



MOVING
MOUNTAIN VALORISATION THROUGH
INTERCONNECTEDNESS AND GREEN GROWTH

Policy Brief

BEYDAGLARI | Greenhouse Tomato



Photo credit: Korhan Kinikli



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Greenhouse Tomato, Beydaglari-Antalya

Authors: Murat Yercan, Hakan Adanacioglu, Duygu Tosun, Filiz Kınıklı (EGE University)

Summary

Tomato is not only the most grown vegetable in Turkey but it is also a very important raw product for processing industry. Tomato has more than a 40% share in total vegetable production. This includes around 70% for fresh tomato and the rest is for the industrial processing. Tomatoes for industrial processing are grown in open field conditions during the summer season and fresh tomatoes are grown in greenhouses throughout the year. Most of the greenhouses are in south-west Anatolia-Antalya where the Mountain Reference Region (Beydaglari) is located. This region produces tomatoes for export and the region has micro-climatic advantages which minimise production and heating costs during periods with the most daylight and highest daily temperature.

Greenhouse farming is spread-out across the plains at sea level but the last decades have seen expansion into the steep-slopes in Beydaglari. Greenhouse production provides 3-5 months' cash flow and doubles annual production, as distinct from other seasonal crops. The region is also a popular tourist destination for summer holidays (15 million tourists, 2019) which generates demand for local food products. This explains the interconnectedness and mutual support between sectors.

Know more about the Beydaglari Reference Region, its selected value chain and the regional multi-actor platform (MAP), [here](#).

Key policy messages

- Production planning integrating with natural resource capacity
- Policy supports for eco-friendly farming practices
- Efforts for establishing a farmer cooperative on fresh vegetables and fruits.

1. The Mountain Reference Region (MRR)

Beydaglari is one of the western extensions of the Taurus Mountains, which are within the borders of Antalya. The Beydaglari extends to the west of the Antalya Bay, in a north-south direction parallel to the bay. Mountains of between 600-3086 m., are located in the region.

Teke dorugu, Bakirli mountain, Tahtali mountain and Kizlar Sivrisi are important peaks. The highest peak is 3086 m. Mountaineers reach this peak from Çamçukuru Valley, which is



covered with cedar forests. The easiest access to the valley is via the Antalya-Elmalı (LAU) road. The mountain climb can be completed in one day.

Tahtalı Mountain to the west of Kemer is decorated with interesting slopes. Its elevations extend to 2360 m. Pine and mixed forests extend up to 2000 m. The climb to Tahtalı Mountain starts from Soğukpınar and offers unique views when overlooking the Mediterranean. You can reach the camping area with a short walk and climb from Soğukpınar. It is possible to organise excursions to the Bey Mountains throughout the year. The months of April, May and June are most suitable for excursions due to the suitability of the climate appearance of rich flora in this period.

Beydağları Coastal National Park (Olympos Beydağları National Park) is a national park in Antalya Province, southern Turkey. The national park was established on March 16, 1972 by a government decree. It stretches over an area of 34,425 ha (132.92 sq mi), beginning in Sarısu, located southwest of Antalya and reaching out to Cape Gelidonya parallel to the Mediterranean Sea, across the Kemer-Kumluca shoreline. The park has significant biodiversity, with more than 865 plant species, 25 of which are endemic. Rare mammals can also be found in the area, including the mountain goat, bobcat, caracal and wolf.

2. Resilience and innovation

In Beydağları-Antalya, the district with the highest annual sunshine is Elmalı (LAU). In addition, the air is cool and dry because of the high mountain region. Both the high annual sunshine and the favourable climatic conditions played an important role in the development of greenhouse cultivation in Elmalı (LAU). Greenhouse tomato cultivation is very common in the region. Due to the favourable conditions in the region, greenhouse tomato producers produce higher quality tomatoes compared to the producers located in the plain. Tomatoes produced in greenhouses in Elmalı (LAU) have a better appeal than those grown in the plain.

The total area under greenhouse tomato cultivation in Elmalı (LAU) is about 835 hectares. The average farm size per household is between 0.4 and 0.5 hectares. Greenhouse tomato cultivation has been carried out in Elmalı (LAU) since 2000. The number of greenhouse tomato growers is 1850. Approximately 95% of greenhouse tomato growers are smallholder farms. Community interaction has had an important effect on the spread of greenhouse tomato cultivation in Elmalı (LAU).

3. Value chain contribution to sustainability and resilience of the MMR (barriers and opportunities)

Greenhouse tomato cultivation is an innovative production activity for the Elmalı (LAU). Disease and pest density is low in the region due to climatic and topographic factors. Therefore, fewer pesticides are used. Using less input increases the income of producers. In addition,



greenhouse tomato growers in Elmalı (LAU) produce higher quality tomatoes than the ones in the plain. Quality tomato production provides an opportunity for tomato growers to obtain higher prices for their products. The price advantage in the product positively affects the producer income. As a result, greenhouse areas have increased rapidly in recent years in Elmalı (LAU) as greenhouse cultivation activities provide high income. In addition, healthier products are supplied to the market due to the use of less pesticide.

There are three major challenges for growers growing tomatoes in a greenhouse. These are; low crop selling prices, crop diseases and labour shortages. Greenhouse tomato production is very common in Antalya. There are many greenhouse tomato growers especially in the plains region of Antalya. The high supply of tomatoes causes the prices to fall. Although greenhouse tomato growers in Elmalı (LAU) produce higher quality tomatoes compared to the producers in the plains, they cannot obtain high prices. Producers encounter crop diseases. However, crop diseases are less common than in lowland areas (plain). This is also an important advantage.

4. Policy relevant considerations

The most common marketing channel used by greenhouse tomato growers is the wholesale market brokers. The traders are used moderately in product sales. Direct-to-consumer sales are low. Greenhouse tomato growers sell to export companies less frequently. Although tomatoes produced in the region are of high quality, producers cannot get high prices for their products. This is one of the negative aspects of the value chain. Also, the greenhouse tomato growers in Elmalı (LAU) do not have a farmers' organisation. On the other hand, the fact that the tomatoes produced in Elmalı (LAU) are a highland product creates a positive effect in terms of the product's value chain. As a matter of fact, tomatoes grown in the highland have a higher quality and healthier product image.

High quality and a healthy product image are important advantages in greenhouse tomato marketing. However, marketing innovations are needed to turn these advantages into opportunities. This value chain analysis gives us an idea about how to innovate, especially in production and marketing methods. This value analysis will also provide the opportunity to examine the main resilience for marketing innovation. In this context, the possible effects of climate change will be analysed alongside socio-cultural and environmental factors.

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Authors

Murat Yercan, EGE University, murat.yercan@ege.edu.tr

Hakan Adanacioglu, EGE University, hakan.adanacioglu@ege.edu.tr

Duygu Tosun, EGE University, duygu.tosun@ege.edu.tr

Filiz Kınıklı, EGE University, filiz.kinikli@ege.edu.tr