# Water-bound Geographies of Seasonality

Investigating Seasonality, Water, and Wealth in Ethiopia Through the Household Water Economy Approach

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## Household Water Economy Approach

- Developed to bring analytical rigour to understanding the inter-linkages between water security & food security
- Designed to build on existing methodologies & to link to and inform the early warning and disaster risk management systems in place in Ethiopia, which are based partly on HEA
- Brings a *prescriptive* analysis to water assessments and links household economy with access to water

# Household Water Economy Approach > HWEA Components

- Water Baselines which a) quantify seasonal access to water by different wealth groups for different uses; and b) characterise groundwater availability and potential through hydrogeological investigations
- Hazards Analysis which quantifies shocks/hazards and translates them into quantified consequences at household level
- Outcome Analysis which project impact of hazards in relation to survival and livelihoods protection thresholds

### Household Water Economy Approach

#### Assessments

- HWEA pilot Bale, Oromiya, Ethiopia Bale Pastoral (BPA) Livelihood Zone, Livelihoods Integration Unit
- Rapid emergency water & livelihoods needs assessment in north-eastern SNNPR, Ethiopia during the Belg 2008 emergency, CHF International
- Action-research HWEA study to roll out HWEA baselines and assess likely impacts of climate-change related shocks on household water and livelihoods security and identify opportunities to mitigate risk and build resilience, RiPPLE Ethiopia

#### Quantifying Seasonal Access to Water in Bale Pastoral LZ

Poorer households can't secure enough water in the bona season to meet minimum livestock water needs



Wealth-based disparities in access have profound implications on asset protection and wealth generation

#### Seasonal Conflicts Over Labour Allocation in Alaba, SNNPR



#### The Geography of Seasonality: Hydrogeological Investigations in Oromiya & Somali Regions

- Groundwater is often the most important water source in drought
- Looking at hydrogeology and rainfall levels allows us to assess the vulnerability of aquifers to changes in climate & rainfall



#### Scenario Analysis in Alaba-Mareko, SNNPR



- Water survival deficits also peaked during this period.
- Water for livelihoods deficits resulted in 50-65% loss of production of peppers by the poor,
   which makes up 30% of people's entire income

Households faced survival food deficits starting in May in Alaba-Mareko (SNNPR) in 2008.



#### What to do?

- HWEA helps to better understand the inter-linkages between food security and water security
  - > when do different people face water deficits
  - ➢ for which uses
  - > what are the impacts
  - how do they cope
- Better understanding of how people piece together their livelihoods in a 'normal' year and how they deal with seasonality contributes to better understanding how they will be affected by shocks or hazards in a bad year
- HWEA can potentially be used to build scenarios of likely impacts of climate change and water-based climate change adaptation interventions

