

Project

Small holder dairy farming in a humid livestock zone

Presentation from Livestock team

Outline

- Profile of dairy system of interest
- Development Goal
- Climate Proof Tool
- Potential Climate Hazards
- Adaptation Options identified

- Concluding Remarks

Profile of dairy system of interest

- Project site: Melrose
- Livestock zone set up in state Land (approximately 40 acres)
- Regroup 10 farmers (10 units)
- 10 cows (locally adapted cross breeds) per unit – confined/cut and carry system
- Each unit 4 acres (0.5 acres for farm building)
- Integrated fodder unit (fodder grasses and legumes) of 3.5 acres per farm
- Target: 1000 litres per day
- Sale: pasteurised milk to middlemen

Development goal

To improve productive efficiency and income

Climate Proofing Tool used

Steps followed:

1. Current and future climate risks assessed
2. Adaptation options identified and
3. Adaption measures selected

Potential Climatic Hazards

1. Extreme high temperature

2. Flash floods

3. Drought



Potential Impacts

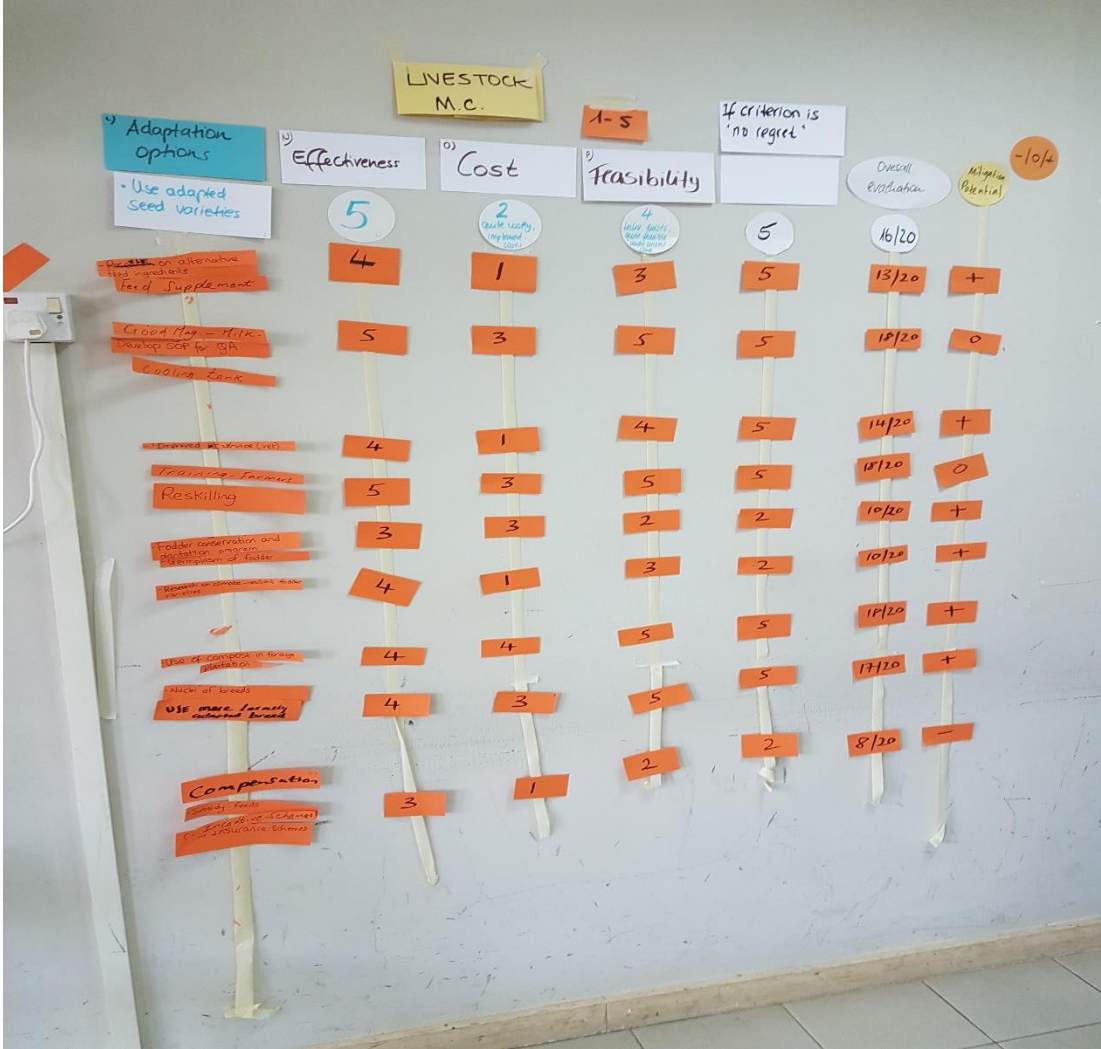
Extreme high temperature	Decrease in Milk quantity and quality Animal performance (loss in weight, conception rate, long calving interval)	Decrease in income and increase in cost of production
Flash floods	Increase in mortality rate Damage to infrastructure	
Drought	Decrease in Milk quantity and quality Animal performance Increase in mortality rate	

Risk Assessment

- After observing the climate hazards, basic vulnerability and potential impacts, the risk rating was medium

Adaptation Options

11 adaptation options identified



Adaptation Options Identified

Adaptation Option	Overall Evaluation (/20)	Mitigation Potential
Good milking practices	18	0
Use of cooling tanks	18	0
SOP for Quality assurance	18	0
Training of farmers/reskilling	18	0
Use of compost in forage plantation	18	+
Use of locally adapted cross breeds	17	+

Adaptation Options Identified

Adaptation Option	Overall Evaluation (/20)	Mitigation Potential
Improved AI Service	14	+
Research on alternative feed ingredients/feed supplements	13	+
Fodder conservation and germplasm	10	+
Research on use of climate-resilient fodder varieties	10	+
Policy measures (compensation, insurance, etc)	8	-

Concluding Remarks

- 5 options have equal rating of 18/20
- Out of these 5 adaptation options only one shows mitigation potential
- Policy measures (compensation) give a low overall rating and –ve mitigation potential
- Out of 11 options, two adoption options have regret measures
- Climate Smart Project (P,R,M)
- Overall, the proposed project with the adaptation measures meet our development goal



Thank You