



# Out scaling climate-smart technologies to smallholder farmers in Malawi, Zambia & Zimbabwe

## *Prioritization*

24<sup>th</sup> – 26<sup>th</sup> September, 2018, Lilongwe Hotel, Lilongwe

# BACKGROUND

- Two level process to identify and prioritize adaptation strategies:
  - Level 1:  
(Malawi, Zambia and Zimbabwe)
  - Level 2:  
Regional



# PROCESS

1 - 5  
Bad Good

CENTRAL MALAWI

Adaptation Option	Effectiveness	COSTS	Feasibility	Political/Social Acceptance	Active Speed Benefit	"No Regret" Potential	Alignment with donor priorities	Alignment with Policy	TOTAL	Mitigation Co-Benefit	Gender Sensitive
DTV Central Govt	5	4	5	5	5	5	5	5	35 (1)	+	+
CA with TREES	5	5	4	4	2	5	5	5	35 (4)	+	+
Migration Sub. from Farm	5	2	4	5	5	5	5	5	36 (3)	0	+
Water harvesting Structure on land	4	2	3	4	5	5	4	5	32	0	+
Land Use Restoration - from RAB	5	4	4	5	2	5	5	5	<del>35</del> 35	+	+
SRI Cotton	5	4	4	3	5	5	4	5	35 (4)	0	+
Early Warning Weather	5	4	5	5	5	5	5	5	39 (1)	+	+
Crop Insurance	5	4	5	5	5	5	5	5	39 (1)	+	+
Weather Forecast	3	3	4	4	5	5	5	5	34	0	0
Weather Insurance	5	2	3	4	4	3	4	4	29	0	0
Policy Reform	5	2	4	5	3	5	5	5	29	0	+
WASH	5	3	4	5	5	5	5	5	37 (2)	0	+
Local Gov. Loans	5	3	4	5	3	5	5	5	35 (4)	0	+

Central Malawi Adaptation option	Effectiveness	Cost	Feasibility for Farmers	Political/ social acceptance	Relative speed to benefit	No regret potential	Alignment to donor support	Aligneme nt with Policy	Sum of score	Rank	weighted rank	Mitigation co-benefit	Gender Sensitivity
DT varieties	5	4	5	5	5	5	5	5	39	4.88	4.8	0	+
Early Mat Varieties	5	4	5	5	5	5	5	5	39	4.88	4.8	0	+
Crop Diversification	5	4	5	5	5	5	5	5	39	4.88	4.8	+	+
Soil and Water Cons	5	4	4	3	5	5	4	5	35	4.38	4.45	+	0
CA/ CA with Trees	5	5	4	4	2	5	5	5	35	4.38	4.3	+	0
Irrigation Solar w pump	5	2	4	5	5	5	5	5	36	4.50	4.2	0	+
Landscape Resto	5	4	4	5	2	5	5	5	35	4.38	4.15	+	0
Local by-laws	5	3	4	5	3	5	5	5	35	4.38	4.1	0	0
Weather Forecasting	3	3	4	4	5	5	5	5	34	4.25	3.95	0	0
Policy Enforcement	5	2	4	5	3	5	5	5	34	4.25	3.9	0	0
Water Harvesting	4	2	3	4	5	5	4	5	32	4.00	3.7	0	+
Weather insurance	5	2	3	4	4	3	4	4	29	3.63	3.5	0	0

Southern MAL Adaptation option	Effectiveness	Cost	Feasibility for Farmers	Political/ social acceptance	Relative speed to benefit	No regret potential	Alignment to donor support	Alignment with Policy	Sum of score	Rank	weighted rank	Mitigation co-benefit	Gender Sensitivity
InterCropping	5	3	5	5	4	4	5	5	36	4.50	4.35	+	+
Crop Diversification	5	3	4	5	4	5	5	5	36	4.50	4.25	0	+
DT Vars	5	2	3	4	5	4	5	5	33	4.13	3.85	0	0
CA	4	3	4	4	2	4	5	5	31	3.88	3.6	0	+
Organic Manure	4	3	3	4	4	4	2	5	29	3.63	3.55	-	0
Supplementary Irrigation	5	1	2	4	5	5	5	5	32	4.00	3.55	0	0
Cap Building	4	1	5	4	1	3	5	5	28	3.50	3.15	0	+
IPM	3	1	2	3	4	4	3	4	24	3.00	2.7	0	0
Agro Met Info Sharing	2	1	4	4	2	2	4	5	24	3.00	2.55	0	0
Small livestock production	4	1	1	4	3	2	4	4	23	2.88	2.45	-	+
Rainwater Harvest	4	1	2	2	3	3	1	3	19	2.38	2.45	0	-
Policy Implement	2	1	2	3	1	2	5	5	21	2.63	2	0	0

Eastern ZAM Adaptation option	Effectiveness	Cost	Feasibility for Farmers	Political/social acceptance	Relative speed to benefit	No regret potential	Alignment to donor support	Alignment with Policy	Sum of score	Rank	Weighted rank	Mitigation co-benefit	Gender Sensitivity
InterCropping Maize and pigeon pea	3	4	5	5	5	5	4	5	36	4.50	4.35	0	+
Staggering Planting Dates	3	5	5	5	4	4	3	3	32	4.00	4.15	0	0
Drip Irrigation	5	3	3	5	5	5	3	5	34	4.25	4.1	0	+
DT, HT varieties	3	3	4	5	5	5	5	5	35	4.38	4	0	+
CA	4	4	4	3	3	5	5	5	33	4.13	4	+	+
Early Warning Systems	2	5	5	4	2	4	5	5	32	4.00	3.8	0	0
Overhead Irrigation	5	1	2	5	5	5	5	5	33	4.13	3.6	-	0
AgroForestry	5	3	3	3	2	3	5	5	29	3.63	3.45	+	+
Water Harvesting	5	2	2	3	3	4	5	5	29	3.63	3.3	0	+

Southern ZIM-ZIM Adaptation option	Effectiveness	Cost	Feasibility for Farmers	Political/social acceptance	Relative speed to benefit	No regret potential	Alignment to donor support	Alignment with Policy	Sum of score	Rank	weighted rank	Mitigation co-benefit	Gender Sensitivity
Staggard planting	4	5	3	5	5	5	5	5	37	4.63	4.40	0	0
Soil Fert Mgt	5	3	4	5	4	4	5	5	35	4.38	4.15	+	+
Cap Buidling on CSA	5	2	4	5	4	5	5	5	35	4.38	4.05	0	+
Soil and Water Conservation	5	3	4	3	3	5	5	5	33	4.13	4.00	+	+
DT-HT varieties	5	2	4	4	4	4	5	5	33	4.13	3.90	0	+
Livelihood Diversification	5	3	4	4	3	3	5	4	31	3.88	3.80	0	+
ICT Info Mgt	5	2	3	4	4	5	5	5	33	4.13	3.80	0	0
Irrigation Systems	5	1	3	3	2	5	5	5	29	3.63	3.25	0	0
Water Harvesting	5	1	3	3	2	3	4	5	26	3.25	3.00	0	0

# IN-COUNTRY

- **Semi-arid conditions:**
  - Crop diversification,
  - Use of organic manure,
  - Early maturing and drought tolerant crops,
  - Forms of Conservation Agriculture (ripping direct seeding and basins).
- **Sub-humid conditions:**
  - Crop diversification,
  - Use of organic manure,
  - Agro-forestry,
  - Forms of CA (ripping, direct seeding)
  - Drought-tolerant varieties highly in comparison to other options.
  - Irrigation
  - Improved climate information services



# REGIONAL

- **Highest scoring adaptation strategies were:**
  - **Diversification,**
  - **Intercropping,**
  - **Drought tolerant germplasm**
  - **Conservation agriculture interventions**
  - **Supplementary irrigation**
  - **Soil fertility management**
  - **Pro-active risk management through staggered maize planting**



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*End of Presentation*

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