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PICSA

Participatory Integrated Climate Services for Agriculture

PRESENTATION OBJECTIVES

- Explain the PICSA approach, how/where was it developed, where has it been introduced.
- Outline the overall aim of the work with farmers.
- Explain the PICSA timeline: well before, just before, during and after the season.
- Explain the step-by-step approach and how it progresses along the timeline.

THE CHALLENGE

- Smallholder farmers are key to food security across the developing world
- Critical farming decisions depend upon the weather
  - How much rain falls, are there extremes in temperature?
  - The length and start date of the season
  - These aspects vary considerably from year-to-year

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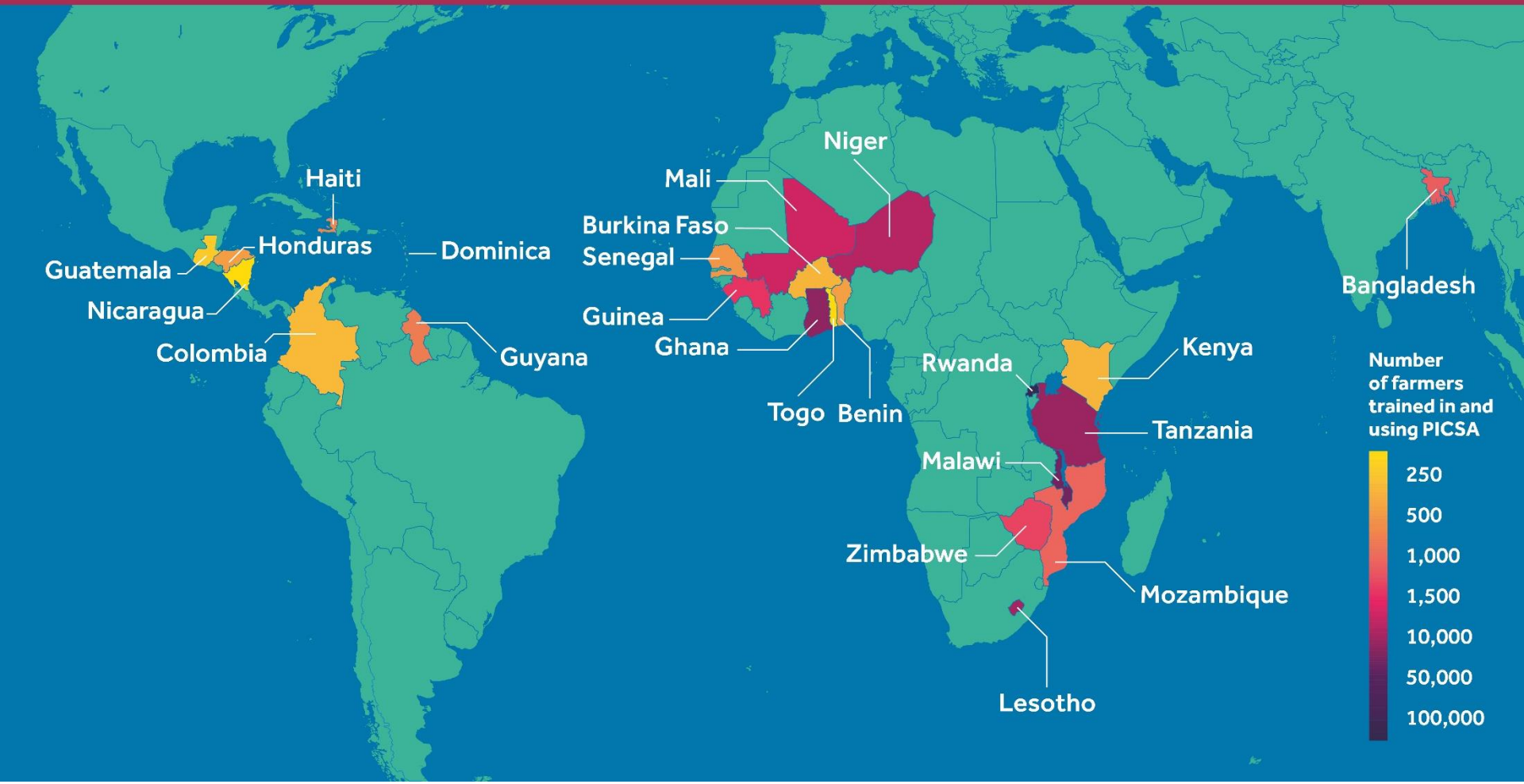
THE LOCATIONS AND NUMBERS OF FARMERS TRAINED IN AND USING PICSA



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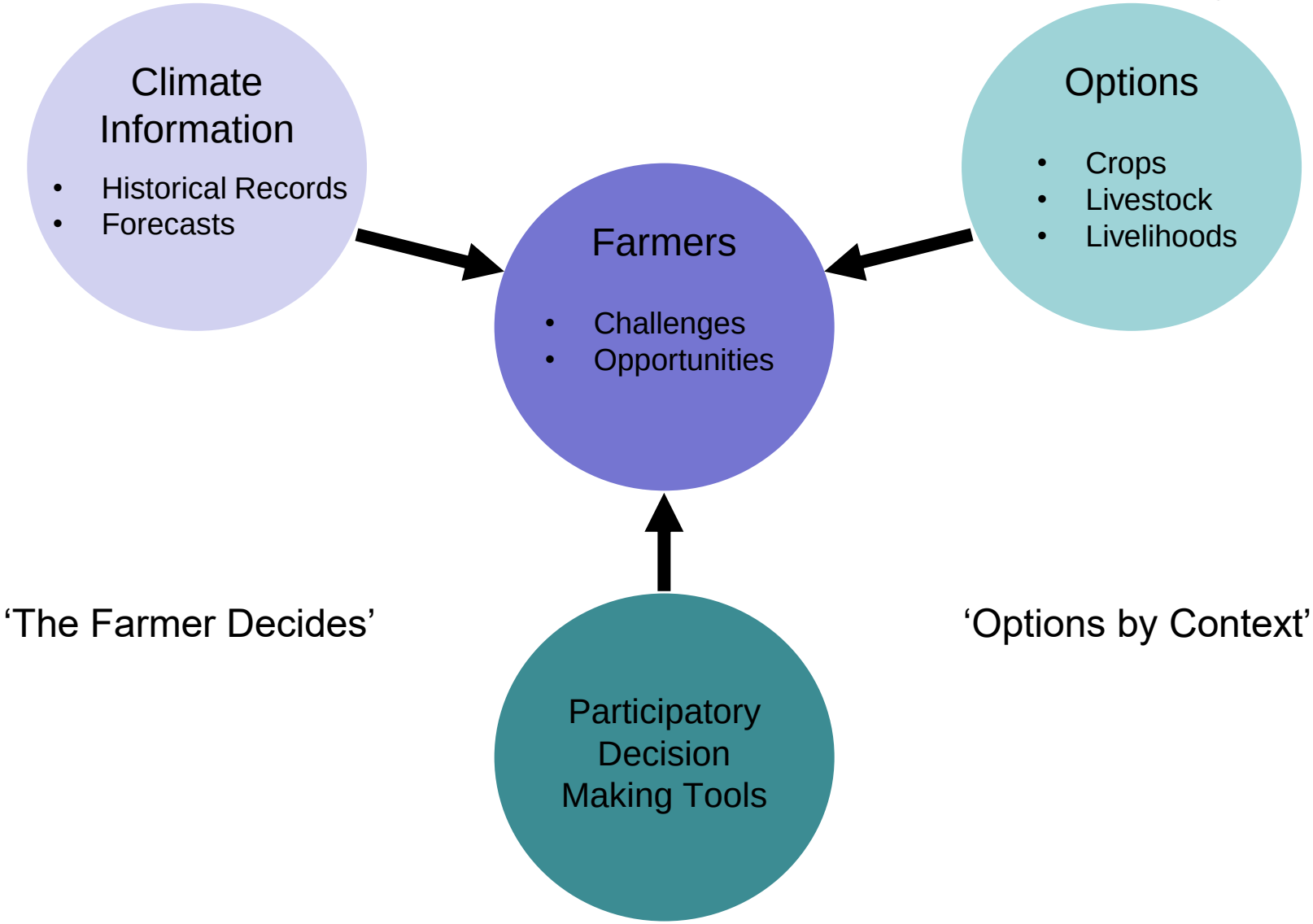

'The Farmer Decides'

'Options by Context'


Choice
N SOAP

STEP-BY-STEP APPROACH

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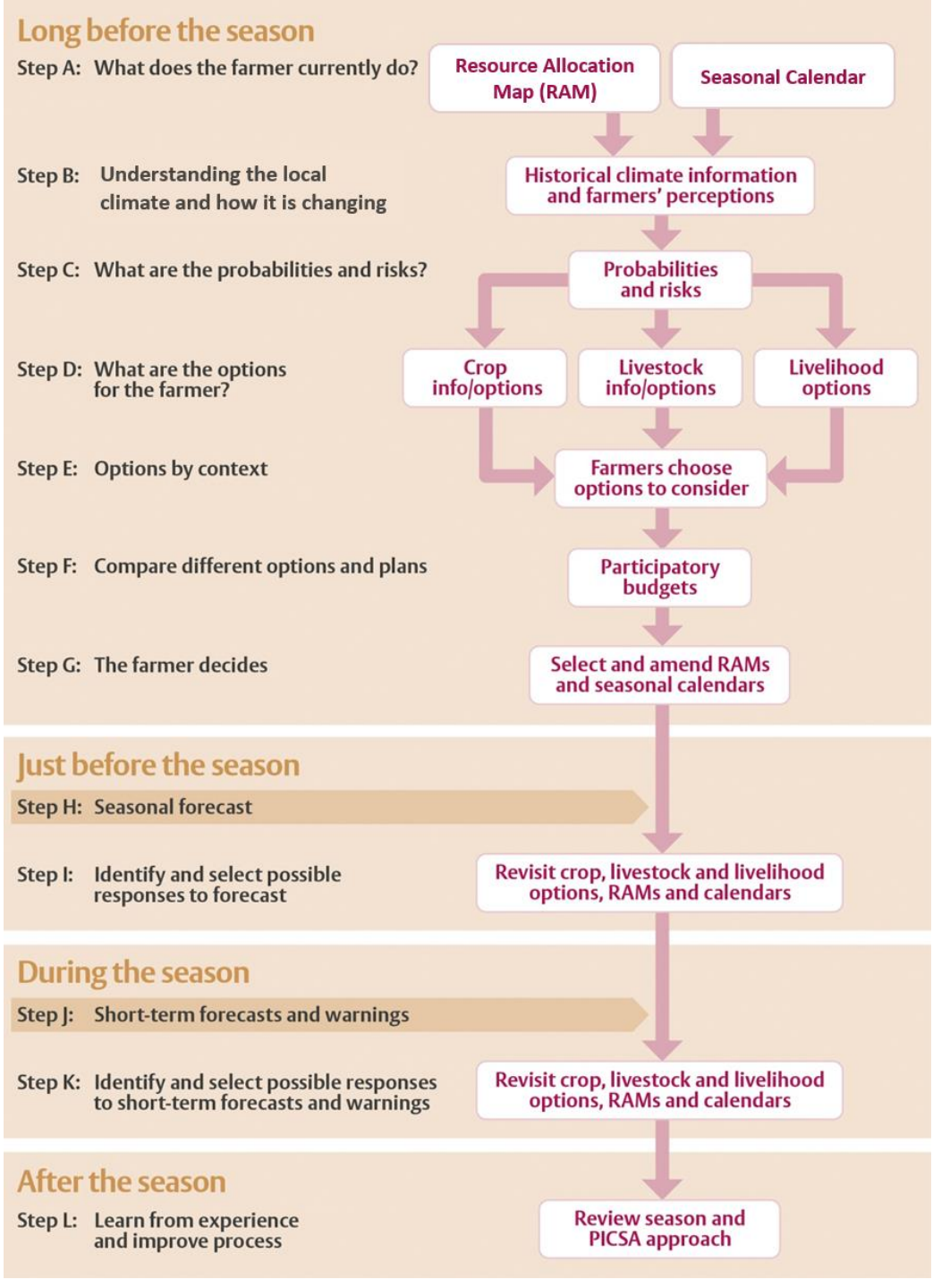
- The activities that make up the PICSA approach are broken down into 12 clear and logical steps
- These steps enable intermediaries to work with farmers to use a range of sources of climate, weather, crop, livestock and livelihood information for their planning and decision making
- Each step has a set of activities that intermediaries implement with a group of farmers through a series of meetings



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STEP A – FARMERS CURRENT SITUATION

HISTORICAL CLIMATE INFORMATION

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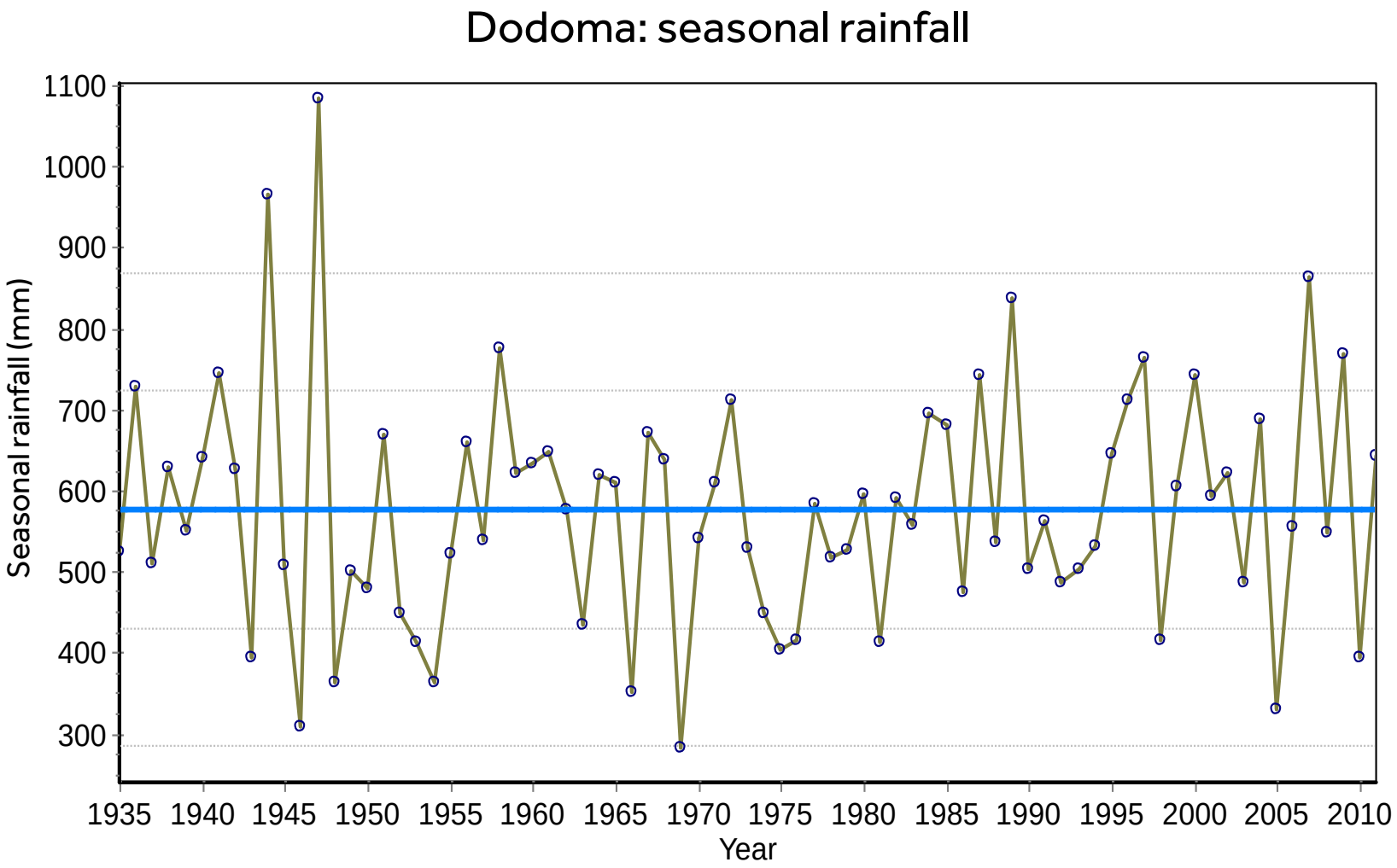

STEP C – CALCULATING RISKS OF GROWING DIFFERENT CROPS

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LINKING PROBABILITIES TO CROPS

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Crop	Variety	Days to maturity	Crop water requirement	Chance of sufficient rainfall if season starts on x (Early)	Chance of sufficient rainfall if season starts on x (Middle)	Chance of sufficient rainfall if season starts on x (Late)
Maize	Local	120	480	5/10	4/10	2/10
Maize	Pioneer xxx	100	350	7/10	5/10	4/10
Sorghum	Seed Co xxx	110	300	5/10	7/10	6/10

STEP D – ANALYSING LOCAL OPTIONS – CROPS

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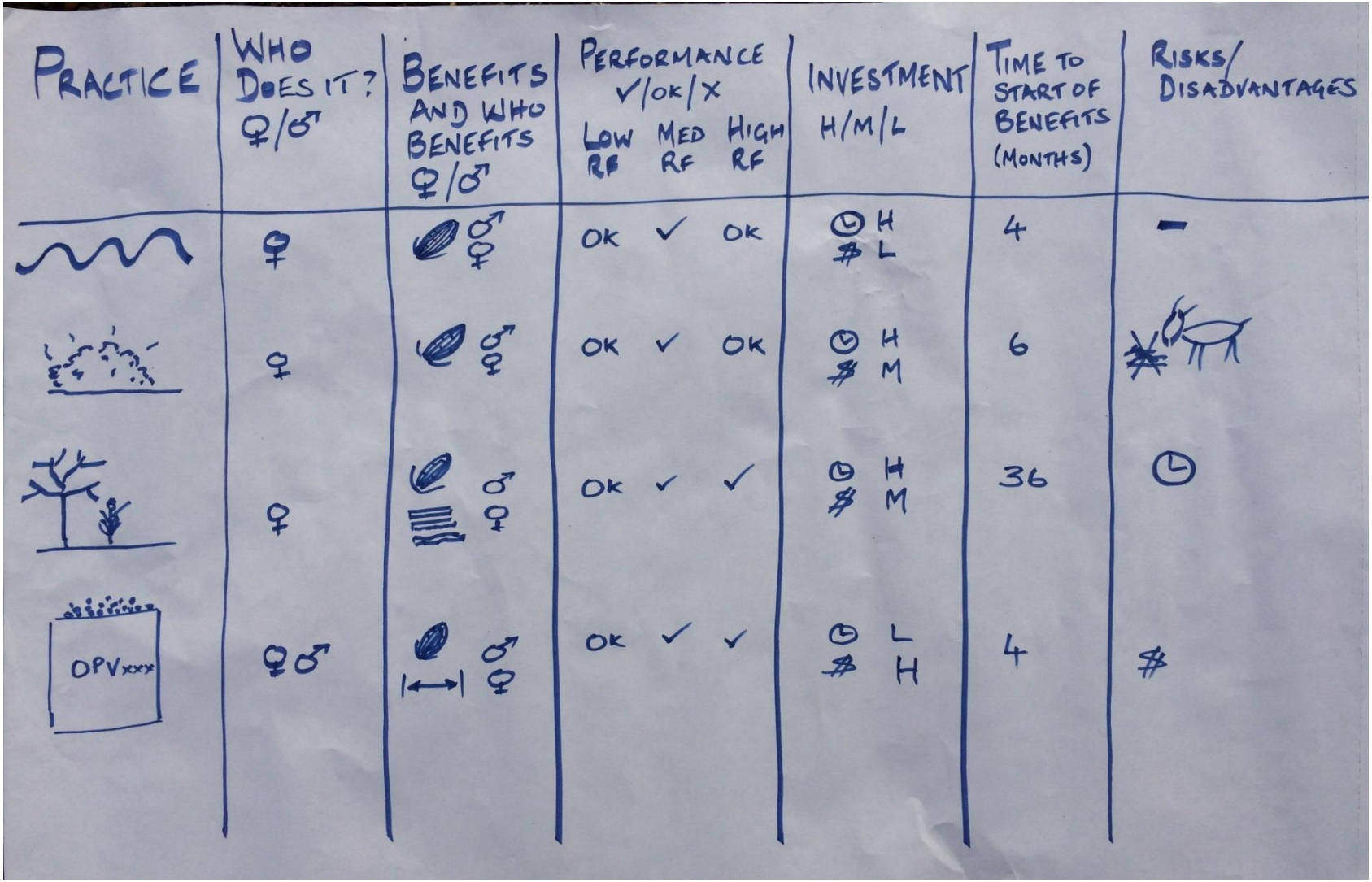

STEP D – ANALYSING LOCAL OPTIONS – LIVESTOCK

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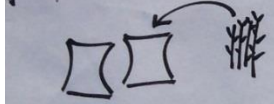
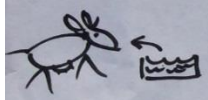
PRACTICE	WHO DOES IT? ♀/♂	BENEFITS AND WHO BENEFITS ♀/♂	PERFORMANCE √/OK/X LOW RF	MED RF	HIGH RF	INVESTMENT H/M/L	TIME TO START OF BENEFITS (MONTHS)	RISKS/ DISADVANTAGES
	♀/♂	♀♂	ok	✓	✓	H M	0	
	♀/♂	♀♂	✓	✓	✓	M L	5	-
	♀/♂	♀♂	✓	✓	✓	M L	0	-
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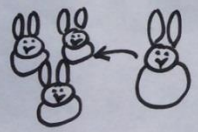	♀	♀	ok	✓	✓	L M	1	

STEP D – ANALYSING LOCAL OPTIONS – LIVELIHOODS

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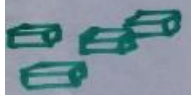
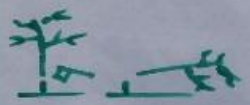
PRACTICE	WHO DOES IT? ♀/♂	BENEFITS AND WHO BENEFITS ♀/♂	PERFORMANCE ✓/ok/✗ LOW RF	PERFORMANCE ✓/ok/✗ MED RF	PERFORMANCE ✓/ok/✗ HIGH RF	INVESTMENT H/M/L	TIME TO START OF BENEFITS (MONTHS)	RISKS/ DISADVANTAGES
	♂♀	♂♀	ok	ok	ok	M L	0	-
	♂	♂	ok	ok	ok	H H	1	
	♂	♂♀	ok	ok	ok	M M	3	
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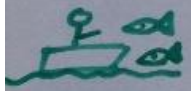
	♂	♂♀	✓	ok	✓	H L	0	-
	♂	♂	✓	✓	✓	H M	0	

STEP F - FARMERS COMPARE AND DECIDE WHICH OPTIONS TO TRY ON THEIR FARM

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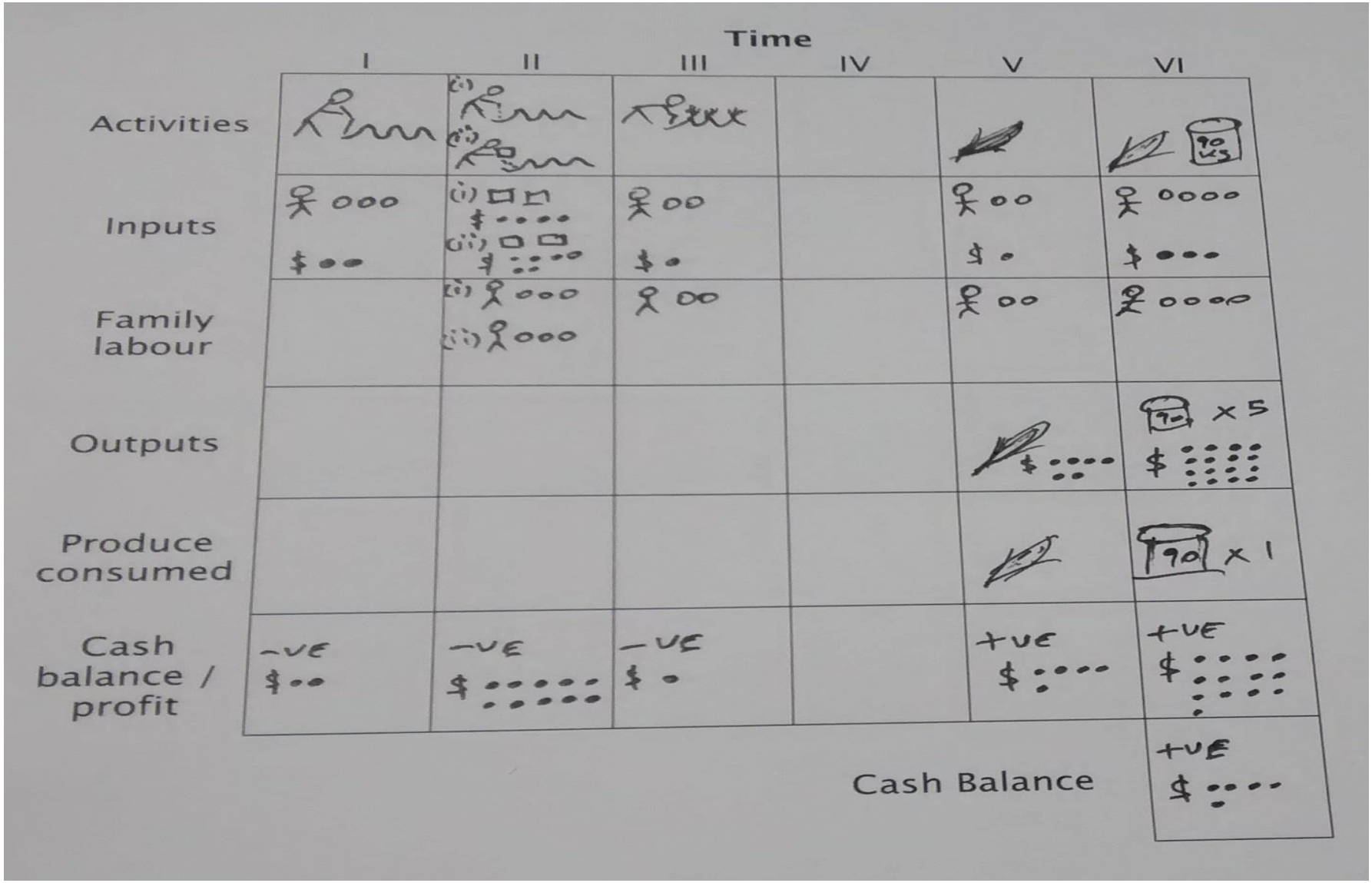

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Long Before the Season

Historical Climate Data

Crop, Livestock + Livelihood Options

Participatory Planning

Just Before the Season

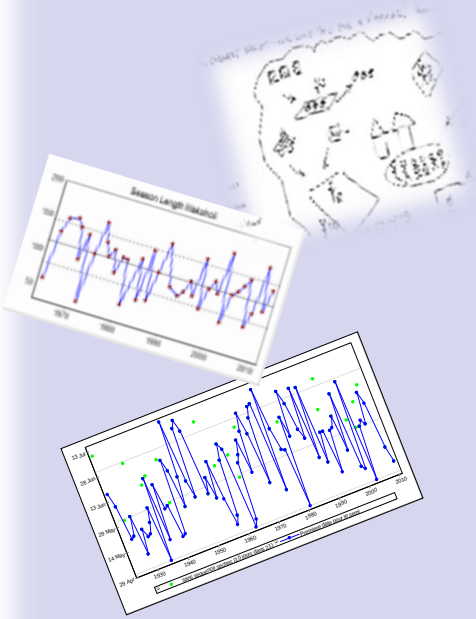
Seasonal Forecast & Revise Plans

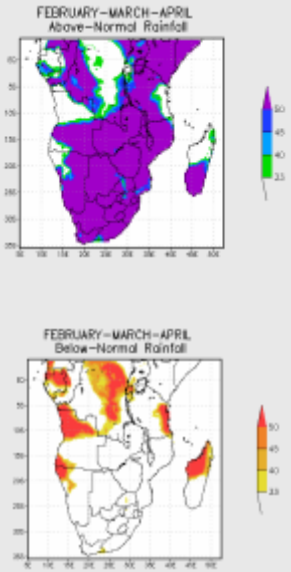
During the Season

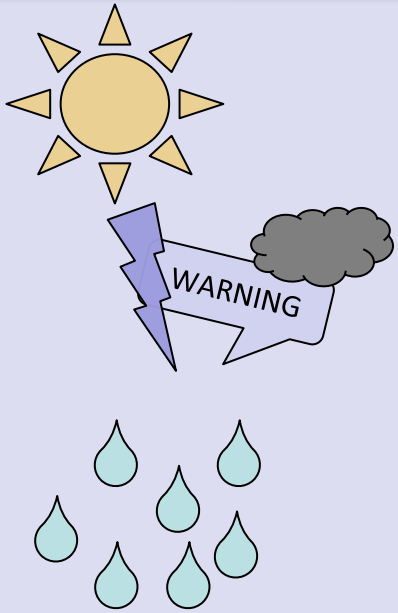
Short-term Forecasts & Warnings

Shortly After the Season

Review weather, production, forecasts & process







Seasonal Forecasts from http://rava.qsens.net/themes/climate_template/seasonal-forecasts/

PICSA IN THE NORTH OF GHANA

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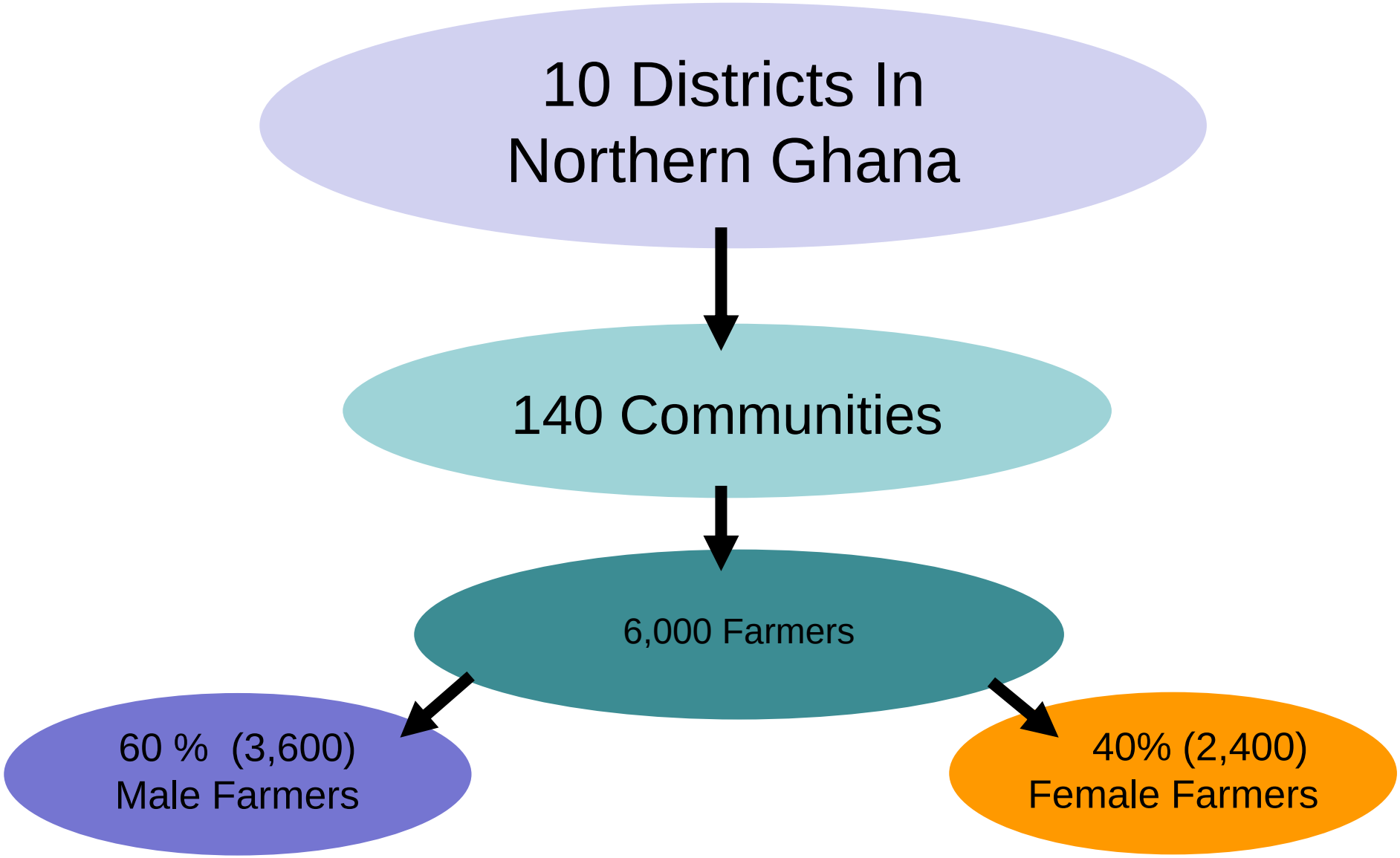

RESULTS FROM EVALUATION

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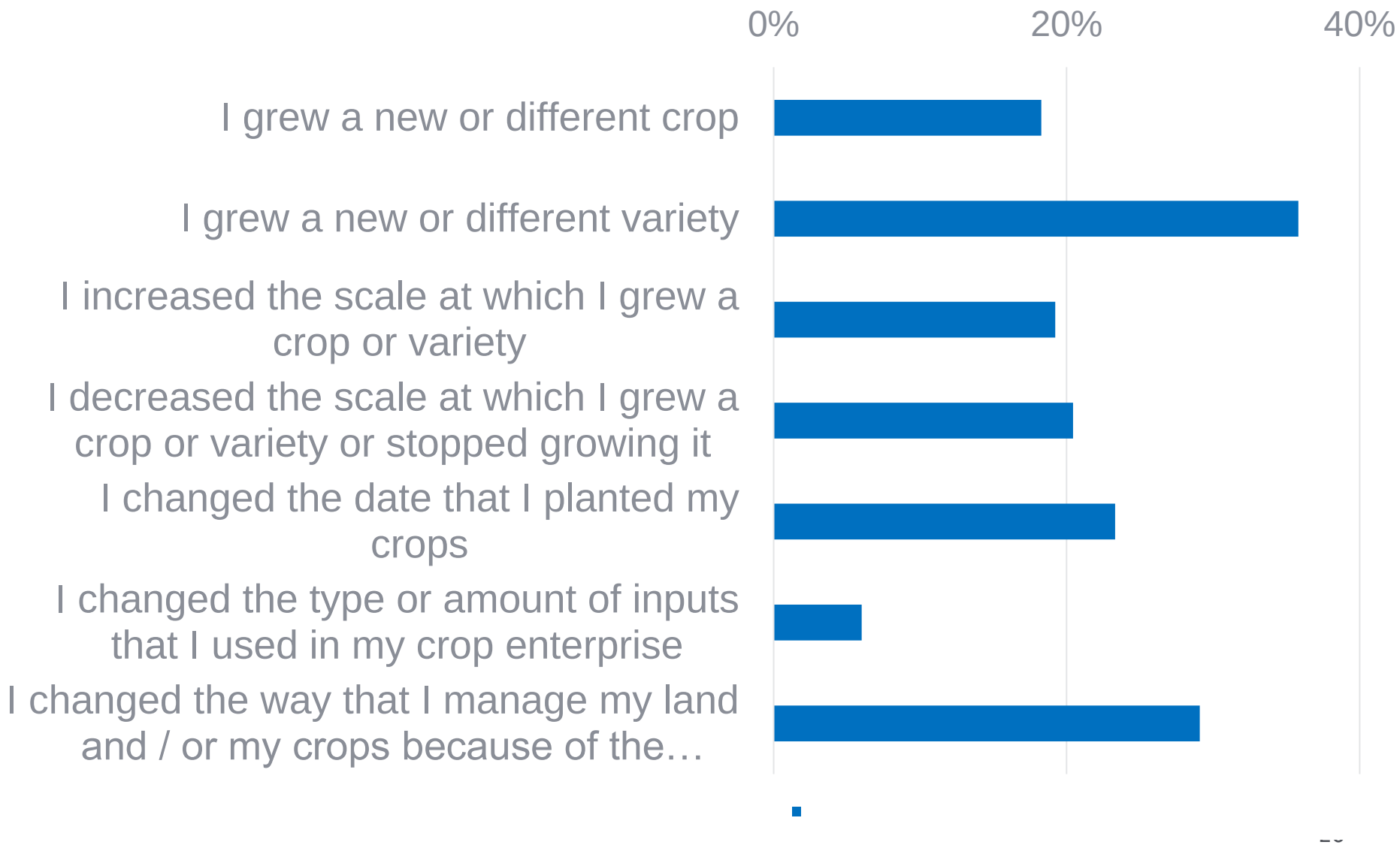
	Bangladesh (n=280)	Malawi (n=907)	Haiti (n=103)	Rwanda (n=502)
% trained farmers making changes in crops, livestock or livelihood enterprises as a result of PICSA training	90%	91%	70%	98%
% trained farmers using participatory budgets in their planning and decision making	99%	97%	93%	88%
% trained farmers using historical climate information in their planning and decision making	80%	96%	89%	81%
% trained farmers 'better able to cope with bad seasons caused by the weather' following the training	87%	85%	76%	76%
% of PICSA trained farmers who had shared the information / tools with peers	92%	72%	48%	60%

CHANGES TO CROP ENTERPRISES IN GHANA



EXAMPLES OF CHANGES MADE

Farmer starting a small business selling soya beans

Farmer engaging in a short-term (54 day) variety of cowpea

Farmer engaging in a new livelihood, making and selling shoes

CASE STUDY HOUSEHOLDS

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Farmer	Changes	Impact
Male farmer, northern region, Ghana	Reduced the scale of maize farm and used early maturing variety	Increased maize yield by 3 bags and reduced cash losses. Extra bags helped feed his family for 4 months and money saved helped pay school fees and purchase a goat
Female farmer, northern region, Ghana	Started regularly feeding and vaccinating her livestock	Increased profit from selling her sheep which was used to pay her son's school fees; some was used to purchase food and some to purchase two sheep
Female farmer, Balaka, Malawi	Early maturing maize and conservation farming techniques	After a difficult season, she was able to harvest while others weren't. Paid daughter's school fees, fed extended family and bought seeds for the coming season (incl. trying new crops)
Male farmer, Longido, Tanzania	Introduced new cattle breed (more suited to dry environments), reduced the size of his herd and vaccinated	Some of the remaining money from sales of local breed were invested in building a house. He has also started to engage in agriculture, planting maize, some trees and vegetables which helps feed his family

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THANK YOU