

# Piloting Road-run off water Harvesting in Malawi



# Context

- Road construction is one of the biggest investments in most sub-Saharan countries.
- Mzuzu – Nkhatabay Road
- Balaka - Kasinje Road
- Liwonde - Balaka Roads
- Run off from roadsides if not properly channeled results in land degradation in farmers' fields in various ways
- Turning the liability of runoff into a hydration opportunity...



# Maintenance routine for Unpaved roads



# Problem/challenges

- **Land Degradation** - Road side culverts which are poorly designed have rendered some fields completely uncultivable due to poor run off disposal
- **Extremely low agricultural production** – less than one tonne per hectare due to intra-seasonal dry spells and drought;
- Shortage of water for **livestock production**
- **Poor access to and availability of water** in the region due to inadequate water harvesting infrastructure – water storage falls below 1700 m<sup>3</sup>/capita/year (international minimum).
- **Drying of boreholes** due to poor ground water recharge.





# Unexploited Potential



# Current drought



# Objectives

- Raise the level of awareness
- Build the capacity of community
- Promote the construction of RWH for storage of roadside runoff
- To promote economic empowerment
- To document and disseminate lessons



# Excessive runoff



# Gone in a few minutes















# Infiltration pits







# Road run off for Rice Production









# Roadside Burrow pits





# Well conserved roadside fields



# The road – water channel





# Maize in flooded fields



# Maize crop







# Way forward

- Campaign launch for R4W – local chiefs
- Capacity building
- Collect data through action research
- Farmers exchanges (Kitui, Machakos)
- field days



# Happy faces

