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OUR FOOD PLANET FUTURE
OCT2020-APR2021
TORINO-PIEMONTE
e in tutto il mondo!



Mediterranean
Model Forest Network

19 NOVEMBER 2020
in webinar format
start at 17:00

ITA-ENG (SIMULTANEOUSLY TRANSLATION)

**MODEL
FORESTS OF THE
MEDITERRANEAN
NETWORK:
COMMUNITY,
PRODUCTS,
MANAGEMENT**

19 November 2020

17.55-18:10 (Roma Time)

**The valorization of no wood
forest products in Turkey
through the Model Forest
concept**

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Turkey

MODEL FORESTS IN TURKEY



International Model Forest Network



MEMBERSHIP TO MMFN/IMFN

Mediterranean Model Forest Network

Members:

Region of Castilla y León (Spain)
Region of Murcia (Spain)
Region of Corsica (France)
Region of Provence-Alpes-Costa de Azul (France)
Region of Sardinia (Italy)
Region of Tuscany (Italy)
Region of Istria (Croatia)
Prefecture of Magnesia (Greece)
Region of Western Macedonia (Greece)
Turkey
Tunisia
Morocco

Urbión Model Forest (Castilla y León)
Ifrane Model Forest (Morocco)

*Candidate





2014-2018

YALOVA MODEL ORMANI STRATEJİK PLANI

Graphic1-1030x782.jpg



YALOVA MODEL FOREST
STRATEGIC PLAN
2010 – 2014

Brief History

- Turkey participation process in Model Forest started in 2007. While we were discussing the issue to be a member or not, we made some changes at the "Forest Management Regulation-FMR", which is one of the basic documents in the management of forests. The FMR was published in the Official Gazette dated February 5, 2008..
<https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=11952&MevzuatTur=7&MevzuatTertip=5>
- Item 5/c of FMR as follows: "*Forest management plans can be made with different contents and bases in order to implement changes in forestry practices, **to develop a new model**, and to determine whether this model can be applied or not*". Based on the FMR, we obtained official and written permission from the Minister of the time to participate in the MMF.
<http://www.gonder.org.tr/?p=1280>
- The model forest issue was added to the founding law of the General Directorate of Forestry(GDF) in 2011. The related item as follows: *To determine, protect and operate recreation areas, urban forests, research forests, arboretum areas, forest biodiversity conservation areas, **model forest** and conservation forest areas.*
<https://www.mevzuat.gov.tr/MevzuatMetin/19.5.4.pdf>
- As a result, we declared two model forests namely Yalova and Bucak.

Non-Wood Forest Products in Turkey

"Light in Weight Heavy in Value"

- In 2011, the Department of Non-Wood Products and Services (DNWFPS) was established as the central unit of the GDF.
- The total amount of marketed NWFPs in Turkey for 2019 was calculated about **880 million USD**.
- NWFPs are mainly found in state-owned forests. The main collectors of NWFPs are "forest villagers" who live in forests and on the edge of villages. As of 2019, the income generated by forest villagers from the sale of NWFPs was **123 million USD**.
- The number of forest villagers working in wood production is around 150 000 people. **The number of forest villagers working in the collection of NWFPs is around 25 000 people.**
- **However, the NWFPs sector makes an economic contribution directly or indirectly to approximately 500 000 people in Turkey.** This number includes the people working in the field for collection, working in drying processes, working in the process of making the product or semi-finished products, packer, end seller-retailer, exporter etc.

Indicator	Unit of measure	Amount
Country area (FAO,2016)	ha	78 535 000
Forest area by FAO (FAO,2016)	ha	11 715 000
Forest area by national definitions (GDF,2020)	ha	22 740 297
Private forest area	ha	18 000 (0.080% of total forest)
Growing stock (2019)	m3	1 679 356 210
Annual increment (2019)	m3	47 200 000
Industrial wood in the rough production-2019	m3	22 113 248
Annual fFuel wood production-2019	Stere/m3	5 589 798 stere/3 912 858 m3
Country population (TURKSTAT, 2020)	Person	83 154 997
Forest villages subject to Forest Act (GDF, 2018b)	Number	22 712
Forest villagers subject to Forest Act	Person	7 013 712

TÜRKİYE ORMAN VARLIĞI HARİTASI



ÖZEL İŞARETLER

VERİMLİ ORMAN	BATAKLIK
BOZUK ORMAN	SU
AÇIK ALANLAR	BÖLGE MÜDÜRLÜĞÜ SINIRI
ÖZEL ORMAN	İŞLETME MÜDÜRLÜĞÜ SINIRI

0 70.000 140.000 280.000
Meters

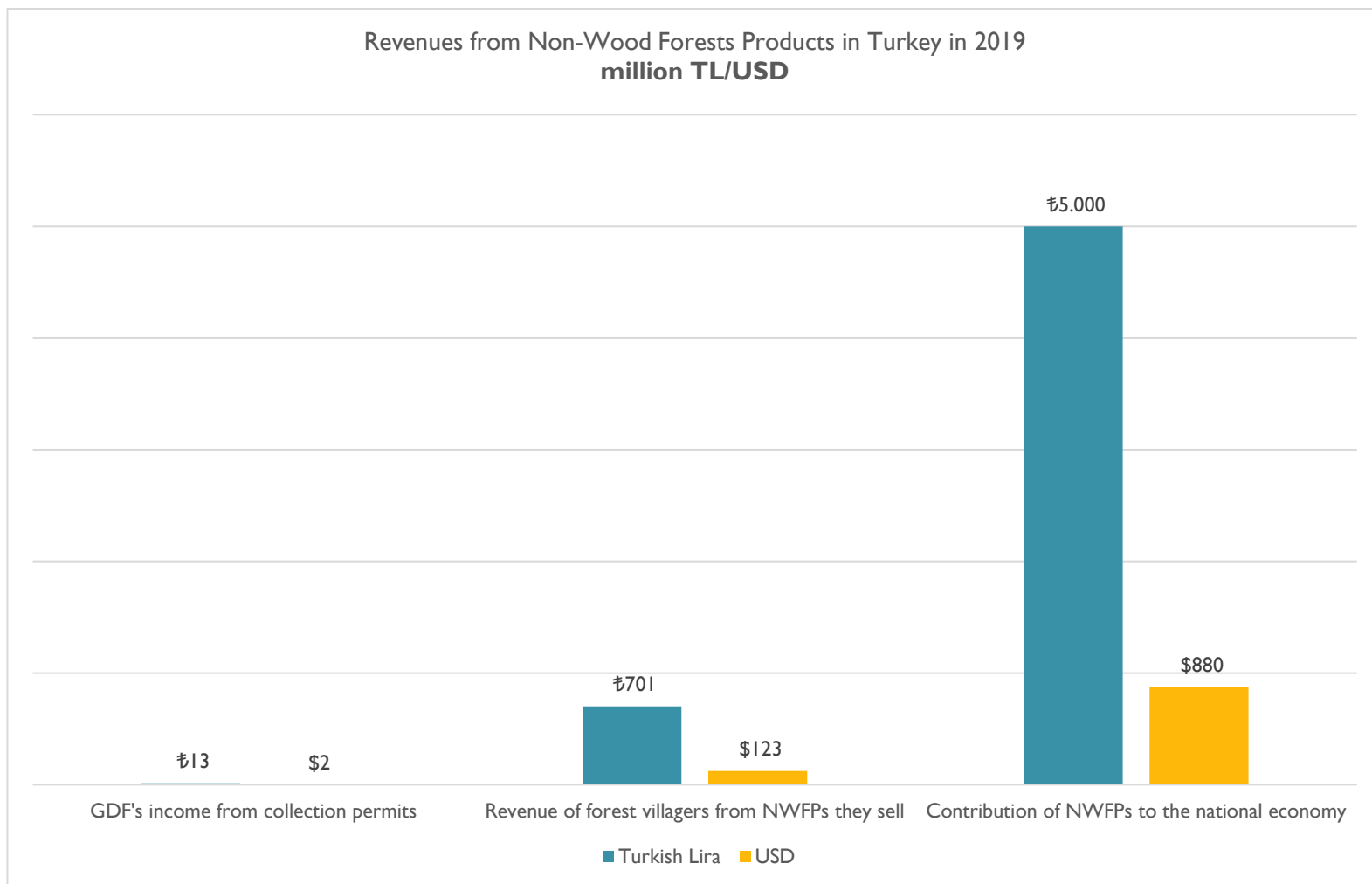
© OGM-İlg. Sistemleri Dairesi Başkanlığı-CBS Güne Müdürlüğü tarafından üretilmiştir 2012

Definition Used by Turkey for NWFPs

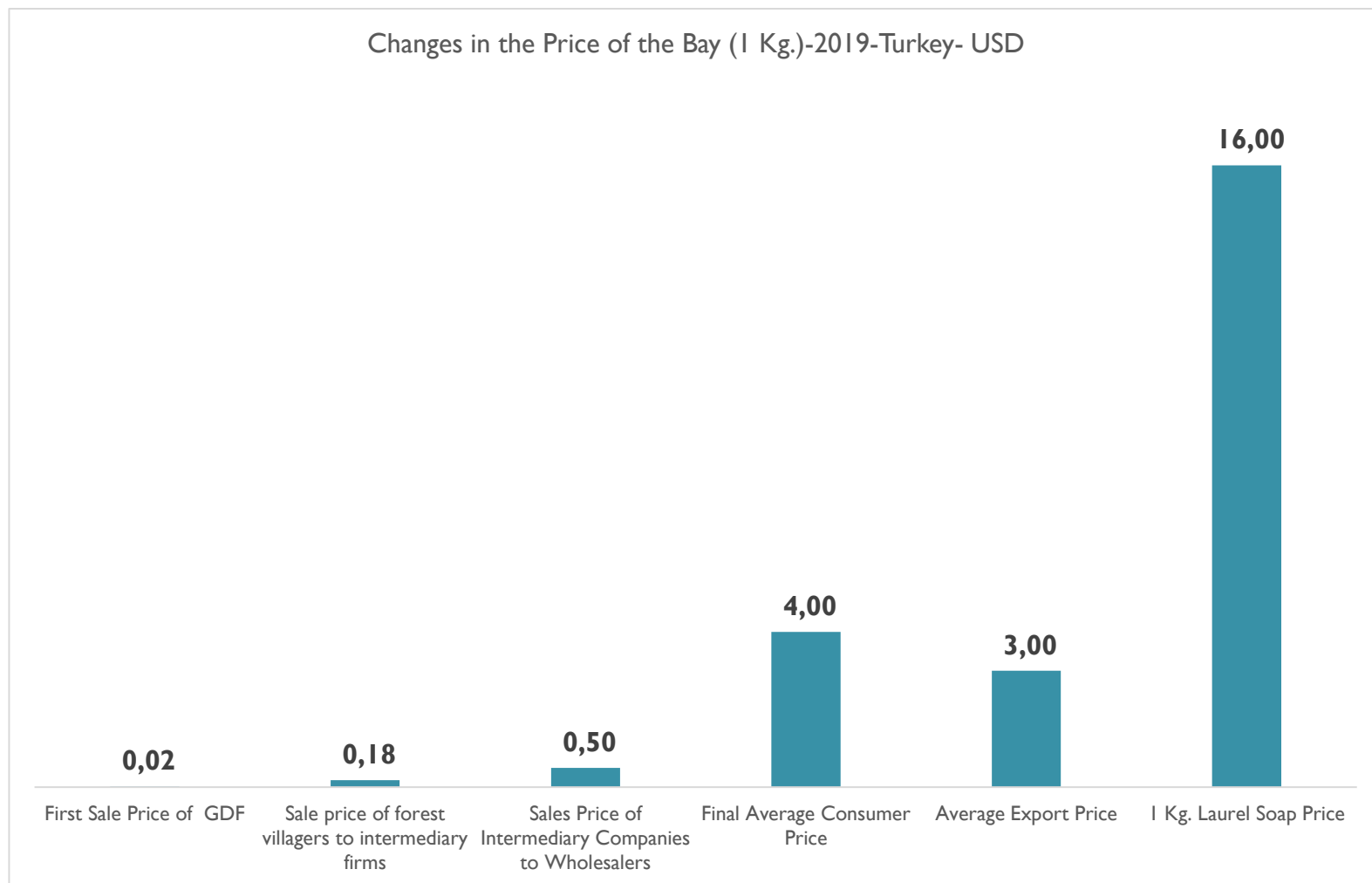
- For Turkey, “Communiqué No. 302 on Inventory and Planning of NWFPs and Production and Sales Principles (Communiqué of NWFPs)”, which was put into practice in 2016, is the most comprehensive and directing legislation on NWFPs. (GDF, 2016)
- **Non-Wood Forest Product (NWFP):** It refers to biological and mineral origin products other than wood obtained from forests and trees, and other products exposed during the production of wood such as bark, chip, shrub, root, stump, and cone.
-

Revenues from Non-Wood Forests Products in Turkey in 2019

million TL/USD



Changes in the Price of the Bay (1 Kg.)-2019-Turkey- USD



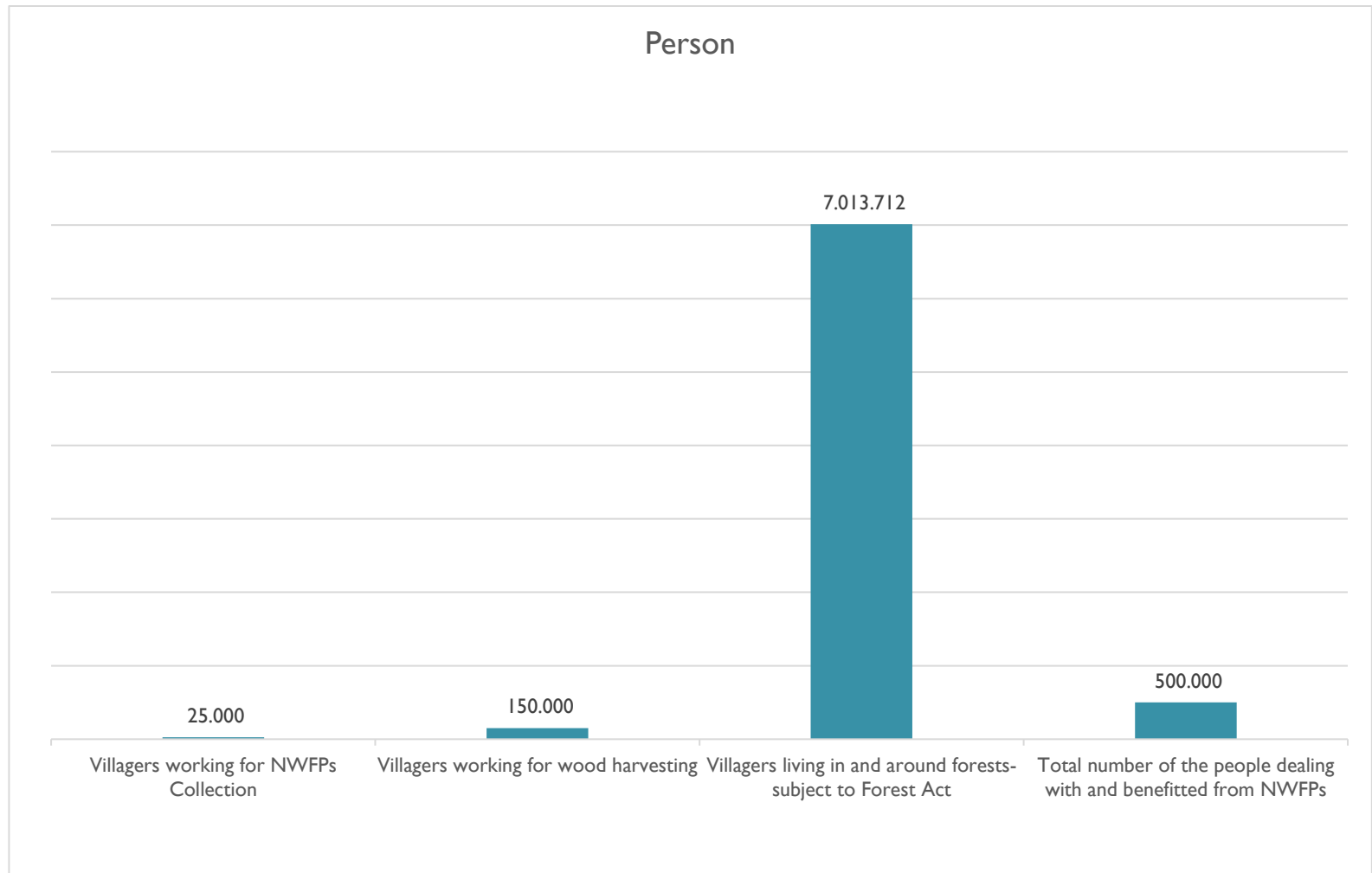
Top 10 NWFPs with their total values in 2019

No	English Name	Latin Name	Contribution to national economy-USD	Area
1	Bay tree	Laurus nobilis	264 084 507	180 400
2	Chestnut	Castanea sativa	176 056 338	74 897
3	Thyme	Origanum onites	140 845 070	86 358
4	Pine nut	Pinus pinea	88 028 169	61 310
5	Mushrooms	+	35 211 268	+
6	Salvia	Salvia fruticosa Mill.	21 126 761	11 874
7	Carob bean	Ceratonia siliqua	5 281 690	13 203
8	Rosemary leaf (shoot)	Salvia rosmarinus / Rosmarinus officinalis	4 401 408	6 107
9	Tilia	Tilia platyphyllos/ tomentosa	4 401 408	19 231
10	Mulberry-Blackberry		1 760 563	+

Top 10 most exported NWFPs

No	Latin Name of the NWFP	Export Quantity (Ton)	Export Value-USD
1	Laurus nobilis	13 600	38 234 826
2	Castanea sativa	14 225	35 837 736
3	Origanum onites	16 830	57 247 281
4	Pinus pinea	516	26 946 250
5	Mushrooms	1 716	12 843 337
6	Salvia fruticosa	2 317	8 680 563
7	Ceratonia siliqua	953	1 131 485
8	Salvia rosmarinus/ Rosmarinus officinalis	592	1 716 307
9	Tilia platyphyllos subsp. platyphyllos and Tilia tomentosa Moench	107	1 100 870
10	Mulberry-Blackberry-	1415	5 190 832
	Total	52 271	188 929 487

Contribution of NWFPs to rural employment





Some Policy Documents

Related Articles of the Constitution

Forest Law

Organic Agriculture Law

Presidential Decisions and Decrees

Development Plans

National Basin Management Strategy (2014-2023)

Strategic Plan of General Directorate of Forestry (2017-2021)

Afforestation Regulation

Forest Management Regulation

Communiqué on Inventory, Planning, Production and Sales Principles of NWFPs

Administrative Structure

NWFPs and Forest Management Plans

NWFPs Utilization Plans

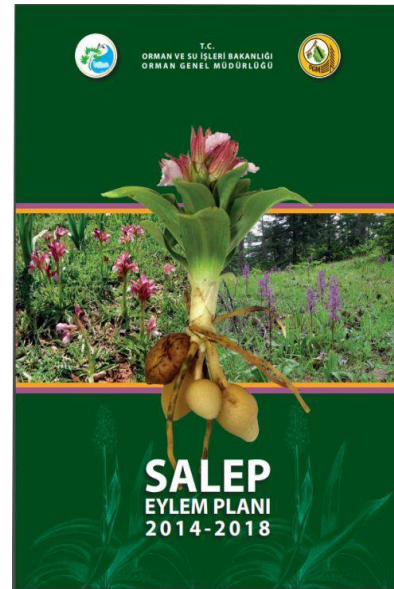
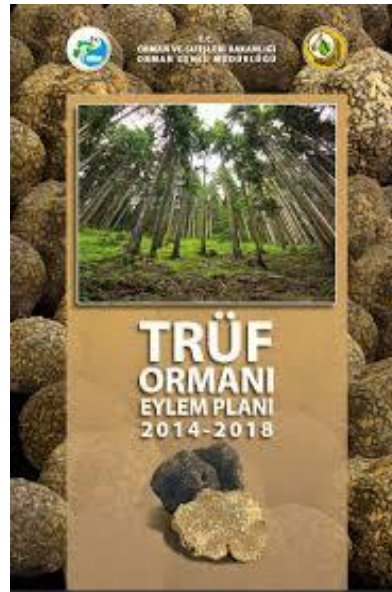
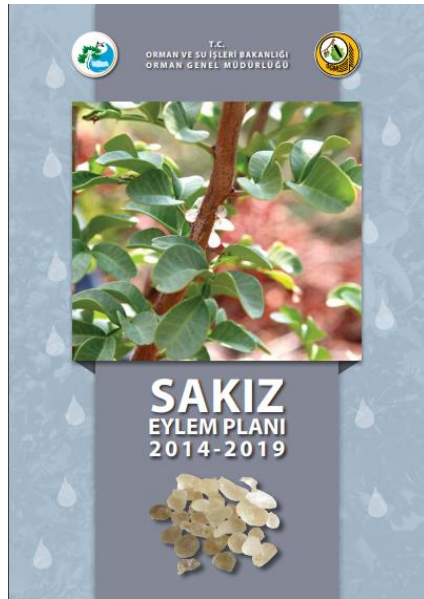
OFFICIAL STRATEGY ON NWFP STRATEGIES IN TURKEY

Production and Marketing of Non-Wood Forest Products (EXAMPLES)

- Truffle Forest Action Plan (2014-2019),
- Orchid Action Plan (2014-2018),
- Gum Action Plan (2014-2019),
- Honey Forest Action Plan (2013-2019),
- Wild Fruit Species Action Plan (2014-2018),
- Blueberry Action Plan (2015-2019),
- Daphne Action Plan (2016-2020)
- Resin Action Plan (2017-2021)

OFFICIAL STRATEGY ON NWFP STRATEGIES IN TURKEY

ACTION PLANS (EXAMPLES)





GENERAL DIRECTORATE OF ORESTRY



**HIGH POTENTIAL AND
ECONOMIC PROFIT
SOME OF OUR
SPECIES**

Pine Honey

- The average honey production in Turkey from the past five years is 109 115 tons annually. According to FAO statistics, Turkey is the second country in the world produces the most honey in general.
- There are approximately 80 000 agriculture holdings in apiculture/beekeeping. It can be said that the overall contribution of the sector could be calculated 1.173 billion USD. However, this is not a scientific or official calculation and can be used for a general idea. it can be said that 207 000 people are dealing with beekeeping in Turkey in total.
- Pine honey is a unique honey produced by bees, not from flower pollen, but producing by an insect (*Marchalina hellenica*) lived in the body of some pine tree species to the Mediterranean climate. Most of the world's pine honey (about 90%) is produced in Turkey (FAO, 2020)



Bay Leaf

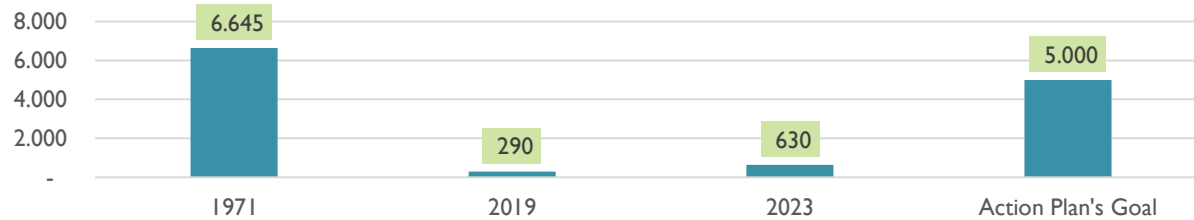
- According to GDF, Turkey had a total area of 180 400 hectares of bay trees in the whole country in 2019. The total amount of bay leaf production was 32 600 tones in 2019.
- The contribution of bay leaf to Turkey's national economy was calculated as 264 084 507 USD in 2019. Turkey has exported approximately 13 600 tones and has the export value at around 38 million USD



Resin

- Resin production showed an uneven process. The annual production, which approached 7 000 tons in the 1970s, has decreased since 1983, and almost no production was made in the 2000s.
- In 2017, the "Resin Action Plan" was prepared and it was aimed to increase the production. It is aimed to increase the annual resin production, which was around 420 tons by 2020, to 5 000 tons by 2023.
- Resin is produced mainly from Turkish pine/red pine- ***Pinus brutia*** and the maritime pine - ***Pinus pinaster***. In addition to these two trees, a little amount of resin production is made from black pine- ***Pinus nigra*** roots. However, the area suitable for natural resin production has been calculated around 100 000 hectares.
- Due to the limited production in Turkey, natural resin demand is met through imports. As of 2020, Turkey has been importing natural resin around 11 thousand tons annually. The commercial value of this is around 20 million USD.
- In current practice in Turkey can be an average of 2 kg product per tree.

Natural Resine Production ton/year



Prices of 1 ton resin at different stage



Truffle

- Truffles have a world trading volume of USD3.5 billion, expected to increase USD 6 billion during next decade. Turkey has a target to reach USD350 million, grabbing a 10% share in the short term, and an action plan made operational since 2014.
- Truffle, which was not even on the agenda of Turkey before 5-6 years ago, has drawn the attention of every society, from hunters to investors, from consumers to tourism today. According to data provided by GDF total volume of truffle production is around 40 tons. Increased momentum in truffle production continues.
- Truffles were a source of livelihood so far for nearly 200 families in Turkey, the price of truffles varied between 100 Euros (USD112) and 500 Euros depending on the type and quality,
- It is very difficult to give an exact figure about the annual truffle production amount worldwide. The producers are generally small-scale producers, sell their products to local markets and not keep the reports of the products they produce. For these reasons, governments have very little data on truffle production.
- GDF along with its respective departments give priorities to the formulation of action and utilization plan and truffle species in the forest area selected based on inventory activities. As at the end of 2019, **a total of 384 ha potential area** determined for truffe production.



Chestnut

- The distribution area of chestnut forests in Turkey is about 262,045 hectares .
- According to the TUIK data of 2019, chestnut production in Turkey reaches over 70 000 tons annually, and the domestic product reaches 240 million TL in total. More than half of the chestnut fruit produced in two provinces mainly in the fruit sector of Aydın and İzmir where close to Eagean Sea.







**THANK YOU
FOR YOUR
ATTENTION**

