

Strategic Initiative on Climate Change Impacts, Adaptation, and Development in Mountain Regions

MENA Regional Meeting
16-18 December 2012

«Mountains in Turkey; Status, Achievements and Challenges for Sustainable Mountain Management in Turkey»

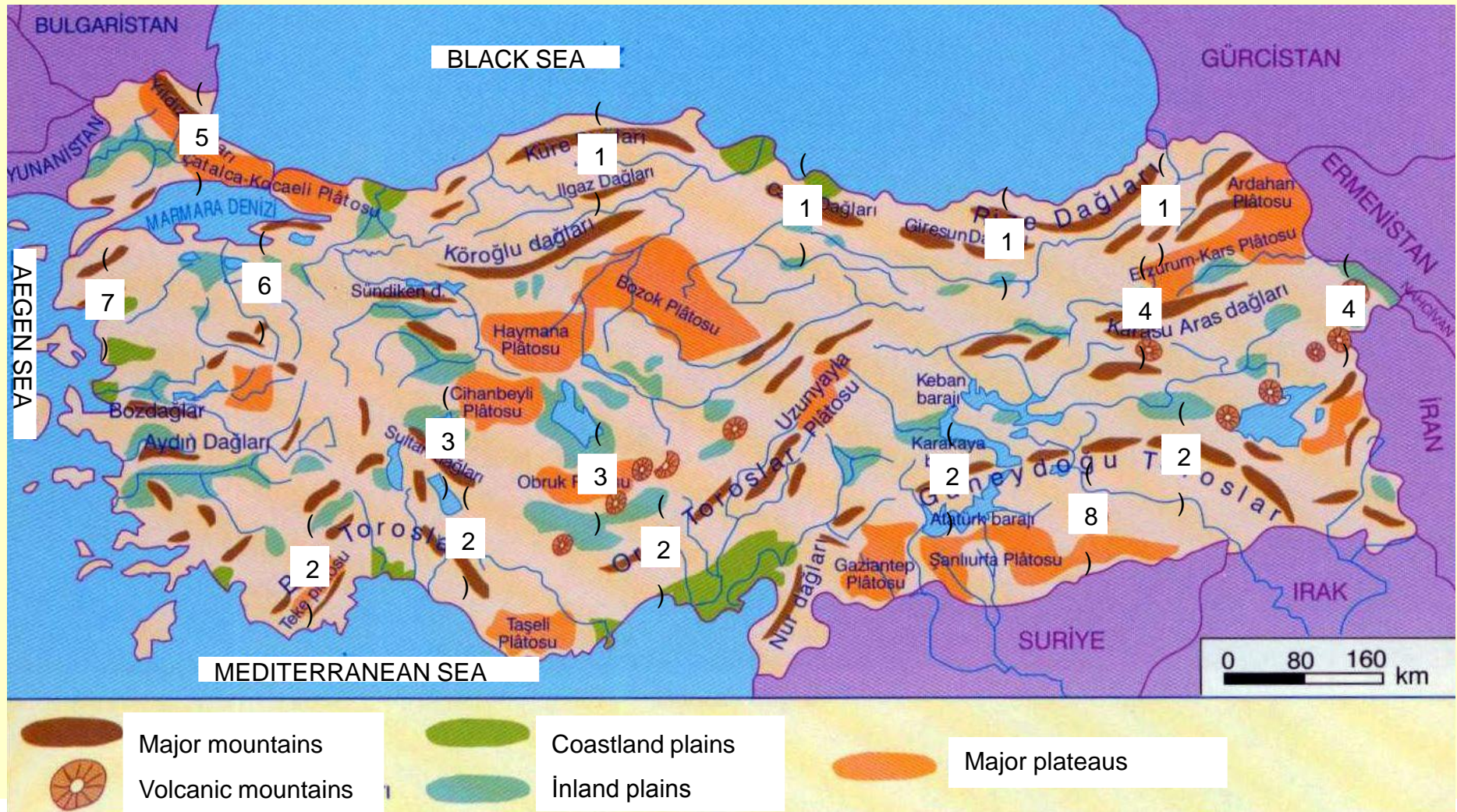
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- Turkey is located within the Alps-Himalaya orogenic belt
- Three types of mountains; orogenic mountains, tectonic mountains, volcanic mountains,
- Average altitude is about 1032 meters,
- Mountains are evenly distributed over the country,
- One peak over 5000m, three over 4000 m, 219 peaks over 3000 m in Turkey,
- Majority of the national parks, forested areas and other protected areas are in mountain ranges and adjacent uplands,
- Grazing in alpine meadows is still major livestock practices,
- Several mountain areas are the destination of local festivals , holidays, summer events,
- Interest in winter sports and other tourism activities in mountains is getting increased,
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Some facts and figures in Turkey

- Total country's territory is about 78 million hectares,
- Total inhabitants is about 70 million, 35 % is rural,
- Average altitude is about 1032 meters,
- Forests and other wooded lands cover about 21 million hectares (27%)
- Great diversity of climate, landscape and land-use pattern,
- In the cross-road of the great number of human civilizations
- It is typically Mediterranean country,
- Seasonal droughts, frequent floods, forest fires are common,
- Very sensitive to desertification and climate change (intensive/modern agricultural practices, fertilizers, pesticides, irrigation, soil contamination etc.)

Mountain map of Turkey



16-18 December, Marrakech, Morocco

Definition of mountain areas in Turkey

The definition of «mountainous areas» was made by a number of experts, technical and administrative staff from different institutions (MARA, MoEF, SPO, Turkstat etc.) in 2007 as following;

«the areas having altitude higher than 1000 meters or areas having altitudes between 500-1000 meters and slope more than 17%».
%56 of Turkey is above 1000 m.

<u>Slope Group</u>	<u>Covered area</u>	<u>(%)</u>
1- Flat lands %0-2	9.178.404	11,80
2- Mild slope lands %2-6	8.039.452	10,33
3- Middle slope lands %6-12	10.596.581	13,62
4- Steep lands %12-20	11.478.394	14,75
5- Middle steep lands %20-30	13.394.964	17,22
6- Very steep lands %30 +	10.463.292	13,48
Total	63.151.087	81,20

- (1) The North Anatolian Mountains,**
forests, tourism, biodiversity, summer festivals, alpine meadows,
- (2) Taurus Mountains,**
mountaineering, summer destination, alpine meadows and nomadic livestock
- (3) Anti-Taurus mountain range,**
many of them volcanic, panoramic and landscape, winter sports, nomadic grazing
- (4) The East Anatolia Mountains,**
Agri Mountain, the highest peak in Turkey (5161 m) alpine meadows, livestock, mountaineering
- (5) Yıldız (Istranca) Mountains,**
recreation and tourism, biodiversity and species
- (6) Uludağ (Olympus Mt),**
winter sports, summer destination, tourism, rich on flora
- (7) Ida Mountain (Kazdagi),**
biodiversity, endemism, scientific interest,
- (8) Nemrut Mountain, History, culture, tourism**

Achievements/Initiatives and Challenges for SMD

- A number of programs and projects implemented in the concept of Chapter 13 of the Agenda 21,
- IYM has been effectively observed (national Committee, National symposium, workshops, media etc.),
- Yuntdagi (Yunt Mountain) Model Project has been successfully implemented with the financially and technically assistance of FAO (TCP Project),
- Sustainable Mountain Management Strategy document has been prepared and distributed,
- National planning processes started to include mountain related subject after the project,
- New organization of the Ministry and Water Affairs has established several mountain related units,
- Turkey has actively following up the mandate of Mountain Partnership and other regional and international processes on SMD,
- Turkey was a partner of the MEDITERRITAGE Project of EU/Interreg-C

Other Major achievements

Big-scale Watershed Rehabilitation Projects

- The Eastern Anatolia Land Rehabilitation Project,
- Anatolia Watershed Rehabilitation project,
- Çoruh River Watershed Rehabilitation Project,
- Yunttagi (Yunt Mountain) Model Project
- A number of rural development projects/programs

Tools/Mechanisms related to mountain management

- Five-Year National Development Plans,
- National Environmental Action Plan (NEAP)
- National Biodiversity Strategy and Action Plan
- National Forestry Program (nap)
- National Action Program (NAP) for combating to desertification and drought
- National Rural Development Plan

The major outputs/findings of recent studies/projects Recommendations for SMD in Turkey

- Legislative and institutional mechanisms on mountain management are needed
- Permanent coordination mechanism such as commission, committee, team etc. should be established at national as well as local levels where appropriate
- Such mechanism should include representatives from all related sectors, public, private and NGOs etc.
- Integrated and multi-sectoral approach should be arranged
- National planning processes should include the sustainable mountain management issues (Specific sectoral expertise commission report)
- National Rural Development Plans should address the less favored areas including mountain population
- Up-to-date information and baseline surveys for accurate data and networks at national level is necessary
- Cooperation with/involvement in ongoing regional and international processes as well as related institutions, particularly FAO-MP is must be maintained, experiences/achievements should be shared

Mountains and their management in MENA Region

- Information about the MENA Mountains is ragged and inadequate,
- Institutions responsible for MM and networks are dissimilar and diverse,
- There is not any institution directly related/responsible
- Key issues and concerns for SMD are;
 - ✓ Environment, ecosystem goods and services
 - ✓ Climate, water and soil,
 - ✓ Wildlife and biodiversity,
 - ✓ Socioeconomic and governance,
 - ✓ Agriculture, grazing and land use,
 - ✓ Land degradation, energy, tourism, urban development etc.
 - ✓ Peace, rest and effective policy for solving conflicts

Mountains and their management in MENA Region

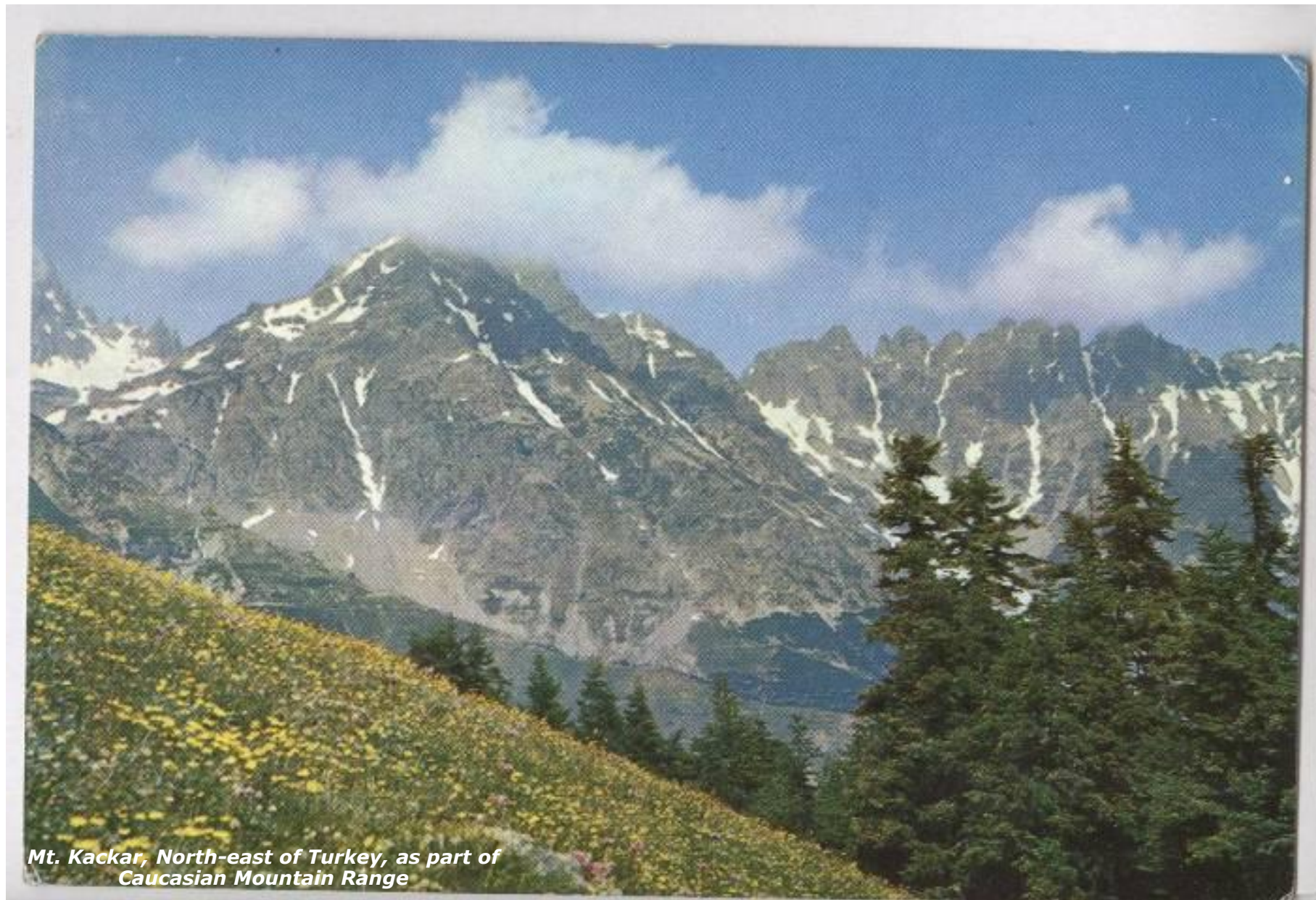
- Major peaks over 4000m are Jabel Toubkal (Moroco), Mt Damavand and Zard Kuh (Iran), Agri Mt (Turkey)
- ***A comprehensive study to be carried out by multidisciplinary surveys (including government institutions, scientist, civil society, researchers, other experts etc.) on mountain resources of the MENA region is strictly needed.***

Mountains and Climate Change in the Region

All mountain ecosystems in the MENA region are highly vulnerable to climate change impacts. Priority should be given to the following issues while adaptation measures are considered:

- Survival of livelihoods of mountain people who highly depend on mountain resources,
- Sustainability of water resources in both highland and downstream areas,
- Survival of forests, biodiversity, endemic species,
- Protection of soil resources, quality and quantity,
- Traditional land use patterns, agricultural practices, rangeland and livestock
- Income of mountain communities
- Protection of settlements, infrastructures and other facilities

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- **However, any specific adaptation measure against climate change has not been well identified/articulated and addressed so far..**



*Mt. Kackar, North-east of Turkey, as part of
Caucasian Mountain Range*

16-18 December, Marrakech, Morocco



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