



RESOURCE

Blue Paper: Water Storage in an Era of Climate Change: Addressing the Challenge of Increasing Rainfall Variability

Author(s)

Matthew McCartney Vladimir Smakhtin

Description / Abstract

Rainfall variability is a key constraint to agricultural production and economic growth in many developing countries. This is likely to be exacerbated in many places as rainfall variability is amplified (even where the total amount of rain increases) as a result of climate change. Changes in rainfall will also increase variability in groundwater recharge and river flow, thus affecting all water sources. Water storage, in its various forms, provides a mechanism for dealing with variability which, if planned and managed correctly, increases water security, agricultural productivity and adaptive capacity. As such, water storage can make an important contribution to safeguarding livelihoods and reducing rural poverty. However, ill-conceived water storage is a waste of financial resources and, rather than mitigate, may aggravate unpleasant climate change impacts. Systems that combine complementary storage options are likely to be more adaptable and acceptable than those based on a single storage type. More systematic planning and management is required to avoid the mistakes of the past and to ensure more effective and suitable storage systems for the future.

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