



# Development of Management Plans for Protected Areas of Iran



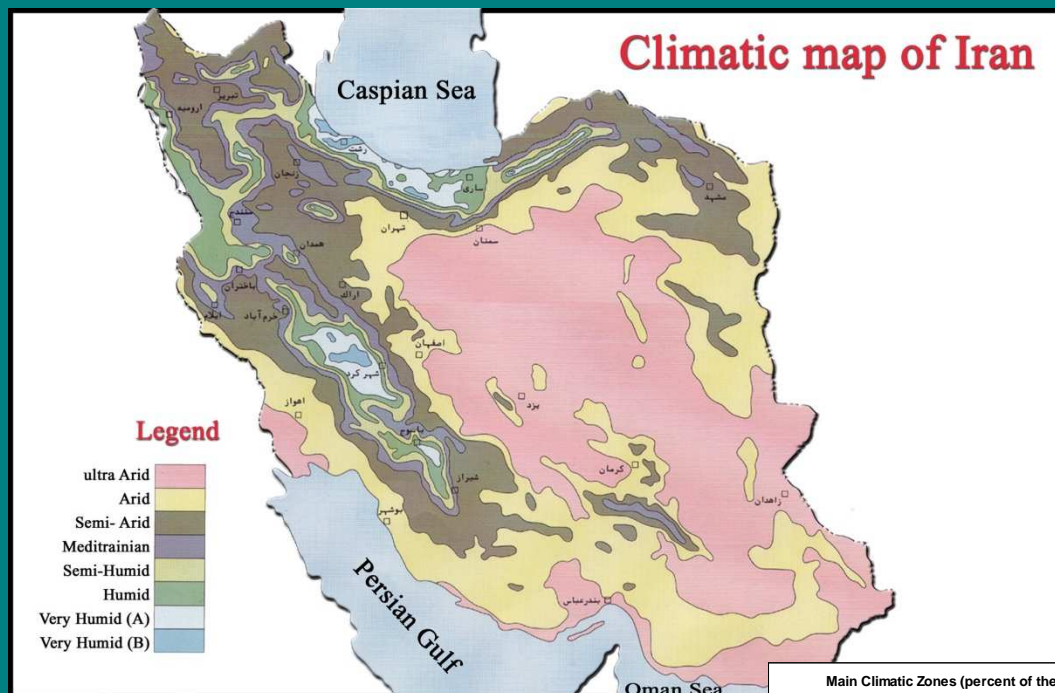


- ❁ Islamic Republic of Iran comprises a land area of 1.64 million km<sup>2</sup>
- ❁ It lies in the northern part of the temperate zone, between latitudes 25° 03' and 39° 47' north and longitudes 44° 14' and 63° 20' east
- ❁ And the average altitude is over 1200 m
- ❁ Iran is bordered by Turkmenistan, the Caspian sea (over 900 km of coastline), Azerbaijan, and Armenia in the north, Afghanistan and Pakistan in the east, the Persian Gulf and the Sea of Oman in the south, and Iraq and Turkey in the west
- ❁ The Iranian habitat supports over: 8,000 recorded species of plant (almost 2,500 are endemic), 502 species of birds, 164 mammals, 209 reptiles (26 endemic species) and 375 species of butterflies





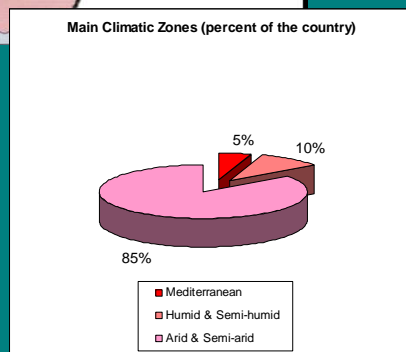
# Main climatic zones in IRAN



Iran has a varied but generally harsh climate, arid with large temperature fluctuations,

Many species and varieties are adapted to surviving in these harsh conditions

The country features three main climatic zones: Mediterranean, Humid & Semi-humid, Arid & Semi-arid









# *Protected Areas in Iran*

*managed by Department of the Environment (DoE)*

## Management Level

**23 National Park**

**22 National Natural Monument**

**35 Wildlife Refuge**

**111 Protected Area**

**22 Ramsar Site Wetland**

**9 Biosphere Reserve**





## *Management Plans of Iran*

- ❁ In 2001 Department of Environment, division of natural resources and biodiversity, approved a national project on developing a comprehensive management plan
- ❁ This project is one of the main strategic plans on sustainable use of national biodiversity resources
- ❁ This plan is in accordance with IUCN, UNEP and WWF framework of management planning for protected areas





## *Main Goals of the Management Plans*

- ✿ Conservation of biodiversity resources
- ✿ Optimum utilization of the natural resources (Landscape planning)
- ✿ Development of eco-tourism plans
- ✿ Providing more ecosystem services for human wellbeing





# *Main Phases of the Management Plans*

## **Feasibility study (phase I):**

- ❁ Preparation and development of basic studies for each site
- ❁ Data Analysis in GIS
- ❁ Assessment of ecological capabilities/potentials
- ❁ Development of Zoning system for each site





# Zoning system

	Zone	نام زون
I	Strict Nature Zone	طبیعت محدود شده
II	Protected Area Zone (Primitive, ecological)	حفاظت شده
III	Extensive Tourism Zone (Recreation zone outdoor)	تفرج گسترده
IV	Intensive Tourism Zone	تفرج متمرکز
V	Cultural Zone	تاریخی / فرهنگی
VI	Restoration Zone	زون بازسازی
VII	Special Zone	استفاده ویژه (اداری)
VIII	Buffer Zone	سپر بازدارنده یا بافر
IX	Transition Zone	زون گذرگاهی
X	Primitive Scientific Zone	استفاده های علمی
XI	Multiple use Zone (Special use, Scio-economic)	سایر فعالیتها





## *Main Phases of the Management Plans ...*

### **Detailed study (Phase 2):**

- ❁ Development of a plan for each zone: research activities, protection, rehabilitation, eco-tourism, cultural values, livelihood and local community involvement
- ❁ Development of detailed short, medium and long-term action plans





## *Main Phases of the Management Plans ...*

### **Implementation (Phase 3):**

- ❁ Implementation of action plans and management suggestions according to work plans timetables (based on the outcomes of phase 2)





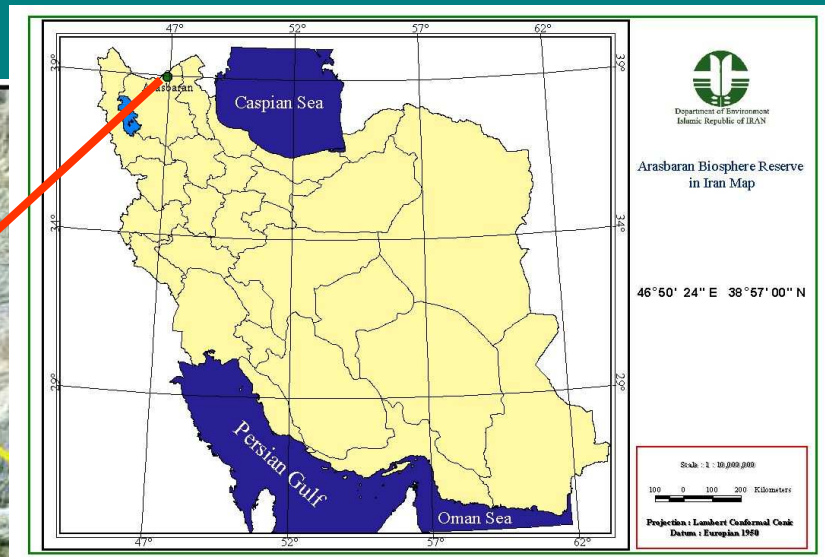
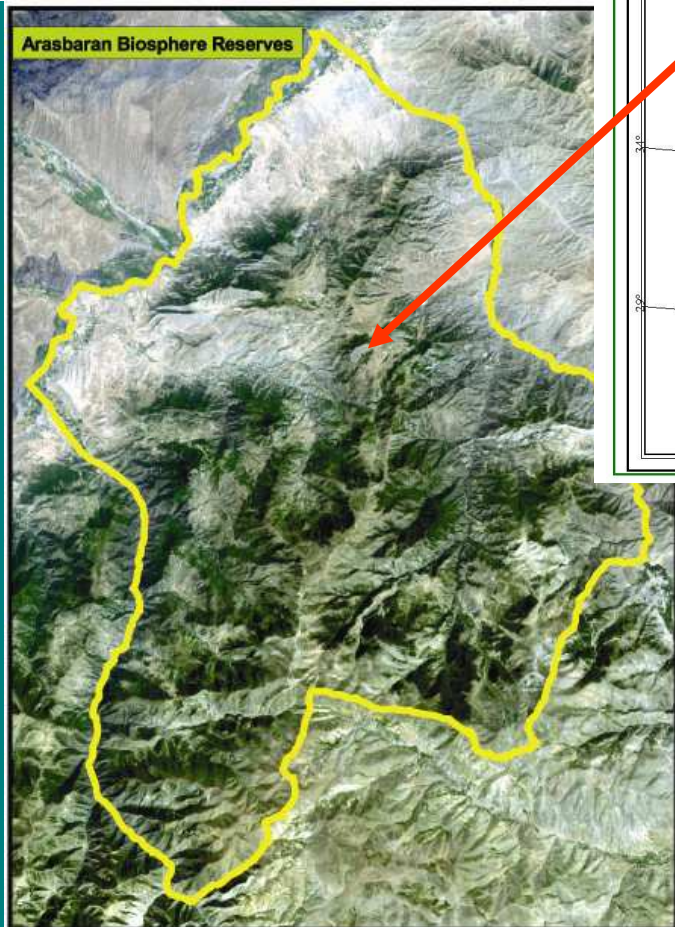


# An Example ....

## *Arasbaran Protected Area And Biosphere Reserve*



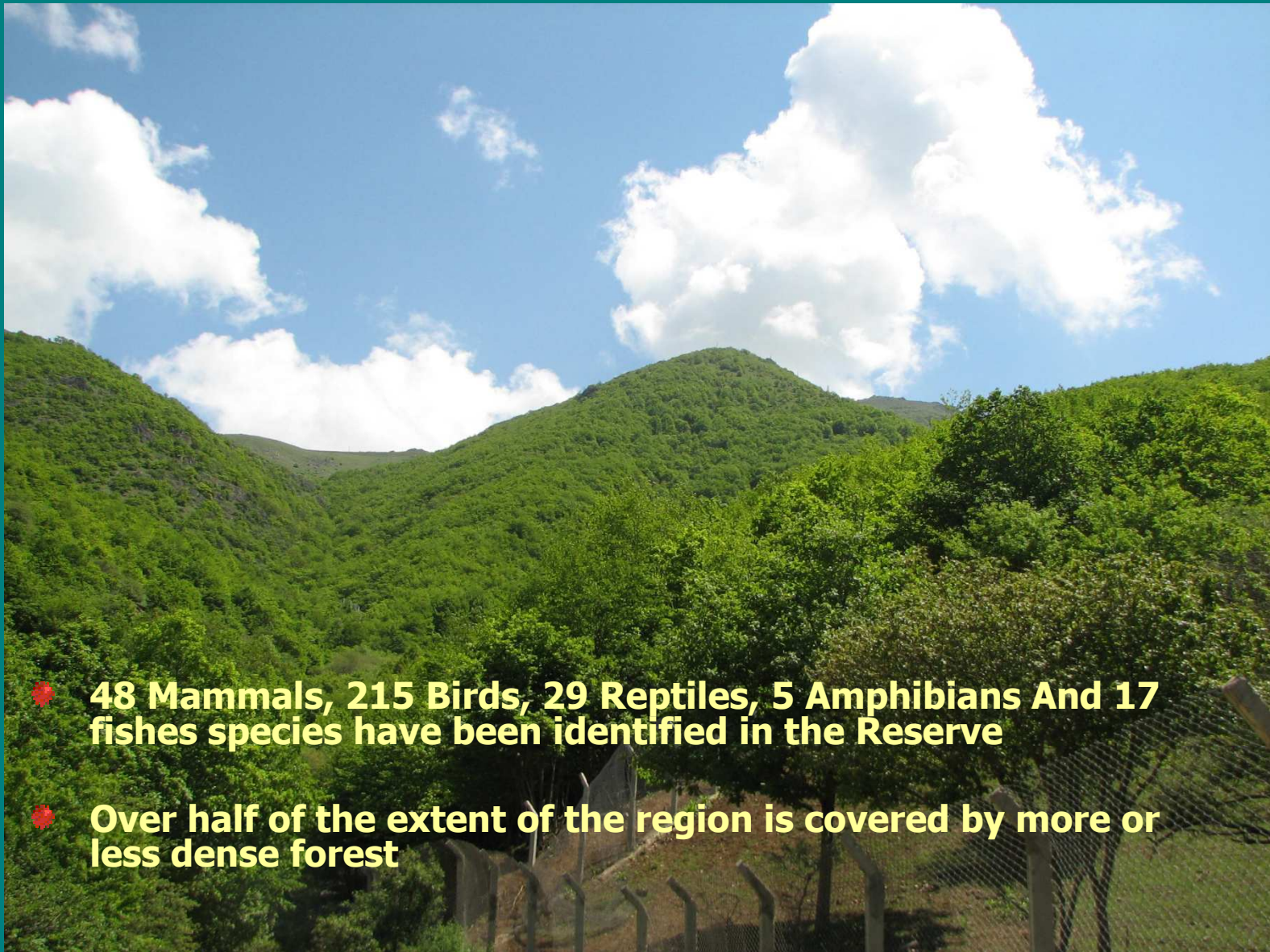
# The Area



Arasbaran	Estern Azarbaijan	80,654 ha.
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- ❖ **48 Mammals, 215 Birds, 29 Reptiles, 5 Amphibians And 17 fishes species have been identified in the Reserve**
- ❖ **Over half of the extent of the region is covered by more or less dense forest**







## *Features*

- ❁ Hyrcanian biome,
- ❁ Caucasus mountain,
- ❁ Unique landscape and Ecosystem







## Cultural and historical monuments:

- ✿ Babak castle,
- ✿ Toumanians church





## *Main Plant Species*



1. *Quercus macranthere*
2. *Carpinus orientalis*
3. *Acer campestre*
4. *Acer monspessulanum*
5. *Fraxinus rotundifolia*
6. *Ulmus glabra*
7. *Evonymus latifolia*
8. *Juglans regia*
9. *Platanus orientalis*
10. *Taxus baccata*

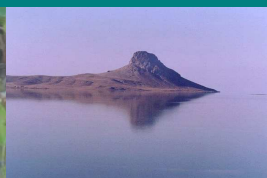




# Main Animal Species



<i>Mesocricetus auratus</i>	هامستر طلائي
<i>Cricetulus migratorius</i>	هامستر خاکستري
<i>Panthera pardus</i>	پلنگ
<i>Ursus arctos</i>	خرس قهوه اي
<i>Cervus elaphus</i>	مرال
<i>Capreolus capreolus</i>	شوکا
<i>Sus scorofa</i>	گراز
<i>Capra aegagrus</i>	کل و بز
<i>Ciconia nigra</i>	لک لک سیاه
<i>Vipera ursinii</i>	افعی البرزی
<i>Tetrao mlokosiewiczi</i>	سیاه خروس
<i>Phasianus colchicus colchicus</i>	قرقاول ارسبارانی
<i>Tetragallus aspicus</i>	کبک دری
<i>Francolinus rancolinus</i>	دراج



# Endangered Species

Plant Species		Animal Species	
<i>Taxus baccata</i>	سرخدار	<i>Tetrao mlokosiewiczi</i>	سیاه خروس قفقازی
<i>Ribes blebersteini</i>	قره غات	<i>Phasianus colchicus</i>	قرقاوول ارسبارانی
<i>Pistacia muticu</i>	بنه	<i>Tetragallus caspicus</i>	کبک دری
<i>Amygdalus fenzeiliana</i>	بادام وحشی	<i>Francolinus francolinus</i>	دارج
<i>Pirus syriaca</i>	گلابی وحشی	<i>Ciconia nigra</i>	للك سیاه
<i>Fragaria vescu</i>	توت فرنگی وحشی	<i>Panthera pardus</i>	پلنگ





## *Socio-economic Characteristics*



**Human Settlements:** 66 Villages

**Population:** 11192 (permanently)  
3130 (seasonal)

**Existing Land Use:** Farming, Animal husbandry, copper mine, Settlements Area

**Communities Livelihood:** Agriculture, Animal husbandry, horticulture, apiculture, handcrafts

**Number of Tourism:** 135,000 per year







# *Main Threats in Arasbaran*

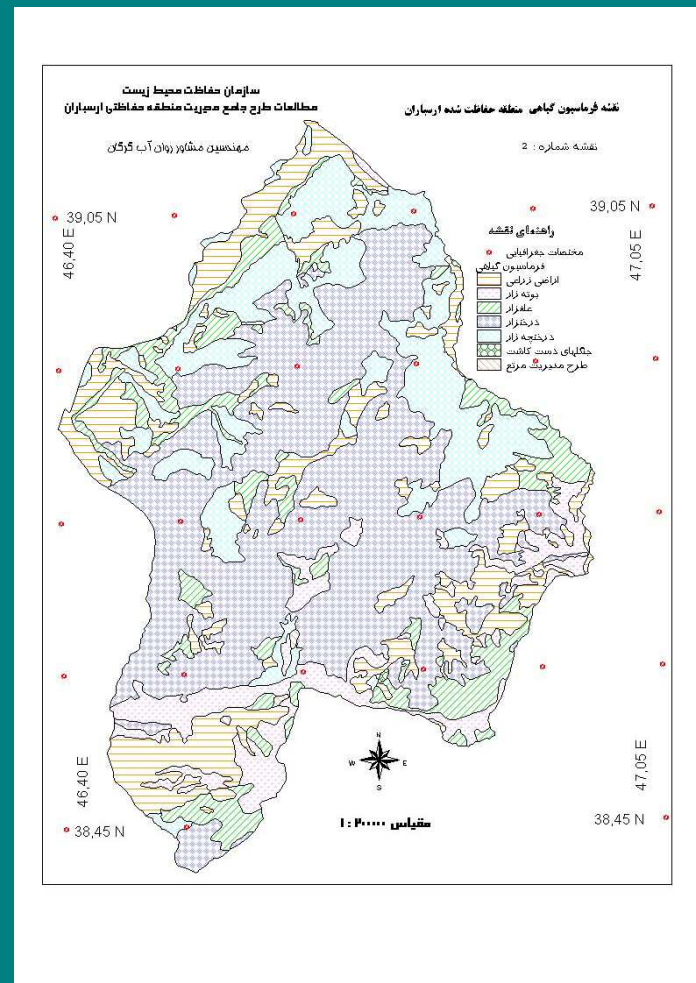
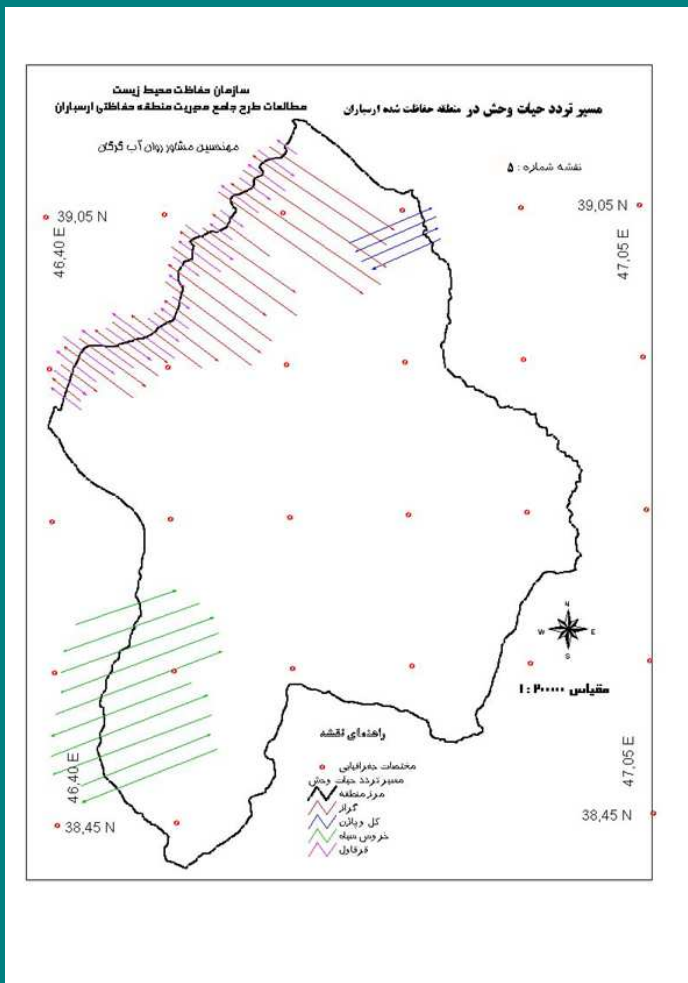
- ❁ Unsustainable development activities
- ❁ Forest logging by local communities for fuel consumption and domestic livestock, Illegal hunting and fishing
- ❁ Land conversion to agriculture and human settlement
- ❁ Disturbance of unorganized tourism





# Wildlife Migration Corridors

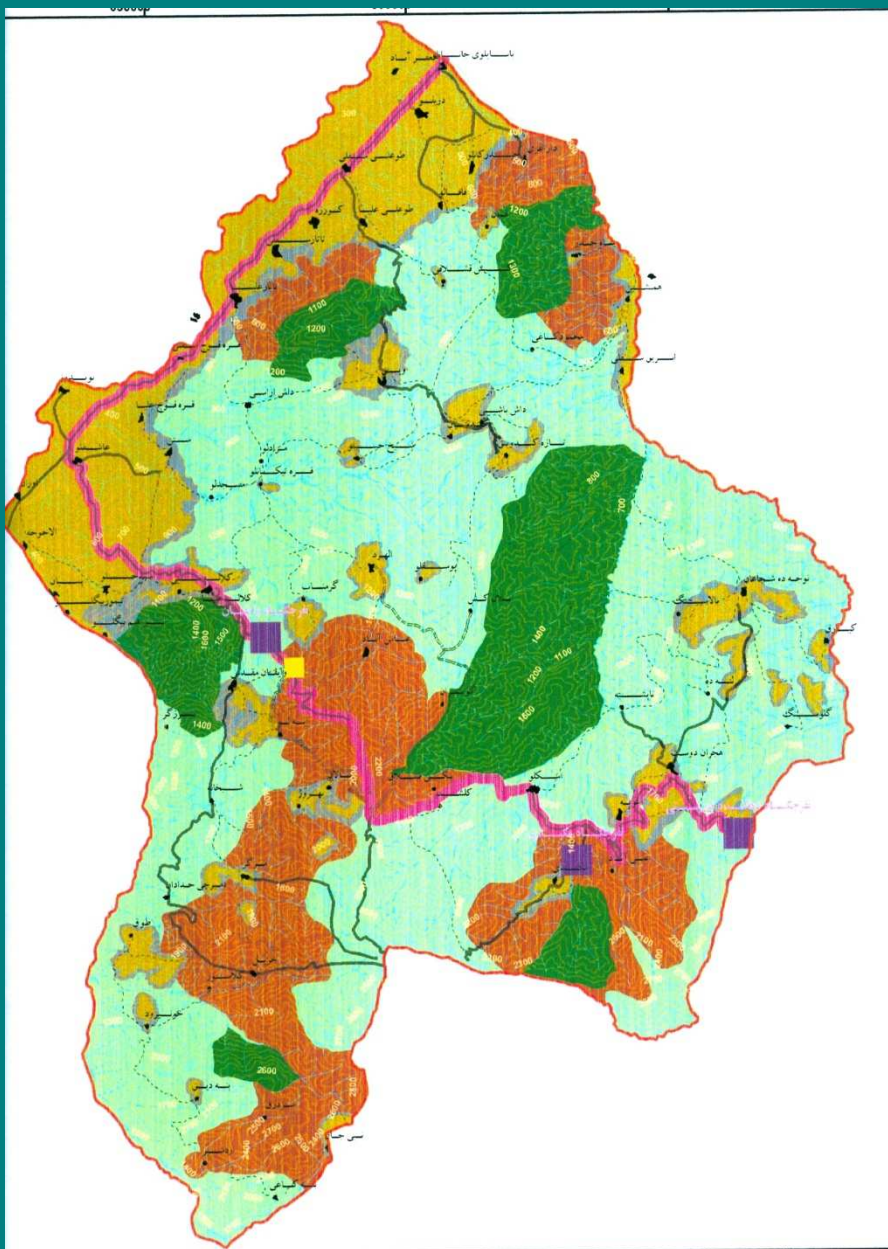
# Plant Types



with the mentioned models of phase 1, 21 maps were prepared







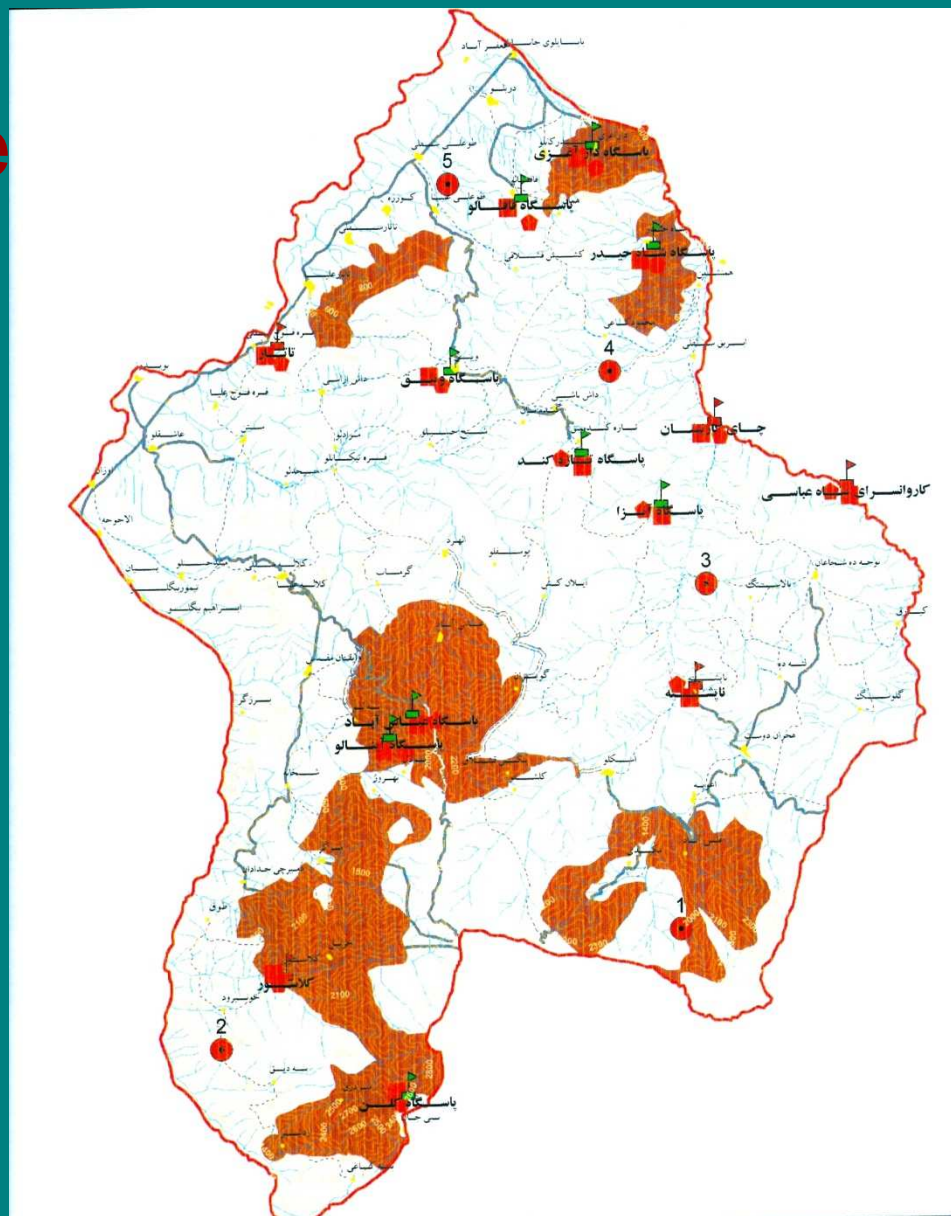
	Zone
I	Strict Nature Zone
II	Ecological Zone
III	Extensive Tourism Zone
IV	Intensive Tourism Zone
VI	Restoration Zone
VII	Special Zone
VIII	Buffer Zone
XI	Other Development Zone





# Restoration Zone

- Number and location of guard stations

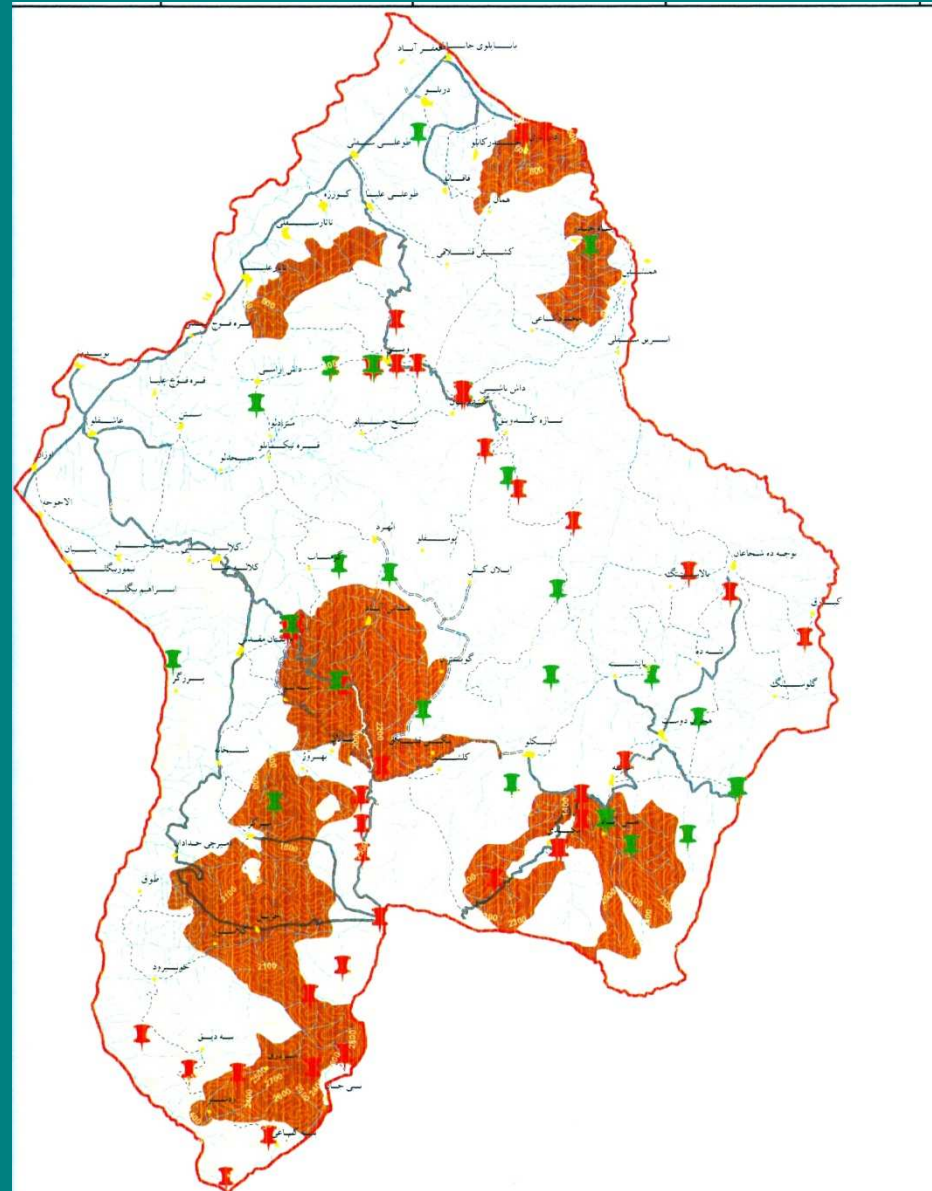






# Restoration Zone

- Number and location of information and guiding signs









## *Action Plans*

- ❁ Boundary making
- ❁ Grazing control
- ❁ Preservation
- ❁ Rehabilitation of local species
- ❁ Invasive species control
- ❁ Making balance between the utilizing population and landscape capability
- ❁ Involvement of local communities





# Communications

## Local Councils

(most of the members of the council are the respected elders and their decisions are acknowledged by others)



- Awareness raising among local communities (with emphasis on women and youth)
- Related organizations







# Example ends....





## *Benefits*

- ❁ Development of comprehensive database for protected areas
- ❁ Improvement of communities' participation in sites' management
- ❁ Strengthening the links and cooperation between different sectors
- ❁ Better informed local communities







# Challenges

- ❖ Time constrains
- ❖ Information gaps
- ❖ Insufficient expertise and experiences
- ❖ Insufficient technical support from related international organizations





*Thanks for your Attention!*

