

Strategies for sustainable upgrading in global value chains: the Tunisian olive oil sector

Jan Grumiller, Hannes Grohs, Werner Raza, Cornelia Staritz, Bernhard Tröster

This policy note¹ presents policy recommendations for a sustainable development strategy for the Tunisian olive oil sector in the context of the ongoing negotiations on the Deep and Comprehensive Free Trade Agreement (DCFTA) between Tunisia and the EU. Against the backdrop of increasing local value added and ecological constraints, a sector development strategy should primarily focus on exploiting functional and product upgrading potentials in the EU and other end markets instead of increasing low value bulk exports.

Overview of the Tunisian olive oil sector

The olive oil sector plays a crucial role in the Tunisian economy. As an export-oriented sector it is particularly important for foreign-exchange income given structural import dependencies and balance of payments constraints. Between 2012/13 and 2016/17, Tunisia was the second largest producer of olive oil after the EU, accounting on average for 6% of total production and 18% of global exports by volume (IOC 2018). Olive cultivation represents around 40% of total agricultural production by area cultivated (around two million hectares) and olive oil is by far the most important agricultural export product, amounting to an average of 36% of total agricultural exports by value between 2006 and 2016 (CEPEX 2017). Italy (37% of total olive oil exports in 2016 by value), Spain (18%), the US (17%), France (11%) and Canada (4%) are Tunisia's main export markets (UN Comtrade 2017).

The main segments of the olive value chain in Tunisia include (i) input supply; (ii) olive production, providing livelihood to around 310,000 smallholders (CEPEX 2017); (iii) intermediaries; (iv) olive oil production, including around 1,720 traditional and modern mills (Ayadi/Fourati/Triki 2014: 61); and (v) exporting and packaging companies. Tunisia's olive oil sector has experienced significant changes since the country's independence from France. The *Office National de l'Huile* (ONH) used to regulate the sector, but the deregulation process since the mid-1990s has increased the importance of private exporters, which have a dominant position in the local sector relative to olive producers and olive oil millers due to their access to finance and stronger control over the value chain.

The Tunisian olive oil sector faces many challenges, including (i) relatively low productivity rates; (ii) high volatility of olive and olive oil production as well as exports; (iii) high dependence on the EU market; and (iv) a large share of bulk exports in total olive oil exports (see Grumiller et al. 2018 for more details). The relatively low productivity rates and high

volatility in production can be attributed to local sector dynamics (e.g. limited coordination and adoption of good agricultural practices among smallholders, lack of irrigation systems, etc.) and climatic conditions (especially water scarcity).

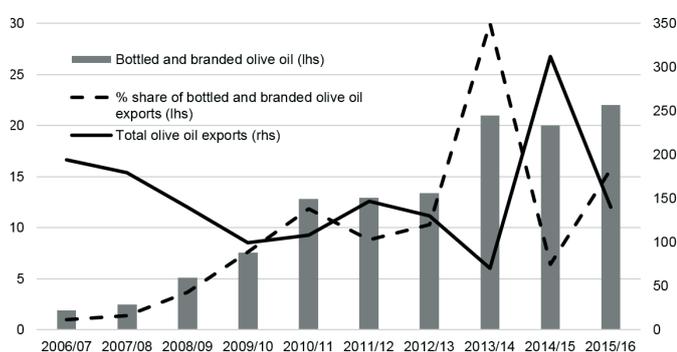
The high dependence on the EU severely constrains the development of the Tunisian olive oil sector for three key and partially interrelated reasons: First, the large share of bulk exports highlights the subordinated integration in the European olive oil value chain and the constraints for functional upgrading in the context of an increasingly buyer-driven value chain in which lead firms in the EU focus on high value added activities such as bottling and branding and thus primarily import olive oil in bulk. Second, Tunisian olive oil exports to the EU are subject to a preferential tariff quota at a zero rate of duty or to inward-processing arrangements² (TARIC 2017). Since 2006, the annual permanent duty free tariff quota for olive oil has been fixed at 56.7 thousand tons.³ In April 2016, the EU granted a temporary expansion of the yearly quota by 35 thousand tons until the end of 2017 in order to assist the Tunisian economy. At the time of writing, the quota has not been extended for the year 2018 even though Tunisia already utilized 100% of the standard quota in the first week of 2018 (EC 2018).⁴ The quota impedes⁵ exports of bottled and branded products, since it hampers the creation of long-term relationships between importing and exporting companies as access to the quota cannot be assured in the future. Third, consumer awareness with respect to Tunisian olive oil in the EU is low. This owes in part to the practice of European importers to mix Tunisian olive oil with other olive oils without being obliged to declare its Tunisian origin.⁶

Tunisian exporters have to some extent succeeded – but continue to struggle – to diversify markets (e.g. to the US and Canada) and to increase the share of bottled and branded products. Many exporting companies were however able to functionally upgrade and increase exports of bottled and branded olive oil, which includes local firms but foreign direct investment from the EU played an important role as well.

This can be seen in increased bottled and branded olive oil exports - from 1.9 thousand tons in 2006/07 to 22 thousand tons in 2015/16 (see Figure 1).⁷

Against the background of the ongoing negotiations between Tunisia and the EU on a Deep and Comprehensive Free Trade Area (DCFTA), it will be pivotal for Tunisia to dynamize the economic potential of its export oriented sectors in general, and the olive oil industry in particular. Against the backdrop of increasing local value added and ecological constraints, a sector development strategy should primarily focus on exploiting functional and product upgrading potentials and diversifying end markets instead of increasing bulk exports.

Figure 1: Exports of olive oil and bottled and branded olive oil (thousand tons)



Source: MIC 2016

Policy recommendations for a sustainable development strategy

Based on field research as well as a global value chain (GVC) and SWOT-analysis, a sector development strategy should focus on eight intervention areas (see also Jackson et al. 2015):

1. Promote olive production in terms of increased productivity and reduced volatility

The promotion of olive production needs more attention and resources in order to improve the general performance of the olive oil sector. Low productivity levels as well as the high volatility in production limit the quantity of exportable olive oil and the income of the most vulnerable group in the Tunisian olive oil sector, i.e. smallholders. Productivity of olive production is comparatively low due to ageing olive trees, a low planting density, limited application of good agricultural practices and maintenance of farms, a low level of mechanization, weak infrastructure and lack of irrigation systems as well as access to water (Jackson et al. 2015). While the ongoing vertical integration of exporters and millers is likely to benefit productivity levels in the future, policy makers should particularly focus on the challenges of smallholders, which would also have positive impacts on smallholders' income. The promotion of olive production in Tunisia is particularly beneficial since olive trees are well adapted to the Tunisian climate and are comparatively elastic in terms of output in case of climatic changes.

The key challenges of smallholders must be tackled in order to increase productivity levels in olive production. Extension services (access to finance, education, equipment, inputs, etc.) provided to smallholders and cooperatives should be increased. Cooperatives also need to be supported in order to make the provision of services to smallholders more efficient. The expansion of contract farming – which is so far not widespread in the Tunisian olive oil sector – between buyers (esp. millers or exporters) and cooperatives can also be a useful instrument in this regard.

The current government strategy to plant around 5 million trees between 2015 and 2020 is likely to yield a positive effect on output and productivity since the aging of trees is an important issue in Tunisia. The strategy nevertheless needs to be supported by more efforts to promote good agricultural practices and investments (in particular in irrigation systems) as well as access to finance and equipment (e.g. for harvesting). Investments in irrigation systems must be combined with feasibility studies, which take account of regional water scarcity and explore opportunities for water recycling (cf. Jackson et al. 2015).

Horizontal integration among farmers could also be an opportunity to promote productivity in the Tunisian olive oil sector. Such endeavors should be accompanied by creating attractive alternatives for smallholders exiting agricultural production. Vertical integration of millers and exporters into farming is increasing and positive impacts on productivity levels should be expected.

2. Continue strategies for product upgrading

The main opportunities for product upgrading relate to (i) the general quality of Tunisian olive oil, in particular the share of extra virgin olive oil, (ii) organic olive oil and (iii) the strengthening of geographical indications. The quality of Tunisian olive oil is high since the share of extra-virgin olive oil in total output is estimated at around 70% to 80% (ONH 2017). Nonetheless, there is still room for improvement. The increase of organic olive production from almost zero in the early 2000s to around 120 thousand hectares in 2015/16 in light of governmental support has been a success (CEPEX 2017), but certification of smallholders should nonetheless be extended. Geographical indications for Tunisian olive oil need to be further developed in the context of a national branding strategy. Geographical indication, high quality and organically certified olive oil does not only add value, but is of particular importance for the promotion of bottled and branded exports to traditional consumer markets, especially the EU.

The introduction of technical standards in the upstream segments of the value chain (olive production, transportation and mills) is key in order to raise the average quality of Tunisian olive oil to a higher level. In the production of olives, post-harvesting methods must be improved via extension services. With respect to the transportation of olives, mandatory standards should be set in order to reduce waiting time and reduce damages of the produce. In the milling sector, hygiene standards must be enhanced and enforced.

The further expansion of organic production is also an opportunity for increasing the value added in the Tunisian olive oil value chain. The incentives of the government to support organic production have proven to be successful. The expansion of certification must nonetheless be accompanied by measures to enhance the impact of certification on the incomes of smallholders (e.g. improve market intelligence and reduce the role of intermediaries).

3. *Intensify functional upgrading to bottled and branded exports*

Exports of bottled and branded olive oil products have increased in the last decade. Nonetheless, Tunisia continues to export most of its exports in bulk (93% in terms of volume in 2016) (CEPEX 2017). It is furthermore estimated that around half of the bottled exports are branded by distributors and not by 'Tunisian brands,' limiting the value added accruing to Tunisian companies. Further increasing the share of bottled and branded exports (in particular of Tunisian brands) is key in order to expand the value added in the Tunisian olive oil sector as well as to mitigating income volatility, as high value olive oil products have a lower price volatility. It is also instrumental to promoting the continuing diversification of export markets (see below), since competition in traditional and key non-traditional consumer markets is high. The exportation of organic bottled and branded oil is particularly important to penetrate traditional consumer markets in the EU and key non-traditional markets like the US and Canada.

Challenges to increase functional upgrading are related to GVC dynamics and the interest of lead firms in the EU to buy olive oil in bulk for blending. Hence, the share of bottled and branded olive oil products can be increased by promoting diversification of export markets where lead firms have more interest in importing bottled and branded products (see point below) and ensuring consumer awareness of Tunisian olive oil and Tunisian brands. Both require extending support for exporting companies and promoting cooperation between exporting companies.

Tunisian exporting companies already possess well-developed capabilities and capacities in producing a competitive and marketable bottled and branded product. However, consumer awareness of Tunisian olive oil and Tunisian brands in traditional and non-traditional markets could be furthered via targeted and more extensive marketing instruments. The government and exporting companies would be well advised to develop a national branding strategy for Tunisian olive oil on a larger scale, focusing on markets with significant export potential and manageable levels of competition (e.g. USA, Canada, Japan, Malaysia, non-traditional EU markets). The promotion of bottled and branded olive oil products should also be accompanied by the extended use of geographical indications, thus further enhancing the quality reputation of Tunisian brands.

4. *Promote the diversification of export markets*

The EU (esp. Spain, Italy, France and Portugal) continues to be the most important export market for Tunisian olive oil,

even despite the increasing diversification of export markets. Market diversification is however a key focus area of the Tunisian industry and government, with organizations such as CEPEX and PACKTEC focusing on new markets within the EU and markets outside the EU such as the US and Canada. The further diversification of export markets and the expansion of market shares particularly in non-traditional export markets continue to be important not only to increase the volume of bulk exports but also to ensure functional upgrading by increasing the share of bottled and branded olive oil exports (see above).

The main challenge continues to be the lack of capabilities and finance on the part of many smaller exporting companies to penetrate (new) markets. Exporting companies are supported by the government via a rather well-developed institutional setup for the promotion of bottled and branded olive oil (esp. Ministry of Industry, PACKTEC, CEPEX). Support for exporting companies should however be extended by the provision of country specific market intelligence as well as financial support for market penetration fees (e.g. subsidies for listing fees).

5. *Develop linkages between the olive oil sector and other sectors*

The development of linkages is key in order to improve the positive impacts of the olive oil sector on the local economy. The main opportunities lie in the enhanced use of byproducts (e.g. reuse of wastewater of millers, usage of olive cake, production of lampante oil, etc.) as well as the development of a national bottling industry.

The development of bottled and branded exports is closely connected with further promoting the national bottling industry, which is currently limited to two tin can and one glass bottle producing companies. Glass bottles produced are furthermore only 'standard quality' and availability is a problem as well. Exporters of bottled and branded products thus need to import bottles, mainly from Italy. The expansion of bottled exports thus yields great potential to further the Tunisian bottling industry. Investments into this sector could be enhanced by a subsidized investment capital facility for local investors and strategic foreign direct investment attraction.

6. *Use the potential of the DCFTA*

Tunisian stakeholders in the olive oil sector need to be more involved in the DCFTA negotiation process in order to be able to voice their concerns. As negotiations on the DCFTA move forward, the Tunisian olive oil sector must push for (i) DFQF access for Tunisian olive oil, or, at the minimum, an expansion of the existing quota and the introduction of a quota system that differentiates between bulk as well as bottled and branded products, (ii) the protection of geographical indications, and (iii) a change in the labelling requirements for olive oil manufacturers in the EU, obliging the latter to publish the origin of the olive oil used in more detail. At the moment, EU regulation No 29/2012 allows European olive oil manufacturers to label bottles containing Tunisian olive oil to be 'not of European origin' (Article 4(2)) without being obliged to specifically name Tunisia as the origin, thus limit-

ing European consumer awareness on Tunisian olive oil. In case the negotiations of the DCFTA do not move forward, Tunisian stakeholders should seek to review and adapt the Association Agreement.

7. *Promote social upgrading and environmental sustainability*

Smallholders as well as workers on the farms can be identified as the main vulnerable group in the olive and olive oil sector. The large majority of short-term waged workers in the olive oil sector in Tunisia are women. The biggest challenges for olive farmers include price volatility, low productivity rates and large fluctuations in production volumes as well as often problematic working conditions on the fields. The further development of farmer-based organizations, targeted training to promote good agricultural practices, contract farming as well as improved access to finance and irrigation systems are key in order to improve the livelihood of farmers and workers in the Tunisian olive oil sector.

Olive oil production in Tunisia has adverse environmental impacts since the olive mill wastewater is often not treated and disposed accordingly. The recycling of wastewater as well as the use of byproducts could be enhanced. The recycling of wastewater is particularly important in the context of scarce water resources. The expansion of irrigation systems has been identified as a key instrument to tackle low productivity as well as high volatility rates in olive production. However, in the face of the scarcity of water resources, the improvement of extraction technologies to reduce water requirements and reuse wastewater is key in order to be able to expand irrigation systems (Jackson et al. 2015).

8. *Use development cooperation in strategic policy areas*

European development cooperation needs to support defined elements of the partner countries' industrial development policies. This in turn will also improve control over, and ownership of, donor projects by government partners so that activities initiated by development partners are better sustained and the knowledge generated is not lost.

Development cooperation from the EU has in recent times already played an important role in supporting the Tunisian olive oil sector. Its role should be continued focusing on areas where such assistance will be most useful. This should prioritize the following:

- Supporting the government in developing a visionary strategy for the olive oil sector and in improving the coordination among stakeholders in the olive oil sector
- Financing market research and providing market intelligence to support export diversification and market share expansion particularly in non-traditional markets for bottled and branded exports

- Supporting government agencies to develop the necessary capabilities to enhance the promotion of bottled and branded olive oil exports to non-traditional markets and to support input industries (e.g. bottling)
- Financing targeted training to promote good agricultural practices in areas with less capabilities in olive growing
- Providing refinancing mechanisms for bank lending to agricultural production and processing activities, including input industries (e.g. bottling), especially with regard to investment loans for local firms
- Supporting the expansion of irrigation systems (including feasibility studies)
- Supporting the government in reducing the environmental impact of olive oil production, including the reuse of wastewater
- Supporting the establishment of farmer based organizations and link them with other stakeholders in the olive oil value chain (clusters)

Conclusion

Tunisia has a long history in olive oil production and well-established capacities and capabilities in almost all segments of the value chain. Room for improvement nonetheless exists, in particular with regard to low productivity and high volatility levels in olive production, the weak organization and coordination among stakeholders, the limited access to finance as well as further product and functional upgrading to higher value added exports and end market diversification. The key challenge for the Tunisian olive oil sector is its subordinated integration into particularly European olive oil value chains, in which lead firms in the EU focus on high value added activities such as bottling and branding and thus import olive oil mainly in bulk. The potential for product and functional upgrading in Tunisia has improved with increasing demand in non-traditional markets as well as for high-quality niche products. In this context, many Tunisian exporters of bulk olive oil successfully increased their share of bottled and branded exports to non-traditional markets and the EU. The EU nonetheless remains the most important market for Tunisian olive oil and exports of bottled and branded olive oil to the EU are hampered due to international competition and restricted market access. The DCFTA negotiations (or a review of the existing Association Agreement) between Tunisia and the EU provide an opportunity not only for negotiating enhanced market access for Tunisian olive oil to the EU, but need to be used for implementing a strategic upgrading policy for the olive oil sector. Only upon that basis will it be possible to link the development of the Tunisian olive oil sector to sustainable development outcomes.

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- 1 The policy note builds on the findings of two comprehensive studies conducted by the Austrian Foundation for Development Research (ÖFSE). Grumiller et al. (2018a) analyse the DCFTA between the EU and Tunisia with regard to its potential macroeconomic effects and its implications on the Tunisian textile and apparel as well as olive oil sectors. Grumiller et al. (2018b) focus on policy recommendations for a sustainable development strategy for the two respective sectors based on a Strengths-Weaknesses-Opportunities-Threats (SWOT) analysis.
 - 2 Inward-processing arrangements allow for duty-free imports from third countries under the condition to export the equivalent oil quantity outside the EU after processing.
 - 3 Regulation (EC) 1918/2006
 - 4 Regulation (EC) 2016/605
 - 5 The specific application of the import quotas by monthly limits until 2016 has led to underutilization of quota volumes in all years between 2013 and 2016, even though total imports exceeded the quota volumes in two out of these four years (OTE 2017). Since 2016, the import quota has been applied on a yearly basis aiming to reduce the administrative burden. Flexibility for importers increased insofar as the issued import licenses are now valid from the day of their issuance until the end of the corresponding year. In 2016, the total quota of 56.7 thousand tons was allocated in the first week of the year. Additionally, 10.4 thousand tons of the expanded quota were allocated throughout the year (EC 2016). Tunisia utilized nearly 100% of the standard quota in 2017, but did not utilize the additional quota as of mid-December 2017 (EC 2017). Some Tunisian exporters (e.g. CHO) set up importing companies in the EU in order to get access to the quota.
 - 6 EU Regulation No 29/2012, Article 4(2b)
 - 7 Depending on the year, this translates to between 6% and 30% of total olive oil exports in recent years.

Disclaimer:

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Authors information

Jan Grumiller
Researcher ÖFSE
j.grumiller@oefse.at

Hannes Grohs
Research Assisitant ÖFSE
h.grohs@oefse.at

Werner Raza
Director ÖFSE
w.raza@oefse.at

Cornelia Staritz
Senior Researcher ÖFSE
c.staritz@oefse.at

Bernhard Tröster
Researcher ÖFSE
b.troester@oefse.at