



Green Roads for Water: Malawi experience, impact and lessons

IRF Training “Building Climate Resilience into Roads & Transport Infrastructure”

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Malawi



Problems

- ▶ One rainy season
- ▶ Erratic rainfall punctuated by Dry Spells
- ▶ Land Degradation due to poor runoff management
- ▶ Lack of Knowledge on how to harness rainwater



Opportunities



Rural road network



High intensity rains

Techniques

- ▶ Roadside trenches
- ▶ Infiltration pits
- ▶ Swales
- ▶ Percolation Ponds
- ▶ Spate Irrigation using road run off

Techniques



Infiltration pits



Contour continuous
trenches

Techniques



Spate irrigation



Roadside rice production

Complementary agronomic practices

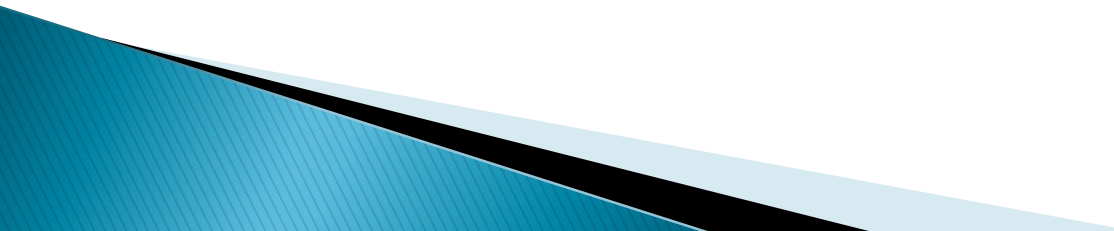


Old practices



Improved practices

The Approach

- ▶ Stakeholder awareness raising
 - ▶ Capacity building (Communities and Extension workers)
 - ▶ Demonstration of relevant techniques
 - ▶ Production of IECs
 - ▶ Linkage to existing projects and programmes
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The Approach



Engaging stakeholders



Capacity building

Multi stakeholder engagement

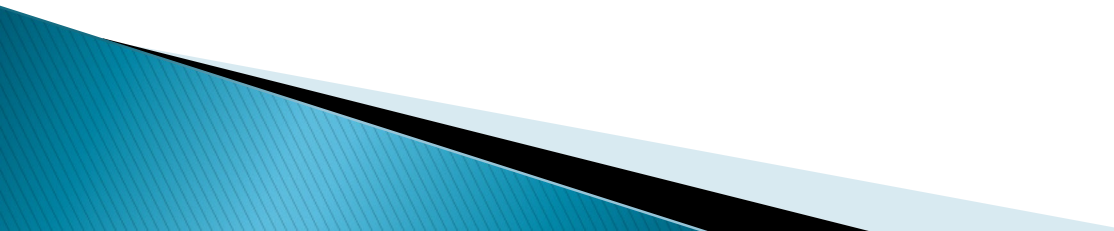
- ▶ Ministry of Agriculture, Irrigation and Water Development
 - ▶ Ministry of Transport and Public works
 - ▶ National Roads Authority
 - ▶ Local Development Fund
 - ▶ Ministry of Health
 - ▶ Ministry of Environment and Natural Resources
 - ▶ Ministry of Local government
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Infiltration Pits





OUTCOMES

- ▶ A package of Improved coping capacity to climate change impact adopted
 - ▶ Improved crop and livestock productivity that has improved household food and income security
 - ▶ Improved capacity of communities to manage road infrastructure
 - ▶ Improved Wetland restoration and ecosystem conservation
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Lessons learnt– GR4W for enhancing community resilience

- ▶ **Continuous learning during implementation and Flexibility** – Continuous engagement with communities and provision of full extension package is key for learning and uptake and impact of resilience building through GR4W.
- ▶ **Farmer to farmer extension crucial for scaling up resilience building work** – Experiences show that interventions that spill out through informal farmer to farmer extension are those that are easily adaptable at local level using available resources.
- ▶ **Linkage with production**– Roads for water practices need to be linked with productivity (increased food production and household income)
- ▶ **Technology adoption is a slow and long-term process** – Even technologies that are well adopted by some groups of beneficiaries may not be adopted at all by others that are faced with seemingly similar socio – economic realities. Also not everything that looks good on paper works on the ground.