

# **Water and Irrigation Development in the High Atlas**

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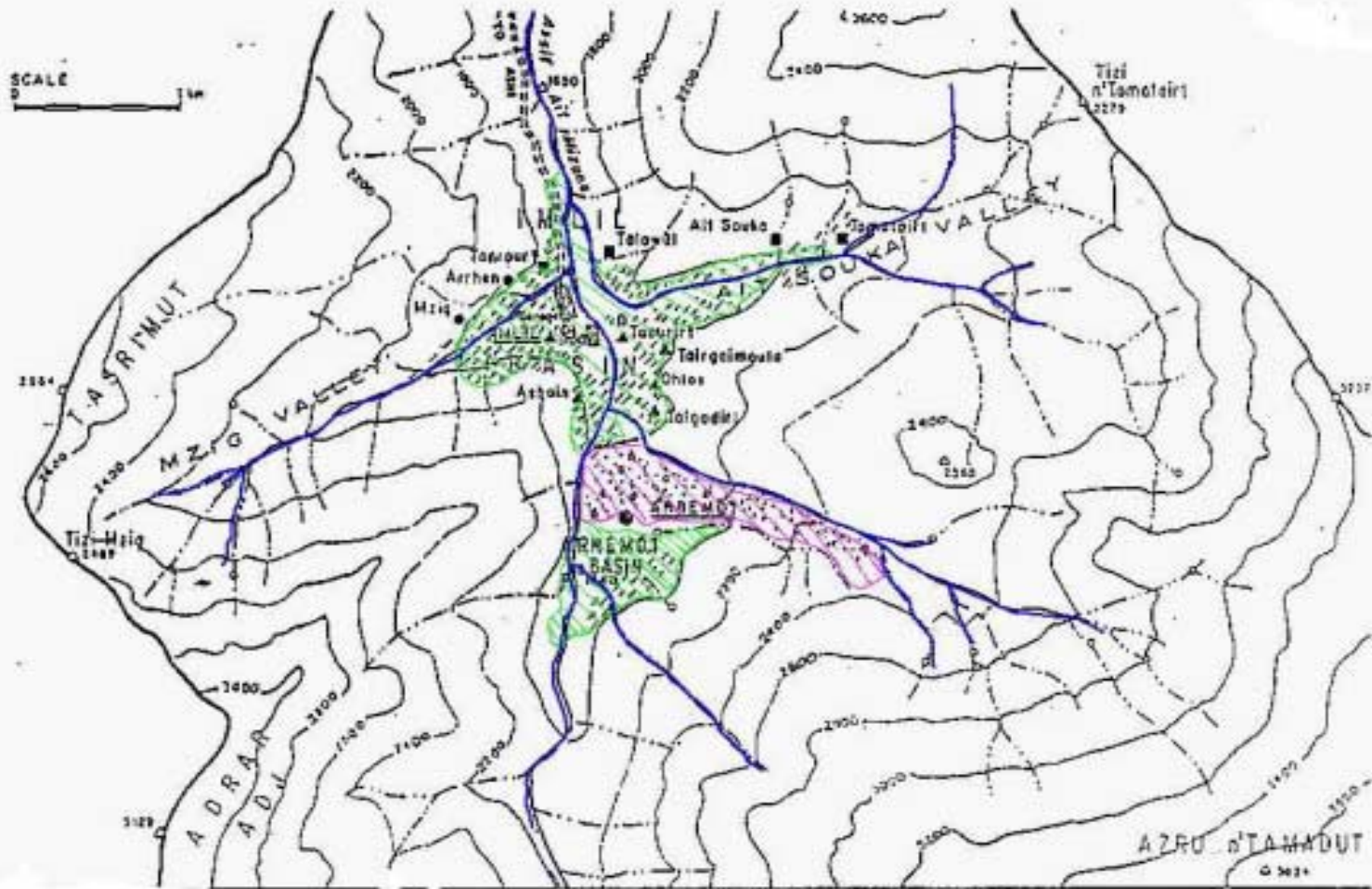
**University of Sussex**

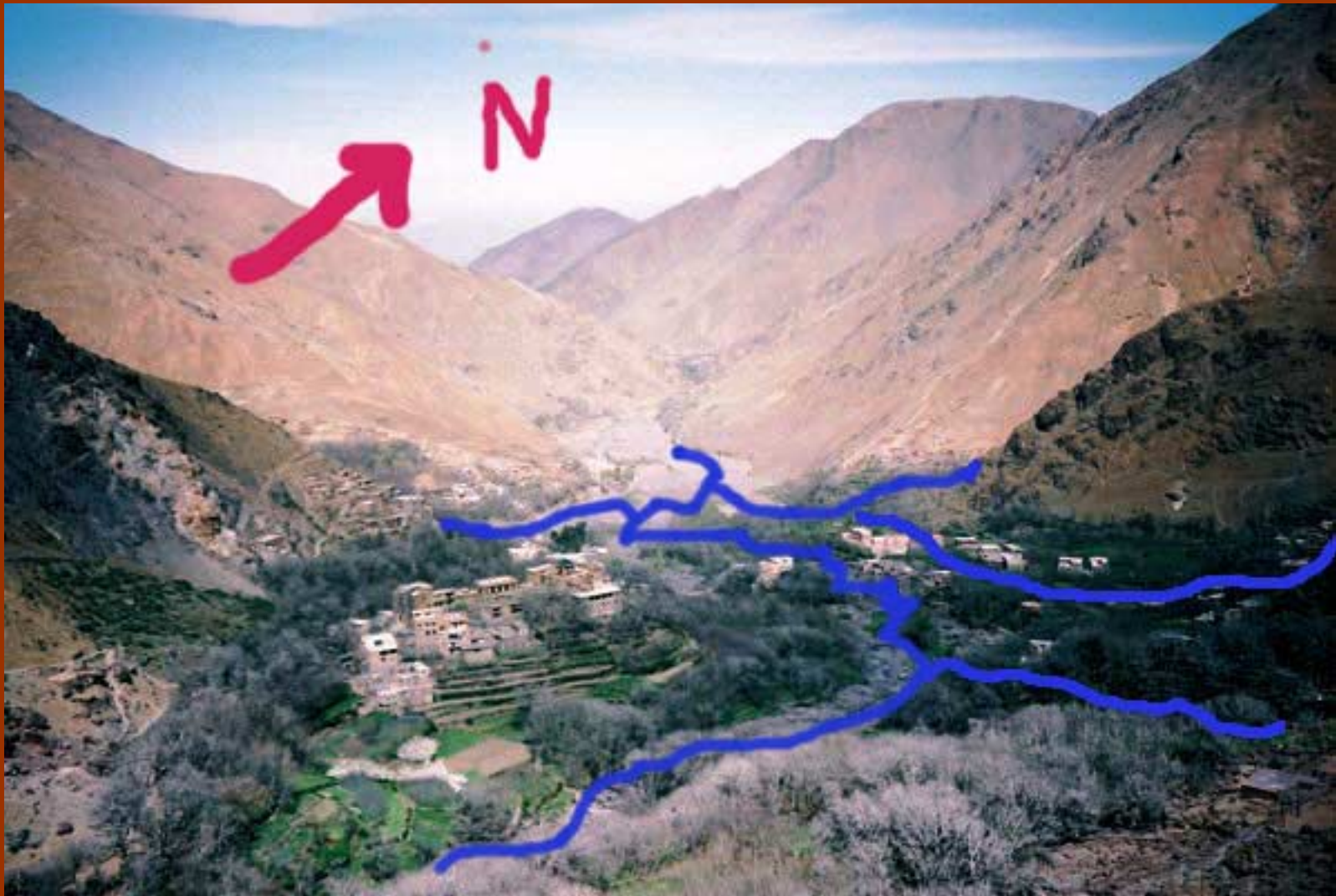
**UK**

# Summary

- 1. Basic pattern of water use in the area**
- 2. Identification of specific stress points**
- 3. Role of Community Management**
- 4. Long Term Issues**

# Ait Mizane Basin





# The Ait Mizane Basin

- Upper Rheraya valley
- Confluence of Asif Rheraya, Talait Mzig, Talait Ait Souka, Asif m'Inserdane
- Home of Ait Mizane, 4 clans, 12 Douars c 2500 persons
- Irrigated area see map

# Hazards

- **Seasonal Fluctuations ( eg the Mzig system)**
- **‘Disasters**  
Mizane system subject to occasional serious flooding  
1974, 1995, 2001 [1995 written up]

## **Impact is:**

- **Destruction of irrigation systems**
- **Flooding and damage to terraces**
- **Loss of crops/trees**
- **Loss of bottomland**
- **Destruction of roads/dwellings etc**

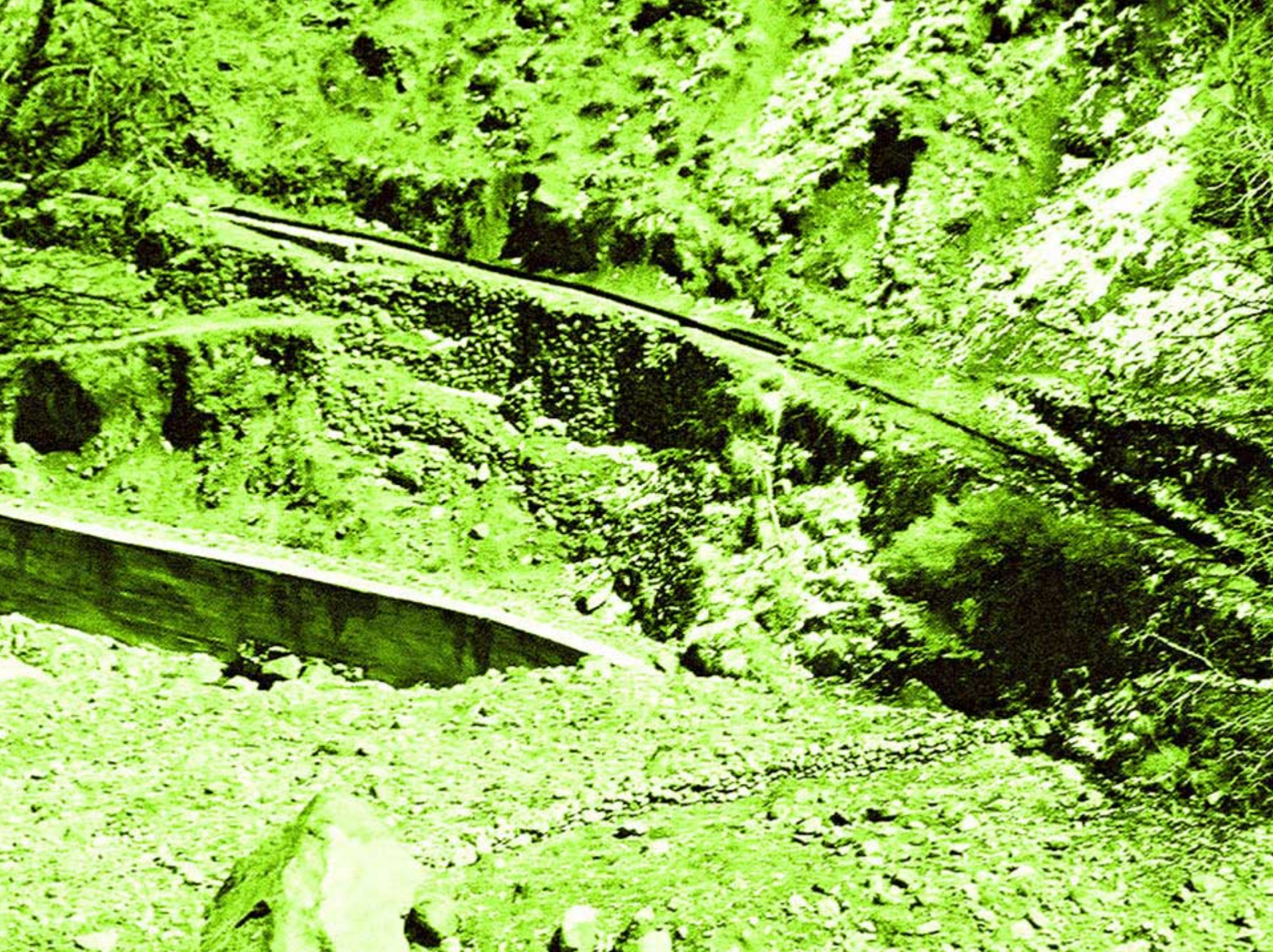
# Coping/Response Mechanisms

- **Seasonal Repair (traditional spring task)**
- **Special local ‘gangs’: farmers/other**
- **State Assistance**
- **International Agency (USAID)**
- **NGOs**

# Major disasters

- In major floods eg 1995 with loss of life,
- Recovery assisted by State and Agencies
- New seguias formed with concrete construction
- Rebuilding of terraces/walls
- Rebuilding of destroyed property and roads
- Replanting of trees (esp.fruit)





# Minor disasters

- **Lesser damage: the 2001 Asif m'Inserdane**
- **Role of local initiatives and covered channels**
- **Planning and building of check walls**
- **Replanning of alternative routes (engineering)**



# **Tourism and Irrigation: the debate**

**(See literature on hazards etc)**

- **Negative impact on labour supply?**
- **Generation of local financial resources**
- **Priorities of local community**
- **Use of valley bottom land and buildings (cf Ourika)**
- **Key role of Association as facilitator and link with external agencies.**

# Preliminary Findings

- **High priority of Irrigation as livelihood security**
- **Less willingness to accept regular damage: seeking permanent' solutions' (the concrete model!!)**
- **Money generated for contractors**
- **Seek technical assistance on system design for potable water (location of reservoir/ dams etc)**

# Preliminary Conclusions

- **Tourist impact has not lessened significance of water management**
- **Key role of Association to link local/regional agencies**
- **Local labour mobilisation/funds for contractors**
- **Engineering design for coping with increased vulnerability of fixed capital: potable water/floods.**