International Training Workshop on Integrated Sediment Management in River Basin

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A LOOK AT THE EROSION AND SEDIMENT SITUATION IN IRAN

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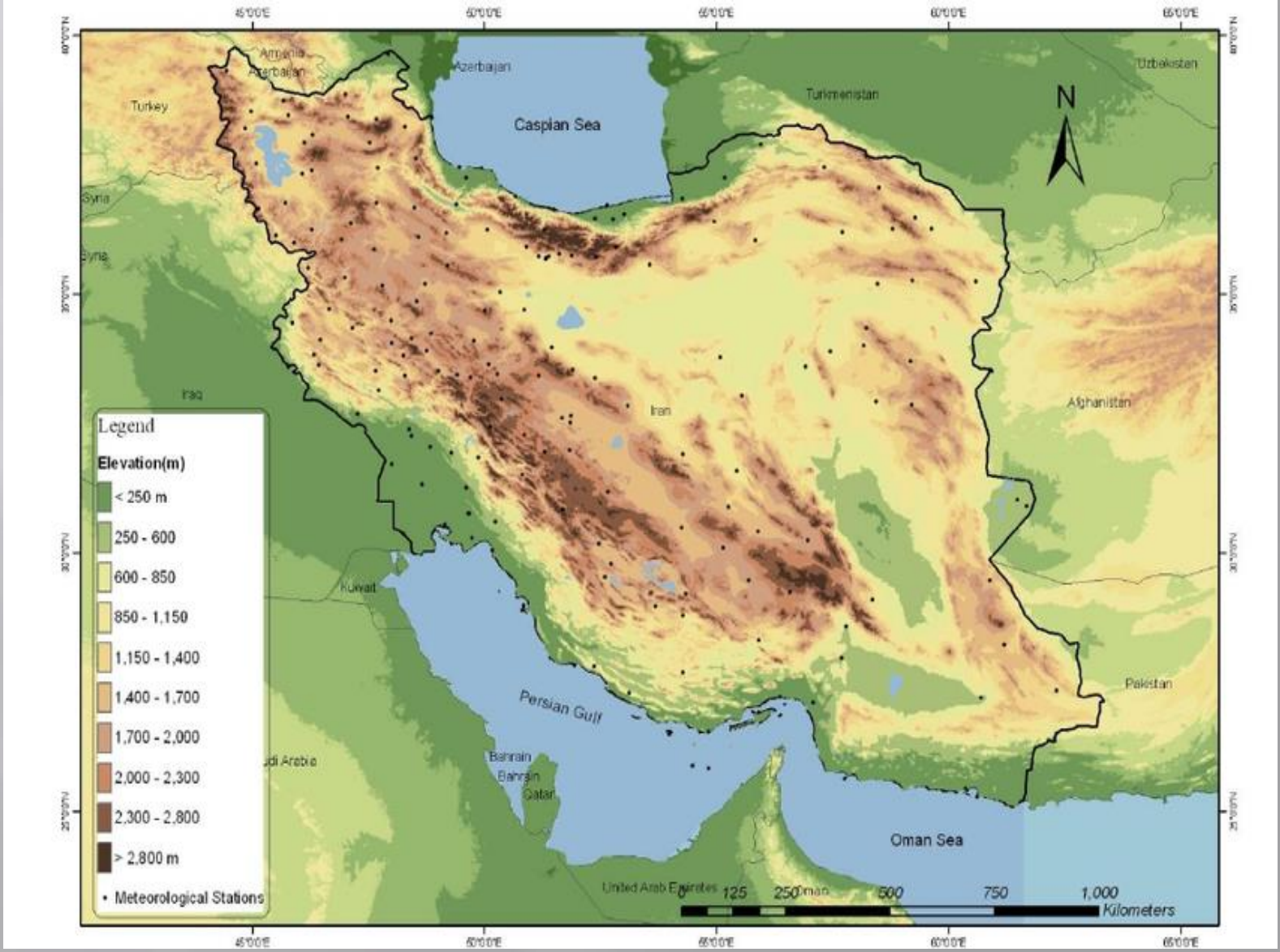
Outline

- Introduction to General Geography of Iran
- General condition of sediment and erosion in Iran
- Strategies and policies to control erosion and sediment

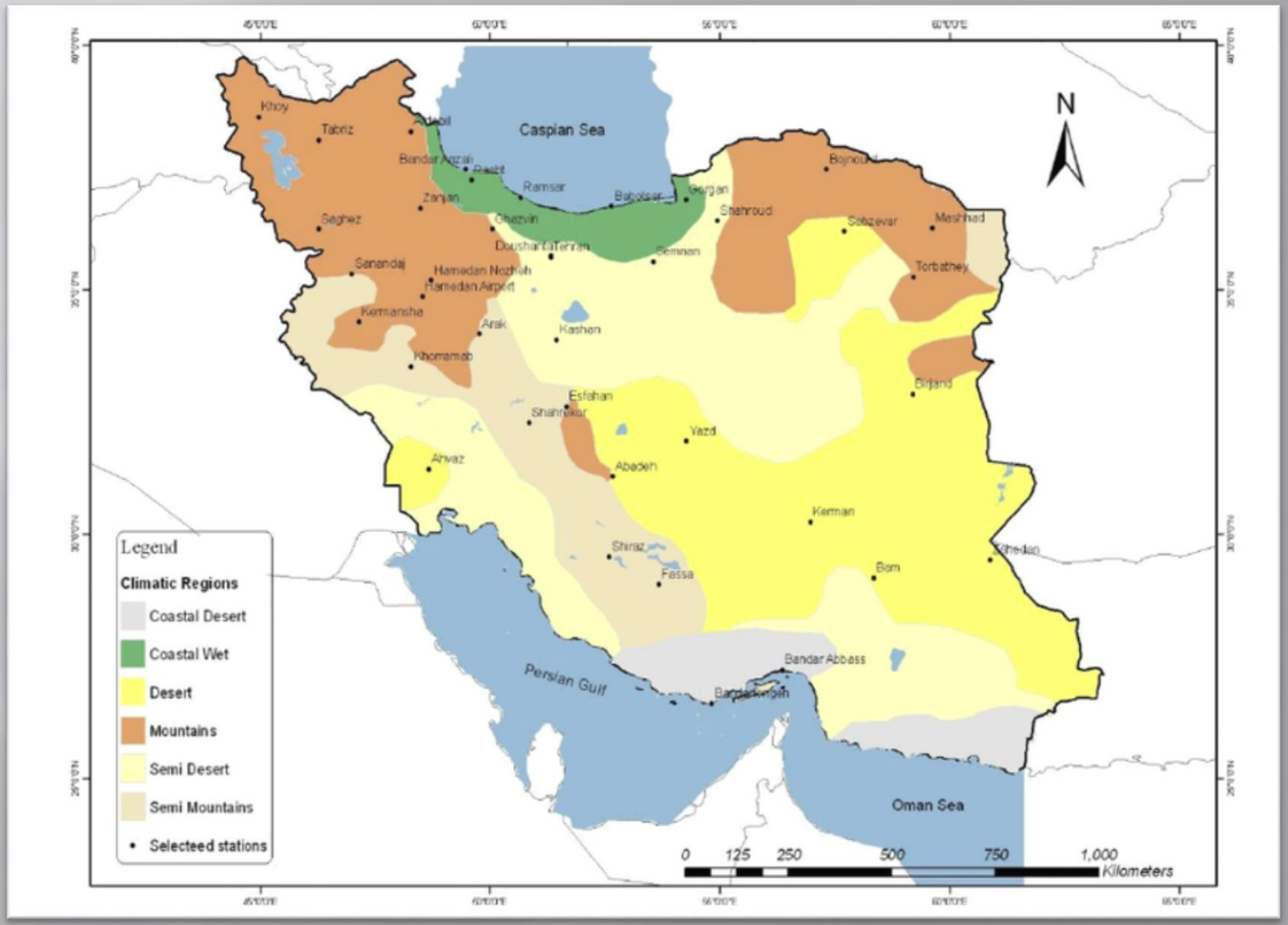
Introduction to General Geography of Iran

- Topographic features



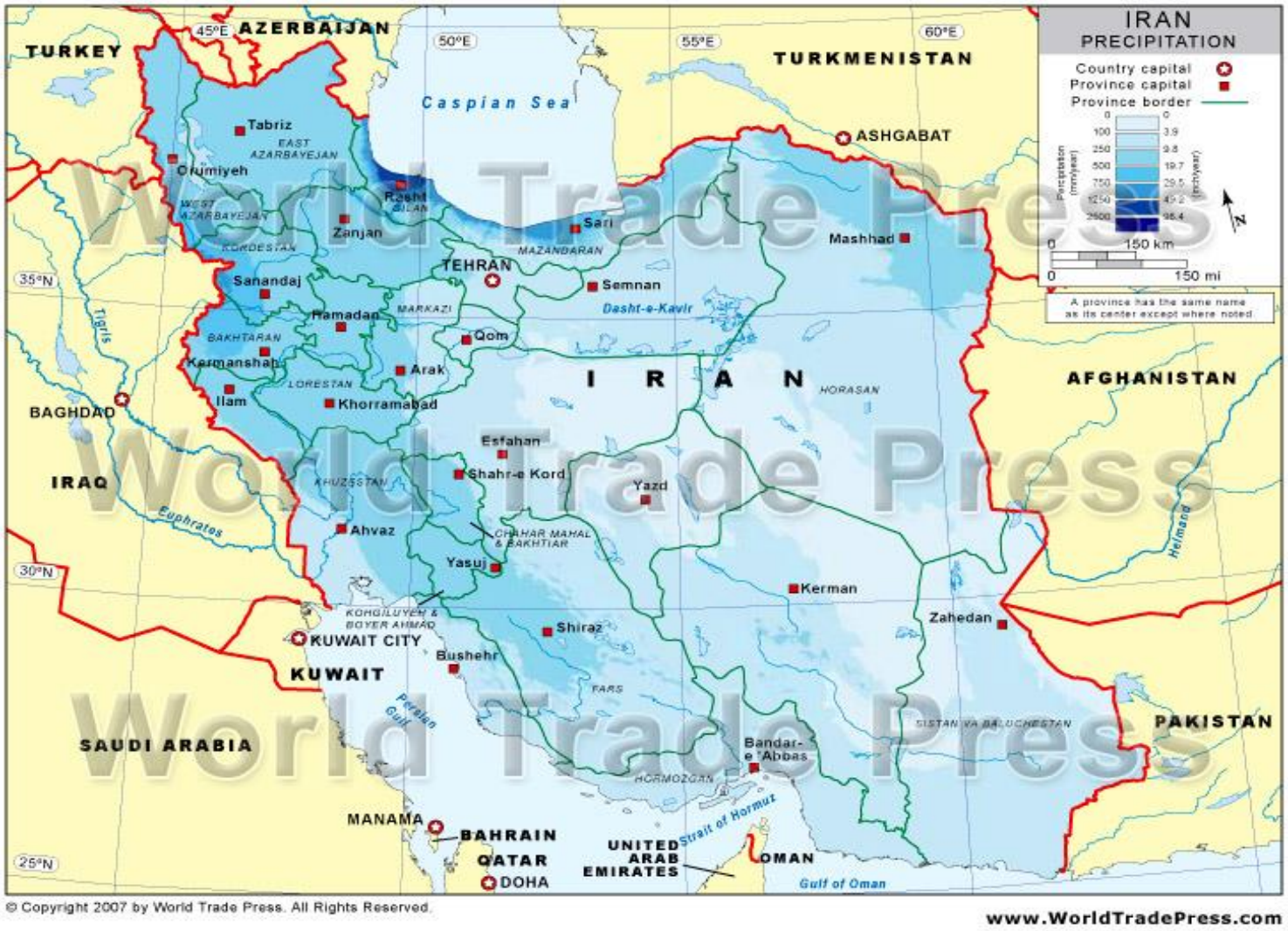
Introduction to General Geography of Iran

- Climate Regions

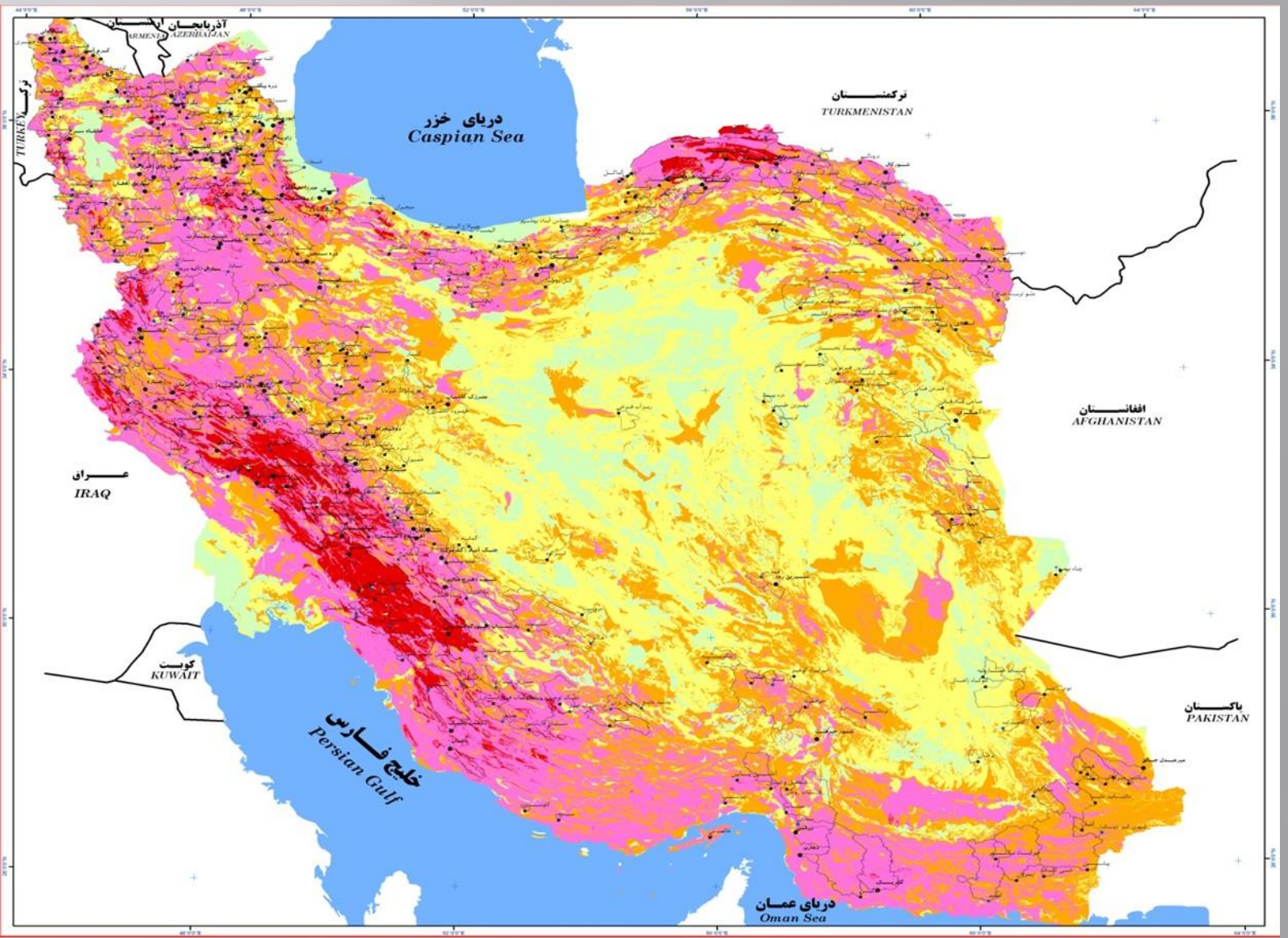


Introduction to General Geography of Iran

- Quantity and distribution of rainfall

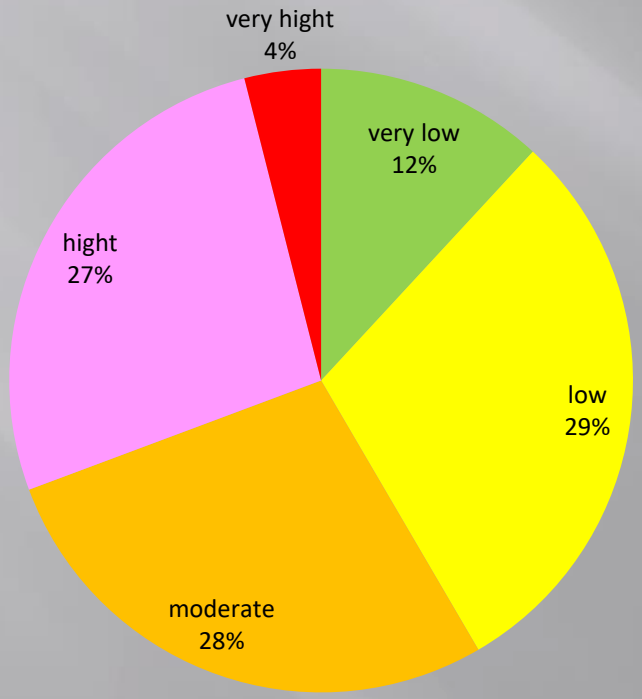


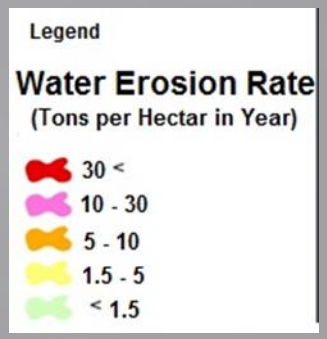
General condition of sediment and erosion in Iran



General condition of sediment and erosion in Iran

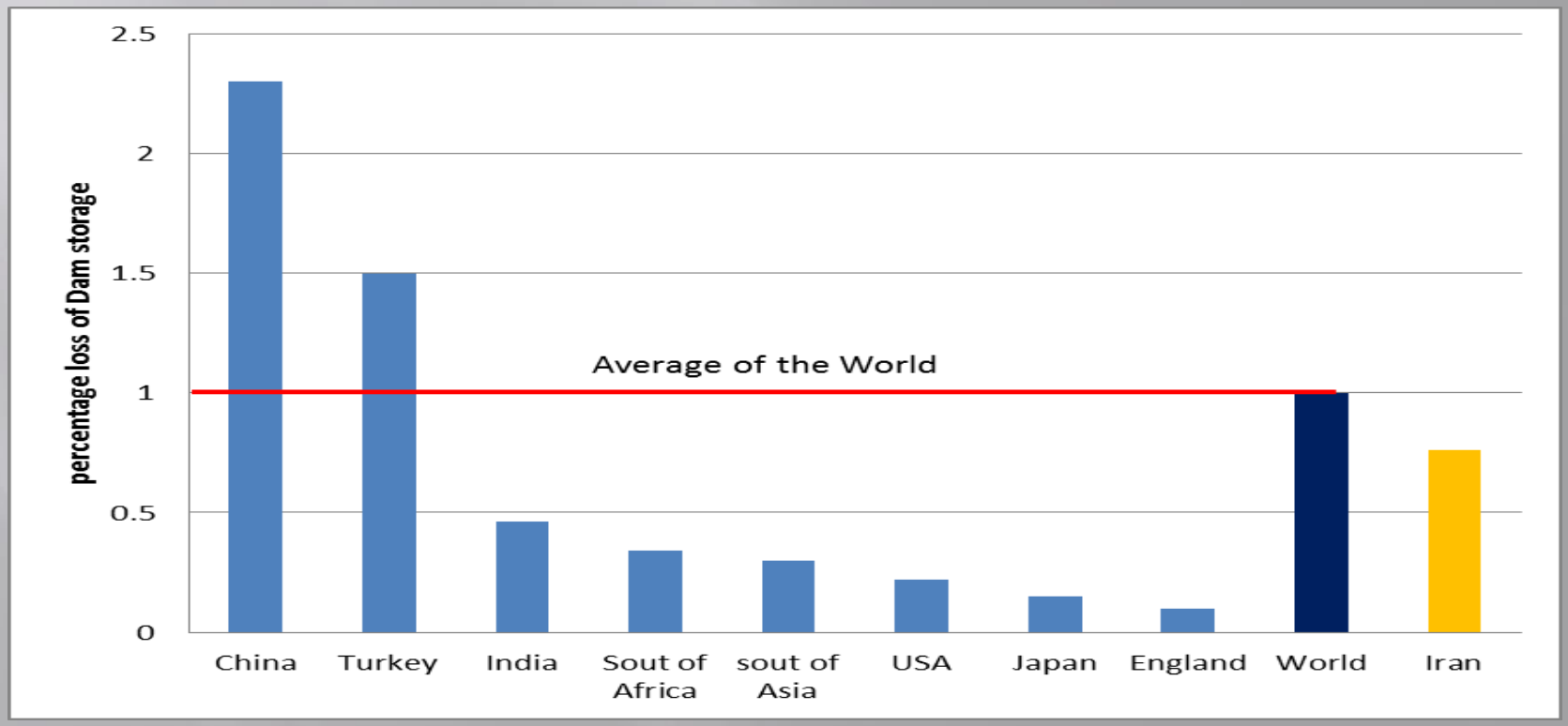
% of country	Area (m.hec)	Situstion	Water Erosion Rate (Ton/Hec)
12	19.4	Very low	< 1.5
30	49	Low	1.5 - 5
28	43.4	Moderate	5 - 10
27	45.2	Hight	10 - 30
4	7.2	Very hight	> 30



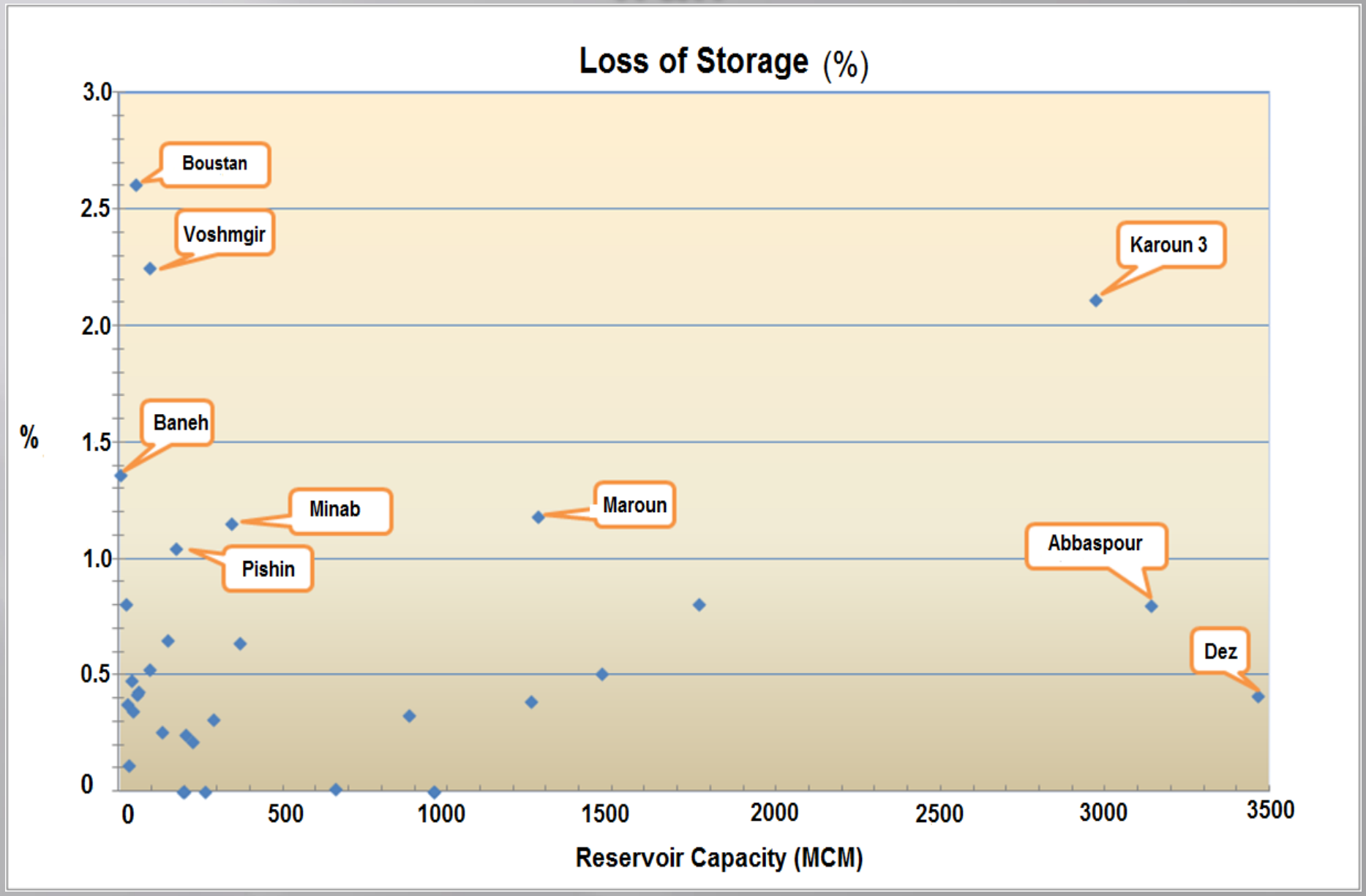


General condition of sediment and erosion in Iran

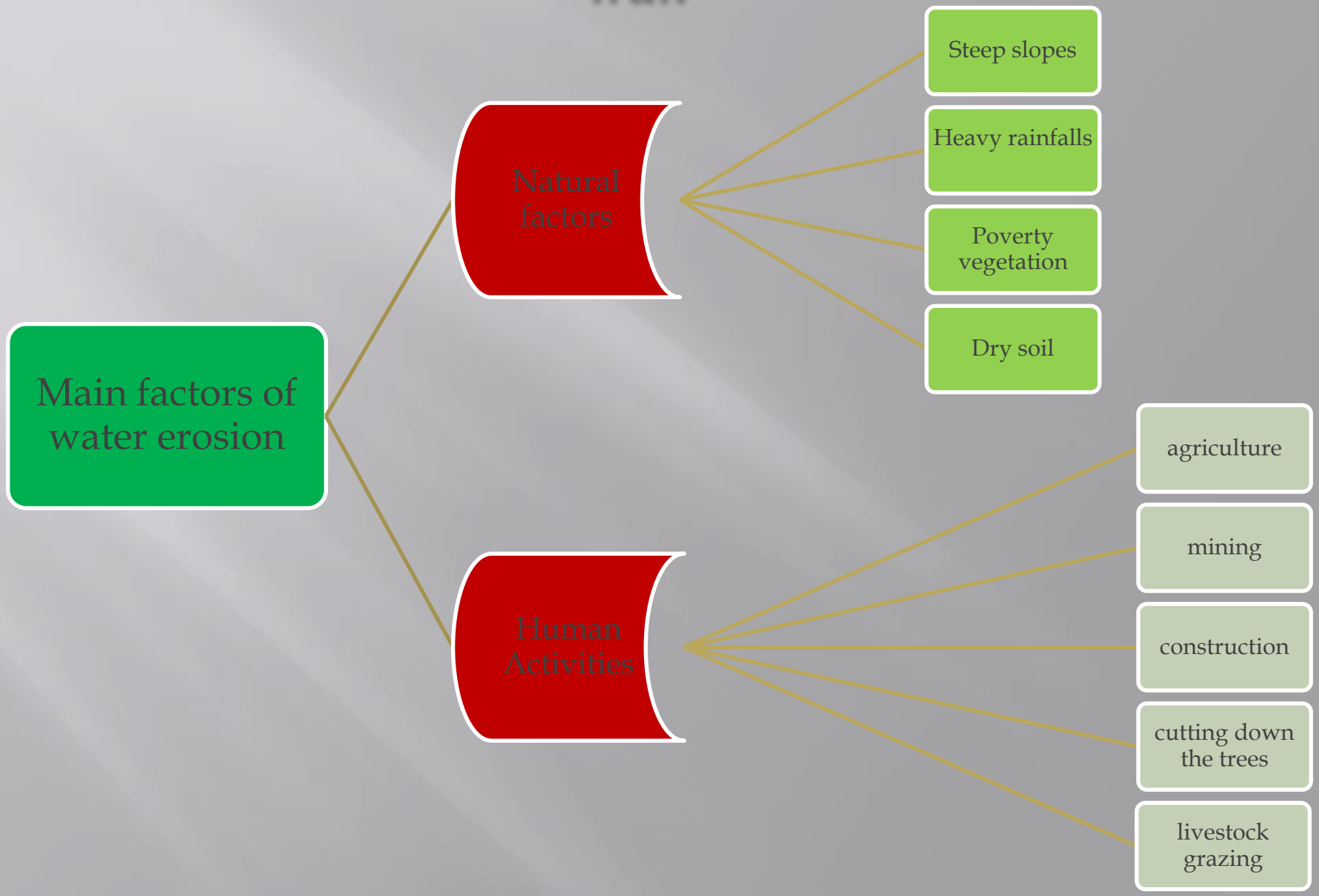
Parameter	Average specific Erosion (ton per hec. in year)	Loss of storage (%)
Iran	16.7	0.76
world (Average)	5 - 6	0.75 – 1



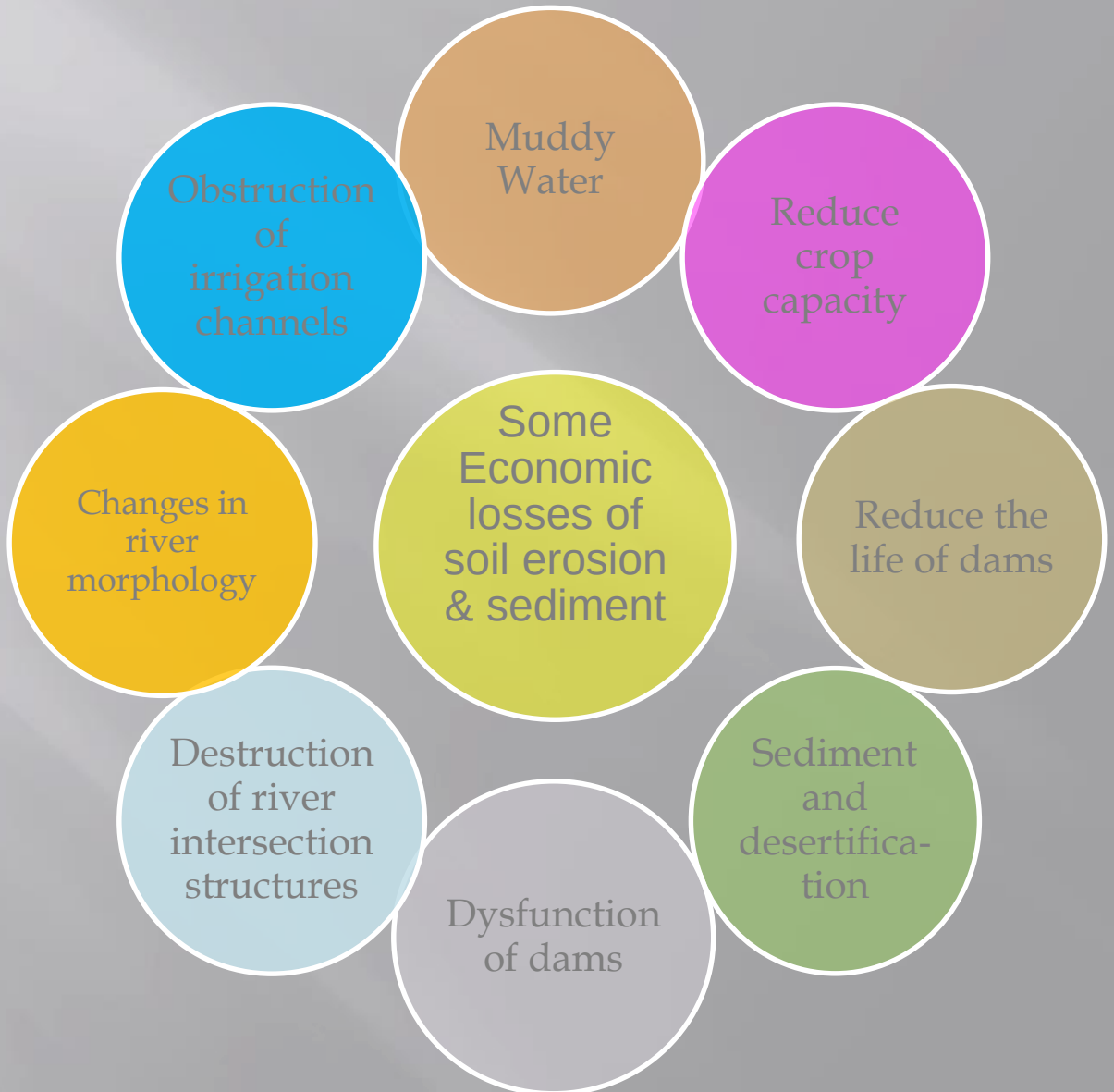
General condition of sediment and erosion in Iran



General condition of sediment and erosion in Iran



General condition of sediment and erosion in Iran



Strategies and policies to control erosion and sediment

Traditional Actions

Strategies and policies to control erosion and sediment

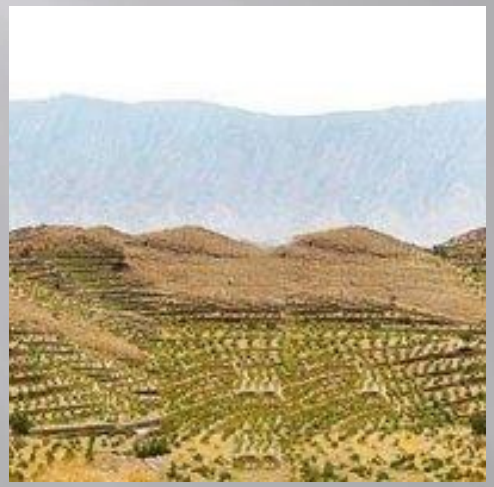
- ***The main problems of sediment integrated management in Iran***

  - ***Lack of coordination between responsible organizations and island decisions***
  - ***Traditional approach to erosion and sediment management***
  - ***Excessive emphasis on the executive role of government agencies in affairs sediment and Watershed Conservation***
  - ***The lack of supervision systems to observe the principles of watershed management in the people activities***

Strategies and policies to control erosion and sediment

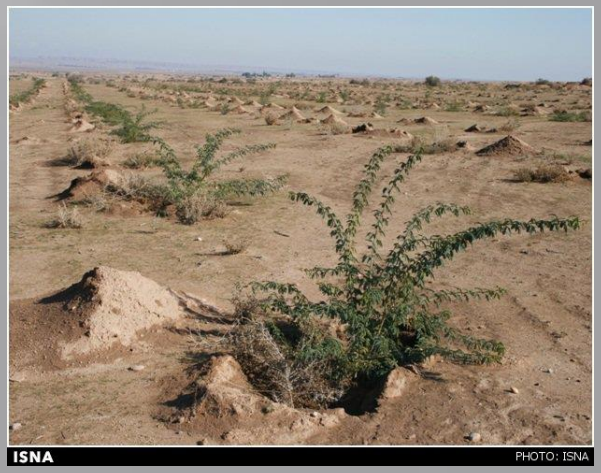
Strategies and policies to control erosion and sediment

- ***Construction of Turkey nest & Check Dam by Gabion or stone***
- ***Terracing the steep lands***
- ***Modify plowing***
- ***…***



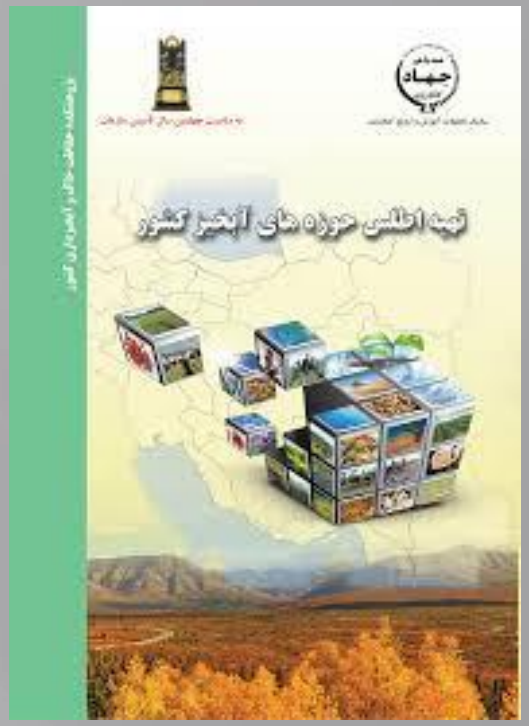
Strategies and policies to control erosion and sediment

- ***Seedling***
- ***Seeding***
- ***Restoration of pastures***
- ***Planting forage***
- ***…***



Strategies and policies to control erosion and sediment

- ***Preparation of Atlas of Watersheds of the Country***
- ***Preventing excessive livestock***
- ***Encourage people in cooperation in watershed management***
- ***…***



Strategies and policies to control erosion and sediment

- ***Considering sediment engineering measures in the design of large reservoirs***
- ***Improve and update the dams' operation guidelines***
- ***Upgrading of hydro mechanical equipment of dams for release the sedimentary flow***
- ***...***

Strategies and policies to control erosion and sediment

- ***Hydrography of reservoirs of dams In order to monitor the incoming sediment and the volume of the reservoir***

- ***Dredging of rivers and irrigation canals***

- ***Performing river training operations with regeneration and naturalization approach***
- ***Management of sand mining from rivers bed***


Thank you for your
attention