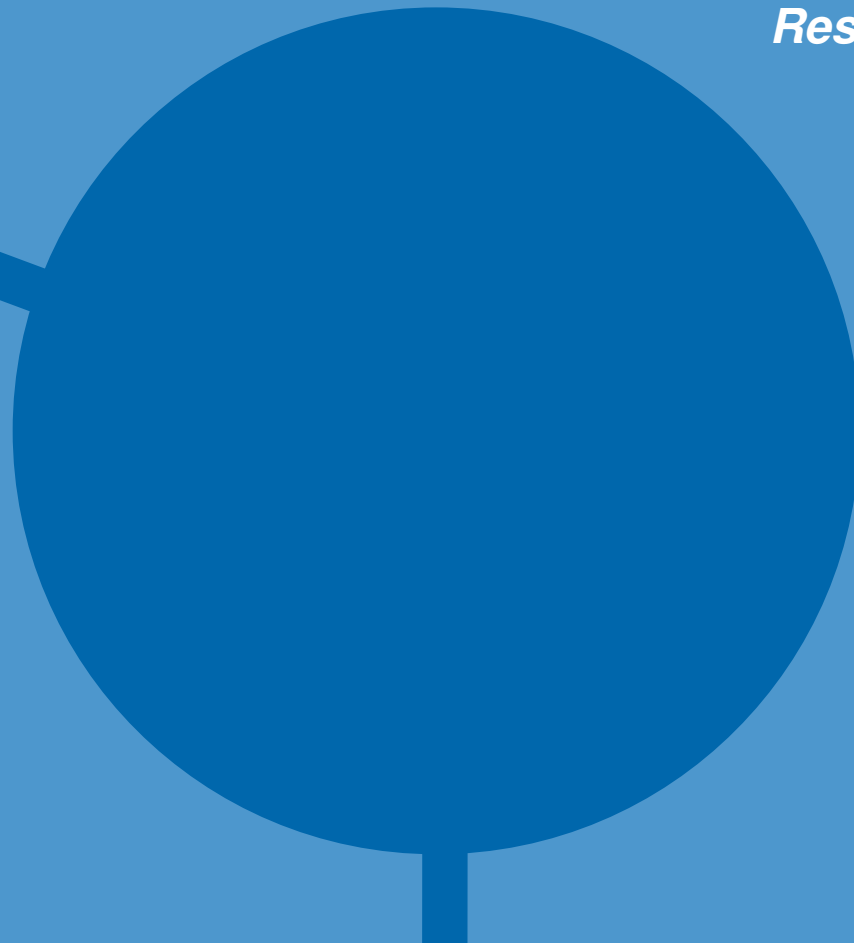


SEPARATE STREAMS?

Adapting water resources management to
climate change Case-study – Niger

*Research conducted by JEMED,
supported by Tearfund*



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The case-study region

Primary Research conducted in:

- Abalak Department, Tahoua Region, Republic of Niger

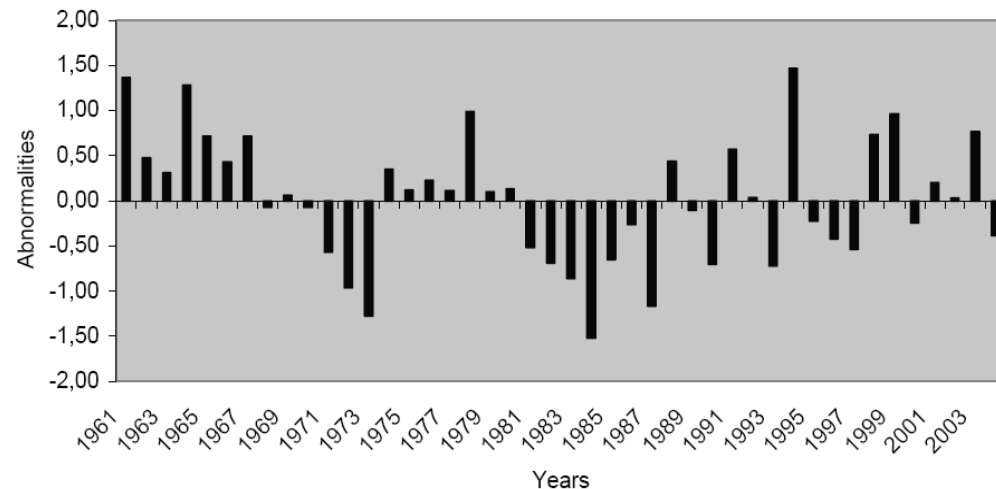
This area is characterized by:

- Ongoing Desiccation
- Frequent periods of drought



Meteorological Evidence of Climate Change

- **Decrease in rainfall**
- **An increase in temperature**
- **Increasing variability in rainfall both temporally and spatially.**



Anomalies dans la moyenne annuelle des précipitations au Niger, de 1962 à 2003. (Source : Direction de la Météorologie Nationale Nigérienne, 2006)

Issues

Tuareg and Wodaabe pastoralists have confirmed this scientific data through their own observations:

- Diminished and irregular rainfall.
- Temperature increase is creating a greater water need.
- Available surface water inadequate for household and animal needs.



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Issues

- Increased household water use.
- Increase time spent in securing water (usually by women).
- Increase in the distance traveled in search of water.
- Increase in workload for both men women and children.



Issues

- Desiccation is causing the disappearance of water rich species of grass and trees.
- This is causing a drop in animal production.
- The lack of milk has caused a shift to cereal as a staple food.
- Families now consume 4 or 5 times as much grain as in the past.



Issues

- The reliance on cereal decreases food security.
- Changed herd composition.
- The lack of milk and shift to cereal have decreased mobility.
- Pastoralists interviewed no longer claim to be fully nomadic.



Issues

- The reliance on small stock has increased the workload for the entire family.
- Supplemental fodder now used.
- Lack of mobility means dependence on a smaller area.
- Development of fixation points.
- Pastoralists have no land tenure.



Community Responses

The pastoralists are adapting to climate change and increasing variability.

- Fixation in one area with limited mobility.
- Environmental regeneration.
- Grain banks to improve food security.
- Disaster Risk Reduction



Community Responses

- Animal fodder banks and supplemental feeding to increase animal productivity and as drought security.
- Hand dug deep wells to secure adequate potable water supplies.
- More intensive herding techniques with smaller more productive herds and greater veterinary care.
- Economic diversification with a greater role for women in economic activities
- Education

Community Needs

The pastoralists say existing adaptation measures are not enough. They seek:

- Land management rights.
- Increased access to ground water.
- Increased food security.
- Economic diversification.
- Education.



National Level Perspectives

- Niger is addressing climate change, but its approach is not systematic, particularly in regards to water resources.
- Water policy in Niger is complex and cross cutting.
- Current legislation regarding resource management is contradictory in regards to pastoralists rights. But revisions are underway.
- Decentralization of the water sector has begun, but there is still much to do.
- The government is making a concerted effort to engage donors to help develop capacity.