

Communication of downscaled, probabilistic seasonal forecasts and evaluating their impact on farmers' management and livelihood outcomes

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Hypothesis

- **Since many farm management decisions are taken without knowing what the season going to be, advance information about the possible seasonal conditions will help farmers in making more informed decisions**

Key constraints addressed

- **Lack of awareness about seasonal climate forecasts and their reliability**
- **Misperceptions about the climate and its variability**
- **Lack of understanding about the probabilistic nature of forecast information**
- **Non-availability of information in a format that can easily be understood by the farmers**

Methods

- **The study was conducted in Wote division, Makueni district, Eastern province, Kenya during the 2011-2012 short rain season**
- **Study treatments include**
 - **Control**
 - **Two day training workshop**
 - **Interpreting and presenting seasonal forecast information in the form of an agro-advisory**
 - **Training workshop along with advisory**

Methods

- **A total of 117 farmers (61% women) were involved in the study**
- **Farmer response to climate information was assessed by conducting three surveys**
 - **Before training or providing forecast information**
 - **During the season**
 - **After the season**

Observed responses

Treatment	Area cultivated (ha)		Investment (Ksh/ha)	Yield (kg/ha)
	PS	ES		
Control (T1)	1.53	2.06	1797	386.8
Training workshop (T2)	2.00	1.89	2043	447.3
Agro-advisory (T3)	2.04	1.62	6092	613.8
Training workshop and advisory (T4)	2.10	1.94	3400	441.4

Expectation of the season

Village/treatment	Women farmers		Men farmers		All	
	No	Yes	No	Yes	No	Yes
Control (T1)	82	18	82	18	82	18
Training workshop (T2)	63	38	54	46	59	41
Agro-advisory (T3)	53	47	42	58	52	48
Training workshop and advisory (T4)	27	73	33	67	30	70

Usefulness of climate information

Village/treatment	Amount willing to pay (Ksh/season)		
	Women	Men	All
Training workshop (T2)	258	357	313
Agro-advisory (T3)	228	204	211
Training workshop and advisory (T4)	385	364	368
All villages	262	263	261

Conclusions

- **For effective utilisation of climate information, there is a need to enhance the understanding of the users about the climate and uncertainties associated with it**
- **Workshop based capacity building is an effective means by which better understanding of climate variability and options available to manage it can be promoted**
- **Forecast information provides a basis for farmers to plan and make best use of the climate**
- **Advisories are an important means to provide this information but need to be more location specific**
- **Focus should be on regions where predictability is good and regions where climate risks are a major constraint to productive agriculture**

Thank you for your attention