



Food System Pathways Guidebook

Kiribati

English language



Acknowledgements

The *Food System Pathways Guidebook* was produced by the Australian Centre for International Agriculture Research project, *Transformation Pathways for Pacific Coastal Food Systems* (CLIM-2020-178). It is a partnership between the Cawthron Institute, Live and Learn Environmental Education, University of Technology Sydney, CSIRO and SPC.

We thank community members from Abaiang Island who helped the team design and refine the planning tools in this Guidebook.

We also acknowledge the support of the Abaiang Island Council, the Ministry of Environment, Lands and Agricultural Development, Ministry of Education, the Office of the President, and the Ministry for Culture and Internal Affairs.

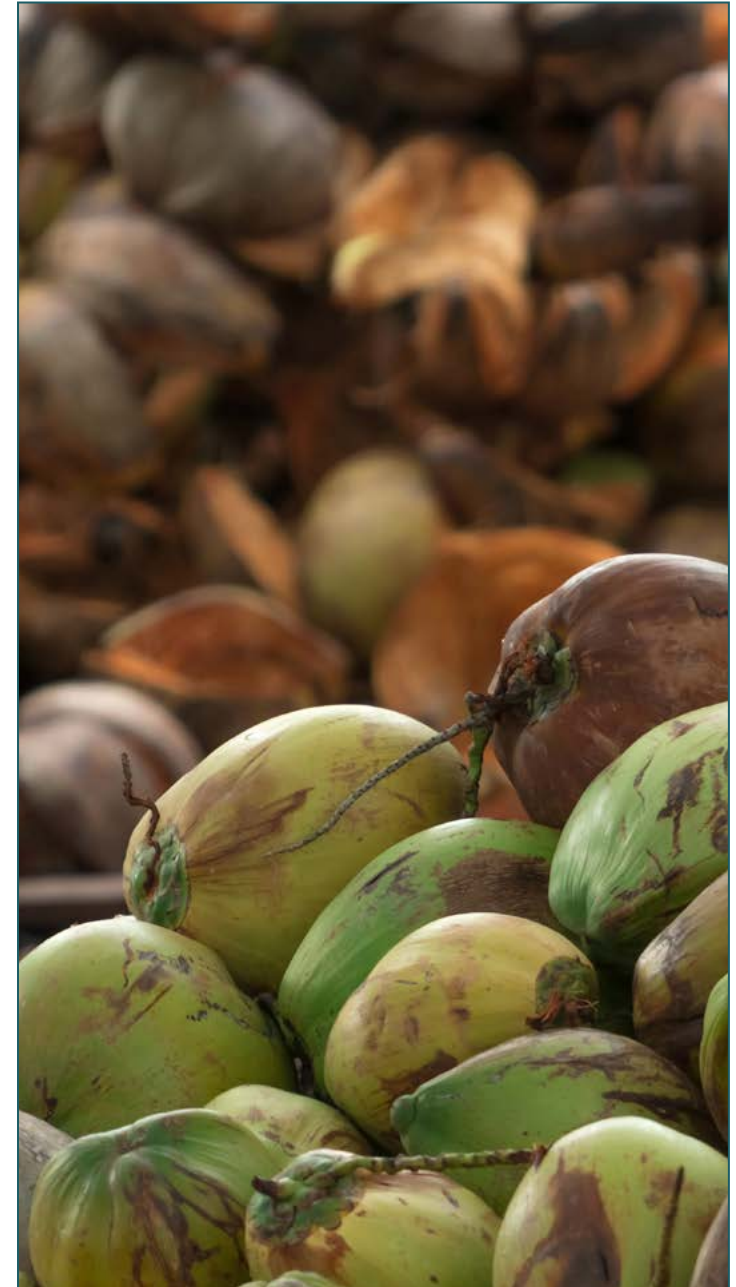
The Board of Live and Learn Environmental Education Kiribati provided valuable advice and guidance throughout the project.

Artwork was created by Natan Itonga.

Graphic design was provided by Kirsten Revell of RevellDesign, and Tom Greenwood of Greenwood Media

Photographs were taken by James Butler, Alaric McCarthy and Leo Dutra.

Suggested citation: Butler, J.R.A., McCarthy, A., Davila, F., Dutra, L., Eriuta, T., Barnabas, T., Hunter, M., Lai, Y., Nenai, L., Lal, R. and Teroroko, T. 2025. *Food System Pathways Guidebook – Kiribati. English Language*. Cawthron Institute, Nelson, New Zealand. 46 pp.





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Introduction

Change is happening faster, and the future is uncertain. Climate change, population growth and technology bring risks, but also opportunities. Shocks like COVID-19, natural disasters and conflict are also affecting the world. Communities must be ready.

This Guidebook aims to support knowledge brokers and facilitators in Kiribati to conduct participatory planning with communities and their partners to understand their food system, anticipate future uncertainty and risk, and design adaptation pathways to transform their food.



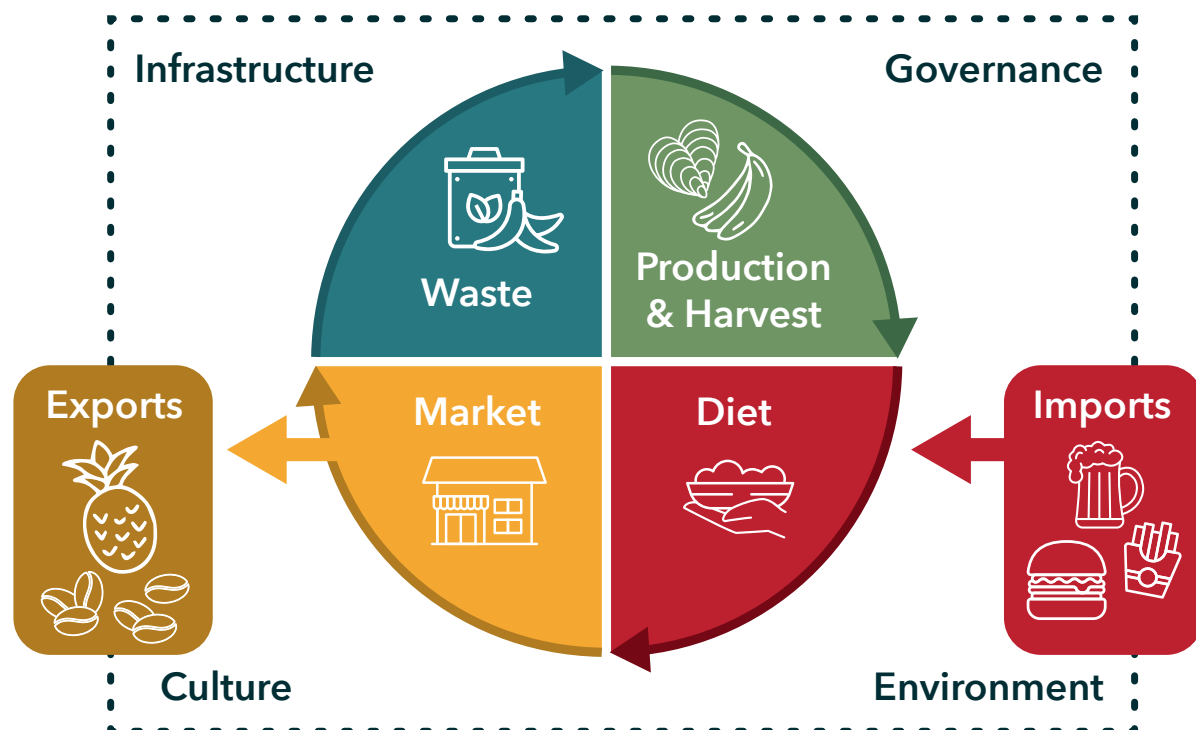
Opposite page:

In Kiribati, there is a traditional ceremony called “kaiwa”, where an expert lights a fire within the “kaiwa” fireplace facing the east as the sun rises. He allows the leaves to burn and form smoke, and then breathes through the smoke. By doing this he can foretell the future, forecasting what lies ahead and how to find the best way forward. This ceremony was important to help seafarers navigate the ocean. The artist, Natan Itonga, has used the ceremony to explain the idea of adaptation pathways (“mwakuri ni kakatauroi”), which is also about planning a route ahead despite future uncertainty.



What is a food system?

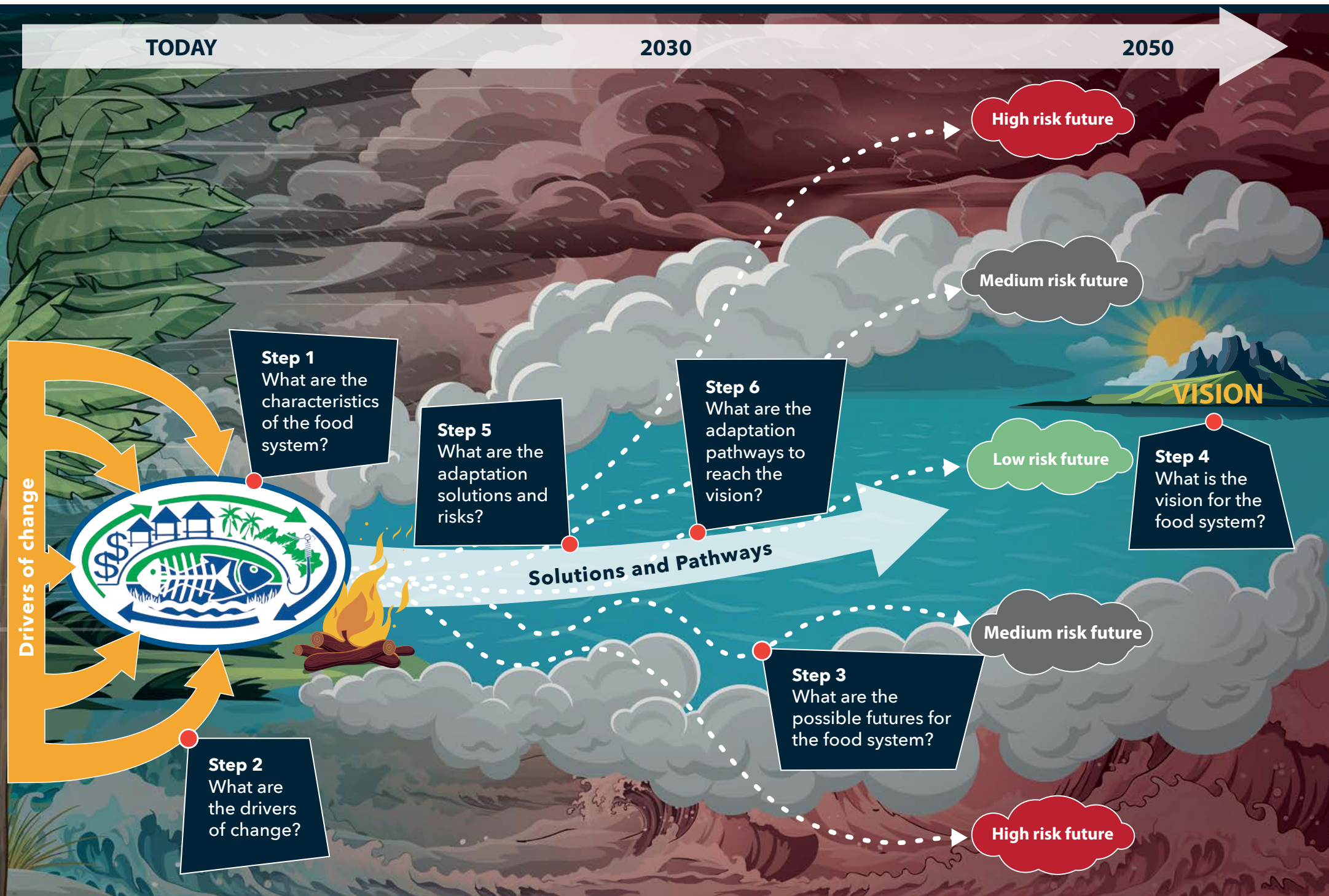
Food systems are critical to communities' nutrition, livelihoods and well-being. A food system can be defined as: "all the elements (environment, people, inputs, processes, infrastructure, institutions, etc.) and activities that relate to the production, processing, distribution, preparation and consumption of food, and the output of these activities, including socioeconomic and environmental outcomes".



For this project, Natan Itonga created the "Uamari" logo to illustrate an island food system in Kiribati.



Learning steps in the planning process



Food system tools

There are nine tools in the steps. These have been designed to encourage learning and knowledge exchange between participants. Most tools are essential to complete each step, but three tools in Step 1 are optional.

If all of the tools are used, the process could take up to 4 days. If only the essential tools are used, the process will take 3 days.

Learning step	Tools	Importance	Time needed
Step 1 What are the characteristics of the food system?	1. Food System Wheel	Essential	2 hours
	2. Historical Timeline	Optional	1 hour
	3. Governance Analysis	Optional	2 hours
	4. Causal Loop Analysis	Optional	3 hours
Step 2 What are the drivers of change?	5. Food System Drivers	Essential	3 hours
Step 3 What are the possible futures for the food system?	6. Future Scenarios	Essential	3 hours
Step 4 What is the vision for the food system?	7. Food System Vision	Essential	2 hours
Step 5 What are the adaptation solutions and risks?	8. Solutions and Risks	Essential	3 hours
Step 6 What are the adaptation pathways to reach the vision?	9. Adaptation Pathways	Essential	4 hours



Step 1 What are the characteristics of the food system?

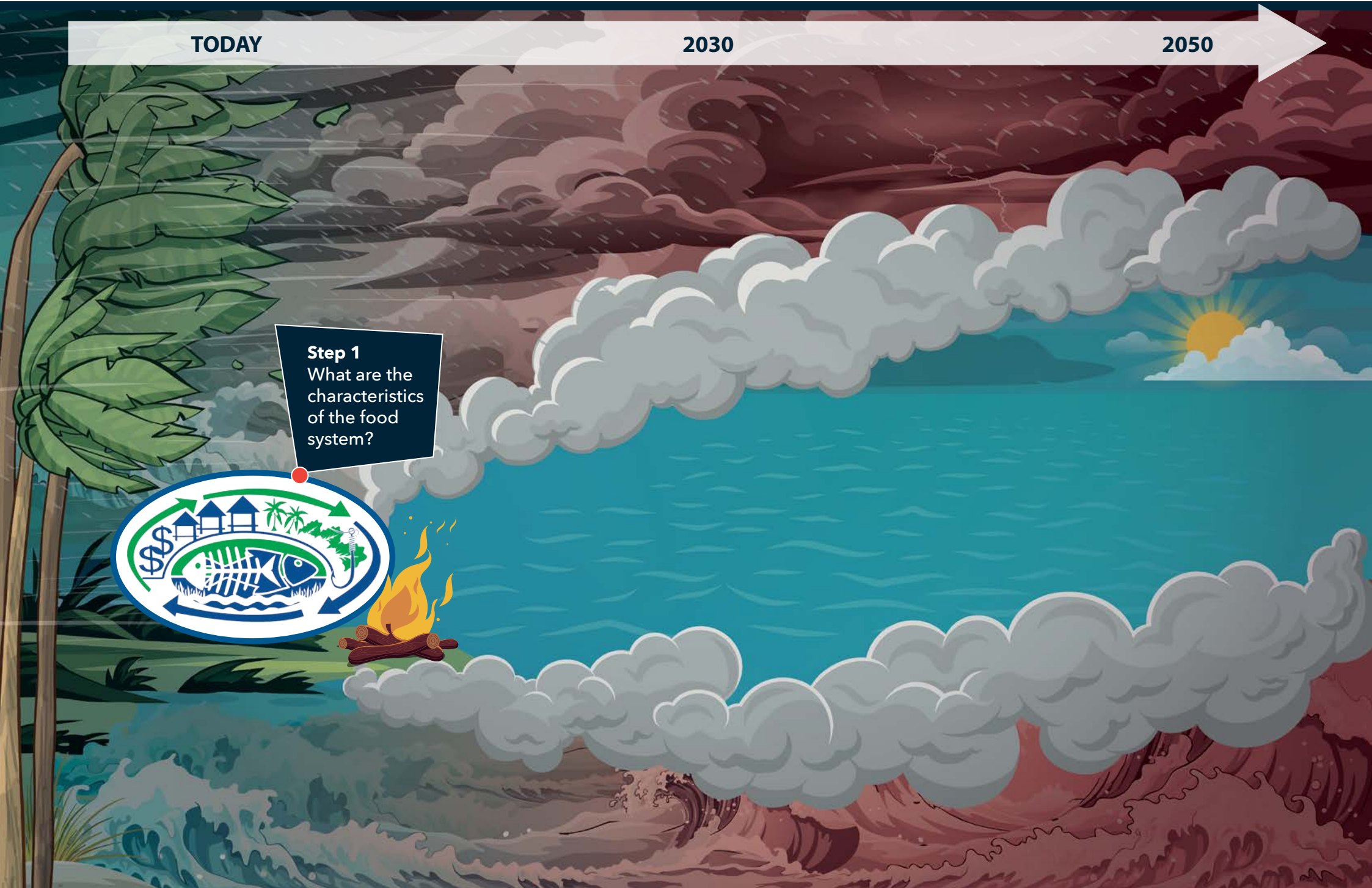
TODAY

2030

2050

Step 1

What are the characteristics of the food system?



Tool 1: Food System Wheel

(Essential)

Learning outcomes for participants

1. They understand what a food system is
2. They can map their food system
3. They can identify the most important food items
4. They can identify food system problems
5. They understand their ability to respond to shocks and change

Notes for facilitators

- This tool is essential – it starts the conversation about food systems
- Remember to include human waste as 'waste'
- Start to identify the pressures and shocks people can respond to locally



Materials:

Flip chart paper
Coloured post-it notes
Pens



Time needed:

2 hours

Food System Wheel



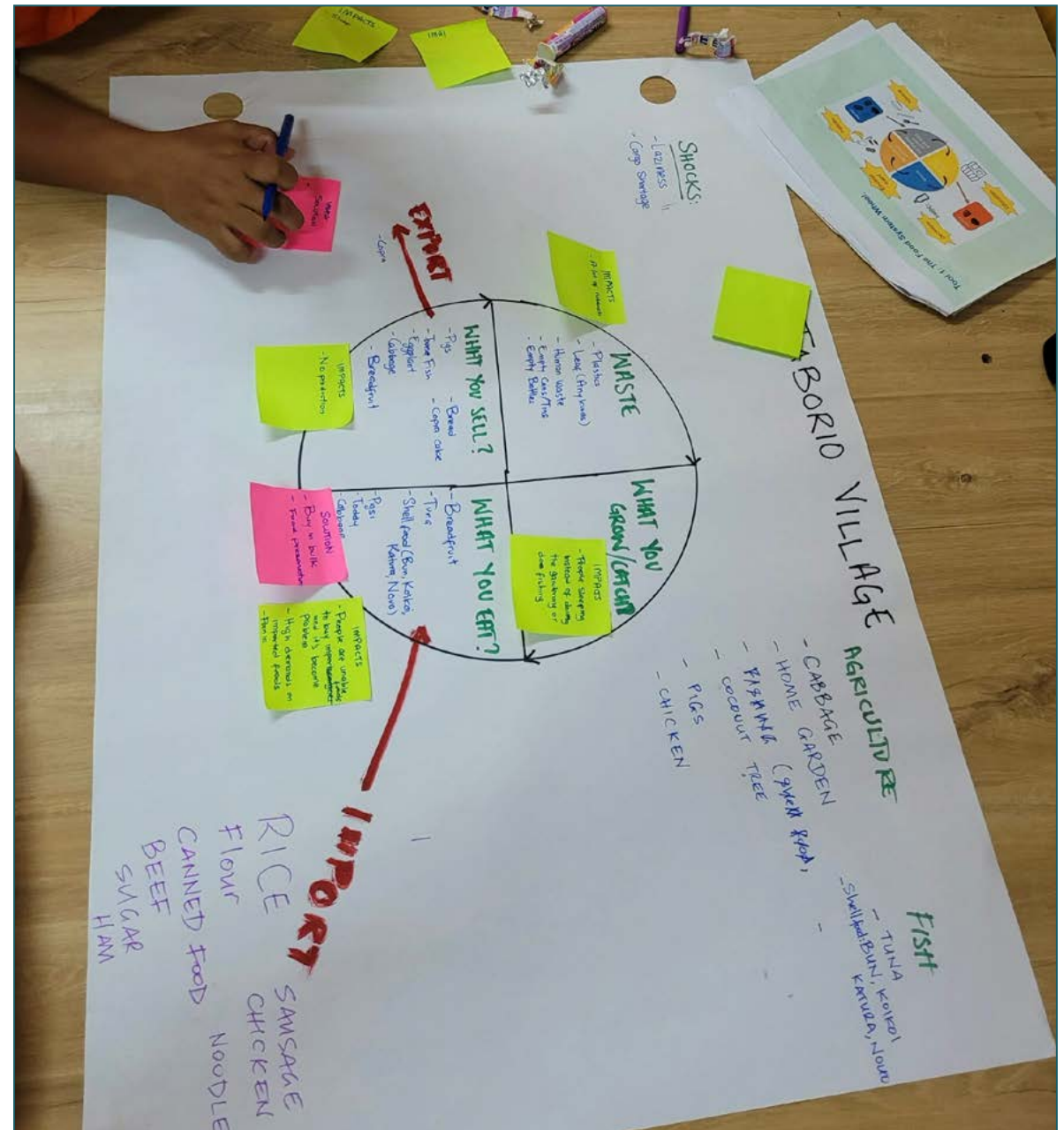
Exercise 1

- Draw and fill in the wheel.
- Highlight the most important foods in the diet



Exercise 2

- Identify shocks and pressures and how they have affected the food system (yellow post-its)



Exercise 3

- Identify how the community adapted to the shocks and pressures (pink post-its)



Tool 2: Historical Timeline

(optional)

Learning outcomes for participants

1. They understand past changes to the community that were 'transformations'
2. They understand how the changes affected the food system
3. They understand how food systems could change in the future
4. Elders can educate youth about traditional knowledge and history

Notes for facilitators

- This tool is optional – only use it if you have time
- You can use this tool to engage elders with youth to exchange knowledge
- Participants can choose any start date for the timeline
- Dates don't have to be accurate



Materials:

Flip chart paper
Coloured post-it notes
Pens

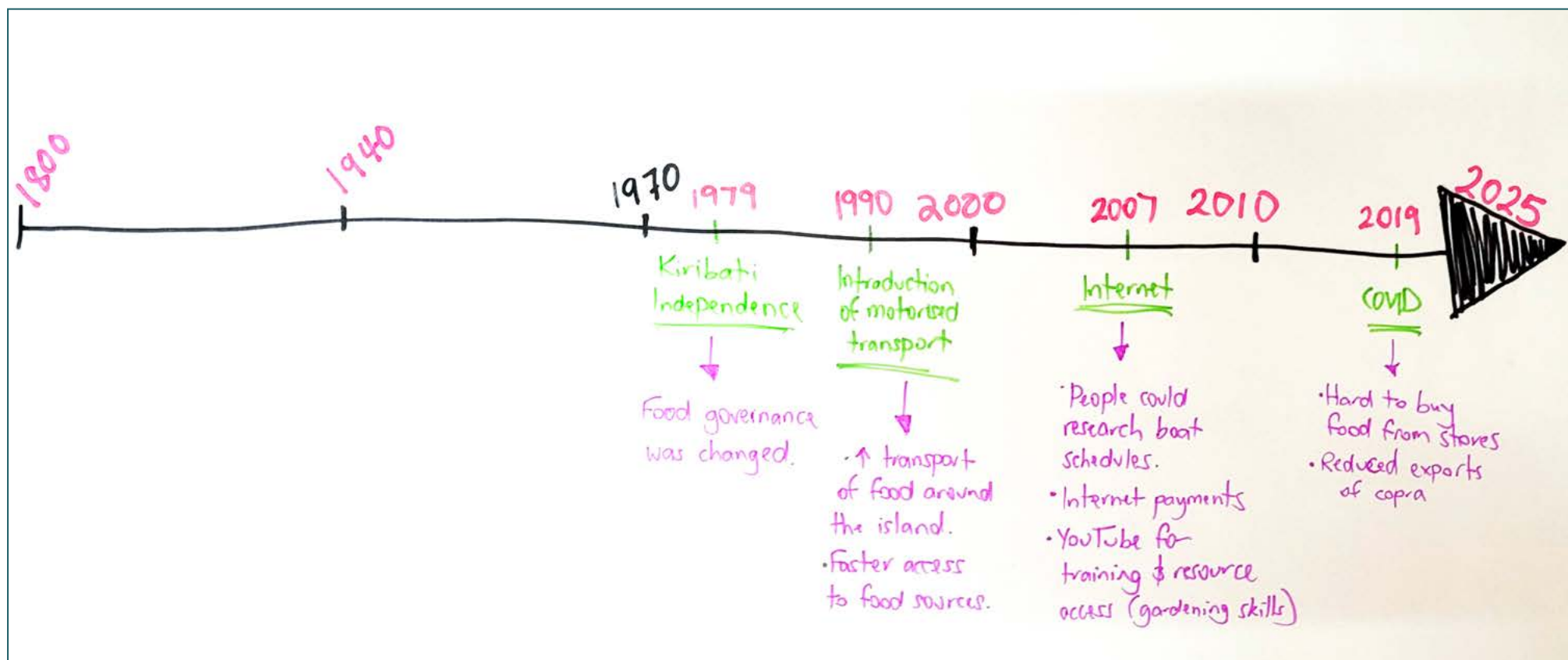


Time needed:

1 hour

Exercise 1

- Ask groups to draw a timeline with key events and how they changed the food system



Tool 3: Governance Analysis

(optional)

Learning outcomes for participants

1. They are aware of the governance structures that influence decision-making about the food system
2. They understand who is the most powerful and influential in food system decisions

Notes for facilitators

- This tool is optional – only use it if you have time
- You can run this exercise before workshops to identify who to invite
- Discussions about who is most powerful may be sensitive



Materials:

Flip chart paper
Coloured post-it notes
Pens
Reports, management plans

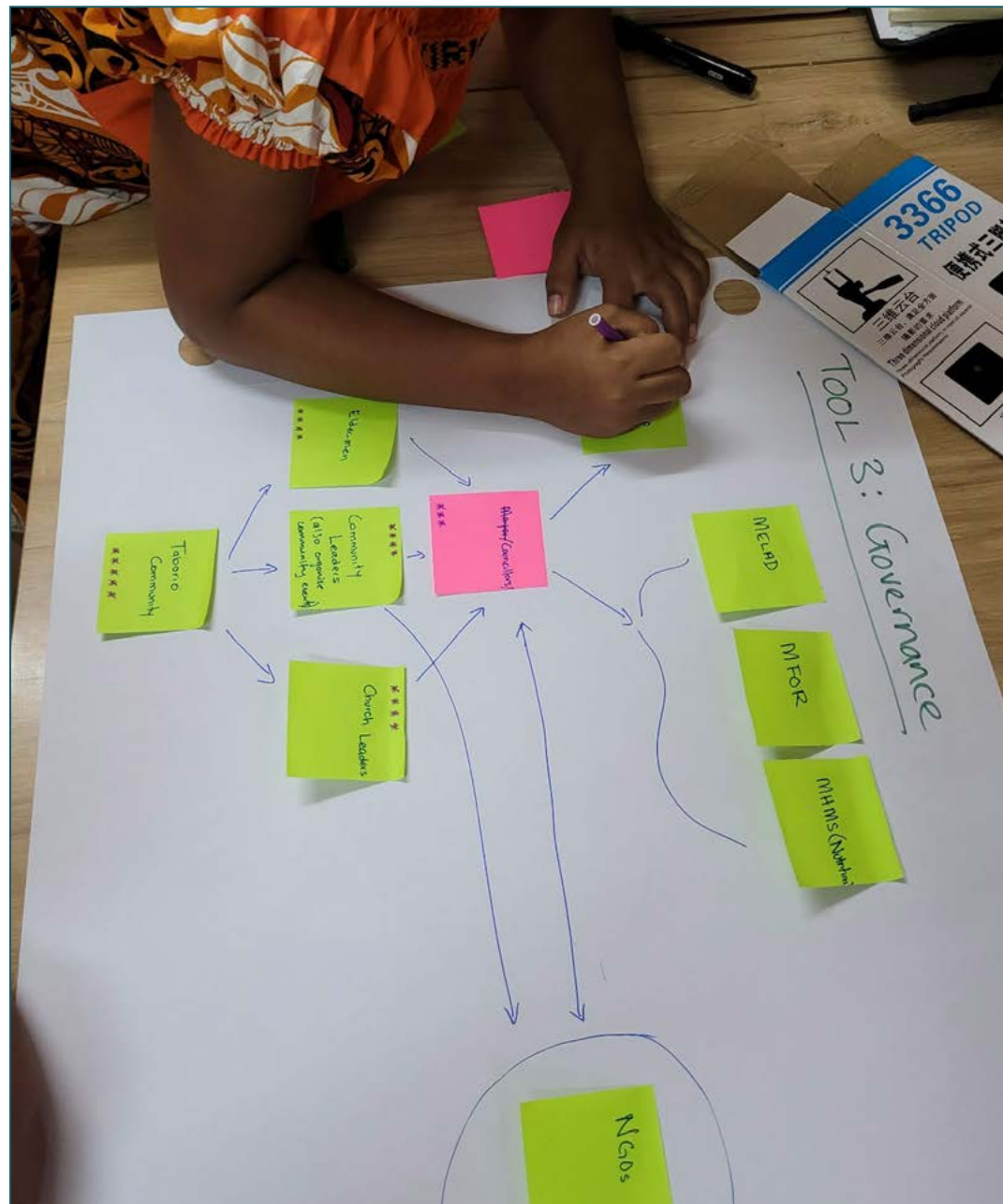


Time needed:

2 hours

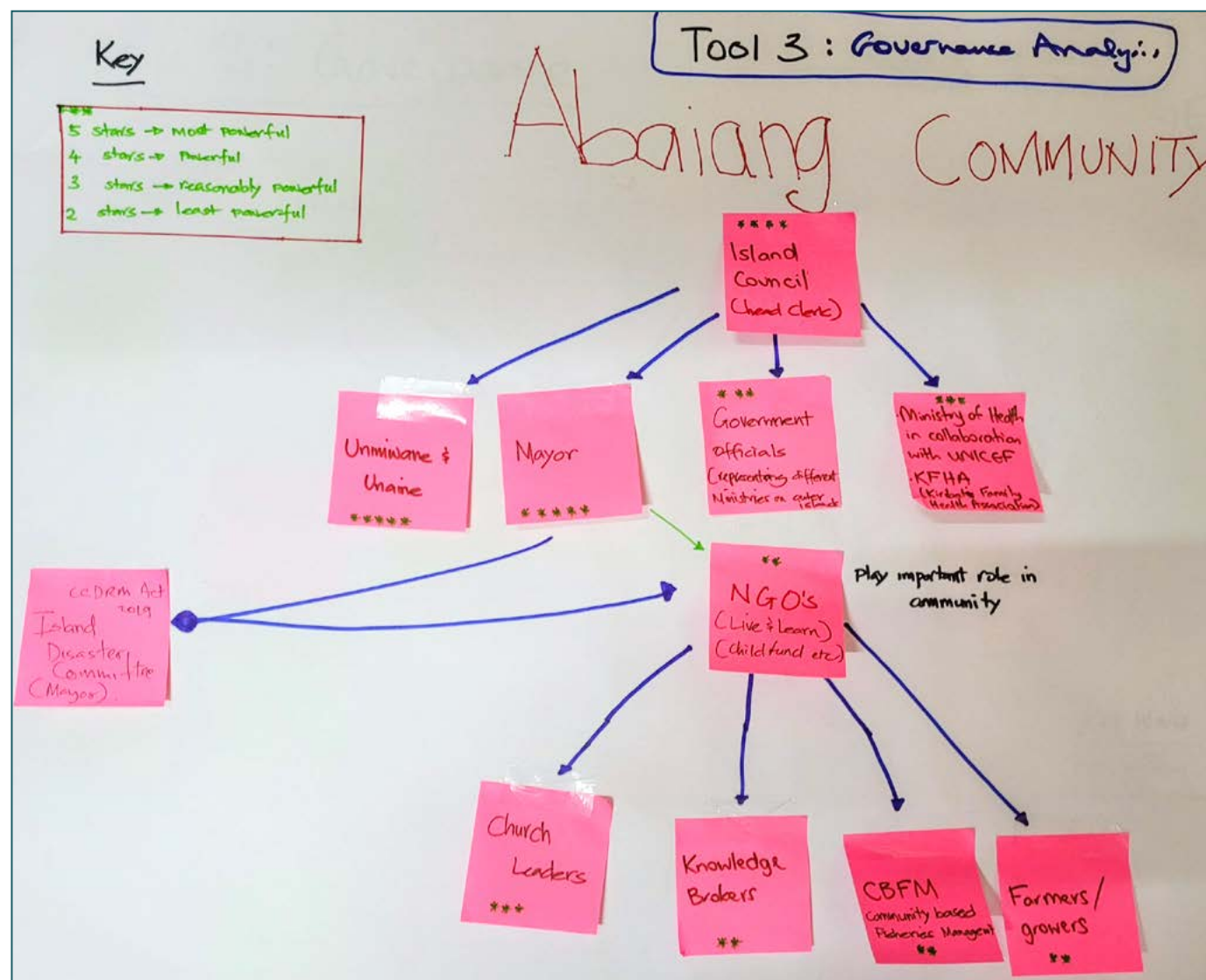
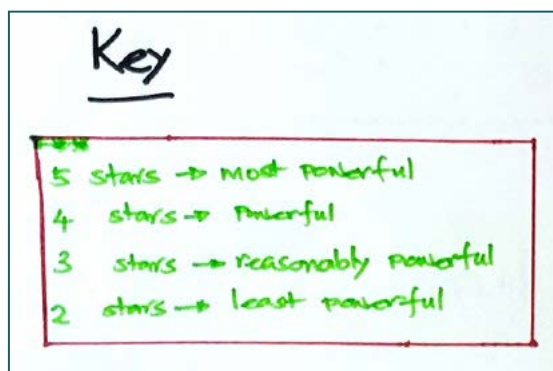
Exercise 1

- Draw the governance structure



Exercise 2

- Using stars, rank the power of the different groups



Tool 4: Causal Loop Analysis

(optional)

Learning outcomes for participants

1. They understand the root causes of food system problems, and solutions to solve them
2. They understand which decision-makers should be engaged in pathways planning

Notes for facilitators

- This tool is optional – only use it if you have time
- It is complicated – assess the capacity of your participants before you use it
- Link the solutions to Step 5 Solutions and Risks
- Cross-check the results with the Governance Analysis



Materials:

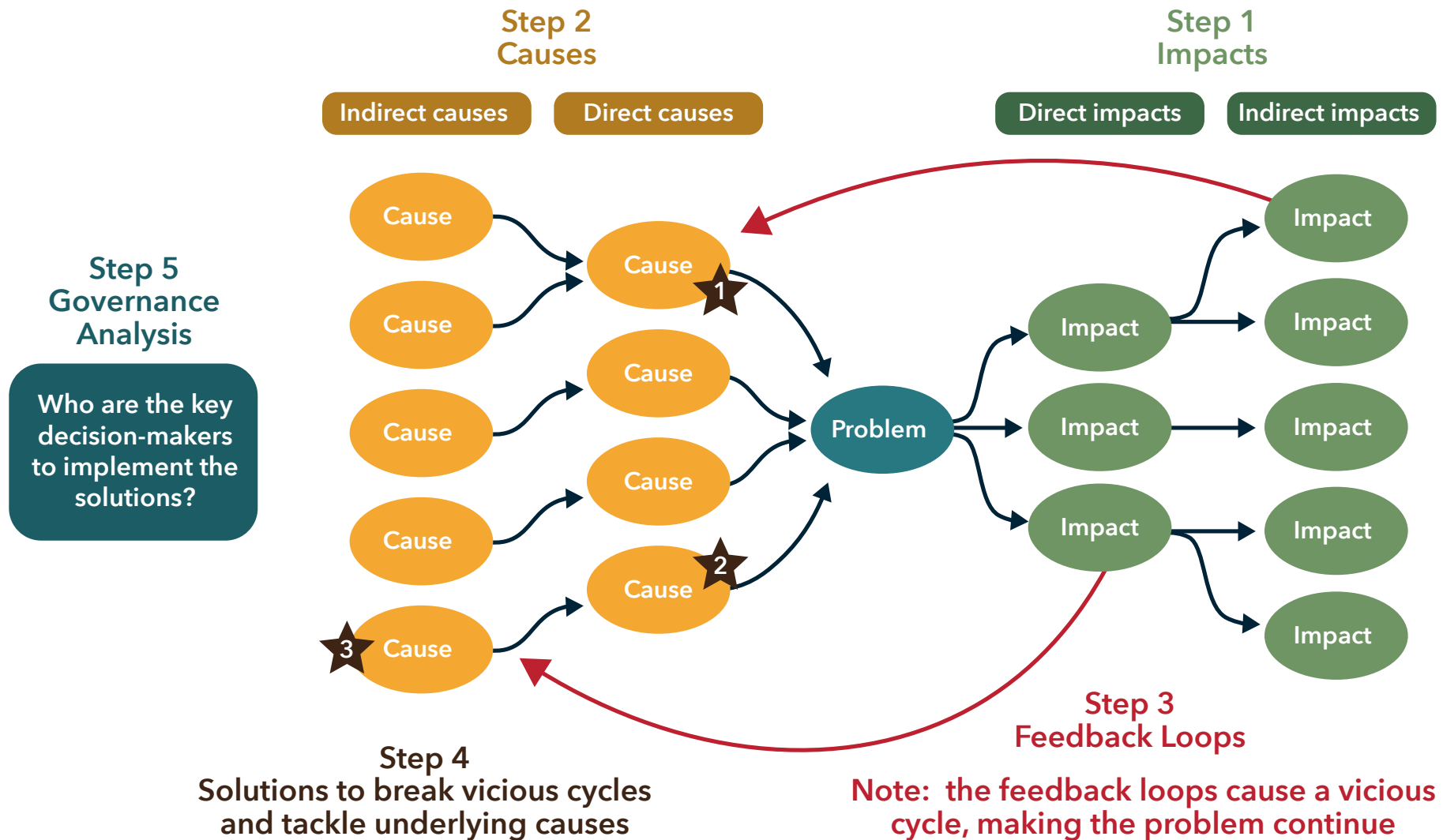
Flip chart paper
Coloured post-it notes
Pens



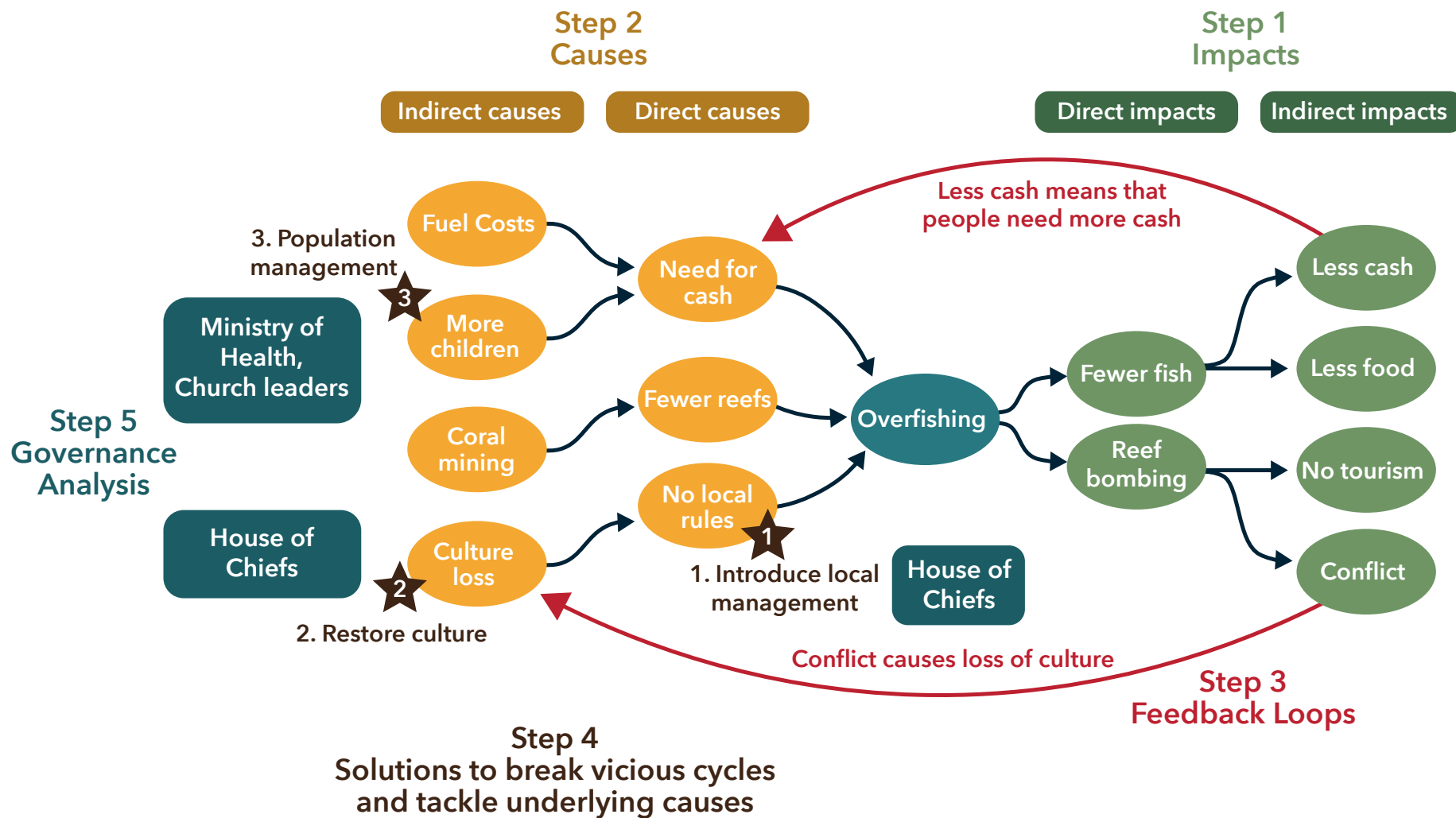
Time needed:

3 hours

Causal Loop Analysis process

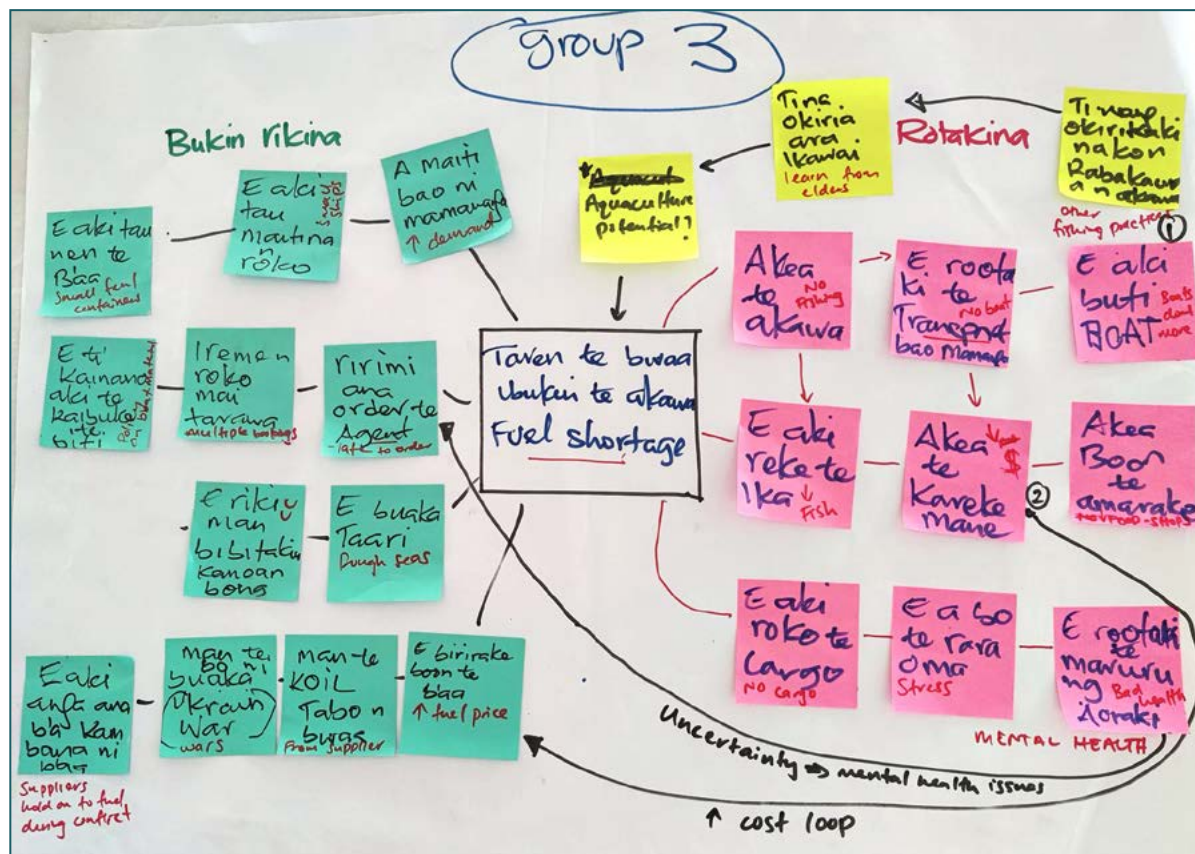


Example: overfishing



Exercise 1

- Identify food system problems to focus on



Exercise 2

Step 1: Add 'downstream' impacts

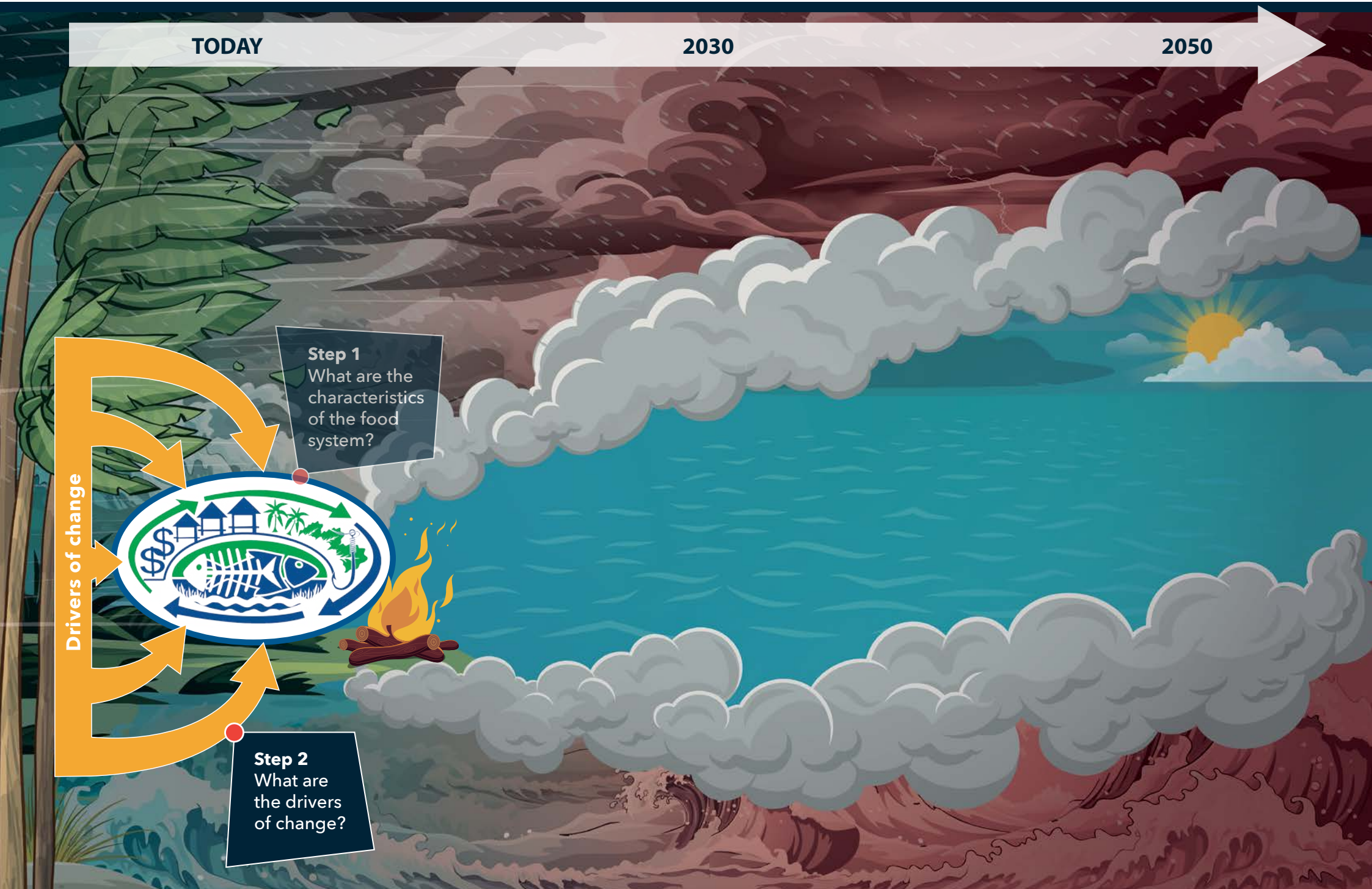
Step 2: Add 'upstream' causes

Step 3: Draw feedback loops that link impacts to causes

Step 4: Identify solutions that will break the feedback loops

Step 5: Identify key decision-makers responsible for causes and solutions

Step 2 What are the drivers of change?



Tool 5: Food System Drivers

(essential)

Learning outcomes for participants

1. They understand the drivers of change of the food system
2. They prioritise which drivers are most important

Notes for facilitators

- A driver of change is any natural or human-induced factor that directly or indirectly causes a change in the food system
- Decide how to bring outside knowledge about global and national change (e.g. climate change and population projections, diet changes, technology, economics)
- Allow time to present this
- You may have to manage power dynamics between external experts and communities
- You need to prepare the whiteboard or wall with driver themes before the exercise
- Link this exercise back to the results from the Food Systems Wheel and Causal Loop Analysis in Step 1



Materials:

Whiteboard or wall | Flip chart paper
Coloured post-it notes | Pens
Voting stickers
Projector, laptop and screen
for expert presentations

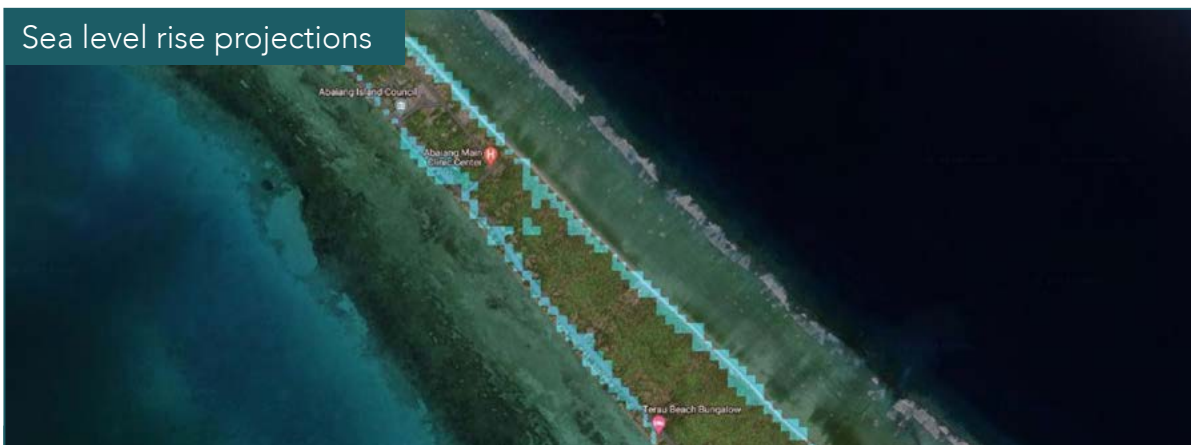


Time needed:
3 hours

Exercise 1

- Present external knowledge on national and global drivers of change, and their impacts on the food system
- Climate change projections, sea level rise projections, population projections, diet and health statistics are important sources of information

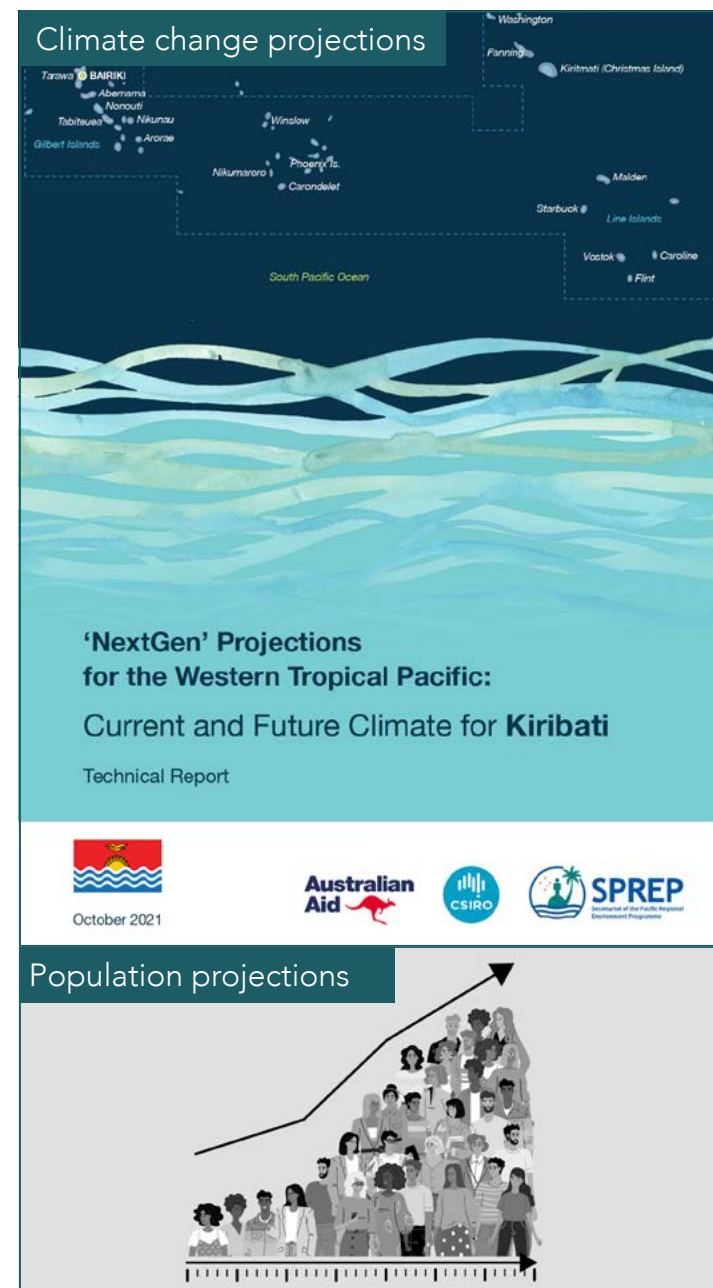
Sea level rise projections



Diet and health statistics



Climate change projections



Exercise 2

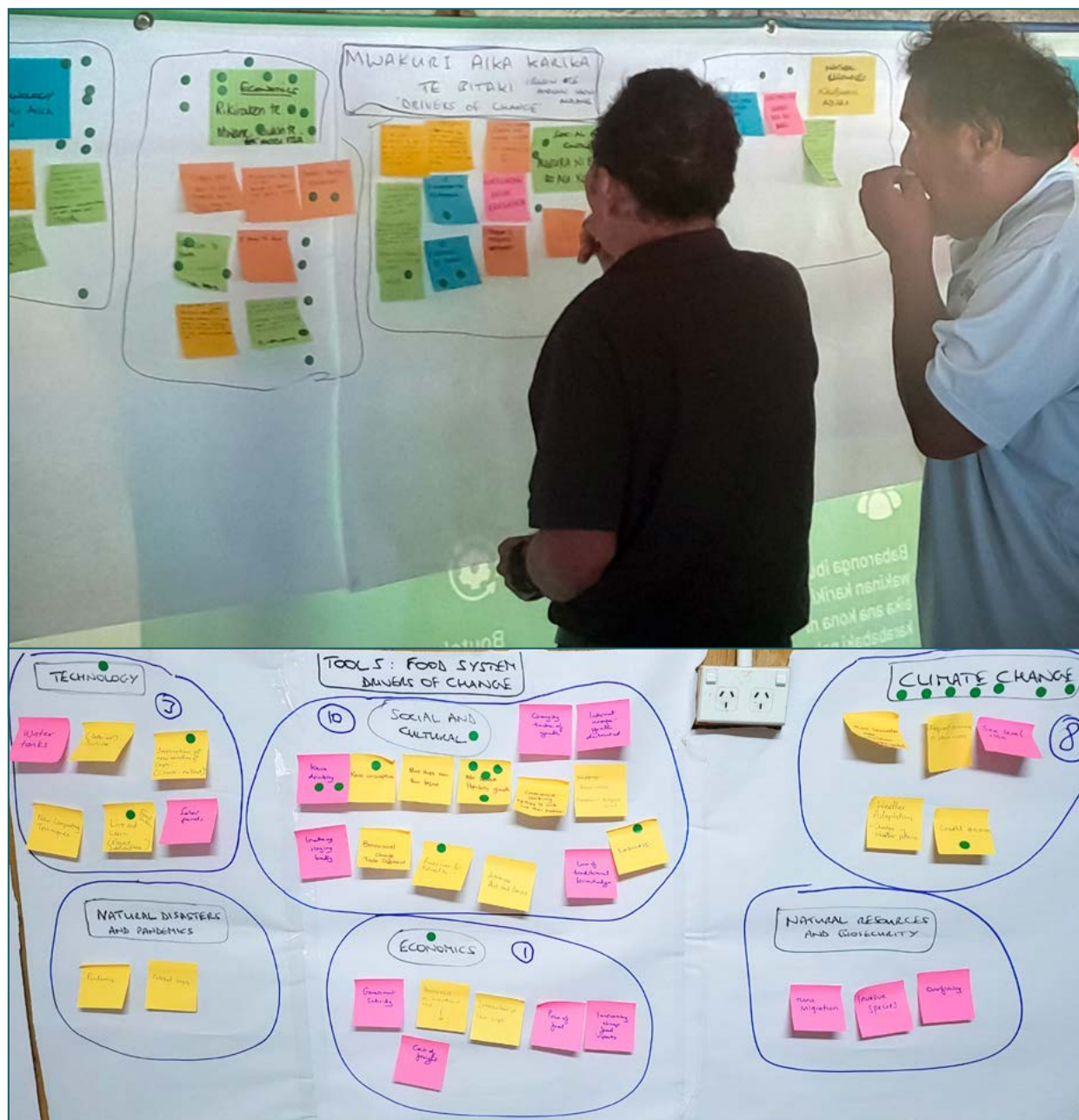
- Groups discuss drivers and write one driver on each post-it note, as many as they like

Exercise 3

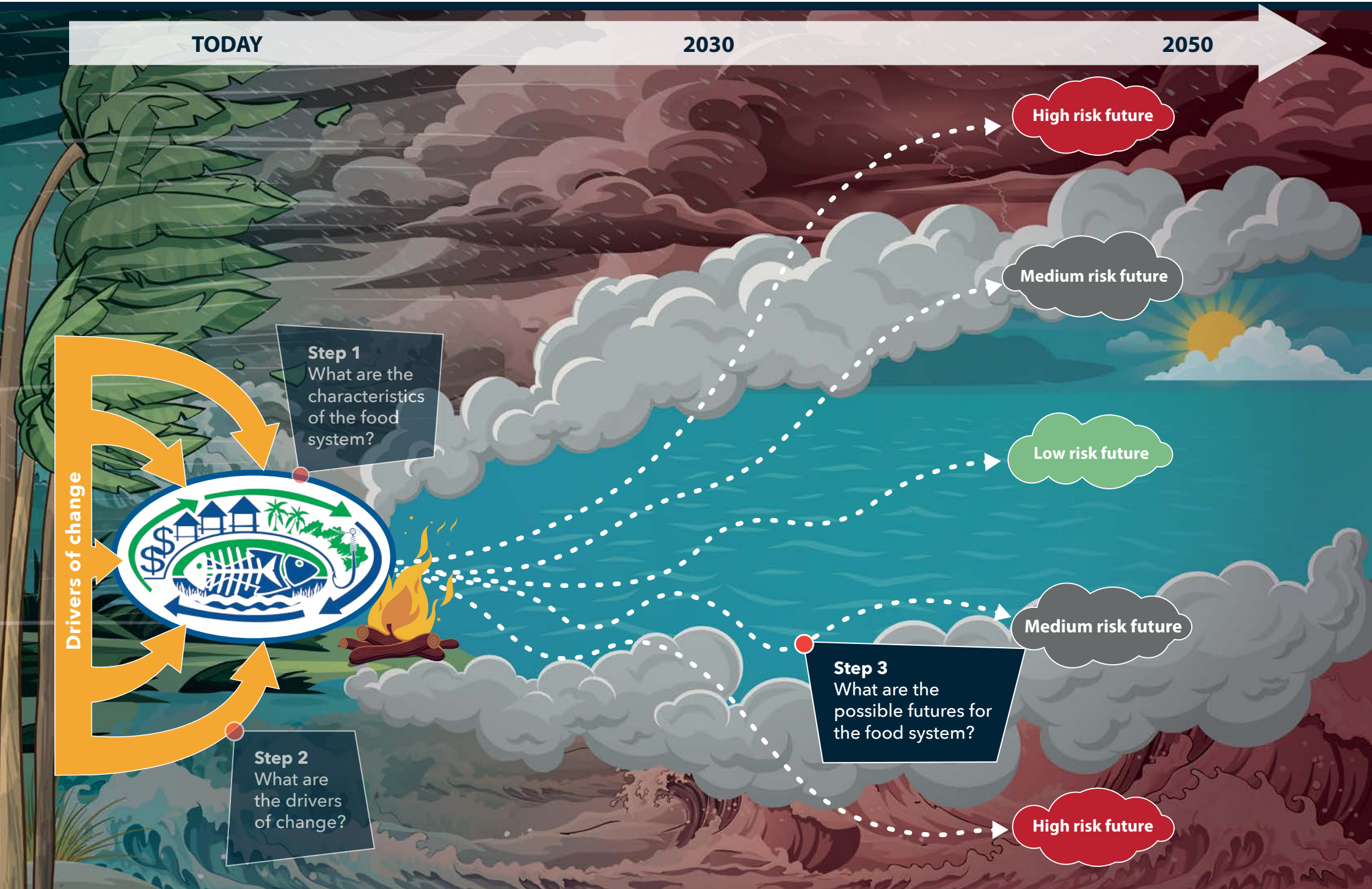
- Place post-it notes on a whiteboard under six driver themes:
 - » Climate change
 - » Social and cultural
 - » Economics
 - » Natural resources and biosecurity
 - » Natural disasters and pandemics
 - » Technology

Exercise 4

- Each person votes for the two most important drivers with voting stickers. Then count the votes for each theme and identify the most important drivers
- The two most important driver themes will be used in Tool 6 Future Scenarios



Step 3 What are the possible futures for the food system?



Tool 6: Future Scenarios

(essential)

Learning outcomes for participants

1. They understand future uncertainty and risk
2. They think about the major drivers of the food system
3. They recognise the drivers that they can control, and those they can't

Notes for facilitators

- Use the two most important driver themes from Step 2 to draw the scenario matrix
- Write the most positive and most negative features of the drivers at the end of each axis in the scenario matrix
- Put the scenario matrix on the wall and explain where the drivers came from
- Ask participants to focus on the same future year (e.g. 2050) for their scenarios
- Highlight the difference between the drivers that they can control, and those they can't



Materials:

Flip chart paper
Pens

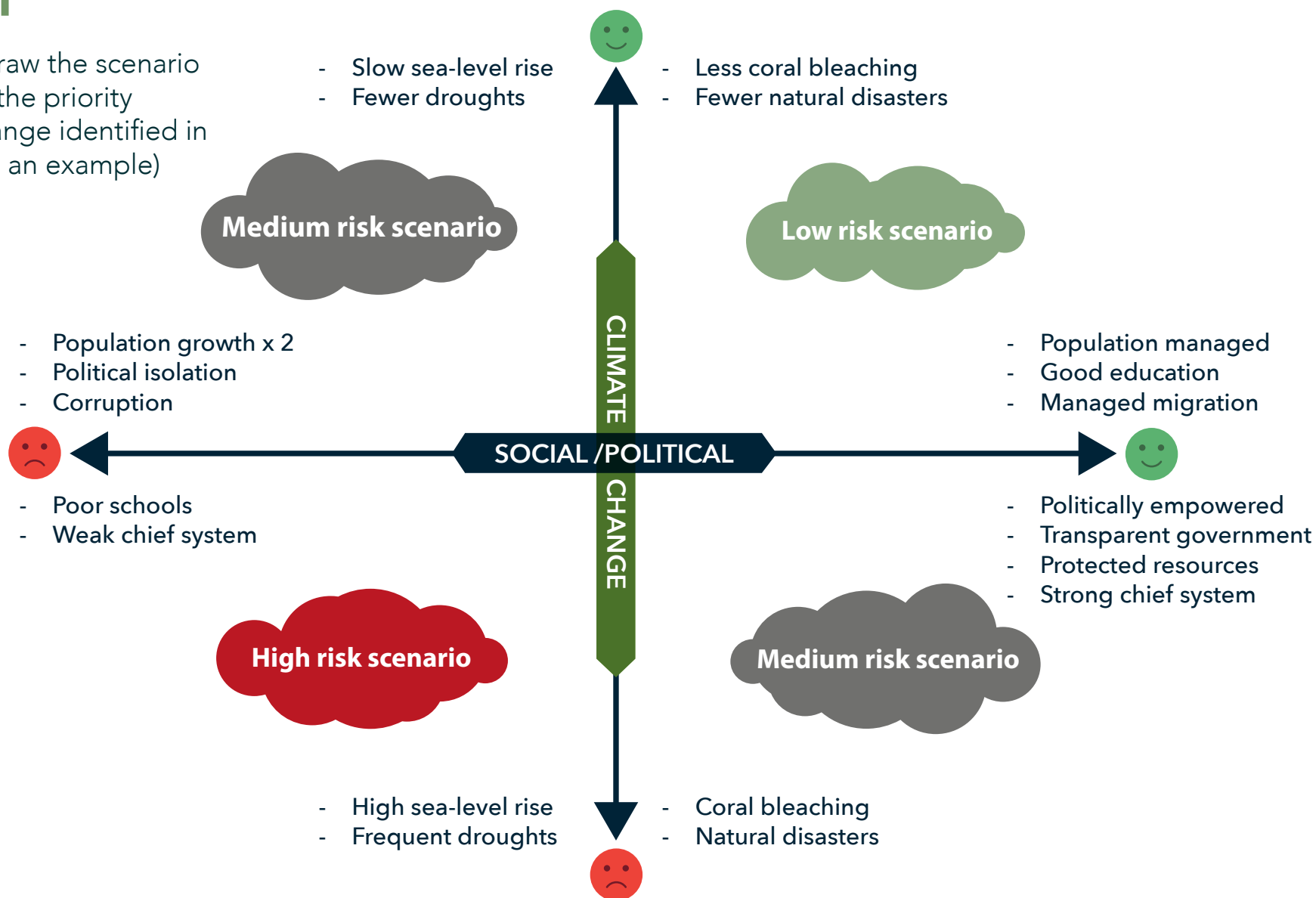


Time needed:

3 hours

Exercise 1

- Facilitators draw the scenario matrix using the priority drivers of change identified in Step 2 (this is an example)

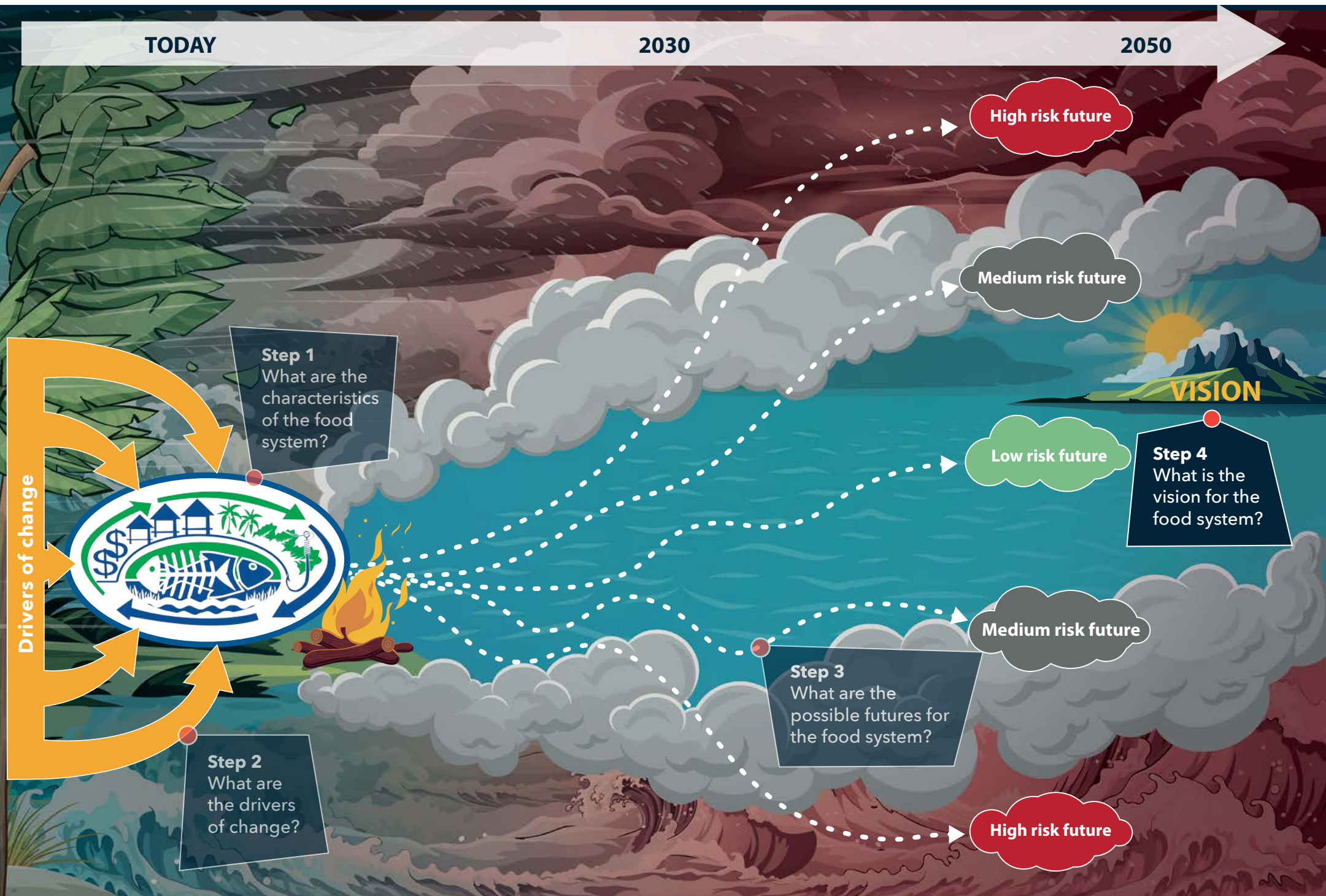


Exercise 2

- Allocate one scenario to each group, and ask them to draw a picture, give it a year and a name



Step 4 What is the vision for the food system?



Tool 7: Food System Vision

(essential)

Learning outcomes for participants

1. They agree a vision of their desired transformed food system
2. They think about future possibilities and hope
3. They think about the whole system
4. They think about future generations

Notes for facilitators

- Set the vision year to be the same as the scenarios in Step 3 (e.g. 2050)
- Select the favourite vision with a vote, or ask an artist to combine the visions later



Materials:

Flip chart paper
Pens



Time needed:

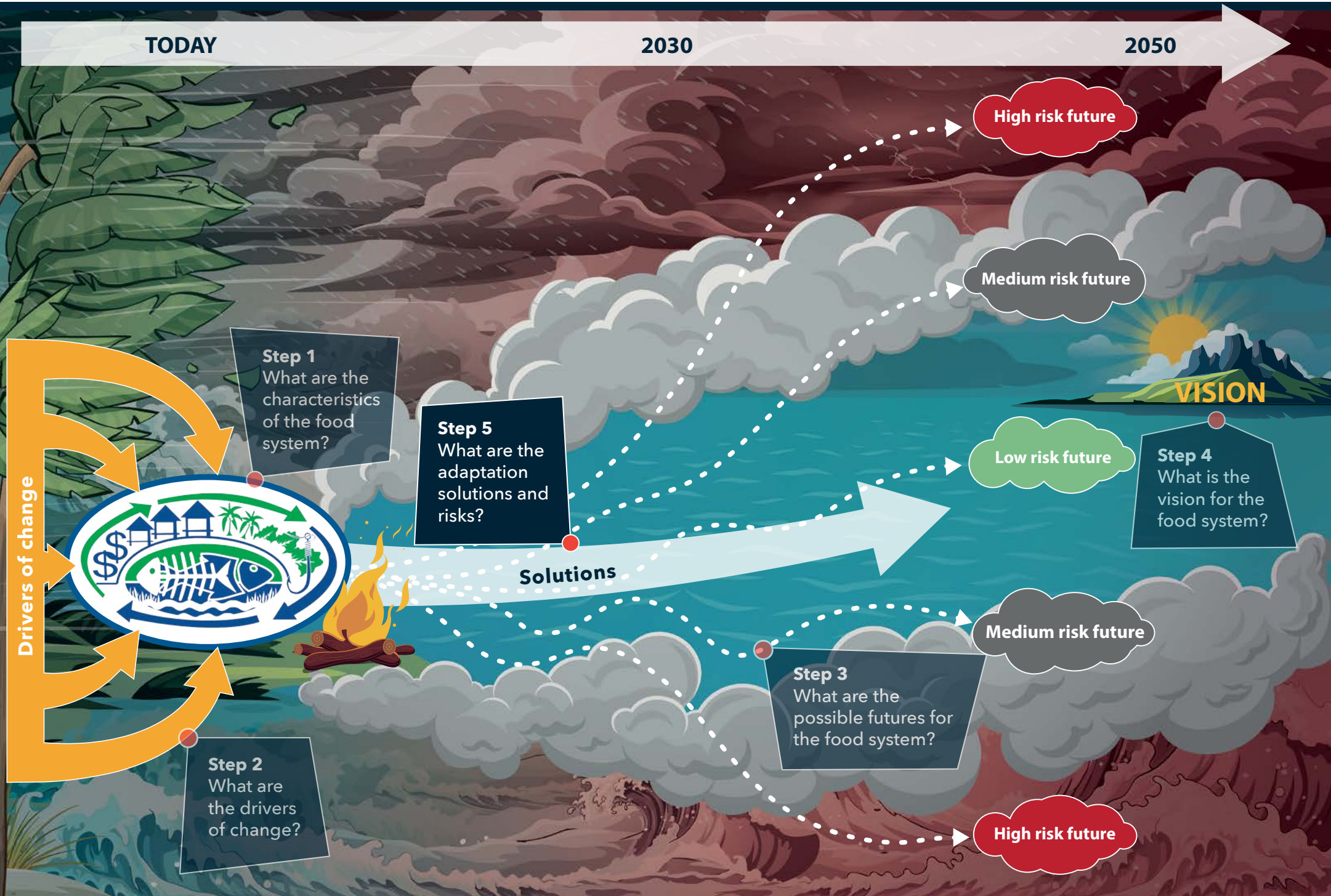
2 hours

Exercise 1

- Ask each group to draw a vision for a year in the future (e.g. 2050)



Step 5 What are the adaptation solutions and risks?



Tool 8: Solutions and Risks

(essential)

Learning outcomes for participants

1. They identify solutions that are low risk, 'no regrets' and flexible that can achieve the Step 4 vision
2. They identify more risky solutions which may also be important

Notes for facilitators

- Decide how to bring outside knowledge about innovations and ideas
- Allow time to present this
- You may have to manage power dynamics between external experts and communities
- Prepare the risk/time sheets before the exercise
- Include the solutions from the Food Systems Wheel and Causal Loop Analysis in Step 1



Materials:

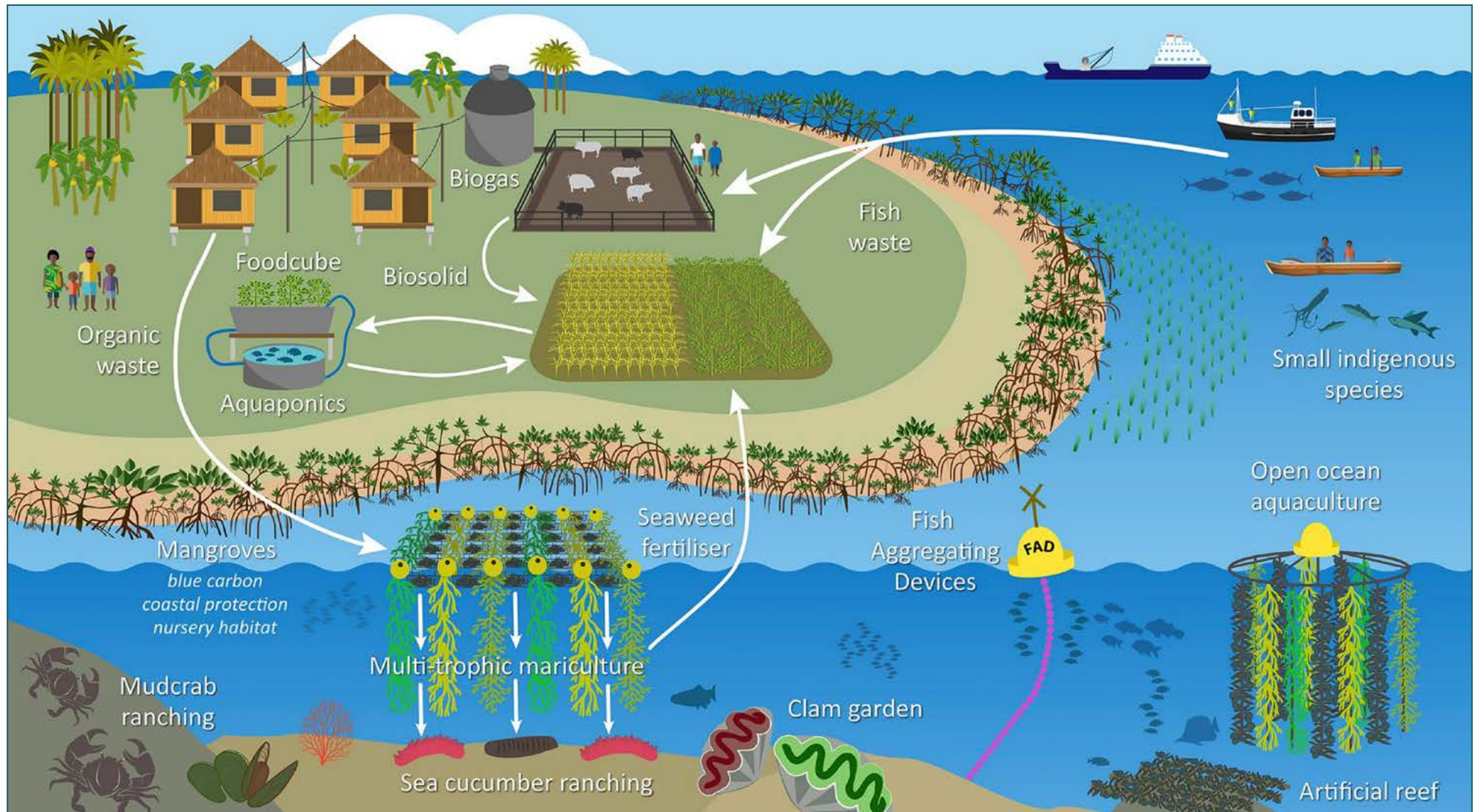
Flip chart paper
Coloured post-it notes | Pens
Projector, laptop and screen
for expert presentations?



Time needed:
3 hours

Exercise 1

- Present external knowledge on food system innovations (this is an example)



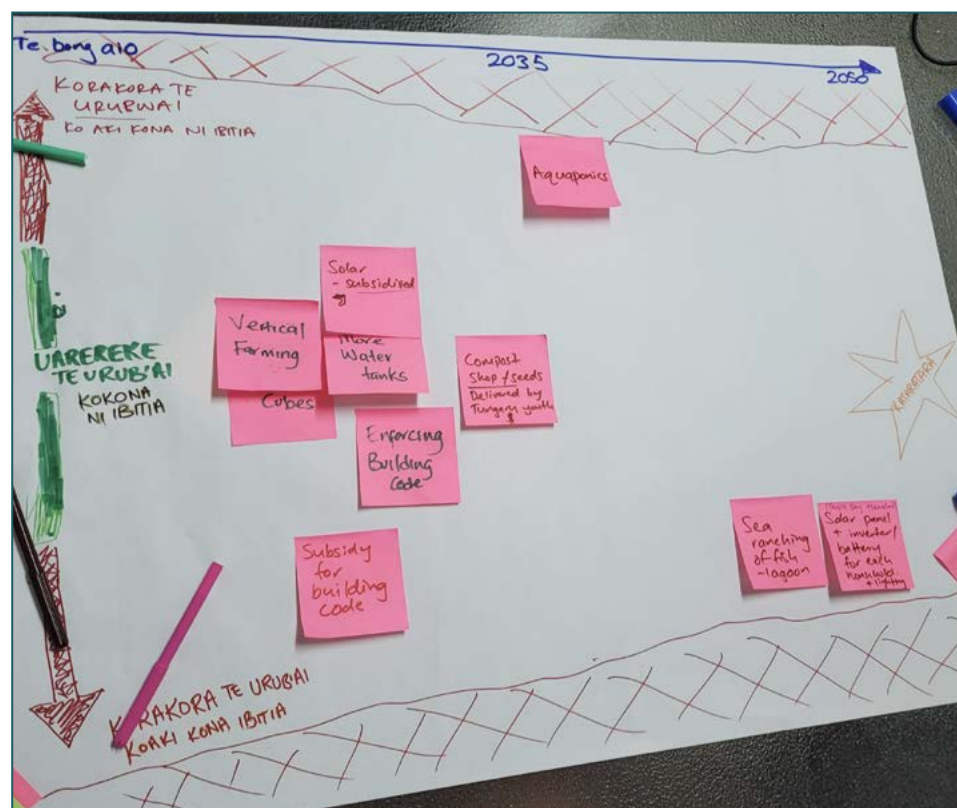
Exercise 2

- Facilitators draw and explain the risk/time sheets



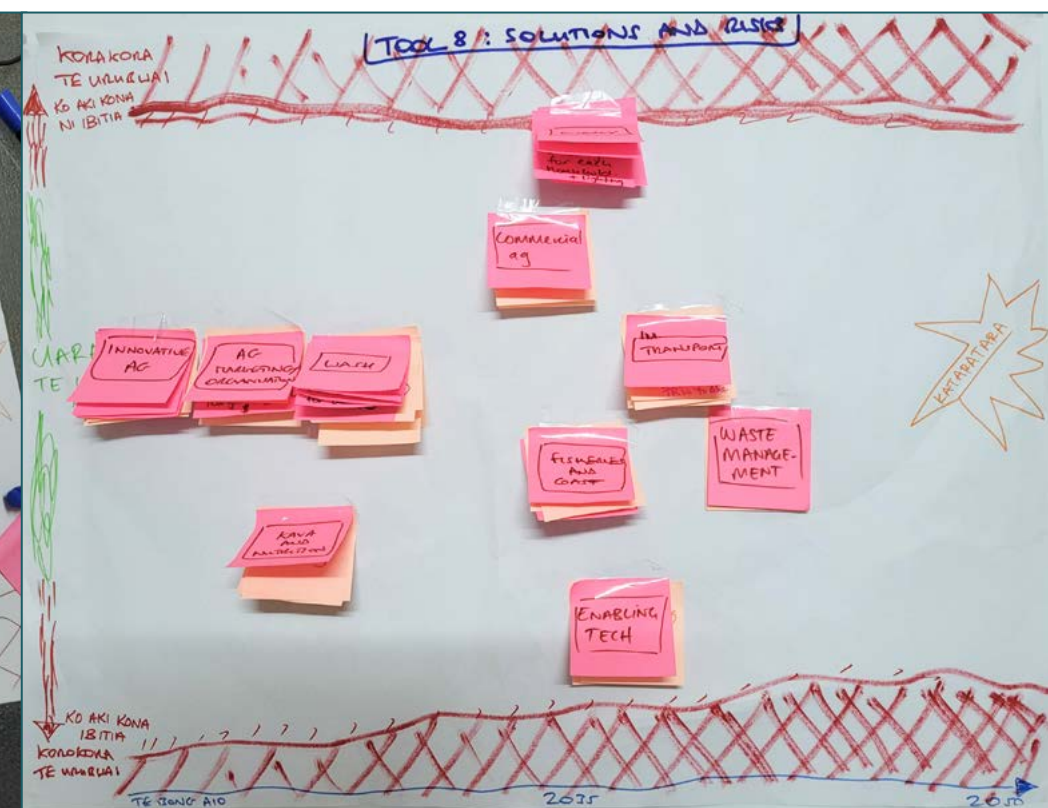
Exercise 3

- Groups write their solutions on post-it notes and place them on the risk/time sheet

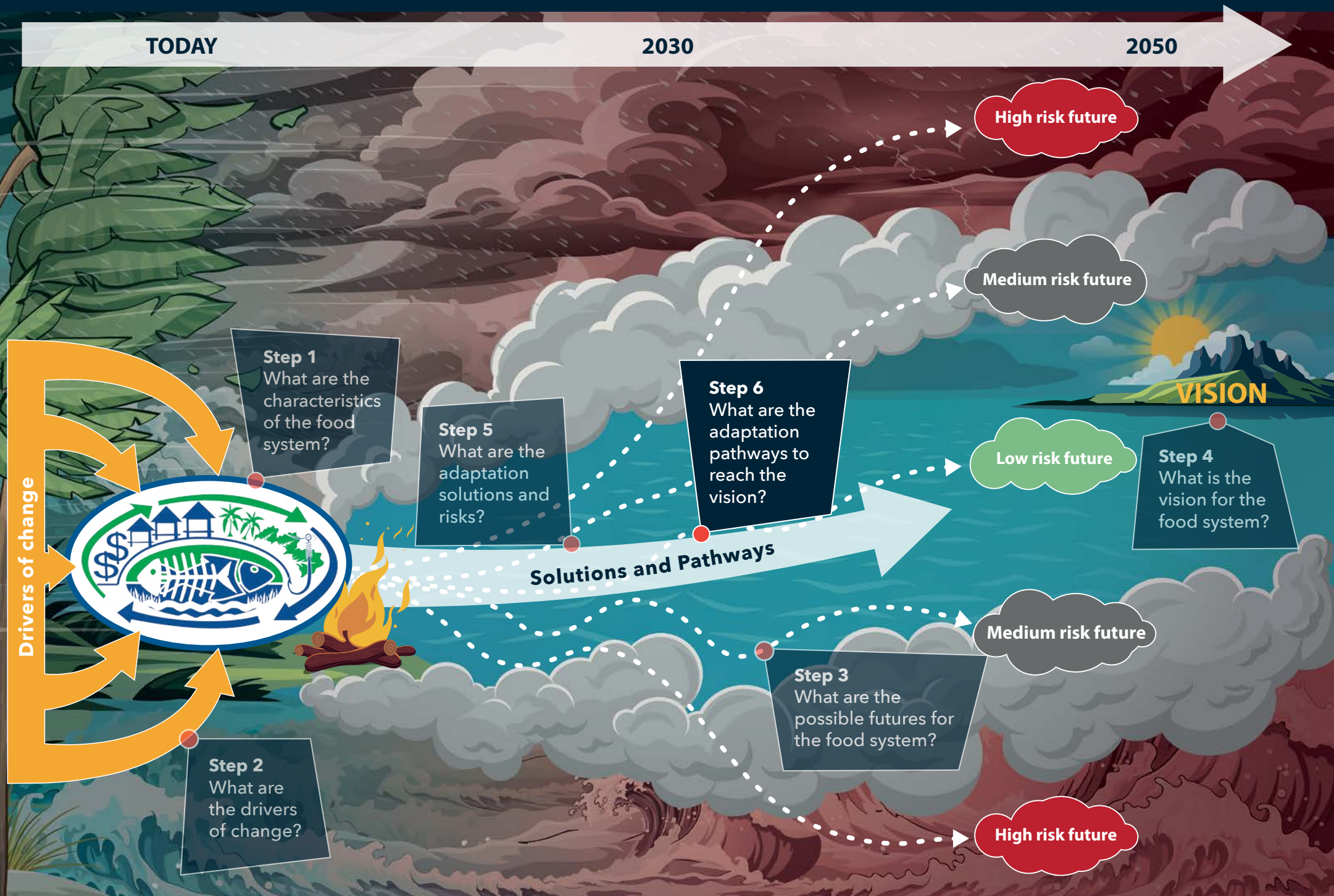


Exercise 4

- Facilitators aggregate all groups' solutions into themes



Step 6 What are the adaptation pathways to reach the vision?



Tool 9: Adaptation Pathways (essential)

Learning outcomes for participants

1. They can identify the sequence of actions and decision points to implement the solutions to achieve the vision
2. They identify key people to implement the actions

Notes for facilitators

- This is the final and most important step
- You can include external stakeholders to help facilitate the process
- You may have to manage power dynamics between external experts and communities
- Prepare the risk/time sheets before the exercise
- Use the results from the Governance Analysis and Causal Loop Analysis in Step 1 to help identify key decision-makers in the pathways



Materials:

Flip chart paper
Post-it notes | Pens

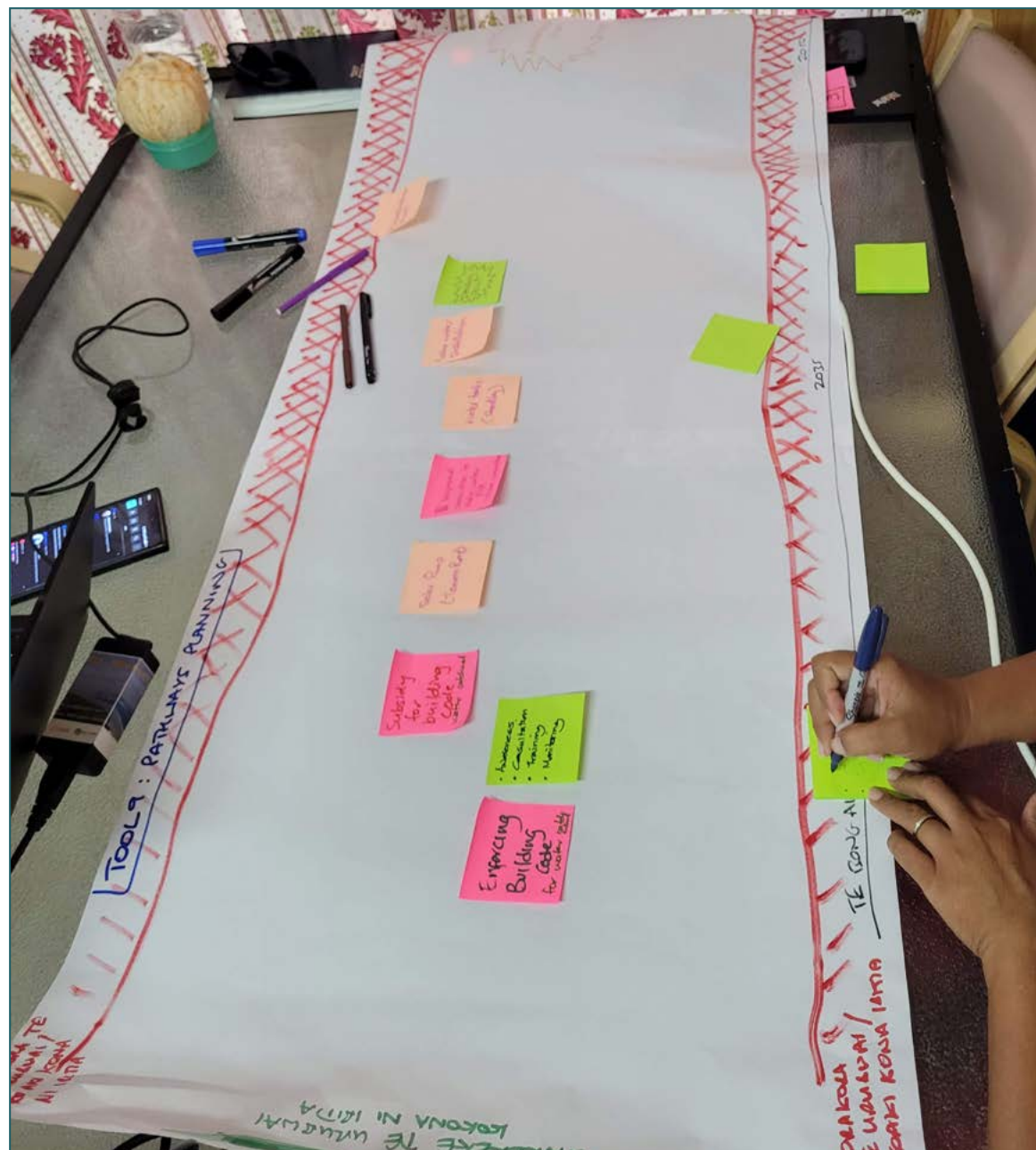


Time needed:

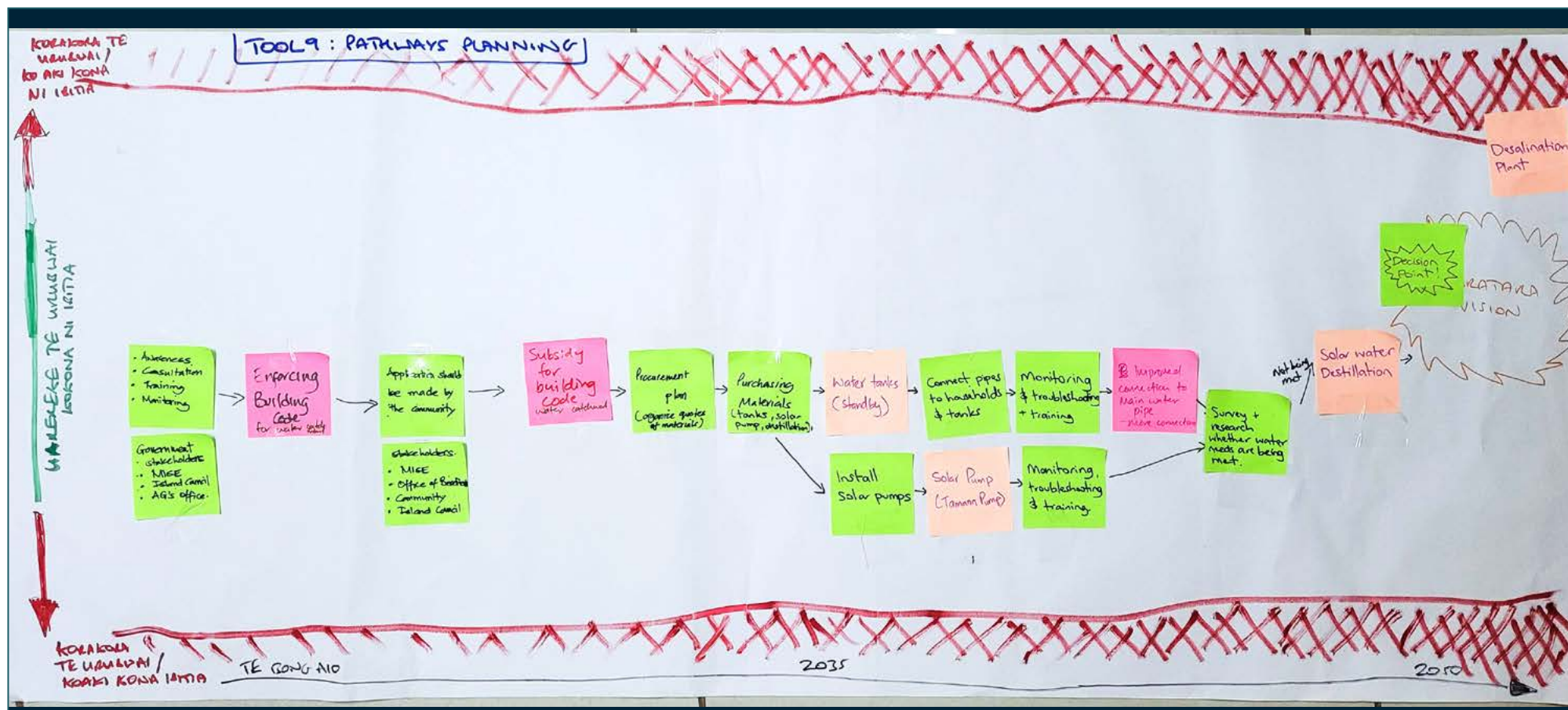
4 hours

Exercise 1

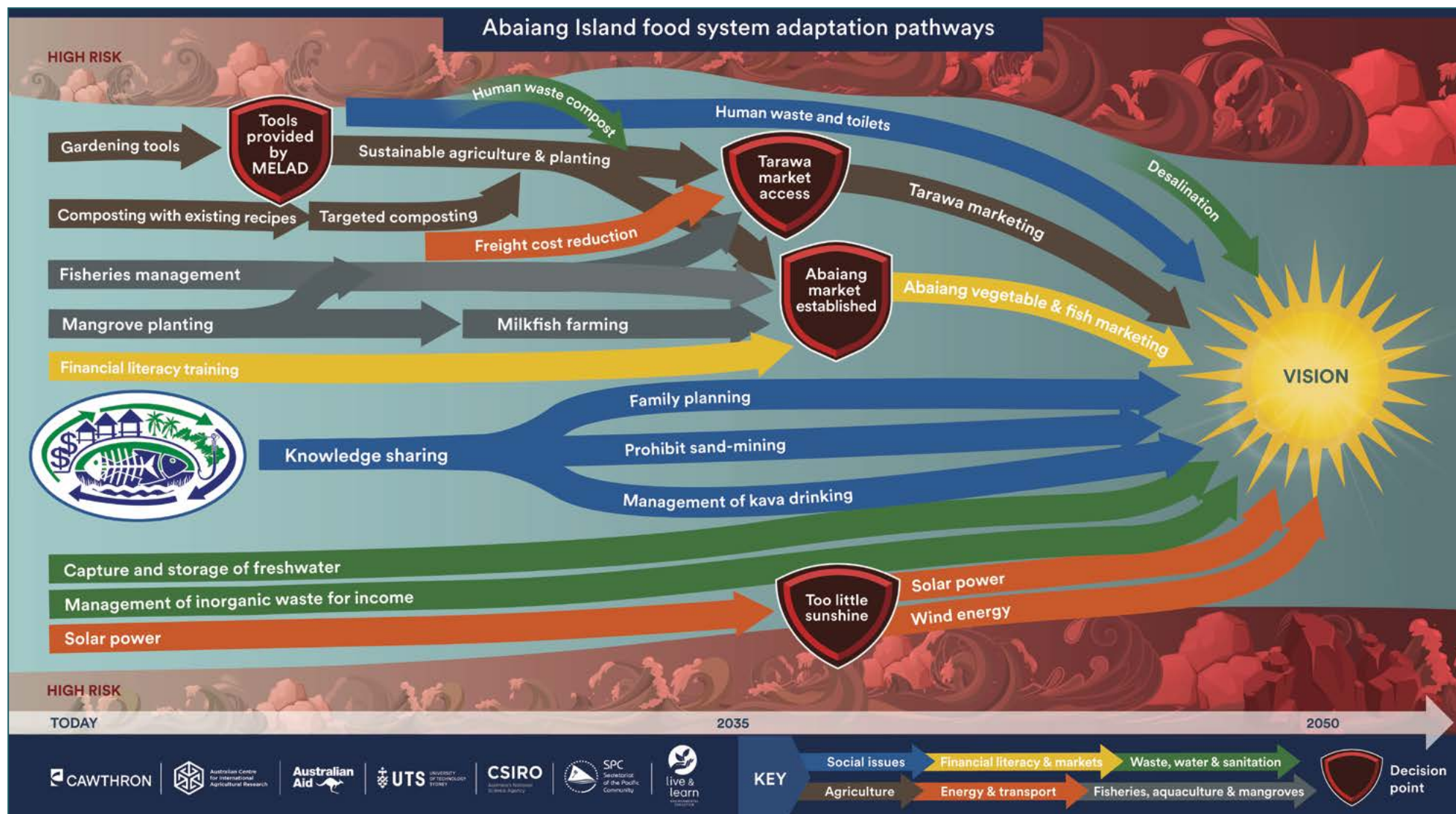
- Facilitators draw the risk/time sheets and give groups some themes of solutions from Step 5 to work on



- Join the actions (yellow post-it notes) to the solutions (pink post-it notes) using arrows. Some new solutions may emerge when doing this exercise



- After the workshops, the facilitators can combine all of the pathways into a summary



Implementing the pathways



Questions to consider

- Who should lead each pathway?
- What support is needed to implement each pathway?
- Do you need to design a pilot project to start each pathway?
- Does the governance of the food system need to change?



Project's name. Temaiuraoi Project.

Goal: Production nutritious, safe, climate resilient food crops in Abaiang to alleviate food security & NCDs.

Key Implementing Partners

- MELAD
- Live and Learn.
- SPC
- Child Fund.
- CSIRO

Funding Partner's

- MFAT
- DFAT
- GGGI

Activities

- Provision of tools – irrigation, basic tool, cubes, solar pump / 80 households
- Irrigation system
- Composting- Develop compost
- Provision of Resilient planting materials.
- Field testing of varieties (& compost)
- Develop targeted compost recipes (develop Youtube videos)
- Training and dissemination
- M & E.

Outputs.

- Increase food production sources
- Actual One Garden per household
- Increased awareness on resilience food production.

TIME FRAME:
18 months.



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