Initial Discussions IDMP AC 2015

- Costs of Inaction <u>and</u> Benefits of Action
 - Avoided costs of inaction (i.e. reduced drought impacts and savings in relief)
 - Co-benefits of drought mitigation actions and no- and low-regret options
- How do lessons learned translate into actions
 Obstacles in the transition from crisis to risk management
 - political will
 - Perverse incentives, e.g. emergency funds
 - lack of resources
 - short term and conflicting priorities
 - targeting and effectiveness of interventions

- ..

Synthesise existing knowledge and convene experts to decide on way forward

IDMP Integrated Drought Management Programme



Expert Group Meeting Geneva, Sept. 2016

- Framework or structured way of looking at impacts, direct and indirect, by sectors (agriculture, industries, health, tourism, environment, ...) seems necessary.
- Value in developing compatible and comparable methodologies handbook on performance metrics
- Evidence gap slow transition from reactive to proactive drought risk mgmt → Build up evidence base
- Track benefits to different sectors, costs of inaction, costs of action, benefits without drought event, is necessary but challenging
- Focus on scarcity of water within drought "water scarcity during drought events" with socio-economic consequences
- ✓ Publish Literature Review as Working Paper with comments from EGM
- ✓ Larger Workshop to start address knowledge gaps

IDMP Integrated Drought Management Programme





Integrated Drought Management Programme Working Paper No. 1

Benefits of action and costs of inaction: Drought mitigation and preparedness - a literature review

Nicolas Gerber and Alisher Mirzabaev

Abstract

1

.

14

15

23

1. Introduction

Contents

- 2. Benefits of action versus costs of inaction: Concepts and methodologies.
- 3. Action against drought: Risk management
- versus crisis management
- 4. From crisis management to risk management: 10
- Obstacks and opportunities
- 5. Conclusions and next steps
- References
- **Acknowledgements**

This review of available literature on the benefits of action and costs of inaction of drought mitigation and preparedness shows that significant progress has been made over the past decade in improving understanding of droughts and their impacts. However, significant gaps in research, policy and practice remain, particularly regarding the merits of risk management compared with traditional crisis management approaches.

The findings highlight the need far mutually compatible methodologies as a means of comprehensively assessing drought costs and impacts. Presently, many available estimates of drought costs are partial and difficult to compare. The problem is compounded by the lack of data an droughts and their impacts, Moreover, relatively little knowledge is. wailable on the casts of indirect and longer-term drought impacts.

The costs of action against droughts are classified into three categories: preparedness costs, drought risk mitigation costs and drought refer costs. This paper reviews several methodologies for making economic drought impact assessments and describes the main obstacles and opportunities facing the transition from crisis management to risk management. It identifies drivers of ex ante and ex post action against drought and highlights actions that are associated with co-benefits beyond drought risk management.

1. Introduction

Droughts are major natural hazards and have wide-reaching resnamic, social and environmental impacts. Their complex, slow and cremping nature; the difficulty of determining their onsets and endings; their sitedependence; and the diffuse nature of their damage (Below et al. 2007) make the task of comprehensively and accurately determining the cost of droughts a highly challenging one. These difficulties are compounded by a lack of data on droughts and their impacts (Changnon 2003), expectally in low-income countries.

About the authors

Mexico Derber and Allefor Minshary are economics. and senior researchers at the Center for Development Research, University of Bonn, Germany, Bath authors are consultants to the Integrated Drought Management. Programme @DMIM.

@ 3017 Worki Meteorological Organization and Glateal Water Partnership

Carroct citation:

Warkit Mateorological Departmentary (NVAC) and Classed Water Partnenship (CMP) (2017). Benefits of action and ments of inaction: Draught mitigation and preparedness a literature review (H. Gerber and A. Mitzataev), Integrated Daught Management Programme (IDAP) Warking Paper 1. WMD, General, Switterland and GWP, Stachholm, Sweden,

IDMP

Drivers of and barriers to drought risk management



Drivers	Barriers
个 frequency, severity & socio-econ costs	Path dependency, Size of costs up-front costs in multi-year events (e.g. Brazil)
↑ awareness of efficiency of drought RM, evidence on various benefits	Information failure on: occurences, impacts, costs/benefits of drought RM
↑ burden of drought relief costs on budgets	Market failure (credit constraints)
Past shocks	Economic rationality of ex-post action (uncertainty and irreversibility)
Evidence	Negative externalities of preparedness plans
	Institutional failure (no direct costs of drought to government)

Conclusion and next steps

- 1. Need for compatible methodologies
 - Build-up of case studies based on consistent, comparable methods
- 2. Improve drought risk (vulnerability and impact) assessments
- 3. Get to clear picture on C-B ratio of action for policy guidance
- Cannot eliminate drought vulnerability →Identify more efficient drought responses
- 5. Research & partners need to connect to governments, show 'low-hanging fruits' & socio-economic co-benefits

IDMP Integrated Drought Management Programme

