Gud wata plan blong iumi

A process to support Community-Based Water Security Improvement Planning in rural Solomon Islands

Community-based Water Security Planning (CWSIP) II:

Planning for climate change & future risks

VOLUME 4

Guidebook for Facilitators

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Authorship: Souter, R., Love, M., Benjamin, C., Wickham, T., Funubo, S., Shrestha, S, and Rankin, T. 2022.

Contributors: Live & Learn Solomon Islands WASH team, including Brendan Teava, Kylie Tovosia.

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Glossary of terms

Adaptation	Actions taken to help communities and ecosystems cope with changing climate conditions. They are changes made to natural or human systems which moderate the harmful impacts of the climate hazard, or take advantage of positive impacts.
Catchment	An area of land, usually surrounded by mountains or hills, over which water flows and is collected. Within a catchment, water runs by gravity to the lowest point. The water is called surface runoff if it stays on the top of the land or groundwater flow if it soaks into the ground.
Climate change	A change in global or regional climate patterns, in particular change that has occurred since the mid to late 20th century, and mostly due to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.
Controls	Activities and processes that can be used to prevent, remove, or reduce the risk of a hazard.
Equity	Each person or group of people are treated according to their need. For CWSIP, this means that all people and groups should have the opportunity for meaningful participation in, and equitable benefit from, water security improvement planning.
Exposure	Risk exposure means the hazard occurs and effects people; it relates to how often the hazard is likely to occur and how many people are likely to be exposed to the hazard.
Gender and Social Inclusion (GESI)	Not excluding any person or group of society based on gender or other factors such as age, cognitive or physical disability, economic status, political orientation, marriage status (e.g., single mothers), migrants/people from another place, or people who follow a different faith.
Germs	Microorganisms and pathogens that carry illness and can make you sick (e.g., bacteria, viruses)
Hazard	Hazards are events or situations that are currently happening or might happen, and which could reduce the availability or quality of water. They may be physical, biological or a chemical agent that can cause harm to people or result in reduced safe water for people.
Hazardous event	Events that cause hazards to the water system.
Resilience	The ability to recover quickly from setbacks.
Risk	The risk of a hazard is based on the likelihood of identified hazards causing harm in exposed populations, the number of people that would be affected, and the severity of the consequences of that harm.
Risk Assessment	A risk assessment considers how likely a hazard is to occur, how many people would be affected, and the severity of the consequence of that hazard. By conducting a risk assessment, water managers can prioritise action for those hazards that are likely to have the greatest negative consequences.
Severity	Risk severity (also called risk impact) is the expected harm or negative effect (in the case of CWSIP, this means impacts on people) that may occur due to exposure to a specific hazard.
Water quality	The condition of the water, including chemical, physical, and biological characteristics, usually with respect to its suitability for a particular purpose such as drinking or swimming.
Water security	The ability for a village to be able to safeguard the sustainable availability of, access to, and use of a safe, reliable, and resilient quantity and quality of water for the health and wellbeing of everyone in the village. For this CWSIP process the focus is on domestic water security for residents of villages in Solomon Islands - this includes water for all domestic needs, e.g. drinking, washing, bathing, cleaning, sanitation, hygiene.

Introduction

What Is CWSIP?

Community-based Water Security Improvement Planning for village water systems

We define water security as:

> **the ability of everyone in a village to safeguard availability of, access to, and use of a safe, reliable, and resilient quantity and quality of water for the health and wellbeing of everyone in the village[1].**

Rather than including irrigation and other larger scale uses of water in water security, our focus is on improving domestic water security for villages in Solomon Islands. This covers water for all domestic needs, including drinking, washing, bathing, and cleaning.

The goal of village-scale water security improvement planning is to get **water users and managers in villages thinking about key risks to their local water security**. This type of risk-based approach involves assessing hazards, which are events, currently happening or that might happen, that could reduce the security of water. **A risk assessment considers how likely a hazard is to occur**, and how serious its consequences. By conducting a risk assessment, water managers can focus on reducing hazards that can cause the most harm. By removing or managing high-risk hazards, communities can prevent water problems from occurring, or reduce their impact, which means it is more likely they will have enough safe water for drinking and other household needs.

This Community-based Water Security Improvement Planning (CWSIP) process is designed to make rural water supplies in Solomon Islands more sustainable, inclusive, and resilient. As well as supporting communities to identify and manage existing and future risks to their water supplies, including the **effects of climate change and changing populations**, it considers **social inclusion and the need for 'safe access for all'**.

A village Water Security Improvement Plan will identify these risks, together with actions that will prevent or reduce these risks – it is a **plan of action** for the community. These actions should include improving operation and maintenance of water facilities, awareness raising, behaviour change of water users, and good community water management.

[1] Adapted from Sustainable Water Partnership, 2017

Water security, climate change and social inclusion in the Pacific islands

There are many unique challenges facing Pacific Island Countries in their efforts to achieve water security for all people living in rural communities. Many of these countries have large populations living in dispersed and often remote rural areas, representing an array of diverse and dynamic socio-economic characteristics, and all facing the challenge of increasing exposure to climate variability and change, as well as socio-economic change.

Socio-environmental change and challenges

In an effort to improve resilience to climate change, shocks such as natural disasters (cyclones, earthquakes, flood, drought), and anthropogenic activities that can dramatically impact ecosystems services (such as erosion and sediment run-off associated with logging), the conventional Water Safety Planning process has been adapted for the Pacific context.7 Specifically, it encourages community water uses and managers to think about water availability, as well as water quality.

This WSIP process seeks to further build on that approach by encouraging community water uses and leaders to think about, and plan for, future hazards and changes relating to both environmental and demographic change (e.g., population).

Gender and Social Inclusion (GESI)

Achieving water security without discrimination is recognised as a human right by the United Nations and is central to the Sustainable Development Goal (SDG) target of achieving universal and equitable access to safe and affordable drinking water for all. Good Water Security Improvement Planning can and must contribute to positive equity outcomes – this means the absence of avoidable or remediable differences among groups of people, whether they are defined socially, economically, demographically, or geographically.[8]

For this WSIP process, this means ensuring social inclusion: all groups should have the opportunity for meaningful participation in, and equitable benefit from, Water Security Improvement Planning. Information and resources on Water Safety Planning and equity, gender, and social inclusion, focusing on the Solomon Islands context, are included throughout the steps and activities outlined in this WSIP Guidebook, and in Appendix B.7.

Local context

In countries such as Solomon Islands, each village is often unique and different from even a neighbouring village. Such differences may be social (e.g., population size, number of tribes, settlement history, economic particulars, governance structures, church denomination) or physical (village layout, kinds and types of water sources and access points), or both. This diversity affects equitable and inclusive water security outcomes.

Using a process that captures and adapts to different village contexts has been central to the development of this CWSIP process.

CWISP-I

CWSIP-I is a process of 7 steps of community engagement by the Facilitators, to *produce a Gud Wata Plan Blong Iumi (water Action Plan)* (Figure 1). Like all Water Safety Planning, it should be repeated, regularly, to ensure the Action Plan continues to address current, emerging and future risks, which change with time. Using these steps will help village members to develop and share the knowledge and skills required to better manage water within the village and improve access to safe and reliable water for all village members.

An important part of this process is that there are two types of steps: some that the CWSIP facilitator takes with the community, and some that the community takes independently (after guidance from the Facilitators). In addition to the 7 community engagement steps to be completed by the CWSIP facilitators, village representatives will be responsible for 5 village tasks. The community engagement steps are designed to build the capacity of village members to conduct these activities on their own.

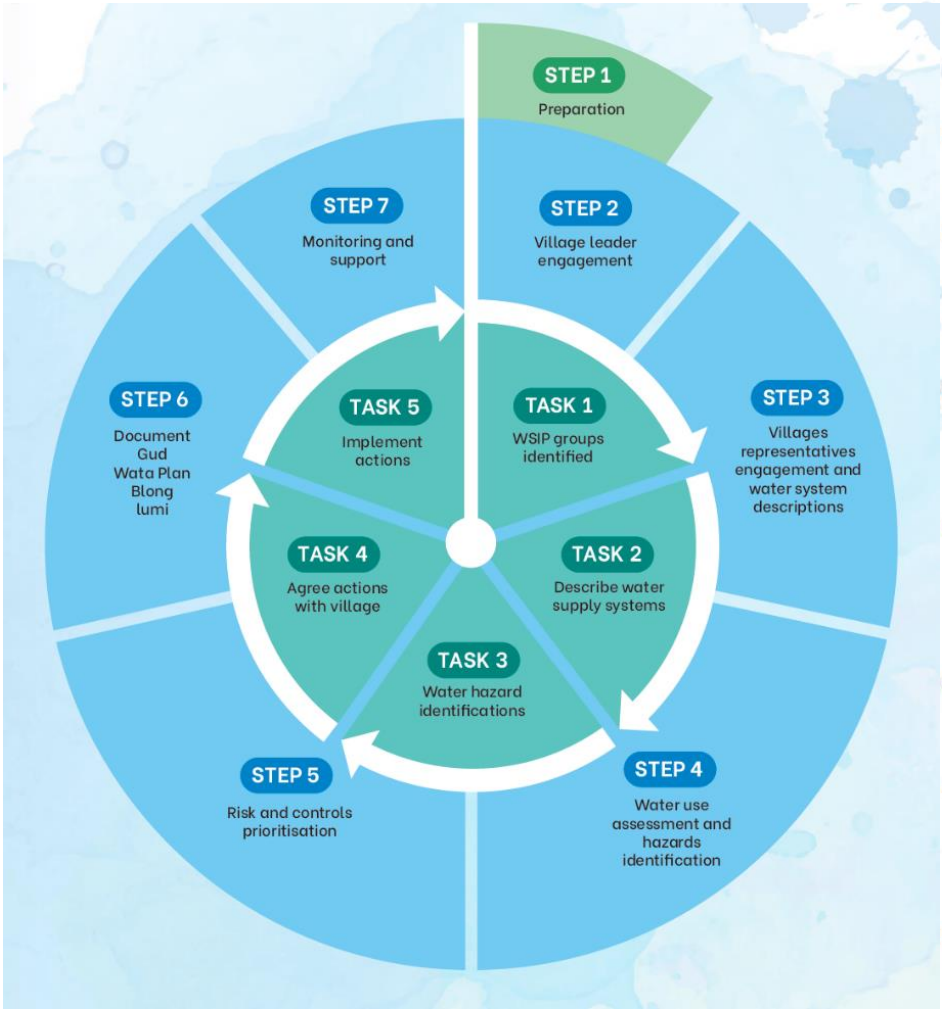
During the first cycle of this CWSIP process, it may take some time and coaching to build this capacity within the village; second, third and future cycles should not require as much support.

Purpose

CWSIP-I is

- designed to build community capacity to develop a water improvement Action Plan that has the support of the community and is based on a good understanding of the community's water system
- focused on the hazards (problems) that already exist and affect the community water supply system
- develop specific skills that are useful for managing water and other systems generally, such as identifying hazards and controls/actions, conducting risk assessments, considering social inclusiveness, developing action plans.

Figure 1: The 7 community engagement steps for CWSIP facilitators with 5 tasks for village members



	Facilitator steps	Village Tasks
STEP 1	**Activity:** Gather Village background **To:** confirm groups and zones and water types **When:** 2 weeks before Step 2 **Duration:** ½ day	
STEP 2	**Activity:** Engage village leaders on water sources and zones **To:** Motivation and permission for **WSIP** (zone approach) **When:** Week 1 **Duration:** ½ day	Organise zone meetings for Step 3
STEP 3	**Activities:** 3a. Zone meetings 3b. Introduce water systems task **To:** motivate WSIP and identify representatives and gather data on water systems **When:** Week 2 **Duration:** 1-2 days	**TASK 1** **WSIP groups identified** Identify all water sources available, when used and for what uses. Zone reps complete household survey, collect stories and map water systems
STEP 4	**Activity:** Village meeting of zone reps **To:** share water systems (maps, survey) and stories from each zone; and training in water pathways and identifying hazards **When:** 1-2 weeks after Step 3 **Duration:** 1 day	**TASK 2** **Describe water supply systems** Zone representatives identify hazards & hazardous events within their respective zones
STEP 5	**Activity:** Village meeting of zone reps **To:** Share hazard assessment results and prioritise controls **When:** 1-2 weeks after Step 4 **Duration:** 2 days	**TASK 3** **Water hazard identifications** Zone reps present, discuss & agree action & priorities with village & village leaders
STEP 6	**Activity:** village meeting of zone reps **To:** Document Gud Wata Plan Blong lumi **When:** 1 week after Step 5 **Duration:** 1 day	**TASK 4** **Agree actions with village** Ongoing implementation and monitoring of village Plan
STEP 7	**Activity:** Ongoing implementation, monitoring & support-monitor water quality **To:** Support sustained village water security **When:** 1 month after Step 6 (then every 2-3 months) **Duration:** 1 day	**TASK 5** **Implement actions**

CWISP II: Future-focused Water Planning

CWSIP-II is the extension of the CWSIP-I and its community scale Action Plan to incorporate consideration of climate change, population dynamics and other future changes**.** This will include integrating externally-generated data (from CSIRO) with local traditional environmental knowledge, along with consideration of catchment-scale links between WASH systems.

Purpose

CWSIP-II is design to:

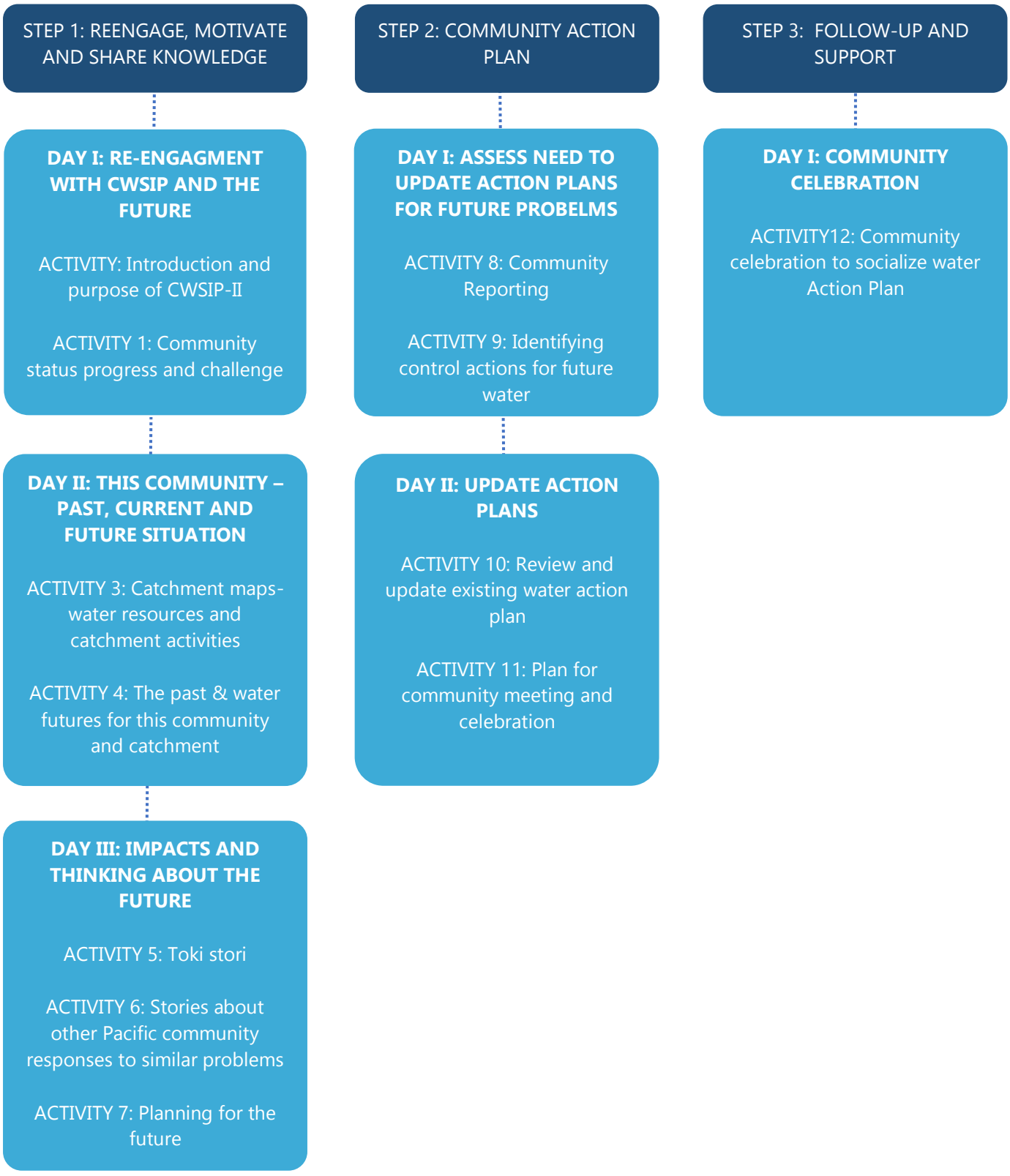
- Support communities to prepare for problems caused by climate change and other change (especially population changes)
- Build on the skills developed in CWSIP-I
- Assess and reinvigorate the Action Plan from CWSIP-I, re-enforcing it's importance and need to be progressed
- Update the Water Improvement Action Plan to include actions to prepare for future problems

When to do CWSIP-II

This depends on the nature of the CWSIP-I action plan (significant hardware takes time). CWSIP-II shouldn't be started until after the community has started to implement the non-hardware actions in their CWSIP-I plan (management, maintenance, behaviour of water users/households) – this shows a commitment by the community to improve the water system. This might be as soon as a month or two after the completion of CWSIP-I. If too much time lapses (e.g. 18 months), it is recommended to redo CWSIP-I before progressing to CWSIP-II.

CWSIP-II: SUMMARY OF STEPS AND ACTIVITIES

The graphic below provides a summary of the steps and activities of CWSIP-II. Each step is aligned with a community visit. The graphic below can be printed or redrawn as a poster, to assist in communicating with communities about the CWSIP-II process.



Before commencing CWSIP-II

Here are few tips for you to prepare before you conduct CWSIP-II:

- Identify all the stakeholders within or relevant to the specific community, and potential participants *(those who participated in CWSIP-I and those who are interested in CWSIP-II or any relevant stakeholders)* during a scoping trip *
- Inform the community about the training at least two to three weeks in advance.
- Give the relevant community the program outline in advance (note that you will be reviewing the *Gud Wata Action Plan* that was prepared with the community during CWSIP-I).
- Send a letter to the community leaders/point of contact to remind them of the training a week before the program.
- Ensure you have a note-taker and lead facilitator for each activity
- Ensure you have all the resources required for the training

*Scoping trip

During an earlier visit - either as part of other program activities, or as a dedicated scoping visit - discuss with WASH Committee chairman, Village Leader, or community facilitator:

1. The purpose of CWSIP-II and it's link to CWSIP-I
2. Involvement of community:
    a. who are the right people to involve in this CWSIP-II process:
        - Who are the influential people in community?
        - Who participated in CWSIP-I?
        - Who are WASH Committee members and how should they be involved?
        - Diversity of participants is important – consider gender, people with disabilities, different social, faith or kinship groups, and different areas of the community.
    b. Emphasise the need for these participants to be able and committed to joining all of the three steps
    c. Discuss time required and managing expectations relating to compensation
    d. if time, meet those people, if not ask the community facilitator/chairman/WC chair to inform these people about the workshop coming up and secure their participation.
3. Check logistical arrangements (power, meeting space, catering, accommodation etc)

GESI: this action helps to ensure socially-inclusive future actions

CWSIP-II schedule

Below is the suggested training agenda. The timing of these steps and activities can be adapted to suit the context and pace of activity in the community, however the sequence of activities should not be changed.

	Day	Activity	Suggested duration (mins)
Step 1	DAY I: RE-ENGAGEMENT WITH CWSIP AND THE FUTURE	ACTIVITY 0: Introduction and Purpose	30 mins
		ACTIVITY 1: Community update on CWSIP-I	1.5 hours
		ACTIVITY 2: Stories of future about water	2.5 hours
	DAY II: THIS COMMUNITY- PAST, CURRENT AND FUTURE SITUATIONS	ACTIVITY 3. Catchment maps - water resources & catchment activities A. *the upstream and downstream of our water* B. Water Hazards C. Hazards to our water pathways	2 hours
		ACTIVITY 4. The past and future water for this community and catchment A. Toki Stori (learning from the past) B. Looking into the future C. Facts (reemphasising the impacts) - *optional activity* Homework	2.5 hours
	DAY III: IMPACTS AND THINKING ABOUT THE FUTURE	ACTIVITY 5. Toki- Share stories about likely impacts	1.5 hours
		ACTIVITY 6. Stories from other pacific community	1.5 hours
		ACTIVITY 7. Planning for the future: next visit & homework task	15 mins
Step 2	DAY I: ASSESS NEED TO UPDATE ACTION PLAN FOR FUTURE PROBLEMS	ACTIVITY:8 Community reporting on impacts of future climate scenarios and prioritising future water problems	3.5-4 hours
		ACTIVITY 9: Identifying control actions for future water problems	2 hours
	DAY II: UPDATE ACTION PLAN	ACTIVITY 10: Review and update existing water action plans	2 hours
		ACTIVITY 11: Plan for community meeting and celebration to socialise water action plan	15 mins
Step 3	DAY I: FOLLOW UP AND CELEBRATION	ACTIVITY 12: Community meeting and celebration to socialise water action plan	2 hours

After CWSIP-II activities

- Inform the participants about the upcoming activities
- At the end of each day, debrief the day with your co-facilitators and take some notes (*what worked well and what can be improved)*
- During step III, share the updated Action Plan with the community and seek support from wider community
- At the end of the step III, provide certification for the participants who attended all the CWSIP-II activities

STEP 1: Reengage, motivate and share

DAY I: RE-ENGAGEMENT WITH CWSIP AND THE FUTURE

ACTIVITY 0: Introductions and Purpose

Objectives

- To (re)establish positive group dynamics, trust, and mutual respect
- To help understand and recap the CWSIP-I steps
- To explain the structure and purpose of CWSIP-II

Duration 30 mins

Preparation and resources: participants attendance sheet, CWSIP-I and CWSIP-II structure overview (key steps and timing – a print out or drawing), agenda, option to show the video resource that summarises and links CWSIP-I & II.

Method

A. Introduction and icebreaker
- Use your preferred method for introductions (ice-breakers/games)
- Fill-up the participant list and sign the attendance sheet and explain the logistics and housekeeping
- Ask the participants if they were engaged in the CWSIP-I activities and acknowledge them and the new ones
- Ask why they have joined the training and discuss the purpose and structure as below

B. Purpose and structure
- Introduce the training

Key points to be raised

- Briefly discuss CWSIP I and II:
  - These meetings are to discuss and learn more about how we can help protect the water system from future changes/problems.
  - CWSIP-I activities were conducted xx months ago. This involved 4 or 5 visits by the facilitators to help improve the community water management. We built understanding and skills about water pathways, hazards, risk assessments, inclusiveness through zones, controls/actions, and we prepared an Action Plan.
  - The skills learned and used in CWSIP-1 can also be used to plan for future risks from climate change and other changes and hazards, which is the purpose of this next phase of CWSIP.
- Ask the participants if they remember any activities or steps done in CWSIP-I. Give the participants a brief overview of the CWSIP-I steps.
- Give the participants a simple overview of the CWSIP-II training content and structure.
  - CWSIP-II is an extension of the CWSIP-I
  - We will build on the ideas and knowledge and Action Plan from CWSIP-I. CWSIP-I focused on discussing the existing problems with the water system, and deciding what actions to take to fix the highest priority problems.
  - In CWSIP-II we will update those actions to address problems that are probably going to happen in the future, such as climate change affecting the weather and storms, and changes to the community population. We want to talk about these future problems now because there are some actions that can be

taken which will prevent those problems from happening in the future, or prepare the community to manage them.

- There are three steps in CWSIP-II and each step has some activities we will do together over a few days (display poster of three-day sessions on wall)

ACTIVITY 1. Community update on CWSIP

Timing Visit 1, Day 1

Summary

Overview of ideas (water pathways, risks), processes (zone reps, HH survey & stories, risk assessments) and status of Action Plans (address knowledge gaps raised by community members).

Objectives

- Re-engage community in CWSIP (if disengaged/busy) by reviewing the existing Action Plan, its progress and status
- Identify challenges in implementing the Action Plan and discuss ways to address them
- Encourage participants to share the successes and highlights with the broader community

Duration: 1.5 hours

Preparation and resources needed: CWSIP-I Action Plan from each community

Suggested Participants: CWSIP-I Participants, village leadership, WASH committee and other members

Method

1. Recap CWSIP-I - discuss the purpose, visits and activities
2. Ensure the participants share their Action Plan for their village with the CWSIP-II group. Ask the CWSIP representative or WASH Committee member to report on progress and status of the Action Plan
3. Discuss what worked well/any strengths or highlights that they would like to share from the Action Plan
4. Discuss challenges in implementing the Action Plan. Write these on poster paper (see example below)
5. Ask the group to discuss how these challenges could be addressed by the community. Write down the main points on the poster paper.
6. Summarise and read back the key points that have emerged from the discussion – this helps to guide the discussion (and useful for reporting to take a photo/record of these notes).
7. At the end of the session, recap successes and challenges, and encourage everybody to share this with the broader community

Notes for Facilitators

- Depending on the village norms & settings, it may be appropriate to conduct these discussions with separate men's and women's groups, and then share discussion summaries at the end
- Facilitators should be prepared for some participants that did not participate in CWSIP-I, who may need extra discussion and explanations to ensure they are able to contribute and participate. This is an opportunity to invite those who did participate in CWSIP-I to share their own understanding and explanations – this helps to reenforce their own learning.
- The timetable of actions in the CWSIP-I Action Plan activities can be updated as required when the Action Plan is updated after completing CWSIP-II. Make a note of specific actions/timing changes to be made.

Challenges	How can we address this challenge?

ACTIVITY 2. Stories about the future of water - local examples of climate change impacts & community adaptation

Timing Visit 1, Day 1

Summary

This activity will help provide a glimpse into different future scenarios, which will help the community to understand the likely impacts of climate change on water, people's health, livelihood, and overall community well-being and encourage them to prepare and take action to mitigate these negative impacts. This activity will also emphasize that communities can plan and prepare for future problems.

Objectives

- To understand the impacts of climate change on water and the link to people's health, livelihood and overall community well-being
- To motivate participants to prepare and take actions to mitigate and/or adapt to the future climate change impacts

Duration 2.5 hours

Preparation and resources needed Poster paper, markers / pens, blue tack, pins; pre-filled Poster

Method

Facilitators have the option to read the stories below to the whole group, or, to break into smaller groups to read and discuss the stories to encourage discussions

1. Introduce the activity. Here is an example introduction:
   "I would like to tell some short stories of some villages which have been impacted by climate change and how these communities have, and / or have not, responded to these challenges. These are stories from other places in Solomon Islands."

2. Share the stories below (pg 18)
   Either facilitator reads the story, or someone each group reads the story out loud to their group. Read the story in pijin (translate from english as you read). Tell the story with enthusiasm to make sure it is engaging!

3. Discuss the stories
   After reading the stories below, split the group into two (if they are not already in smaller groups) and ask the groups to discuss these stories using the following questions:
   - *What do you think about these stories?*
   - *What are the key differences between these stories?* (Preparation, action, or inaction?)
   - *What kinds of action* (prompts: organisation/planning, collective action, self-funding etc.)?
   - *What are the impacts on future changes to water as the result of these actions/preparation and inaction?* (e.g., impact on the community health, livelihood, and well-being)
   - *What can your community learn from this?*

4. Ask the two groups to share their discussions with the whole group.
   Facilitate follow-up discussion. If the following points are not raised by the participants, raise them for discussion:
   - *Links between good WASH and health and livelihoods.*
   - *What types of health problems happen when the water systems aren't working well? (*Prompts-not just diseases, think about carrying water containers, time wasted walking long distances, not enough water to clean the house, clothes and kitchen etc)
   - *What other ways are our lives affected when the water system isn't working well?*

5. Summarise the points further reiterate the key messages.
   - In the future there may be more/different problems with water
   - People's health, livelihoods and community wellbeing are affected by water
   - It is possible to take actions now to protect these benefits from climate change
   - Not acting might mean more difficulties and impacts in the future
   - Motivate action – other communities are doing this (social norm)

Facilitator note: At the end of the day, thank everyone for their time and participation. Ensure you inform about the next day and time and what it will entail.

Story A (example of 'good' village water planning)

John is the secretary of the WASH Committee in a village in Isabel, which consists of 52 households and has a population of around 320 people. John used to work for the Provincial government and is a very active member of the community.

The village has four main water sources:

- A Creek (covered dam piped to a reservoir tank and then 22 tap stands)
- A River (10 minutes' walk from the village)
- Three nearby Springs ["SEU"] (which are often the main drinking water during the worst of the dry season)
- Two rainwater tanks (at the health clinic and the school).

The village WASH Committee has been strong and active for nearly 10 years and the village is known for its reliable and good water, reasonably high standard of sanitation (many houses have toilets) and generally clean environment. For example, the community regularly clean and re-dig the drains around the village (which one of the springs feeds into). As John states, because of their good water and sanitation the community has a good reputation:

"Bae yu lukim, pipol blong defren ples i kam ota enjoyem … ota realy laek blo kam, ota laek blo talk aboatem tu. Eni miting oslem, go long ples olsem, because wota hemi gud lo there, toilet hemi gud lo there"

The village often hosts Anglican Church meetings as well as the occasional government and NGO activity.

In the past, there were tensions in the community because not everyone had the same access to taps – e.g. some areas or 'zones' of the village had fewer taps (1 tap for up to 5-6 households) and also, often, low water pressure (as some zones are located on higher ground and further away from the reservoir tank). These people are also from a different tribe than people in zones 1 and 2, who are the land-owners of the village site and have many more taps (1 tap for 1-3 households).

When the WASH Committee fundraise for the water system, the people from zone 3 and 4 rarely contributed, because their water situation was much poorer. Ten years ago, when a new WASH Committee was formed (with John as a member), the committee addressed these issues through various community meetings and ultimately increased the number of taps in zones 3 and 4 when they improved (protected) the dam.

Once the system was better, many households had more free time because they didn't need to spend hours queuing (when there was water pressure) or walking far to collect water, carrying heavy water containers long distances. Everyone now had more time to spend doing church and community activities, gardening and spending time with their families. Also, the children had more time for school and playing.

Additionally, because everyone across the village had more reliable water from the taps near their house, there was less community tension between different zones and groups of people in the community.

John told us one other positive outcome of the village's improved water system:

"Good water leads to good health and so people are strong to do the work in the community".

Our studies showed that this village had amongst the lowest cases of malaria and amongst the best water quality of all the villages we have studied.

Story B (example of 'not good' water planning

This story comes from a village in Guadalcanal but is a situation faced by many communities in Solomon Islands.

Evelyn remembers when the water system in the village was installed in the late 1980s when she was around 18 years old – "it really helped us. It saved us a lot of time and energy and we also noticed that children generally suffered less belly-run (diarrhea)". However, there was no active committee or group of people looking after the water system and within less than 10 years the system was not working very well. Moreover, the population was growing quickly – from 200 people to nearly 400 in less than two decades. There was a minor upgrade supported by an NGO in the 2000s (a reservoir tank, some new pipes and 5 more tap stands). However, due to a range of factors – including community disputes over land – there was never really any management of the system and it quickly fell into disrepair.

The village has numerous water sources, but the main source is a spring (a non-covered spring-box) which is gravity-fed to a reservoir tank and then sixteen tap stands. There are also:

- A creek (used for washing and, quite often, drinking for houses in zone 3)
- A few wells
- 12 rainwater tanks (10 private, 2 communal [church, community hall])

The village is dived into three zones. Zone 3 is located the furthest from the reservoir tank and often has low water pressure, and sometimes no water available at all. Evelyn lives in zone 3, and like her neighbours has to walk down the hill to zone 2 with one of her children to fetch water, carrying many water containers. When it rains, it is very slippery walking back-up the hill to their house with full water containers. It is around a 15–20-minute walk to the tap stands in zone 2, and they often have to wait for other Meri to finish their water chores before collecting water. This has to happen at least twice a day. All up, Evelyn and others in zone 3 can spend up to nearly 2 hours a day collecting water.

This means the women have less time for gardening and contributing to community activities, and the children have less time for schoolwork and playing. An old widower in Zone 3 has a bad back, and really struggles with getting the water. Many people are impatient and sometimes use the nearby creek water instead, as it is closer and there is no waiting time. However, there are several villages up stream that use the water, and many people have got sick from drinking this water. The nurse at the nearby clinic recalled that one infant was so sick they had to go to the NRH.

DAY II: THIS COMMUNITY- PAST, CURRENT AND FUTURE SITUATIONS

ACTIVITY 3. Catchment maps – links between water supplies, water resources & catchment activities

Timing Visit 1, Day 2

Summary

This mapping exercise provide community members with the opportunity to identify and discuss where their water supplies come from in the catchment, and what activities in the catchment influence their water supplies, and how their own activities might influence water supplies, of this community r other others downstream.

Objectives

1. To build understanding of the existing water system operating at the catchment level and link to the community water supply systems
2. To understand the upstream and downstream of water
   - that the water sources being used by a community have travelled through the catchment, through/past/under other land uses that might affect the water (e.g., other communities and their wastewater, sanitation, gardens, logging, farming etc).
   - Some water resources might flow away from the community, towards other communities – the actions of this community might affect the amount and health of the water that flows downstream to other communities

Preparation and Resources A2 or A3 printed satellite maps (3 copies) – one zoomed in to community, one zoomed out showing whole catchment, markers, blue-tac, printed pictures, projector (optional)

Duration 2 hours

Method

Start with a quick reminder of the discussions from Day 1 about the important links between water and health, wellbeing and livelihoods, and the importance of taking action.

3.A. The upstream and downstream of our water

1. Use the poster of the water cycle to explain generally **where water comes from and where it goes to**, and that it moves over the land and through the land (**Appendix 3-WATER CYCLE**)
2. Discuss the **ways that climate change can affect the water cycle** – discuss droughts, floods, coastal storm surge, sea level rise, heavy rainfall.
3. Share the A3 printed satellite map. **Ask the participants to identify and draw catchment activities** using following questions (or they can draw their own catchment maps):
   - Locate and label the village (label)
   - Label other major land features – coast, hills & ridges
   - Locate and label other communities
   - Locate the water supplies and sources used by the community e.g., dams, reservoir tanks, springs, creeks, rivers, wells
   - For waterways (streams, creeks and rivers): try to draw the whole pathway, from where it starts in the hills to the coast.

3.B. Hazards to water systems

1. **Review the hazard information cards** (APPENDIX 4) about the main types of hazards (focusing these 5, which can affect the source feeding into the community's water supply)
   - Sediment
   - Germs
   - Salt
   - Chemicals
   - Water source availability
2. Discuss with participants what each of these hazards are – use the discussion prompts on the back of the pictures; **especially discuss the types of human/land activities that causes these hazards**
3. OPTIONAL: Screen and discuss the video: Climate change: The Water paradigm (https://youtu.be/Q8B4tST8ti8)

3.C. Hazards to our water pathways

1. Return to the **catchment maps.**
   Add the main human/land use activities happening upstream, happening in this community and happening downstream (e.g., villages – sanitation, drainage; washing (clothes, bathing, kitchen etc) in water; gardens, roads; farming (chemicals or fertilisers); animal grazing; logging; land clearing.
   - what activities are happening on the edges of the stream/river/waterway, all the way **upstream** to its start and what types of hazards can they cause (link to the hazard information cards)
   - what activities are happening on the edges of the stream/river/waterway, all the way **downstream** to its end and what types of hazards can they cause
   - what activities are happening on land around springs and wells (e.g. think about the land up to 30 metres away), especially uphill, and what types of hazards can they cause
2. Discussion – which of these human and land activities are already affecting water quality or water availability in the community water supplies? Which ones might cause problems in the future?
3. At the end of the session summarise the key findings from the discussions.

ACTIVITY 4. The past and future water for this community and catchment

Timing Visit 1, Day 2

Summary This activity focuses on the most likely future changes to occur in this community that will affect community water systems *(e.g., population change -drought, floods, intense storms, cyclone, sea level rise, storm surges*). It involves looking at past experiences, to help understand what types of effects these changes will have on water systems. By the end of this activity, a poster will be produced which will be used later.

Objectives

3. To reflect on the past water hazards and how these affect the community and the water system
4. To understand the likely future hazards (*varying levels of specificity and uncertainty*) and how they may affect catchment water systems and the community water supply systems.

Preparation & resources A large poster paper prepared for use in the 'Future Changes Poster' activity described below. This will involve a poster paper divided into four sections, with headings for each section, and with one section with colour photos of "future changes" glued on. You can use your own photos of types of future changes, or those in APPENDIX 5). For Activity 4C, print out or write a poster with the facts, for discussion, Additional resources: markers, blu-tack.

Duration 2.5 hours

Methods

4.A. Tok Stori (learning from the past) (30 mins)

1. Bring the whole group together and ask about their **past experiences with major changes** (*e.g., droughts, flood, storms, population change & flux….)*
2. Discuss how each of these changes **affected the water system, and how that affected community**
3. Tell the participants we will be discussing these more in the next activity.

Notes:

- This is a good opportunity to **share local and customary knowledge between older and younger participants**, about looking after water systems and catchments, and trends of changes
- the purpose is to remember the experience to prepare participants for the next activity. It is not necessary to capture this in writing.

4.B. Looking into the future – 'Future changes posters' (1.5 hours)

1. Divide the group into two or three sub-groups and assign (participants chose which ones to do, each group do different future change) each with one future change (*drought, flood, storms…*)
2. Ask these two groups to discuss using following questions and ask them to put it on the large paper
   - *What are the effects on the catchment water systems and pathways?*
   - *What are the effects on community water supply systems (possible future water system problems/hazards)?*
   - *What are the impacts to people and their livelihoods from these future water system problems?* Ask participants to think not only how this change would affect themselves and their families, but others in the community, especially those with special needs.

GESI: this action helps to ensure future actions are socially inclusive

Example 'Future changes poster'

1. Future change: Drought (or…)

2. Changes to catchment water resources systems and pathways

- Spring becomes weaker – less water flowing out
- Stream flow is lower
- Stream is more filled with mud, branches etc (less flow to flush it)
- …..
- ……..

3. **Effects on community water supply system** (possible future water system problems/hazards)

- Storage tank doesn't fill as much
- Pipes from dam block up more often
- ……
- ……..

4. **Impacts to people and livelihood** (from future water system problems)

- People at end of water pipes have low pressure or no water more often than they do now – need to walk further and carry water (carry less, affects their health and wellbeing)
- Not enough drinking water for community gatherings
- ……..

Note: The posters in activity 4B will be used in other activities, so ensure to keep it in safe place to reuse.

4.C. Facts (re-emphasising the impacts) **Optional activity**

- Use this below video as a scene setting/introduction: *Untold stories of climate change loss and damage in the LDCs: Solomon Islands (Pijin)**
- Put up the **POSTER** below and use the points to talk about what the 'science' and research tells us thus far:

CLIMATE CHANGE FACTS

- Solomon Islands is experiencing **higher temperatures**, fluctuations in rainfall, and more frequent El Nino weather patterns. This is believed to be due to climate change and **is intensifying disasters**, such as floods and cyclones, and changing weather patterns which cause prolonged droughts and heat waves (e.g., Birk and Rasmussen 2014).
- Climate change is caused by high fossil fuel use by humans across the world – it is not a local problem caused only by local actions, but the actions of every human everywhere matter!
- Other communities in SI are facing similar effects of climate change
- Climate change is affecting **water security** by intensifying the frequency of precipitation, floods, droughts, and cyclones, causing damage to water infrastructure (Paeniu et al. 2016: 65).
- **Water systems** will be affected by climate change, and if water catchments are degraded, they will be less resilient to the impacts of climate change.
- **Solomon Islands faces multiple water risks** including flooding from storm surge, tsunami, and heavy precipitation, which impacts safe, reliable water for drinking and household use (Gheuens et al., 2019, SOPAC, 2007).
- Sea surface temperatures are increasing, and ocean acidification and rising sea levels are leading to a **decline in fish stocks** through the destruction of coastal habitats and reefs (Dey et al. 2016).
- Increased soil salinity and erosion from rising sea levels affects **food gardens, impacting food security and health** (e.g., Asugeni et al. 2017; WHO, 2015).
- In some locales, such as the artificial islands and coral atolls in SI's, sea level rise, king tides and food and water security are impacting upon the viability of settlements and resulting **in internal migration** (Monson and Fitzpatrick 2006).
- Stress on the physical environment is impacting existing **community ability to manage social relations** (Higgins, 2020).
- **Local Ecological (or Traditional) Knowledge** positively contributes to building resilience and support anticipatory and reactive local adaptation to climate change (see Nalua et al., 2018; SPREP, 2012; 2018).

Homework for CWSIP-II participants: This evening, talk to other people, especially any older people or people with special needs, in your extended family or neighbours about: a) how things have changed from when they were young (population, environment, climate); and, b) What they think the likely changes will be in the future?

DAY III: IMPACTS AND THINKING ABOUT THE FUTURE

ACTIVITY 5. Toki Stori – SHARE STORIES ABOUT LIKELY IMPACTS

Timing Visit 1, Day 3

Summary

This activity will provide opportunity to share stories about the likely impacts from the future change using intergenerational dialogue with family members, as part of the homework that was assigned in the previous activity.

Objectives

- To gather and share stories about impacts of future change on water

Duration: 1.5 hours

Preparation and resources The 'Future Changes Poster' (Activity 4B), markers, blu-tac

Method

GESI: this action helps to ensure future actions are socially inclusive

1. Ask the participants to share the stories they have gathered about the likely impacts (choose 2-4 people to share. Ask the remaining participants if they have anything further to add)
2. Discuss whether these impacts affect different groups such as women, children, people with disability, different areas of the village differently or same?)
3. Revisit the 'Future Changes Poster' from the previous activity (4B) and add in any new points that have been raised in the poster (*i.e., effects of the future change? impacts??)*
4. Summarise the key points and reiterate the importance for communities to prepare an Action Plan for the upcoming changes – and remind them this will be done during the next visit.

Notes

If the discussion includes possible actions that can be taken to reduce the impacts, including customary or local knowledge, make a note of these to discuss again during the next visit, when action plans will be made. It is not necessary to discuss actions at this time.

ACTIVITY 6: Stories from other Pacific communities

Timing Visit 1, Day 3

Summary

In this activity, stories from elsewhere in Pacific will be shared that focus on a community's response to future water problems and the positive action/s that they have taken to address them and the resulting benefits to the communities.

Objective

- To share ideas about the types of action which will help address water problems
- To raise awareness that it is possible to take action now
- To ensure these actions are feasible/possible for communities to implement / lead
- To motivate community to take feasible actions

Duration: 1.5 hours

Preparation and resources read the story below, butchers' paper, marker

Method

1. Let the participants know you will be sharing a story from elsewhere in the Pacific and **read the story** below (pg 25)
2. **Discuss** the following (and summarise key points on poster paper)
   - *What were the problem/s?* (e.g. No preparation for drought, water scarcity….)
   - *What were the key actions the community took to address the problems?* (e.g. Alternative water source, fundraising, water rationing, stronger water management, collective action- recognition that water is everyone's responsibility not just the WASH committee)
3. Summarise the key points and reiterate the key lessons / actions below:
   - Strong leadership was a key factor**-** Laura and other community leaders work cooperatively together to plan the new system
   - The ability to raise funds is critical- raising funds locally and abroad through Facebook was successful and helped attract further support from the government
   - In this example, women led the process which then encouraged other members of the community to take part
   - Cooperation and collective action are important **–** WASH committee got support from the community to maintain the new water system
4. Ask the following questions and record responses on poster paper (keep this for later activity)
   - *Could these key factors be applied in your community to address future water problems? Why/ Why not?*
   - *What could be some of the challenges to implement these lessons / actions?*
   - *How might any challenges be addressed?*

Story C (example of taking positive actions)

Laura is a mother of four children living in a small remote village in Kiribati, only accessible by the boat. Kiribati is one of the most vulnerable countries to the effects of climate change in the Pacific. As a result of rising sea level and coastal erosion, many people have lost their livelihood and homes. Laura's community lives a simple and traditional way of life- *food is available from the land and sea*. The primary source of water is a well and people use the well water for cooking, drinking, and farming needs.

A few years ago, the well water started to smell bad. This was caused by the sea water that encroached the land and seeped into the wells. Laura noticed since the water started smelling, her children were getting ill with frequent episodes of diarrhea. Laura, like many in her community, tried boiling the water but still the water was murky. The community were experiencing an extended period of drought. It was getting harder for Laura to access drinking water and there was not enough water for bathing and washing clothes, even watering her home gardens.

Laura and her community realised that they needed to find an alternative water source and also heavily ration water during the drought period.

Laura is newly appointed WASH Committee leader and active in the women's church group. She understands that looking after water is "everybody's business" and water affects everyone.

The WASH Committee held a meeting and Laura proposed the idea of fundraising to install a rainwater harvesting system. Some of the members were initially not supportive of the idea but eventually came around following Laura's advocacy and energy. The committee reached out to the community members, village leaders, landowners, elders, other community groups (e.g., church group, women's group) and villagers living abroad (via Facebook) to raise funds for the new water system. Women led the fundraising efforts. They also reached out to their local government agency to help install rainwater catchment and storage tanks.

After successful fundraising and planning, they installed rainwater tanks to provide safe drinking water and extra supply during times of drought. The WASH Committee is responsible for the operation and maintenance of the system. The community also help the WASH Committee to clean and maintain the system, and every year when the tanks are nearly empty, they clean the RWTs. The annual tank cleaning activity is organised by areas within the villages with households joining together to clean the nearest tanks. The WASH Committee and the community decide together on how to ration the water during the times of drought.

Now they have rainwater tanks, Laura noticed her children were falling ill much less often and she was happy about that. She also noticed the water quality was better in rainwater tanks compared to the well water. She believes that this with the other activities will help prepare her community for changing climate patterns in the future. The community is now reassured that they will have drinking water stored in the tanks when a drought comes.

ACTIVITY 7. Planning for the future: next visit & homework task

Timing Visit 1, Day 3

Objectives

- To build a collective awareness among the community regarding future water problem and its impact
- To inform the community about the next visit

Duration 15 mins

Preparation Write out the questions in step 3 below, and leave with the participants

Method

1. Inform the community about the next visit (we will identify actions the community can take to prepare for future change and water problems and update the CWSIP plan with these action)
2. Tell the participants that there is a homework assignment/task for them. Ask the participants to go to their respective groups (youths, women's, men's, and other relevant groups), share the 'Future Changes Poster' and discuss the following questions:
    - *How would these types of future water problems impact on people? How would their lives be affected?*
    - *Which of the water problems would be the most important? (Because they affect a lot of people, or the consequences/effects on people are very serious)?*
3. Ask the participants to write down this information to share in during the next visit (activity 8)

Step 2: Community Action Planning

DAY I: ASSESS NEED TO UPDATE ACTION PLAN FOR FUTURE PROBLEMS

ACTIVITY 8: Community reporting on impacts of future climate scenarios & prioritising future water problems

Timing Visit 2, Day 1

Summary

This will further explore the future water problems and its impact which has been collected by the participants from the community engagement (assigned in Activity 7). It will also provide an opportunity to share ideas for actions to control or mitigate these future water problems.

Objective

- To share the information from the community engagement about the most important impacts
- To share ideas for mitigating/controlling actions for the future water problems

Duration 3.5 Hours

Preparation and resources Homework assigned at Activity 7; Future Changes Posters prepared during Step 1 activity 4B; tables from appendix 6: severity, likelihood and exposure and risk level

GESI: this action helps to ensure future actions are socially inclusive

Method

1. Remind the participants about the **homework task** that was assigned to them (activity 7) and **put up the 4 Future Changes Posters** from **activity 4B** (future climate changes and effects to the water system and to people), and the **catchment map** prepared in **Activity 4A)**
2. Ask the participants to **share the key points from their community engagement** using the following questions:
    - *How did the community engagement go? Which group did you go to?*
    - *What new information did you learn about how these types of water problems of the future impact on people? How would their lives be affected?*
    - *Does anything need to be added/changed to box 4 (impacts to people) of the 'Future change posters" based on the discussions?*
3. Discuss again Box 3 (changes to community water supply systems) of each of the "Future changes posters'. **Make sure Box 3 of all of the posters is updated to everyone's satisfaction** – this information is the focus of the future action planning so it will be used in the next activities.

4. From now on we will call the things listed in Box 3 of all the posters – the "**Future Water Problems**"

GESI: this action helps to ensure future actions are socially inclusive

5. Discuss which of these water problems are the most important? **highlight the "most important problems"** (draw a circle, asterix or other symbol).

   In deciding which are the most important, it is important to discuss:
   - The consequences/impact on people caused by this hazard or problem – refer to the training in Step 1 about different hazards and how they affect people
     - Think about the type of hazards that are caused by this problem (germs, salt in drinking water, sediment, lack of water etc)
     - Remember that different hazards have different effects on people's health and to their lives – if the consequences are serious to anyone, then the problem should be considered as serious for everyone.
   - How likely this problem is to happen in the next 10 years
   - How many people will be affected by this problem if it happens
   - Option: use a voting process to identify the most important – this allows everyone to have a say in what is important,

6. Agree on (not more than) **5** "**High priority possible future water problems**" and make sure the group is satisfied these are the most important problems to prepare for. The goal is to identify not more than **5 future problems** (across all the posters) for attention – we want these to be the most important AND the most likely to happen. If more than 5 future water problems have been identified – discuss again which 5 of these are the most important AND the most likely.

Note for facilitators about the above "risk assessment" approach: the above activity involves identifying the highest priority future risks to the water system by considering the most serious problems – those that cause serious harm to health or wellbeing, those that affect many people, or that are likely to happen often. This is a "risk-based" approach. This is the same idea as used in CWSIP-I – however in CWSIP-I this was done in a more rigorous way, involving listing all the hazards/problems and documenting a "likelihood & exposure" rating to each (high/medium/low), and then a "severity" rating (high/medium/low) for each hazard, and determining a "risk level" for each hazard.

If it is preferred to use the same approach here, this can easily be achieved by making a table that lists the future water problems (taking the items from Box 3 from all the posters), and adding in two columns: Severity (H/M/L) and Likelihood & exposure (H/M/L), and then following the same method as in CWSIP-I to identify the highest risk future water problems (refer to CWSIP-I Step 5 – Task 3 (Vol. 2, pp. 45- 49)

ACTIVITY 9: Identifying control actions for future water problems

Timing Visit 2, Day 1

Summary
Identify control actions that can be implemented to prepare for the high priority potential future water problems.

Objective:
To update future action plans with actions to prepare for high priority future water problems

Duration: 2 hours

Preparation and resources List of "5 high priority possible future water problems"

Method:

1. **Discuss possible control actions.** Talk about (and if it's helpful to remember some of the discussion, add notes to a new poster "**Possible Actions**"):
   - What actions might **prevent** each water problem from happening, even if the climate change does happen?
   - What actions might **reduce** the impacts of each water problem from happening, even if the climate change does happen?
   - What actions would help prepare for these possible future changes **AND** also **improve the water situation now**?
   - When discussing possible actions, prompt:
     - What changes to the water system (**hardware**) would prepare the community to cope with this problem? (e.g., installing new water system parts, tanks, pipes, dam etc).
       (Discuss: Hardware is often a solution – but it is not the only one and it is often very difficult to get.
     - What changes to the way the water system is **managed and maintained** would prepare the community to cope with this problem? (e.g., managing more than one water supply source; maintaining storage tanks – removing dirt and rubbish so they can store maximum water; protecting tanks, pipes and infrastructure from storm damage);

   It is also important that everyone in the community plays their part in managing the water system – changing the way they use and look after water and the water system). Think about possible **zone level** actions here, not just WASH Committee or household.
     - What changes to the **way people use water** now and, in the future, would assist? (e.g. encouraging people to use river or well water for sanitation, and washing and house cleaning, saving clean water for drinking; teaching people how to treat water to make it safe if the main supplies aren't available)
     - What changes to other **behaviours and land activities** would assist? (e.g., stopping animals accessing dams, stirring up the bottom and damaging the edges so that more dirt fills the dam – this makes the dam smaller and store less water

2. Start a new poster "**Agreed actions**" with a table like the one here, and then to the column "ACTIONS", select 5-10 actions from the "possible actions" list, choosing those that had the most interest and support from the group.
   - For each action, discuss **what type of action** it is:
     - Hardware
     - Management or maintenance action – make a note whether this is the responsibility of the WASH Committee, zone, household, or of everyone
     - Water use behaviours
     - Other behaviours/activities
   - For each action, note which of the **future water problems** would be assisted by each action
   - For each action, tick if this action would also assist with current water problems
   - For each action, note what steps will be taken to ensure that no-one is excluded or disadvantaged by this action (**steps to ensure inclusion**). Discuss whether the action can be modified, or whether a new action

is needed to ensure everyone's water needs will be met. For example, a step might include consulting with people with disabilities, or on the far edges of the community, or single mothers, about how the action can be achieved in a way that also benefits them or allows them to participate.

GESI: this action helps to ensure socially-inclusive future actions

Agreed actions poster

ACTIONS	**Type of action?** ✓			**Which future water problems would this assist?**	**Assist with current water problems?** ✓	**Steps to ensure inclusion**
	Hardware	Management and maintenance (who is responsible)	Peoples' behaviours water/ other activities			
1. Protect all pipes and taps from damage		✓ Taps – Zone/households sharing each tap Pipes – WASH Committee		Water wastage/loss	✓	
2.						
3.						
4.						
5						
6						
7						

3. **Review** the actions listed:
   - Are there **actions to address ALL of the priority water problems?** If some are not addressed, more actions need to be added
   - Is there a **mix of types of actions?** This is important – the action plan cannot only include hardware.

4. Review management maintenance (Who is responsible)
   - If any individual or groups (e.g., zones, WC, households) have been added to the Action Plan, ask: *Have they been consulted? If so, how and by who? If not, how are they going to be consulted?*

5. **Choose which actions to take forward for further discussion**. It may not be possible to undertake all of the actions – the group should discuss whether any actions can be left aside for now. In this discussion it is helpful to look at whether an action also assists with current problems – these would be useful to keep. AND make sure the actions chosen to take forward will address ALL of the high priority future water problems.

DAY II: UPDATE WATER ACTION PLAN

ACTIVITY 10: Review and update existing Water Action Plans

Timing: Visit 2, Day 2

Summary
This will provide opportunity to review the existing Action Plans and consider adding in actions to address future problems

Objective:
Update the Water Action Plan Review the Water Action Plans previously prepared during CWSIP-I or any other community planning activities and update these to include any new actions required to address the high priority future water problems. Also, to re-emphasise the option of adding zone level activities into the village Action Plans (as it was unintentionally missed during CWSIP-I)

Duration 2 hours

Preparation and resources: Action Plans (from CWSIP-I); Actions list from yesterday (Activity 9)

Method:

1. Display the CWSIP-I water action plan.

2. Discuss whether there have been any major changes to the list of actions – have any new actions been considered or implemented? Or has there been a decision not to proceed with actions (to remove them from the action plan)? Discuss these changes to ensure they don't mean that some of the existing problems with the water system are not going to be addressed.

   It is very important that communities address existing problems – it is not appropriate to only focus on future problems.

3. Start a new "**CWSIP-I AND -II ACTION PLAN'** Poster (see example below). the format should be a table that includes:
   - Action name/description
   - Hazard or problem it is assisting
   - Type of action
     - Hardware
     - Management or maintenance – WASH Committee / Zone / Everyone
     - Behaviours – Water user, or land activities, or other
   - Steps to ensure inclusion
   - Champion/responsibility (who) (include zones if warranted)
   - Timetable (when)

4. First **add the updated CWSIP-I actions**.
   - For each action listed, discuss the status – if not yet implemented when is it likely to be implemented? Make updates to the action plan to reflect this discussion. Encourage participants to set a tentative date rather than "TBC"; this is to encourage accountability. Let the community know it can be changed if needed, by discussion with this group.

5. Look at the **CWSIP-II actions discussed yesterday** and discuss:
   - Are any of these actions that address future problems already included in the updated CWSIP-I action plan? Or would they be included if a minor change is made to an existing actions – is there agreement to do this

(often making a change to an existing action will benefit problems that exist now as well as problems in the future)?

- Which of the CWSIP-II actions should be added to this new action plan? (Add these to the action plan, and complete the information in the action plan table)

6. At this time, it is important to **discuss the full list of actions**:
   - *Is there agreement that all of these actions are needed to ensure the water system can properly support everyone's needs now and in the future as changes happen?*
   - *Are any of these actions going to further disadvantage anyone in the community? How can the action be changed to ensure no-one is excluded?*
   - *If the group is concerned, they cannot do all of these actions immediately, discuss which actions can be delayed and reflect this in the timetable column*
   - *Who is responsible – make sure that if any new people or groups have been included (e.g., zones) that they have been consulted with?*
   - Agree on the timetable and champion/responsibility for each action.

7. Once the action plan is complete – **congratulate the group on their hard work. And discuss**
   - *How do they feel about this action plan?*
   - *How do they feel about their water future?*
   - *Discuss the group's commitment to this updated action plan?*
   - *What problems do they expect?*
   - *How can they work together to overcome these problems?*
   - *Who else in the community can assist to overcome these problems?*

Take a photo of the updated Water Action Plan, and leave the poster copy in the community.

GESI: this action helps to ensure socially-inclusive future actions

WATER ACTION PLAN - GUD WATA PLAN BLONG IUMI (CWSIP-I AND -II ACTION PLAN)

ACTIONS	**Hazard or Problem being addressed**	**Type of action?** ✓			**Which <u>future</u> water problems will this assist?**	**Does it assist with <u>current</u> water problems?** ✓	**Steps to ensure inclusion?**	**Who is responsible?**	**Timeline**
		Hardware	**Management/ maintenance (who is responsible)**	**Peoples' behaviours water/ other activities**					
1. Protect all pipes and taps from damage			✓ Taps – Zone/households sharing each tap Pipes – WASH Committee		Water wastage/loss	✓			
2.									
3.									
4.									
5									
6									

ACTIVITY 11: Plan for Community meeting & celebration to socialise water Action Plan

Timing Visit 2, Day 2

Summary
This will provide an opportunity for the participants to identify relevant stakeholders and plan for the third step - celebration and socialising the action plan to wider stakeholders

Objective
To plan for the final step -celebrate and socialise the updated water action plan (Gud wata plan blong iumi) to broader audience

Duration 15 minutes

Method

1. Discuss the importance of the final step – community celebration. It is important to socialise the action plan to ensure there is community support for the WASH Committee in the future, and to encourage everyone to take up their new actions.

2. Ask the participants to identify the influential and relevant stakeholders to invite to the celebration.
    - Think about the people that were identified for this community when you did the scoping visit (refer to "before starting CWSIP advice, on pg 11)
    - Consider whether any neighbouring community members should be invited
    - Ask whether the updated Water Action Plan should be shared with any of these stakeholders before the celebration day.
    - Confirm who will send invitations (the community, or facilitators?)

3. Decide who, how and where the participants can present the updated Water Action Plan and celebrate the success of the workshop

4. Decide on the celebration date and location (allow enough time to send invitations and give people notice to make plans to attend e.g. 3-4 weeks)

5. Remind everyone who has completed the workshop they will receive a certificate on the celebration day.

6. Wrap up

Following this activity, facilitators should:

- Write up the Water Action Plan so it can be easily printed and shared.
- Send invitation letters to invited stakeholders and guests (if facilitators agreed to this task)
- Send copies of the GUD WATA PLAN BLONG IUMI (CWSIP-I AND -II ACTION PLAN) to influential people and relevant stakeholders (with permission from the community)

Step 3: Follow-up and support

Day I: Follow-up and celebration

ACTIVITY 12: Community meeting & celebration to socialise water Action Plan

Timing Visit 3, Day 1

Summary This will provide the participants the opportunity to share the updated CWSIP-II Action Plan and emphasise the importance of preparing for future changes, and the need for community action by everyone to support these actions.

Objective

- To share the updated future focused action plan to the wider stakeholders
- To gather feedback and comments on the updated action plan
- To get community buy in or support to implement these actions for the future changes

Duration 2 hours

Preparation and resources:

- **Pre-arrange a time for the community meeting** – try to arrange a time so that most community members can participate.
- **Send invitations** (and copies of the Water Action Plan) to invited guests
- Bring Copies of CWSIP-I and -II Action Plan, printed participation certificates, (optional projector- share and get feedback on action plan)

Method

1. Explain the purpose of CWSIP-I and -II, and the training overview
2. Ask the CWSIP-II participants to present the updated Water Action Plan (using projector if preferred)
    - Reiterate the importance of preparing for the future changes and the need of full community support to implement these actions
3. Ask the community if they have any feedback or comments
4. Get the community's endorsement for the action plan
5. At the end, ask the relevant stakeholder to distribute the certificate of completion to all the participants who successfully conducted all three steps of CWSIP-II
6. Wrap up

Appendix

1. Scoping Trip – Information & Checklist

Trip Date: Staff Name/s:

Name of the village:	
Demographics	
Ward	
Population:	
No of households:	
Water supply system	
Water system type/s:	
# Number and types of source/s:	
# Access points (tap stands):	
# RWTs:	

Logistics	Notes
Phone coverage (Y/N):	
Transport (types, time and cost):	
Potential meeting venues (school, community hall, church.):	
Cost of venue:	
Electricity: Generator and fuel (availability and cost)	
Accommodation:	
Catering (options and costs)	

Contacts:

List of stakeholders (please update this list before, during and after your visit)

Name	Role/relevance	Phone

Examples (roles/relevance)

- Village chief(s)
- Ward development committee representatives
- Water source landowners
- Water/WASH Committee members or water managers
- "active water system fixer" (may not be part of the WC-someone who knows how to maintain or repair WS)
- Youth group leader/member
- Women group leader/member
- Health Group leader/member
- Church leader
- Disaster committee member/s
- Any other relevant stakeholders??

Water/WASH Committee information

- Water/WASH Committee status: Active Not Active
- No. of male =
- No. of Female=
- No. of youths=
- Total members=

CHECKLIST

S.N.	Meeting with Stakeholders	Yes/No	Any comments
1	Have you Identified and listed the relevant stakeholders (chief, VHWs, youths, women, landowners, school...)? refer to the list above		
2	Have you met with all the identified major stakeholders? Any plans of follow-up?		
3	Did you explain the purpose of your visit, (including training, structure, duration, types of participants…)?		
4	Are the stakeholder/s supportive of the training/project? Will they be able to provide any support (venue, participants list, any recommendations ...)?		
5	Have you recorded all contact details for the stakeholders? (Telephone availability, letter…)		
6	Have you found a suitable venue for the training venue (school classroom, community hall...)? Can we book the venue? (*Ask the stakeholder to get the information)*		
7	Did you get the approval for the implementation? (*Please save a copy and send it to IWC)*		
8	Have you set some potential date/s for the implementation of the project? Please record it here.		
9	Any challenges for implementation? List them (How can we address them?)		

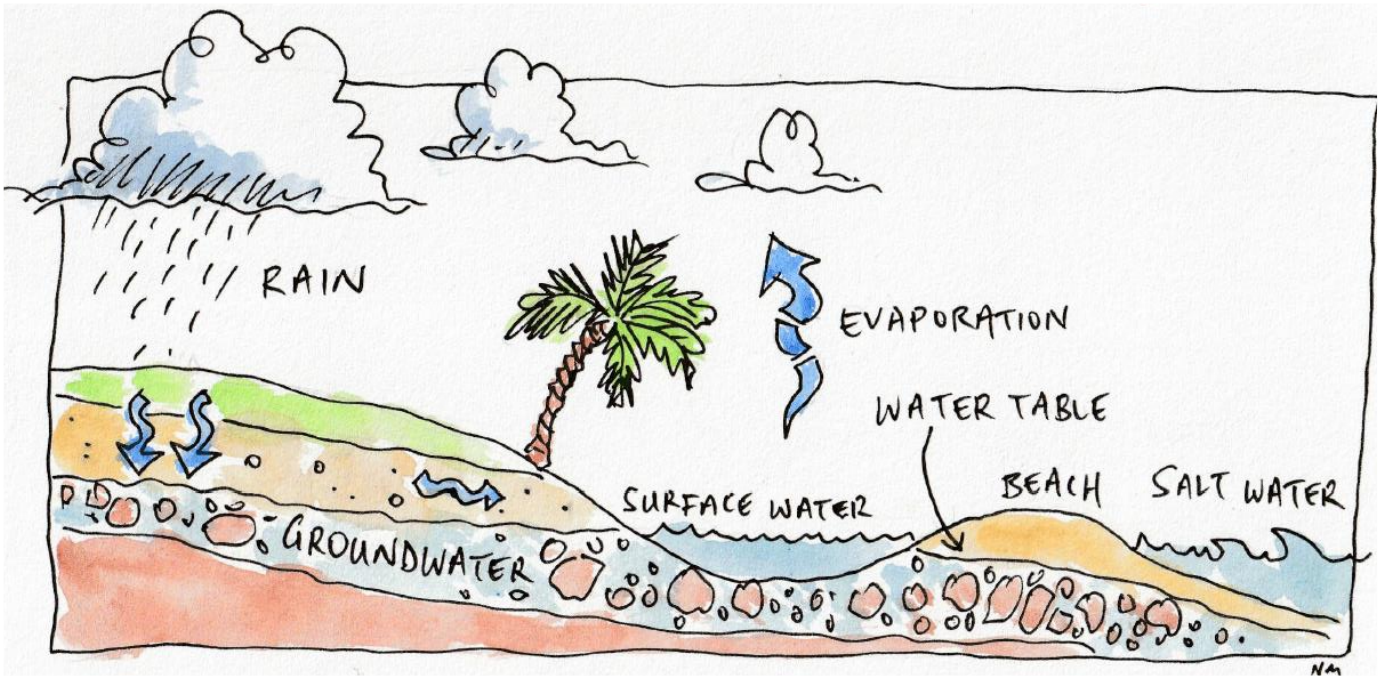
10	Have you sorted out the electricity and back up (?		
11	Have you sorted out the accommodation?		
12	Have you sorted out the catering? (Who will do it and cost?)		

Final comments about commencing CWSIP in this community:

2. The 7 steps of CWSIP-I

	Facilitator steps	Village tasks	Actions that will enable GSI	Actions that will enable Climate Resilience
Step 1	**Activity**: Gather Village background **To**: confirm groups and zones and water types **When**: 2 weeks before Step 2 **Duration**: ½ day)		Identify all groups to ensure they will be engaged in WSIP process	Identify climate predictions
Step 2	**Activity**: Engage village leaders on water sources and zones **To**: Motivation and permission for **WSIP** (zone approach) **When**: Week 1 **Duration**: ½ day	Organise zone meetings for Step 3	Seek identification of all groups	
Step 3	**Activities**: 3a. Zone meetings 3b. Introduce water systems task **To**: to motivate WSIP and identify representatives and gather data on water systems **When**: Week 2 **Duration**: 1-2 days	Identify all of the water sources available and when used and for what uses Zone reps complete household survey, collect stories and map water systems	Seek meaningful participation of all marginalised people in zone group meetings. Incorporate experiences and needs from all marginalised people in stories and HH survey	
Step 4	**Activity**: Village meeting of zone reps **To**: share water systems (maps, survey) and stories from each zone; and training in water pathways and identifying hazards **When**: 1-2 weeks after Step 3 **Duration**: 1 day	Zone representatives identify hazards & hazardous events within their respective zones	Incorporate hazards experienced by all people	Consider expected climate related hazards in assessment of existing and future hazards
Step 5	**Activity**: Village meeting of zone reps **To**: Share hazard assessment results and prioritise controls **When**: 1-2 weeks after Step 4 **Duration**: 2 days	Zone representatives present, discuss and agree action & priorities with village & village leaders	Prioritise improvements to achieve equitable access Discuss positive and negative impact of controls	Identify actions for prioritised climate related hazards
Step 6	**Activity**: village meeting of zone reps **To**: Document Gud Wata Plan Blong Iumi **When**: 1 week after Step 5 **Duration**: 1 day	Ongoing implementation and monitoring of village Plan	Include all sources and needs of all people	Include climate hazards and actions
Step 7	**Activity**: Ongoing implementation, monitoring & support- monitor water quality **To**: Support sustained village water security **When**: 1 month after Step 6 (then every 2-3 months) **Duration**: 1 day		Strengthen equitable implementation	Adaption of plan to emerging hazards

3. Water cycle



4. Hazard picture cards

The following pages contain picture cards of the 7 hazards for discussion during activities

These should be **printed DOUBLE-SIDED, and cut in half** (except for the GERMS sheet). Then you will have a picture on one side and the key points for discussion on the other side. These can be laminated and kept to use as a resource for all village engagement activities.

Why we need to care for our water quality (source: Live & Learn Environmental Education , Keeping your drinking water safe: An introductory guide)

GERMS INFO

DISCUSSION POINTS:

CANNOT SEE GERMS, even in if water looks clean it may still have germs in it – option to do siti in clean water activity (CLTS activity)

SOURCES and CAUSES **(Where from):**	**PATHWAYS INTO DRINKING WATER** **How GERMS get into drinking water:**
Human siti – open defecation toilets that leak into the ground nappies in rubbish piles dirty hands after siti	**Germs leak into ground** from open defecation or toilets, then **into groundwater** and **into wells, bores** (especially when raining) Rain washes germs over ground from open defecation or nappies in rubbish and into streams, dams, wells **Water pipes are broken** and germs from open defecation or toilets enters water systems through cracks in pipes **Animals eating/touching siti** – pick up germs on feet and mouths and then enter water sources or lick taps or containers **Dirty hands** after defecation touching water containers Bathing / washing clothes in or next to watersource
Animal siti on ground; on house roofs	Animal **germs leak into ground** from open defecation, then **into groundwater** and into wells, bores **Rain washes animal germs over ground** from open defecation and into streams, dams, wells Rain washes animal germs on roof into rainwater tank

SOLWATA

CHEMICALS

FUEL DRUM

HERBICIDES

PESTICIDES

FERTILISERS

USED FOR MANUFACTURING
(making products e.g., glue)

SALT

DISCUSSION PROMPTS

- Salt in water makes the water taste bad – you will not be able to drink water with levels of salt that can cause harm to your health
- Salt (like germs) cannot be seen in drinking water

SOURCES and CAUSES (Where from): Common sources and causes of SALT:	**PATHWAYS INTO DRINKING WATER** How SALT gets into drinking water:
Sea	• Storms cause coastal flooding – sea water comes over land into wells, shallow bores, streams, rivers • Sea level rising pushes sea water into groundwater • Extracting too much groundwater from bores and wells causes sea water to get sucked into the fresh groundwater

CHEMICALS

DISCUSSION PROMPTS:

- Can harm human health – significantly less common than germs
- May only present at health issues after a long time
- THESE ARE NOT COMMON IN VILLAGES IN SOLOMON ISLANDS – AND LESS IMPORTANT THAN GERMS, SEDIMENT OR SALT.
- WE WILL NOT BE PLANNING FOR IMPROVEMENTS ABOUT CHEMICALS YET – unless there is clear evidence of a chemical problem in water sources. (This can be done if future plans if there is a concern about chemicals.)

SEDIMENT (DIRT)

WATER AVAILABILITY – SOURCE SUPPLY

SEDIMENT

DISCUSSION PROMPTS:

- Makes water look bad – *looks like milo*
- Makes water unpleasant (not as nice) to drink but sediment by itself does not harm health

SOURCES and CAUSES (Where from): Common sources and causes of SEDIMENT:	**PATHWAYS INTO DRINKING WATER** How SEDIMENT gets into drinking water:
Plants removed for logging, gardening, farming, mining Ground dug for construction	Rain washes the sediment into rivers, streams, dams, wells

WATER SOURCE AVAILABILITY:

DISCUSSION PROMPTS:

- Why might water not be available at the source?

HAZARD:	**CAUSES: (when / why does this happen)**
Not enough water – <u>not enough supplies</u>	Drought – less rain than usual - dam or tanks are empty **Tanks or dam not big enough** for the number of people (now, or in the future) Spring is drying up Population growth-more demand than supply
Not enough water – source / pipe is blocked	Storm / flood – **more rain than usual** – high amounts of sediment enter source (dam) or flood source (spring) and block inlet pipe Flood damaging infrastructure-dams, tanks, spring boxes

5. Future changes photos (activity 4B)

Sea level rise

Flooding

Drought

6. CWSIP-I– Risk Assessment guide

(page 45-49, CWSIP-I, volume 2)

Assessing and prioritising risks (2 hours)

It is important to prioritise risks. This is because there are many improvement controls that could be put in place by the village, but it is **difficult to do everything at the same time.** Prioritising risks helps to focus village resources and energy on the hazards causing the biggest and most severe problems.

Future cycles of the CWSIP process can address risks that aren't addressed this time.

Each zone team should determine the risk level for each hazard for every water system. Other members of the Water Planning Group should assist zone representatives in this task.

First, ask them to add 3 headings to their last 3 columns on their hazards tables: 'SEVERITY', 'LIKELIHOOD & EXPOSURE', 'RISK level'.

Explain what these words mean (see below).

ZONE: _____ Risk assessment

WATER SYSTEM (source and access point)	PEOPLE using this water system	HAZARDS Affecting water quality AND Water availability	CAUSES of this hazard	Existing CONTROLS	SEVERITY	LIKELIHOOD & EXPOSURE	RISK level

Assessing water systems risks

Assessing the risks to a water system is a way to identify hazards with the highest priority, so that the resources of the village are focused on those hazards.

To assess risk for each water system, we need to assess the risk of each hazard. To do that we need to assess (i) the severity level and (ii) the likelihood and exposure level.

Severity:

an assessment of how serious (bad) the effects of this hazard are, for example, could they cause death, or are they less severe? Three levels of severity will be used:

Hazards	Severity level
• Human germs – likely to cause illness, hospitalisation or death(s) • Will have no water for a long time	High
• Animal germs – could cause illness • Might have no water, or will have no water only for a short time	Medium
• Sediment, Salt (cause minor irritation or discomfort) • Unlikely to have no water	Low

Likelihood and exposure:

an assessment of how likely a hazard is to happen and how many people would be affected. Three levels of likelihood and exposure will be used:

Hazards	Likelihood and exposure level
Very common, occurs often OR many people would be affected	High
Hazard could happen ***now or in the future*** (with changing climate or changing population) OR a medium number of people would be affected	Medium
Hazard does not happen often ***now or in the future*** OR only a small number of people would be affected	Low

Risk level:

an assessment of the overall importance of a hazard – based on the severity and the likelihood and exposure.

Likelihood & exposure	Severity		
	Low	Medium	High
High	Medium	High	Urgent
Medium	Low	Medium	High
Low	Low	Low	Medium

Once this information has been discussed, **show the Water Planning Group how to assess the risk level of the hazards they have listed.**

For **each hazard in the table of hazards for water systems, assess the severity level, then likelihood & exposure and the risk level.**

Add the water test results

When the water quality tests are completed, this information will be added to this risk assessment to help with prioritising risks.

For each water system type, add the water testing result to the HAZARDS column. **Check the likelihood and exposure assessment – does this need to be changed now** that the water test results are available?

For water sources with water test results of High Risk (MPN 13.6 – 48.3) or Unsafe (MPN >100) – the likelihood/exposure level should be high.

For water sources with water test results of Intermediate Risk (MPN 1.0 – 9.6) – the likelihood/exposure level should be medium (if was high, leave it at high).

For water sources with water test results of Low Risk (MPN 0.0) – the likelihood/exposure level should be low (if it was already medium or high, leave these levels).

If the likelihood/exposure level changed with the water test results, check **whether the final risk level** should also change.

Prioritise the risks:

Using the risk levels, identify the highest priority risks (for example, circle them in red):

- Select all 'urgent' risks.
- Select up to 3 risks in each zone.

Explain that the next step is to plan improvements to reduce these risk levels.

Managing hazards using controls

With a list of hazards developed and prioritised it is time to develop strategies to remove or reduce the hazard as far as possible.

Ask each zone team to think about controls that could be taken to remove the hazard or lessen the effects of the hazard. Ask them to focus on the highest priority risks.

Ask them to think about how feasible or possible it is to do each of these controls and to choose controls that are more likely to be adopted in this village.

Ask them to think about hazards that create unequal water access for different households. Are there actions that can be made to improve equal access to water?

Ask them to identify controls that require individual water users or households to take action (such as changing water use behaviours, reporting leaks) and controls that require changes to water systems at zone level (such as managing water access at different times, sharing responsibility to repair taps), or village or other levels (such as cleaning the dam, storage tanks or mains pipes).

Encourage them to choose controls that reduce the hazard the most – the *best is to remove the hazard* altogether.

Good controls:

- have a big effect on reducing the hazard
- address multiple hazards
- can be easily implemented
- are low cost
- are resilient to changing climate
- don't cause harm or difficulty for anyone.

Give them time to work on this in small groups and write their conclusions on paper. If you think it is helpful, you can provide them with copies of the lists of hazards and controls in section 3 (above). These controls should be discussed as to their appropriateness for the village context.

Remember – local people may have different ideas about how to manage a hazard – as long as it is likely to reduce the likelihood or exposure of a hazard, then it is good to build on knowledge and practices already familiar to the village.

This list of controls for hazards can be **written in any format** – a basic table such as this might be useful:

Table of Hazards and Controls

ZONE:_____

High and urgent risks (name the hazard)	Individual or household controls	Zone controls	Village or other controls

After possible controls have been identified:

Ask zone teams to ***share with other zone teams the controls they have suggested.***

Discuss whether these controls will remove or reduce the risk well, or whether there are other controls that might work better.

Discuss whether there are some controls that have been identified more than once (for a zone) – these are controls that can help to manage more than one hazard and which should be prioritised for implementation.

Discuss whether any controls might negatively affect any people either within, adjacent to or outside the village and identify alternatives that are not harmful.

Discuss and ensure that the water needs of women will be improved through these controls.

Ask teams to update their choice of controls based on these discussions.

7. Additional video resources

Climate change: The Water paradigm : https://www.youtube.com/watch?v=Q8B4tST8ti8

Facing climate change in the Solomon Islands : https://www.youtube.com/watch?v=XtniZAaFxdk

Untold stories of climate change loss and damage in the LDCs: Solomon Islands:
https://www.youtube.com/watch?v=8lA4e-1Aiu0

*Untold stories of climate change loss and damage in the LDCs: Solomon Islands (Pijin)****

https://www.youtube.com/watch?v=KYwSjpk3u3g&t=0s

Sinking Solomon Islands' climate change warning: https://www.youtube.com/watch?v=b01mGA0lifc

How is climate change affecting the Pacific? : https://www.youtube.com/watch?v=clSpjQf_bME

Climate Resilient? David Miavana of Supizae island, Solomon Islands: https://www.youtube.com/watch?v=cKyXN9r19Eg