



## Forestry Policies and Practices in Turkey

FORESTRY AND WATER AFFAIRS MINISTRY  
GENERAL DIRECTORATE OF FORESTRY

**Başar BAKIR**  
Division Director of Ecosystem Services  
9-11/03/2015  
İstanbul





# CONTENTS



GENERAL INFORMATION  
GENERAL POLICY TOOLS IN TURKEY  
GENERAL POLICY AND PRACTICES IN TURKEY  
FUNCTIONS AND RESPONSIBILITIES OF GDF  
ORGANIZATION AND MISSION OF GDF  
ORGANIZATIONAL STRUCTURE  
HUMANIZATION  
HUMAN RESOURCES  
NATURAL RESOURCES  
BENEFITS OF FORESTS  
ACTIVITIES OF GDF  
PROTECTION OF FOREST AGAINST FIRES  
PREVENTING FOREST FIRES  
ROUND TEAMS  
FIRE TEAMS  
WARNING , REMOTE SENSING  
DEALING WITH PESTS  
PREVENTING FOREST CRIMES  
DEVELOPMENT OF FORESTS  
REHABILITATION OF BURNT AREAS  
PROTECTION OF FORESTS AREAS AND

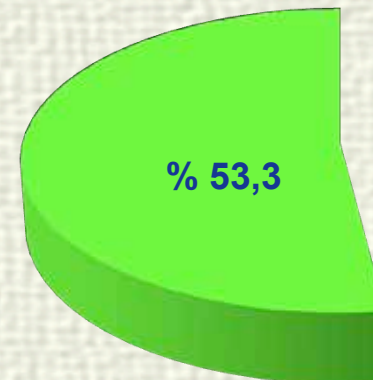
22.DETERMINING OF FOREST BORDERS  
23.FOREST MANAGEMENT PLANNING  
24.PROTECTION OF BIODIVERSITY  
25.MONITORING OF FOREST ECOSYSTEMS  
26.MONITORING OF FOREST ECOSYSTEMS  
27.PRODUCTION OF INDUSTRIAL WOOD AND FUEL WOOD  
28.STRENGTHENING THE FOREST INFRASTRUCTURE  
29.PRODUCTION VEHICLES  
30.PROTECTION VEHICLES  
31.SEED PRODUCTION  
32.SAPLING PRODUCTION  
33.AFFORESTATION MOBILIZATION  
34.NON WOOD FOREST PRODUCTS AND SERVICES  
35.ESTABLISHING HONEY FORESTS  
36.FOREIGN RELATIONS  
37.REGIONAL BILATERAL RELATIONS  
38.INTERNATIONAL ORGANIZATIONS  
39.RELATION WITH INTERNATIONAL ORGANIZATIONS  
40.INTERNATIONAL ORGANIZATIONS  
41.RESEARCH STUDIES



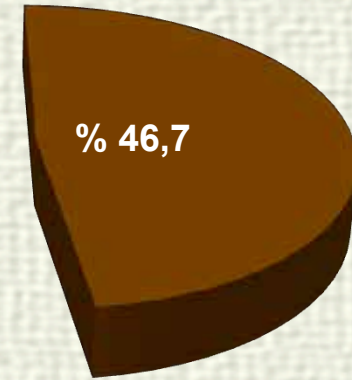


# GENERAL INFORMATION

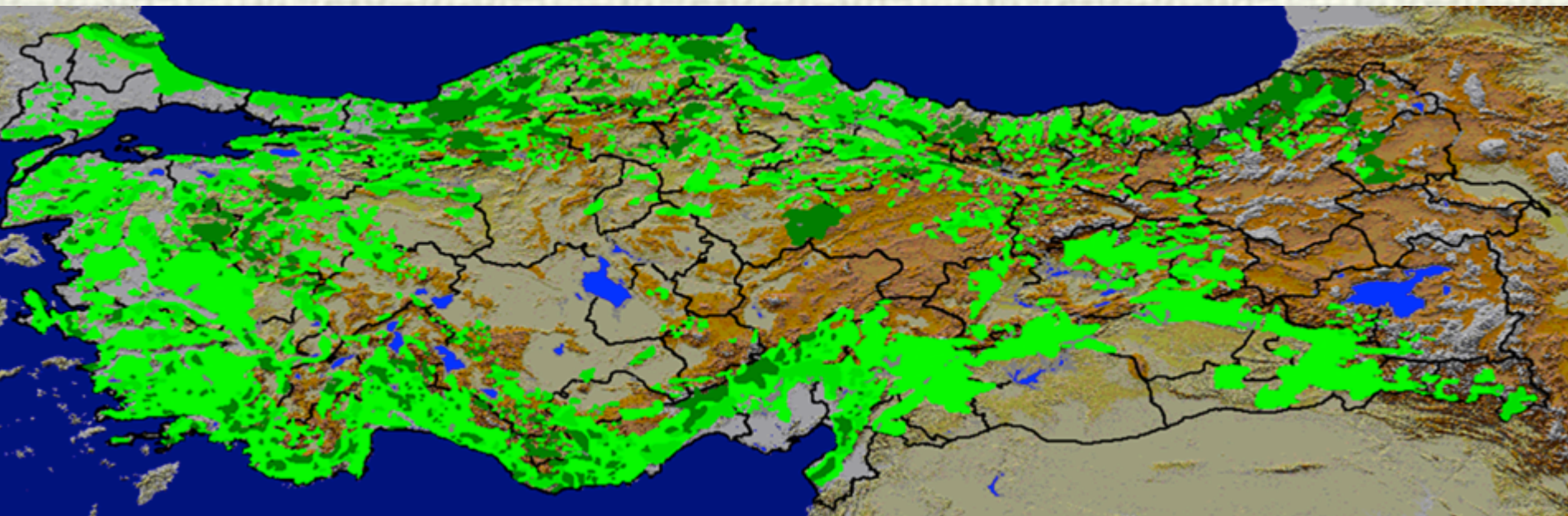
**ge altitute** : 1.132 meter  
**area** : 21,7 million hectares (%27,6)  
**g stock** : 1,5 billion m<sup>3</sup>  
**l increment** : 42,2 million m<sup>3</sup>  
**ship status** : % 99,9 belongs to government



PRODUCTIVE  
FORESTS



DEGRADED  
FORESTS







# GENERAL INFORMATION

## LEGAL AND INSTITUTIONAL FRAMEWORK

**Constitution:** forests are under the constitutional conservation.

**Forest Law:** protection, development and utilization are regulated by law.

**International agreements and commitments:** agreements and commitments signed by Turkey are integrated into forestry legislation.

**Ministry:** Responsible for determining forestry policies and implementation of strategies.





# GENERAL INFORMATION

## Turkey's Forestry and Water Affairs Ministry Organisation

- General Directorate of Nature Conservation and National Parks
- General Directorate of Combating Desertification and Soil Erosion
- General Directorate of Water Management
- Other central units

## Ministry of connected units

- General Directorate of State Hydraulic Works
- Turkish State Meteorological Service
- Turkey Water Institute
- General Directorate of Forestry





# General Policy Tools in Turkey

## General Policy Tools

Constitution, laws, secondary legislation, International agreements and commitments

Development Plans ( 5 years)

Medium Term Financial Plan and programme ( 3 years)

Government Program

Annual Investment Programs ( 1 year)

National Strategy Documents and Plans / Programs

Regional Strategy Papers and Plans

## Industry / Corporate Policy Tools

Sectoral Analysis (According to various needs)

Institutional Strategic Plans ( 5 years )



# Forest Policy and Practices in Turkey

## ❖ DEVELOPMENT PLANS ( 1963-2018)

10 th Development Plan in implementation

## ❖ FORESTRY MASTER PLAN (1990- 2009)

## ❖ NATIONAL FORESTRY PROGRAMME (2004-2023)

## ❖ 1st STRATEGİCAL PLAN ( 2010-2014)

## ❖ 2 nd STRATEGİCAL PLAN(2013-2017)







# Forest Policy and Practices in Turkey

## 10th DEVELOPMENT PLAN (2014-2018)

The plan aims; high, stable and inclusive economic growth in addition to environmental protection and sustainability of the sources.

Effectively implement of the strategy and action plan which are prepared the fight against desertification and drought in Turkey.

Enabling the fight against erosion, prevention of the pollution.

Determination of biodiversity also conservation, sustainable use, development and monitoring.





# Forest Policy and Practices in Turkey

---

## NATIONAL FORESTRY PROGRAMME OF TURKEY (2004-2023)

### National Forestry Policies in Programme

**Sustainability**

**Protection of Biodiversity**

**Multifunctional Management/Utilization**

**Participation**

**Fairly Sharing of Benefits**

**Transparency**

**Global Responsibility**





# POWER AND RESPONSIBILITIES OF GDF



Directorate of Forestry (GDF) is a legal entity with special budget responsible of the protecting, managing and managing Turkey's basic resources to provide multiple to the society.

has been served as a “connected to various ministries, finally in is connected to Ministry of Forest er Affairs.







# ORGANIZATION AND MISSION OF GDF

is a well-established institution with years of history that was established in

its service side, it is a special budgeted which founded on base of local government and has legal entity.

s taken its current final shape by the No. 3234 Published in 1985. it has the Living Fund Budget experience since

Mission is “to protect forests and forest resources against all kind of threats, to manage them in harmony with the nature, to maintain them in ecosystem integrity and providing multifunctions to the society







# ORGANIZATIONAL STRUCTURE

## **Central organization consist of:**

- Main Service Units
- Auxiliary Service Units and
- Advisory and Inspection Units.

In the center, there are 18 departments, and total of 118 branch offices.

## **Regional organization**

- 27 Regional Directorates of Forestry
- 12 Research Institute Directorates

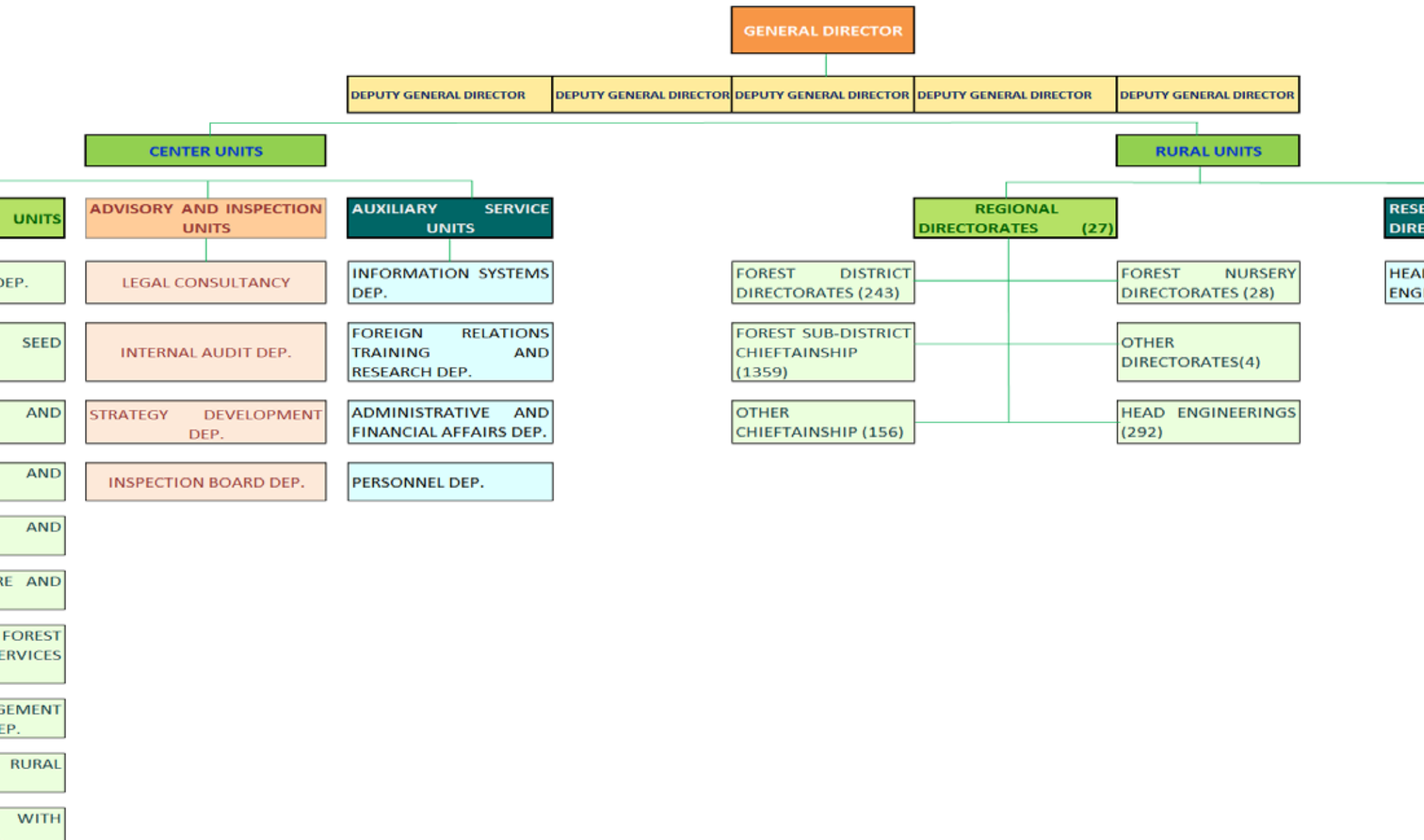
## **While a total of 470 branch offices in the center of Regional Directorates, there are:**

- 243 forest district directorates,
- 1.359 forest sub-districts chieftaiships
- 156 other sub-districts
- 28 nursery directorates,
- 4 other directorates
- 292 head engineering units.

linked to the Regional Directorates. In addition to this, there are 86 head engineering units which connected to research institution directorates.



# ORGANIZATIONAL STRUCTURE







# REORGANIZATION



Urban and rural organizations of GDF have been re-arranged by Decree Law Numbered 64 on the Organization and Duties of the Forestry and Water Affairs Ministry which issued on the official gazette of Turkey on July 4, 2011 and numbered 27984

## **Departments which established in the framework of reorganization;**

Urban Wood Forest Products and Services Department,  
Dealing with Forest Pets Department,  
Dealing with Forest Fires Department,  
Foreign Relations, Training and Research Department,  
Information Systems Department,  
Land Use, Concession And Easement Department,

Forest Processing Department and Forest Map and Remote Sensing Department were closed. The units have been transferred to the Information Systems Department newly established. While Çanakkale and Sinop Forest Regional Directorates were closed, Kayseri and Samsun Forest Regional Directorates were established, totally 28 forest district directorate were established and 3 forest district directorate were closed.

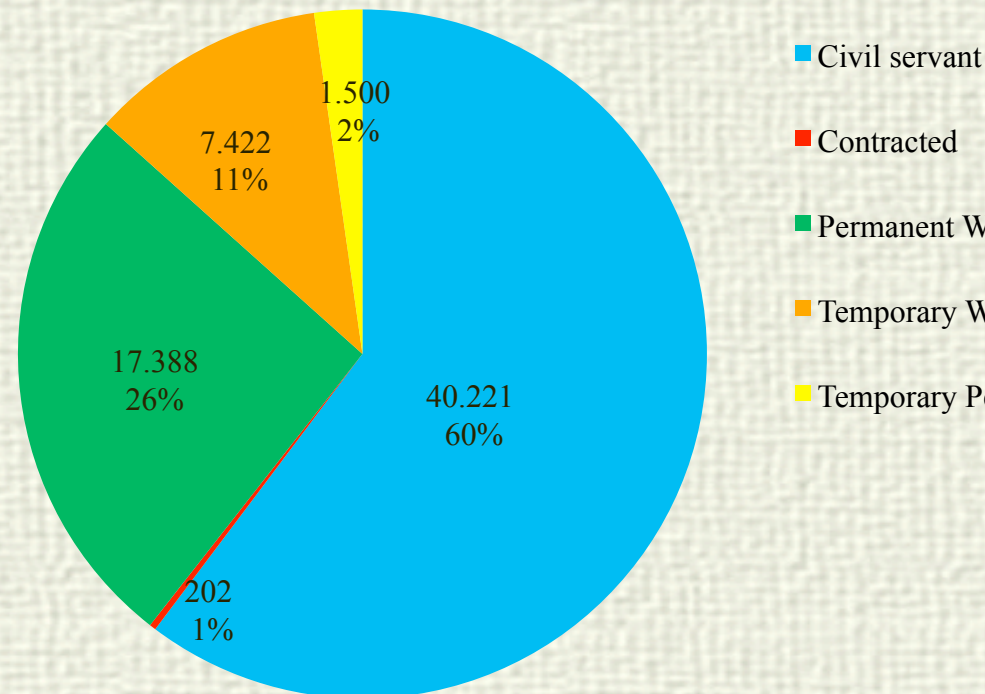


# HUMAN RESOURCES

	Special Budget		Rolling Capital		Total		TOTAL
	Center	Rural	Center	Rural	Center	Rural	
	Full	Full	Full	Full	Full	Full	
	733	14.349	228	2.826	961	17.175	
			43	159	43	159	
Workers		10.028		4.723		14.751	
Workers		2.689		4.733		7.422	
Personnel.				496		496	
<b>TOTAL</b>							

Number of total employed personnel in center and rural units of GDF is 3.

of the employees works in the officer, while the remaining 40% works as contracted staff, permanent and temporary and temporary personnel







# MAIN ACTIVITIES OF GDF

**General Directorate of Forestry has six basic activity and service areas.**

**are;**

Protection of forests,  
Development of Forests,  
Evacuation from forests,  
Permissions to areas accepted as forests,  
Forest management-map and photogrammetry services,  
Development services of forest roads and infrastructure of them.

## **PROTECTION OF FORESTS:**

Generally the protection of forests includes protection activities of forests against:  
Forest fires  
Forest pests, tree diseases and disorders  
Natural interventions

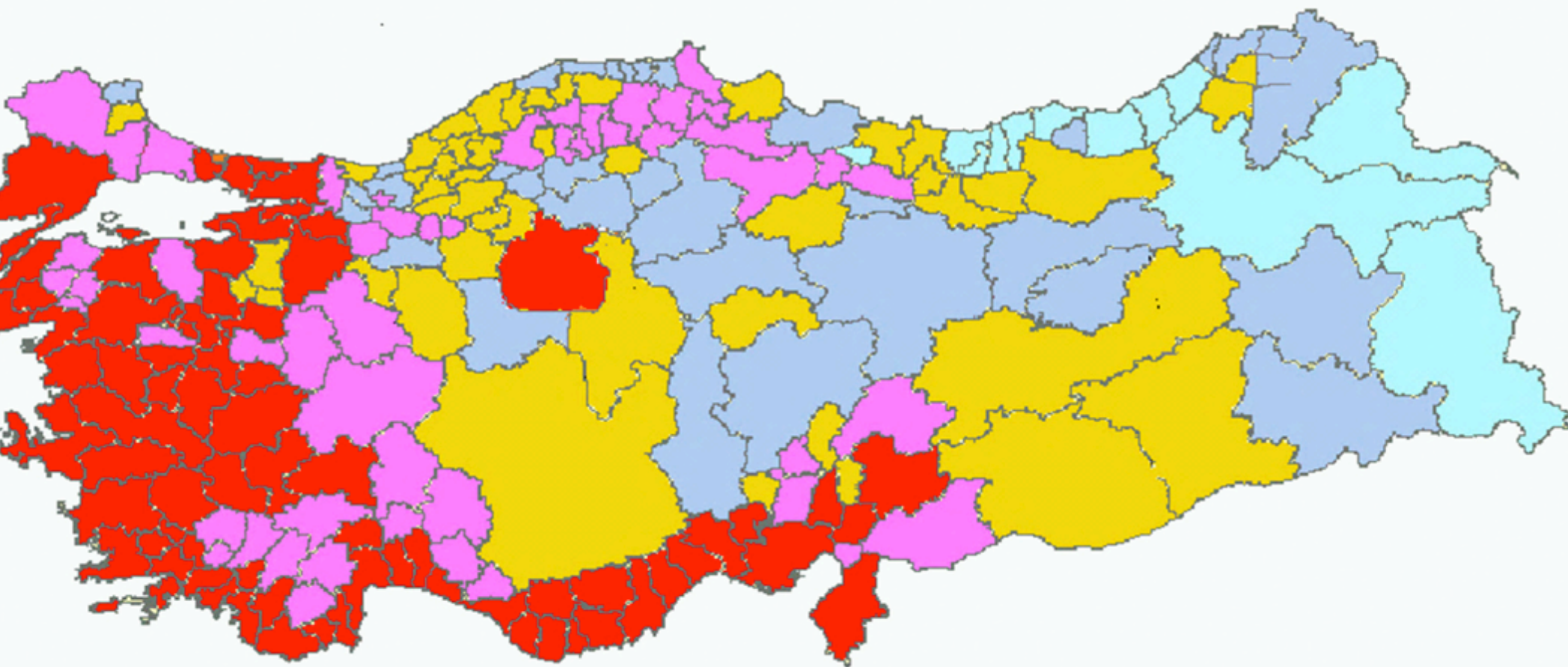




# PROTECTION AGAINST FOREST FIRES



tion hectare forest area which is %60 of Turkey's forest area is located in the Mediterranean region which are very vulnerable to fires.







# COMBATING FOREST FIRES



3 basic  
strategy of  
GDF in  
combating  
forest fires:

prevention

To prevent a fire outbreak  
(Education and awareness raising)

extinguishing

Early warning, rapid and  
effective intervention

Rehabilitation

Rapid reforestation of  
burnt areas





# FIRE GROUND TEAMS

grade crews use  
extinguishing truck  
intervention vehicle  
er tank  
dozer,  
der  
der,  
er



Fire professionals who can  
trainment in the internat  
level will be trained in the la  
and very modern Fire Tra  
Center in Antalya.

Organized fire teams in the  
high fire risk areas manner  
that they could interfere  
with the fire at least within  
15 minutes.







# FIRE AIR TEAMS

Aircraft including 6 GDF's administration helicopters, 21 the water throws helicopter, 14 Dromader airplane, 6 to CL-215 amphibious aircraft, works for GDF's air team.







# COMBATING WITH PESTS

Biological struggle against pests still continues in 61 laboratories  
The production annually of :  
thousand predatory insect  
thousand bird slot are hanged  
ant transportations are made.  
000 *Calasoma sycophanta* predators producing in the 35  
tory in a year are given to forests which are damaged.  
In this framework, biological struggle has been done with pests  
in 108.500 hectares forest areas for last 5 years.



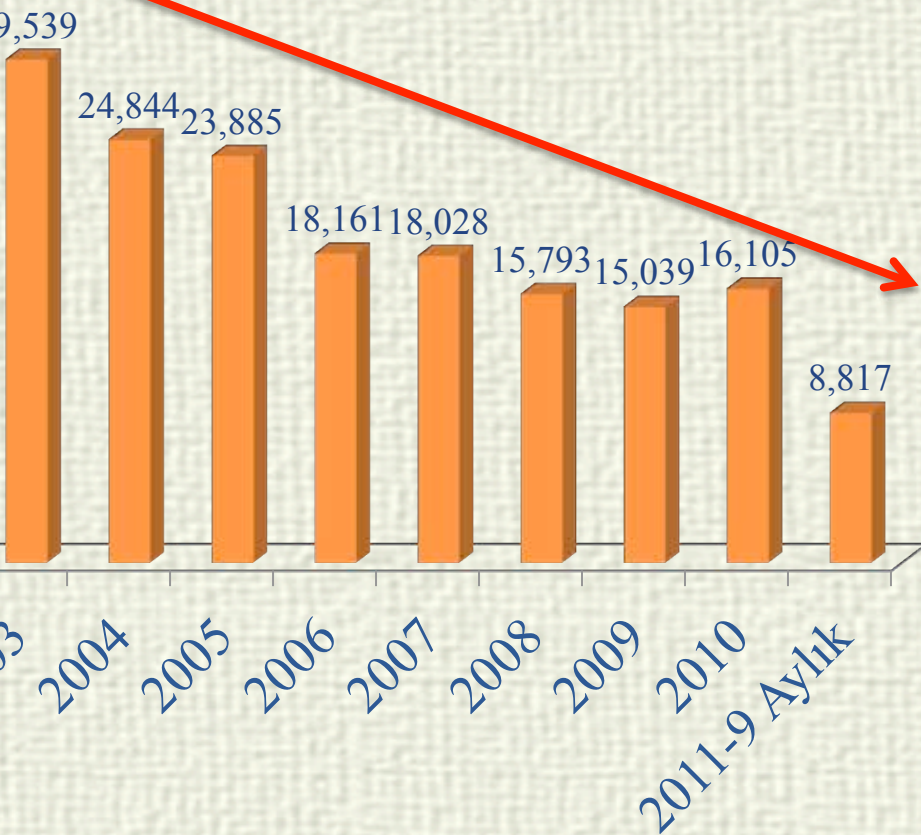
Number of laboratory which produce predatory insects reached



# COMBATING FOREST CRIMES



## Changes in forest crimes



➤ Forest crimes which declining Since continued to decline markedly in years.

➤ It is thought to be effective in reducing forest crimes that improvement in the people relations, the fight against illegal cutting and awareness about the importance of the forest.







# DEVELOPMENT OF FORESTS

ations intended for rehabilitation of juniper forests which  
g in the 1,1 million hectares and 92% of the degraded qualities  
en ongoing.

rting studies of the coppice forests to high forests have been

seeds have been planted in the totaly 240.675 ha. potential  
eas.

00 ha degraded oak forests have been rehabilitated for 10 years.

000 ha forest areas have been rehabilitated for 10 years .

med to create income for people who live in rural areas by  
ing 30.000 ha locust (*Ceratonia siliqua*) forests in 10 years.

forests were established to 5000 villages in the last 5 years.

imately 2,3 million hectares area have been rehabilitated in the  
of Afforestation Mobilization







# PROTECTION OF FORESTS BORDERS

**Key cadastre of forests are made by GDF.  
works related to cadastre:**

determination of the borders of forests with the  
els which adjacent to the forest,  
ucing data-based forest cadastral maps based  
country's system using the satellite image  
photograph and available maps.  
ting the needs of digital maps and data of OGM  
other institutions.



**al area of 393 private forests is 179.875.007 m<sup>2</sup> across Turkey.**

**forests constitute 0,1% of the forests in Turkey.**

**forests:**

**f them owned by public institutions with Legal personality.**

**e 314 of them belong to the public and the legal persons of the private forests**





# PROTECTION OF BIODIVERSITY

18 ecosystem -based forest functional sample plans that biodiversity integrated into have been prepared by the Ministry of Administration and Planning. Some examples are below:

da  
ıkdere  
i  
çam ve Uğurlu (Ardahan)  
gökdere (Isparta )  
eli ve Altıparmak (Artvin)

on Integration of Biodiversity in Forest Management  
g Plans” preparations have been ongoing.







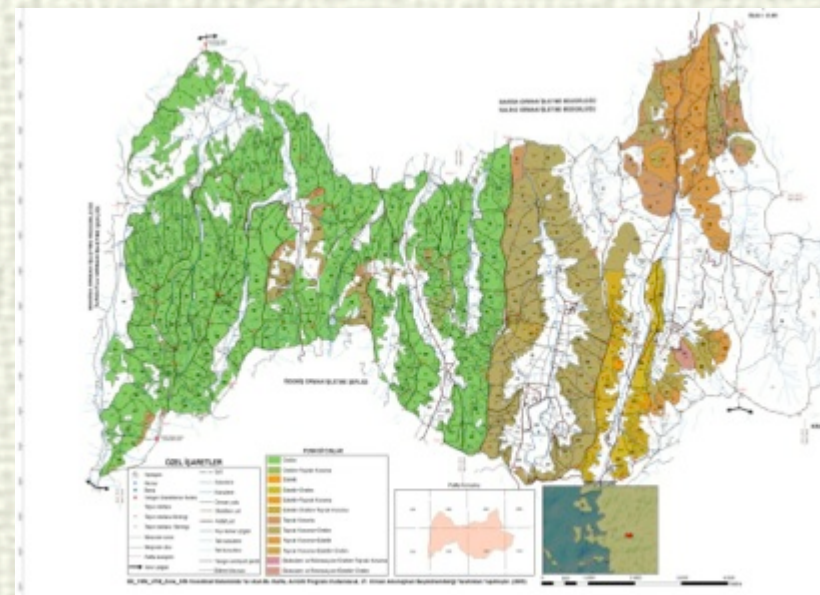
# FOREST MANAGEMENT PLANNING



The management plans, making them made, renewal of them, control of the implementation of them, monitoring the developments in management and preparation of inventory data and reports required are among the important activities of General Directorate of Forestry.

## Services Provided in This Regard

Determining the forest functions,  
Determining objectives of the management of forests,  
Preparing the inventory tables for functional planning,  
Management of functional utilization,  
Coordination of implementation and audit services,  
Preparing and updating national forest inventory,  
Restoring works of forest ecosystems.







# MONITORING OF FOREST ECOSYSTEMS



It was established in the 818 permanent observation areas using a 1 km<sup>2</sup> systematic grid network in the forest fields of Turkey. Monitoring activities were executed in the 602 permanent observation areas. Monitoring of the tree health has been carried out for 5 years. Every year, crown condition assessment have been carried out in the approximately 800 units of permanent observation areas.







# MONITORING OF FOREST ECOSYSTEMS



II

in the period 2012 -2013:

needle-leaf chemistry, soil, biodiversity issues have been  
g; and obtained data is stored in the database after  
ing in the laboratory.

the context of the Monitoring of Forest Ecosystems  
nme, to analyze samples, a laboratory in international  
ds has been constructed in the Aegean Forestry Research  
e, Izmir-Urla .







# INDUSTRIAL AND FUEL WOOD UTILIZATION



Quantity available volume for production,  
Total allowable cut is totaly 16,2 million

of which about 11,9 million m<sup>3</sup> is  
softwoods and the remaining 4,3 million m<sup>3</sup>  
consist of broadleaves.

Total harvested round wood is 13  
million m<sup>3</sup>

Total fire wood production of GDF is

DISTRIBUTION OF USERS	MILLION m <sup>3</sup>
Forest Industry	5
Domestic Industry	1,8
Wood	0,8
Domestic Industry	4,7
Domestic Industry	0,6
Domestic Industry	0,075
Domestic Industry	0,024







# PRODUCTION VEHICLES



VEHICLE	QUA.
TRACTOR	109
ER AND LOADER	48
BLE	28
OR	13
T MOUNTED TRACTOR	6
OR	58
T MOUNTED TRACTOR	2
	58
NG MACHINE	2
R	2
IPMENT	5
ACHINE	1
	<b>344</b>







# PROTECTION VEHICLES

TYPE OF VEHICLE	QUANT.
BULLDOZER	184
GRADER	156
LOADER	28
TRAILER	72
FIRE EXTINGUISH TRUCK	956
FIRST INTERVENTION VEHICLE	467
HEAVY-DUTY TRUCKS	3
EXCAVATOR	17
MOTORCYCLE	850
TANKER	7
WATER SUPPLY VEHICLE	282
-----	







# SEED PRODUCTION

Seeds used in the production of seedlings are provided from seed stands which they comprise the quality of trees and seed orchards

in the country;

There are, 1.189 hectares of 172 seed orchards, of 10 tree species

There are 46.390 hectares of 347 seed stands of 24 tree species







# PRODUCTION OF SEEDLINGS

In Turkey, the first mass production of seedlings has started in 1925.

Production of seedlings are made in the 126 forest nurseries which are established on 3.200 hectares with 498 million pcs/year capacity.

Different types of seedlings are produced in our nurseries.



Container seedling production



Bareroot seedling production



Tubed seedlings production





# NON WOOD FOREST PRODUCTS AND SERVICES



do and have some works done of non wood  
products, forest ecosystem services and  
biodiversity as below:

entory,  
uation,  
roducing,  
nning,  
oping,  
ect,  
duction,  
vering,  
cking and marketing







# ESTABLISHING HONEY FORESTS



Beekeepers are supported by properly beekeeping activities like reforestation with species as robinia willow, maple, almond and apricot, further more grown herbaceous and bushy plants which are important for honey productivity such as thistle, trefoil, Paliurus and other plants in the forest areas.

As a result of intensive efforts of Forest Regional Directorates:

3 honey forests were established until this day.

There are total 1.293 recreation spots of GDF

Within the context of establishing urban forests works that started in 2003, in the 72 province and 29 districts total 101 units of urban forests have been established up to now .







# FOREIGN RELATIONS

ateral and multilateral relations were developed  
many countries especially neighboring countries on  
ent topics related to the forestry issues.



ting programs have been organized and realized  
elegations came to our country from many foreign  
tries and GDF's delegations who gone to abroad in  
eration with the forestry organization of related  
tries .







# BILATERAL REGIONAL RELATIONS



North Republic of Northern Cyprus – Combating forest fires, forest pests and diseases

Georgia – Combating forest fires and pests–collaboration with TİKA (Turkish Cooperation And Coordination Agency)

Republic of Macedonia-Combating forest fires

– Combating forest fires, making forest management plans - collaboration with FAO

Kazakhstan- Combating forest pests

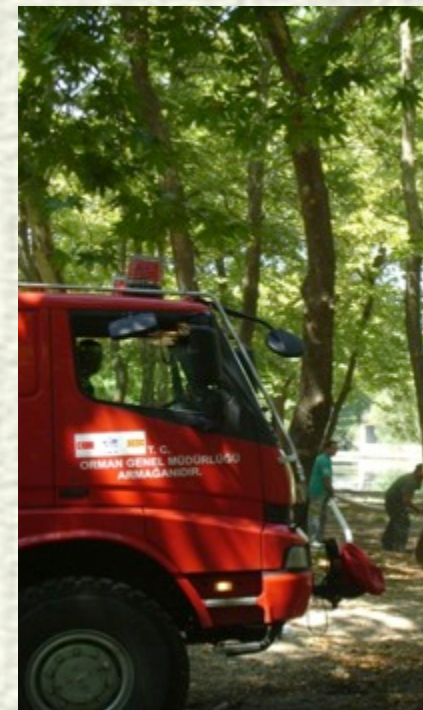
Republic of Uzbekistan- Rehabilitation of forests

Yemen- Combating forest fires

Laos- making forest management plans

Bosnia Herzegovina – Combating forest fires, establishing urban forest

Finland, Estonia, France, Great Britain- Establishing Wood Energy Network





# INTERNATIONAL ORGANIZATIONS

ty-eighth Session of the European Forestry Commission  
Party on the Management of the Mountain Watersheds were  
with overall theme “Water for Forests, Forests for Water” on  
5th September 2011 in Kastamonu, Turkey by General  
ate of Forestry and FAO.

onal Training Workshop on Forest Genetic Resources in  
Asia and Eastern Europe was hold in Directorate of Izmit  
Culvitation Institute on 19-22nd of September 2011 with FAO.

meeting of 69th Session of UNECE Timber Committee and  
European Forestry Commission of FAO were hold in Antalya, with  
all theme “Forests 2011: Forests in a Green Economy”.







## RELATION WITH INTERNATIONAL ORGANIZATIONS

International processes are being followed :

United Nations Forum on Forest (UNFF),  
International Conference on the Protection of Forests in Europe (Forest Europe),  
East and North Asia Forest Law Enforcement and Governance (ENA-FLEG),  
United Nations Framework Convention on Climate Change (UNFCCC),  
United Nations Convention on Biological Diversity (UNCBD),  
Mediterranean Model Forest Network

Relations have been ongoing with organizations that support international forestry processes such as

United Nations Food and Agriculture Organization),  
Forestry Committee (COFO),  
World Forestry Congress (WFC),  
Mediterranean Forestry Questions Programme (Silva Med)  
United Nations Economic Commission for Europe (UNECE)  
World Bank and Organisation for Economic Co-operation and Development (OECD)





# **THANK YOU FOR YOUR ATTENTION**

**Başar BAKIR**

**General Directorate of Forestry**  
**Division Director of Ecosystem Services**  
**[basarbakir@ogm.gov.tr](mailto:basarbakir@ogm.gov.tr)**

**Natural Capital Accounting Regional Workshop for Europe and Central Asia (ECA)**  
**March 9-11, 2015, Pera Palace Hotel, Istanbul**