



**Country Report of The IR. Iran**  
**28-30 Jan., 2009, Bangkok, Thailand**

**Workshop on**  
**Improving Agricultural Productivity, Water Use Efficiency**  
**& Strengthening Rural Livelihoods**

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# Outlines

## Part I:

General Information About Iran

## Part II:

Current Land Uses & Management

## Part III:

National Spatial Plan & Sectoral Strategic Plans

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## Iran is Located in an Arid & Semiarid Region

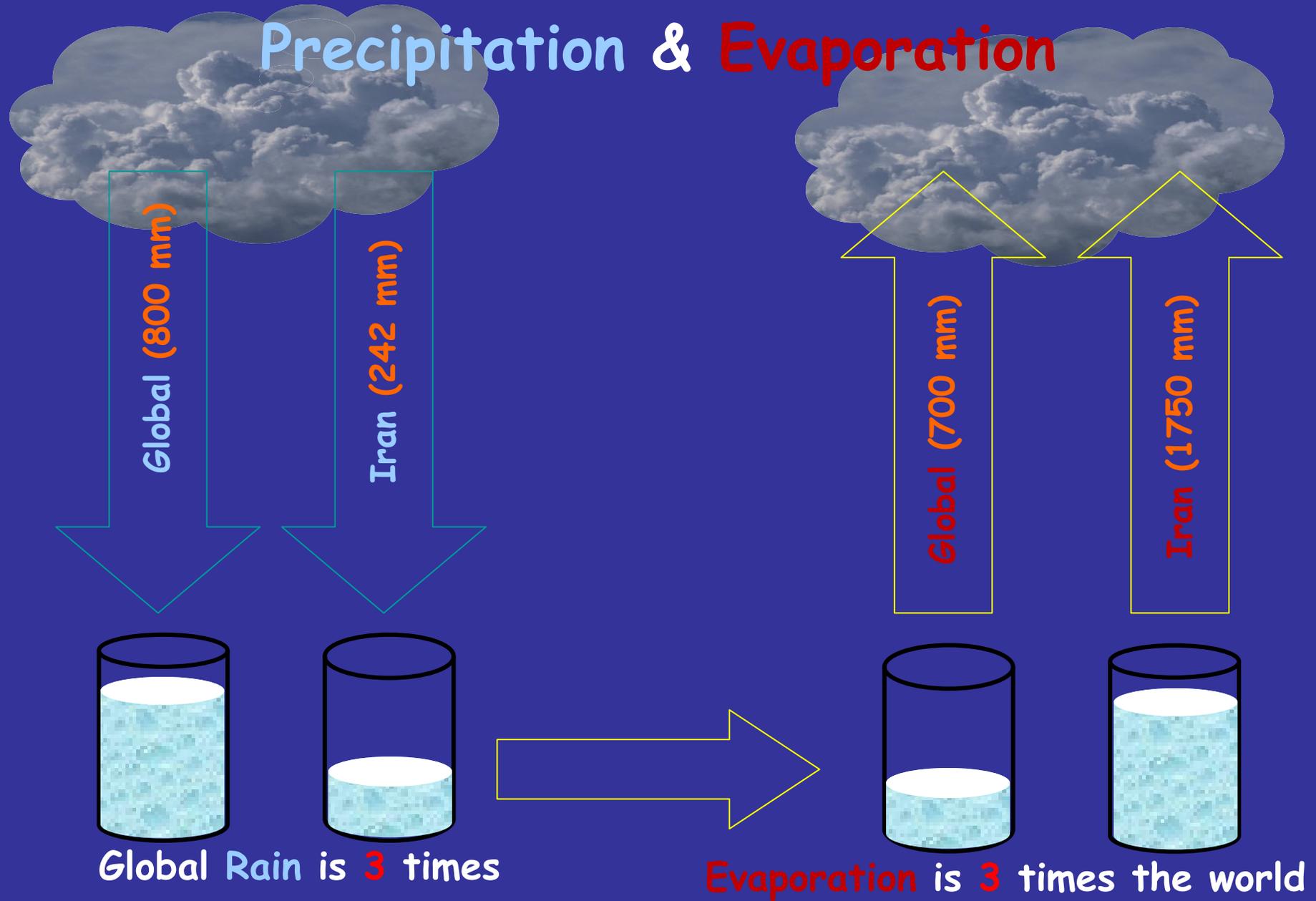
SCWMRI

Soil Conservation and Watershed Management Research Institute



Area: 165 Mha  
 Population: 70 M  
 Mountains: Alborz (North)  
 Zagros (West)  
 Elevation:  
 -28 to 5610 m  
 Temperature:  
 -44 to 56 °C  
 Cultivated Lands:  
 18 Mha

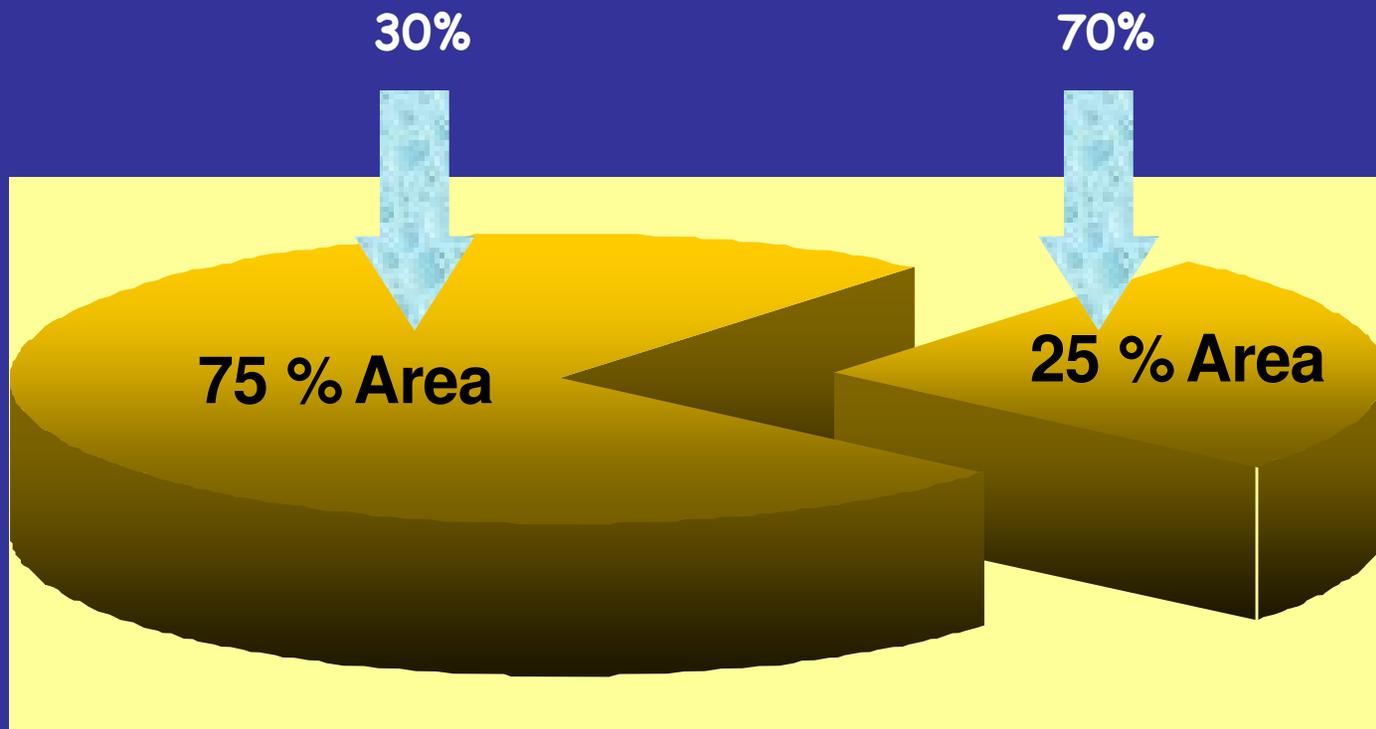
# Precipitation & Evaporation



Global Rain is **3** times

**Evaporation** is **3** times the world

# Spatial Distribution of Precipitation



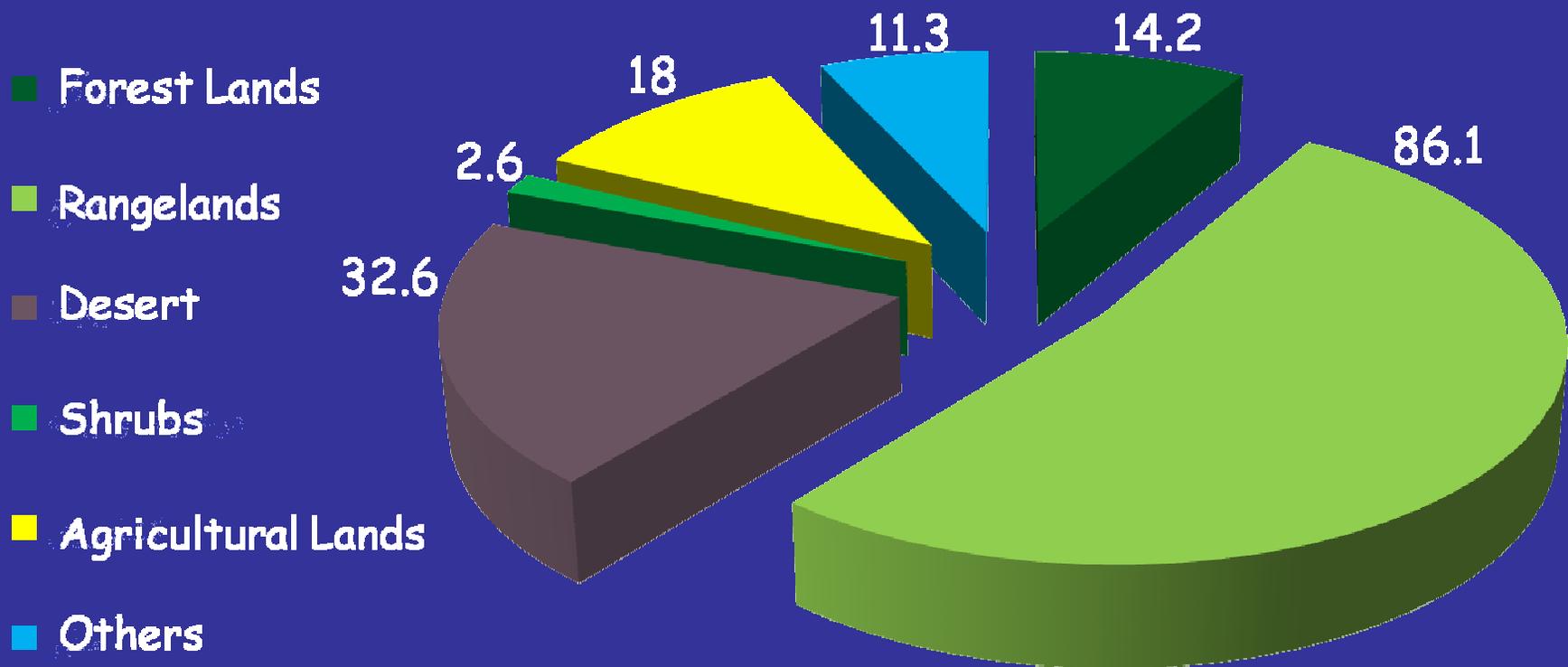
# Temporal Distribution of Precipitation



# Water Resources

- **Precipitation: 413 BCM**
  - **70% Rain**
  - **30% Snow**
- **Evaporation: 295 BCM (71% of the Precipitation)**
- **Trans-Boundary Rivers: 13 BCM**
- **Total Potential Renewable Water Resources: 130 BCM.**
- **Water Use: 90 BCM**

# Land Resources (Mha)



# Agricultural Lands

- **Agricultural Lands 18 Mha**
  - **Irrigated Lands 8.4 Mha**
    - **Equipped to Modern Irrigation & Drainage Networks 2 Mha**
    - **Traditionally Irrigated 6.4 Mha**
  - **Drylands 9.6 Mha**

# Agricultural Land Users

- Total 4.32 M
- Not Educated 1.96 M (45%)
- Primary School 1.49 M (35%)
- Secondary School 0.74 M (17%)
- Graduated 0.13 M (3%)

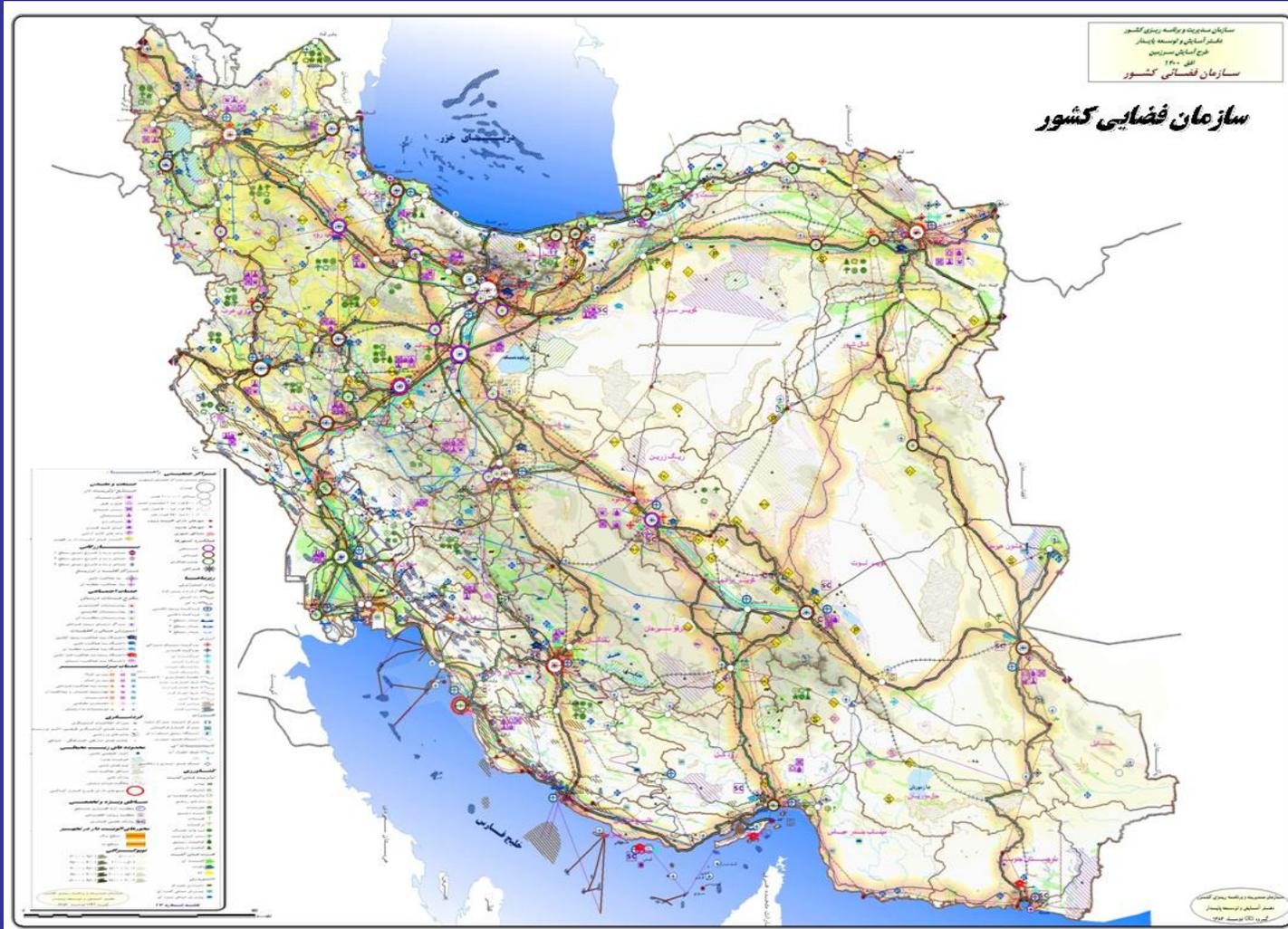
# Spatial Planning

- The Methods Used to Influence the Distribution of People & Activities in Spaces & Includes All Levels of Land Use Planning Such as Urban, Rural, Regional, & Environmental Planning
- In 1974 Within the Planning & Budgeting Organization
  - Land Use Studies & Researches Center Established
  - Same Year Changed to Land Use Planning Studies Center
  - Then Changed to Spatial Planning Center

# Spatial Planning

- In 1976 the 1<sup>st</sup> Outcome
  - The Basis of Spatial Organizing
  - Distribution of Population & Activities
  - Spatial Strategies of Socio-Economic Sectors
- In 2005 Spatial Planning National Center Established, 5<sup>th</sup>
- But, They Were Never Used by Sectors Due to:
  - No Political Will
  - No Inter-Sectoral Planning & Cooperation
  - No International Cooperation

# Spatial Planning



# Land Use Planners

- **Ministry of Agriculture**
  - **Forests, Rangelands, Deserts & agricultural lands**
- **Department of Environment**
  - **Natural, Marin & Human Environments**
- **Ministry of Power**
  - **Water Resources**
- **Ministry of Industries & Mines**
  - **Mining**
- **Ministry of Road & Transportation**
  - **Road Construction**

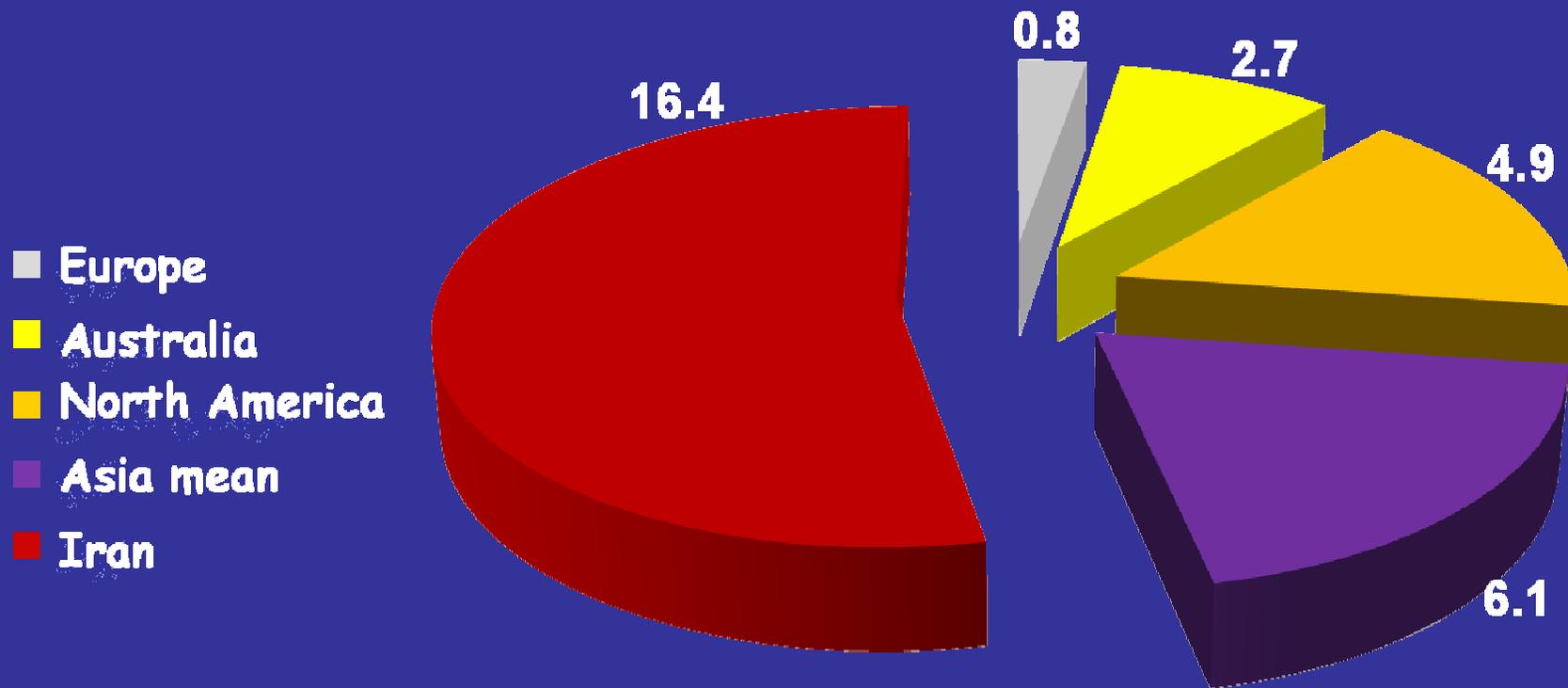
# Improper Land Use & Management



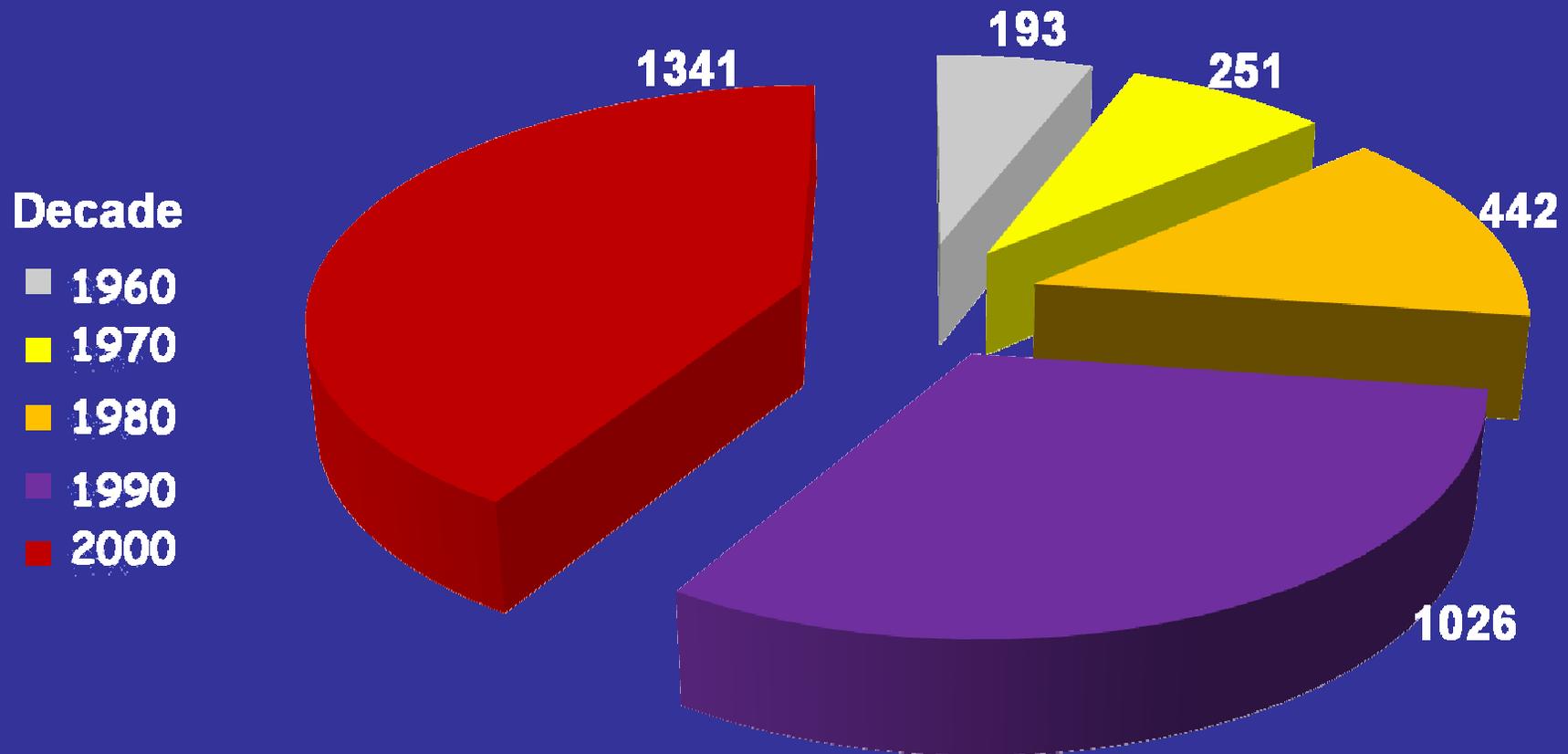
# Land Degradation

- Improper Land Use & Management
- Exploitation of Marginal Lands
- Deterioration of Vegetative Cover
- Overgrazing & Wood Cutting
- Wind and Different Shapes of Water Erosion
- Salinization Due to Improper Use of Irrigation Water

# Soil Erosion in Iran (ton/ha)



# Flood Occurrence



**Irrigation Efficiency:**  
**In Developing Countries 45%**  
**In Developed Countries 60%**



Depth of water beneficially used to the depth applied  
 Assuming 85% for network irrigation efficiency, irrigation efficiency in Iran is 40%



# Facts

- Suitable Lands are Limited in Arid & Semi-Arid Regions
- Water Scarcity Is a Fact in Arid & Semi-Arid Regions
- Sectors Have Their Own Manner
- Resources Are not Properly Managed & Used
- The Majority of Lands Are Highly Degraded

# Means of Implementation

- Political Will
- National Spatial Plan
- Sectoral Strategic Plans
- Inter-Sectoral Planning & Cooperation
- Training & Extension Services
- New & Appropriate Technologies
- International Cooperation
- National & International Expertise
- International Financial Resources

# Some Projects

- Land Use Planning
- Drought Risk Assessment
- Rainwater Harvesting
- Utilization of Renewable Sources of Energy
- Optimization