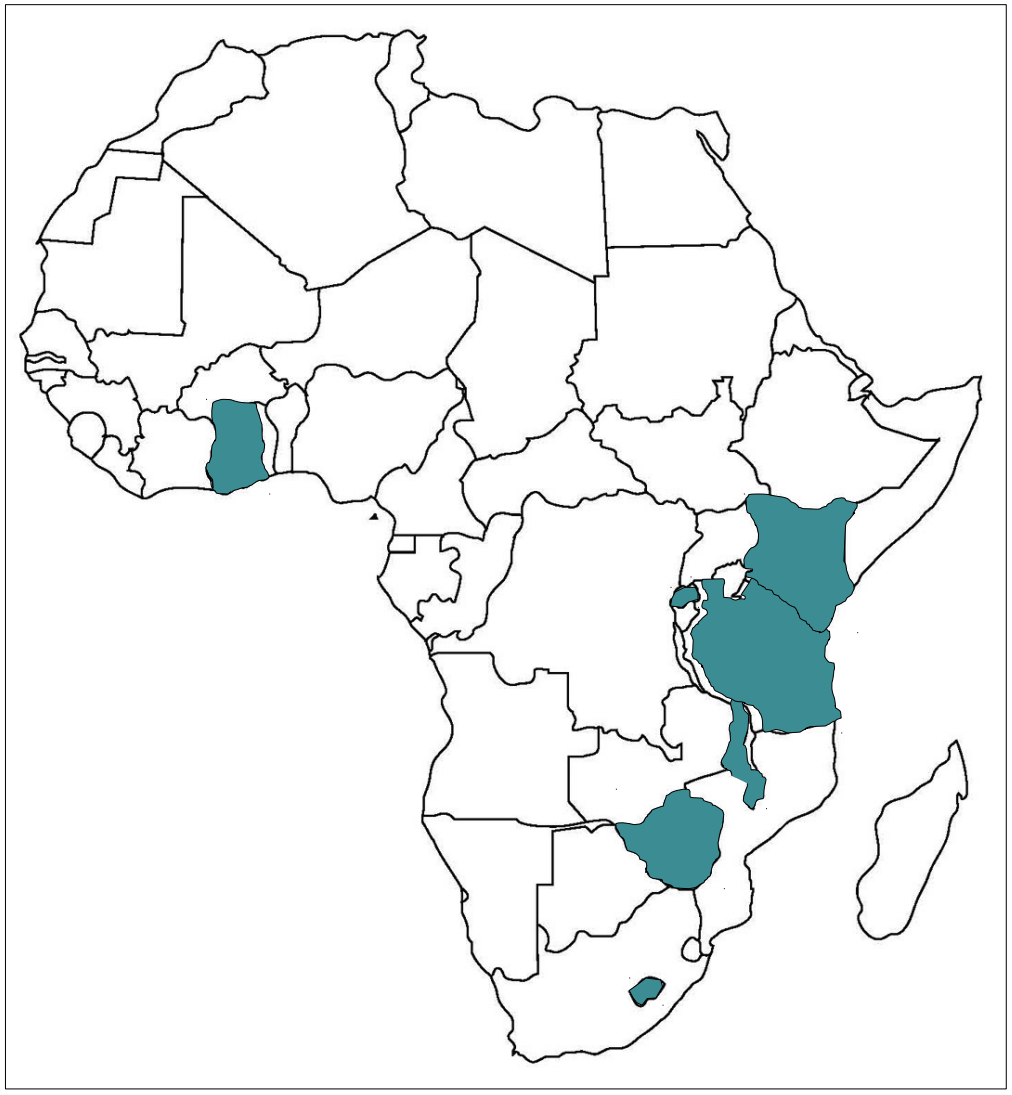
Participatory Integrated Climate Services for Agriculture

PICSA

Graham Clarkson, Peter Dorward and Roger Stern



- 9 countries in Africa
- Honduras, Colombia and Guatemala in Central & S America
- Guyana in Caribbean

RESEARCH PROGRAM ON Climate Change, Agriculture and Food Security

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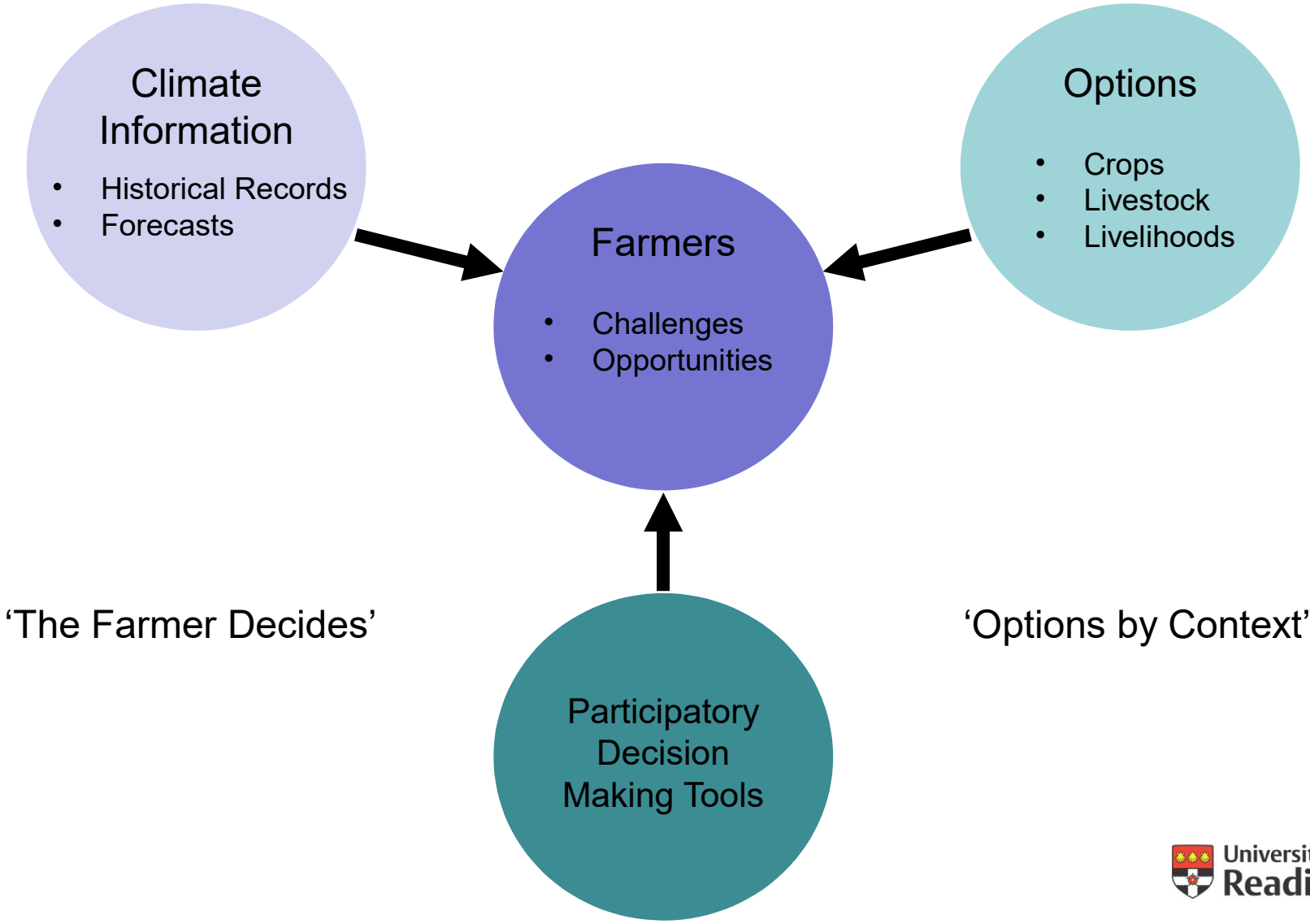
PICSA – key principles



'The Farmer Decides'

'Options by Context'

Long Before the Season

Historical Climate Data

Crop + Livestock Options

Participatory Planning

Just Before the Season

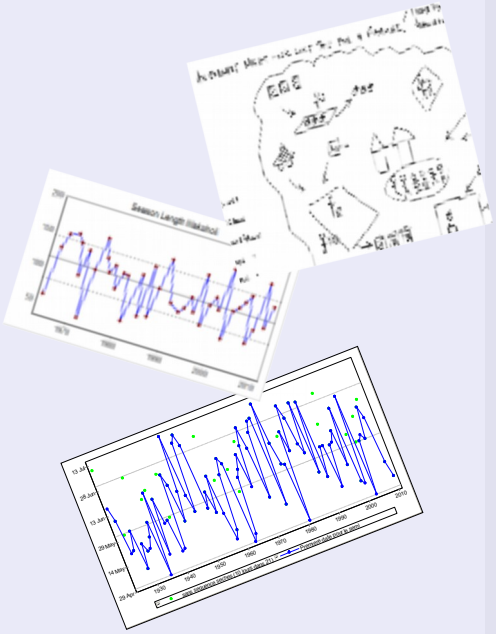
Seasonal Forecast & Revise Plans

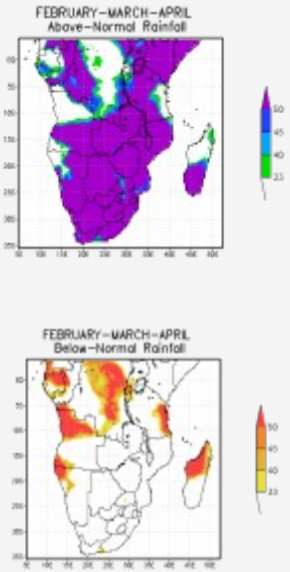
During the Season

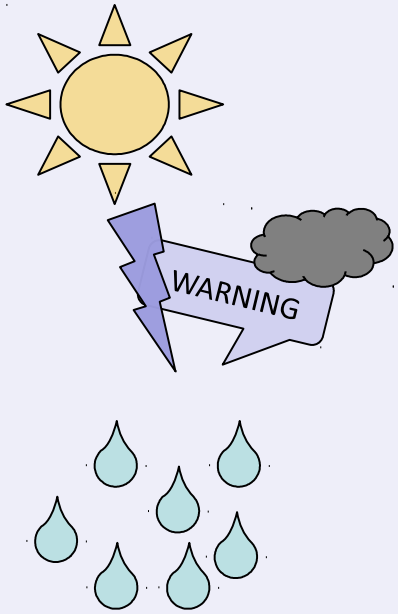
Short-term Forecasts & Warnings

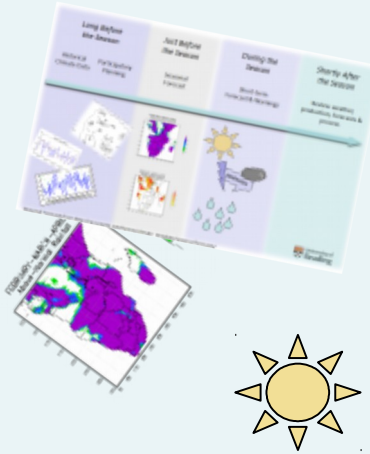
Shortly After the Season

Review weather, production, forecasts & process

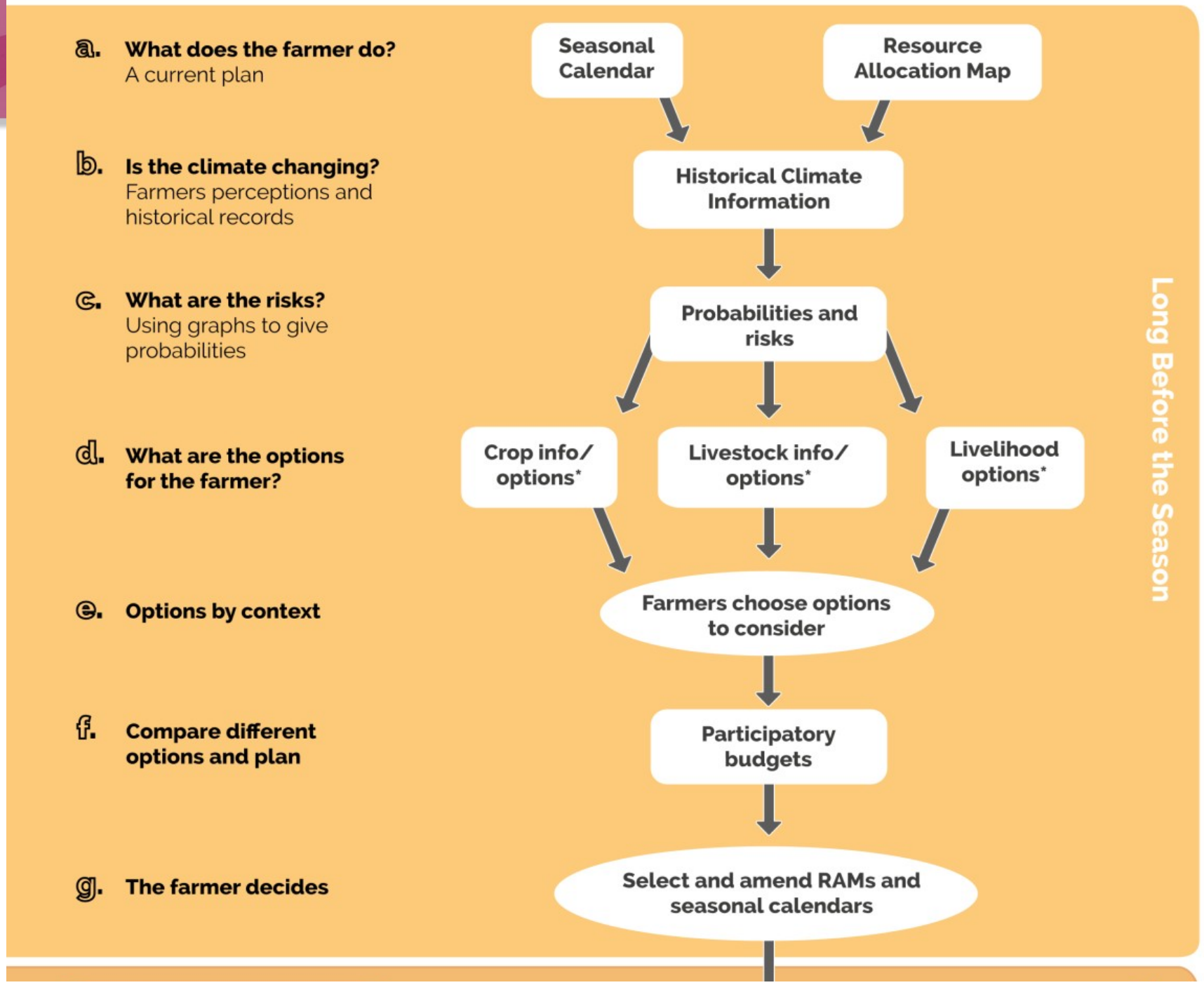




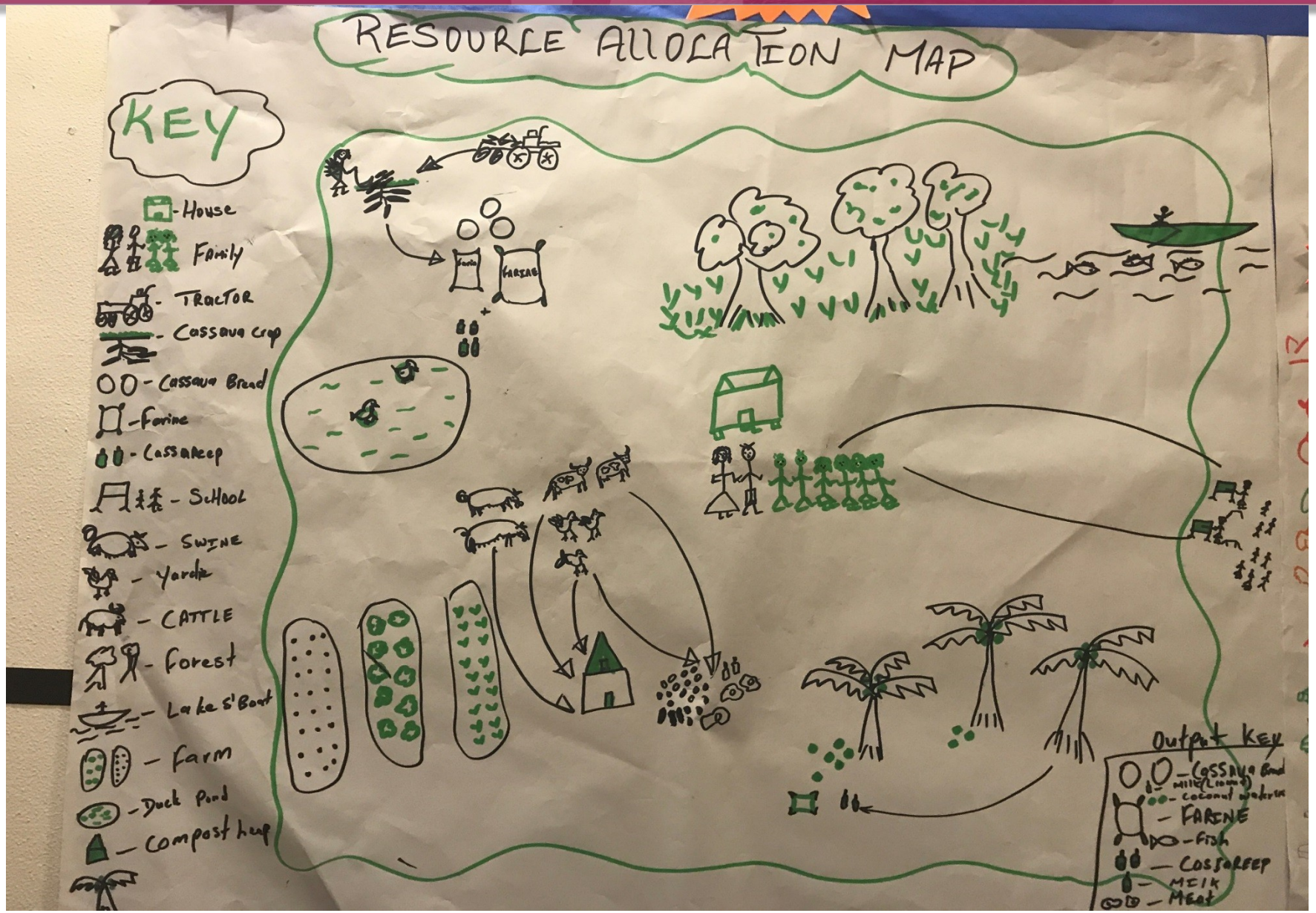




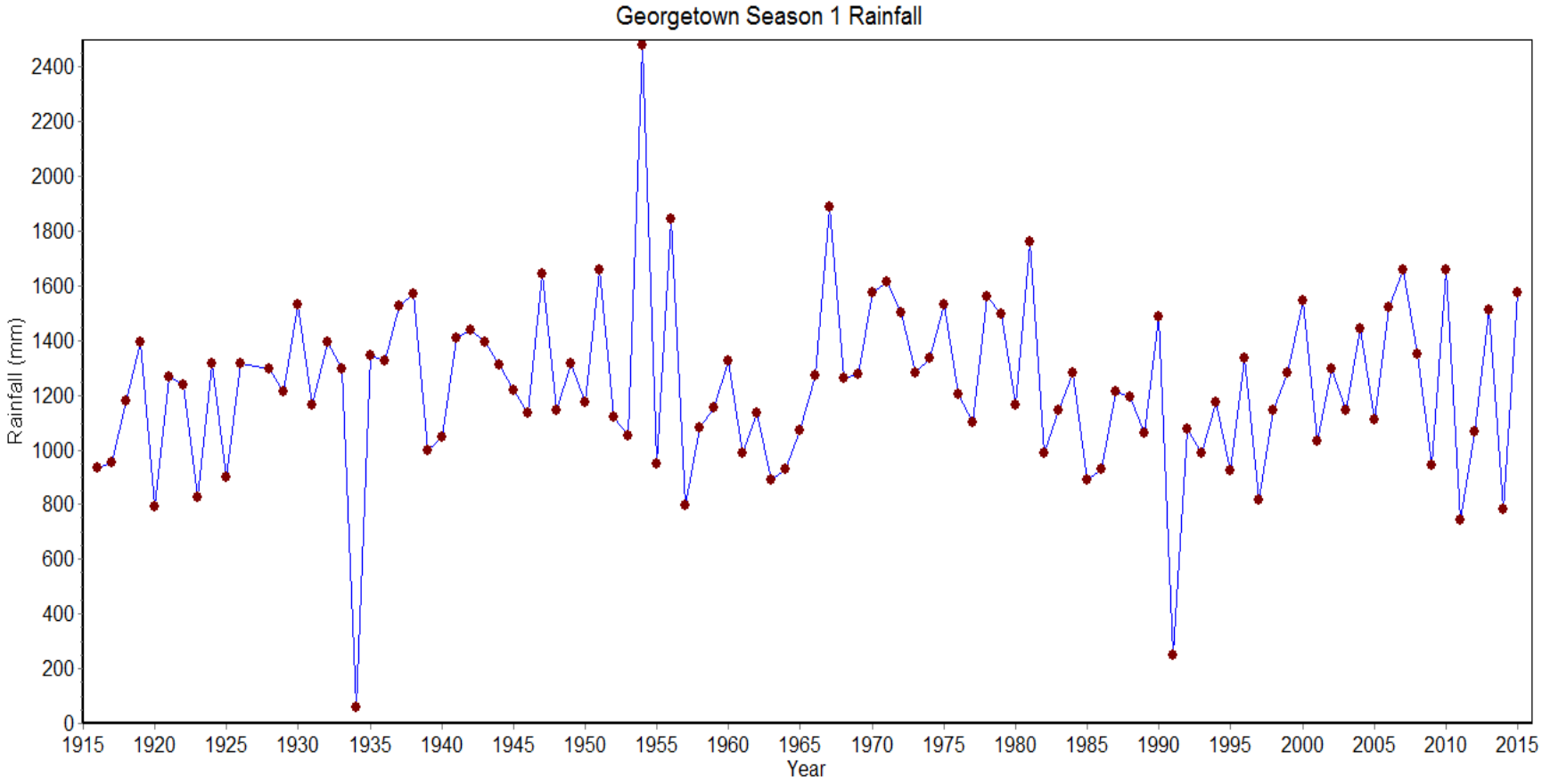
Seasonal Forecasts from http://rava.qsens.net/themes/climate_template/seasonal-forecasts/


a. What does the farmer do?
A current plan
b. Is the climate changing?
Farmers perceptions and historical records
c. What are the risks?
Using graphs to give probabilities
d. What are the options for the farmer?
e. Options by context
f. Compare different options and plan
g. The farmer decides
Seasonal Calendar
Resource Allocation Map
Historical Climate Information
Probabilities and risks
Crop info/ options*
Livestock info/ options*
Livelihood options*
Farmers choose options to consider
Participatory budgets
Select and amend RAMs and seasonal calendars
Long Before the Season

Step A – What does the farmer do?

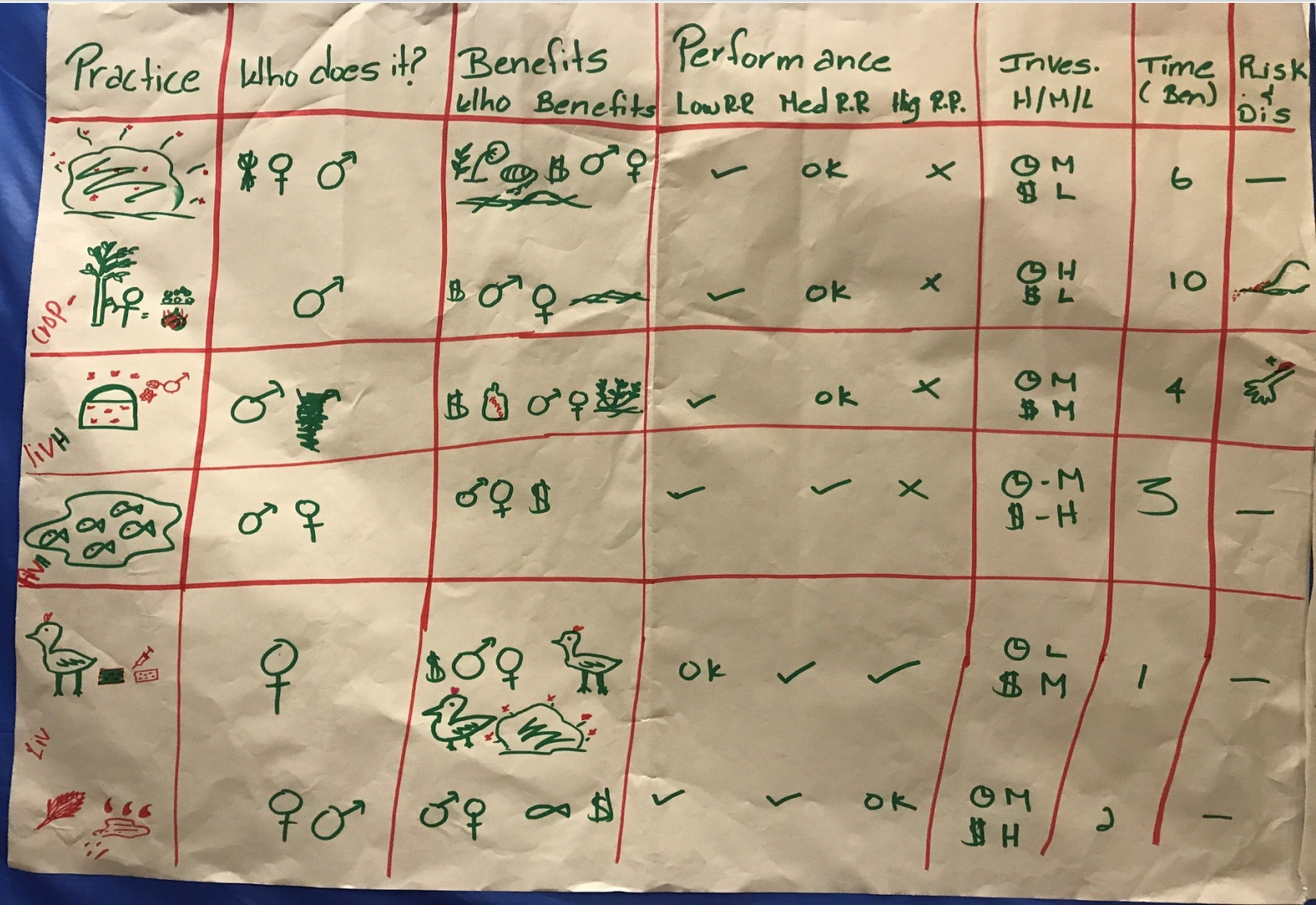


Steps B & C - Is the climate changing and what are the risks?

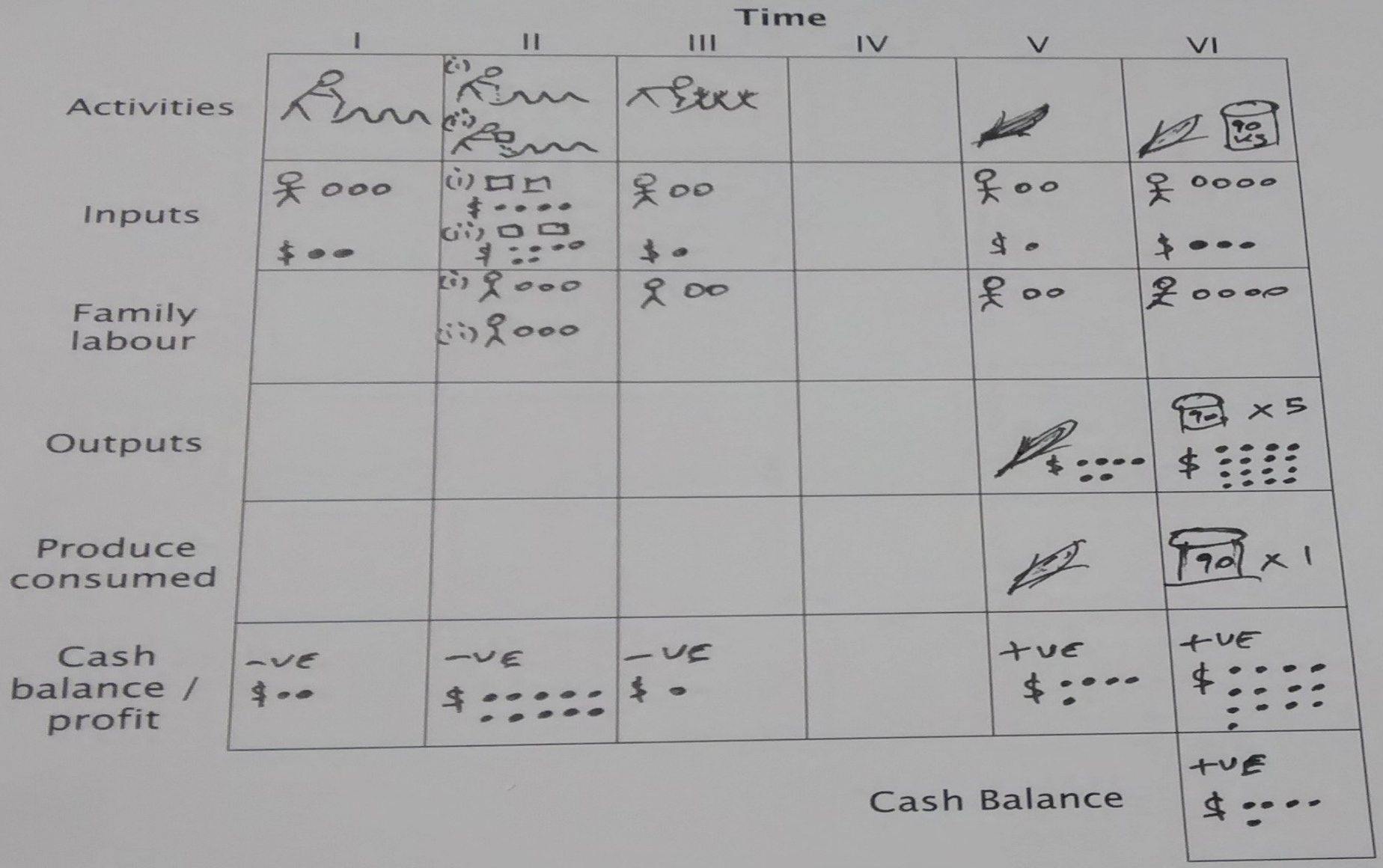


Calculating the risks of growing different crops

Step D – What are the farmers options?



Steps E to G – the farmer compares and decides which options to try



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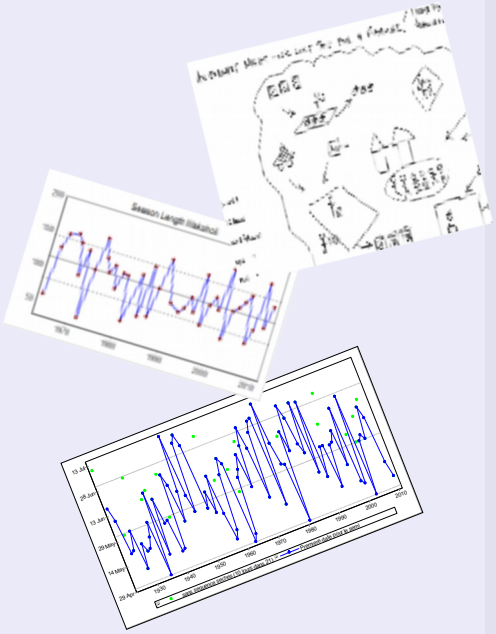

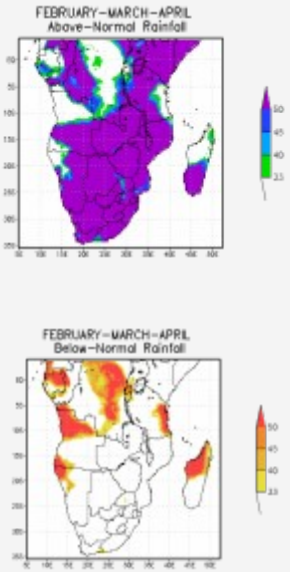

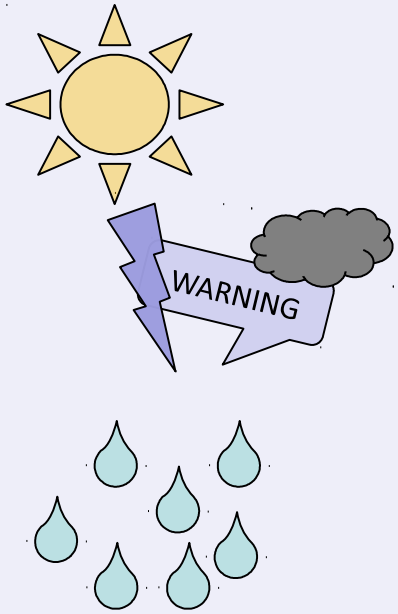

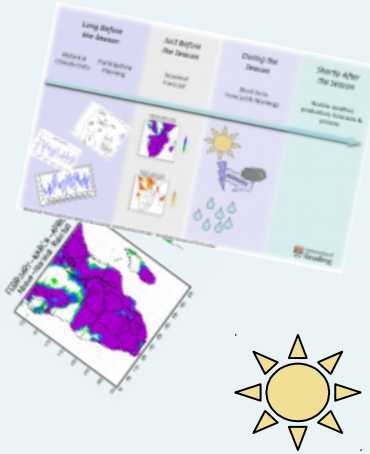

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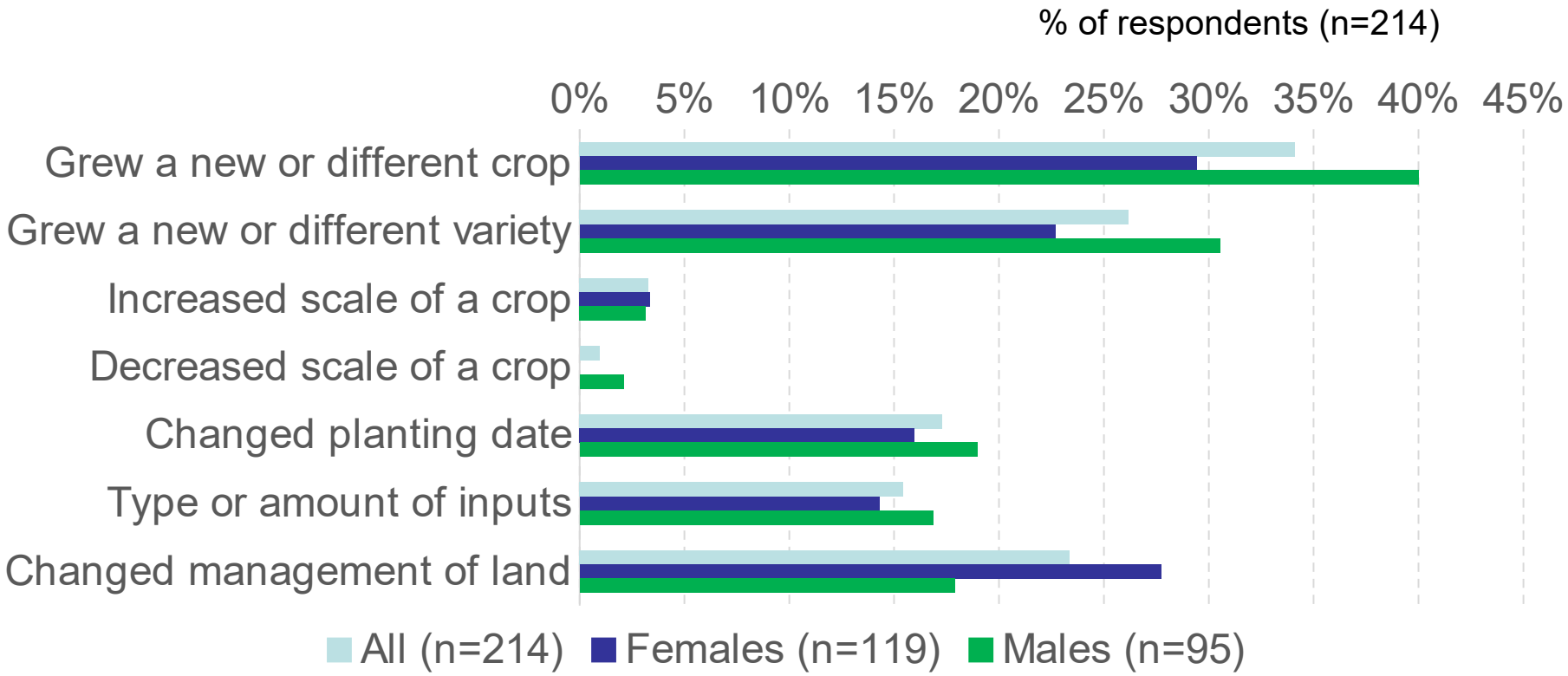
Some results from PICSA roll out

	Ghana (n=416)	Malawi (n=193)	Tanzania (n=611)	Rwanda (n=214)
% making changes in crops, livestock or livelihood enterprises as a result of PICSA training	97%	82%	52%	93%
% using participatory budgets in their planning and decision making	93%	80%	83%	97%
% of farmers using historical climate information in their planning and decision making	93%	86%	85%	98%
% of farmers 'better able to cope with bad seasons caused by the weather' following the training	88%	80%	88%	92%
% of PICSA trained farmers who had shared the information / tools with peers	84%	85%	88%	91%

Changes to crop enterprises in Rwanda



Case studies

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

PICSA in Guyana & the Caribbean

2017

- Scoping visit Guyana
- Work on climate data and PICSA
- Training and ‘pilot’
- Very positive feedback from farmers & other stakeholders
- Works in different contexts

Walker INSTITUTE

Thank you

BRCCC PROGRAMME

Programme for Building Regional Climate Capacity in the Caribbean

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CIMH

GFCS GLOBAL FRAMEWORK FOR CLIMATE SERVICES

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