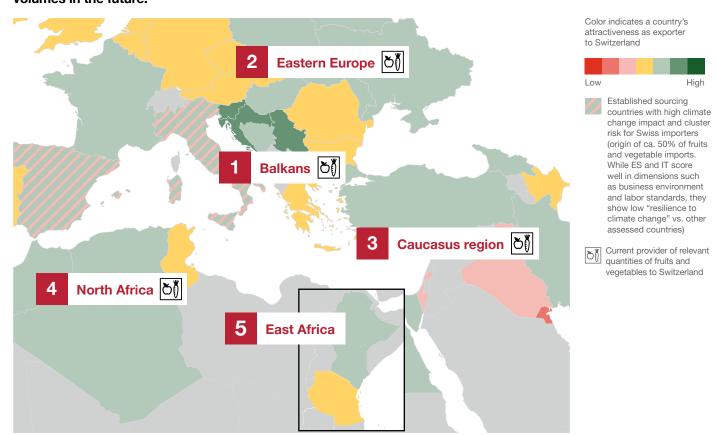


Illustrative case study: Supply chain diversification strategies for Swiss food importers

To explore ways for Swiss food importers to diversify their sourcing strategy and ensure a steady supply of fresh fruits and vegetables, we have identifed alternative supplier countries in selected European and African regions that meet specific prerequisites¹ and assessed their potential to become relevant suppliers for the Swiss market. Our analysis considered six key criteria: production costs, output volumes, product quality, sustainability, labor standards, and environment. Currently, these countries contribute a relatively small share of Swiss food imports, highlighting the potential for increased volumes in the future.



Proximity to CH, beneficial climate conditions, stability and rule of law, capacity to satisfy relevant share of CH demand

Possible regions for import diversification (detailed rationale on following pages)

- 1. Balkans (focus: Serbia and Croatia): Expand trade relations and imports from Croatia and Serbia. Consider dual-sourcing to benefit from each market's strengths and ensure sufficient supply in case of shortages.
- 2. Eastern Europe (focus: Hungary and Moldova): Build on existing import relationships with major suppliers like Hungary and explore options in fast-growing countries with maturing agricultural sectors such as Moldova.
- 3. Caucasus region (focus: Turkey and Georgia): Selectively increase imports from Turkish producers which meet Swiss health, quality and sustainability standards (e.g. pesticide usage). Potentially explore opportunities to build relationships with Georgian exporters and build up supply chains.
- North Africa (focus: Morocco and Algeria): Assess Morocco's ability to maintain its position as major supplier of fruits and vegetables given potential adverse effects from climate change. Assess Algeria's potential to complement Morocco as part of a multisourcing strategy in the long-run.
- 5. Ethiopia (potential long-term option): Assess Ethiopia's potential to develop into a reliable supplier for selected niche and high quality products. Join forces with other importers and NGOs to support further professionalization, infrastructure improvements and address potential political and humanitarian issues.

Rationale by region

Balkans (focus: Serbia and Croatia)







幽 111%



Favorable climate conditions and higher climate change resilience than Spain and Italy render Croatia and Serbia attractive for food importers. A multi-sourcing strategy would enable importers to benefit from each country's strengths (e.g. Croatia's EU membership and focus on sustainability) and higher agility in case of disruption. In Serbia, potential issues related to high pesticide use may require particularly diligent supplier selection and monitoring.

Eastern Europe (focus: Hungary and Moldova)





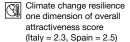
118%

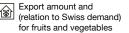


1,489 kt. (140%)

Eastern Europe presents a blend of a stable existing supplier base and significant growth potential driven by the maturing agricultural sectors in rapidly developing economies. Already known for exporting a diverse array of fruits and vegetables, the region continues to boost its output and diversify into new crops, making it an attractive prospect for Swiss importers.

Average attractiveness index score (Italy = 3.2, Spain = 3.2)





Average self-sufficiency rate for fruits and vegetables

Caucasus region (focus: Turkey and Georgia)



3.3

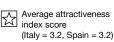


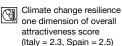


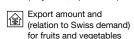


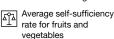
8,753 kt. (818%)

Turkey offers an immediate opportunity to diversify fruit and vegetable imports, with a large export-oriented agricultural sector that produces about 7.5 times the Swiss demand. However, ensuring Swiss quality and sustainability standards requires careful selection and monitoring of suppliers due to concerns over quality and high pesticide usage. Other Caucasus countries like Moldova and Georgia, expected to be more climate-resilient, present additional mid-term opportunities. Nonetheless, economic, legal, and geopolitical challenges must be considered.









North Africa (focus: Morocco and Algeria)







劉 122%



2,299 kt. (215%)

Morocco is a key supplier of fruits and vegetables for the Swiss market. However, mid-term agricultural output may be negatively affected by climate change-induced desertification and water shortages. To mitigate these risks, neighboring Algeria, with its currently small but rapidly developing agricultural sector, could complement Morocco in a multi-sourcing strategy for enhanced supply security.

East Africa¹ – Example Ethiopia² (long-term option)













83 kt. (8%)

Ethiopia's favorable climate and topography, coupled with low exposure to climate change, enable competitive cultivation of high-quality crops such as strawberries, exotic fruits, and vegetables. Although the agricultural sector is expanding and modernizing, improvements in efficiency, product quality, and infrastructure are crucial for Ethiopia to become a reliable supplier for the Swiss market. Ethiopia should be viewed as a promising development initiative for Swiss importers to pursue in collaboration with other European importers and NGOs with the goal to modernize the country's agricultural sector, foster economic development and enhance long-term supply security for Switzerland.

Methodology: Two-staged selection approach

Pre-requisites	Selection criteria
Proximity to CH ³	Cost of production ⁵
Beneficial climate conditions ⁴	Strength of agricultural sector ⁶
Stability and rule of law	Quality and safety ⁷
Capacity to satisfy relevant share of CH demand	Sustainability of agriculture ⁸
	Labour standards ⁹
	Business, political and social environment ¹⁰



See key considerations for importers and final remarks on pages dive into further analysis on individual regions on the following pages

- Selected countries, including Kenya, Ethiopia, Tanzania and Uganda. Whilst several Swiss importers already maintain trade relations with Kenvan suppliers
- 2. We illustratively selected Ethiopia for this case study given the country's potential to develop into a relevant exporter in the longer term
- 3. Distance to Switzerland in km
- Mediterranean, subtropical and temperate zones
- Including labour costs and transport to CH
- Absolute agrisector of GDP, self-sufficiency, size of agricultural sector
- Global Food Security Index for quality and safety
- Driven by fertilizer, pesticide and water usage
- Labour rights index
- 10. Driven by human freedom, inclusive internet and trade and labour market index

1. Balkans (focus: Serbia and Croatia)

918 kt. (87%) 😰 111%

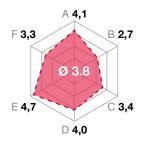
- Region expected to become warmer and more humid, which is favorable for growing a variety of fruits and vegetables
- Serbia's large and export-oriented agricultural sector stays in contrast to Croatia's smaller but more specialized and sustainability-focused farming industry (e.g., organic, high quality produce)
- Croatia's EU-regulated agricultural sector with significantly lower pesticide usage compared to its neighbor, yet harmonization with EU standards is expected to improve situation in Serbia
- Existing fruit and vegetables trade relations with EU / Switzerland with strong potential for further expansion

A. Serbia (non-EU member)

5.19 CHF 4804 kt. (75%) 37kg / ha (149% of CH) 114%

- Climate and soil conditions favorable for a wide range of fruits and vegetables (e.g., berries, stone fruits such as peaches, tomatoes)
- Well-developed, self-sufficient agricultural sector with high export capacities (e.g., one of world's largest raspberry exporters)
- Existing agricultural product trade relations with EU / Switzerland with strong potential for further expansion
- Pesticide usage currently relatively high, but expected to be reduced due to harmonization with EU regulation

Attractiveness index score: Overall 3.8



B. Croatia (EU member)

8.28 CHF 144 kt. (13%)
1.8kg / ha (38% of CH) 86%

- Similar climate / soil conditions and product variety as Croatia, but significantly smaller agricultural sector
- Access to various EU agricultural funds which is expected to enable growth and modernization of agricultural sector
- EU-regulated agricultural sector and significantly lower pesticide usage vs. Serbia mitigating potential health / quality issues
- Reputation for high-quality and organic products driven by growing emphasis on sustainable agricultural practices

Attractiveness index score: Overall 3.7



each 1kg tomatoes, potatoes, onions and lettuce

Price per food basket including

- Export amount and (relation to Swiss demand) for fruits and vegetables
- Agrichemical usage
- Self-sufficiency rate for fruits and vegetables

Score 0: Low attractiveness Score 5: High attractiveness

- A Resilience to climate change B Business, political and social environment
- C Cost of production
- D Strength of agricultural sector
- E Labour standards F Sustainability
- Source: Strategy& analysis

Source: IFA, FAO, Statista, World Bank, European Parliament

Swiss food importers could pursue a flexible dual- / multi-souring strategy with supplier in both countries to increase agility and ensure sufficient volumes in case of shortages.

2. Eastern Europe (focus: Hungary and Moldova¹)

1,489 kt. (139%)



- Temperate continental climate and fertile soil render both countries suitable for a wide variety of products
- Hungary's well developed agri-export market currently outperforms Moldova's agricultural sector in terms of product quality, output volumes and supply chain infrastructure
- Yet, Moldova's higher resilience to climate change, ongoing modernization initiatives and improving quality standards strengthen the country's positioning as reliable fruit and vegetable supplier
- Potential economic, legal and geopolitical challenges need to be considered, especially for Moldova

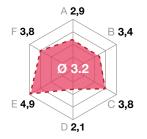
A. Hungary

5.19 CHF 4804 kt. (75%)

△ 7kg / ha (149% of CH) № 114%

- Climate well suited for wide range of fruits and vegetables (e.g., stone fruits, grapes, paprika, peppers, tomatoes), however climate change expected to lead to more frequent droughts and soil degradation with potential adverse impact on productivity
- Advanced, self-sufficient agricultural sector, with wellestablished high-value export market, incl. several EU countries with similar quality standards as Switzerland
- Modern infrastructure with vertically integrate supply chains and strong processing capabilities (e.g. canning, packaging etc.)

Attractiveness index score: Overall 3.2



- Price per food basket including each 1kg tomatoes, potatoes, onions and lettuce
- Export amount and (relation to Swiss demand) for fruits and vegetables
- Agrichemical usage
- Self-sufficiency rate for fruits and vegetables

Score 0: Low attractiveness Score 5: High attractiveness

- A Resilience to climate change B Business, political and social environment
- C Cost of production

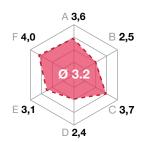
 D Strength of agricultural sector
- E Labour standards
- F Sustainability
- Source: Strategy& analysis
- Case studies selected based on comprehensive scoring model taking into account production costs, output volumes, product quality, sustainability, labor standards, and business environment, as well as current supply relationships and volumes
- Deep and comprehensive free trade areas between EU, Georgia, Moldova and Ukraine Sources: IFA, FAO, Statista, World Bank, International Finance Corporation, Ministry of Agriculture, Nature and Food Quality Netherlands

B. Moldova

5.41 CHF 512 kt. (48%)

- Temperate continental climate and fertile soil suitable for cultivation of wide variety of fruits and vegetables (e.g., stone fruits, grapes, tomatoes). Climate change could enable further diversification (e.g., kiwis and figs)
- Growing and modernizing agricultural sector exporting to several EU countries under DCFTA²). In CH, Moldova benefits from suspended import taxes and loosened quotas
- Existing infrastructure deficits (e.g. insufficient modern storage, inefficient logistics) are currently being addressed through agri-sector modernization programs, increasing reliability and efficiency of export supply chains
- Geopolitical instabilities in the region may affect agricultural production and supply chains and need to be closely monitored

Attractiveness index score: Overall 3.2



3. Caucasus region (focus: Turkey and Georgia¹)

8,241 kt. (770%) 🕸 117%

- Regional climate suitable for tropical / sub-tropical fruits and vegetables
- Climate change will likely affect both countries, but Georgia expected to be more resilient to widespread impact
- Turkey's large agricultural export industry is complimented by Georgia's smaller, but fast-growing farming sector with increasing reputation for high quality niche products
- Health and sustainability issues (e.g., pesticide usage and residues) exist in both countries, yet Turkey has more stringent adherence to international quality standards due to its established export market
- Potential economic, legal and geopolitical challenges need to be considered for both countries

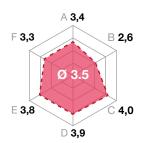
A. Turkey

७ 3.23 CHF ♣ 8,087 kt. (756%)

△ 2.3kg / ha (49% of CH) № 116%

- Climate suitable for variety of tropical / sub-tropical fruits and vegetables
- Sizeable and well-developed agricultural sector (one of the largest stone fruit producers worldwide)
- Risk of more frequent droughts and water shortages in light of climate change requiring mitigation measures
- Relatively high pesticide usage / residues in some products¹ require diligent vendor selection and monitoring²
- Modernized EFTA-Turkey free trade agreement improves market access and customs provisions

Attractiveness index score: Overall 3.5



- Price per food basket including each 1kg tomatoes, potatoes, onions and lettuce
- Export amount and (relation to Swiss demand) for fruits and vegetables
- Agrichemical usage
- Self-sufficiency rate for fruits and vegetables

Score 0: Low attractiveness Score 5: High attractiveness

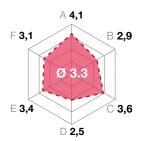
- A Resilience to climate change B Business, political and social
- C Cost of production
- D Strength of agricultural sector
- E Labour standards F Sustainability
- Source: Strategy& analysis
- Case studies selected based on comprehensive scoring model taking into account production costs, output volumes, product quality, sustainability, labor standards, and business environment, as well as current supply relationships and volumes
- Potential inaccuracies due to official vs. actual numbers
 Fruchtportal.de
- Source: IFA, FAO, Statista, World Bank, Ministry of Commerce Turkey, European Commission

∺ B. Georgia

4.41 CHF 154 kt. (14%)

- · Stable climate conditions and limited impact from climate change
- Diverse climate zones including subtropical Black Sea coast and mountainous regions suitable for a wide range of fruits and vegetables (e.g., stone and citrus fruits, grapes, tomatoes)
- Relatively small, but growing agricultural sector with growing export volumes to EU under DCFTA¹)
- Reputation for high quality products and growing awareness for sustainable / organic farming practices
- Pesticide usage remains issue, requiring diligent vendor selection and monitoring in line with EU / Swiss standards
- Interesting mid-term option for Swiss importers as agricultural sector continues to develop and standards improve to meet EU / Swiss requirements

Attractiveness index score: Overall 3.3



4. North Africa (focus: Morocco and Algeria)

2,299 kt. (215%) 😰 122%

- As of today, Morocco is a key fruits and vegetables supplier for Switzerland. Algeria plays a lesser role, given its smaller and less developed agricultural sector (Algeria's export volume fruits and veggies to CH is ca. 1 / 3 of Morocco's)
- Whilst climate change affects the entire region, Algeria appears more resilient given comparatively large water resources and irrigation systems
- · As Algeria's agricultural sector grows and undergoes modernization, importers sourcing from Morocco could consider Algeria as back-up option in a multi-sourcing strategy. This would require build-up of new supplier relations and infrastructure improvement, which may take a few years. Joining forces with other European importers and development agencies could accelerate the process

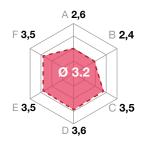
A. Morocco

3.49 CHF (202%)

△ 1.5kg / ha (32% of CH) 🕯 124%

- Sizeable and well-developed agricultural sector
- Important fruit and vegetable supplier for Switzerland, (e.g., accounting for ~25% of tomato imports)
- · Broad range of products such as citrus fruits, green beans, peppers, watermelons, and berries
- Climate change-induced desertification and water shortages may hit agricultural productivity and output in the mid-term
- · Modernization and investments required to increase climate change resilience and maintain current output and export capacities

Attractiveness index score: Overall 3.2



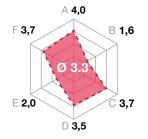
B. Algeria

3.25 CHF 136 kt. (13%)

△ 0.7kg / ha (15% of CH) № 97%

- Relatively small player (ca. 1 / 3 of Morocco's export to CH) with interesting upside
- Higher climate change resilience compared to Morocco and relatively large water resources. Measures to mitigate shortages such as irrigation systems are under way
- Maturing agricultural sector with potential for further expansion and technology-driven productivity increase
- Potential economic / business and political challenges to be considered

Attractiveness index score: Overall 3.3



- Price per food basket including each 1kg tomatoes, potatoes, onions and lettuce
- Export amount and (relation to Swiss demand) for fruits and vegetables
- Agrichemical usage
- Self-sufficiency rate for fruits and vegetables

Score 0: Low attractiveness Score 5: High attractiveness

- A Resilience to climate change B Business, political and social environment
- C Cost of production
- D Strength of agricultural sector
- E Labour standards
- F Sustainability
- Source: Strategy& analysis

Swiss food importers could pursue a flexible dual-/multi-souring strategy with supplier in both countries to increase agility and ensure sufficient volumes in case of shortages.

Source: IFA, FAO, Statista, World Bank, MEYS Emerging Markets Research, National Agricultural and Rural Development Program

5. East Africa¹ – Example Ethiopia (long-term option)

3 kt. (8%)



Swiss importers could consider sourcing fruits and vegetables from Eastern Africa for a couple of reasons:

- (Sub-)tropical climate and favorable topographical conditions, suitable for a wide range of high quality products (e.g., avocado, berries, tropical fruits such as mangoes or bananas, beans and peas)
- Relatively low cost of production, given low labor cost
- Existing trade relations with Swiss importers in some countries (particularly Kenya) which could be further extended

Yet, the region also bears several challenges which need to be addressed

- Infrastructure deficits in some countries, such as lacking end-to-end cold chains or transport systems
- · Need to rely on air-freight for some products to ensure fresh and timely delivery, adding to costs
- · Challenges around political stability, humanitarian issues and rule of law in some countries

The region offers a promising opportunity for importers to support economic development and sustainability, aligning with Switzerland's commitment to sustainable trade practices and development aid. Swiss importers could collaborate with NGOs and other European importers to share costs and maximize impact

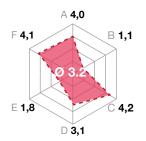
Ethiopia²

3.82 CHF 383 kt. (8%)

△ 0.2kg / ha (4% of CH) № 100%

- Diverse agro-ecological zones, coupled with fertile soil and low pest pressure in high-altitude areas, offer optimal conditions for a wide range of temperate and tropical fruits and vegetables, including high margin products such as high quality strawberries3
- · Abundant water resources and relatively low climate change impact
- · Deficits in agricultural productivity and infrastructure, particularly in cold chains, transport networks, and market access, are being addressed through dedicated modernization and development initiatives (supported by NGO's, such as FAO⁴ and ITA⁵)
- Potential for collaboration with established importers, particularly in the sectors of coffee, to reduce cost and share best-practices
- Risks and challenges mentioned above need to be carefully monitored and mitigated
- Overall, Ethiopia presents a viable long-term development option for importers aiming to expand their sourcing relationships in the region while contributing to the country's economic development

Attractiveness index score: Overall 3.2



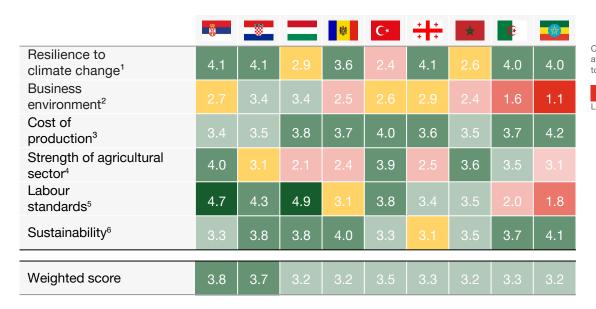
- 1. Selected countries, including Kenya, Ethiopia, Tanzania and Uganda; Whilst several Swiss importers already maintain trade relations with Kenyan suppliers
- 2. We illustratively selected Ethiopia for this case study given the country's potential to develop into a relevant exporter in the longer term
- 3. Further products include peas, green beans, peppers or spinach for Swiss winter months
- 4. The Food and Agriculture Organization
- 5. International Trade Association Source: IFA, FAO, Statista. World Bank

- Price per food basket including each 1kg tomatoes, potatoes, onions and lettuce
- Export amount and (relation to Swiss demand) for fruits and vegetables
- Agrichemical usage
- Self-sufficiency rate for fruits and vegetables

Score 0: Low attractiveness Score 5: High attractiveness

- A Resilience to climate change B Business, political and social environment
- C Cost of production
- D Strength of agricultural sector
- E Labour standards
- F Sustainability
- Source: Strategy& analysis

Attractiveness overview and key considerations for importers





Key considerations for importers

- 1. Conduct a thorough review of supply chains to identify products heavily dependent on suppliers operating in regions vulnerable to climate change
- 2. Perform scenario analyses to evaluate the potential impacts of climate change on your product portfolio, financial performance, and customer relationships. Assess whether affected products can be partially or fully replaced by alternatives from your existing portfolio or sourced from other suppliers with established trade relationships. If this is not feasible:
- 3. Identify countries with suitable conditions for cultivating the affected products, shortlist the most feasible options, and perform qualitative and quantitative suitability assessments based on the dimensions applied in this case study and your specific requirements.
- 4. Build relationships with local suppliers and conduct due diligence to ensure they can reliably provide the required capacities at competitive costs while adhering to your quality, sustainability and labor standards.
- 5. Compare shortlisted suppliers through a comprehensive cost analysis, including product, transportation, and additional costs like trade insurance or import duties.
- Select most suitable supplier(s) and consider a multi-sourcing strategy to enhance agility and negotiation power
- 7. Integrate new suppliers into your global supply chain network to identify potential synergies and inefficiencies. Restructure supply chains where appropriate to enhance efficiency and resilience.
- 8. Formally establish new supply relationships and implement necessary monitoring, quality assurance, and risk mitigation measures.
- Continuously monitor supply chains using data-driven, real-time monitoring tools to enable early identification of potential bottlenecks and take proactive action in case of upcoming disruptions.

^{1.} Impact on water stress,

drought and flooding

Overall stability of local business, political and legal situation

Labor costs and logistics costs for import to Switzerland

Size and self sufficiency of domestic agricultural sector

Preservation and protection of labor rights

Fertilizer and pesticide usage, impact on land and logistics impact
 Source: IFA, FAO, Statista,
 World Bank

Final remarks and contacts

This illustrative case study aims at providing 'food for thought' for Swiss importers and other stakeholders interested in diversifying the fruit and vegetable supply chain, considering potential future output reductions in current key supplier countries and the possibility of increasing competition among European nations for fresh produce.

The country selection used in this analysis is not exhaustive and is based on the KPIs introduced at the beginning of the paper. These KPIs enable pragmatic cross-country comparisons and are designed to approximate local conditions as accurately as possible. However, they may not capture all relevant qualitative or quantitative factors affecting a country's suitability as a fruit and vegetable exporter to Switzerland. Importers can use this analysis as a foundation for strategic considerations but are advised to conduct thorough qualitative and quantitative suitability assessments based on their specific requirements and standards, as well as specific local conditions in the respective countries.

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