

STOCKHOLM 2010

3R WATER QUALITY

3R
MANAGING THE WATER BUFFER



Rainwater Harvesting
Implementation Network



INTRODUCTION TO 3R

Presented by: Sjef Ernes (A4A)



3R INITIATIVE:

**How to create a break through
in fresh watersources availability
to meet MDG's and
contribute to climate adaptation**

3R solutions to improve Water Quality and Quantity



FRESH WATER RESOURCES: SUPPLY AND DEMAND

- **Water and food security is determined by availability of fresh water resources. (North and South, urban and rural, rich and poor)**
- **Extra dimension: affordability and enabling environment. Targets MDG 7 (and other MDG's)**
- **Climate change extra stress factor on top of growth in global population , urbanization and industrialization. Impacts on basin scale**

IMPORTANCE OF STORAGE

The Economist: 22 May 2010 :

In semi- arid Gujarat agriculture has grown at an average of 9.6% since the turn of the century partly thanks to the creation of 500,000 small ponds, dams and such like



THEREFORE: STORAGE!

There is a need for small scale, low tech, low cost, sustainable solutions!



- Subsurface storage
- Catch-retain-use-re use
- Buffer mgt. at basin scale
- advantage of large subsurface storage potential for rainharvest

This is not enough

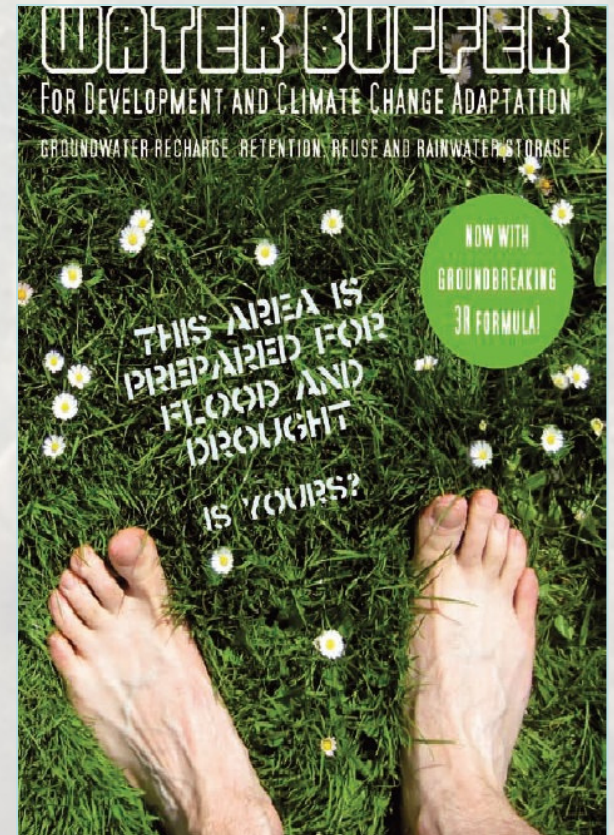


MANAGEMENT OF GRW. RECHARGE AND STORAGE

Managing the Water Buffer: 3R

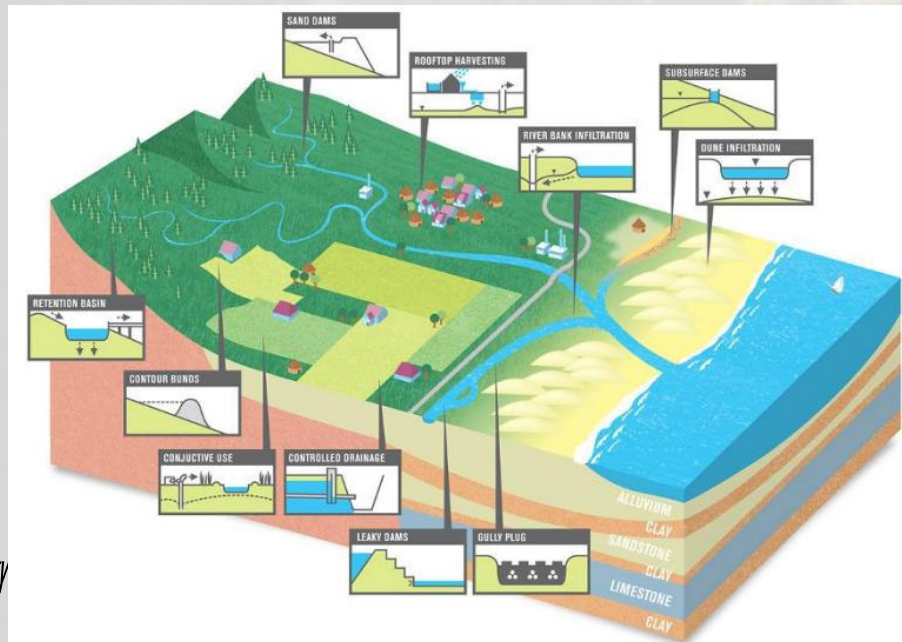
No regret measures for
climate change adaptation

Its not so much about how climate
change affects groundwater but what
grw. storage can mean for climate
change adaptation and MDG's ?



3R: MANAGEMENT OF THE WATER BUFFER

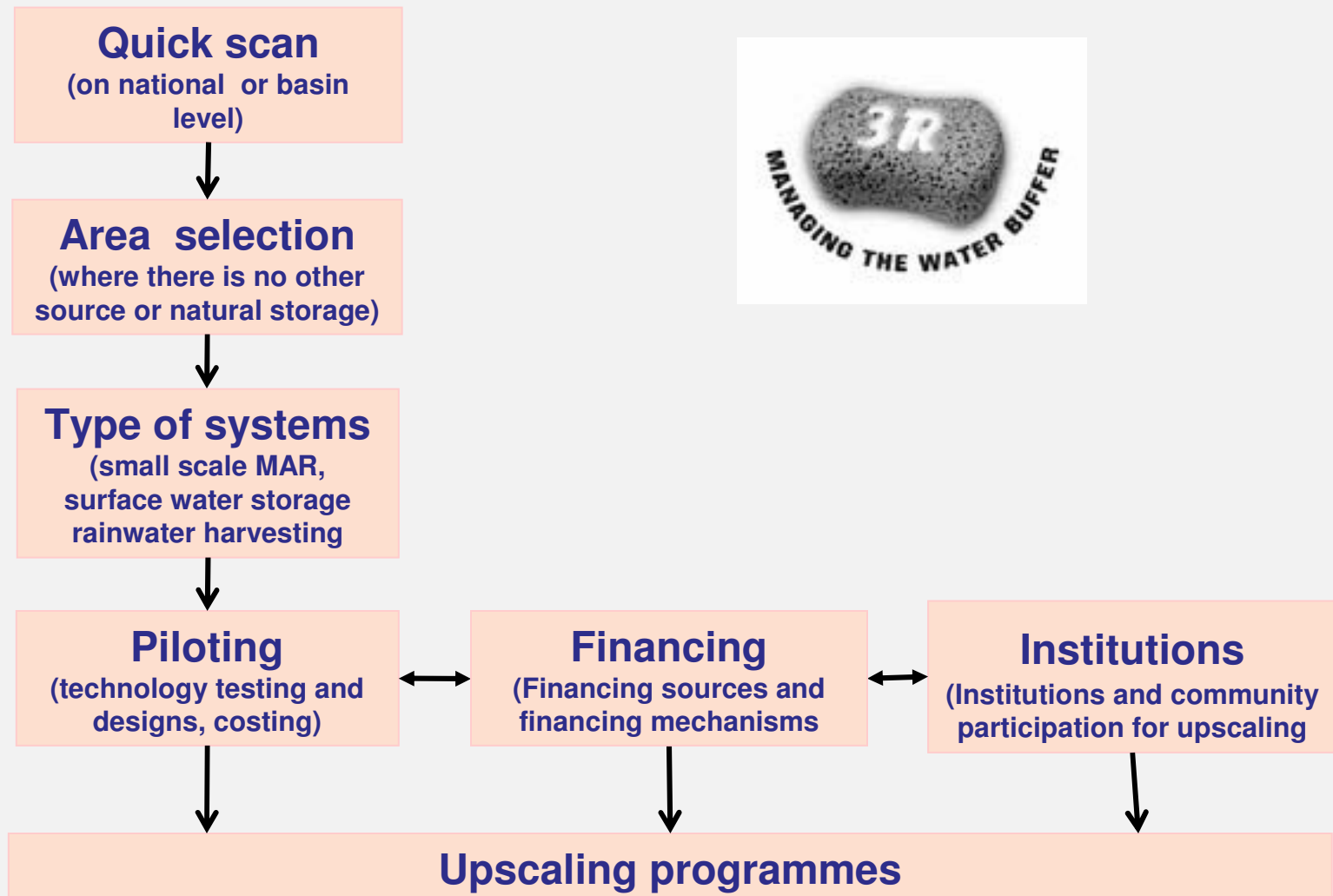
- Planning of water buffering on the basin scale (quality and quantity)
- Focus on rural livelihoods and meeting UNMDG targets
- Selection of appropriate Recharge, Retention and Reuse Options: MAR

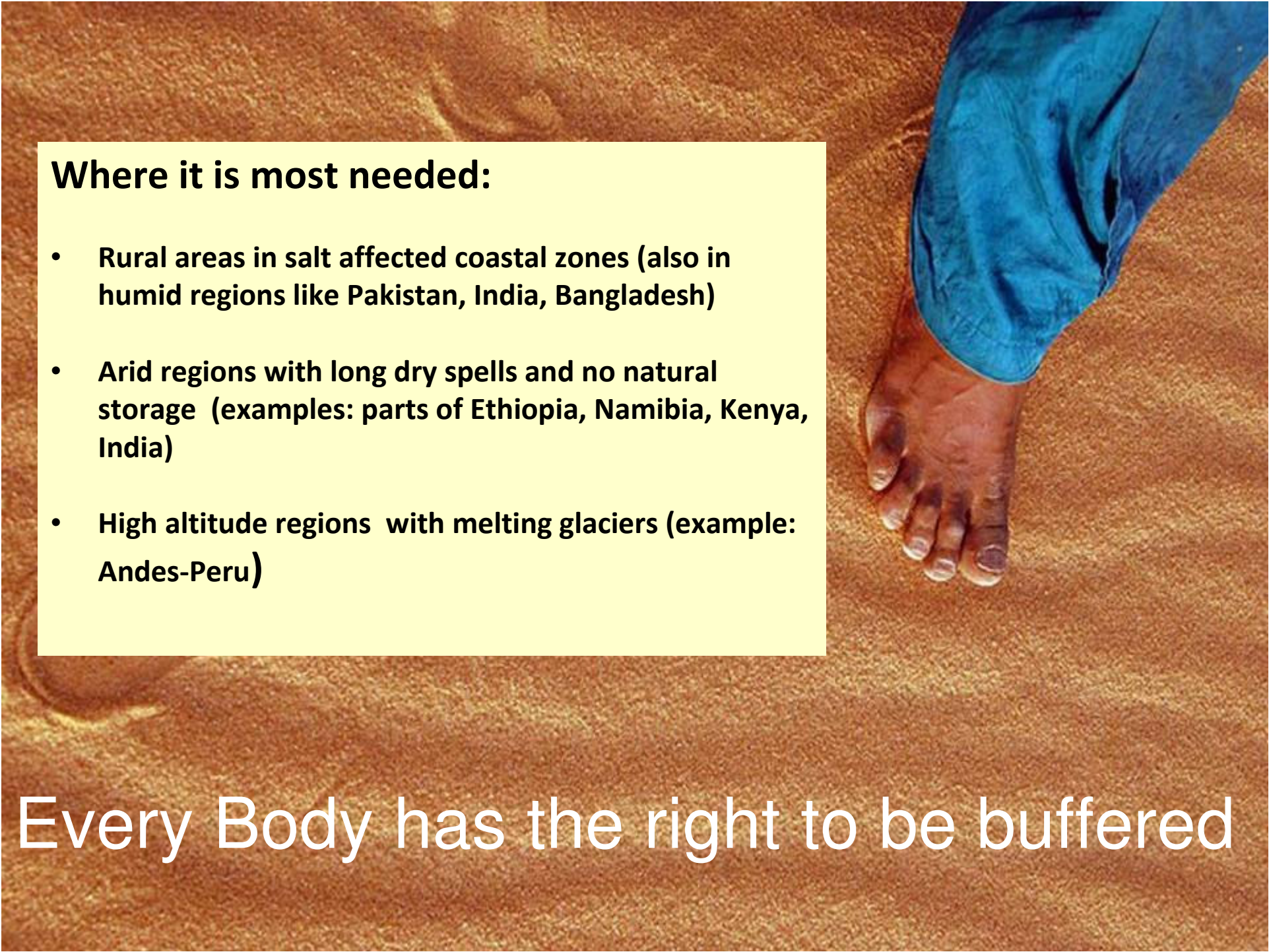


3R SOLUTIONS TO IMPROVE WATER QUALITY AND QUANTITY



3R - PROJECT DEVELOPMENT





Where it is most needed:

- **Rural areas in salt affected coastal zones (also in humid regions like Pakistan, India, Bangladesh)**
- **Arid regions with long dry spells and no natural storage (examples: parts of Ethiopia, Namibia, Kenya, India)**
- **High altitude regions with melting glaciers (example: Andes-Peru)**

Every Body has the right to be buffered

3R: CASES IN THIS WORKSHOP

- **Central-Northern Namibia: Integrated Water Resources Management and 3R**
- **Bangladesh : Fresh Groundwater Buffering**
- **Rwanda: Upscaling of 3R for improved water use in rainfed and irrigated production systems**

RESOURCE AND SUPPLY: PART OF THE SAME CHAIN

Resource mgt and water supply
need more integration

**Water resources
dev & mgt.**

Water supply provision



Storage needed to
bridge gaps in supply
and demand

HOW TO SECURE FUNDING?

- **Link water resource (and buffer) mgt. stronger to the water supply distribution (where the money goes)**
- **A focus on small town water supply where investments in piped water systems can be linked to low cost 3R/MAR solutions**
- **Promote the importance of investment in 3R/MAR as a cost effective means to secure the sustainability of the (larger) investments in pumps and pipes**

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JOIN THE 3R FAMILY

- **Secretariat**
 - **Front office (matchmaking, fundraising, upscaling program initiatives)**
 - **Backoffice (promotion, lobby, information increase and sharing)**
- **How to participate**
- **Rule of engagement available through the website www.bebuffered.com (October 2010)**

THIS AREA IS
PREPARED FOR
FLOOD AND
DROUGHT

IS YOURS?

WWW.BEBUFFERED.COM

