>rackaging intertars, etc.</li> <li>A system of financial grants/loans for packaging companies to meet their operational expenses and capital expenditures related to equipment and facilities will be created.</li> </ul>						

Operational objectives	Operational objectives Activities Priority	Priority	Implementation period	tion period	Tar	Target Lead and supporting
		1=high 2=med 3=low	2018 2018	2020	2022	implementers
3.2. Improve access to packaging.	<ul> <li>3.2.3. Improve access to packaging equipment for saffron companies through the development of a shared service facility for packaging.</li> <li>Develop a pilot packaging centre where packaging equipment could be established as a shared facility for farmers' organizations to use.</li> <li>Location ideally in Herat.</li> <li>Privately operated and managed facility. Operators can be chosen through expression of interest. Private companies will showcase and demonstrate equipment.</li> </ul>	2			•	Shared service facility for packaging ANSA, MoCI, ACCI is set up and operational
	<ul> <li>3.2.4. In an effort to bridge the information and trust gap between suppliers and saffron firms, create packaging clinics with the following modalities:</li> <li>Experts will provide detailed feedback on existing samples to saffron firms in order to coach them on the weaknesses / strengths of their existing packaging.</li> <li>Packaging suppliers coached by international experts will lead sessions to package samples of participating saffron firms. Pre- and post-packaging and labelling assessment will be provided.</li> <li>Information and demonstrations on a variety of packaging types will be shared with SMEs and packaging suppliers.</li> <li>To incentivize saffron SMEs to use packaging firms, firms will be provided with 'vouchers' that can be used to procure packaging services on a one-time basis, the goal being that this will help prove the value proposition for firms so that they will procure the packaging services on their own in following iterations.</li> </ul>	2			•	At least two coaching sessions led MoCI, ANSA, MAIL by international experts per year, targeting saffron firms A voucher system is developed and operational
3.3. Promote Afghan saffron in international markets and facilitate greater in-market support.	3.3.1. Roll out an awareness-raising campaign on Afghan saffron by developing promotional material and merchandising such as videos and a dedicated website to showcase the attributes of Afghan saffron.	2			•	One comprehensive campaign MoFA, ANSA, MAIL, ACCI, launched reaching four key target MoCl markets
	3.3.2. Through a competitive selection process, identify a number of Afghan saffron companies to be supported through grants to participate in international fairs and exhibitions. Capacitate participating companies on market intelligence prior to their travel. Coach companies on the following topics:	-				<ul> <li>Ten Afghan SMEs are selected and ACCI, MoCI, MoFA benefit from grant support</li> </ul>
	<ul> <li>Identifying and connecting with new buyers, and how to follow up meetings and deals.</li> <li>Understanding market requirements.</li> <li>Identifying opportunities for reaching international markets.</li> </ul>					
	Facilitate business-to-business meetings for participating companies during the corresponding fairs and exhibitions.					
	Organize field visits in the host country to local processing units and packaging facilities, and local markets (e.g. Dubai's Gold Souk) to increase their awareness of international standards.					
	3.3.3. Enhance in-market support through capacity-building of trade attaches abroad.	2			•	Four online workshops are conduct- MoCI, ACCI and MoFA
	<ul> <li>Through online capacity-building workshops and the dissemination of market profiles and Afghan saffron factsheets, build the capacities of trade attachés at Afghan missions abroad on the potential of saffron.</li> <li>Train trade attachés on identifying business development opportunities and channelling them back to stakeholders such as ministries, sector associations, etc.</li> </ul>					ed annually, targeting trade attachês in at least eight key target markets
	3.3.4. Conduct a feasibility study to assess the possibility of establishing at least one showroom in a key market to showcase saffron and other similar exports to raise awareness and create a single ad- dress where wholesalers and retail buyers can get saffron and other products in that export market.	က			• •	Flot launched     MoCl, ACCI     Plot launched
	Based on the study, launch a pilot for the establishment of a showroom in a key market.					

Challenges in importing important faw materials and packaging varieties will be reviewed, and related advocacy efforts will be undertaken at the official level.

<ul> <li>3.3. Enhance market intelligence on current and potential regional and international international markets and facilit. Italy, UAE) by developing market profiles. Information to include: legal requirements, late greater in-market support; trends.</li> <li>Develop strategies for each larget market, considering:  • EU (market requirements such as packaging), possible diversification of products (e.g. herbal drinks, salfron-flavoure pilets, resturants, accordingly).</li> <li>• Asia markets, possible diversification of products (e.g. herbal drinks, salfron-flavoured profilets), resturants, accordingly.</li> <li>• Asia markets, possible diversification of products (e.g. herbal drinks, salfron-flavoured profilets and area markets, possible diversification for imports is generally non-existent except for the filet best market (UAE, second-largest consumer after familic Republic of Iran saffron imports), with potential focus on packaged saffron and saffron-flavoured profiles and conduct workshops for saffron and saffron-flavoured profiles and conduct workshops for saffron and saffron-flavoured profiles and conduct workshops for saffron and saffron-flavoured profiles and conductions of the saffron and saffron-flavoured profiles and conduction for export;</li> <li>• Business and market upofiles and conduct workshops for saffron and related in the file and profiles and conduction saffron saffron.</li> <li>• Financial side saffron saffron saffron saffron saffron saffron saffron saffron saffron.</li> <li>• Forducts and benefit from the trade agreements in the target market trough saffron saffron.</li> <li>• As a pilot initiative, assessment to explore a propretatives. Other advings and other functions involved in the commerce applications. Ensure trades of sufformation and sumposition saffron.</li> <li>• Creative packaging according to consumer inter</li></ul>	Onerational objectives Activities Priority	Priority	Implementation period		Tarnet	Lead and Supporting
		1 = high 2 = med 3 = low	2019 2019 2020 2021	2022		implementers
	3.3.5. Enhance market intelligence on current and potential regional and international markets (e.g. laby, UAE) by developing market profiles. Information to include: legal requirements, such as quality equirements, labelling; consumer preferences, such as certifications, packaging; and consumer trends.	-		ľ	<ul> <li>Market profiles developed for at MoCl (commercial attaleast eight target markets chés), MoFA, ACCl and N</li> </ul>	MoCI (commercial atta- chés), MoFA, ACCI and MAIL
	Develop strategies for each target market, considering:  • EU (market requirements such as packaging), possible diversification of products (e.g. pharmaceutical, cosmetic and food industries), market and distribution channels (e.g. involvement of diaspora, tical, cosmetic and food industries).					
	notels, restaurants, accordingly).  • Asian markets, possible diversification of products (e.g. herbal drinks, saffron-flavoured dairy products, plant-based medicine). Regulation for imports is generally non-existent except for China and Japan.  • Middle East market (UAE, second-largest consumer after Islamic Republic of Iran, re-exports most saffron imports), with potential focus on packaged saffron and saffron-flavoured products.					
	Disseminate market profiles and conduct workshops for saffron companies.  3.3.6. Enhance business and marketing capacities of Afghan saffron companies. Organize training sessions for exporters on:	-		·	<ul> <li>Two training sessions targeting at MoCI, MoFA, ACCI and MAIL least 30 SMEs are conducted per</li> </ul>	MoCl, MoFA, ACCl and MAIL
	or export; . quality, packaging, etc.); reated by trade agreements;				year	
	on nee trace agreements in the target market, iols. Focus on interpretation of market information.					
	3.3.7. Explore e-commerce development possibilities for the Afghan saffron sector. <ul> <li>Conduct a brief feasibility study / assessment to explore options to use e-commerce to sell and ship</li> </ul>	က			<ul> <li>A feasibility study is conducted</li> <li>Ten cooperatives / companies are</li> </ul>	ACCI and MoCI, Ministry of Communications and Information Technology
	As a pilot initiative, assist select cooperatives/companies to set up websites, online payment modali- ties and other functions involved in e-commerce applications. Ensure that local information technol- oov firms are involved in the implementation and scale up the initiative based on success.				-	:
<ul> <li>Networking and organizing of a local market througl consumers.</li> <li>Creative packaging according to consumer interests.</li> <li>Raising awareness among families about the signifiat home.</li> <li>3.4.2. Promote programmes to increase national demans.</li> <li>Encourage national demand for saffron by rolling out</li> </ul>	3.4.1. The local market needs to be addressed through a home business marketing strategy, which creates links with society and businesses through seminars, exhibitions and symposiums as well as the establishment of saffron sales representatives. Other activities include:	2			Home business marketing strategy ACCI, MoCl and local media designed and rolled out     An annual symposium is conducted	ACCI, MoCI and local media
<ul><li>3.4.2. Promote programmes to increase national deman</li><li>Encourage national demand for saffron by rolling out</li></ul>	<ul> <li>Networking and organizing of a local market through coordination with industrial, food and home consumers.</li> <li>Creative packaging according to consumer interests.</li> <li>Raising awareness among families about the significance of saffron and methods of using saffron at home.</li> </ul>					
<ul> <li>Elicourage Hallolfal Dellatio 101 Sanfoll by folling out</li> </ul>	ase national demand for saffron.	2		•	<ul> <li>A technical report is developed ACCI, MoCland local media on the current domestic market</li> </ul>	ACCI, MoCI and local media
Conduct a study to analyse the current domestic marker market and corresponding product development alt	<ul> <li>Enroduage hattorial definant for safron by forming out communication campaigns.</li> <li>Conduct a study to analyse the current domestic market. Develop a study to analyse the potential unmet market and corresponding product development alternatives for domestic saffron consumption.</li> </ul>			•	for saffron  One national campaign is carried out per year, based on study findings	

## REFERENCES

Abadia, A. (2012) Analysis of the saffron industry in Afghanistan and introduction to export promotion strategies for saffron. USAID.

ACCI (2014). *Business Policy Recommendations*. Afghanistan National Business Forum, 27 February.

Afghanistan, Ministry of Agriculture, Irrigation and Livestock (2016). *National Comprehensive Agriculture Development Priority Programme 2016-2020.* 

Afghanistan, Ministry of Agriculture, Irrigation and Livestock (2017). 5th National Saffron Conference Terms of Reference. 6–8 November, Kabul.

Afghanistan, Ministry of Commerce and Industries (2009). *Afghanistan SME Development Strategy.* 

Afghanistan, Ministry of Counter Narcotics (2015). *Afghanistan Drug Price Monitoring Monthly Report, September.* Ministry of Counter Narcotics, Islamic Republic of Afghanistan and United Nations Office on Drugs and Crime. Kabul. Available from http://mcn.gov.af/Content/files/Afghanistan%20 Price%20Monitoring%20September%20%202015.pdf.

Afghanistan, Ministry of Labour, Social Affairs, Martyrs and Disabled (2009): Baseline Data for the Quality of TVET Provision in Afghanistan, National Skills Development Programme.

Afghanistan Research and Evaluation Unit (2016). Moving With the Times: How Opium Poppy Cultivation has Adapted to the Changing Environment in Afghanistan.

Afghanistan Public Policy Research Organization (2011). Gender and the Agricultural Innovation System in Rural Afghanistan: Barriers and Bridges. Available from: http://reliefweb.int/sites/reliefweb.int/files/resources/Full%20 Report 46.pdf.

Afghanistan Public Policy Research Organization (2010). Value Chain Governance and Gender: Saffron Production in Afghanistan. Available from http://appro.org.af/wp-content/uploads/2017/03/131206754-Value-Chain-Governance-and-Gender-Saffron-Production-in-Afghanistan.pdf.

Afghanistan Rural Enterprise Development Programme (2013). Afghan saffron sold in European markets. *AREDP in Focus*, No. 2. Ministry of Rural Rehabilitation and Development.

Altai Consulting (2015). Afghanistan/Central Asia regional food fortification programme. Available from www.gainhealth.org/wp-content/uploads/2014/07/Regional-Trade-Flow-Analysis-across-the-CAR-Region-ENG.pdf.

Centre for the Promotion of Imports from Developing Countries (2013). *CBI Product Fact Sheet: Consumer-packed Spices and Herbs in the EU.* 

Centre for the Promotion of Imports from Developing Countries (2009). *CBI Market Survey: The Spices and Herbs Market in the EU*.

Danish Committee for Aid to Afghan Refugees (2010). Saffron Operation Manual. Kabul.

Food and Agricultural Organization of the United Nations (2015). Saffron progress and opportunities in Afghanistan. *Newsletter – Afghanistan,* Issue 3 (December).

Food and Agricultural Organization of the United Nations (2015). *Empowering Women in Afghanistan – Reducing Gender Gaps through Integrated Dairy Schemes*. Rome.

Ghiasy, Richard; Zhou, Jiayi and Hallgren, Henrik (2015). *Afghanistan's Private Sector: Status and Ways Forward.* Stockholm International Peace Research Institute and International Council of Swedish Industry.

Global Agricultural Information Network (2015). *China's Food Safety Law (2015)*. Report number CH15016. United States Department of Agriculture.

Government of India (2012). The Saffron Grading and Marking Rules, 2012.

Harakat Investment Climate Organization and Afghanistan Chamber of Commerce and Industries (2014). *Private Sector Priorities for Reform for London Conference*.

ICAR-Indian Institute of Natural Resins and Gums (2015). *Lac, Plant Resins and Gums Statistics 2015*: At a Glance, ISSN No IS: 2454-8782. Available from: http://ilri.ernet.in/~iinrg/Lac%20Statistics.pdf

International Centre for Agriculture Research in the Dry Areas/Danish Committee for Aid to Afghan Refugees (2008). Saffron Manual for Afghanistan. Available from: http://afghanag.ucdavis.edu/b\_field-crops/other/Man\_Saffron\_Afghanistan\_ICARDA.pdf.

International Labour Organization (2015). Selecting the Road to More and Better Jobs: Sector Selection Report of the Road to Jobs Project in Northern Afghanistan.

International Taste and Quality Institute (2013). Afghan saffron company ranked 1st by International Taste and Quality Institute, 22 June. Available from www.itqi.com/en/aboutitqi/press-archives/afghan-saffron-company-superior-taste-award-2013/.

Islamic Republic of Afghanistan (2008). *Afghanistan National Development Strategy.* 

ITC (2016). Enhance export capacities of Asia's least developed countries for intra-regional trade – Afghanistan's exports to China (unpublished).

ITC (2017). Reconnecting Afghanistan to global markets – an ITC assessment of export potential and trade obstacles (unpublished).

Katawazy, Abdul Samad (2013). *A Comprehensive Study of Afghan Saffron*. Afghanistan Investment Support Agency, Research, Planning and Policy Directorate. Available from www.doc-developpement-durable.org/file/Culture-epices/safran/Commercial/A%20comprehensive%20study%20 of%20afghan%20saffron.pdf.

Majid Wafiq (2016). "The Role of Medicinal Plants in Afghanistan's Trade". Available from: http://assets.publishing.service.gov.uk/media/57a08c59ed-915d3cfd00131c/RALF3\_002.pdf

Minoia, Giulia and Pain, Adam (2016). Saffron: The social relations of production. Secure Livelihoods Research Consortium. Afghanistan Research and Evaluation Unit, Working Paper No. 48. Available from http://areu.org.af/wp-content/uploads/2016/08/1701E-Saffron\_The-social-relations-of-production.pdf.

Paterson, Anna (2006). *Going to Market: Trade and Traders in Six Afghan Sectors*. Afghanistan Research and Evaluation Unit. Available from http://areu.org.af/wp-content/up-loads/2015/12/622E-Going-to-Market-SP.pdf.

Sampathu, S.R. and others (1984). Saffron (*Crocus Sativus* Linn.) — Cultivation, processing, chemistry and standardization. *CRC Critical Reviews in Food Science and Nutrition*, vol. 20, issue 2.

Samuel Hall Consulting (2012). Research Study to Determine the Priorities for the Implementation of Standards in Afghanistan and Evaluate the Demand for Services of the Afghan National Standards Authority in the Private Sector. Commissioned by UNIDO.

UNIDO (2014). Sa//ron Industry Value Chain Development in Iran: Diagnostic Study Report. Available from http://open. unido.org/api/documents/4672742/download/Saffron%20 Industry%20Value%20Chain%20Development%20In%20 Islamic%20Republic%20of%20Iran%20-%20Diagnostic%20 Study%20Report.

USAID (2012). *Market Analysis for Saffron*. USAID's Trade and Accession Facilitation of Afghanistan.

USAID (2010). Afghanistan Agricultural Finance Market Research. Washington, D.C.

World Bank (2016). *Afghanistan – Systematic Country Diagnostic*. Washington, D.C.

World Bank (2016). Regional trade & transit: opportunities and challenges for Afghanistan. Background Technical Brief. Washington, D.C.

World Bank (2015). *Afghanistan – Country Snapshot*. Washington, D.C.

World Bank (2015). Saffron: a major source of income and an alternative to poppy, 19 January. Available from www. worldbank.org/en/news/feature/2015/01/20/saffron-major-source-income-alternative-poppy.

World Bank (2014). *Afghanistan – Agricultural Sector Review:* Revitalizing Agriculture for Economic Growth, Job Creation, and Food Security. Washington, D.C.

World Bank (2012). *Afghanistan Diagnostics Trade Integration Study*. Washington, D.C. Available from http://documents.worldbank.org/curated/en/373301467992809220/ Afghanistan-diagnostics-trade-integration-study.

World Bank (2011). *Understanding Gender in Agricultural Value Chains: the Cases of Grapes/Raisins, Almonds and Saffron in Afghanistan.* Washington, D.C.

World Bank (2010). *Saffron Value Chain Forum for Women in Herat*. Available from http://documents.worldbank.org/curated/en/510671467993728238/Saffron-value-chain-forum-for-women-in-Herat.

Wyeth, Peter (2007). *Marketing Afghan Saffron*. Washington State University International Research and Development.

Wyeth, Peter and Malik, Najib (2008). A Strategy for Promoting Afghan Saffron Exports. Research in Alternative Livelihoods Fund.



FSC is an independent, non-governmental, not for profit organization established to promote the responsible management of the world's forests.

Printed by ITC Digital Printing Service on FSC paper, which is environmentally-friendly paper (without chlorine) using vegetable-based inks. The printed matter is recyclable.





Street address: ITC

54-56, rue de Montbrillant, 1202 Geneva, Switzerland

Postal address: ITC

Palais des Nations,

1211 Geneva 10, Switzerland

+41-22 730 0111 +41-22 733 4439 itcreg@intracen.org www.intracen.org Telephone: Fax: E-mail: Internet:







This project is funded by the European Union:



ADVANCING AFGHAN TRADE EU Trade-Related Assistance