



Forests protection in Republic of Macedonia

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PE Macedonian forests



PE MACEDONIAN FORESTS 1998-2009

- ***Afforestation***

There is an average of 1500 ha of afforestation

- ***Nursery gardens***

PE Macedonian Forests has a total of 19 nursery gardens with a maximum capacity of 20 million seedlings

- ***Forests protection***

- Fires
- Illegal woodcutting
- Diseases and pests





PE MACEDONIAN FORESTS 1998-2009

Fires as a serious problem with economic and ecological importance

Review

- Forest fires for the period of 1999-2009 година, including period to 31.08.2009

Number	Year	Number of fires	Fired areas (ha)	Fired wooden mass m3	Costs for fire elimination (denars)	Total damage from fire
1	1999	69	2,414.80	1,905.00	104,000.00	105,837,151.00
2	2000	476	46,235.73	711,782.00	60,520,814.00	969,852,057.00
3	2001	161	6,263.30	88,260.00	4,142,270.00	610,814,677.00
4	2002	65	1,186.30	24,661.28	941,972.00	18,531,939.00
5	2003	144	1,068.88	10,987.00	2,765,688.00	15,594,691.00
6	2004	94	892.05	4,322.30	1,439,302.00	91,083,591.00
7	2005	182	1,368.00	1,063.00	2,584,114.00	25,287,638.00
8	2006	138	2,085.95	12,978.00	2,763,983.00	148,712,782.00
9	2007	652	35,248.06	617,678.00	23,598,042.92	1,311,167,721.95
10	2008	249	7,411.70	37,362.50	5,897,256.00	280,083,235.00
11	2009	38	197.00	756.50	313,627.00	5,812,889.00
Total		2268	96,763.07	1,510,999.08	105,071,068.92	3,582,778,371.95



PE MACEDONIAN FORESTS 1998-2009

Fires as a serious problem with economic and ecological importance

Endangered areas



Степен на загроеност по ха	
I	52,385.86
II	198,310.91
III	374,695.48
IV	191,583.42





PE MACEDONIAN FORESTS 1998-2009

Available resources for fire extinguishing

Review

- Total resources for extinguishing forests fire

Number of workers	Resources for extinguishing forests fire						
	Water pumps	Steel brooms	Rakes	Shovels	Axes	Motor saws	Hoes and diggers
1731	254	491	253	279	153	63	180



PE MACEDONIAN FORESTS 1998-2009

Available mechanization

Review

- Total available mechanization

Bulldozers		Terrain vehicles		Tractors		Tracks		Cranes	
TG 50	2	UAZ	34	LKT 80, 81	16	FAP 1314	38	LIV	16
TG 75	12	Lada Niva	65	Different IMT	28	FAP 1414	17	RADOJE DAKIC	7
TG 80	5	Total	99	Total	44	FAP BUS	15	JOHCEPEC	1
TG 90	3					FAP 1516	6	Other	3
TG 100	7					KAMAZ	8	Total	27
TG 110	20					Total	84		
TG140	9								
TG 160	1								
TG 170	1								
Total	60								





PE MACEDONIAN FORESTS 1998-2009

EVIDENTION OF FORESTS IN R. MACEDONIA

Composition of forests by area:

Composition of forest	Area (ha)
Broad leaf forests	471.138.49
Mixed broad leaf forests	239.744.73
Pine leaf forests	70.812.33
Mixed pine leaf forests	8.350.56
Other broad leaf and pine leaf forests	45.009.51
TOTAL :	835.055.82



Area of forests according to the composition of species	Area (ha)
Beech (Fagus spp.)	195.403,06
Oaks (Quercus spp.)	244.671,36
Other broad leaf deciduous	27.556,84
Other leaf trees	8.350,56
Spruce (Picea)	835,06
Fir tree (Abies spp.)	2.005,17
Black pine (Pinus Nigra)	55.948,74
White pine (Pinus Silvatica)	6.680,45
Other pine leaf Evergreen	4.175,30
Other broad leaf and pine leaf	288.929,31

**Thank you for your
attention !**

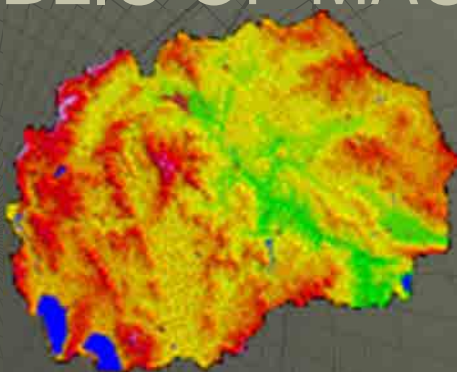


**To preserve the forest, we have to take care
of it!**



Ministry of Agriculture, Forestry and Water Economy

FORESTS & FORESTY IN THE REPUBLIC OF MACEDONIA



B. Sc. Vojo Gogovski
26 february 2010
Skopje, R. Macedonia

LOCATION and basic data

Area– 25 713 km²

Habitats: 2,1 mil.

Density: 81 inh./ km²

GDP – 2219 \$/per capita (year 2005)



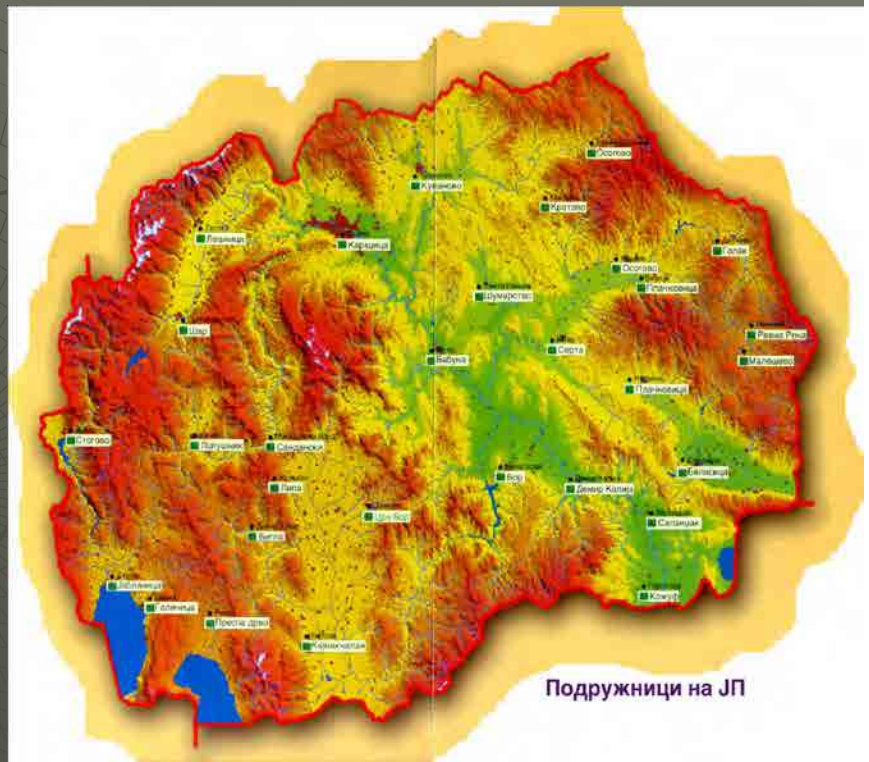
Natural conditions-Relief

Mainly mountainous land

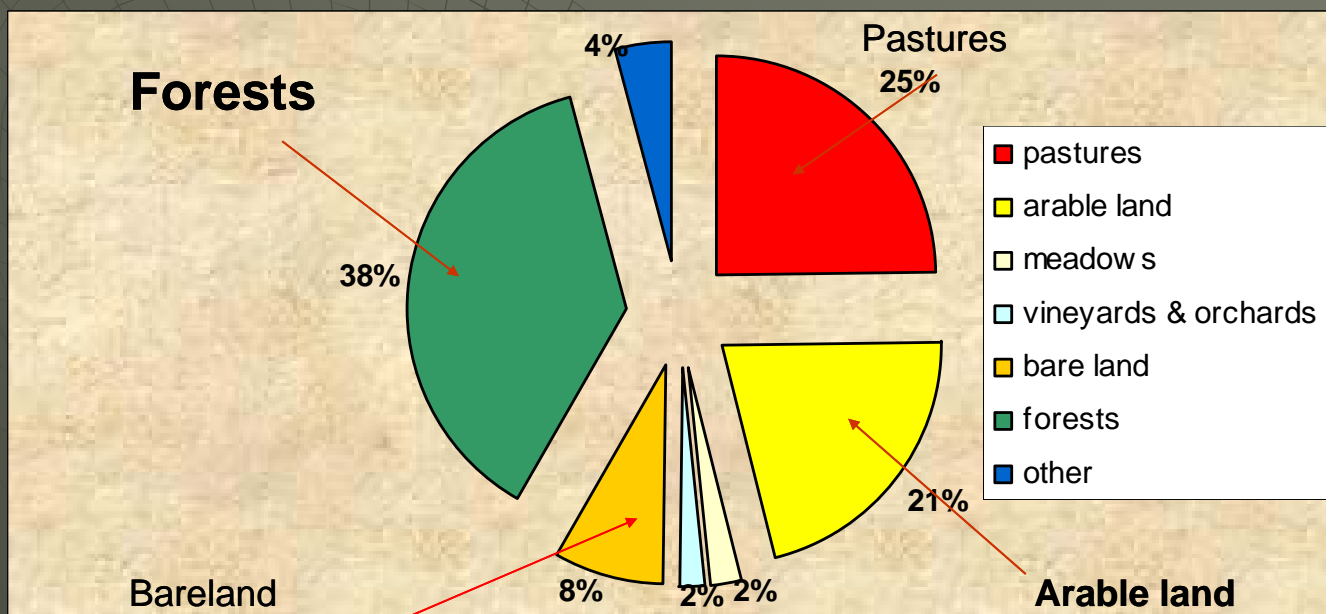
15 mountains over 2000 m.a.s.l

50 – 2784 m.a.s.l

Heterogenic climate

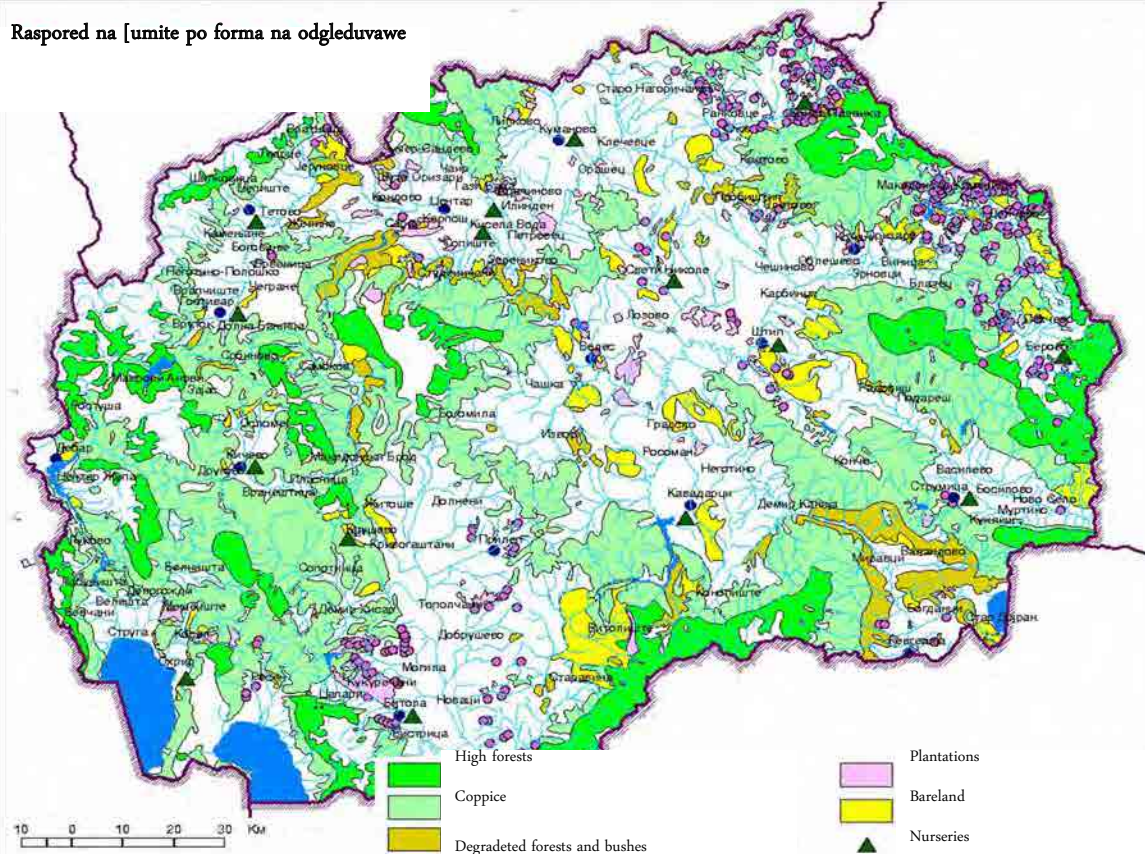


Classification of land in RM



Forests and forestry – 1.159.600 ha (Strategy for sustainable development of forestry in RM, 2006)

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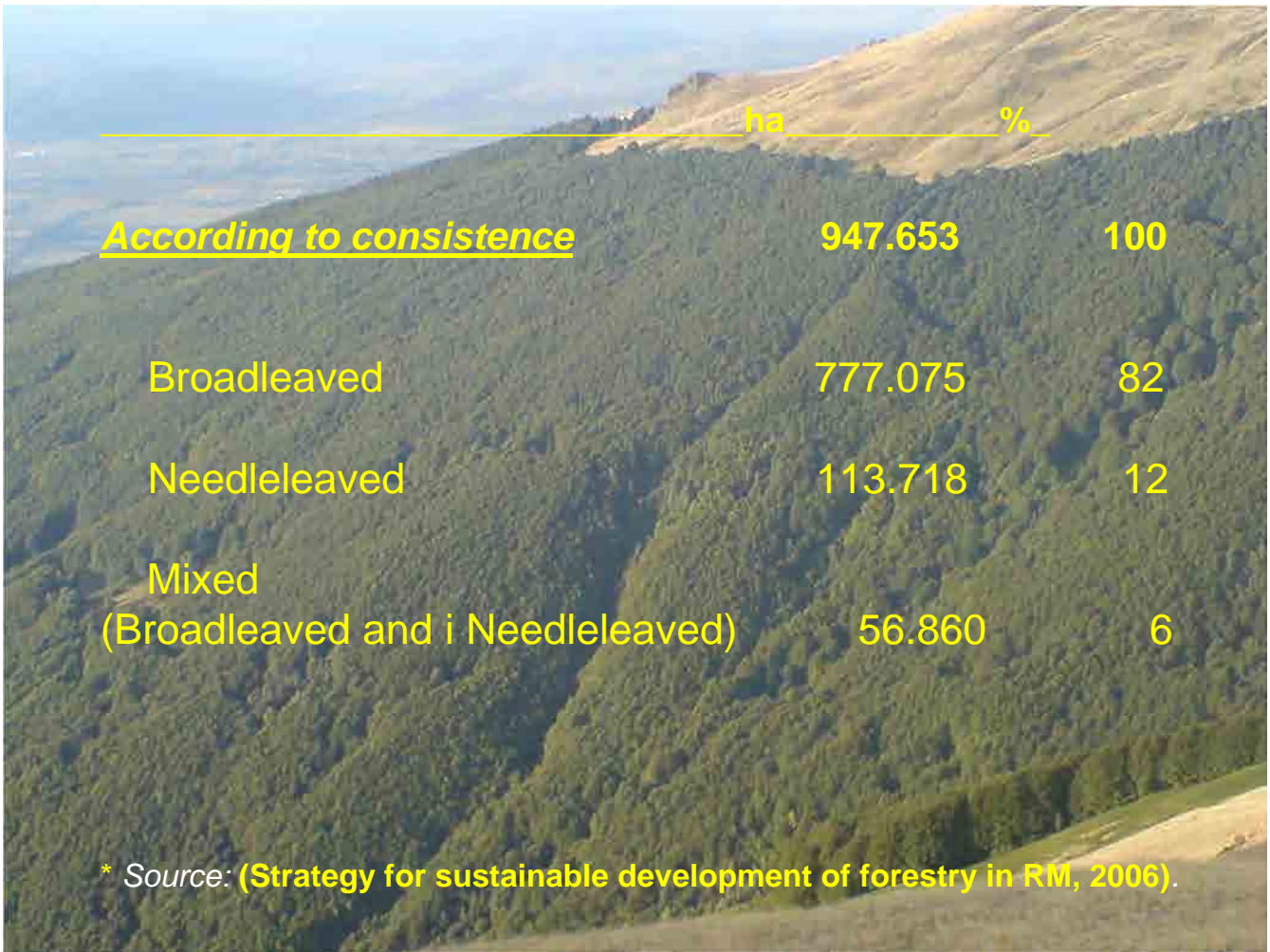
Forests as natural resource in RM

	ha	%
Total area under forests	947.653	100.00
State owned	854.214	90.14
Private	93.439	9.86

Categories of forests:

<u>According to form</u>	947.653	100
High forests	274.819	29
Coppice	672.834	71

* Source: (Strategy for sustainable development of forestry in RM, 2006).



	m3/ha	m3	%
Total wood mass	82	74,343,000	100
High forests	179	46,958,000	63
Coppice forests	42	27,375,000	37
<hr/>			
Total annual increment		1,830,000	100.0
High forests		906,140	50.5
Coppice forests		923,860	49.5
<hr/>			
Planned cut (etat) in RM		1,300,000 m3	

* Source: (Strategy for sustainable development of forestry in RM, 2006)

Planning in forestry

- Forests in RM are divided in Forest management units
- Surface of FMU – till 5,000 ha, if high forests participate with more than 60% or 10,000 ha if coppice forests participate with more than 40%.
- 190 FMU in the territory of RM
- Planning is developed throughout Forest management plan with validity of 10 years
- FMP for economic use contain textual part, forms and maps
- Purpose of FMP is sustainable development of forestry and development of environment



Administration of forestry

Main responsibility:

Ministry of agriculture, Forestry and Water Economy

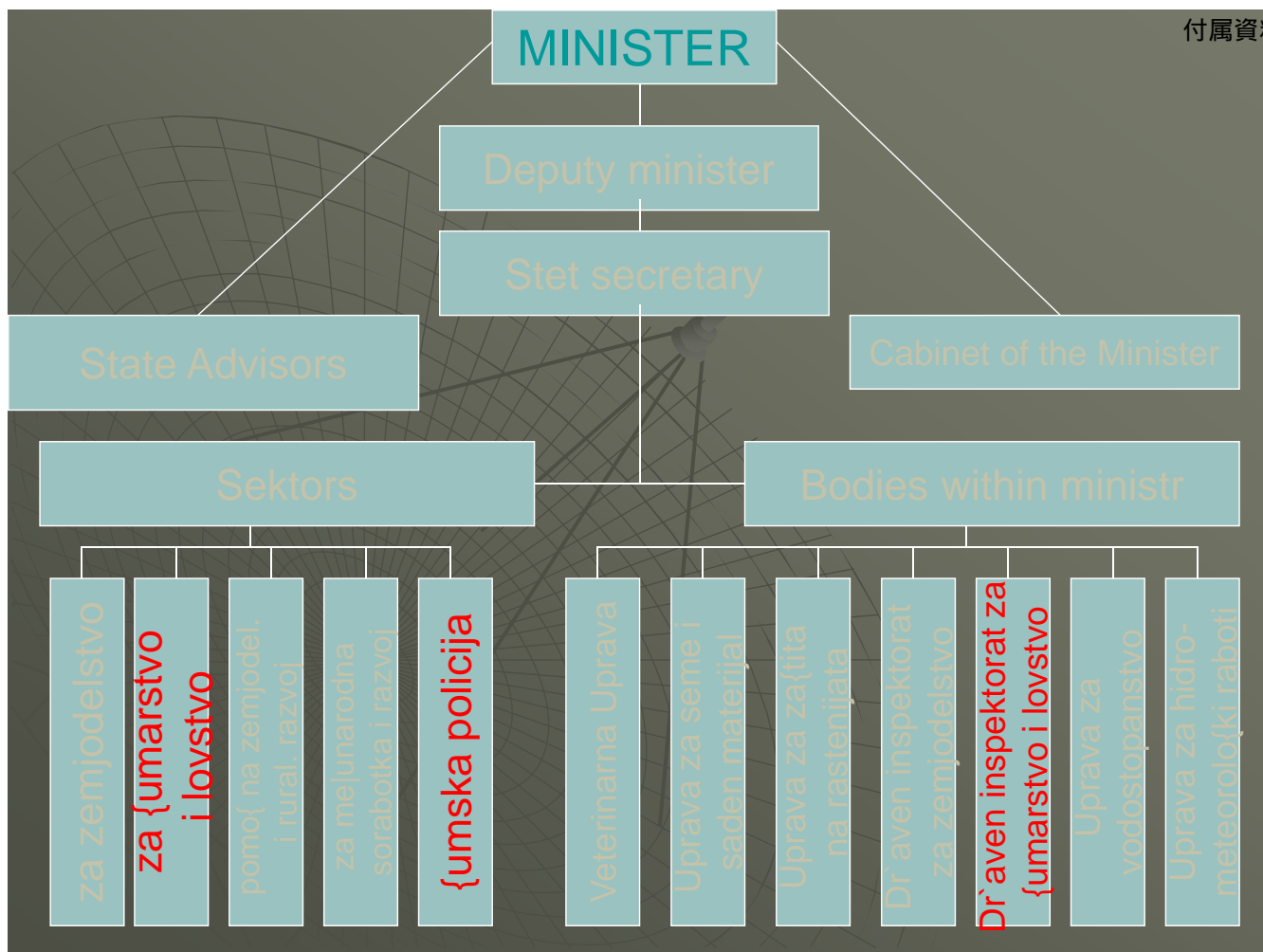
- Forestry and Hunting Department
- Department for Forestry Police
- State Inspectorate for Forestry and Hunting



Management and utilization:

PE "Macedonian forests"

PI "National Parks"



Forestry and Hunting Department

Head of department

Deputy head of department

- Unit for utilisation and use of forests
- Unit for afforestation and breeding of forests
- Unit for protection of forests
- Unit for hunting

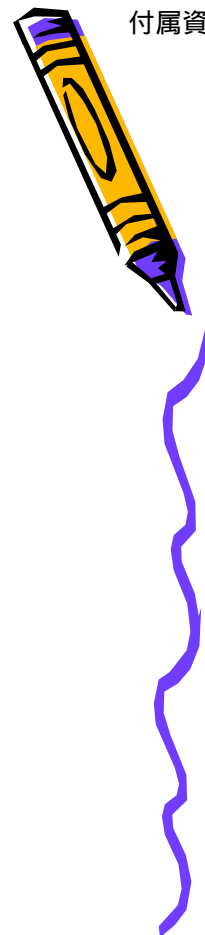
Department for Forestry and Hunting



- Head of Department
- Deputy Head of Department
- 300 employed (commanders, deputy commanders and forestry policeman) distributed in forestry police stations in RM

State inspectorate for forestry and hunting

- Director
- Head of Department
- Deputy head of Department
- 5 Heads of Regional Units
- 22 Regional inspectors (with situation in regional units of MAFWE)



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Blagodaram na vnanianieto



Thank you for your attention