



# Food System Pathways Guidebook Solomon Islands

English language V1



# 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, World Wide Fund for Nature Solomon Islands, University of Technology Sydney, CSIRO and SPC.

We thank community members from Sairagi Village and the Ijo Maringi Association (Gizo Island, Western Province) who helped the team design and refine the planning tools in this Guidebook.

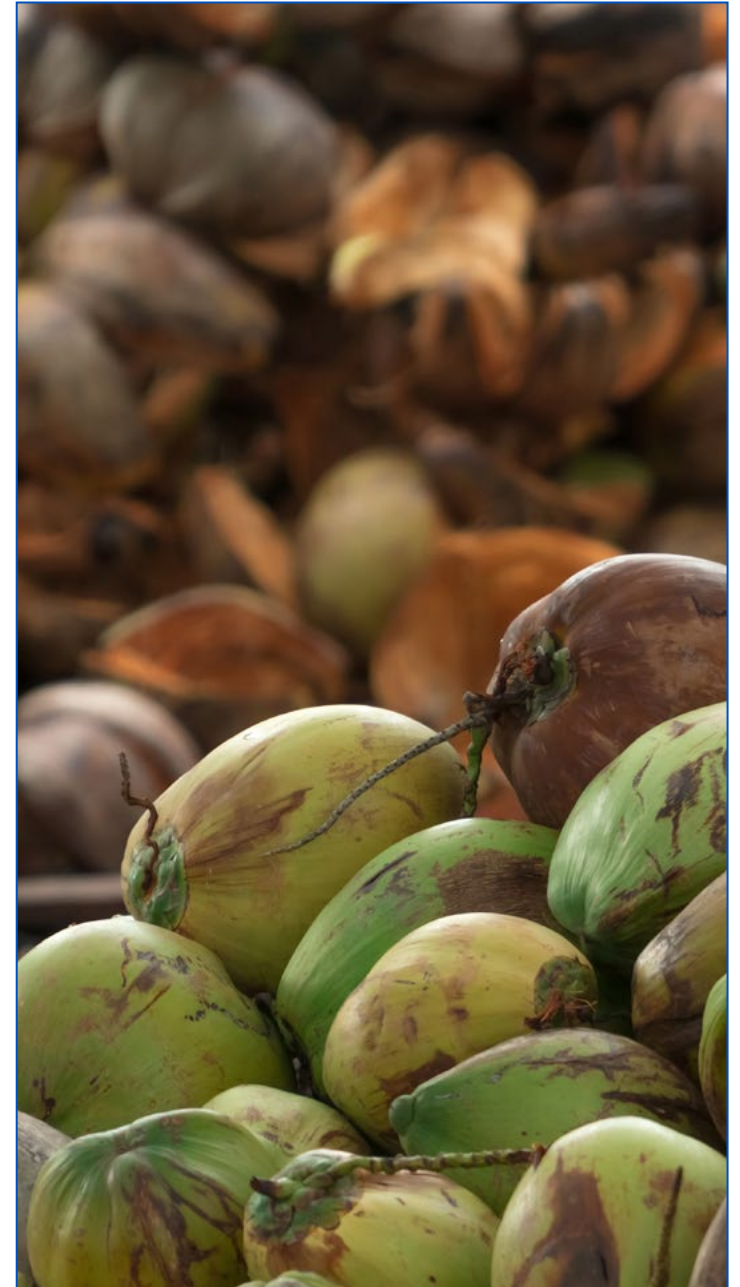
We also acknowledge the support of the Western Province Provincial Administration and the Ministry of Agriculture and Livestock. Dafisha Aleziru contributed greatly to the project.

Artwork was created by Desmond Warugutaia.

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

Photographs were taken by James Butler, Federico Davila and Leo Dutra.

**Suggested citation:** Butler, J.R.A., Davila, F., McCarthy, A., Dutra, L., Ririmae, S., Topo, S., Kaniki, H., Nenai, L. and Lal, R. 2025. *Food System Pathways Guidebook – Solomon Islands. English Language V1*. Australian Centre for International Agriculture Research, Canberra, Australia. 47 pp.





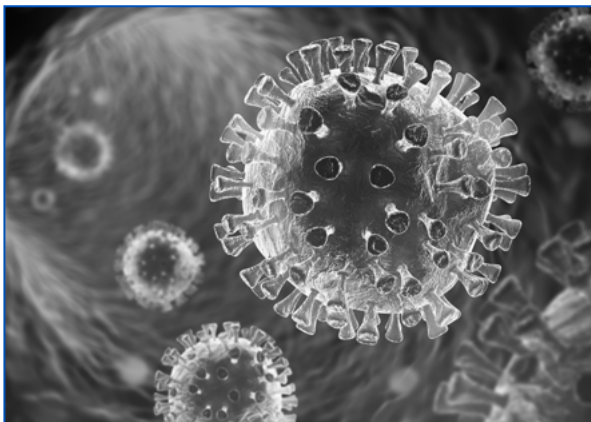
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# Introduction

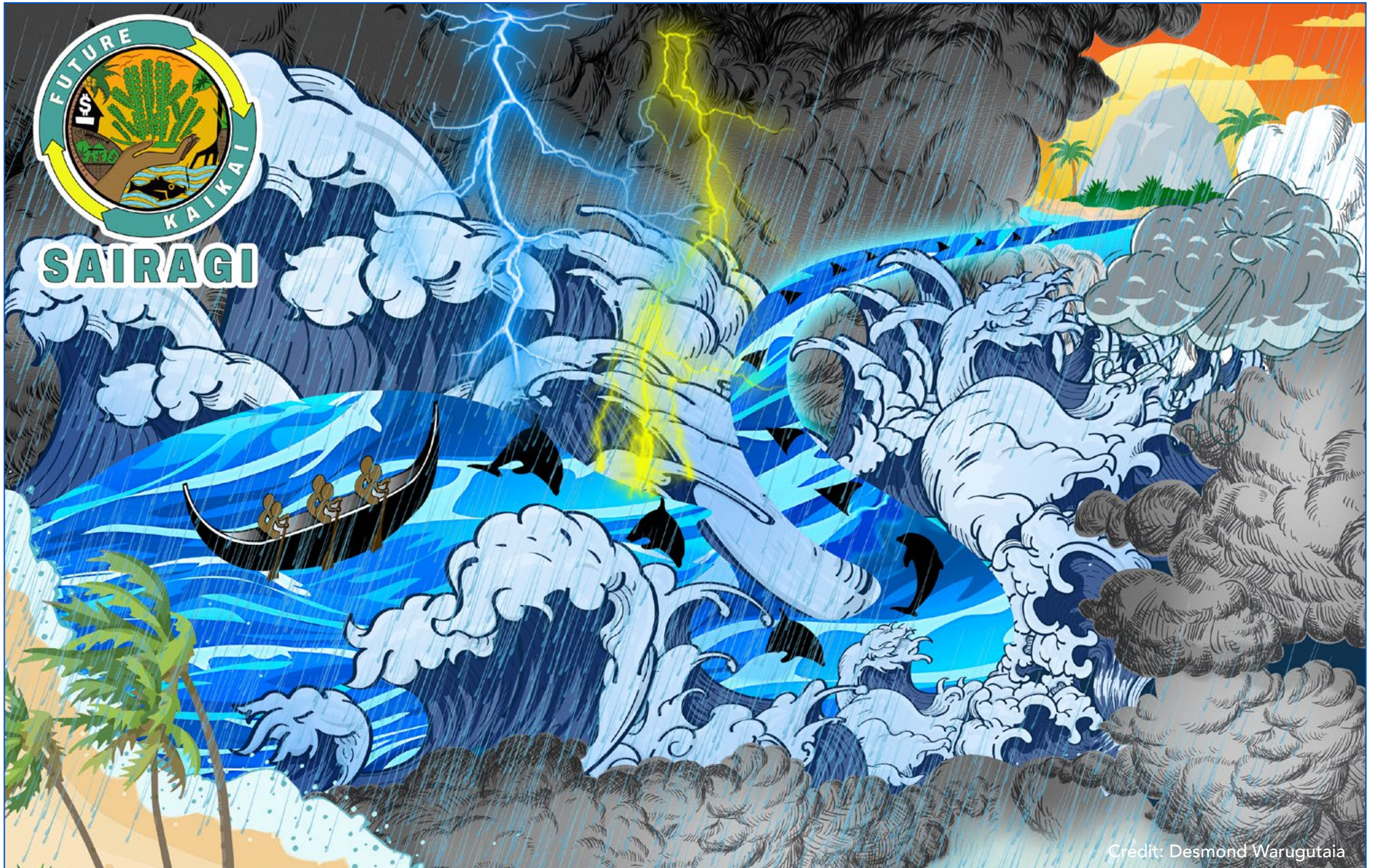
Change is happening faster, and the future is uncertain. Climate change, population growth and technology bring risks, but also opportunities. Shocks like COVID-19, natural disasters and conflict are also affecting the world. Communities must be ready.

The Guidebook aims to support knowledge brokers and facilitators in Solomon Islands 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 Solomon Islands the dolphin is one of our totem animals. It is wise, and can lead our tomoko canoes to safety through a storm. In this artwork, Desmond Warugutaia from Sairagi Village has used this story to explain adaptation pathways. The dolphins lead us through future storms and uncertainty to reach our community vision, which is the island on the horizon. Like the community, the crew of the tomoko must work together and plan ahead, making decisions that keep the canoe in the calm water, and out of the rough seas.

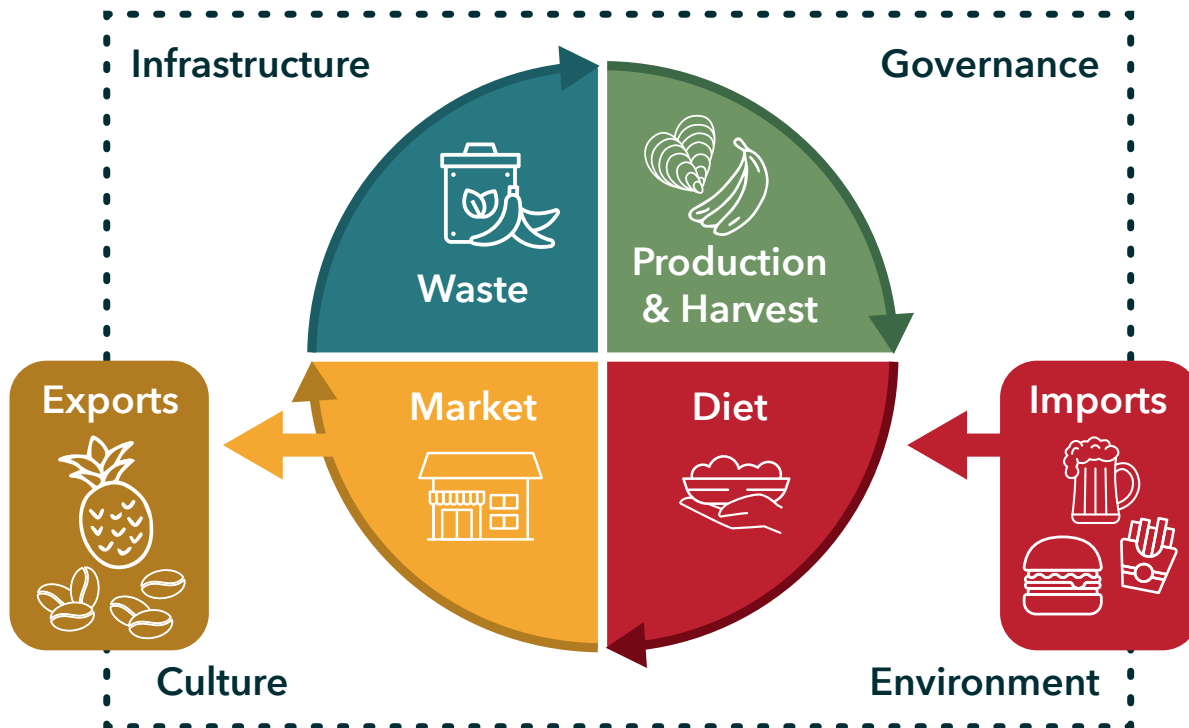


Credit: Desmond Warugutaia

# 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".

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



For this project, Desmond Warugutaia created the "Future Kaikai" logo to illustrate an island food system in Solomon Islands.



# Learning steps in the planning process

TODAY

2030

2050

**Step 1**  
What are the characteristics of the food system?

**Step 5**  
What are the adaptation solutions and risks?

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

High risk future

Medium risk future

VISION

**Step 4**  
What is the vision for the food system?

Low risk future

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

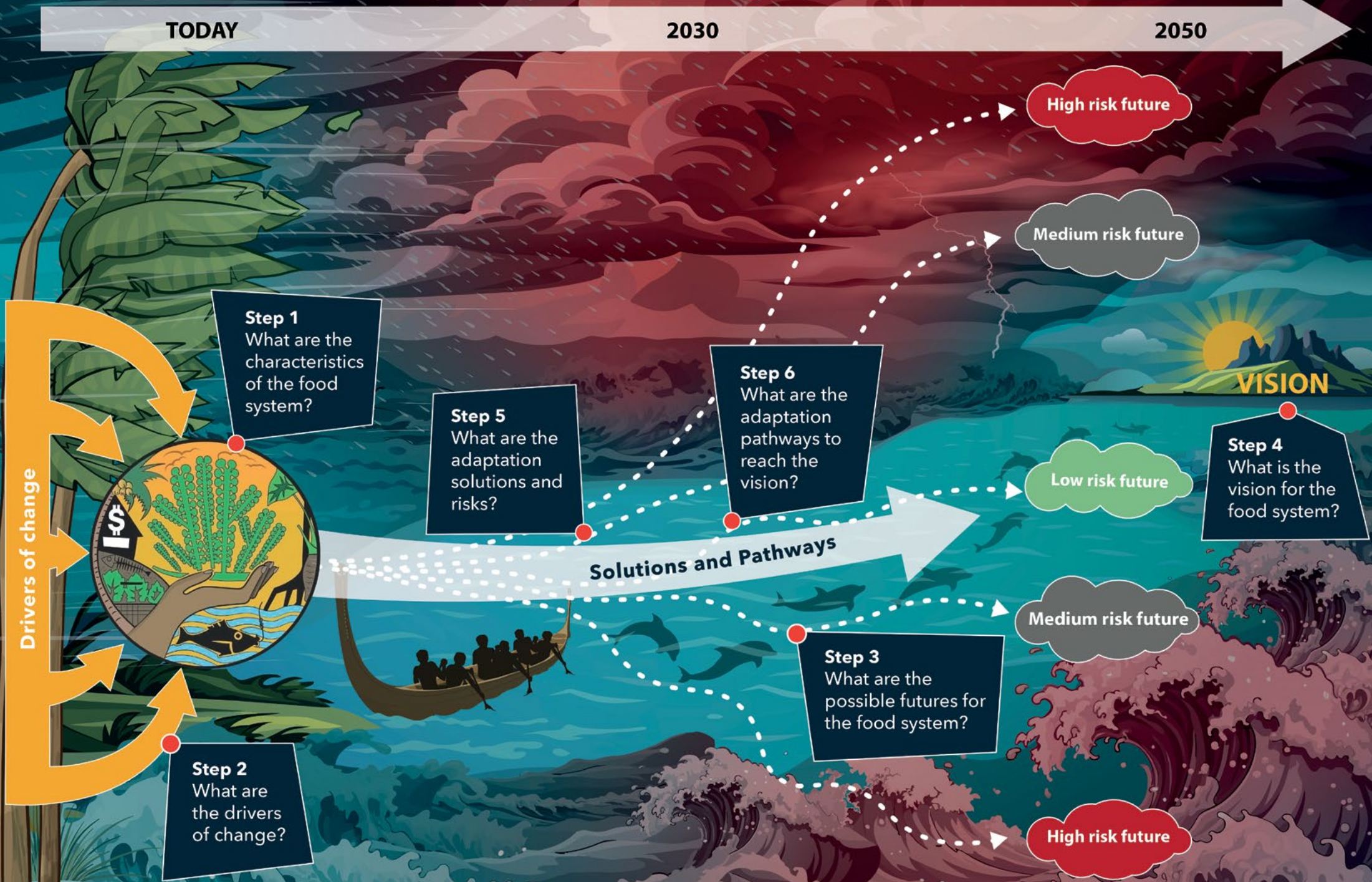
Medium risk future

High risk future

**Step 2**  
What are the drivers of change?

Solutions and Pathways

Drivers of change



# 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:

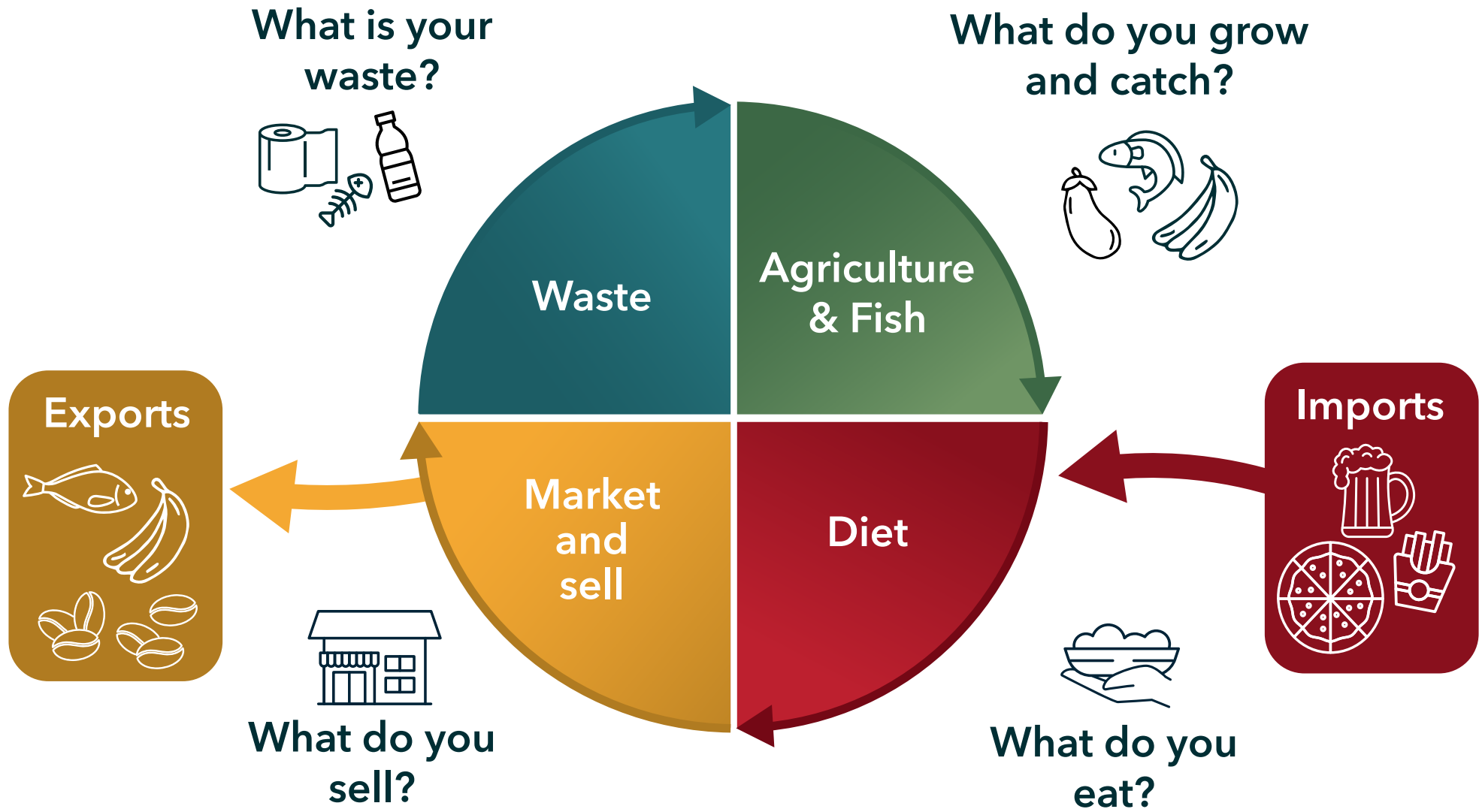
Flip chart paper  
Coloured post-it notes  
Pens



#### 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 (orange post-its)



# Exercise 3

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

**LOCATION: NUSATUVA COMMUNITY - KOLOMBANCARA ISLAND.**

**Waste:**

- Fish bones
- Coconut: Fruits, shells, husks, leaves
- Fruit/root crop peellings
- Impacted goods waste: Non biodegradable: clothes/plastics/tins/cans
- Animal
- Pig/chicken Manure

**\* Agriculture:**

**Root Crops:**

- potatoes
- Cassava
- Yam
- Pina

**Fruits:**

- Banana
- watermelon
- Cucumber
- Kelabotan
- mango
- pineapple
- Guava
- Slippery Cabbage
- Saladix/Pachoi/Gochoisum
- egg plants
- Taro leaves
- Pumpkin top
- Tulip fruits/leaf
- Redish
- Garlot

**\* Nuts:**

- Ngali Nuts
- Walnuts
- Coconut
- Alite
- Betelnuts
- Kava Kava

**\* Fish/Inverts:**

- Fish
- Shell
- Clam shell
- Trochus

**Vegetables:**

- Slippery Cabbage
- Saladix
- Pachoi
- Gochoisum

**Imported Food:**

- Rice
- Flour
- Noodle
- Tin Fish
- Sugar
- Corn
- Beef
- Biscuits
- Oil
- Black/White/Red
- Soft Drink/Soft
- Bread
- Lilies/On
- Ice cream
- Ice ball
- Paprika
- Milk/Butter
- Sausage
- Chicken
- Beef
- Spice (Mustard, Curry, Sesame)
- Mixed water

**Products produced locally (SOP):**

- Sol-Tara products
- White basmati (Wing/Kita/Calab/Khmer)

**Sea food:**

- Sea grapes
- fish
- mangroves/shells/fruit
- Cray fish/lobsters
- Clam shell

**\* Garden food:**

- Cassava/Yam/Pina
- Taro/Kakake
- Potatoes
- Slippery Cabbage
- Saladix/egg plants
- fern/green papia
- Fotip/pumpkin fruit/leaves
- Tulip fruit/leaves
- Nuts/betelnuts
- Onions/chilli/Guava/orange

**Market & Sea**

**Waste**

**Fish**

**Imagined species: Rhino Beetle/ Dahan/Flour/bleed**

**COVID-19**

**CYCLONE**

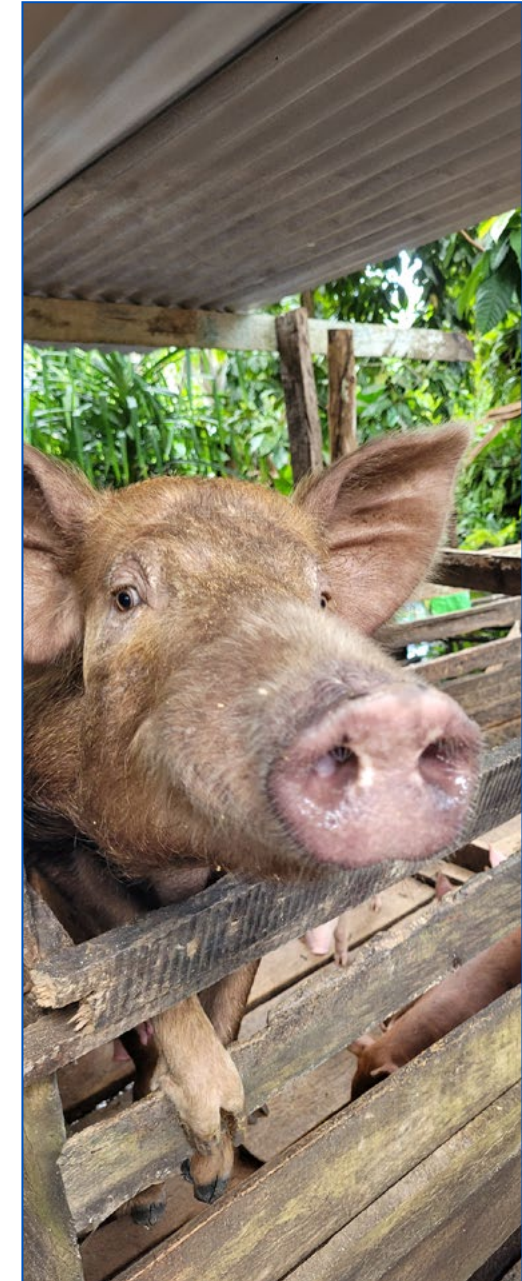
**KPL Logging Culture**

**AMC**

**Chon & Fish**

**Yellow Post-its (Adaptations):**

- Taruni:**
  - Relaxation
  - Food shift: betula
- Logging:**
  - Garden relaxation due to access from logging operations
  - Relaxation & new crop based on soil fertility (cut crop usage)
- Imagined Species:**
  - Capacity building from MIT on how to best manage invasive species.
- Loggers:**
  - Food preservation practices:
    - Baked Fish for Malunggay
    - Pineapple
    - Soy Bean
    - Kakabe
- COVID-19:**
  - Food preservation
  - Agriculture techniques (MIT + other KCA)
  - Biological gardening
  - organic farming encouraged



## 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

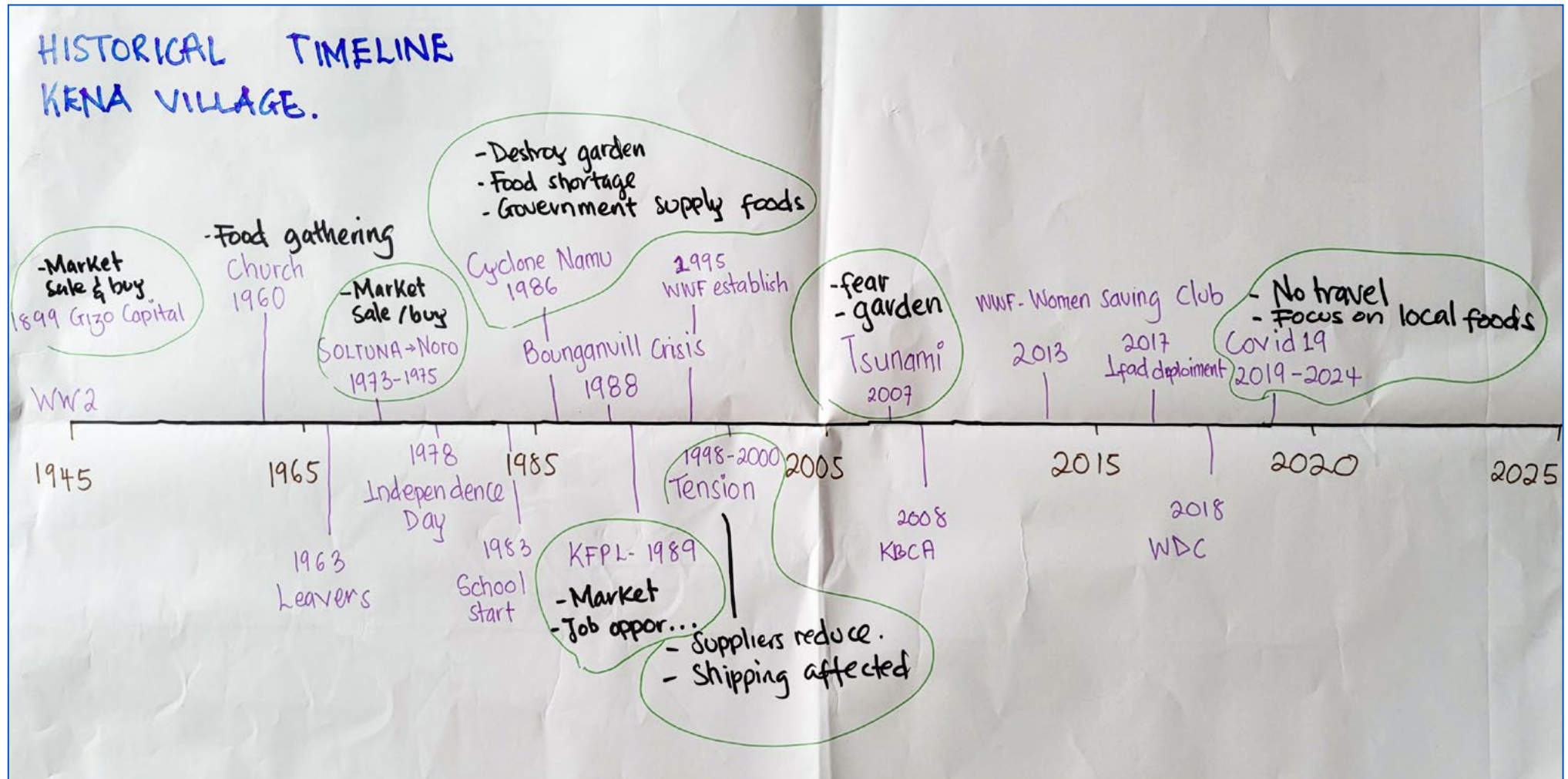


#### Time needed:

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



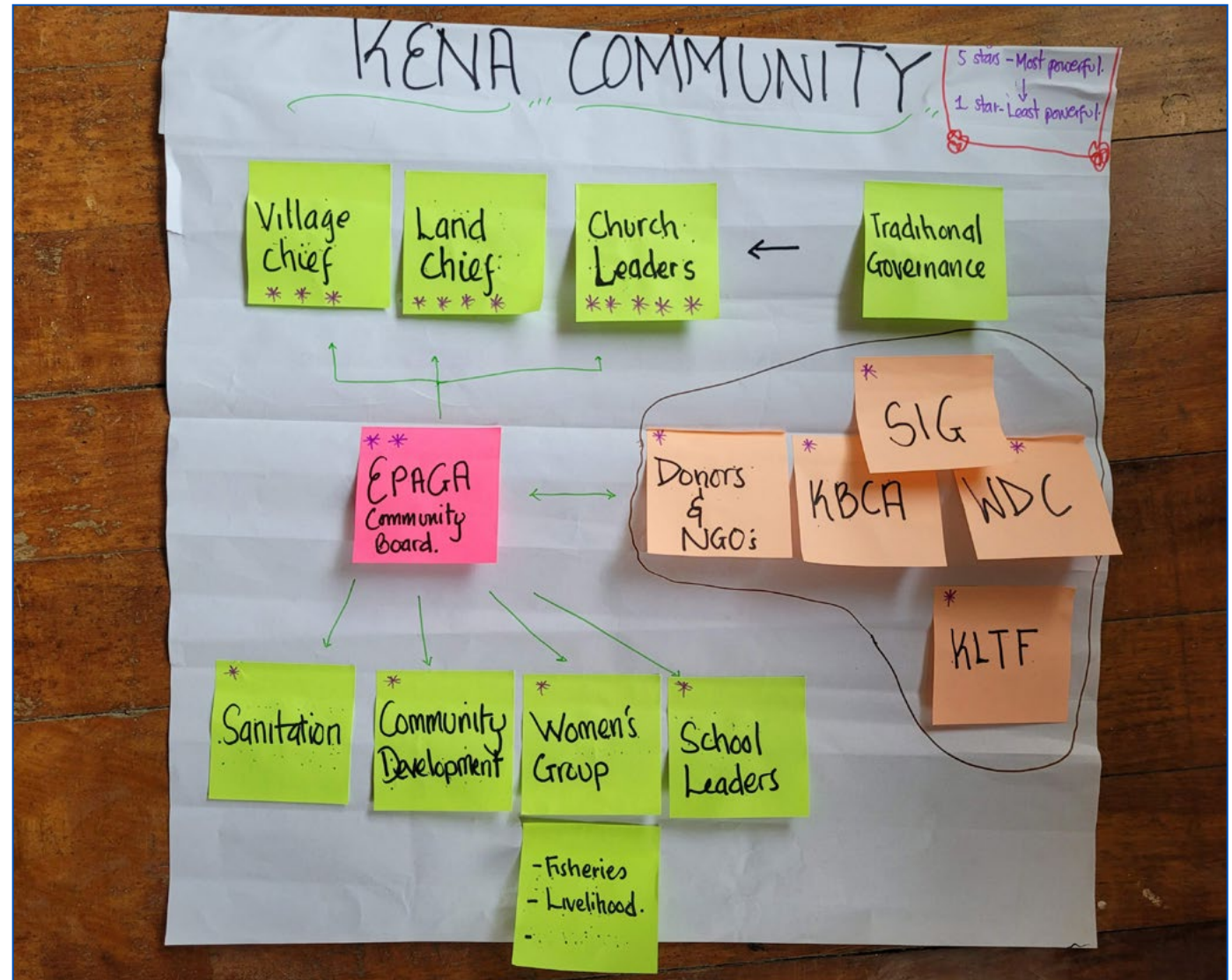
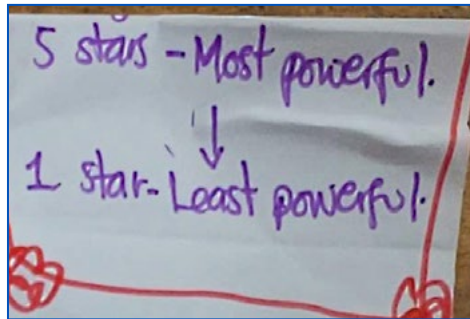
#### Time needed:

2 hours



## Exercise 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:

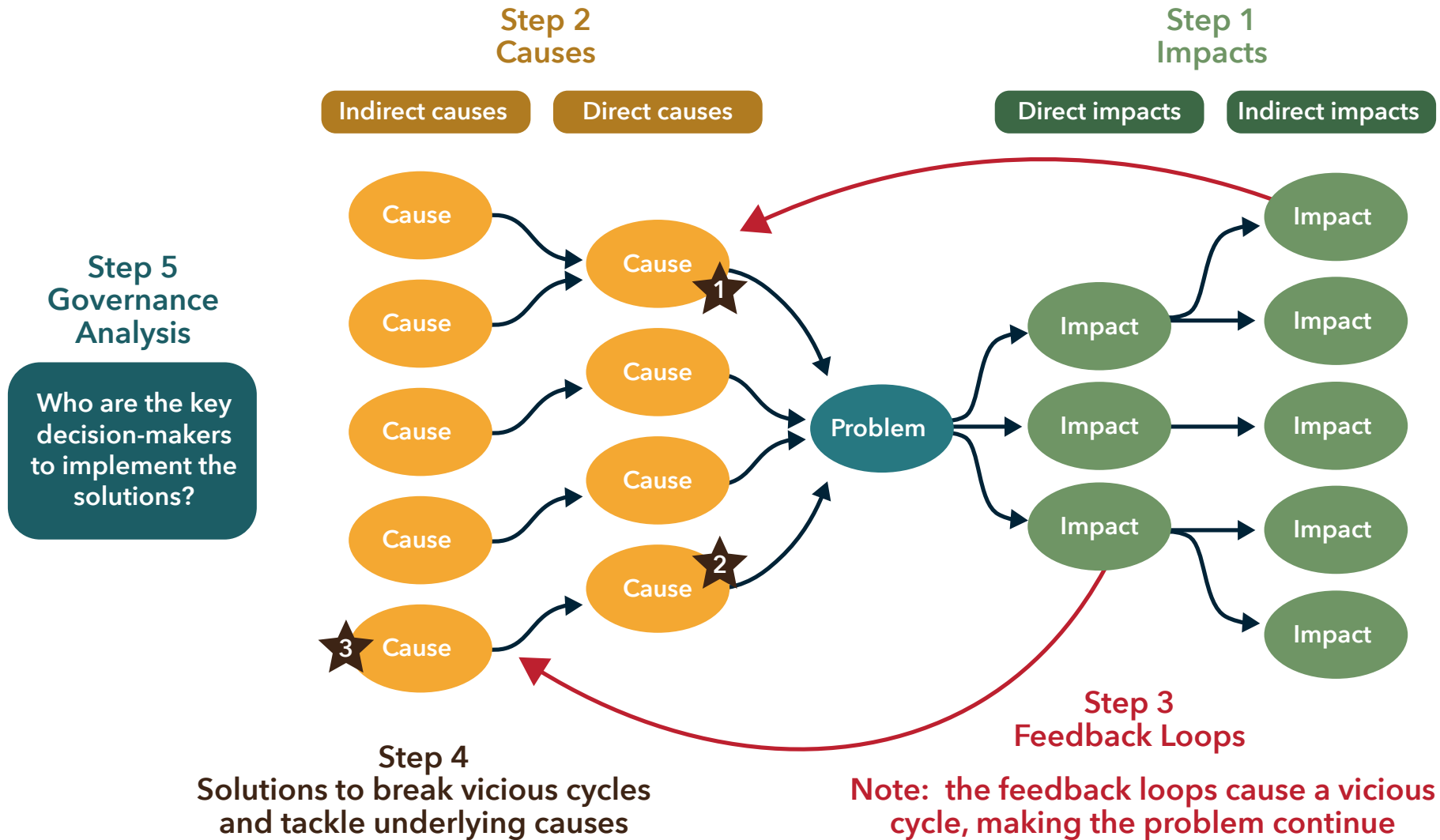
Flip chart paper  
Coloured post-it notes  
Pens



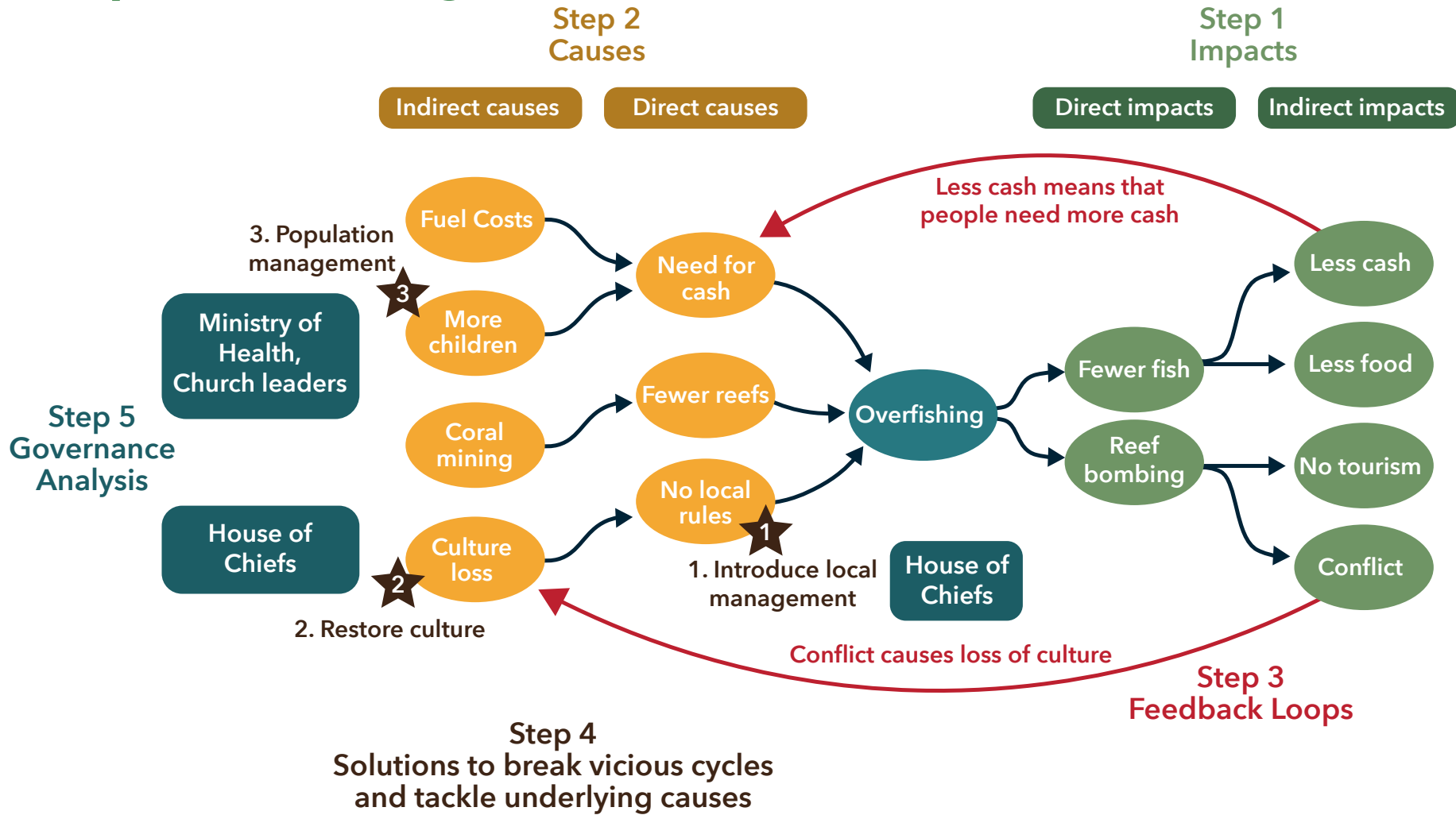
#### Time needed:

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?

TODAY

2030

2050

**Step 1**  
What are the characteristics of the food system?

**Step 2**  
What are the drivers of change?

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

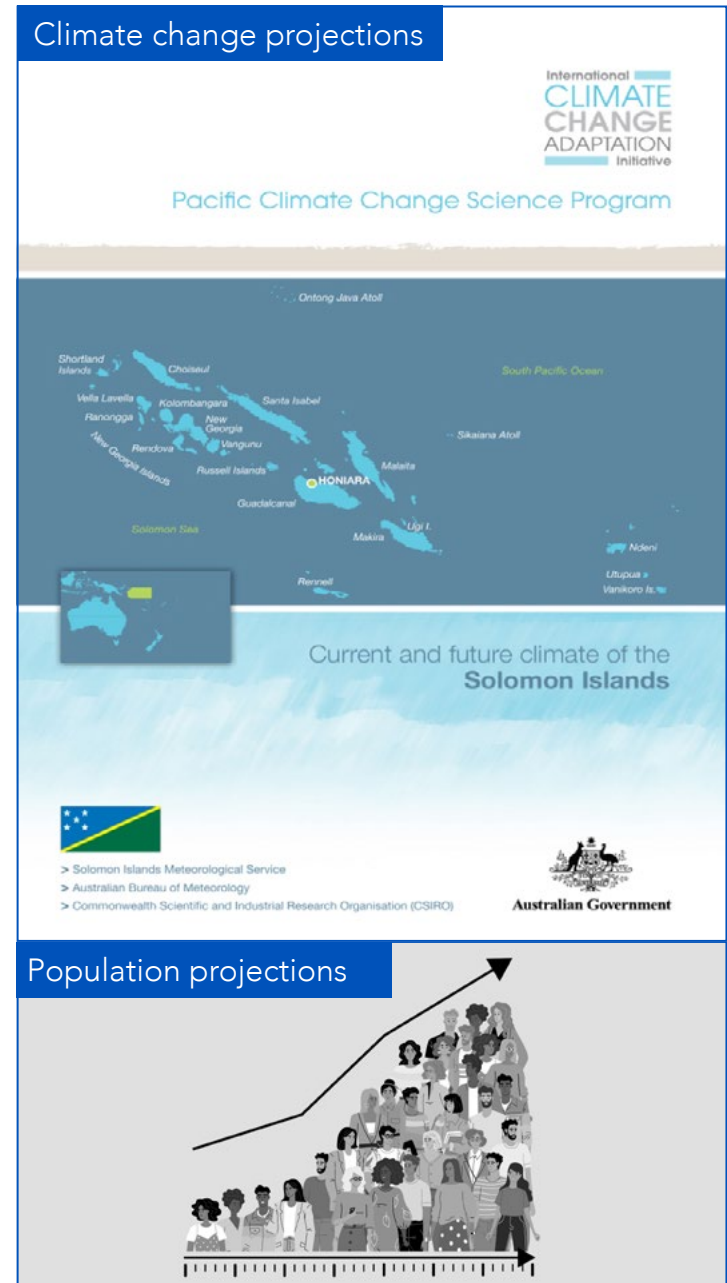
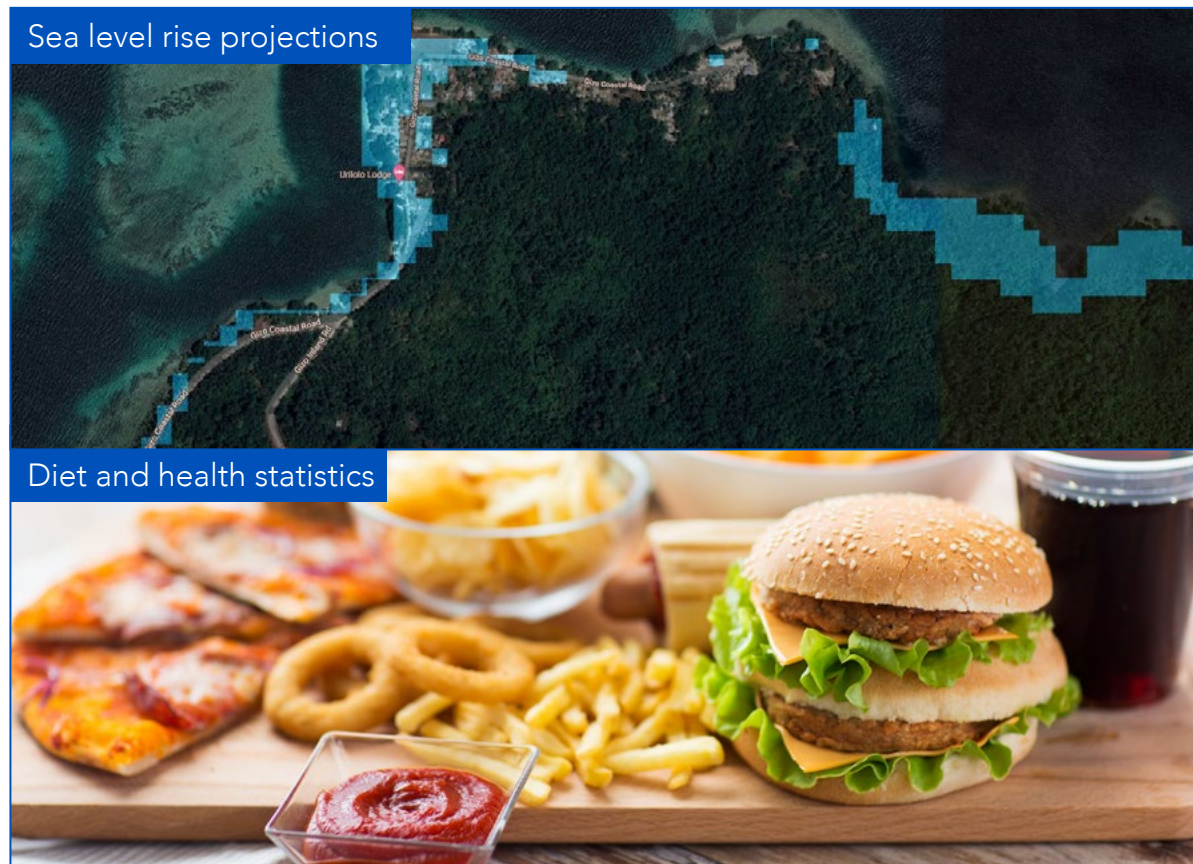


#### Time needed:

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



## 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





## 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

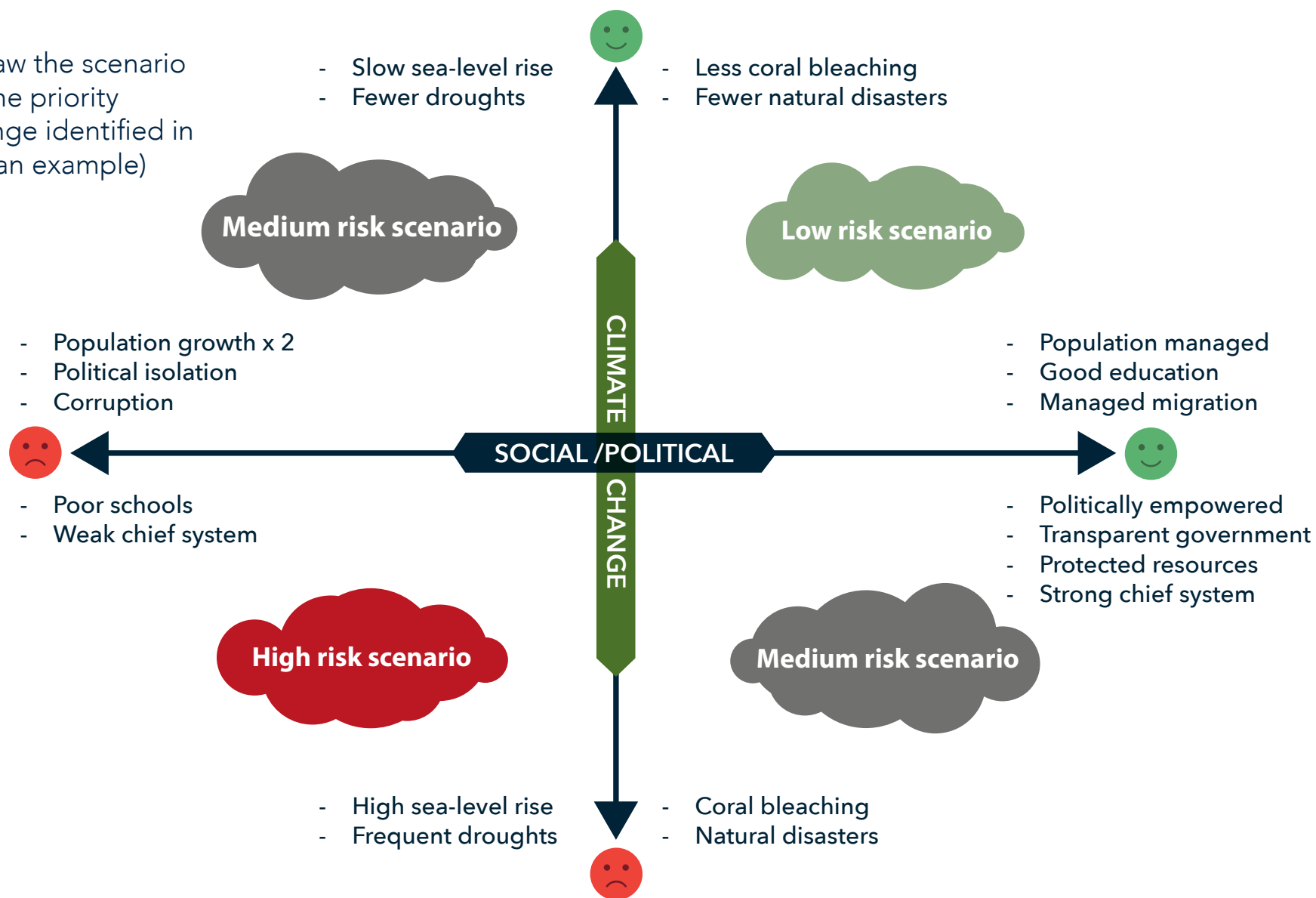


#### Time needed:

3 hours

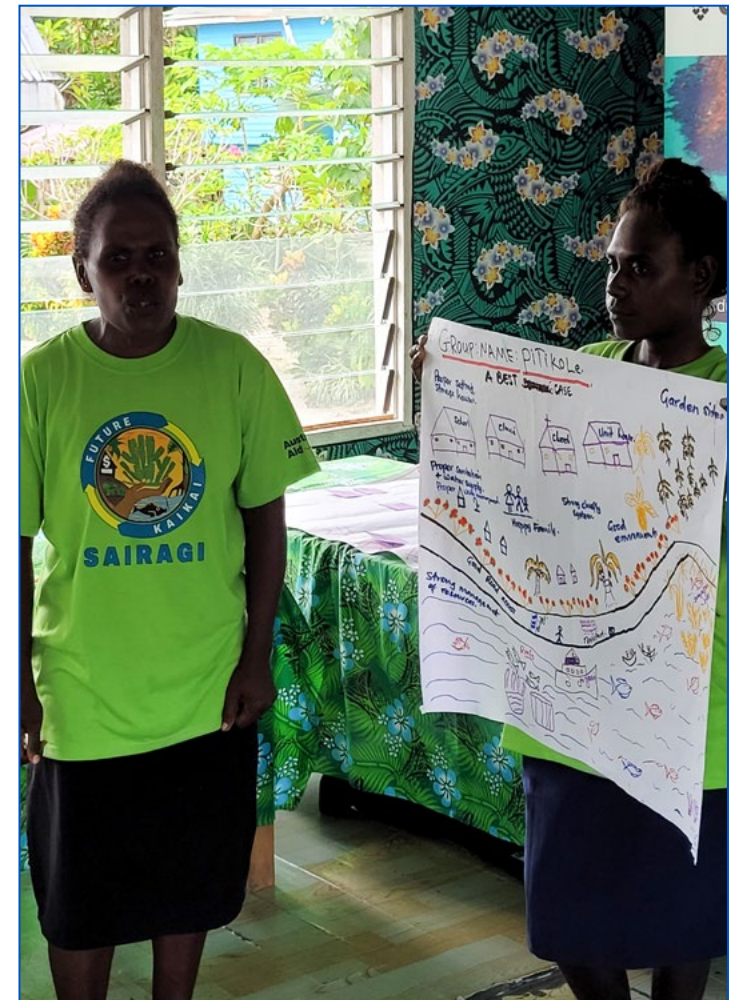
## Exercise 1

- 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





# 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:

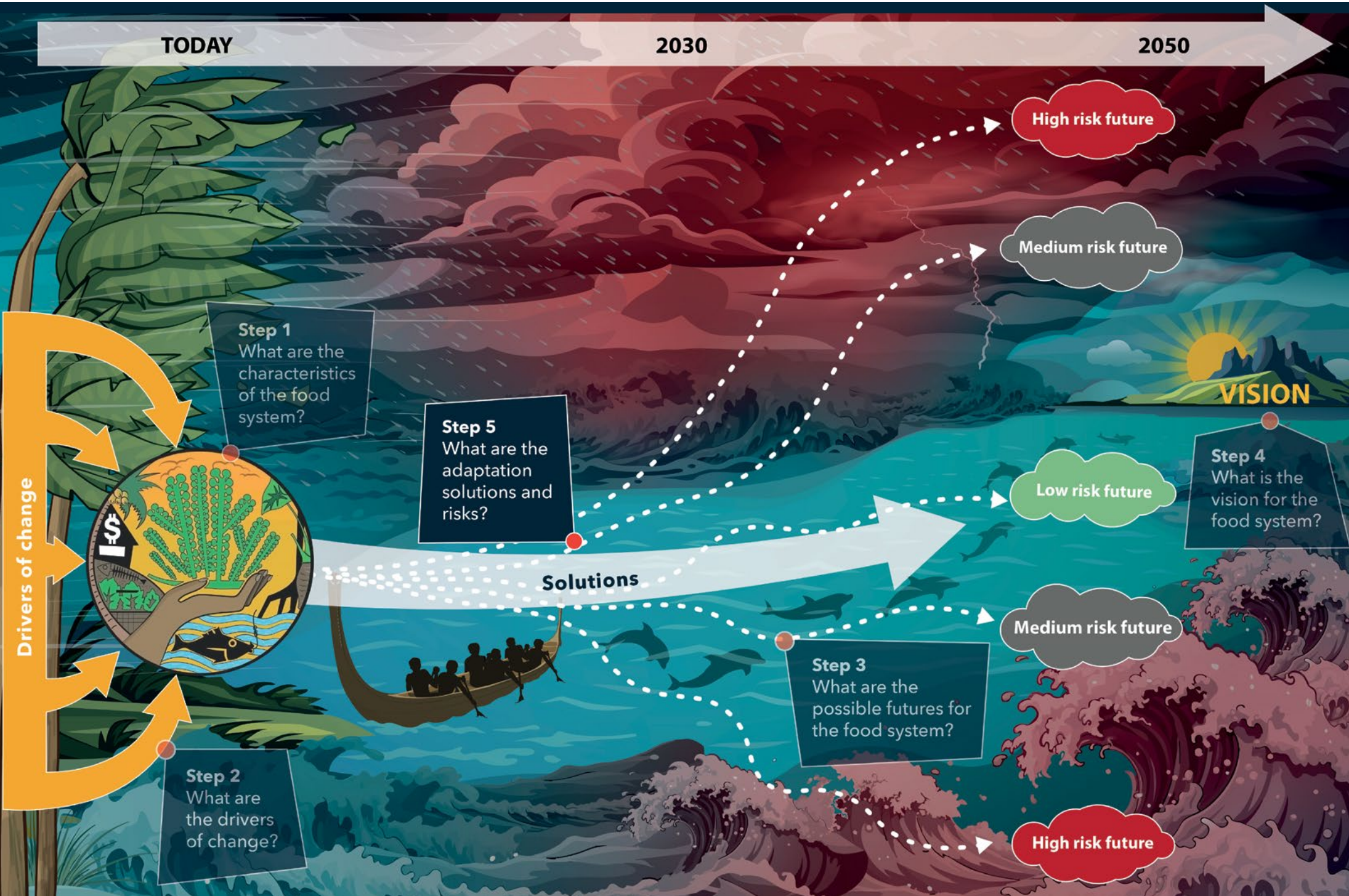
2 hours

## Exercise 1

- Ask each group to draw a vision for a year in the future (e.g. 2050)
- Later, this can be turned into artwork for the community to use



# 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



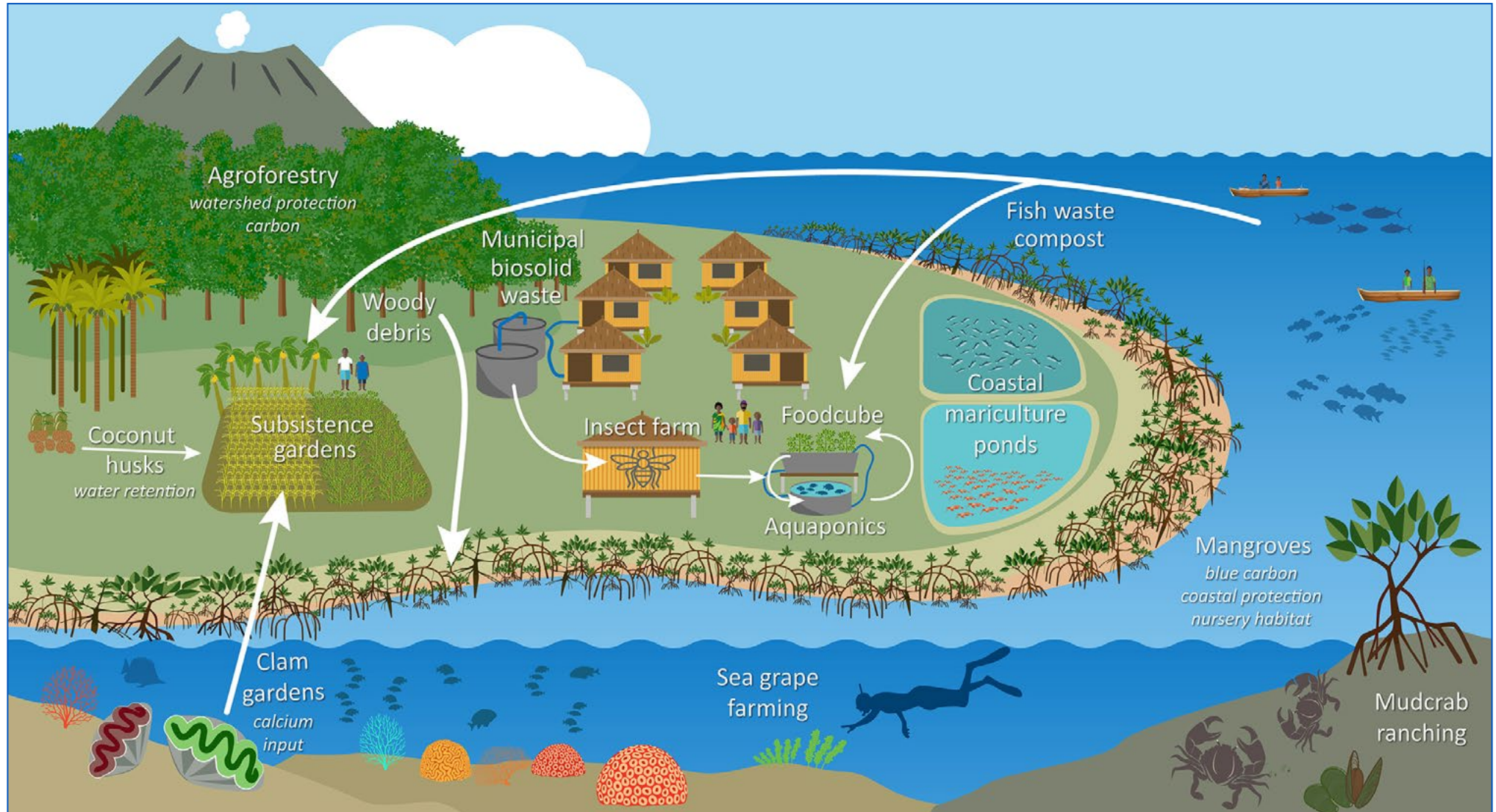
**Materials:**  
Flip chart paper  
Coloured post-it notes | Pens  
Projector, laptop and screen  
for expert presentations?



**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

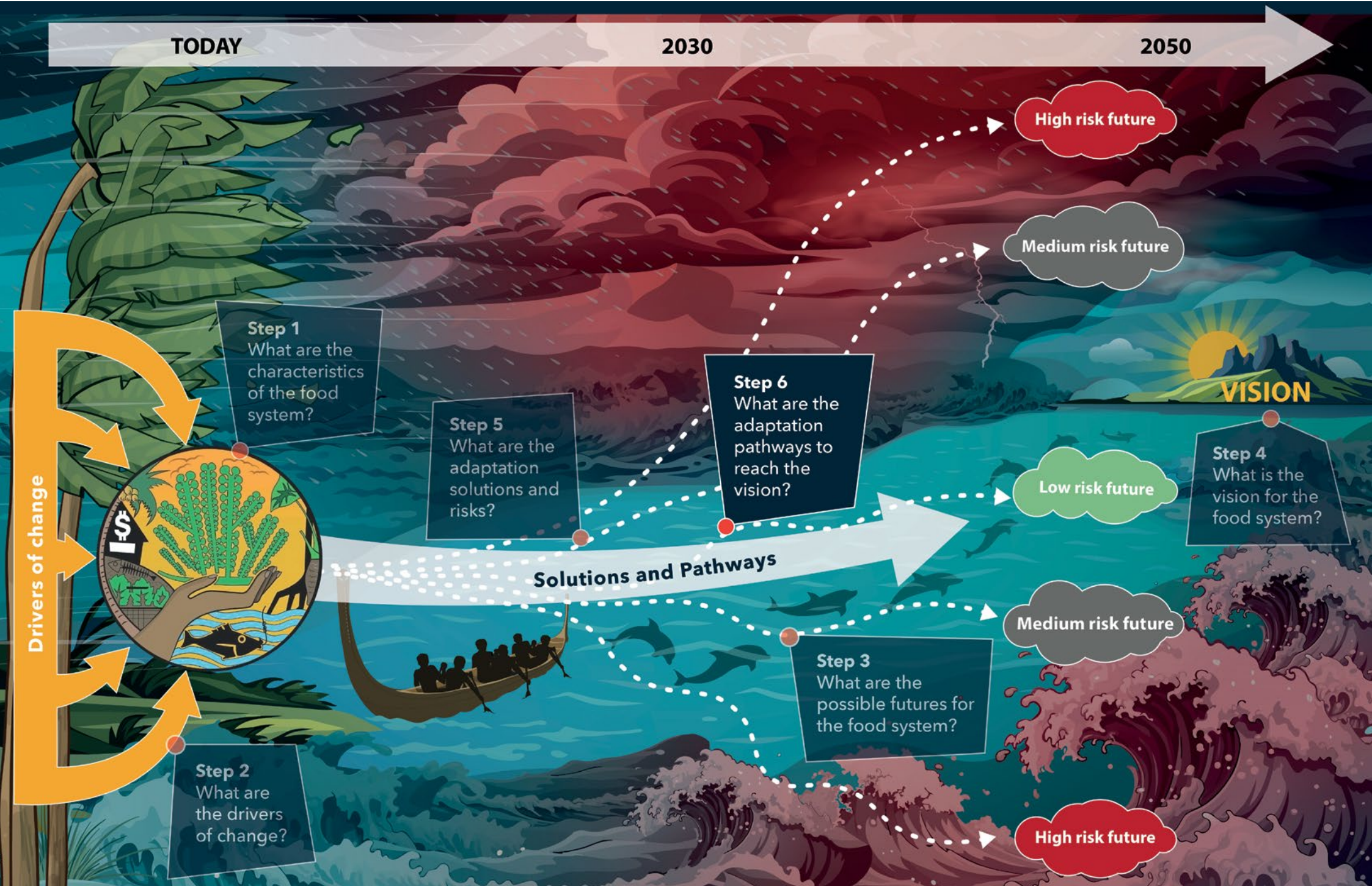


### Exercise 4

- 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

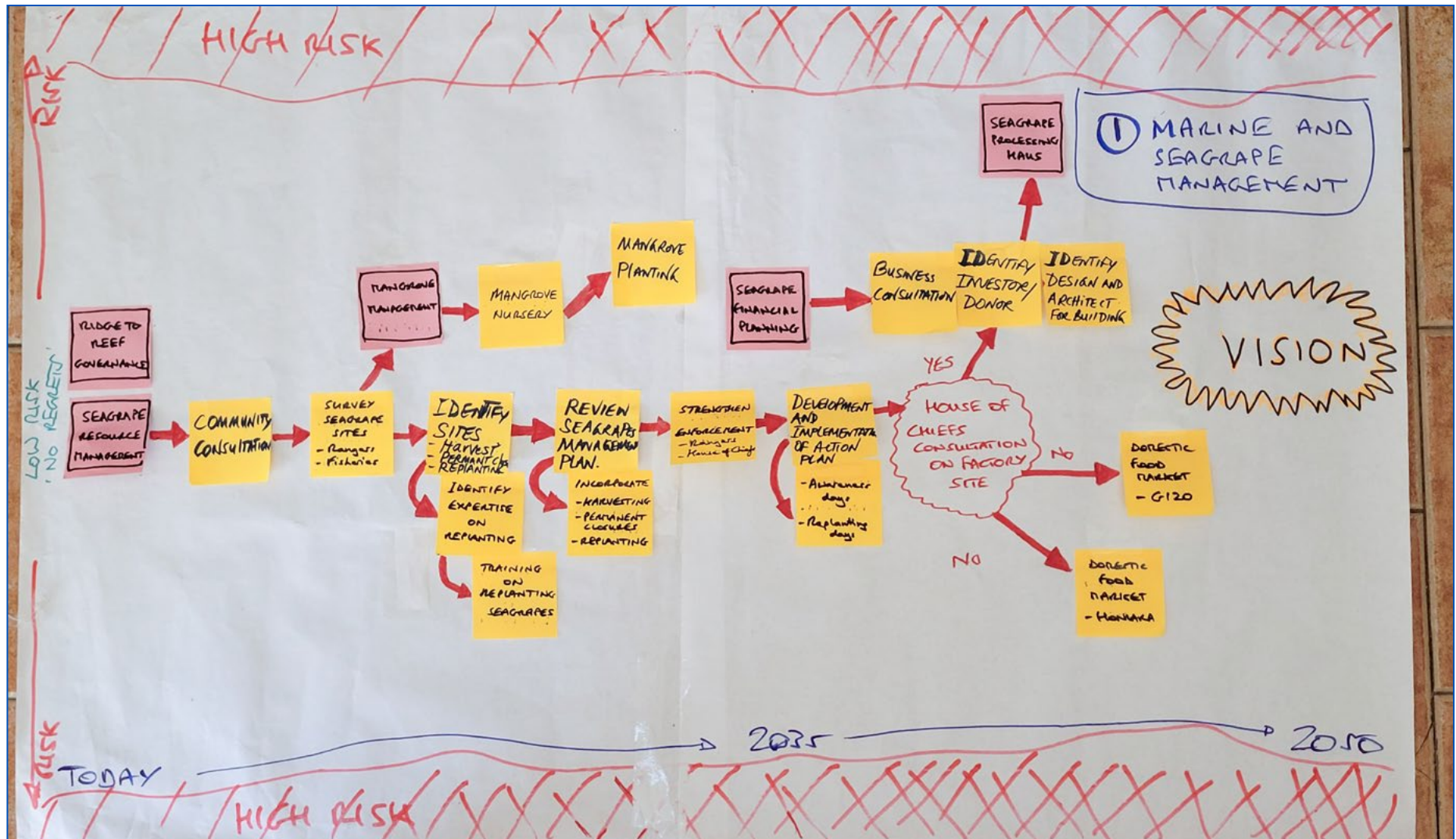


## Exercise 2

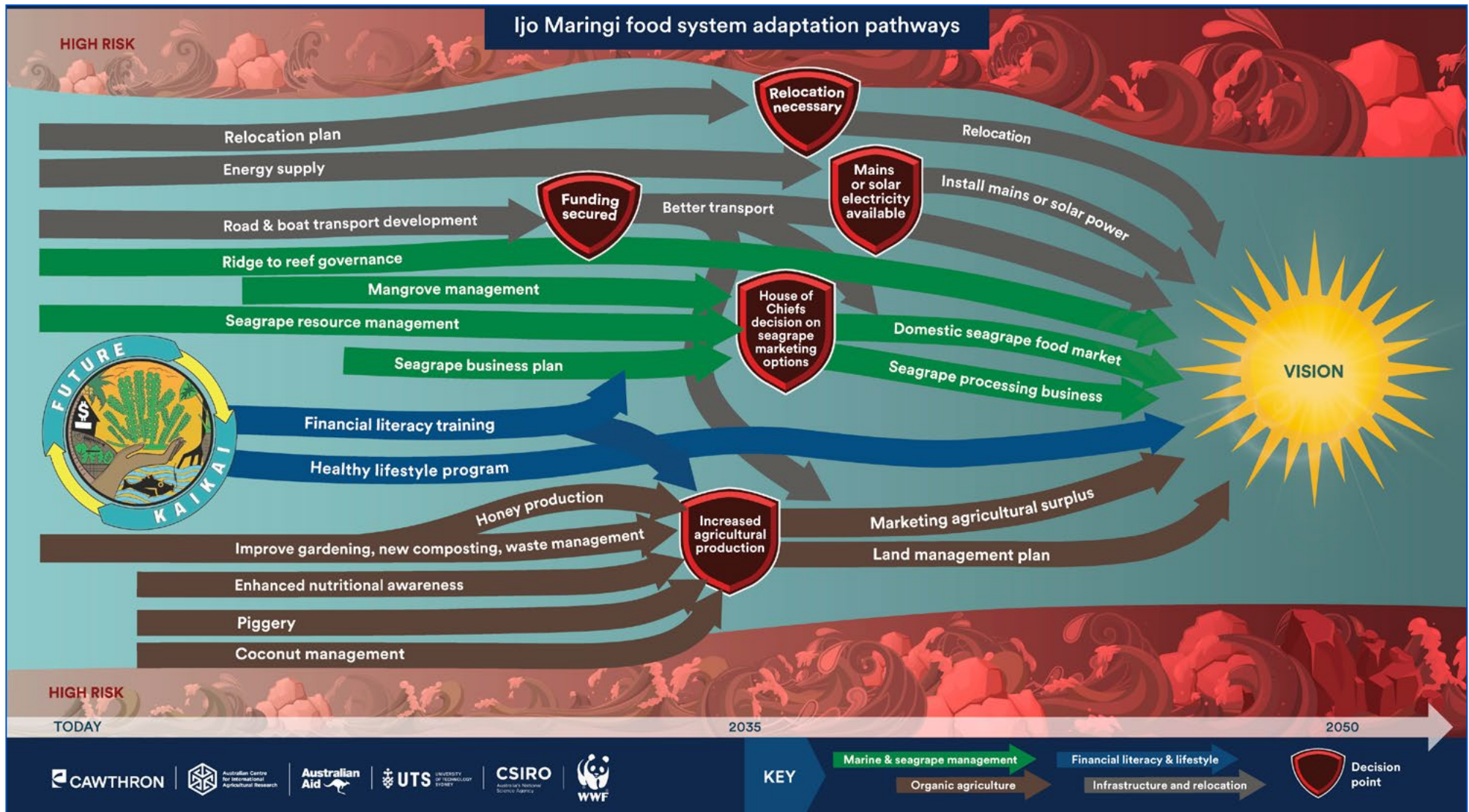
- Groups draw the sequence of actions and decision points to implement the solutions on post-it notes, listing who is responsible for each action. They also consider the risk and timing of the actions



- 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 Name: Uriaelo Project

Goals:

- ↳ Increase physical activity in the community
- ↳ Improve sanitation
- ↳ Advocacy (nutrition & healthy lifestyles).

Key partners and their roles:

- ↳ Community - ownership
- ↳ MAMS (Nutrition & WASH) - Training & awareness
- ↳ World Fish - Integrated nutrition, fisheries & agriculture.
- ↳ Kestom Garden - Organic farming
- ↳ Agriculture - technical expertise (crop & life stock).
- ↳ Donor partners - Funding

Activities:

- Tool shed construction
- Weekly clean up
- Purchasing of rubbish truck / cleaning tools (grass cutter, rakes, wheel burnows).



# Food System Pathways Guidebook

## Solomon Islands

English language V1