

*The State of Iran's mountains
&
Achievements of
Mountain Environment Protection Society
(MEPS)*

IPROMO COURSE

10 July 2010

Torino, Italy

Abdollah Ashtari

Managing Director

MEPS



The Land of Iran

Mountains; Sources of Life



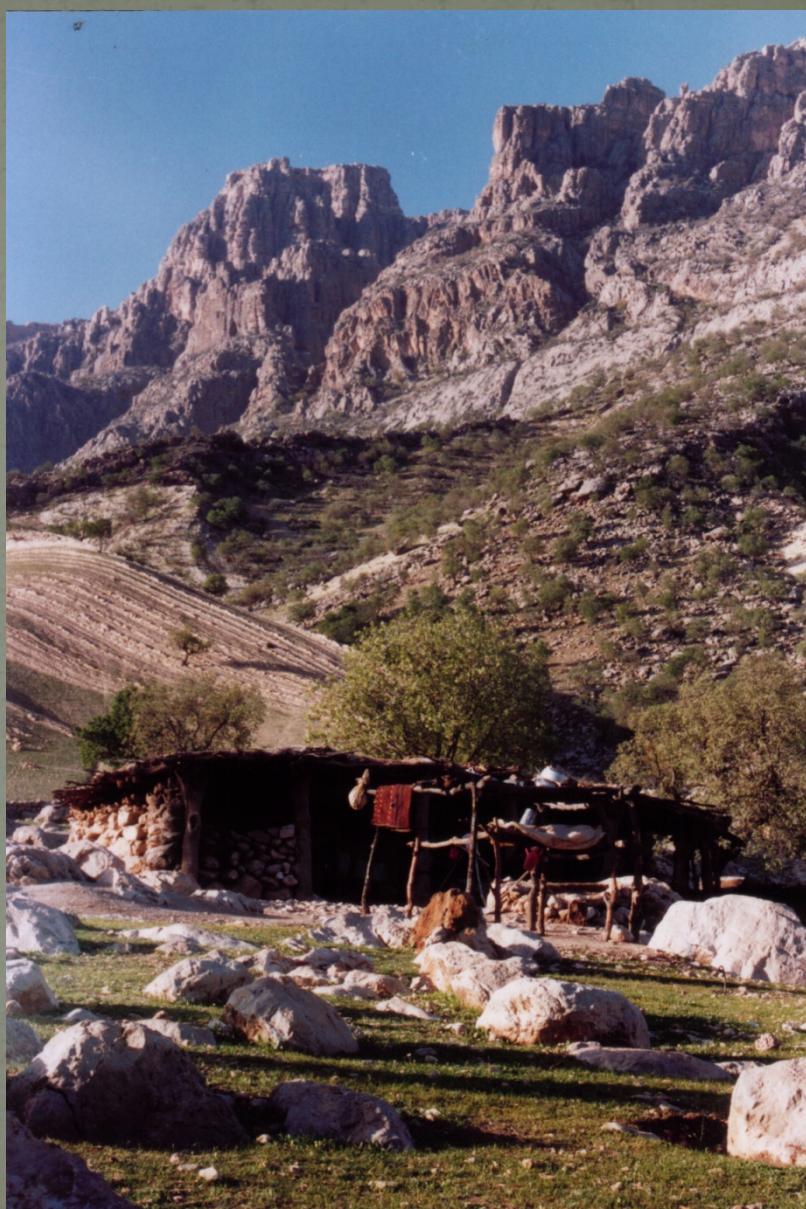
The Land of Iran

- *Iranian Plateau is a double - sided orogen formed during the quaternary period*
- *A bowl-like plateau situated on the arid belt of northern hemisphere with high mountains in its periphery*
- *Located between 25 to 40 degree latitude north*
- *The interior part of plateau receives very low amounts of precipitation*
- *50%- 80% of the precipitation are in form of snow on high altitude mountains in cold season*



Physical Geography

- *The simplest fact about “Iranian” landscape or environment is pronounced physiography*
- *Consisting an outer ring of periphery mountain chain surrounding a high plateau*
- *With scattered mountains and*
- *Desertic basins*



Upland - Lowland Systems

- *All interior water basins are closed*
- *Therefore anything happening in the mountains has direct impact on the whole basin*
- *The lowland portion, acting as sink for water and sediment load, is affected by upland part of these closed systems*

- *Manifestation of interdependencies between altitudinal belts within this systems is evident due to the very steep slope of young mountains*
- *In a regional scale, interdependencies between mountains and lowland deserts are enforced by the flood type hydrologic regime of water currents*
- *Diversity of environmental features in different altitudinal belts and*
- *Dominant traditional land use types*

Constraints and Advantages

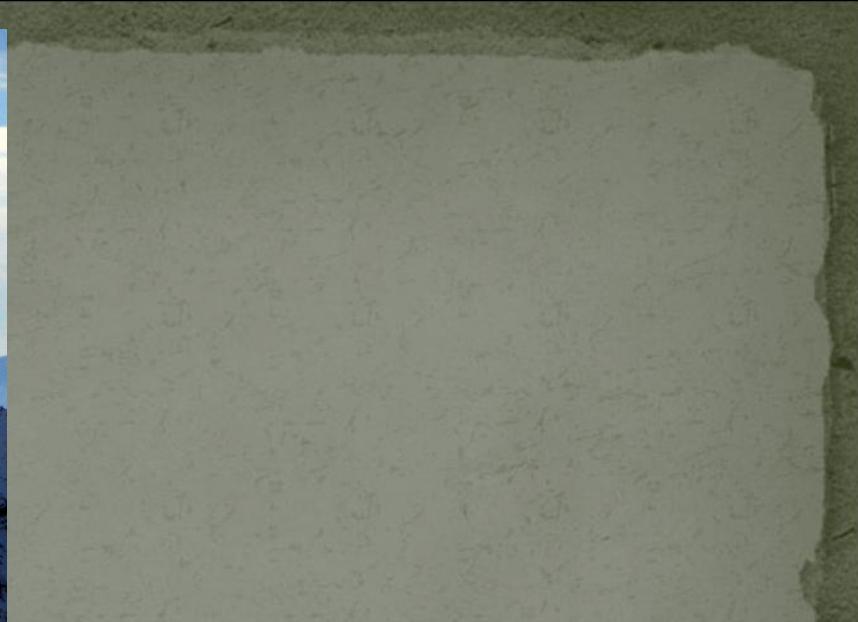
- *Iranians have learned to cope with the constraints and benefits of these mountain systems through history*
- *Reflection of these strategies in reaction to arid mountain environment and its natural resources availability is visible in:*
 - a) *Seasonal migrations*
 - b) *Especially nomadic transhumance*
 - c) *Water exploitation methods*
 - d) *Land use planning approaches and*
 - e) *Settlement site selections*

Major Mountain Systems

- *Alborz*
- *Zagros*
- *Central interior highlands and mountains*

Alborz

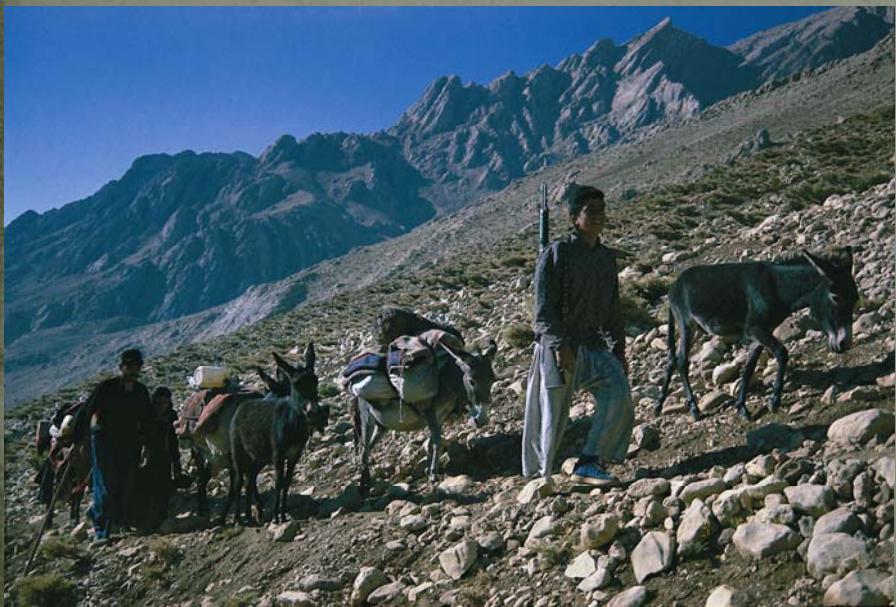
- Like an unbroken wall in north of Iran
- Extremely steep slope and unusually high (Mount Damavand, 5610 m)
- Narrow with only 150 km width and 700 km long
- Exceptionally rich in microclimate, biodiversity and landscape diversity
- Alborz is divided into 3 sections west, central and east
- Temperate forests exceptionally rich in biodiversity; relique species that have survived the ice age





Zagros

- Stretching from North West to South East, it dominates all western and southern parts of Iran
- Comprised with some of the most imposing fold structure and clusters of high peaks (found not only in Iran but also in the Middle East)
- 300 to 700 km Average width and 2500 km length
- An important centre of biodiversity, especially those of domesticated plants and animals, wheat, barely, grape vines, sheep, goat and of pharmaceutical plants
- 600 varieties of *Astragalus* spp.
- Home for the origination of some of the oldest cultures and human civilizations
- Holds the greatest nomadic population with very long migrations
- The greatest landslide ever recorded in the world has happened in Zagros (120 km³)





Central interior highlands and mountains

- *East and South East of Iran consist of a number of scattered upland massifs*
- *Separated by topographical expanses of differing width and altitude*
- *Standing at altitudes of more than 1000 meter*
- *Many of these mountains attain heights more than 4000 meter*



Mountains; as sources of life in Iran

Water:

- Mountains supply more than 80% of fresh water for agriculture, industry and home uses

Biodiversity:

- Due to topographical variations, changes on slope, directional orientation, climate, elevation and soil, mountains of Iran host untold biodiversity (fauna & flora) and a high number of endemics
- 8000 plants have been identified to date, 1700 of which are endemic



Alpine rangelands:

- *Occupies one third of the whole country's rangelands*
- *Play a vital role in conservation of water and soil*

Human settlements:

- *Through history, because of relative advantages of mountain regions, human settlement patterns have been formed near mountain regions*
- *Tehran , Hamadan, Tabriz and many other cities have been stretched at mountain foothills*



Forests:

- *Iran's forests cover approximately 14.3 million ha of total national lands and host a very high biodiversity and play a key role on soil and water conservation*
- *Humid and Sub-humid forests in the north, Hyrcanian zone with special geo-botanic characteristics*
- *Zagros forests, in the west (beautiful Oak forests) supply 45% of fresh water and the origin of most of the rivers and the habitats for rare wildlife*
- *Central and south of the country are characterized by hot climate forests*
- *Mangrove ecosystems in the south*
- *Arasbaran forests in north west rich in tree species*



Mountains of Iran under severe threats

Main degrading factors are:

- a)Over grazing*
- b)Dry farming*
- c)Road construction*
- d)Others*





Root causes of mountain degradation

- *Poverty*
- *Over exploitation of resources*
- *Lack of legislation*





Mountain Organizations in Iran

a) Governmental

There exists no structure or department to specifically address mountain issues

b) Non-governmental

There are only a few NGOs involved with mountain environment out of which MEPS is the only organization scientifically working for the protection and sustainable development of mountains

Mountain Environment Protection Society (MEPS)



- *Established in 1993*
- *Member of Mountain Partnership and IUCN*
- *Working at national level*

Achievements of MEPS

- *MEPS is known as the leader of mountain-related conservation activities in Iran*
- *It acted as the lead organization handling activities of the International Year of Mountains (IYM) in 2002 in Iran*
- *Has organized several educational seminars and classes, has published books, brochures*

- Is currently publishing a quarterly newsletter, "**Mountain Environment**", which addresses mountain-specific and scientific issues
- MEPS, has successfully concluded a UNDP-GEF project in three phases since 2002 up to now in north-west of Iran with the goal of promoting sustainable local livelihoods, alternative range management methods and conservation of mountain environments through participatory approaches

Other activities

- Establishment of “Mountain Sub-committee” within NCSD
- Making efforts for establishment of a masters degree on mountain environment in Faculty of Environment, University of Tehran
- Executing projects with the Municipality of Tehran in the mountains nearby Tehran to foster public awareness on mountain environment issues
- Since the initiation of IMD, MEPS has performed special activities and ceremonies to highlight this occasion throughout Iran
- Recently MEPS carried out a short training course on the critical issues of mountain environment in June and July 2010





Thank you for your attention
