SEPARATE STREAMS?
Adapting water resources management to climate change

Messages and recommendations

tearfund

Message 1: ***Climate variability is having a real and lasting impact on how people manage their water resources*** → affecting rural livelihoods

Increasing vulnerabilities:

- Niger – disruption of pastoralist traditional movement patterns
- Brazil – smallholder rain-fed agriculture affected leading to loss of traditional methods of managing water and land

Increasing tensions:

- Niger – social conflict between transitory herders and local population over availability of surface water and pasture
- Brazil – issues relating to installation of complex irrigation schemes and the encroachment of large agro-enterprise systems

tearfund

Message 2: *Communities are demonstrating resilience with a variety of adaptive measures* → lessons can be learnt from localised solutions

Water management measures:

- Water harvesting – use of loose stone dykes, house-hold cisterns
- Water storage – small local dam construction, subterranean dams
- Increase in groundwater use – deep well construction

Economic-related responses:

- Income diversification - changing gender roles, additional income-generating activities
- Restoring biodiversity – seed banks
- Alternative food security measures – animal selling, grain banks

tearfund

Message 3: ***Climate risk is not factored into national water resources policy planning*** → effective integration is essential

Current situation:

- Niger – series of stand-alone, donor funded projects
- Brazil – focus on water scarcity and drought management, predominantly reactive

Key barriers/ opportunities:

- Availability and accessibility of climate science information
- Institutional framework for water – structure and capacity
- Cross-sectoral harmonisation (linkages between different sectors – land, water, mining, agriculture etc. as well as coordination with climate change institutional structures)

tearfund

Message 4: *Effective decentralisation* → potential to provide a solid framework for climate risk integration

Lessons can be learnt from Ceará state, Brazil:

- Devolution of authority over water resources management from national (DNOCS) to state (COGERH) level
- Network of *téchnicos* (water professionals)
- Success of informal water user commissions

Decentralisation has begun in Niger, but major stumbling blocks exist:

- Although legislation is in place, there is a disconnect between policy and practice
- Lack of adequate power transfer to local management committees
- Lack of financial resources and technical capacity at local level

tearfund

Recommendations

- Integrate climate risk-based approaches, which address *climate variability* and *climate change*, within water policy frameworks.
- Focus on ‘linked-up’ cross-sectoral approaches to water resources planning systematically considering climate risk
- Support the decentralisation process for managing water resources
- Target differentiated solutions to water resources management according to the needs of different groups

tearfund

Recommendations

- Ensure that climate risk information, where available, is made widely accessible. Where it does not exist, gaps should be plugged.
- Strengthen local adaptive capacity by supporting localised water resources approaches, and looking at options for how to replicate them at scale.
- Empower communities to participate in water resources planning and management
- Plan for change as livelihoods and cultures alter as a result of climate change and water scarcity

tearfund

Thank you

For more information, a copy of the full report can be downloaded from Tearfund's web-site: www.tearfund.org or contact Jane Cacouris: jhc@tearfund.org

tearfund