Across the next few pages, you'll find all the activity guides, tools, worksheets, and templates for all six chapters of the Eco Leaders Guide. Use the hyperlinks below to quickly find the specific resource you need. To access the entire toolkit, click here to return to the main **Eco Leaders Guide website**.

INTRODUCTION & BACKGROUND

CHAPTER 1: Exploring the Thematic Issues of the Greater Mekong Subregion

CHAPTER 2: Developing An Advocacy Position

CHAPTER 3: Analyzing and Consulting Your Stakeholders

CHAPTER 4: Developing Your Advocacy Plan

CHAPTER 5: Implementing Your Advocacy Campaign and Influencing People

Click here to return to the main **'Eco Leaders Guide' website**.

USAID
FROM THE AMERICAN PEOPLE

WWF

Eco Leaders Guide

WWF's Environmental Education and Youth Advocacy Toolkit for the Mekong Region

Disclaimer:
This toolkit is made possible by the generous support of the American people through the United States Agency for International Development (USAID), as part of the USAID-WWF Mekong for the Future program. The contents of the report are the responsibility of the authors and do not necessarily reflect the views of USAID, the United States Government.

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WWF

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WWF, 28 rue Mauverney, 1196 Gland, Switzerland.
Tel. +41 22 364 9111.
Fax. +41 22 364 0332

For contact details and further information, please visit our international website at **wwf.panda.org**

TOOL: CHANGEMAKER SELF-ASSESSMENT

Instructions: The following are a list of skills and capacities that are either fundamental, or highly desirable, for successful changemaker leaders in the context of environmental advocacy and leadership.

Use a "1-5" rating scale, where 1 is "not strong," and 5 is "mastery" (full confidence that you are operating at top professional capacity). Check your assessment with someone else you trust, who knows you and your work well.

SCORE 1 - 5	TOPIC & CRITERIA	REMARKS FOR YOURSELF
	Mastery of knowledge base	
	I have sufficient knowledge of environment issues and topics of focus in the GMS related to my topic of interest i.e. freshwater ecosystem management, climate change and renewable energy concepts and information sources.	
	I am up to date with relevant and current news and events related to GMS environment and climate change issues and trends (freshwater ecosystem management, climate change or renewable energy).	
	I feel confident to interact with topic professionals and experts.	
	Self-knowledge	
	I feel I know what my personal strengths and weaknesses are.	
	I am good at soliciting and receiving feedback from other people.	
	I am able to manage and control my anxiety and fears.	
	Listening Communications	
	I am a good active listener.	
	I can take in new information and am able to suspend my judgment to help me listen clearly for understanding.	
	I am able to communicate well (without speaking) to people I'm listening to so that they understand that they have been heard and understood by me.	
	Verbal / Speaking Communications	
	I feel confident that I can stand up in front of a group of people and talk and present my message and views	
	I am confident in speaking in front of a camera, either a computer camera (online), or a hand-held professional camera in person.	
	I am good at adjusting my voice, language level and tone according to the audience I am speaking to, and spatial situation.	

	Facilitating	
	I feel confident in facilitating meetings and forums of diverse people, backgrounds and issue perspectives.	
	I feel confident to facilitate large and small group workshops and conference size events.	
	I feel I have the ability to effectively facilitate and resolve conflict situations.	
	I am mindful and aware of my body language and facial expression projection and how it affects the energy and responsiveness of groups I facilitate.	
	Writing Communications	
	Writing ability, i.e. blogs, technical reports, press releases, etc.	
	Writing ability in terms of letters, emails, campaign messages, etc.	
	Networking	
	Networking ability: creating and maintaining social and professional networks.	
	Quality of my current network for promoting sustainability-related change.	
	Political and Power Relationship Literacy	
	Have a good understanding of dynamics of power relationships within the social, professional and political groups I am involved in.	
	Ability to interact effectively with a wide range of groups with different types of power dynamics.	
	I can successfully gain the trust of people in authority with whom I interact (especially in the context of environment issue advocacy).	
	Social Influencing	
	I have a good understanding about what motivates people and how people are likely to respond to different situations.	
	I am confident about what topics, approaches and strategies are likely to be successful in a given social context.	
	I am good at respectfully interacting with a variety of different personality types and different cultural backgrounds and perspectives.	
	I have the ability to influence and persuade people to do something new.	

	Strategic Situational Skills	
	Ability to make adjustments to your message and strategy based on different strategic contexts and situations.	
	Ability to quickly respond to changing circumstances and crisis situations.	
	I can appropriately balance caution and courage.	
	I can confidently make action decisions in the absence of visible cues and signals.	
	Personal & Professional Development	
	I devote significant time/attention to personal capacity development.	

List other qualities you believe to be important to be an effective environmental advocate and changemaker, and evaluate yourself on those as well.

1.1.1

WATERSHED PUZZLE

Age Group: 15 years old and above.

Time Required: 1 1⁄2 - 2 hours

Location: Area with shelter and good writing space/floor

Author: Wet Project

Photo Credit: Traidhos Barge Program

Materials: Flipchart or poster paper, lottery sign, drawing pens, color pencils, crayons, food coloring, etc. (for "pollution") and a bowl of water.

ACTIVITY DESCRIPTION

Participants will demonstrate how to form a river system. Starting from the headwaters, each person is asked to explain their development and how it will affect the water quality of the river (i.e. which types of pollution does their development add to the river and why). Participants will add pollution (food coloring, paper, soil, coffee, etc.) to a container of clean water, which represents what they have contributed to the river's pollution. Likewise, if they developed their land into a nature reserve they can add some fresh water to help dilute the concentration of the pollution. Eventually the last person will end up with a bucket full of very disgusting looking water, signifying the waste that has accumulated along the whole watershed.

LEARNING OUTCOMES

Participants will...

- Recognize that everyone contributes to and is responsible for a river or lake's water quality.
- Identify ways to reduce pollution.
- Develop conservation practices in their community or school to reduce waste.

SAFETY CHECK

- Don't visit sites by yourself, especially in the evening or in high risks areas.
- Don't get into the water if you do not know how deep it is.
- Don't touch the water without any protection, especially if you do not know how contaminated the water is.
- If possible, bring life-jackets for everyone on your team.

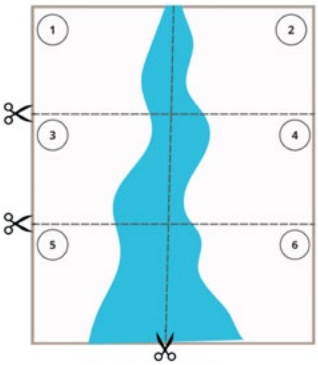
BACKGROUND INFORMATION

The quality of water in a river is, to a large extent, a reflection of land uses and natural factors found in its watershed. If soil near a river naturally erodes, chances are the river has sediment and turbidity problems. If the land has stable vegetative cover, erosion is kept in check. When humans settle and develop land, water quality is affected. Breaking sod, cutting forests, building cities, mining and other land have an impact on water quality.

Everyone bears responsibility for the health of a watershed and the water systems (river, lakes, wetlands, etc.) within a drainage basin. Individual action, both negative and positive, add up. Understanding a river or lake's water quality involves investigating the condition of the contributing watershed. If the watershed is polluted, the river will likely be polluted.

Sources for more information: *Project Wet Curriculum & Activity Guide. The Watercourse and Western Regional Environmental Education Council*

SET UP



Using a blue marker on large poster paper, draw an outline of the River (that you contextualize your learning around) from the water head down to the gulf or a lake. Divide the river in half down the middle and crosswise into sections. Each section should include a bit of river and blank space to allow room for learners' drawings. The number of sections should correspond with the number of groups of learners working together. Number the sections on one side of the river in sequential order, placing numbers in upper left/right corners and repeat for the other side. Cut out the quadrants.

HOW TO RUN THE ACTIVITY

Engage (5 minutes): This can be a role play in which the instructor is a funny game show character. The character will present each person with a "Congratulations, you have won US$600,000" (convert to your local currency).

Explore (10 minutes): What river are we on? What is a watershed? Can you name the rivers that make up this delta/river system? Where do these rivers originate? What are some of the prominent land uses that you have noticed while cruising along the river? Do you think any of these land uses negatively affect the watershed? What do you think the attitude of downstream residents might be about the water received from their upstream neighbors?

Explain (5 minutes): Remind the participants that they have just inherited a river front and US$600,000. Have them list the ways they could use the land and the money. Possible land uses include farming, mining, logging, residences, industries, temples, parks, etc.

Activity (30 minutes)

Step 1:

- At this point the participants will start their drawings.
- It is important that they are creative but are reminded that they have US$600,000 to spend (don't forget to convert the amount to your local currency). Describe what that amount could buy in real life.
- Once they have completed their drawings, have them turn their paper over. On the back side they should write the reasons they chose to develop the land the way they did, and what they used water for**.**

Step 2:

- Ask the participants to put their papers back in chronological order. Explain that each piece is actually part of a puzzle. Starting with number one, have participants assemble their pieces. Tape the watershed together again.

Step 3:

- Produce a container of clean water.
- As the discussion takes place, pass the container down the watershed, adding pollutants as it reaches the sea. Have each person describe how they developed their land and how they used water. Give them a representation of their contributions to the river with an item from the pollution box.
- After each group has described their development and added pollution, pass it on to the next group. The group that developed the gulf area / lake will eventually have a container with a lot of polluted water.

POSSIBLE POLLUTION CAUSES:

- Landslides/erosion/dirt = soil and leaves
- Food waste = old food
- Household waste = plastic, paper, string
- Garden waste = green tea leaves
- Petrol and oil from engines = cooking oil
- Soil = Ovaltine
- Rubbish/trash = white crumpled paper
- Runoff from farms = food coloring.
- Clean water = cup of clean water
- Factory waste = add hot water
- Sewage = anything that resembles sewage!
- Fertiliser and chemical waste = vinegar (no color but strong smell)

Evaluate (10 minutes): Ask these question to the group and explore their answers together

- What was the condition of the water in the north of the watershed at the start of the game?
- What is it like now at the gulf/lake?
- How did that happen?
- How did the groups in the middle and end of the watershed feel?
- How did their property plans affect the river pollution levels?
- Can a downstream user be affected by an upstream user? Could upstream users alter the water quality of those downstream?

Elaborate

Option 1 (20 minutes): Ask the participants what they could do to prevent water sources being polluted. This may include:

- Take shorter showers so less grey water flows to rivers
- If you are playing in a waterfall, do not use soap or shampoo
- If your family car leaks oil on the road, get it fixed
- Refuse single use plastics
- Carry your own bag, straw, lunch container
- Plant trees/leave green margins next to rivers to absorb hot runoff
- Support organic products so artificial fertilizer use is minimized

Option 2 (20 minutes): Show the participants the water quality map of the river they have drawn. Explain that the map on the left is what they want the river to look like and the one on the far right is what the river looked like in year XXXX and the one to the left is how it looks now.

Ask them if that confirms what they have just learned in the activity: that the start of the waterway is always cleaner than the lower section. If time permits, show them a satellite image of your country. Then ask the participants to find that river on the map. Explain to them what the colors mean and what colors used to be predominant along the river. How has this affected the quality of the river? Where do they think their fish comes from, and how about their trees? (This might be a non sequitur but it could lead to a conversation about minimizing waste.)

Further Activities

It will be helpful to review concepts such as watershed and drainage basin, as well as point and non-point source pollution. This can tie in nicely with the water quality tests.

Ask the participants to write a one paragraph description of ways to reduce the amount of pollution he/she contributed. The participants can research the regulations governing waterfront property in their communities. If they feel their waterways are poorly treated, have them write letters to government officials supporting stricter laws and more enforcement.

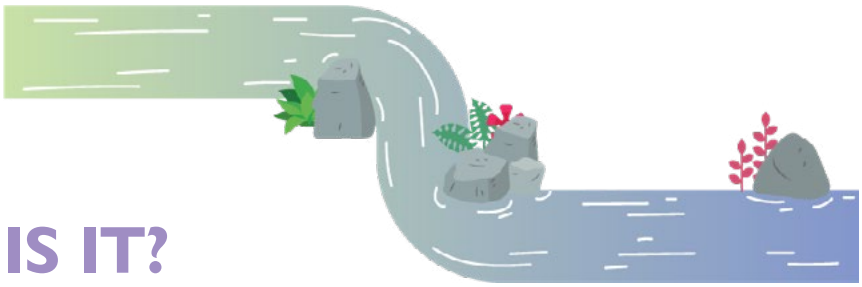
Variations

You could also start the activity with a river full of trash. See if participants can figure out what to do with their land that will reduce the waste flowing through the river. Depending on what they build, have them take a certain amount of trash/ dirt from the river. See if there is a way to eradicate all the waste flowing into the delta - a good way to get focused on clean up instead of pollution.

1.1.2

FRESHWATER ECOSYSTEM OBSERVATION

HOW HEALTHY IS IT?



Age Group: 15 years old and above

Time Required: 2-3 hours for the observation trip then 1-2 hours for research and a summary of your findings

Group Size: This activity should be done in pairs or small group(s)

Location: Area with shelter and good writing space/floor

Materials:

1. 1. Field observations worksheet with pens or pencils
2. 2. Gloves, plastic bottle or glass jar for water collection and Litmus paper (if available)
3. 3. Fishnet or aquarium net with a tray (if available)

Activity Objectives/Participants will...

- Get a deeper understanding of the functions of the local waterway and its ecosystems;
- Recognize the importance of freshwater ecosystem habitat and that a diverse river or stream habitat is crucial for maintaining a healthy waterway;
- Utilize critical thinking to conduct a scientific investigation of the ecosystem's health.
- Be able to assess the overall environmental health of the community's water ecosystem based on the observations and findings.

YOUR ASSIGNMENT

Your assignment is to take a couple of hours for a walk along the river, stream, or canal near your home or community. Something that is not well understood by most people is that rivers, streams, and even man-made canals are not simply drainage channels for water to flow down. They are also the homes of freshwater animals and different plants. A diverse river or stream habitat is, therefore, the key foundation to a healthy waterway. Using your sight, hearing, touch and your brain power, make a thorough scientific investigation of this water ecosystem to determine what the overall environmental health is.

Once you have completed your investigation, your task will be to write a short and informative report about the environmental health of your community's water ecosystem. Ask your friends or a mentor to review and help edit it before you send it to your local environmental organization or use it for your blog post, information board, or other materials.

SAFETY CHECK

- Don't go by yourself, especially in the evening or to a potentially high risk area.
- Don't get into the water if you don't know how deep it is.
- Don't touch the water without any protection, especially if you don't know how contaminated the water is.
- If possible, bring enough life-jackets for everyone in your team.
- Check the weather when you are planning to go on a field investigation!

FIELD OBSERVATIONS

Date: _____

Time: _____

Location: _____

Instructions: Walk along the river, stream, or canal near your home or community and collect as much of the following information as you can with the time and materials you have available. Remember to consider safety as your first priority.

1. **First of all, describe the type of the water ecosystem (river, stream, canal lake, etc):**

   - ☐ Stream or canal
   - ☐ River
   - ☐ Wetland or lake

2. **What is the extent of alteration?**

   - ☐ 100% natural
   - ☐ Slightly modified
   - ☐ Extremely modified

3. **Draw a simple sketch of the water ecosystem and its two banks (sides)** and indicate through labels what you estimate to be the depth of the water and width of the channel. Also show in the sketch what the vegetation looks like along the banks and in the water.

WATER ECOSYSTEM SKETCH

4. **Collect water from the river, stream, canal, or wetland using the plastic bottle or glass jar.** Observe the color and smell of the water, and mark in the appropriate box to record your observations.

Smell: What does the water smell like?

- ☐ No smell
- ☐ Slight smell
- ☐ Strong smell
- ☐ Very strong smell

Water Color: What color is the water that you can see in the container?

- ☐ No color - looks good, but could still be contaminated
- ☐ Turbid brown - there is soil in the water from erosion of land and/or banks
- ☐ Clear like tea - color of decomposed vegetable matter. Could be natural
- ☐ Green - color of suspended algae; maybe too much fertilizer or organic matter
- ☐ Yellow - color of another type of algae; also indicates pollution from fertilizer or organic matter.
- ☐ Grey/black - heavily polluted with sewage
- ☐ Other colors (describe): _____

5. **pH level of the water:** _____

Here is how to measure the pH level:

- Take a strip of litmus paper and dip it into the water sample you want to test.
- Remove the paper and observe the color change.
- Compare the color of the litmus paper to the color chart provided with the litmus paper kit to determine the pH level of the water.

Note: The optimal pH range for a healthy freshwater ecosystem is considered to be between 6.5 - 8.5

6. **The Water Current: How fast does the water at the surface of the channel travel?**

- ☐ Very fast
- ☐ Fast
- ☐ Moderate speed
- ☐ Slow
- ☐ Standing water

7. **Life around the water ecosystem: What things live in the water or in the area of the banks?**

Take some time to look around the area of the banks and in the water to see what plants, animals or insects there are. Look for big things as well as little things. Look at the surface of the water. If the water is clear, try to observe life in the water. If you can, filter the water with a fishnet, and look under logs and rocks. Try not to disturb or harm living things. Put them back after observation. **Note:** Take photos of anything you find during observation that you do not recognize.

Record your observations in the space provided below:

Mammals	**Birds**	**Amphibians and Reptiles** (frogs, salamanders, snakes, & lizards)

Flying insects

Crawling or walking insects

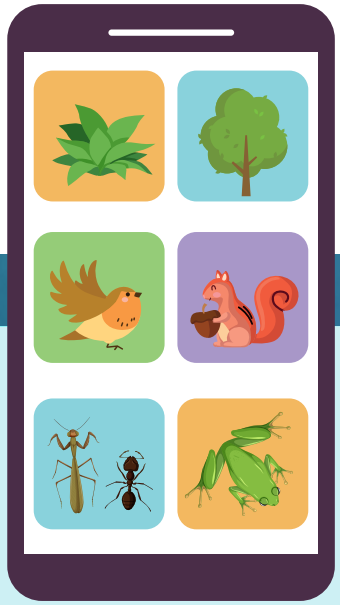
Water insects

Fishes

Invertebrates

Plants and algae

PLANTS AND ANIMALS IDENTIFICATION MOBILE APPLICATIONS



PLANTS AND ANIMALS

iNaturalist: A joint initiative by the California Academy of Sciences and the National Geographic Society, iNaturalist lets you upload photos of plants and animals for identification by a community of experts and enthusiasts. It includes many species from Asia.

Seek by iNaturalist: Seek is a free app designed for beginners. It provides immediate identification using the same database as iNaturalist and rewards users for their discoveries. It includes many species from Asia.

Google Lens: Although not a dedicated plant identification app, Google Lens can identify a wide variety of plants. Simply take a photo with Google Lens, and it will provide information about the plant.

PLANTS

PlantSnap: PlantSnap allows you to identify flowers, trees, succulents, mushrooms, and more. It has a large database and covers many Asian plants. You can take a photo of the plant, and the app will provide identification. You can use it to identify up to five plants a day for free—beyond that, a paid plan is required.

PlantNet: PlantNet is a free app that allows users to identify plants from photos. It has a large database and is supported by a community of users who help verify plant identifications.

Flora Incognita: This app allows for the identification of plants through photographs. It's known for its accuracy and includes many species found in Asia.

BIRDS, INSECTS, REPTILES AND AMPHIBIANS

Merlin Bird ID by Cornell Lab: Merlin Bird ID is an excellent app for bird enthusiasts. It helps identify birds based on photos and bird songs. It includes a wide range of birds found in Asia and provides detailed information about each species.

Picture Insect: Bug Identifier: This app is great for identifying insects and spiders. It has a large database and can identify many species found in Asia.

HerpMapper: Reptiles and amphibians Identifier: Users can upload sightings, and the community helps with their identification. It includes many species found in Asia.

Each of these apps has its own strengths and features, so you might want to try a few to see which one.

8. **Garbage & Waste:** Garbage and other forms of human waste can pollute rivers and streams as well as actually harm aquatic animals and the people who use the water from that source. They are also very ugly. Note the different types of garbage that you find in the water and along the banks for at least ten meters on each side. Mark ☑ in the appropriate box.

- ☐ Food scraps - they pollute the water if fish cannot eat them
- ☐ Paper - it pollutes the water
- ☐ Plastic - it is harmful to aquatic animals if eaten or if they get trapped inside
- ☐ Glass - it does not cause pollution since it is made from sand, but broken glass is dangerous and can cut people
- ☐ Cans/ metal scraps - sharp edges are dangerous to animals and people.
- ☐ Chemical containers / Oil cans / Spray cans / Batteries – Chemical residue left inside may contaminate and pollute the water.
- ☐ Animal droppings and human feces - they pollute the water and spread disease
- ☐ Dead animals - they pollute the water and can spread diseases
- ☐ Other garbage: _____

9. **Your Conclusions:** In the space below write a short summary of the conclusions of your observation and investigation concerning the environmental health of the river, stream or canal. Make sure to explain your findings with proper reasons and facts/observations.

Adapted from: Kanjanavanit, Oy and Moonchinda, Narumol, Handbook for Stream Detectives, Green World Foundation, 1999.

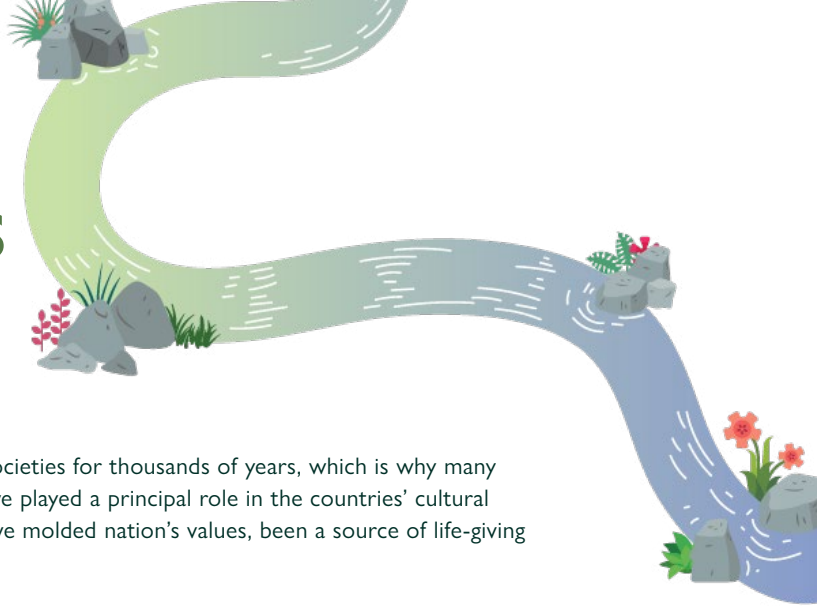
FRESHWATER ECOSYSTEM HEALTH REPORT

Title of Report: _____

My Thoughts and Feelings After Completing This Assignment:

1.1.3

INVESTIGATING OUR COMMUNITY'S LINK WITH RIVERS OR WETLANDS



Rivers have played an important and life-sustaining role in human societies for thousands of years, which is why many of the world's great cities sit on the bank of a great river. Rivers have played a principal role in the countries' cultural traditions and beliefs, political history, and in economics. Rivers have molded nation's values, been a source of life-giving food, served as our highways and linked our communities.

Age Group: 15 years old and above

Time Required: 2-3 hours for the observation trip then 1-2 hours for analysis

Group Size: This activity should be done in pairs or small group(s)

Materials:

1. A notebook with pens or pencils
2. Phone for voice recording and photographs

Activity Objectives/Participants will...

- Develop questioning and interpersonal communication skills.
- Gain an understanding of the role the water ecosystem plays in daily lives.
- Gain perspectives from community members about what they feel are the current issues regarding the river or stream in your community.

YOUR ASSIGNMENT

Your assignment is to go into the community and find out what people think of their connection with the closest river, stream, canal, and/or wetland, what role the water ecosystem plays in their daily lives, and what they feel are the current issues surrounding it.

Discuss with your team to determine the number of interviewees that you feel represent the community and fit within the time that you have.

When your investigation is completed, you should write a short news article or blog post about the results of your investigation.

REMEMBER

- When planning to meet with community members, choosing the best time in a day for each person is crucial for maximizing engagement. The optimal time can vary based on several factors including people's work schedules, family considerations, cultural and religious practices, and other specific needs.
- Dividing roles among your team members will make your interview more effective. These roles can include interviewer, note taker, photographer, etc.
- Do not forget to ask for permission before you take photographs or video.
- Check the weather when you are planning to go on a field work!

PREPARING YOUR INTERVIEW QUESTIONS

- Start with general and simple questions before moving on to more complex ones
- Ask "open questions" rather than "closed questions" that have only one answer like yes or no. Open questions encourage people to talk with more details.
- Questions that begin with 'why', 'how', or 'when' are good open questions because they encourage people to think hard about the reasons why things happen.
- Other good questions are those which ask about local people's knowledge and ideas about the river or stream, including current situations taking place.
- By asking questions that encourage people to review changes over time will give you a clearer understanding of the current situation. Example: "What differences have you noticed in the water quality of the local river over the past ten years, particularly in terms of clarity, odor, and the presence of wildlife?"

Need more tips? *Visit* ***Chapter 2 Developing an Advocacy Position*** *to see some tips on how to conduct interviews*

List some of your prepared interview questions below:

Test the questions you listed on your friends or mentor before using them in real interviews!

List of Community People that You Interviewed:

1. Name: _____ **Age:** _____ **Occupation:** _____

Address: _____

Telephone no.: _____ **Date of interview:** _____

Summary of main answers:

_____

_____

_____

_____

_____

_____

2. Name: _____ **Age:** _____ **Occupation:** _____

Address: _____

Telephone no.: _____ **Date of interview:** _____

Summary of main answers:

_____

_____

_____

_____

_____

_____

3. Name: _____ **Age:** _____ **Occupation:** _____

Address: _____

Telephone no.: _____ **Date of interview:** _____

Summary of main answers:

_____

_____

_____

_____

_____

_____

List of Community People that You Interviewed:

4. Name: _____ **Age:** _____ **Occupation:** _____

Address: _____

Telephone no.: _____ **Date of interview:** _____

Summary of main answers:

_____

_____

_____

_____

_____

_____

5. Name: _____ **Age:** _____ **Occupation:** _____

Address: _____

Telephone no.: _____ **Date of interview:** _____

Summary of main answers:

_____

_____

_____

_____

_____

_____

6. Name: _____ **Age:** _____ **Occupation:** _____

Address: _____

Telephone no.: _____ **Date of interview:** _____

Summary of main answers:

_____

_____

_____

_____

_____

_____

After conducting the interviews, use the table below or recreate the spreadsheet to collect all your information in one place.

INTERVIEW SUMMARY- Investigating our Community's Link with Rivers or Wetland

Instructions

- Use the table below, or recreate it using Microsoft Excel or another spreadsheet software, to collect all the information you received from the interviews you have conducted.
- Add the key questions your team has agreed should be asked in every interview into the table.
- Feel free to adjust the table to fit your interview plans, e.g. adding more columns for more questions

Interviewee Information			**Summary of the response to key questions asked during the interview**				**Notes**
Interviewee Name	Age	Occupation	Q1	Q2	Q3	Q4	Any observations, topic to do more research, etc.

COMMUNITY RIVER LINKS REPORT

You should invest time and effort to develop an article. Researching and presenting additional information that provides more context to the interviews and broader issue can ensure your work is comprehensive and impactful. By thoroughly understanding the issues, you can present well-informed and persuasive arguments, highlight diverse perspectives, and propose effective solutions. This dedication to accuracy and depth not only strengthens the credibility of your advocacy but also helps educate and engage a broader audience, ultimately driving meaningful change in your community.

Title of Report: _____

My Thoughts and Feelings After Completing This Assignment:

1.1.4

FRESHWATER ECOSYSTEMS HEALTH MAPPING

Developing a visual representation of climate change processes and linkages map can deepen your comprehension of the causes and effects of climate change and highlight the intricate connections among its various elements. This improved understanding of climate change is crucial for making informed decisions when addressing this global challenge.

Age Group: 15 years old and above

Group Size: This activity can be done individually or in small group up to 6 people maximum. If there are more people, please consider to make more groups.

Time Required: 45-60 minutes

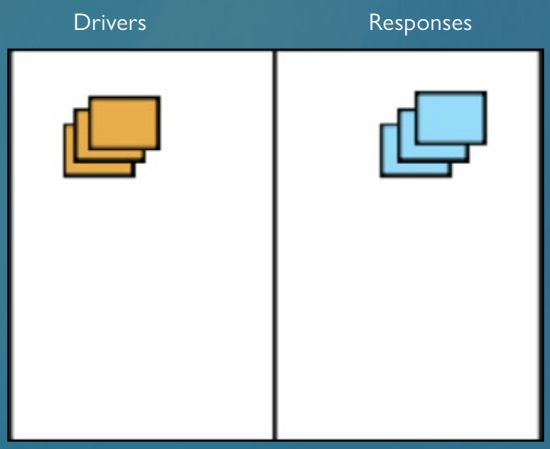
Materials:

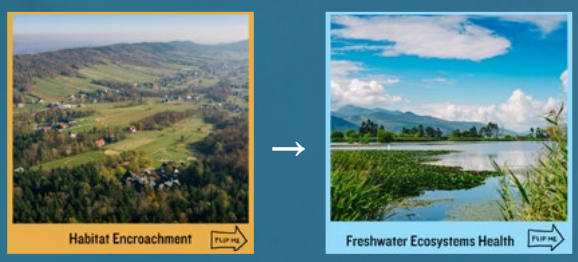
1. **Print out the provided visual elements on A4-size paper, double-sided, and proceed to cut them into individual pieces. Sort them out by color (border color).**
    - The card set contains 2 different colors of cards. Yellow represents the drivers and pressures of the freshwater ecosystem health and blue represents the impacts and responses of the freshwater ecosystem health
    - Each card should feature a picture with a corresponding title on the front side, while the back side should contain a text explanation corresponding to that specific title.
2. **Prepare a big flipchart paper and markers. Fold the flipchart to divide the paper space into 2 sections. If only small-sized flipchart available, you may consider put 2 flipcharts together.**

ACTIVITY INSTRUCTIONS

1. Place flipchart paper on a smooth surface / table.
2. Place the stack of cards on each quadrant of the paper according to color designated (see picture on the right).
3. First, Participants are encouraged to work on the left side of the paper (Drivers and Pressures of the Freshwater Ecosystems Health). Once done, the participants can work on the other cards on the right side of the flipchart paper (Impacts and Responses)
4. Start by putting the blue card, titled **"Freshwater Ecosystem Health"**, in the middle of the flipchart and identify the cause-and-effect relationships of this card with the other cards in yellow colors.
5. Draw an arrow between the 2 interconnected elements to illustrate its directional cause and effect relationship. For example, **Habitat Encroachment → Freshwater Ecosystem Health**

Note: More information provided on the back of each card. If you get stuck in identifying the cause and effect relationship among these cards, flip the card to read the information provided.





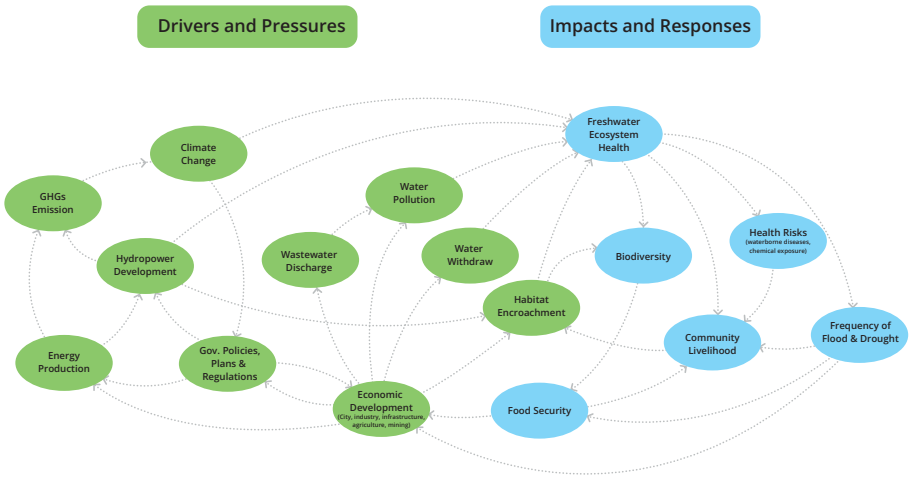
6. Continue to identify the cause-effect linkages between different elements and draw directional arrows to indicates their causal relationships. If you think some elements are missing from this set of cards or, if you would like to add more details, please write down the additional elements on the blank cards provided and include them in your system map.

7. When you are satisfied with the map of the Driver and Pressures of the Freshwater Ecosystem Health (left side of the paper), go ahead and work on the **"Impacts and Responses side"** (right side of the paper), with the card set in blue color.

Note: There are some **blank cards** provided in this card deck. The purpose of having the blank cards are to allow you to expand your view and make connections between climate change and your topic of interest. During the activity, you can add new cards at anytime. It is also okay if you or your group do not use some of the existing cards, if you think these cards are not fit into the conceptual picture.

The system diagram provided on the next page (see picture below) is intended to be used as a guide. It is totally fine if your final map does not look exactly the same with this one. What matters is the conversation/discussion you have with the group.

Master Answer Key



Do not worry if your map does not look exactly like the answer key. What is the most important is the learning and the understanding of the interconnections between different elements in this system map.

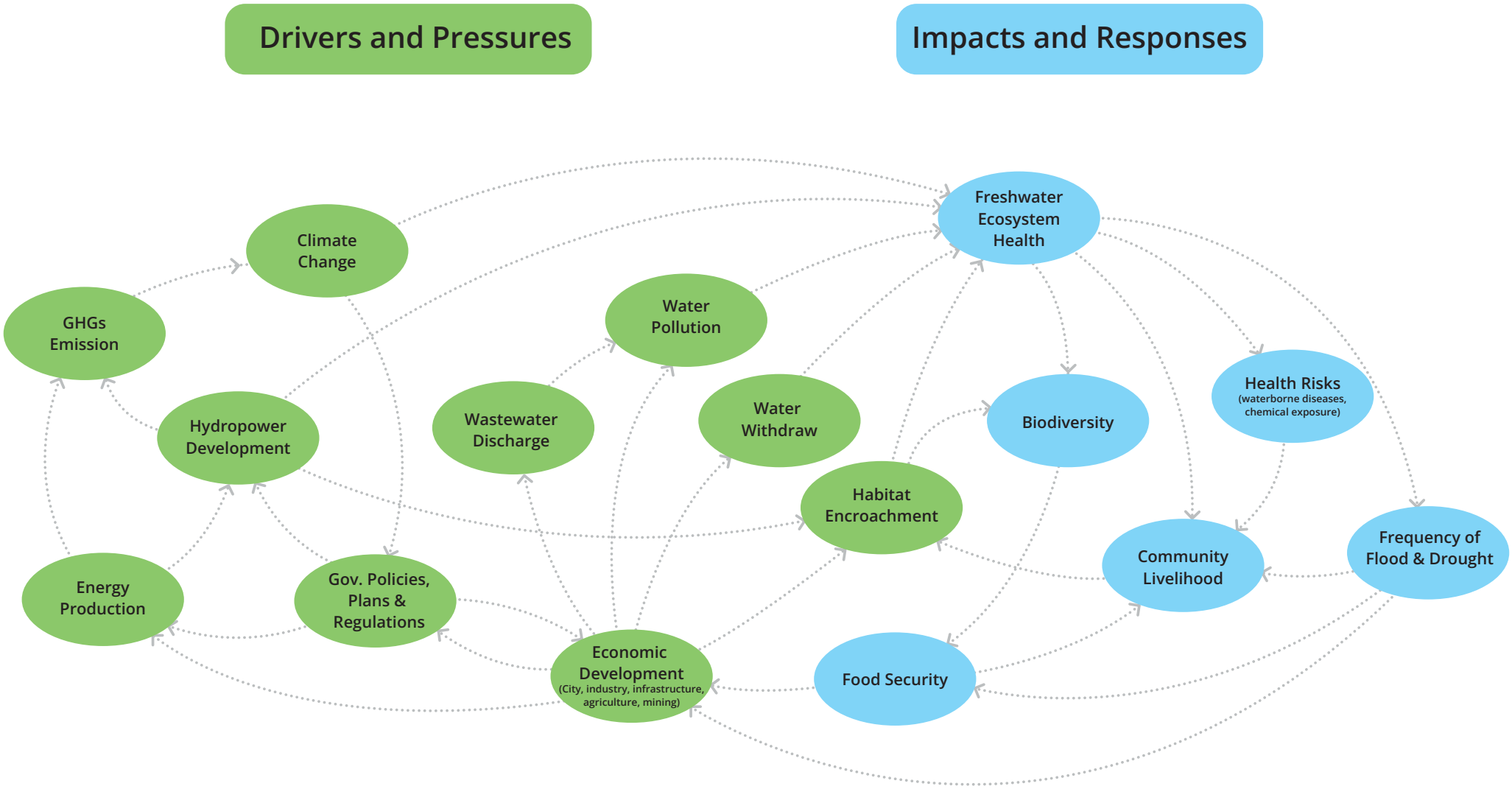
FRESHWATER ECOSYSTEM HEALTH DIAGRAMMING ANALYSIS AND DEBRIEF QUESTIONS

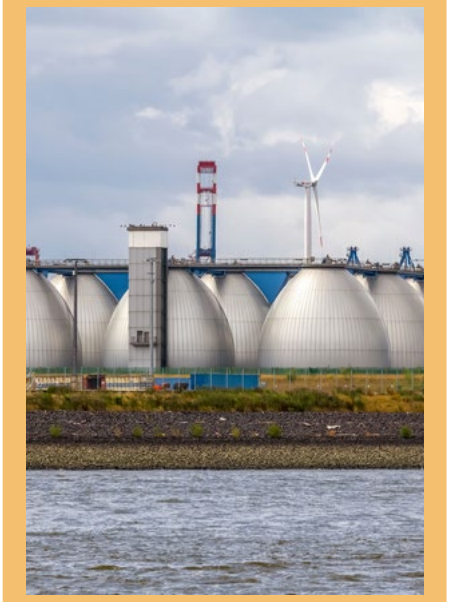
After you finish working on the map, try to go through each of these questions below to generate deep thinking and discussion among the team.

1. **Comparison with Master Diagram:** Does your freshwater ecosystem health model (diagram) look similar or different to the Master system diagram? How is yours different, and can you explain the difference a bit?
2. **New Insights:** In doing this activity, what new insights and thinking have come to you? What does doing this activity cause you to think about regarding freshwater ecosystem health?
3. **Challenges in Mapping:** What was challenging for you in putting together your own freshwater ecosystem health map from the cards (i.e., system elements) that you were given?
4. **Additional Elements:** Were there any new elements that you added to the model? Explain your thinking behind these additions.
5. **Leverage Points for Change:** When you think about making big changes in a system, like how things work in your community or even globally, we're curious to know where you think the best places to make those changes are. We call these spots "leverage points." They're like key places where even a small change can make a really big difference in how things work. So, where do you think these important spots are in your map? What makes them so crucial? And if you could make changes there, what kind of impact do you think it could have on your community or country?

Follow the link provided to learn more about Leverage Points: Leverage Points - Places to Intervene in a System (4.55 minutes)

Freshwater Ecosystems Mapping





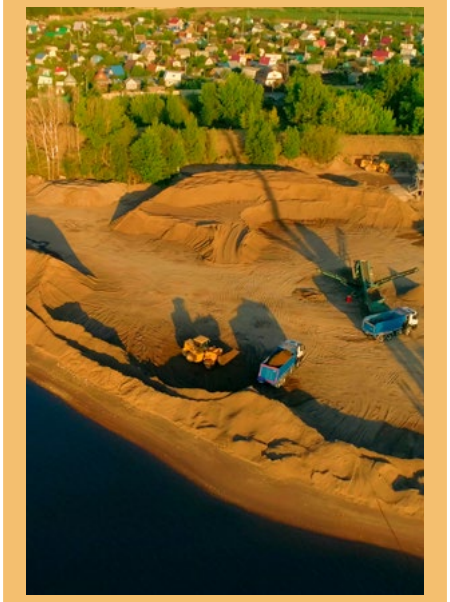
Water Withdraw

Flip me →

Economic Development

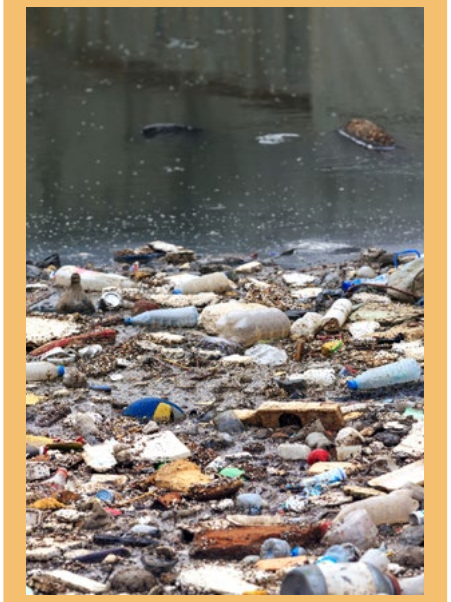
Industry, infrastructure, city, agriculture, mining, etc.

Flip me →



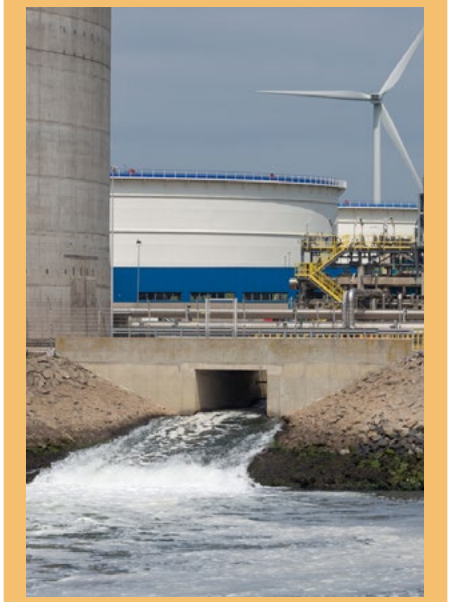
Habitat Encroachment

Flip me →



Water Pollution

Flip me →



Wastewater Discharge

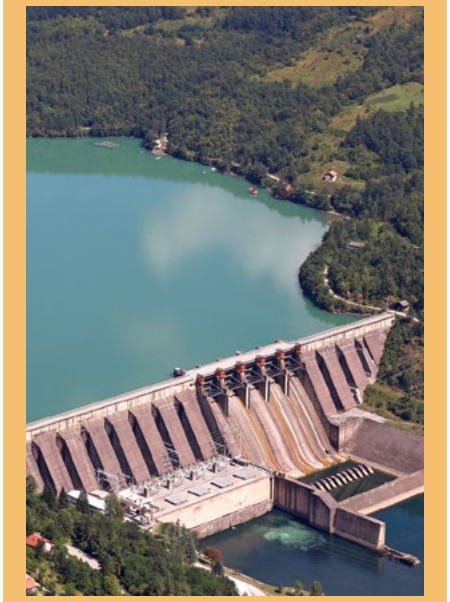
Flip me →

Government Policies, Planning and Regulations

Flip me →

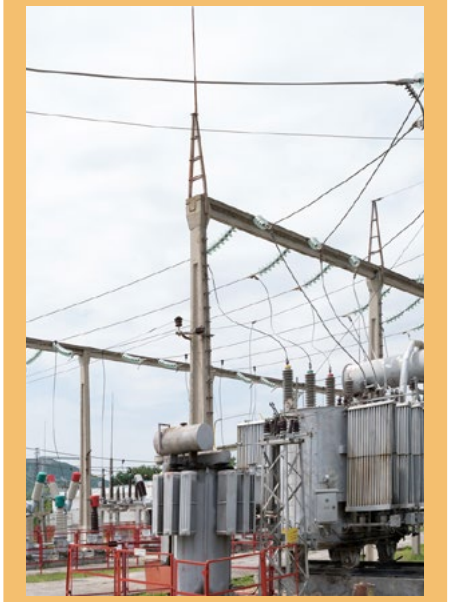
Climate Change

Flip me →



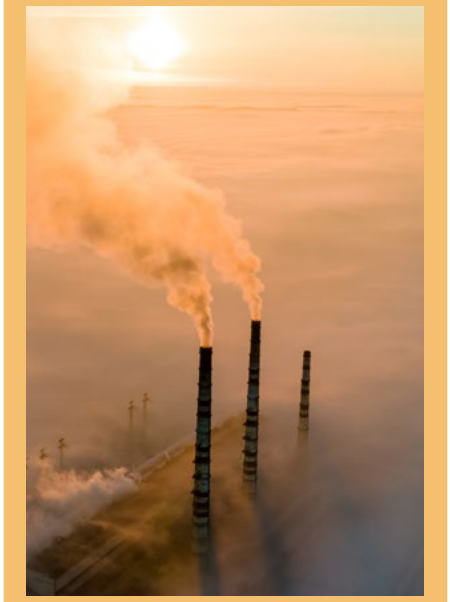
Hydropower Development

Flip me →



Energy Production

Flip me →



Greenhouse Gases (GHGS) Emissions

Flip me →

Water Discharge

Wastewater discharge resulting from economic development occurs when industrial, urban, and agricultural activities produce contaminated water that is released into freshwater sources. Rapid industrial expansion, urbanization, and intensive agricultural practices generate large volumes of wastewater containing pollutants such as chemicals, heavy metals,and nutrients.

Water Pollution

Water pollution resulting from **economic development** and **wastewater discharge** occurs when industrial, urban, and agricultural activities generate large volumes of contaminated water that are discharged into freshwater sources without adequate treatment.

Industrial expansion, urbanization, and intensive agricultural practices driven by economic growth produce pollutants such as chemicals, heavy metals, and nutrients, which degrade water quality and harm aquatic ecosystems.

Wastewater discharged from industries, urban areas, and agricultural fields carries these pollutants into rivers, lakes, and oceans, posing risks to human health, biodiversity, and ecosystem functionality.

Habitat Enroachment

Habitat encroachment significantly impacts the **health of freshwater ecosystems** by leading to habitat destruction, reduced biodiversity, and degraded water quality.

This fragmentation of habitats limits species movement and reduces genetic diversity, making ecosystems more vulnerable to environmental stresses. Overall, habitat encroachment undermines the stability and health of freshwater ecosystems, threatening their biodiversity and functionality.

Economic Development

(Industry, infrastructure, city, agriculture, mining, etc.)

Economic Development, through industrial expansion, urbanization, and intensive agriculture, requires excessive **water withdraw** and significantly contributes to water pollution. Industries **discharge of wastewater** with harmful chemicals into nearby water bodies, urban areas generate untreated or poorly treated sewage, and agricultural runoff carries fertilizers and pesticides into freshwater sources, causing nutrient pollution and contamination.

Habitat encroachment caused by **economic development** activities destroys and fragments wetlands, forests, and other critical areas, disrupting freshwater ecosystems and the species that depend on them.

Government policies and plans can drive **economic sector** to investments in eco-friendly infrastructure and sustainable agriculture, fostering economic growth while preserving freshwater ecosystems. Conversely, **government planning and policies** are also **influenced by economic considerations**, such as the need to balance environmental protection with economic development.

Water Withdraw

Excessive **water withdrawal** reduces river and stream flows, potentially causing water bodies to dry up during dry seasons. This not only affects the entire aquatic ecosystem but also undermines the overall **health of freshwater ecosystems**, leading to habitat loss and decreased biodiversity.

Extensive water withdrawal for agricultural irrigation and industrial use can significantly alter river flow, disrupting sediment transport patterns and impacting the geomorphology of riverbeds and deltas. These changes can adversely affect spawning grounds for fish and other aquatic organisms, further threatening the stability and diversity of freshwater ecosystems.

Greenhouse Gases (GHGS) Emissions

Energy production is the primary contributor to **greenhouse gas emissions**, which are a major driver of climate change.

Hydropower development is often promoted as a renewable energy source to mitigate **GHGs emissions** from fossil fuel-based power generation.

Energy Production

Energy production is driven by the **government policies and plans** as well as the **economic development**.

Depending on the energy mix, **energy production** can significantly **contribute to the GHGs emissions**.

Hydropower Development

Hydropower Development is promoted by the **government policies and plans** as part of a solution to reduce GHGs emissions and to ensure the **energy production** meet the demand side.

However, **Hydropower Development** has huge impacts on **habitat encroachment** during the construction and alter the water flow, which directly and indirectly undermine the **overall freshwater ecosystem**.

Climate Change

Greenhouse gas (GHG) emissions contribute to → **climate change**, prompting → **governments to implement policies** aimed at reducing emissions. In response, hydropower development is often promoted as a renewable energy source to mitigate GHG emissions from fossil fuel-based power generation.

On the other hand, **climate change** impacts **freshwater ecosystem health** by altering precipitation patterns, leading to changes in water availability and quality, and by increasing temperatures, which can disrupt aquatic habitats and biodiversity. These changes exacerbate existing stressors on freshwater ecosystems, threatening the survival of species and compromising ecosystem functioning.

Government Policies, Planning and Regulations

Government policies and plans profoundly influence **energy production** and **hydropower development**, to ensure the energy demand of the country is met.

Government policies and plans can drive **economic sector** to investments in eco-friendly infrastructure and sustainable agriculture, fostering economic growth while preserving freshwater ecosystems.

Additionally, the pressures of **climate change** drive **governments policies** to promote low carbon emissions by advocating for alternative energy sources like hydropower and enforcing stricter controls on business practices.

Food Security

Flip me →

Community Livelihood

Flip me →

Frequency of Flood and Drought

Flip me →

Health Risks

(waterborne diseases, chemical exposure)

Flip me →

Freshwater Ecosystems Health

Flip me →

Biodiversity

Flip me →

Frequency of Flood and Drought

The **frequency of floods and droughts** is impacted by the **health of freshwater ecosystems**, as healthy ecosystems regulate water flow, reducing the severity and occurrence of these extreme events.

When **floods and droughts** occur frequently, they devastate agricultural productivity, leading to food shortages and loss of income for farming communities, which compromises **food security** and disrupts **livelihood**.

Floods and droughts also damage infrastructure, reduce industrial output, and strain resources, thereby hindering overall **economic development** and stability.

Community Livelihood

Community livelihood is significantly impacted by increased **health risks** and the **frequency of floods and droughts**, which disrupt agricultural productivity, living conditions, and overall **community livelihood**.

Additionally, biodiversity loss threatens **food security**, further affecting the **community livelihood**.

Food Security

Food security is impacted by **biodiversity loss**, as it reduces the availability of diverse crops and livestock, weakening ecosystem resilience and agricultural productivity. The increasing **frequency of floods and droughts** further disrupts **food production**, exacerbating food shortages and threatening community stability.

Food security impacts **economic development** by influencing the stability and productivity of urban, industrial, and agricultural sectors; reliable food sources support a healthy workforce and stable markets.

Food security contributes to the **community livelihood** by ensuring consistent access to nutritious food, which is essential for health, productivity, and overall well-being, reducing poverty and enhancing quality of life.

Biodiversity

Biodiversity is negatively influenced by **habitat encroachment** and the **health of freshwater ecosystems**, as habitat loss and degradation reduce species diversity and ecosystem resilience.

Healthy **biodiversity** supports **community livelihood** by providing essential resources, ecosystem services, and opportunities for sustainable economic activities.

Freshwater Ecosystems Health

The **health of freshwater ecosystems** depends on the impacts of **climate change, wastewater discharge, water pollution, habitat encroachment**, and **hydropower development.**

Freshwater ecosystem health determines **biodiversity status**, regulates water flow to help control **floods and droughts**, supports **community livelihood**, and reduces **health risks** from waterborne diseases and chemical contamination.

Health Risks

(waterborne diseases, chemical exposure)

Health risks such as waterborne diseases and chemical exposure are influenced by the **health of freshwater ecosystems**; degraded ecosystems lead to contaminated water, increasing these risks.

These **health risks** negatively impact **community livelihood** by causing illness, reducing productivity, and increasing healthcare costs.

Write an element here

Additional Element

Write an element here

Additional Element

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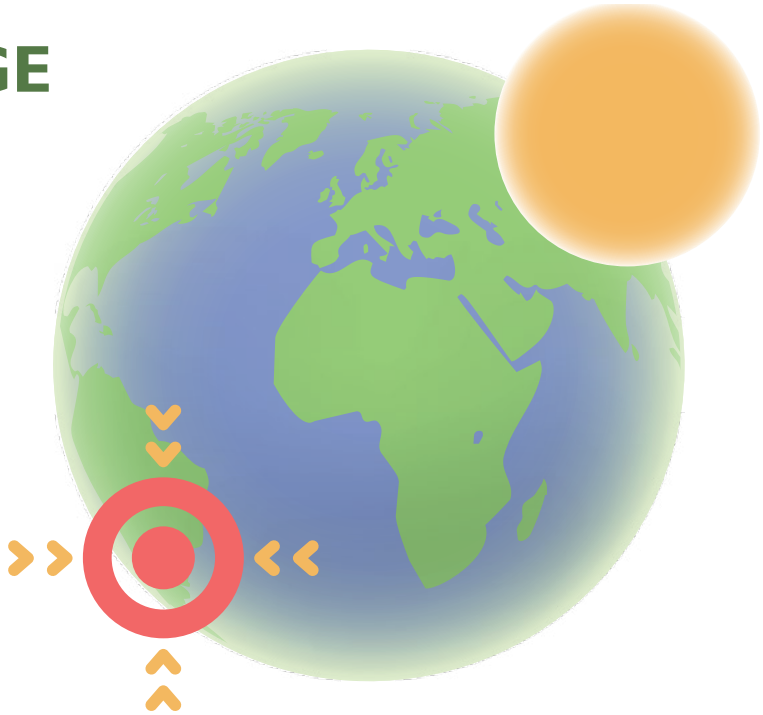
1.2.1

CLIMATE CHANGE WITNESSES



Changes in temperature, precipitation, and extreme weather all affect ecosystems, which in turn affect the people dependent on natural resources for food production, as well as their jobs and traditional livelihoods.

In recent decades, science has documented many observed changes in climate and their associated impacts. At the local level, changes can be small and imperceptible at first, but over time, can be quite major. Usually people don't tend to notice change unless they are asked to reflect on the past in comparison to the present.

Age Group: 15 years old and above

Time Required: 2-3 hours depending on the extent of interview your team would like to do

Group Size: Small group of 4-6 people

Materials:

1. A notebook with pens or pencils
2. Handouts (interview forms)

Activity Objectives/Participants will...

- Observe and analyze the changes in the community over time as a result of climate change;
- Develop an understanding of the impacts of climate change on a specific community.

YOUR ASSIGNMENT

Your assignment is to c**ollect information from local people in your community about the changes that they may have perceived over their lifetime in relation to climate change.** You should primarily interview at least 5-10 older residents in the community as they will have lived long enough to have witnessed any changes that may have occurred.

When your interview is completed, share the stories with others by writing an engaging story, creating a PhotoVoice with captions or developing a mind map with a video explaining the story.

Need more tips? *Visit Chapter 2 Developing an Advocacy Position to see some tips on how to conduct information interviews.*

CLIMATE CHANGE WITNESSES INTERVIEW FORM

Follow the Interview form outlined here with all of your interviewees.

Name: _____ **Age:** _____ **Occupation:** _____

Address: _____

Telephone no.: _____

How long have they lived in this community: _____

Questions:

1. **What changes in the local climate have you noticed during your lifetime in our community?** Describe.

_____

_____

_____

2. **Have you witnessed any changes in average seasonal temperatures over your lifetime for the same time of year?**

Yes ☐ No ☐ **If yes:** **Higher temperatures** ☐ **Lower temperatures** ☐

Explain:

_____

_____

_____

3. **Have you witnessed any noticeable changes in rainfall over your lifetime in this region of the country?**

Yes ☐ No ☐ **If yes:** **Increase in annual rainfall** ☐ **Decrease in annual rainfall** ☐

Explain:

_____

_____

_____

4. **Have you witnessed any noticeable increase in extreme weather events over your lifetime in this region of the country, such as significant flooding, prolonged drought, or heatwave?**

Yes ☐ No ☐

Explain:

_____

_____

_____

5. **Have you witnessed any noticeable changes in the water levels and flows of the local rivers, streams and canals in our area over your life time?**

Yes ☐ No ☐

Explain:

_____

_____

_____

6. **Have you witnessed any noticeable changes in plant and animal species in our area over your lifetime?**

Yes ☐ No ☐

Names of some plant species: _____

Names of some animal species: _____

Explain:

_____

_____

_____

7. **Have there been any personal impacts on your own life from climate change?**

Explain:

_____

_____

_____

MY CLIMATE CHANGE WITNESS ARTICLE/STORY

Headline: _____

My Thoughts and Feelings After Completing This Assignment:

1.2.2

CLIMATE CHANGE MAPPING

Developing a visual representation of climate change processes and linkages map can deepen your comprehension of the causes and effects of climate change and highlight the intricate connections among its various elements. This improved understanding of climate change is crucial for making informed decisions when addressing this global challenge.

Age Group: 15 years old and above

Group Size: This activity can be done individually or in small group up to 6 people maximum. If there are more people, please consider to make more groups.

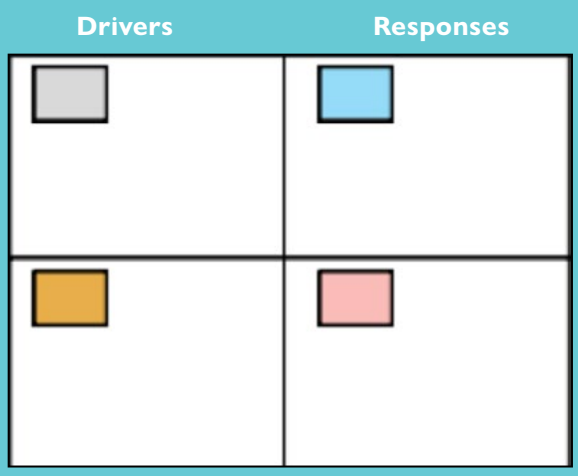
Time Required: 45-60 minutes

Materials:

1. **Print out the provided visual elements on A4-size paper, double-sided, and proceed to cut them into individual pieces. Sort them out by color (border color).**
    - The card set contains 4 different colors of cards. **Blue** represents the climate change responses, **Pink** represents the impacts from Climate Change, **Grey** represents the Climate Change's secondary Drivers, and **Yellow** represents primary root cause human activities that drive Climate Change.
    - Each card should feature a picture with a corresponding title on the front side, while the back side should contain a text explanation corresponding to that specific title.
2. **Prepare a big flipchart paper and markers. Fold the flipchart paper to divide the paper space into 4 quadrants. If only small-sized flipchart available, you may consider put 2 flipcharts together.**

ACTIVITY INSTRUCTIONS

1. Place flipchart paper on a smooth surface / table.
2. Place the stack of cards on each quadrant of the paper according to color designated (see picture on the right).
3. First, participants are encouraged to work on the 2 quadrants (blue and pink) on the right side of the paper (Responses and Impacts of Climate Change). Once done, the participants can work on the other cards on the left side of the flipchart paper (Drivers).



Note: You do not have to start working on the ***"Responses and impacts"*** side. Feel free to choose the starting point that makes the most sense for you and your team.

4. Start by putting the blue card, titled **"Average Global Temperature",** on the flipchart and identify the cause-and-effect relationships of this card with the other cards in blue and pink colors.
5. Draw an arrow between the 2 interconnected elements to illustrate its directional cause and effect relationship. For example, **Average Global Temperature → Ice Cap Melting.**

Note: More information provided on the back of each card. If you get stuck in identifying the cause and effect relationship among these cards, flip the card to read the information provided.

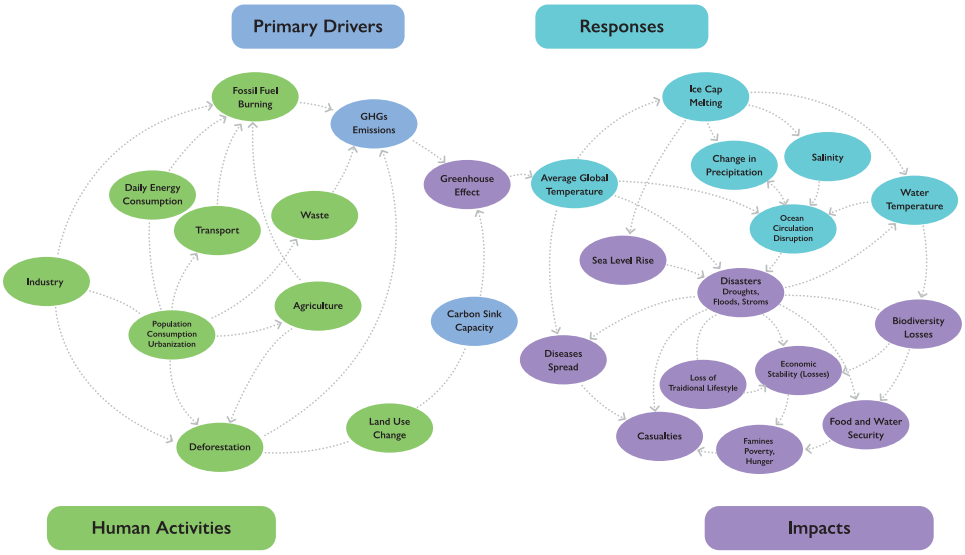
6. Continue to identify the cause-effect linkages between different elements and draw directional arrows to indicates their causal relationships. If you think some elements are missing from this set of cards or, if you would like to add more details, please write down the additional elements on the blank cards provided and include them in your system map.
7. When you are satisfied with the map of the Climate Change Responses and Impacts (right side of the paper), go ahead and work on the "**Drivers of Climate Change**" (left side of the paper), with the card set in grey and yellow colors.

Note: There are some blank cards provided in this card deck. The purpose of having the blank cards are to allow you to expand your view and make connections between climate change and your topic of interest. During the activity, you can add new cards at anytime. It is also ok if you or your group do not use some of the existing cards, if you think these cards are not fit into the conceptual picture.

The system diagram provided on the next page (see picture below) is intended to be used as a guide. It is totally fine if your final map does not look exactly the same with this one. What matters is the conversation / discussion you have with the group.

Master Answer Key

Do not worry if your map does not look exactly like the answer key. What is the most important is the learning and the understanding of the interconnections between different elements in this system map.

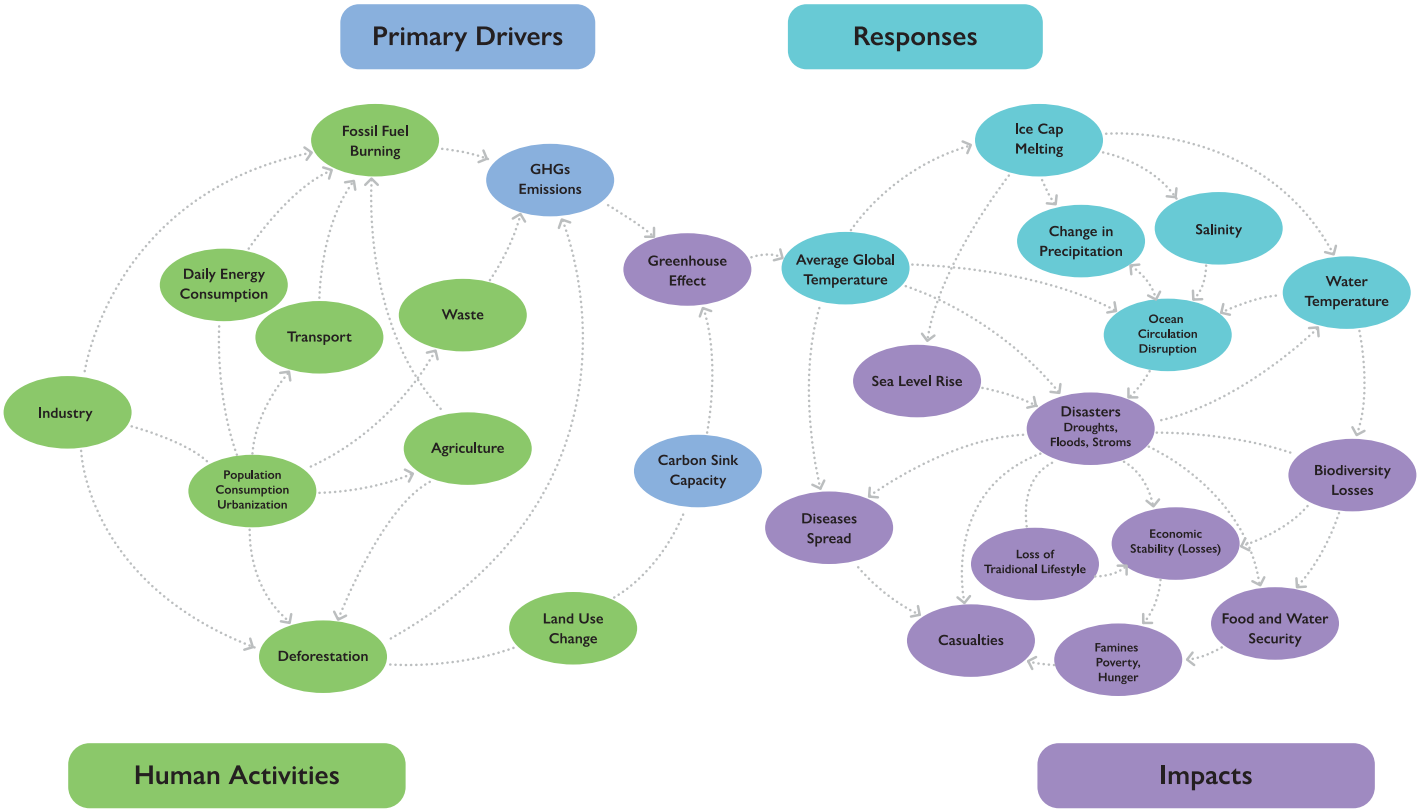


CLIMATE DIAGRAMMING ANALYSIS AND DEBRIEF QUESTIONS

After you finish working on the map, try to go through each of these questions below to generate deep thinking and discussion among the team.

1. Does your Climate Change system model (diagram) look similar or different to the Master system diagram? How is yours different and can you explain the difference a bit?
2. In doing this activity, what new insights and thinking have come to you? What does doing this activity cause you to think about?
3. What was challenging for you in putting together your own Climate Change system map from the cards (i.e. system elements) that you were given?
4. Were there any new elements that you added to the model? Explain your thinking.
5. On the effects side of the diagram, which of the system elements do you feel is the lynchpin for the severity and extent of climate change impacts on human societies, especially looking to the future?
6. When you think about making big changes in a system, like how things work in your community or even globally, we're curious to know where you think the best places to make those changes are. We call these spots "leverage points." They're like key places where even a small change can make a really big difference in how things work. So, where do you think these important spots are in your map? What makes them so crucial? And if you could make changes there, what kind of impact do you think it could have in your community or country?

Climate Change Mapping



Adapted from: An Analysis of Opportunities for USAID Indonesia's Water and Energy Team to Incorporate Global Climate Change Activities in the Natural Resource Management and Energy Sectors, December 2008

Deforestation

Flip me →

Population, Consumption, Urbanization

Flip me →

Land Use Change

Flip me →

Industry

Flip me →

Agriculture

Flip me →

Transport

Flip me →

Land Use Change

Forests act as carbon sinks by absorbing and storing large amounts of CO2 through photosynthesis. Trees capture carbon and release oxygen, contributing to the global carbon cycle.

When forests are cleared during **deforestation**, causing **land use change** and thus **carbon sink capacity** is lost.

Also the process of deforestation, especially through burning, releases stored carbon in the form of CO2 back into the atmosphere. This contributes to **increased greenhouse gas** concentrations and exacerbates climate change.

Population, Consumption, Urbanization

As the world population increases, **residential demand** for energy increases (cooking, heating, colling and lighting).

To build habitat for people, building more roads and other infrastructures also caused **deforestation**.

When cities grow really fast, they need even more energy for **transportation**, **industry** as well as **agricultural** activities.

Deforestation

The conversion of land from a forested state to another land use type (such as **agriculture**, **urbanization**, **industry** and/or infrastructure development) constitutes a significant **change in land use.**

Transport

Cities in Asia expand rapidly,thus there is a simultaneous development of extensive road networks, leading to a greater dependence on both public and private transportation.

The **increasing urban populations** contribute to heavy traffic, causing congestion, longer duration of **transportation** and raising reliance on **fossil fuels burning** like gasoline and diesel.

Agriculture

As the **global population increases**, the demand for food rises, thus there may be increased pressure to convert natural ecosystems, e.g. forests, into **agricultural** land thus causing **deforestation**.

To maximize food production, there's often an intensification of agricultural practices, involving the use of fertilizers, pesticides, and machinery, which often rely on **fossil fuels**. The use of fossil fuels in agriculture contributes to greenhouse gas emissions.

Methane emissions from flooded rice paddies are a significant GHG emission source in Asia.

Industry

The modern **consumption patterns** around the world drive the need for more resources, land, energy, and products, thus **industry** increases their activities. The needs for more resources caused more **deforeststation** for agriculture or logging, and using more energy in their services and production process is produced daily from **fossil fuels.** Additionally, the production and transportation of goods contribute to carbon emissions.

Daily Energy Consumption

Flip me →

Waste

Flip me →

Fossil Fuel Burning

Flip me →

Greenhouse Gases(GHGS) Emissions

Flip me →

Carbon Sink Capacity

Flip me →

Greenhouse Effects

Flip me →

Fossil Fuel Burning

Daily energy consumption, **agriculture** activities, **transportation**, and **industry**, require use fossil fuels like coal, oil, and natural gas for things like it creates a lot of smoke and releases **Greenhouse gases** into the atmosphere.

Waste

As the world **population** increases, we use up more resources, which results in more **waste** being produced. When waste isn't managed properly, such as by dumping it openly or burning it, it adds even more **greenhouse gases** to the atmosphere, worsening climate change.

Daily Energy Consumption

(lighting, heating, cooling, cooking, etc.)

Urbanization, consumption, and population growth are significantly increasing our **daily energy consumption**. This surge in energy demand is largely fulfilled by **burning fossil fuels** like coal, oil, and natural gas, which are major contributors to environmental problems such as air pollution and climate change. As cities expand, people consume more goods and services, and the global population grows, our reliance on these fossil fuels intensifies, perpetuating a cycle of environmental degradation.

Greenhouse Effect

The greenhouse effect is a natural process that warms the Earth's surface. When the sun's energy reaches our planet, some of it is reflected back to space, and the rest is absorbed and re-radiated by greenhouse gases in the atmosphere.

However, human activities, such as burning fossil fuels and deforestation, have reduced the **carbon sink capacity**, and **increase the concentration of greenhouse gases**, thus enhancing the natural **greenhouse effect**. This extra warming contributes to climate change, with consequences such as **rising the average global temperatures**.

Carbon Sink Capacity

Forests, oceans, and other natural areas are like super-sized sponges that absorb a lot of carbon dioxide. This sponge is what we call a "carbon sink."

With **landuse changes** (from urbanisation, deforestation, etc.), the **Carbon sink capacity** is reduced. This means the earth can't absorb as much carbon dioxide, and more of it stays in the air. This extra carbon dioxide contributes to the **greenhouse effect**, making our planet warmer than it should be.

Greenhouse Gases (GHGS) Emissions

Imagine the Earth as a cozy blanket that keeps us warm by trapping some of the sun's heat. This natural warmth is a good thing because it makes our planet just right for living.

Burning of **fossil fuels** like coal, oil, and gas, **deforestation** and improper **waste** management contribute to more greenhouse gases emissions. Instead of just keeping the right amount of warmth, these extra layers make the blanket too thick. This thickening is what we call the **greenhouse effect**. It traps too much heat around the Earth, making it warmer than it should be.

Average Global Temperature

Flip me →

Ice Cap Melting

Flip me →

Salinity

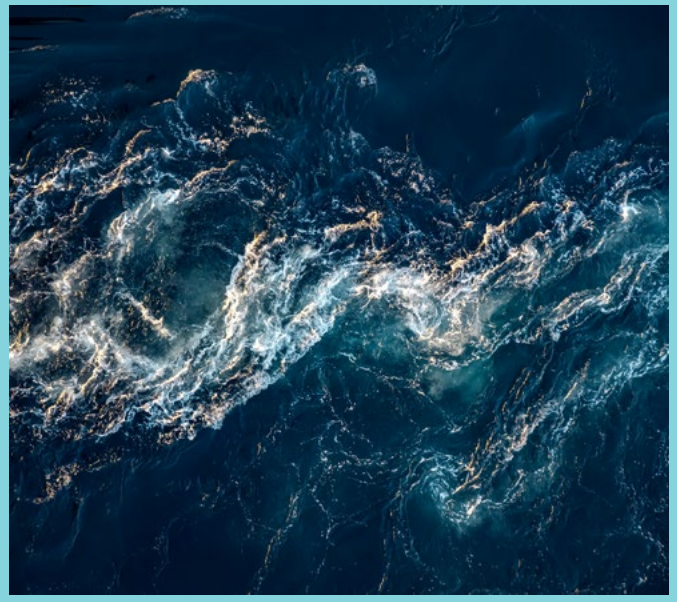
Flip me →

Water Temperature

Flip me →

Change in Precipitation

Flip me →



Ocean Circulation Disruption

Flip me →

Salinity

Ocean salinity, or the concentration of salt in seawater, is a crucial factor influencing ocean circulations / currents.

As **ice caps and glaciers melt**, they release freshwater into the oceans, altering the usual balance of salt and freshwater. Changes in **ocean salinity** impact the density and buoyancy of seawater. In turn, these changes can influence the patterns of **ocean currents/ circulation.**

Reduced salinity in certain areas can disrupt the normal functioning of currents like the Atlantic Meridional Overturning Circulation (AMOC), which plays a key role in redistributing heat globally.

Changes in ocean currents can further influence regional and global climate patterns, affecting weather systems, sea surface temperatures, and precipitation.

Ice Cap Melting

The **rising global average temperature** is a key factor contributing to the **melting of ice caps** and glaciers around the world. As Earth's temperature increases, it leads to the warming of the atmosphere and oceans. This warmer climate results in the melting of ice caps, glaciers, and polar ice sheets.

Average Global Temperature

The increased concentration of greenhouse gases such as carbon dioxide and methane in the atmosphere enhance the **greenhouse effect**. These gases act as a kind of insulating layer around the Earth, trapping heat and causing the **average global temperature** to rise.

This extra warming contributes to climate change, with consequences such as **melting ice caps, disrupting Ocean Circulation**, more climate-related **disasters**, and more s**pread of diseases**.

Ocean Current Circulation Disruption

Changes in **average global temperature, water temperature, salinity, and precipitation patterns** can significantly influence **ocean current circulation**.

Disruptions in ocean current circulation can contribute to a range of **natural disasters** with significant impacts on both human and environmental systems.

Disruptions in ocean current circulation can alter weather patterns, leading to more frequent and severe storms. Additionally, disruptions in ocean circulation can impact marine ecosystems, affecting the distribution of nutrients and leading to declines in fish populations. Furthermore, changes in ocean currents can influence sea level rise and coastal erosion, exacerbating the risk of flooding and coastal inundation events.

Change in Precipitation

The **melting of ice caps** plays a crucial role in **changing precipitation patterns** on a global scale.

As **ice caps and glaciers melt** due to rising temperatures, they release substantial amounts of freshwater into the oceans. This influx of freshwater can disrupt established **ocean circulation** and affect the distribution of heat around the globe.

Changes in ocean circulation patterns, such as the Atlantic Meridional Overturning Circulation (AMOC), can **influence atmospheric circulation and precipitation**.

Water Temperature

The **melting of ice caps** impacts **ocean water temperature** primarily through the introduction of freshwater into the oceans. Ice caps, especially those in polar regions, store vast amounts of freshwater in the form of ice. As these ice caps melt due to rising temperatures, the freshwater is released into the surrounding seas. The influx of freshwater from melting ice alters the density and salinity of the oceans, impacting **ocean circulation patterns**.

When **droughts** occur, they can cause the **water temperature** in rivers, lakes, and other bodies of water to rise. This rise in temperature can have far-reaching consequences for **biodiversity**, the variety of life in a particular habitat.

Disasters (floods, droughts,storms, etc.)

Flip me →

Diseases Spread

Flip me →

Famines

Flip me →

Casualties

Flip me →

Economic Stability (Losses)

Flip me →

Biodiversity Losses

Flip me →

Famines

Famine is a severe scarcity of food that leads to widespread hunger, malnutrition, and sometimes even starvation among a large population.

Climate change-induced **disasters (flood, droughts, extreme weather patterns)** have devastating effects on both **economic stability** (Economic loss) and **food and water security**, often exacerbating conditions that lead to **famine**.

Famines are intricately linked to **casualties** as the severe shortage of food and nutritional deficiencies directly jeopardize the health and survival of populations. In extreme cases, famine can result in a significant number of casualties due to starvation, weakened resistance to illnesses, and inadequate access to medical care.

Diseases Spread

Warmer temperatures contribute to the expansion or **spread of diseases**, vectors such as mosquitoes and ticks extending their geographic range. In areas where these vectors transmit diseases like malaria, dengue fever, Zika virus, and Lyme disease, the prolonged warmer seasons create favorable conditions for these disease carriers to thrive and spread illnesses to new regions.

Additionally, the rising frequency and intensity of **natural disasters** pose threats to public health infrastructure, displacing populations and creating environments conducive to the **spread of diseases**.

Spread of diseases are intricately linked to **casualties**.

Disasters (Floods, droughts,storms, etc.)

Natural disasters have far-reaching impacts, causing **loss of lives (casualties), economic losses** through damage to infrastructure and disruption of supply chains but also creating conditions for the **spread of diseases** by disrupting public health infrastructure and displacing populations.

Additionally, these disasters contribute to **biodiversity loss** through habitat destruction and harm to species, disrupting ecosystems (such as increasing **water temperature**, dry up water bodies, etc).

Furthermore, they can disrupt **traditional lifestyles** by damaging homes, eroding cultural landscapes, and undermining community structures, compelling affected populations to adapt and often resulting in the loss of cultural practices and heritage.

Biodiversity Losses

Climate-related disasters, including storms, floods, and extreme weather events, exert direct and indirect impacts on ecosystems, their inhabitants and **biodiversity**.

While the rise in ocean **water temperatures** directly affects marine habitats, leading to coral bleaching, coastal ecosystem destruction, and species displacement, disrupting normal life cycles, impairing reproduction, and contributing to population declines, **biodiversity losses** and the potential extinction of vulnerable species.

Biodiversity loss significantly impacts **food and water security** by disrupting ecosystems, leading to decreased crop yields, increased vulnerability to pests and diseases, and limiting dietary diversity, while also undermining water regulation, purification, and availability for drinking, irrigation, and fisheries, affecting the livelihoods of millions of people globally.

Economic Stability (Losses)

Climate-related natural disasters, such as storms, floods, or droughts can cause destruction of infrastructure and **economic assets**, leading to significant economic losses for affected communities. Simultaneously, these events often result in the **loss of traditional lifestyles** as homes are destroyed, cultural landscapes erode, and community structures are undermined. As people adapt to the aftermath, the **economic loss** continues with the displacement of populations and the need for costly recovery efforts.

Biodiversity loss and declining essential ecosystem services like pollination, water purification, and disease regulation diminish due to climate change, impacting various sectors of the **economy** dependent on these services.

Casualties

Climate-related **natural disasters** can lead to a chain of interconnected challenges, resulting in **casualties**. These events, such as storms, floods, and droughts, can cause immediate casualties through physical harm and displacement.

Additionally, the breakdown of infrastructure and sanitation systems during disasters creates conditions conducive to the rapid **spread of diseases**, further increasing casualties.

The long-term impacts of such disasters on agricultural systems often contribute to **famines**, as crop failures and food shortages exacerbate food insecurity, leading to malnutrition and, in severe cases, starvation-related **casualties**.

Food and Water Security

Flip me →

Loss of Traditional Lifestyle

Flip me →

Sea Level Rise

Flip me →

Sea Level Rise

Ice caps melting, particularly those in polar regions and glaciers, they contribute freshwater to the oceans, leading to an **increase in sea levels**.

As the sea level increases, it can lead to **flooding**, erosion of coastlines, and saltwater intrusion into freshwater sources.

Loss of Traditional Lifestyle

Climate-related **natural disasters** significantly impact **traditional lifestyles** by causing widespread disruptions to communities' cultural practices, livelihoods, and socio-economic structures. Events such as storms, floods, or droughts can result in the destruction of homes, agricultural lands, and vital resources, forcing populations to adapt to new, often unfamiliar conditions.

The **loss of traditional landscapes** and natural resources can undermine customary activities like agriculture, or fishing, leading to **economic instability** and altering social structures.

Additionally, the displacement of communities and the destruction of infrastructure during these disasters often challenge the resilience of traditional ways of life, as individuals and societies must cope with the aftermath and navigate the complexities of recovery.

Food and Water Security

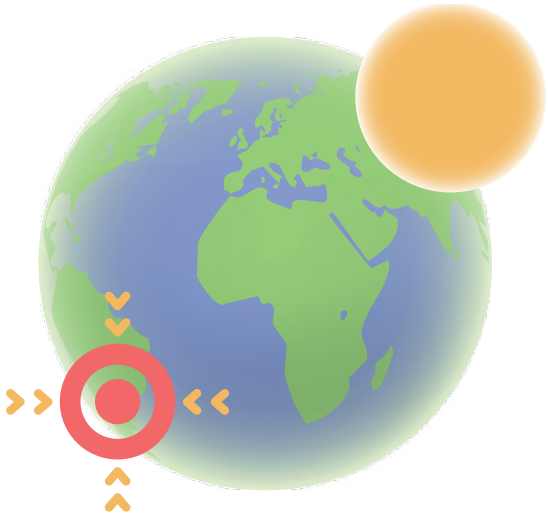
The decline in **biodiversity** undermines agricultural productivity and **food security**, as diverse ecosystems contribute to pollination, soil fertility, and natural pest control.

Climate-related **disasters**, such as storms and extreme weather events, exacerbate these **food security** challenges by directly affecting crop yields and the overall stability of agricultural systems.

Simultaneously, healthy ecosystems regulate the water cycle, ensuring water availability and quality. The loss of biodiversity, coupled with climate-related events, disrupts this regulation, leading to water scarcity and compromising the reliability of water sources for both agriculture and human consumption.

1.2.3

IMPACTS OF CLIMATE CHANGE



The understanding of the potential hazards and impacts of climate change on communities is vital for numerous reasons.

Firstly, it facilitates risk assessment and preparedness, enabling proactive planning to mitigate potential damages and disruptions to local environments, infrastructure, and economies.

Secondly, it aids in protecting human health by identifying and addressing heightened risks such as heat-related illnesses and air pollution.

Additionally, it supports economic resilience by recognizing the potential of climate-related events to disrupt local economies, allowing communities to diversify, invest in resilient infrastructure, and support affected businesses.

The understanding of these impacts also guides efforts to preserve natural resources, promote social equity and justice, inform policy development, engage and educate communities, and foster long-term resilience and sustainability. In essence, this understanding forms the basis for informed decision-making, effective policies, and collaborative action to address climate change's multifaceted impacts.

Note: Hazards in the context of climate change encompass a range of environmental threats exacerbated by shifting climatic conditions. These include extreme weather events like hurricanes, floods, and heatwaves, as well as rising sea levels, temperature extremes, and altered precipitation patterns. Climate change also intensifies risks such as wildfires, vector-borne diseases, food and water insecurity, and biodiversity loss.

Age Group: 15 years old and above
Time Required: 1-2 hours to identify the hazards and impacts of Climate Change
1-2 hours to create the comic strip
Group Size: Any size. Small groups will encourage more participation
Materials:

1. Hazards and Impacts of Climate Change worksheet/handout
2. Big piece of paper for comic strip
3. Pen, pencils and color for comic strip creation

Activity Objectives/Participants will...

- Develop an understanding of the impacts of climate change on different aspects of the community.
- Be able to communicate these issues using various mediums, such as comic strips.

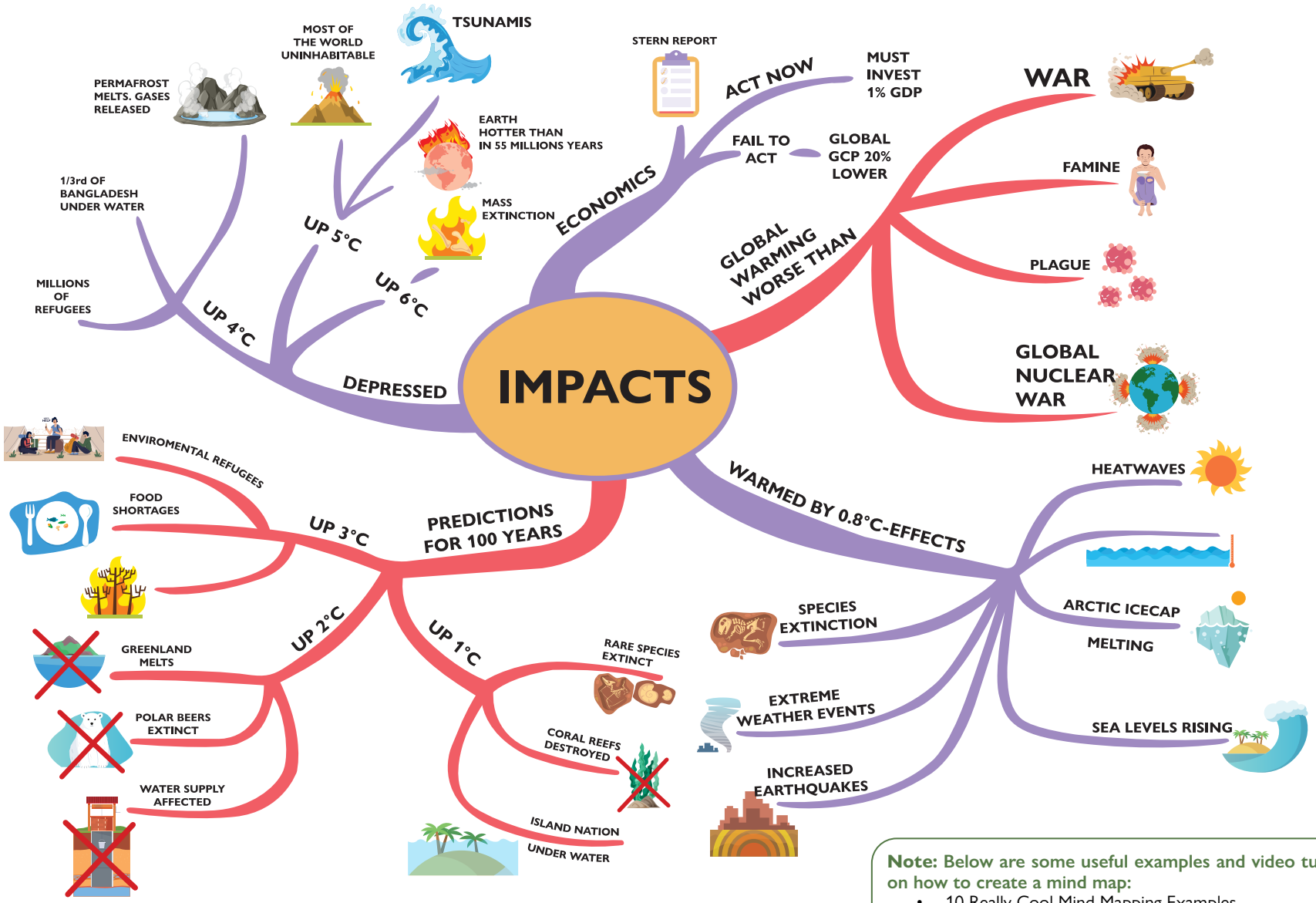
YOUR ASSIGNMENT

1. Using different sources of information that you have an access to, find more information about the impacts of climate change to different aspects of your community and briefly summarize what you found on the worksheet provided. Write your answers inside the clouds shown in the graphic.
2. Following from your research, create a comic strip based on your understanding of the impacts of climate change on your community. Develop one or two interesting characters & a storyline that takes into account the story's background context, includes aspects of the local lifestyle and dramatic events or conflicts that may have developed as a result of climate change. Use the seven comic strip panels provided to make your comic story.

Need to learn "How to Create a Comic Strip"? Follow this link.

CLIMATE CHANGE AND GMS

Countries in the Greater Mekong Subregion are particularly vulnerable to the impacts of climate change. Among the effects of climate change expected in the GMS are those experienced in other similar parts of the world such as...



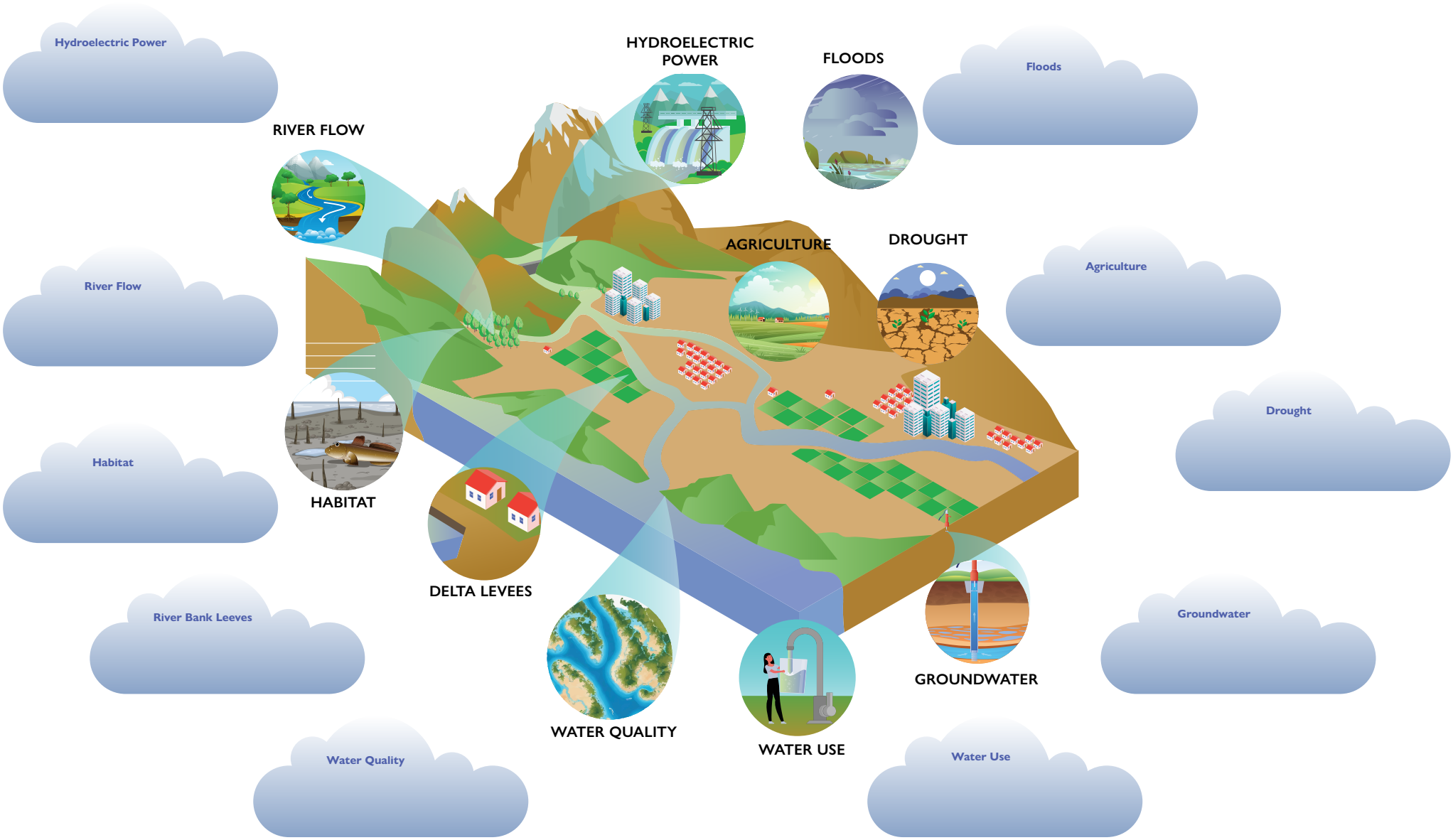
Note: Below are some useful examples and video tutorials on how to create a mind map:

- 10 Really Cool Mind Mapping Examples
- Step by Step directions for creating a mind map
- Miro Mind Mapping Tutorial

YOUR ASSIGNMENT

Using different sources of information that you have an access to, find more information about the impacts of climate change to different aspects of your community and briefly summarize what you found on the worksheet provided. Write your answers inside the clouds.

Hazards and Impacts of Climate Change



Climate Impacts Comic Strip

INSTRUCTIONS

Following from your research, create a comic strip based on your understanding of the impacts of climate change on your community.

Try to create one or two interesting characters & a storyline that takes into account the story's background context, includes aspects of the local lifestyle and dramatic events or conflicts that may have developed as a result of climate change. Use the seven comic strip panels to make your comic story.

My Thoughts and Feelings After Completing This Assignment:

1.2.4

CLIMATE CHANGE ACTION

Age Group: 15 years old and above

Group Size: This activity can be done individually or as a small group

Time Required: 60-90 minutes for mind mapping and 30-45 minutes on action plan

Materials:

1. Flipchart or other large sheet of paper, markers, and pastels
2. Climate Change Action Plan Template

Activity Objectives/Participants will...

- Gain a comprehensive understanding of various actions that can contribute to solving the climate change problem.
- Learn to create a mind map to explore and organize potential actions against climate change.
- Improve the ability to communicate complex issues related to climate change in a clear, organized, and visually appealing manner.
- Develop a sense of personal responsibility and commitment to implementing the identified climate action strategies.

YOUR ASSIGNMENT

- Creating a **"mind map" of how you can help to mitigate the climate change problem** we now face.
- Pick the top five ways that you will focus on in the coming year.

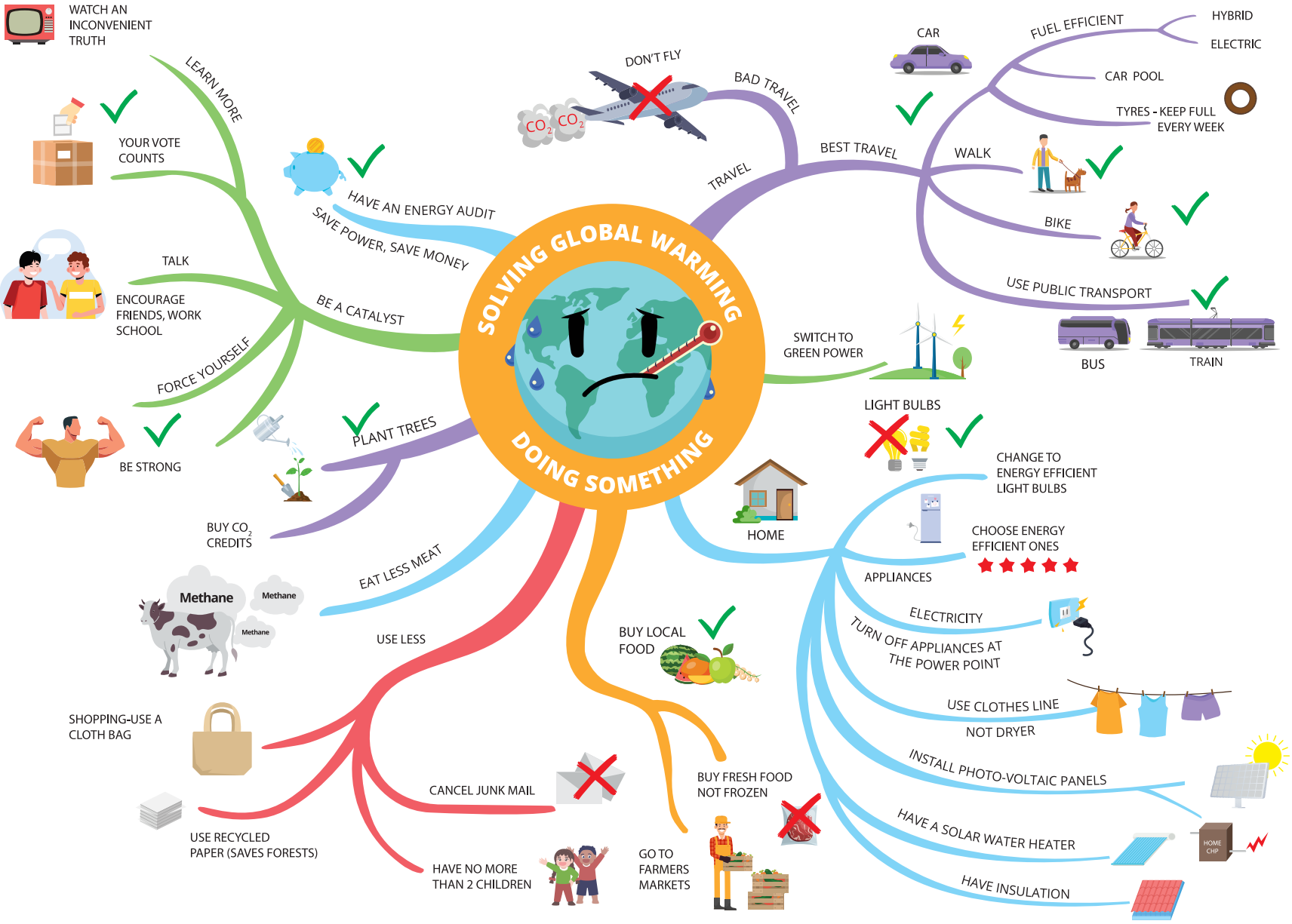
Creating a mind map is quite simple, just follow the simple steps described here...

- First, write your main issue, "Climate Action" in the center of a flipchart or other large sheet of paper.
- Next, think of as many key categories of actions that you could take, such as transportation choices, habits and practices, friends, home, etc.
- Progressively branch out from each main category into smaller, or more specific types of actions that you can do.
- When you construct your mind map, remember to be as creative and artistic as possible. Make it colorful and engaging!
- You can create a mind map on paper or electronically using templates available online for computers or tablets.

Note: Below are some useful examples and video tutorials on how to create a mind map:

- 10 Really Cool Mind Mapping Examples
- Step by Step directions for creating a mind map
- Miro Mind Mapping Tutorial

Example of Climate Change Action Mind Map



See an example of the climate change action mind map above for some ideas. However, please try to develop your own ideas. It will only really make a difference if the contents of the mind map come from your own ideas and feelings.

Once you have finished with the mind mapping, use the "My Climate Change Action Plan" template provided on the next page to make a list of the action items you would like to focus on for this year.

MY CLIMATE CHANGE ACTION PLAN

Based on the potential action items that you have brainstormed on the mind map, select five or more action items that you would like to do this year and use the template provided below to help you create your action plan.

IT IS TIME TO CREATE YOUR CLIMATE CHANGE ACTION PLAN

Action You Want to Focus on This Year	What Help Is Needed?	Possible Obstacles	How Will You Know You Are Successful?
(Example) Turn off the lights when I leave the room	• Place reminder sign on the door. • Ask for reminders from my family and friends	Forgetfulness and laziness	Unit of electricity saved on the monthly bill

1.3.1

ENERGY QUIZ 1

POWER GENERATION

Electric power can be generated from various types of fuel sources.

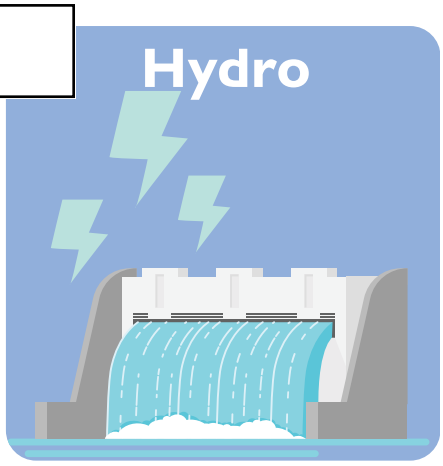
Rank power generation in your country by which fuel sources it uses most.

Example:

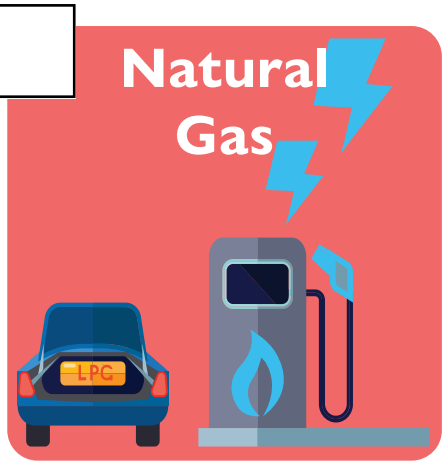
- Highest share = 1
- Lower shares = 2, 3, 4, etc.

Mark ⓧ if you think that particular sources are not used to generate power for your country.

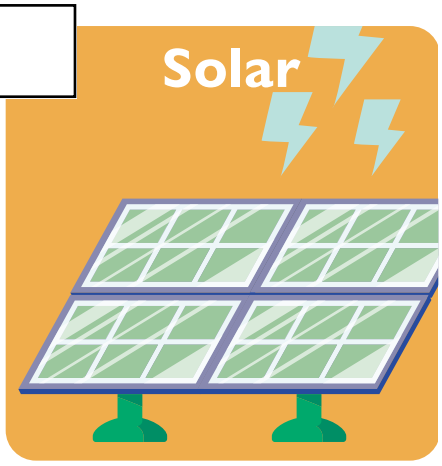
☐ Hydro



☐ Natural Gas

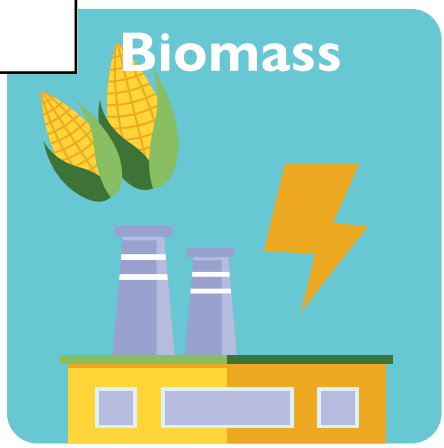


☐ Solar

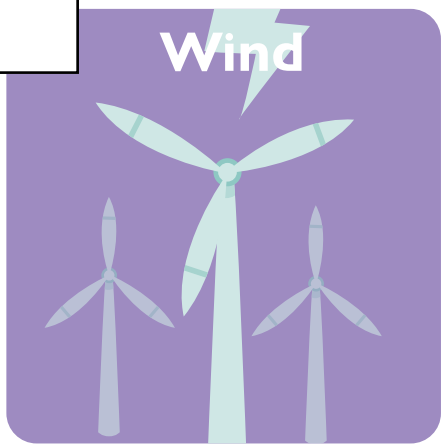


☐ Coal

☐ Biomass



☐ Wind

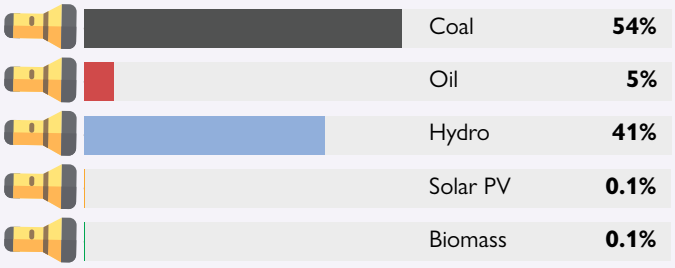


☐ Other Renewable Energy

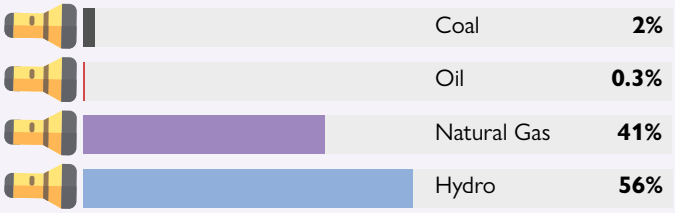
Check your answers →

POWER GENERATION
BY COUNTRY

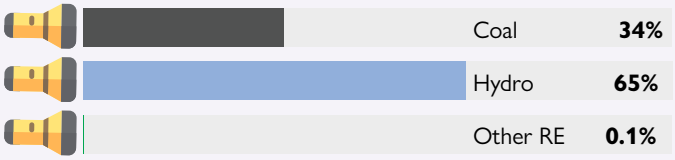
CAMBODIA
2017 Power Generation
6,633 Gwh



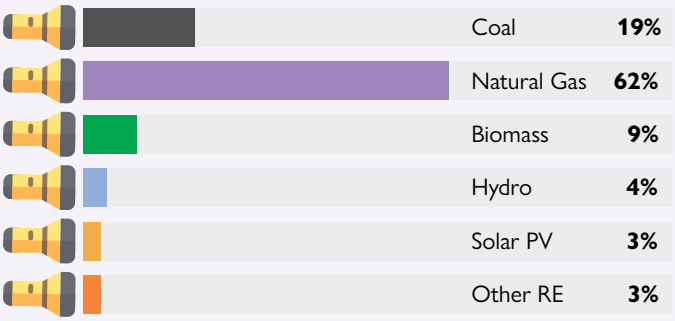
MYANMAR
2017 Power Generation
19,920 Gwh



LAO PDR
2017 Power Generation
31,740 Gwh



THAILAND
2018 Power Generation
187,362 Gwh



Data source: ASEAN-German Energy Programme (AGEP)

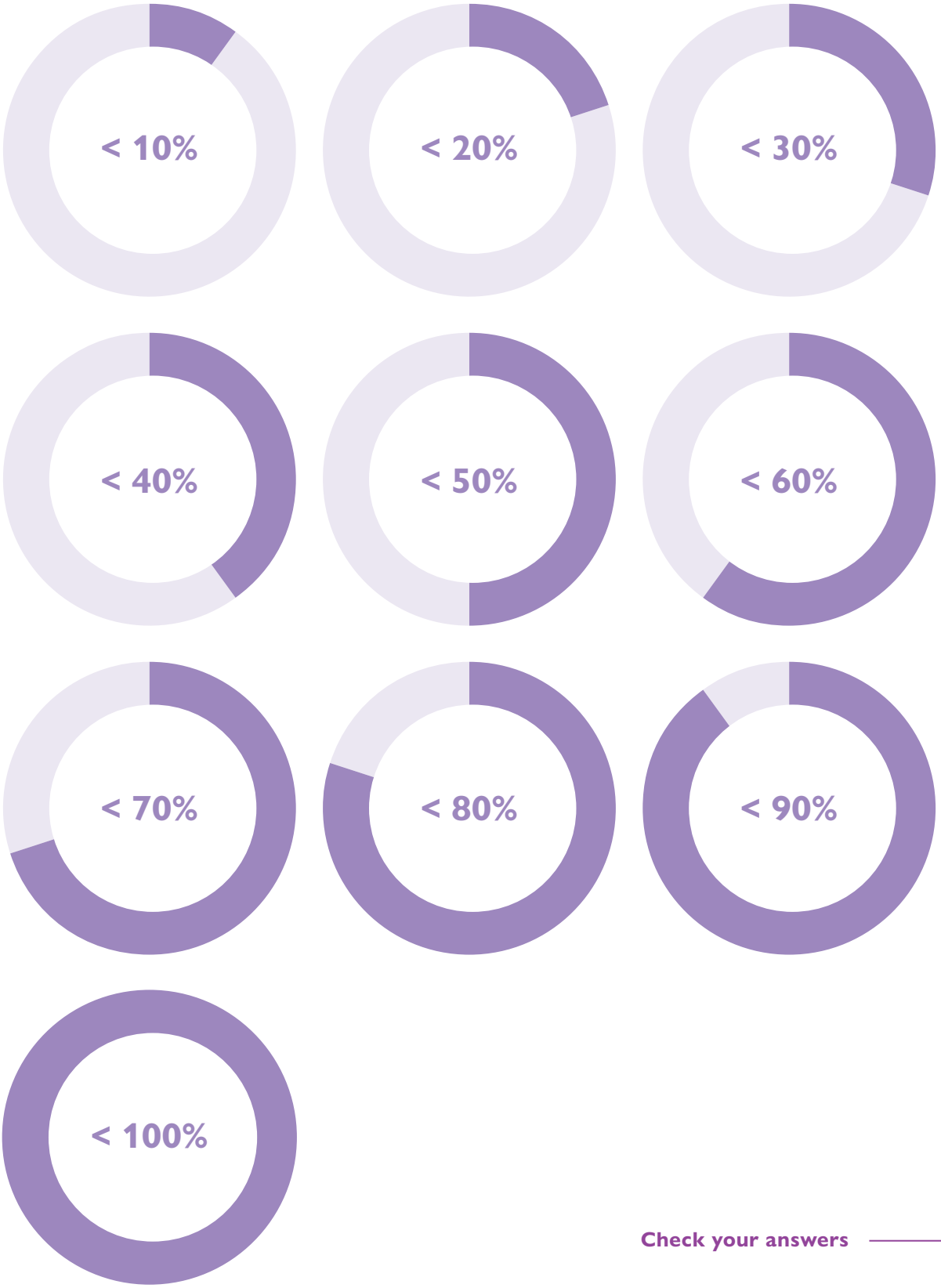
https://agep.aseanenergy.org/ SCAN ME

ENERGY QUIZ 2

ACCESS TO CLEAN COOKING

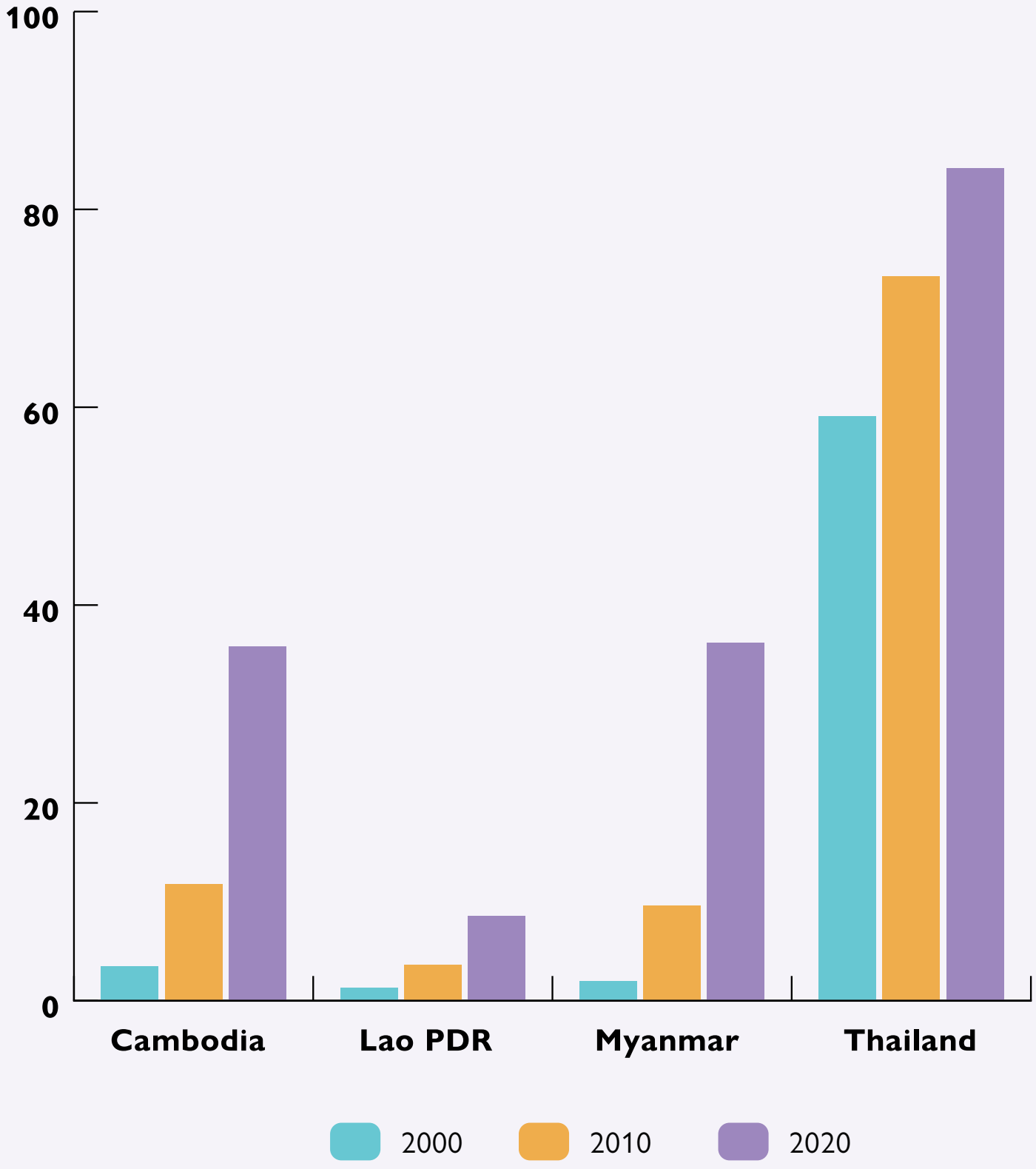
The share of the population in ASEAN that has access to clean cooking varies greatly between countries. According to the ASEAN Centre for Energy (ACE), as of 2017 around 60 million households or 240 million people, were still cooking with traditional biomass or non-modern fuels in ASEAN (ACE, 2020).

Task: Estimate percentage of population in your country with **access to clean cooking in 2020**.



Check your answers →

SHARE OF POPULATION WITH ACCESS TO CLEAN COOKING



Source: WHO (2022)

ENERGY QUIZ 3

ENERGY USAGE

Fill in the blank spaces!

The thick dust on a light bulb can block up to _____% of the light.

Each time we open our refrigerator, it lets up to _____% of cold air out.

Air conditioning, heating, and ventilating systems make up for _____% of the total energy use in the commercial sector.

When we turn an incandescent light bulb on, only _____% of the electricity used is turned into light while _____% of it is wasted as heat.

We can save up to _____% of energy when switching to a compact fluorescent as compared to a regular bulb. Another plus of a compact fluorescent is that it can last up to four years.

Check your answers →

ENERGY USAGE

Answers

The thick dust on a light bulb can block up to 50 % of the light.

Each time we open our refrigerator, it lets up to 30 % of cold air out.

Air conditioning, heating, and ventilating systems make up for 40-60 % of the total energy use in the commercial sector.

When we turn an incandescent light bulb on, only 10 % of the electricity used is turned into light while 90 % of it is wasted as heat.

We can save up to 75 % of energy when switching to a compact fluorescent as compared to a regular bulb. Another plus of a compact fluorescent is that it can last up to four years.

Data source: https://www.c-asean.org/post/fun-fact-about-energy

SCAN ME

1.3.2

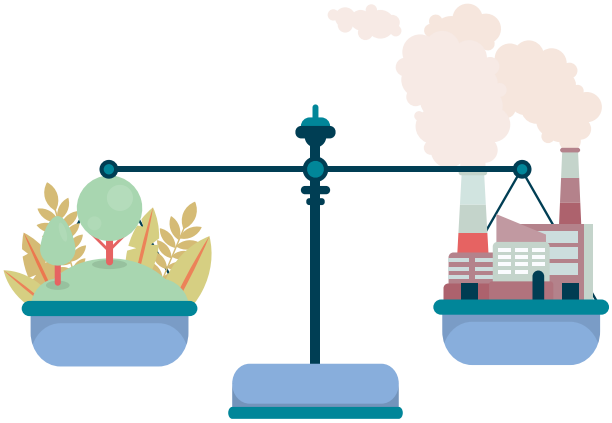
RENEWABLE ENERGY VS. NON-RENEWABLE ENERGY

Age Group: 15 years old and above

Time Required: 30-40 minutes for card game part and 2 - 3 hours for reflection questions research

Group Size: Recommended to do in pair or small group(s)

Location: It can be done anywhere. Indoor is preferable to prevent wind blowing all the cards away. It might be helpful to be somewhere with internet access to find the info you might need.



Materials:

1. Card decks 1, 2 and 3
2. Flipchart paper and a marker
3. Glue or adhesive tape
4. My Community's Energy Sources Worksheet

Learning Objectives:

By the end of this activity, participants will...

- ...be able to correctly identify the properties of the energy sources
- ...recognize the challenges of utilizing each source of energy, such as high initial costs, technical issues, and potential environmental impacts
- ...be able to critically evaluate the pros and cons of different energy sources and how can they apply that knowledge to their community context

Preparing materials: Print the 3 card decks provided and proceed to cut them out into individual pieces. Organize them in 3 decks according to the type and size of the cards.

CARD DECK 1

Energy Card

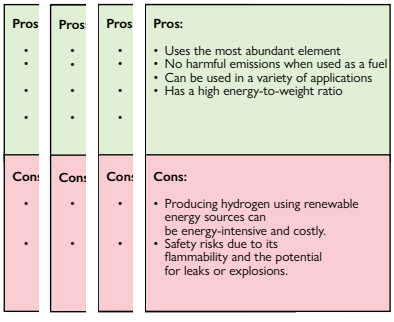
PLACE THE RIGHT SOURCE OF ENERGY IN THIS BLOCK	A type of energy that is generated by utilizing as a fuel source, typically through processes like fuel cells of combustion.
	Pros:
	Cons:

CARD DECK 2

Energy Source

CARD DECK 3

Pros & Cons



ACTIVITY INSTRUCTIONS

Step 1: Identify and match the energy source

- Spread all the energy cards (deck 1) on the table
- Read the description provided, one card at a time
- Based on the description, identify the "Energy Source" (deck 2 cards) that match with the description and place the identified Energy Source card on the first column on the energy card. Glue or tape them to the card.
- Repeat the same process and complete the matching of energy sources with their property descriptions.

Step 2: Matching Pros & Cons with each the energy source

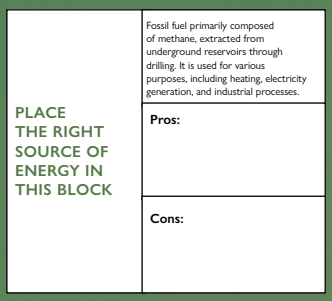
- Look at the Pros & Cons card (deck 3), one card at a time, and match each card with the Energy source. Glue or tape the Pros & Cons card on the Energy card. Repeat the same process until you match all the Pros & Cons cards to the Energy cards.

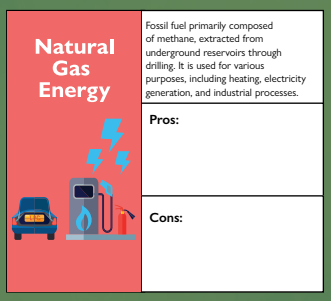
Step 3: Renewable Energy VS Non-Renewable Energy

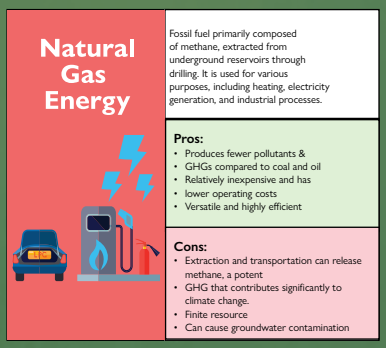
- Use a marker pen to divide a flipchart paper into 2 sections. Write "Renewable Energy" on the left side of the paper and write "Non-Renewable Energy" on the right side of the paper
- Look at all the Energy cards and identify which energy sources are renewable and which ones are non-renewable. Place each card on the corresponding side of the flipchart paper.

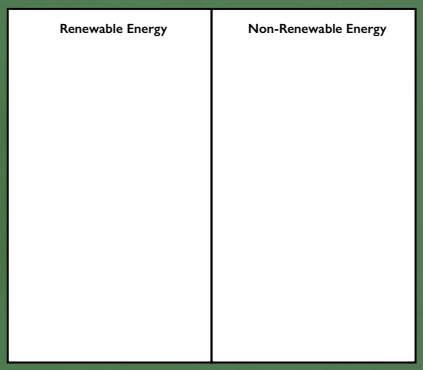
Step 4: Explore and reflect on the current and potential renewable energy sources in your community, along with related policies.

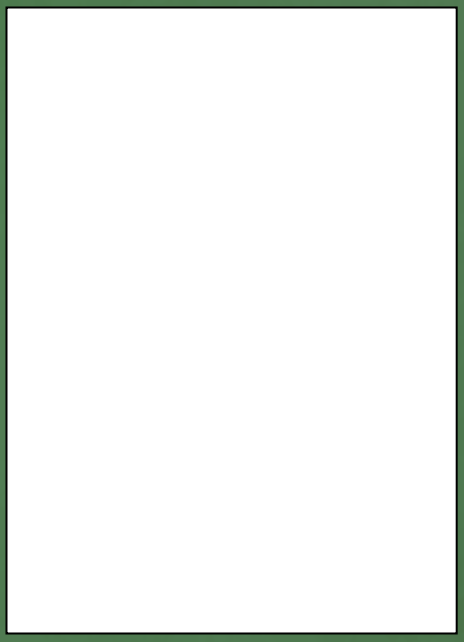
- Use the "My Community's Energy Sources Worksheet" with the guiding questions to explore and reflect on the current and potential renewable energy sources in your community, as well as the related policies.





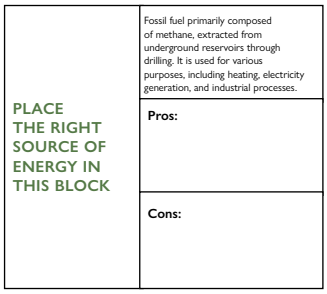






CARD DECK 1 ENERGY CARD

Instructions:
Print this page on one-sided paper (A4) and cut it into individual pieces. See picture below.



PLACE THE RIGHT SOURCE OF ENERGY IN THIS BLOCK	Fossil fuel primarily composed of methane, extracted from underground reservoirs through drilling. It is used for various purposes, including heating, electricity generation, and industrial processes
	Pros:
	Cons:

PLACE THE RIGHT SOURCE OF ENERGY IN THIS BLOCK	A type of energy that is generated by utilizing hydrogen as a fuel source, typically through processes like fuel cells or combustion
	Pros:
	Cons:

PLACE THE RIGHT SOURCE OF ENERGY IN THIS BLOCK	Used to generate energy by burning liquid petroleum products for various applications, including heating buildings, generating electricity, and powering vehicles
	Pros:
	Cons:

PLACE THE RIGHT SOURCE OF ENERGY IN THIS BLOCK	Harnessing the kinetic energy of ocean tides as they rise and fall to turn turbines placed underwater to generate power
	Pros:
	Cons:

PLACE THE RIGHT SOURCE OF ENERGY IN THIS BLOCK	Energy comes from Uranium which is mined underground. It generates electricity by splitting atoms, releasing heat to produce steam that drives turbines to generate electricity.
	Pros:
	Cons:

PLACE THE RIGHT SOURCE OF ENERGY IN THIS BLOCK	Energy that is produced by burning of the black materials mined from deep underground to generate heat, which is then used to produce electricity.
	Pros:
	Cons:

PLACE THE RIGHT SOURCE OF ENERGY IN THIS BLOCK	Energy that is produced by burning organic materials like wood, crops, and waste to generate heat and electricity.
	Pros:
	Cons:

PLACE THE RIGHT SOURCE OF ENERGY IN THIS BLOCK	Conversion of kinetic energy of wind into electrical power
	Pros:
	Cons:

PLACE THE RIGHT SOURCE OF ENERGY IN THIS BLOCK	Generating electricity & heat by using the natural heat from inside the Earth
	Pros:
	Cons:

PLACE THE RIGHT SOURCE OF ENERGY IN THIS BLOCK	Conversion of energy from sunlight into electricity
	Pros:
	Cons:

PLACE THE RIGHT SOURCE OF ENERGY IN THIS BLOCK	Harnessing the energy of flowing or falling water
	Pros:
	Cons:

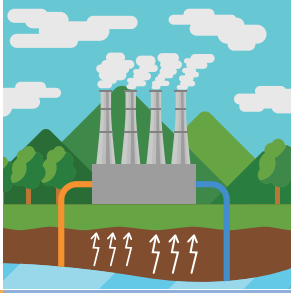
CARD DECK 2

ENERGY SOURCE CARD

Instructions:
Print this page on one-sided paper (A4) and cut it into individual pieces.

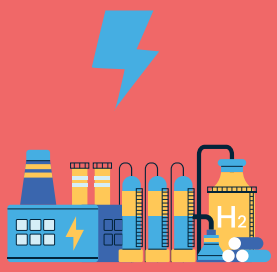
Stack them all into one pile.

Geothermal Energy

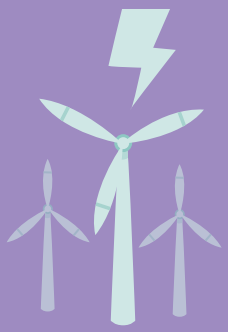


Biomass Energy

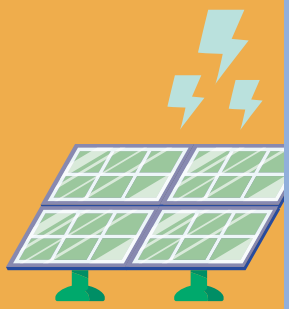
Hydrogen Energy



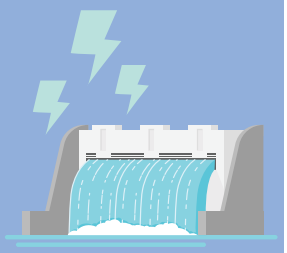
Wind Energy



Solar Energy



Hydro Energy

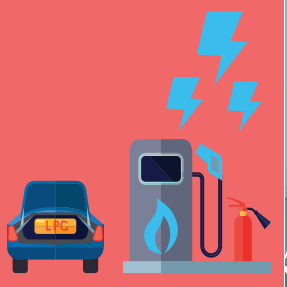


Nuclear Energy

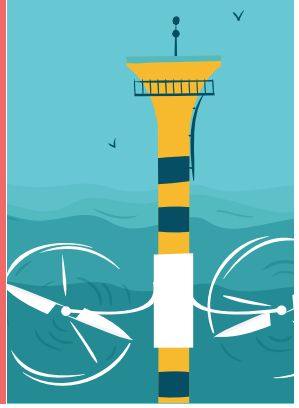
Crude Oil Energy

Coal Energy

Natural Gas Energy



Tidal Energy



CARD DECK 3 ENERGY SOURCE PROS & CONS

Instructions:
Print this page on a paper (A4) and cut it into individual pieces
(Pros & Cons together = 1 piece)

Stack them all together into one pile.

Pros:
- Harnesses heat from within the Earth, making it a virtually inexhaustible energy source
- Reliable and consistent energy production

Cons:
- Dependent of geological conditions
- Make significant environmental impacts from drilling

Pros:
- Uses the most abundant element
- No harmful emissions when used as a fuel
- Can be used in a variety of applications
- Has a high energy-to-weight ratio

Cons:
- Producing hydrogen using renewable energy sources can be energy-intensive and costly
- Safety risks due to its flammability and the potential for leaks or explosions.

Pros:
- Utilizing the abundant resource
- Cheap when produced in scale
- Minimal GHGs release once the equipment is installed.
- Occupy minimal land area, allowing land beneath them to be used for other purposes

Cons:
- Unreliable production - dependent of wind speed and direction
- Local people often dislike the noise of the turbines

Pros:
- Minimal environmental impact
- Low maintenance & long lifespan
- Has been used widely
- Scalability - can be scaled up or down to meet different energy needs, from small residential to large scale

Cons:
- Initial high installation costs
- Energy production depending on weather and time of day
- Requires ample space for installation
- Storage can be expensive

Pros:
- Extremely reliable
- High energy density, making it a highly efficient source of energy
- Can produce large amounts of electricity
- Low GHGs emission

Cons:
- Has radioactive waste that requires long-term storage & management, posing environmental & safety concerns
- High upfront costs
- Uranium, the primary fuel is finite

Pros:
- Cheap energy
- Quite reliable production
- Low carbon emission once the equipment is installed.

Cons:
- Unreliable production
- Installation of equipment can have a significant environmental impacts on coastline & marine ecosystems

Pros:
- Cheap when produced in scale
- Low carbon emission once the equipment is installed.

Cons:
- Expensive to build
- Large local impacts, sometimes causing the community relocation.
- Disrupts freshwater ecosystems

Pros:
- Reduce organic materials in landfill
- Reduces waste and greenhouse gas emissions

Cons:
- Can compete with food production
- Possibly causing deforestation for more farming area
- Transportation & storage issues
- Fluctuating availability & supply

Pros:
- Relatively affordable energy
- Reliable production of energy
- Widely available fossil fuel found around the world and existing infrastructure are designed to use this energy source

Cons:
- Releases pollutants contributing to air pollution and negative health impacts
- Significant contributor to global greenhouse gas emissions and climate change

Pros:
- Extensive infrastructure for extraction, refining, and distribution exists, facilitating its use and availability
- High energy density and versatile, supporting diverse industries

Cons:
- Releases pollutants and particulate matter, contributing to air pollution & climate change
- Extraction and transportation can lead to habitat destruction, posing severe environmental risks

Pros:
- Produces fewer pollutants & GHGs compared to coal and oil
- Relatively inexpensive and has lower operating costs
- Versatile and highly efficient

Cons:
- Extraction and transportation can release methane, a potent GHG that contributes significantly to climate change
- Finite resource
- Can cause groundwater contamination

MY COMMUNITY'S
ENERGY SOURCES WORKSHEET

Objective: Explore, research and reflect on the current and potential renewable energy sources in your community, along with related policies

Instructions: Look at your community and consider the following questions

Looking for more information? Visit Chapter 1 for additional resources

1. **Current Power Source:** What is the current power source for the electricity generation in your city / community?

2. **Renewable Energy Potential:** What is the most appropriate renewable energy source for electricity in your city or community in 10-15 years? Explain your answer here.

PLACE YOUR RENEWABLE ENERGY CARD HERE

3. **Supporting Policies:** Is there currently any policy in your country that supports this type of renewable energy source? Find the name of the law and/or article that supports renewable energy in your country.

ANSWER KEY 1

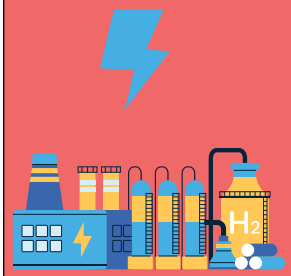
Natural Gas Energy

Fossil fuel primarily composed of methane, extracted from underground reservoirs through drilling. It is used for various purposes, including heating, electricity generation, and industrial processes

Pros:
- Produces fewer pollutants & GHGs compared to coal and oil
- Relatively inexpensive and has lower operating costs
- Versatile and highly efficient

Cons:
- Extraction and transportation can release methane, a potent GHG that contributes significantly to climate change
- Finite resource
- Can cause groundwater contamination

Hydrogen Energy



A type of energy that is generated by utilizing hydrogen as a fuel source, typically through processes like fuel cells or combustion

Pros:
- Uses the most abundant element
- No harmful emissions when used as a fuel
- Can be used in a variety of applications
- Has a high energy-to-weight ratio

Cons:
- Producing hydrogen using renewable energy sources can be energy-intensive and costly
- Safety risks due to its flammability and the potential for leaks or explosions.

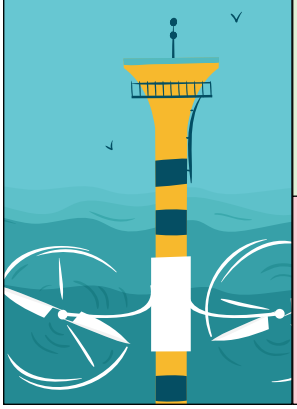
Crude Oil Energy

Used to generate energy by burning liquid petroleum products for various applications, including heating buildings, generating electricity, and powering vehicles

Pros:
- Extremely reliable
- High energy density, making it a highly efficient source of energy
- Can produce large amounts of electricity
- Low GHGs emission

Cons:
- Has radioactive waste that requires long-term storage & management, posing environmental & safety concerns
- High upfront costs
- Uranium, the primary fuel is finite

Tidal Energy



Harnessing the kinetic energy of ocean tides as they rise and fall to turn turbines placed underwater to generate power

Pros:
- Cheap energy
- Quite reliable production
- Low carbon emission once the equipment is installed.

Cons:
- Unreliable production
- Installation of equipment can have a significant environmental impacts on coastline & marine ecosystems

Nuclear Energy

Energy comes from Uranium which is mined underground. It generates electricity by splitting atoms, releasing heat to produce steam that drives turbines to generate electricity.

Pros:
- Extensive infrastructure for extraction, refining, and distribution exists, facilitating its use and availability
- High energy density and versatile, supporting diverse industries

Cons:
- Releases pollutants and particulate matter, contributing to air pollution & climate change
- Extraction and transportation can lead to habitat destruction, posing severe environmental risks

Coal Energy

Energy that is produced by burning of the black materials mined from deep underground to generate heat, which is then used to produce electricity.

Pros:
- Relatively affordable energy
- Reliable production of energy
- Widely available fossil fuel found around the world and existing infrastructure are designed to use this energy source

Cons:
- Releases pollutants contributing to air pollution and negative health impacts
- Significant contributor to global greenhouse gas emissions and climate change

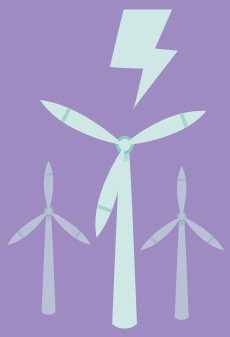
Biomass Energy

Energy that is produced by burning organic materials like wood, crops, and waste to generate heat and electricity.

Pros:
- Reduce organic materials in landfill
- Reduces waste and greenhouse gas emissions

Cons:
- Can compete with food production
- Possibly causing deforestation for more farming area
- Transportation & storage issues
- Fluctuating availability & supply

Wind Energy

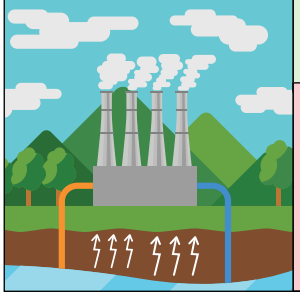


Conversion of kinetic energy of wind into electrical power

Pros:
- Utilizing the abundant resource
- Cheap when produced in scale
- Minimal GHGs release once the equipment is installed.
- Occupy minimal land area, allowing land beneath them to be used for other purposes

Cons:
- Unreliable production - dependent of wind speed and direction
- Local people often dislike the noise of the turbines

Geothermal Energy

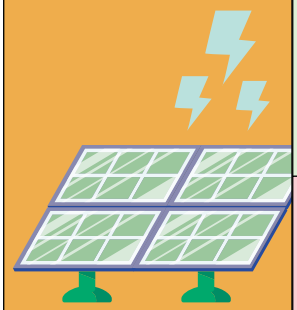


Generating electricity & heat by using the natural heat from inside the Earth

Pros:
- Harnesses heat from within the Earth, making it a virtually inexhaustible energy source
- Reliable and consistent energy production

Cons:
- Dependent of geological conditions
- Make significant environmental impacts from drilling

Solar Energy

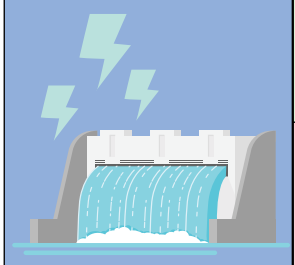


Conversion of energy from sunlight into electricity

Pros:
- Minimal environmental impact
- Low maintenance & long lifespan
- Has been used widely
- Scalability - can be scaled up or down to meet different energy needs, from small residential to large scale

Cons:
- Initial high installation costs
- Energy production depending on weather and time of day
- Requires ample space for installation
- Storage can be expensive

Hydro Energy



Harnessing the energy of flowing or falling water

Pros:
- Cheap when produced in scale
- Low carbon emission once the equipment is installed.

Cons:
- Expensive to build
- Large local impacts, sometimes causing the community relocation.
- Disrupts freshwater ecosystems

ANSWER KEY 2

Renewable Energy	Non-Renewable Energy
Solar	Crude Oil
Hydrogen	Coal
Hydro	Natural Gas
Wind	Nuclear
Tidal	
Biomass	

Note: Many people mistakenly consider nuclear energy a renewable source; however, it is not classified as renewable because the uranium used in the process is finite.

Uranium, the primary fuel for nuclear reactors, is a naturally occurring element found in limited quantities in the Earth's crust. While there are substantial reserves of uranium worldwide, they are not inexhaustible. The process of extracting, refining, and enriching uranium also has environmental impacts and energy requirements.

Due to the finite nature of uranium reserves and the challenges associated with nuclear waste disposal, nuclear energy is not considered a renewable energy source. Instead, it is classified as a low-carbon but non-renewable energy option.

1.3.3

RENEWABLE ENERGY ALTERNATIVES

Renewable energy is energy from a source that can be maintained in a constant supply over time. Six main renewable energy sources exist: water, sun, wind, biomass, energy from within the earth, and hydrogen power. Since the beginning of time, these renewable energy sources have provided warmth, movement, light; in short, energy for life. From early sailing ships to high production wind farms; from ancient civilizations to future generations, solar, wind, water and biomass have been primary sources of power for our everyday needs. With a growing concern on climate change and the shortage of fossil-fuel based energy and advancements in technology, the integration of renewable energy poses real opportunities and real challenges for today and for our future.

Age Group: 15 years old and above

Time Required: 2-3 hours

Group Size: This activity can be done individually or as a small group

Materials:

1. Renewable Energy Research Template
2. Phone or computer with access to the Internet

Activity Objectives / Participants will...

- Increase awareness and understanding of diverse renewable energy options and their role in sustainable development.
- Be able to compare and contrast different renewable energy sources and their potential impact on your community.
- Assess the potential suitability of different renewable energy sources for your community, considering local needs and conditions.

YOUR ASSIGNMENT

- Search the daily news or articles for instances of diverse renewable energy forms being utilized in your country. Once you locate the articles, thoroughly read them, and extract relevant information to address the questions pertaining to each renewable energy source.
- Feel free to select a few sources of energy that have the potential to be appropriate for your community. You do not have to research all sources of energy.
- Use the research template with questions provided in this document for your research.

A. Bioenergy/Biomass

Biomass is matter usually thought of as garbage. Some of it is just stuff lying around, like dead trees, tree branches, yard clippings, left-over crops, wood chips & bark and sawdust from lumber mills. It can even include used tires and livestock manure.

From the news story, how is this kind of energy used in your country currently?

_____

_____

Where is it being utilized here in your country?

_____

_____

What are the challenges to its use by most of the people in your country?

What are the pros (advantages) and cons (disadvantages) of using this form of energy here in your country?

Do you know of any use of bioenergy/biomass in your area? If so, explain.

List your information sources: (i.e. news channel, magazine, field guide, textbook, other book, brochure, television, radio, Internet, talking with a person, etc.)

B. Earth Energy

Geothermal Energy has been around for as long as the Earth has existed. "Geo" means earth, and "thermal" means heat, so geothermal means earth-heat. The different ways of obtaining it are through a Horizontal ground loop, a Coiled loop, a Vertical ground loop, Lake loop systems, or an Open loop.

From the news story, how is this kind of energy used in your country currently?

Where is it being utilized here in your country?

What are the challenges to its use by most of the people in your country?

What are the pros (advantages) and cons (disadvantages) of using this form of energy here in your country?

Do you know of any use of earth energy source in your own area? If so, explain.

List your information sources: (i.e. news channel, magazine, field guide, textbook, other book, brochure, television, radio, Internet, talking with a person, etc.)

C. Hydroelectric Energy

Hydroelectric power uses the kinetic energy of moving water to make electricity.

From the news story, how is this kind of energy used in your country currently?

Where is it being utilized here in your country?

What are the challenges to its use by most of the people in your country?

What are the pros (advantages) and cons (disadvantages) of using this form of energy here in your country?

Do you know of any use of hydroelectric energy source in your own area? If so, explain.

List your information sources: (i.e. news channel, magazine, field guide, textbook, other book, brochure, television, radio, Internet, talking with a person, etc.)

D. Solar Energy

Solar energy is a way of saying "energy that comes from the sun". Today, many buildings, organizations, schools, and even whole communities in GMS are powering themselves using the sun's energy.

From the news story, how is this kind of energy used in your country currently?

Where is it being utilized here in your country?

What are the challenges to its use by most of the people in your country?

What are the pros (advantages) and cons (disadvantages) of using this form of energy here in your country?

Do you know of any use of solar energy source in your own area? If so, explain.

List your information sources: (i.e. news channel, magazine, field guide, textbook, other book, brochure, television, radio, Internet, talking with a person, etc.)

E. Wind energy

Wind energy harnesses the kinetic energy of the wind and converts it into mechanical or electrical energy. This renewable energy source is becoming increasingly important in the GMS. When wind turbines capture wind energy, they convert it into electricity, providing a clean alternative to fossil fuels. In addition to generating electricity, wind energy has traditionally been used for various purposes, such as propelling boats with sails and pumping water from wells using windmills.

From the news story, how is this kind of energy used in your country currently?

Where is it being utilized here in your country?

What are the challenges to its use by most of the people in your country?

What are the pros (advantages) and cons (disadvantages) of using this form of energy here in your country?

Do you know of any use of wind energy in your own area? If so, explain.

List your information sources: (i.e. news channel, magazine, field guide, textbook, other book, brochure, television, radio, Internet, talking with a person, etc.)

F. Hydrogen energy

Hydrogen energy involves using hydrogen as a clean and versatile source of energy. It can be produced through methods like electrolysis, steam methane reforming, or thermochemical processes.

From the news story, how is this kind of energy used in your country currently?

Where is it being utilized here in your country?

What are the challenges to its use by most of the people in your country?

What are the pros (advantages) and cons (disadvantages) of using this form of energy here in your country?

Do you know of any use of hydrogen energy source in your own area? If so, explain.

List your information sources: (i.e. news channel, magazine, field guide, textbook, other book, brochure, television, radio, Internet, talking with a person, etc.)

My Thoughts and Feelings After Completing This Assignment:

1.4.1

WHAT AM I DRINKING, WHAT ARE THE IMPACTS, AND WHAT CHANGE CAN I MAKE OR INFLUENCE?

Problem solving (or problem influencing) is not just about having a fuller picture of the issues and challenges that define sustainability in the Mekong region's environment, societies and economies. It is also about using the insights that you get and deciding on what you can do to contribute with positive actions and outcomes that will add to the necessary systemic solutions. You can add a dimension of decision-making and action by asking the following questions:

- What impact does this have?
- Does this need to change?
- How can things be changed?

Age Group: 15 years old and above

Time Required: 90-120 minutes

Group Size: This activity can be done individually or as a small group

Materials:

- Flipchart or other large sheet of paper
- Permanent markers and pens
- Note cards or sticky notes.
- Worksheets (Task 1, 2 and 3)

Activity Objectives / Participants will...

The purpose of this activity is to provide deep insights into the environmental, social and economic impacts of a personal activity, as well as an understanding of what one can do to bring or influence positive change.

TASK 1: Take some time to investigate some or all of the following questions. Use the table with guiding questions provided on the next page to record your answers.

- Does my daily cup of tea, coffee or other drinks have an impact on any, or all, of the three thematic issues that we are focused on: 1) Sustainable Freshwater Ecosystems; 2) Energy Use, and 3) Climate Change
- Where does the energy come from to make my drink? Is it from a renewable or non-renewable source?
- Where does the water that is used in my drink come from? Where is its source?
- Where do the drink's ingredients come from? Are they locally grown or imported from outside my country or even the Mekong region?
- Is the drink that I mostly drink organic or non-organic?
- Are the cups that I mostly use disposable ones, or are they reusable?
- Where do the sugar, milk or creamer that I use in my drink come from?
- What happens to the coffee grounds / tea leaves, cups and other items used to make and drink my drink when it is finished? Where do they go?

TASK 2: Take some time to investigate the possible impacts that your daily cup of drink has...

...on the natural freshwater ecosystem environment in my country, and regionally.
...on energy production and use in my country, and regionally.
...on global climate change and its effects in my country, and regionally.
...on economic and social development in my country, and in the region.

and what can be done to reduce the negative impacts and increase the positive impacts.

Note: Look at the likely impacts you have identified, and check that you have covered all of the following:

- Local/global impacts
- Impacts in relation to coffee/tea and other drinks' ingredients growing, processing (eg. making instant coffee granules), transport, brewing, packaging and waste management
- Positive and negative impacts

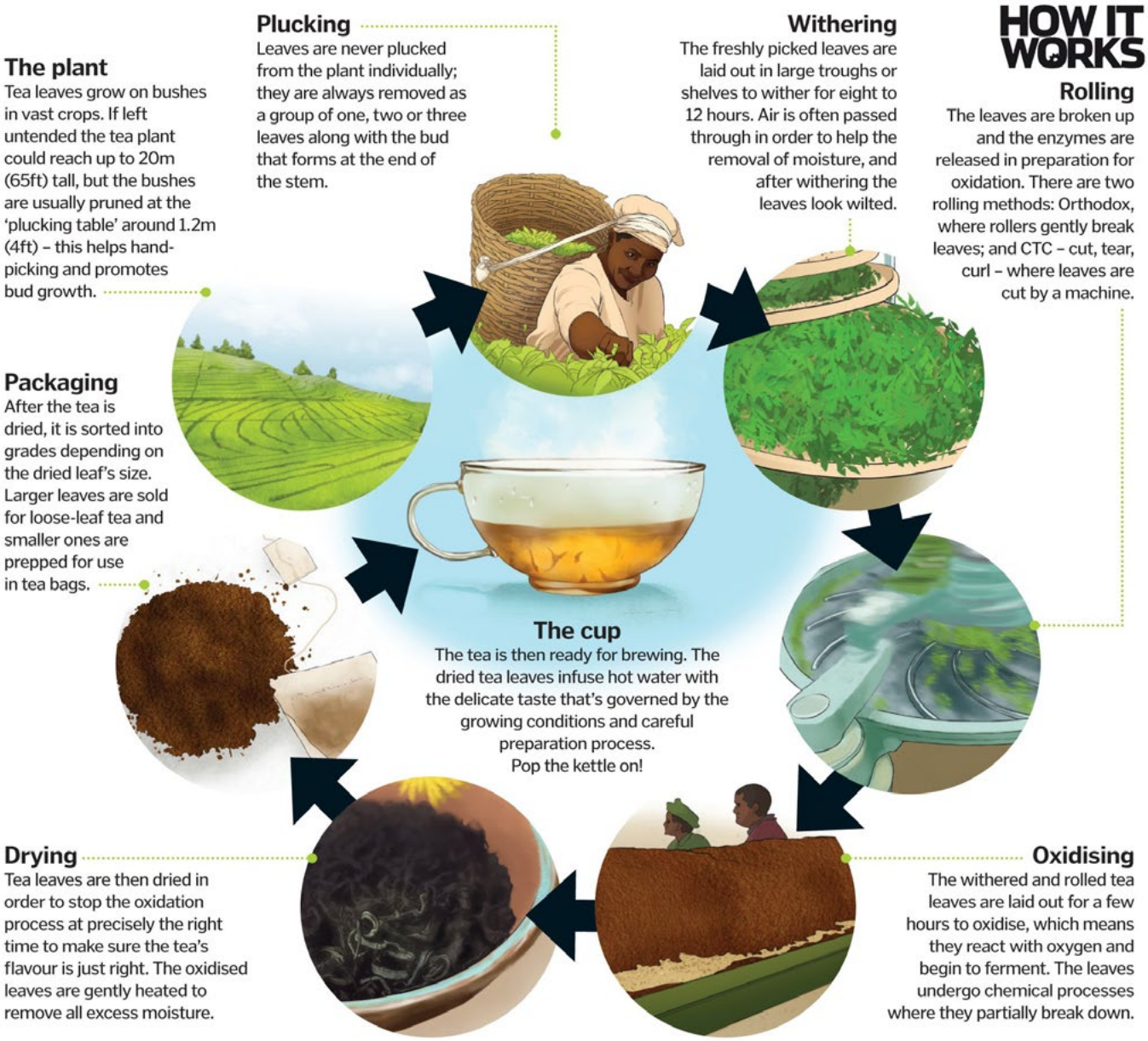
Additional resources to support your thinking process when completing Tasks 1 & 2.

Source: How coffee is made?

Here's how your cup of coffee contributes to climate change:
https://theconversation.com/heres-how-your-cup-of-coffee-contributes-to-climate-change-196648

Wonder about the impact of your daily cup of coffee on the planet? Here's the bitter truth:
https://ideas.ted.com/truth-about-coffee-impact-on-environment-planet/

Coffee: here's the carbon cost of your daily cup – and how to make it climate-friendly:
https://theconversation.com/coffee-heres-the-carbon-cost-of-your-daily-cup-and-how-to-make-it-climate-friendly-152629



Source: How tea is made?

From Farm To Cup: The Environmental Impact of Tea:
https://www.thegoodboutique.com/inspiration/environmental-impact-of-tea

The Environmental Impact of Tea Production:
https://www.halmaritea.com/blog/environmental-impact-tea-production

The Carbon Footprint of a Cup of Tea:
https://circularecology.com/news/the-carbon-footprint-of-a-cup-of-tea

TEST 1 WHAT AM I DRINKING AND WHAT ARE THE IMPACTS ON THE ENVIRONMENT?

Instructions: Brainstorm answers (individually or as a group) to each of these questions in the table. Don't worry if you are having to make assumptions—jot down what you think are the most likely answers—no one will be holding you to the accuracy of your answers.

Note: You can print this table on an A0 size paper or redraw freehand the table onto a flipchart paper or other large sheet of paper, and use note cards or sticky notes to record your answers.

Insight Questions	Your answers
Where does the energy come from to make my drink? Is it from a renewable or non-renewable source?	
Where does the water that is used in my drink come from? Where is its source?	
Where does the drink's ingredients come from? Is it locally grown or imported from outside my country or even the Mekong region?	
Is the drink that I mostly drink organic or non-organic?	
Are the cups that I mostly use for my drink disposable ones or are they reusable?	
Where does the sugar, milk or creamer that I use in my drink come from?	
What happens to the coffee grounds / tea leaves, cups and other items used to make and drink my coffee when it is finished? Where do they go?	

TEST 2 WHAT AM I DRINKING AND WHAT ARE THE IMPACTS ON THE ENVIRONMENT?

Instructions: Individually or as a group, use the questions in the table below to identity the real and/or possible impacts that your daily cup of coffee or tea has on the three thematic areas within the Mekong Region: 1) Sustainable Freshwater Ecosystems; 2) Energy Use, 3) Climate Change and what can be done to reduce the negative impacts and increase positive impacts.

Look at the likely impacts you have identified, and check that you have covered all of the following:

- Local/global impacts
- Impacts in relation to coffee/tea growing, processing (e.g. making instant coffee granules), transport, coffee/tea making (ie making the cup of coffee/tea you drink), waste management
- Negative and positive impacts on the environment, society and economy

Impact Questions	**Negative Impacts** (local / global)	**Positive Impacts** (local / global)
What impact does my daily cup of coffee or tea have on the natural freshwater ecosystem environment in my country, and regionally?		
What impact does my daily cup of coffee or tea have on energy production and use in my country, and regionally?		
What impact does my daily cup of coffee or tea have on global climate change and its effects in my country, and regionally?		
What impact does my daily cup of coffee or tea have on economic and social development in my country, and in the region?		

TASK 3: What Change Can I Make or Influence?

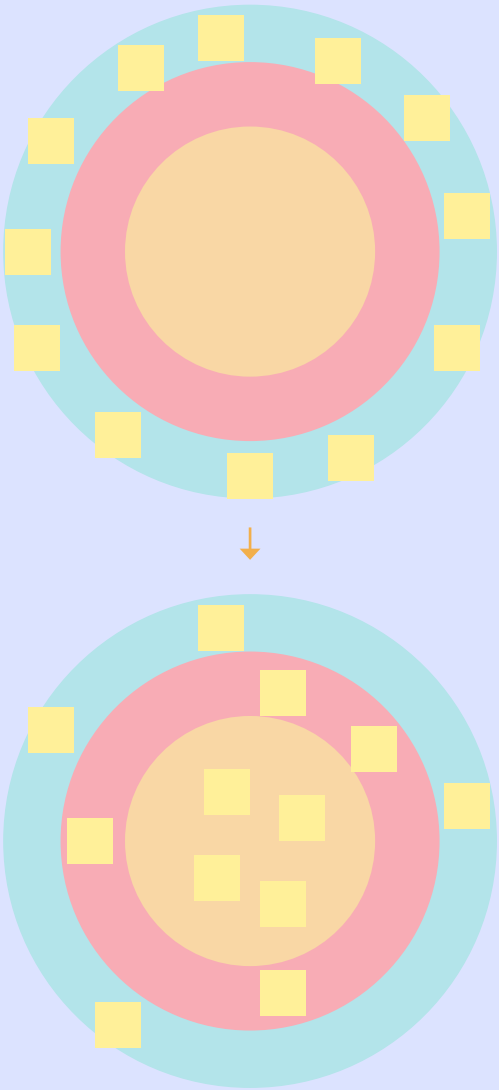
Instructions:

1. Take a large sheet of paper (a flipchart for example) and draw three concentric circles on it, making each large enough to fit in several sticky notes or similar slips of paper.
    - **Inner Circle** = Individual action that can influence
    - **Middle Circle** = School/university/organization actions to influence
    - **Outer Circle** = Outside of the power to influence by myself, my peers, and my school

2. Brainstorm what decision / actions could be taken to make your drink...
    - ...more environmentally sustainable in relation to freshwater ecosystems?
    - ...more environmentally sustainable in relation to energy production and consumption?
    - ...more environmentally sustainable in relation to climate change (mitigation of greenhouse gases and resiliency to climate change impacts)

3. Think of multiple things that could be done, and do not limit yourself to only one or two ideas. Be as imaginative as you can. For this activity your suggestions don't need to be totally economically, socially and politically feasible yet in relation to the global or national context of your own country.

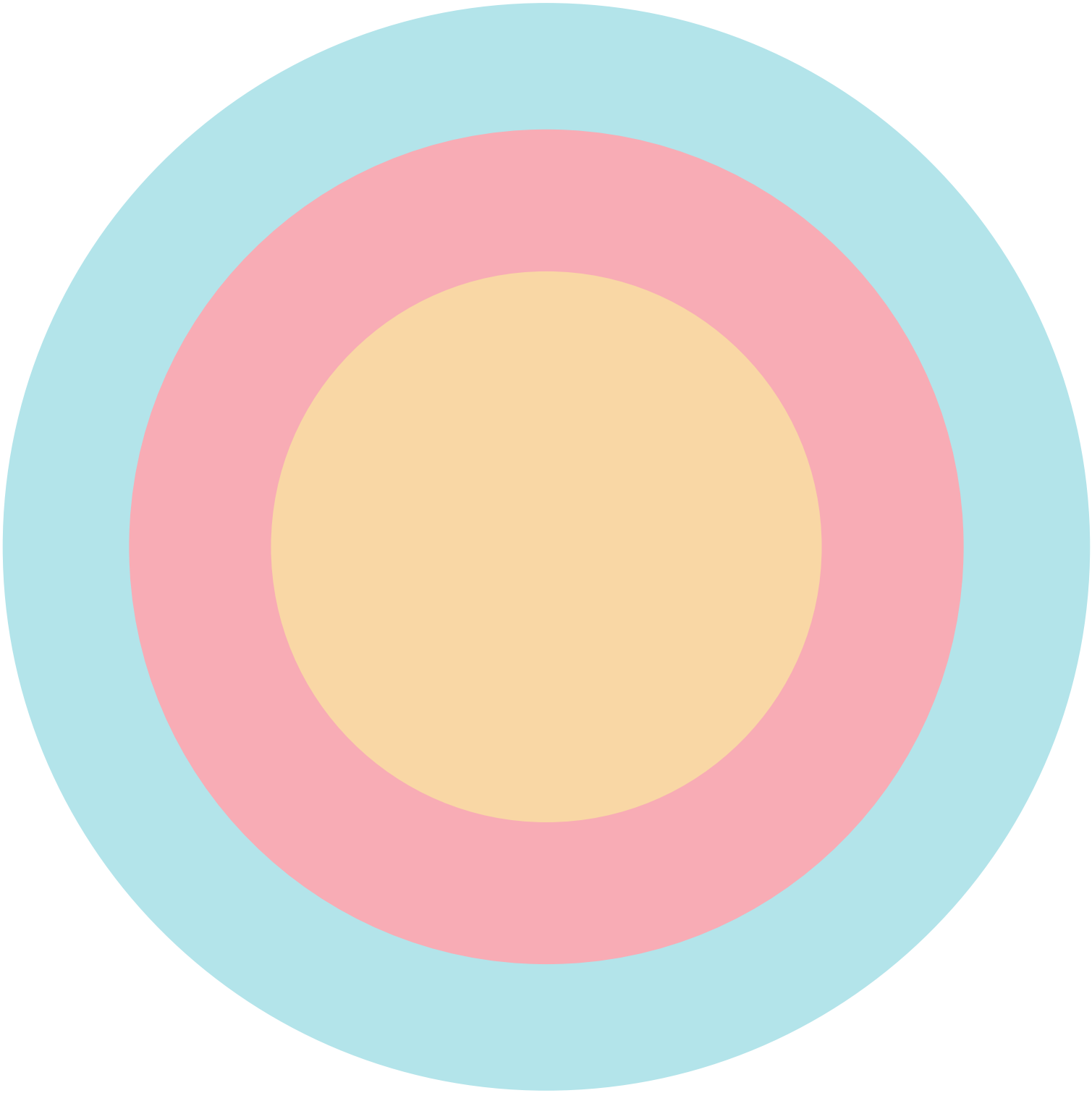
4. Write each suggestion on an individual sticky note, then...
    - Put all the notes on the outer circle of the paper, similar to this example.



5. Now begin to sort the points you have identified.
    - Which of them are feasible and could be undertaken by your school/college/organization (including things that the school/college/organization could do to influence others)?
        - Move these into the second circle
    - Keep any ideas that are either not feasible or outside the power of the school/college/organization in the outer circle.
    - Next, which of the ideas could you, as an individual, undertake (including those that you can influence your school/college/organization and peers to do something about)?
        - Move these into the inner circle and leave any that are outside your own power in the second circle.

TEST 3

WHAT CHANGE CAN I MAKE OR INFLUENCE?
ACTION INFLUENCE CIRCLE



Inner Circle = Individual action that can influence

Middle Circle = School/university / organization actions to influence

Outer Circle = Outside of the power to influence by myself, my peers, and my school

1.4.2

PIECES, PATTERNS AND PROCESSES

Age Group: 15 years old and above
(activities and depth can be adapted to age)

Group Size: Small team(s) of 3-9 people

Time Required:

- 30 minutes to 1 hour for introduction
- 2-5 hours for community investigation and data collection
- 1-2 hours for analysis
- 30 min to 1 hour for discussion and debrief

Materials:

- Field Notebook or Journals
- Binoculars (optional)
- Bird I.D. books or laminated sheets; Bird cutouts (optional)
- Macro-invertebrate sampling equipment (optional)
- Plant guide (e.g. wetland plant I.D. field guide) (optional)
- Pre-drawn large map of the investigation area (e.g. wetland and community)

Author/Source: Magic Eyes Chao Phraya Barge Program (ME-CPBP)

Activity Description
Pieces, Patterns and Processes is a learner-directed community investigation activity whereby youth, in teams, develop their own investigative questions based on some background knowledge, as well as their own interests, within three areas: Environment, Economy and Society/Culture. Participants then go into the community to investigate and try to find the answers to their questions using observation, interviewing, map making and, if possible, hands-on experience in the process. This activity gives youth the opportunity to discover things about the lives and livelihood of their community, its people and their relationship to their environment. The primary objective of this activity is to have youth discover the connections and relationships that exist between the three sectors mentioned above and then examine their own lives and communities within this context.

Materials:

- Understand how to conduct a community investigation outside of the classroom as part of a field research team.
- Develop skills in observation, questioning, interviewing, field data collection, critical thinking, analysis and synthesis, systems thinking and map-making.
- Gain a greater understanding of the interdependent relationships that exist in any community between the environment, economy and society/culture.

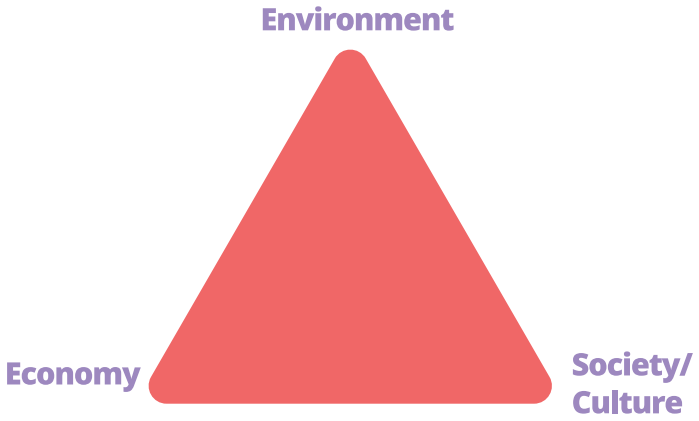
BACKGROUND INFORMATION

Pieces, Patterns and Processes (PPP) is adapted from the various needs assessment techniques (PRA, RRA and other similar approaches) used by NGOs and others to learn more about a particular place in a way that directly involves the local community development stakeholders. PPP asks participants to develop preliminary questions that will enable them to more effectively go into a community to collect information (the pieces) through a variety of methods, including: observation, interviewing, mapping, etc. The pieces of information will at times seem quite isolated in nature, but as more pieces are collected, trends and patterns that illustrate the connections, linkages and relationships that are inherent within the community relating to environment, economy and society/culture should start to become obvious.

Activity Outline

1 Review some background information on the ecosystem area and/or community that you will be investigating, incorporating as much info as possible about the history, culture and other aspects that will help you form your own more penetrating questions. If you have a map of the community, sometimes this helps to visualize some of the issues that you may want to ask questions about and investigate more closely.

2 Go into the natural environment and community, then investigate it from three different angles: Environment, Economy and Society/Culture (the PPP triangle). If you are unclear about what the three different angles mean, brainstorm the meaning of each angle with your friends. The buzzwords that you come up with will provide a good basis for you to develop investigative questions.



3 If you work with your team, first divide your team into three expert groups to form your own discovery questions. Sit together and discuss what you want to find out as well as come up with 5–10 questions that will focus your investigation. Sometimes one person in your group is needed to help facilitate the group's discussion flow and question formulation. Start with easy questions that begin with "what" then add some "how" and "why" questions. Each group must also agree on a symbol for each of the common features you think that you will encounter in the community to go on the map (e.g. the economy group may want to draw a small bag or soda bottle to represent a shop selling goods).

4 After each "expert" group has agreed on the investigative questions...
Optional: divide the expert group members into 2-3 new groups so that each new group has 1-3 representatives from each of the "expert" groups.

- Go into the natural environment/community, seeking the answers to your self-generated questions, while mapping the features that you see that relate to your focus. Time should be given to stop and interview local people (interviewing people of different ages, genders, types of work, etc. is preferred to just talking to several people with similar characteristics).
- At times there may be opportunities for you or your team to have hands-on experiences in the community (e.g. join in making pottery, planting rice, making mud bricks, etc.) while carrying out your PPP activities.

5 Once your team returns from the community, you should meet back together to discuss what you found and organize your information. Place the large master map on the floor. Write Environment, Economy, Society/ Culture on the paper around the map. Leave space for you to write down the facts. Create the map and record your observations with a legend with all the symbols, and you may write 3-4 additional facts (pieces) that you discovered while in the community.

6 After the map is complete, all the teams sit together around the map. Each one will make a short presentation of what they found out. The team members should encourage each other to listen and ask questions after each presentation. The connections and linkages that exist between the three sectors (Environment, Economy, Society/Culture) should be discussed. Additional questions about the meaning, causes, consequences, processes occurring, etc. should be raised.

7 Finally, you should prioritise your stakeholders, in order to focus on who you should be concentrating your time, attention and how to develop your advocacy message that reflects your stakeholders concerns.

WORKSHEET

1 **Identify the map symbols:** With your team, imaging yourself walking in to a community, what are some common features you will encounter? Brainstorm and agree on a symbol for each of the common features to go on the map.

Symbol	Representation of...

2 **Develop investigation questions:** Sit together with your team and discuss what you want to find out while going into the community. Come up with 5–10 questions that help you to focus your investigation.

What You Want to Find Out	What Questions We Should Ask	What We Should Observe

INTERVIEW NOTE PAGE

COMMUNITY MAP

1.4.3

MAPPING A THEMATIC ISSUE WITH THE COMPASS OF SUSTAINABILITY

Age Group: 15 years old and above (activities and depth can be adapted to age)

Group Size: While this activity can be done individually, working together as a team provides a broader range of perspectives for examining an issue more comprehensively

Time Required: 2-3 hours

Materials:

- Compass of Sustainability diagram
- Flipchart or other large sheet of paper or whiteboard (if working in a group)
- Permanent markers or pens
- Sticky notes (optional)
- Reference materials related to the thematic issue (articles, reports, data, etc.)

Learning Objectives: The aim of this exercise is to prompt you to examine an issue of your interest through a more comprehensive lens. This approach will enable you to have a clearer understanding of the causes and effects of the issue on the community, empowering you to identify effective solutions. When carrying out this activity you will...

- ...identify the factors or elements connected to the central issue challenges from the four dimensions of sustainability.
- ...discover some causal (cause and effect) system linkages between these factors / elements.
- ...and through discussion with your peers, better understand the dynamics that surround this issue

Setting up:

Print and use the Compass Mapping Template provided on the last page or draw the Compass of Sustainability on a large sheet of paper or whiteboard, **dividing it into the four quadrants: Nature, Economy, Society, and Well-being**.

As a team, agree on a thematic issue you want to explore in greater depth through mapping.

Here are some examples of issues you could choose from, but you are not limited to this list:

- Water pollution
- Transition to renewable energy
- Adapting to the impacts of Climate Change

Write the issue in the middle of the Compass.

Next, collect data, articles, and other resources related to the thematic issue. This information will help you fill in each of the four parts of the compass.

Then, review the Compass of Sustainability to ensure that everyone on your team understands it!

Overview of Compass of Sustainability

The Compass Is Divided Into Four Main Parts: the Quadrants	
N (North) **Nature**	<u>ENVIRONMENTAL ASPECTS AND NATURAL SYSTEMS</u> **Example Components:** Plants, trees, environment, forest, ecosystems, animals, oceans, the biosphere **Example Issues:** Pollution, deforestation, land clearing, coral bleaching, threatened species, enhanced greenhouse effect, extreme weather pattern, natural disasters **(Things to do with the natural environment)**
E (East) **Economy**	<u>ECONOMIC ACTIVITIES AND FINANCIAL SYSTEMS</u> **Example Components:** Money, industry, factories, shops, jobs, trade, market, investment **Example Issues:** Unemployment, affordable housing, unfair trade, access to resources, distribution of wealth, poverty and affluence, economic viability, cost effectiveness **(Things to do with money and generating income to survive)**

S (South) **Society**	<u>SOCIAL SYSTEMS, COMMUNITIES, LAWS AND REGULATIONS, AND CULTURES</u> **Example Components:** Government, culture, friends, community, local councils, religious groups, political parties, sporting clubs, laws, policies **Example Issues:** Design for human scale/community, social justice, racism, war and peace, democracy, equality, gender issues, youth suicide, immigration issues, community building, cultural sustainability, indigenous issues, human rights **(Things to that affect people as a whole)**
W (West) **Well-being**	<u>INDIVIDUAL HEALTH AND HAPPINESS</u> **Example Components:** Personal health, fitness, sense of happiness and satisfaction, religion and spirituality **Example Issues:** Toxic chemicals and health impacts, aesthetics, nutrition, personal development, spiritual development, health problems, disease, personal income, career, sense of self and purpose, happiness **(Things to that affect people personally)**

Watch this video to learn more about the Compass and how to use it to explore an issue of your interest. →

YouTube: The Sustainability Compass
Source: Compass Education (www.compasseducation.org)

Activity Steps

Step 1: Brainstorm and list factors

Begin brainstorming the various factors related to the thematic issue, one Compass quadrant at a time.

- List them under the relevant quadrant.
- You can use sticky notes for easy adjustments if needed.
- Some factors may overlap multiple quadrants. Place these factors at the intersections of relevant quadrants.

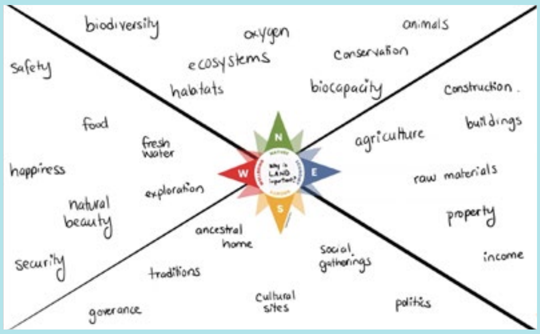
Step 2: Analyze interconnections

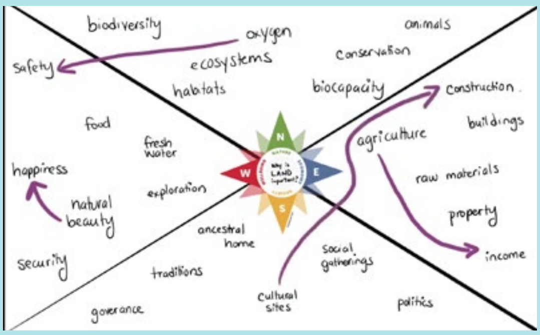
- Discuss with your teammates to identify how factors in different quadrants interrelate in a cause-and-effect relationship (e.g. how agriculture produce affects people's income).
- Draw arrows to indicate connections between them. The arrowhead should point to the factors that are affected by other factors.
- Repeat the same process until you feel satisfied with the map your team has produced.

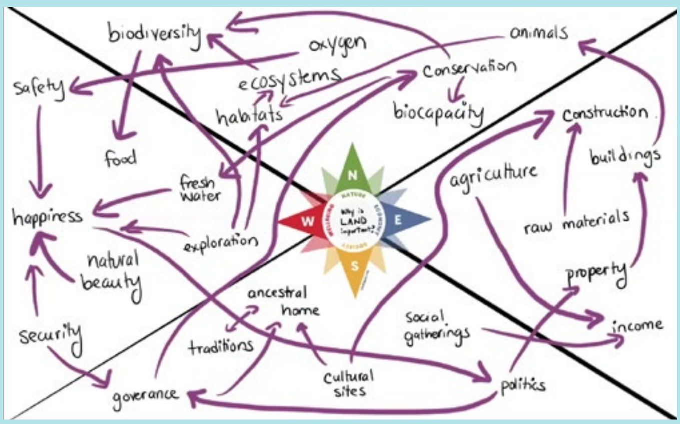
Step 3: Reflection

- Together with your teammates, discuss and reflect on the key insights and patterns that emerge from the mapping process.
  - What are the key connections that you see?
  - What do you notice from seeing all of these connections?
  - Are there any items on the map that are more connected, compared to others?
- Based on the insights, brainstorm potential strategies to address the thematic issue of sustainably.
- Ensure the strategies consider the impacts across all four quadrants of the compass.

By following these steps, you can create a comprehensive and balanced understanding of a thematic issue through the lens of sustainability, facilitating informed decision-making and strategic planning.



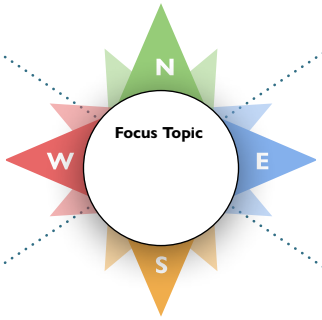




COMPASS THEMATIC ISSUE MAPPING TEMPLATE

NATURE

WELL-BEING



ECONOMY

SOCIETY

2.1

TOOL: ISSUE PASSION AND CONCERN RATING

WHAT ISSUE ARE YOU MOST PASSIONATE ABOUT?

Instructions:

1. Find a quiet and peaceful space, such as under a tree in a public park or next to a river or lake.
2. **Imagine the world you want:** Close your eyes and let your mind unwind. Picture yourself in a future where sustainability is the prevailing value and mindset among governments and societies in the Mekong Region. Consider the four aspects of sustainability: 1) Nature, 2) Economy, 3) Society, and 4) Human Well-being and Happiness. What might you observe in this sustainable Mekong Region? In the table below, **list some descriptive words that capture the essence of this envisioned future.**

Nature	Economy	Society	Human Well-being

3. **List the issues:** Based on the words you have listed, what are some key issues related to the three main topic areas (Freshwater Ecosystems Management, Climate Change and Renewable Energy) that you are interested in working on?
4. Once you have the list of issues, **transfer the different issues into the table** provided on the next page
5. From here, rate the issues: Carefully review and rate each issue based on your level of concern and passion. Consider how strongly you feel about each topic and how urgently you believe it needs to be addressed. Give each issue a score from 1-5 (refer to the rating scale below) and mark ☑ in the appropriate box.

1 = Very low passion and concern (not passionate about it)

2 = Low passion and concern about the issue, but it's not at the forefront of my thinking

3 = Moderate passion and concern about the issue, and want to know more

4 = High passion and concern about this issue and feel like I would like to contribute towards reducing or solving it

5 = Very high passion and concern and feel most passionate to do something to make positive change on the issue

Environmental Issues		Very Low	Low	Moderate	High	Very High
	PASSION					
	CONCERN					
	PASSION					
	CONCERN					
	PASSION					
	CONCERN					
	PASSION					
	CONCERN					
	PASSION					
	CONCERN					

6. **Compare your ratings:** Once you have finished rating all the issues, compare your ratings. Look for the issue that stands out with the highest combined score of concern and passion.
7. **Identify your priority:** The issue with the highest combined rating is the one you feel most strongly about and believe requires immediate attention. This indicates both your urgency to address the situation and your passion for making a difference.

2.2

SYSTEMS ICEBERG

The Systems Iceberg model can be used to understand the underlying causes of a problem or event. It helps focus our attention on areas of high potential for change (leverage). It is typically presented visually, with the visible event, impact or problem above the surface of the water and the underlying patterns and causes at different levels below the surface.

Age Group: 18 years old and above. For younger age groups, you may need a youth facilitator to provide guidance for discussion.

Time Required: 45-60 minutes

Group Size: This activity can be done individually or in small groups of up to 6 people maximum. If there are more people, please consider making additional groups and comparing your analyzes.

Materials:

1. The iceberg introduction video or the Systems Iceberg Explained video. You can also search for more examples online.
1. The iceberg template. You can print the provided template on an A4/A3 paper for small groups, or you can draw a big iceberg on a flipchart paper for larger groups.
2. Pens, pencils or permanent markers.
3. Post-it notes (if available)

How the Systems Iceberg works:

Moving down through the various layers of the iceberg, we find the following levels, starting with the top: Events; Patterns and Trends; Systemic Structures; and Mental Models. As we move down the iceberg we gain a deeper understanding of the underlying systems, and at the same time gain increased leverage for changing the system or its effects.

The layers of the Iceberg Model are:

1. **Events: What are the day to day events or situations that are most prominent or in view?**

   Events are what we can easily see. What we see above the water is just a small part of the iceberg, but that is where we focus most of our attention.

   What really draw our attention are events! These are HEADLINES in the newspapers, urgent emails with problems to solve, fires to put out, or some new proposal... The issues and factors that grab our attention and call for a response.

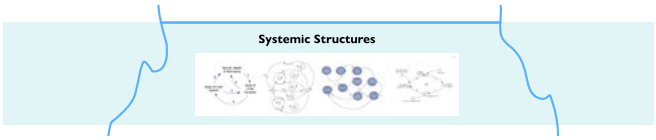
2. **Pattern of Behavior: What's been happening? What are the trends? What changes have occurred over time?**

   As we string events together we start to recognize trends and patterns. This provides a deeper level of understanding, which leads to the insight that 'this event has happened repeatedly over time—it has happened before.'

3. **Systems Structure: What systemic structures have contributed to the behavior patterns and trends that we have identified?**

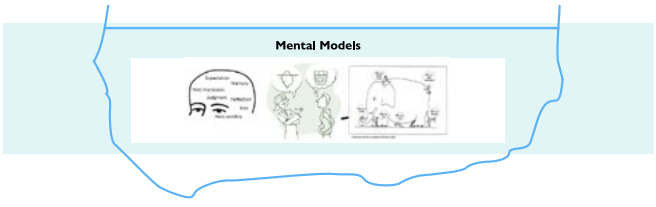
   A structure creates the foundation that supports the trends and patterns—which in turn result in events. These systemic structures are for example: policies, processes and practices.

   Structure is important as it gives us a deeper understanding of the system and can help us to predict systems behavior.



4. **Mental Model: What assumptions, values, and beliefs do people hold about the issue and system in general?**

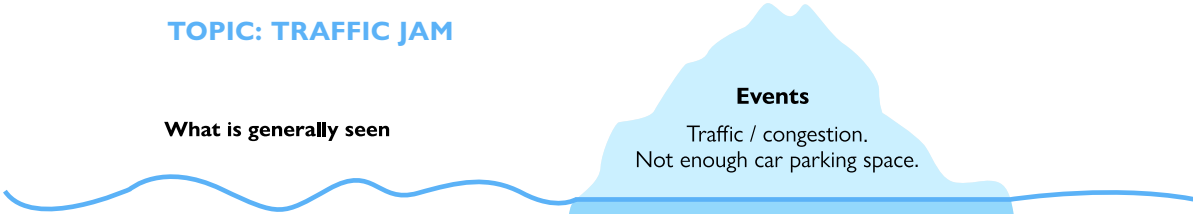
   Systemic structures, in turn, are frequently held in place by beliefs or "mental models." Beliefs may be undiscussable theories, residing in the minds of leaders, on what constitutes quality, service excellence or customer orientation. These beliefs may also affect interpersonal dynamics–such as approaches toward conflict, leadership or the best way to introduce change.



TOOL: ISSUE ANALYSIS ICEBERG TEMPLATE

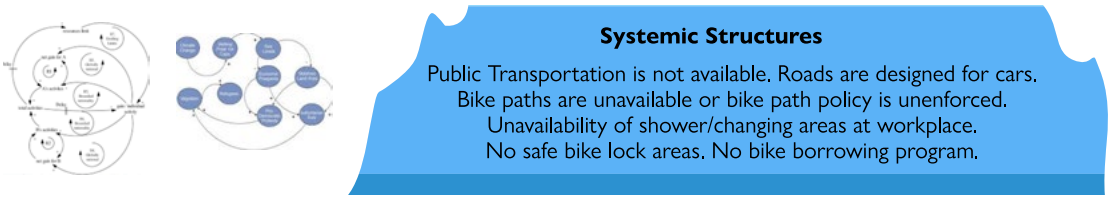
Instructions: The basic steps in using the Systems Iceberg to analyze an issue:

1. **Identify the Events:** Start by observing the visible occurrences or "events" related to the issue. These are the specific incidents or data points that are readily apparent and often reported in the media. Events are the "tip of the iceberg" and the most superficial level of understanding.

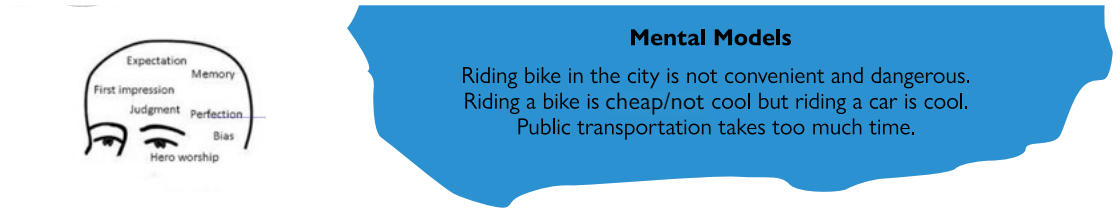


2. **Look for Patterns and Trends:** Next, identify any patterns or trends among the events you've observed. Patterns are recurring behaviors or outcomes that suggest a consistency over time. By recognizing patterns, you can begin to anticipate future events and gain a deeper understanding of the issue.

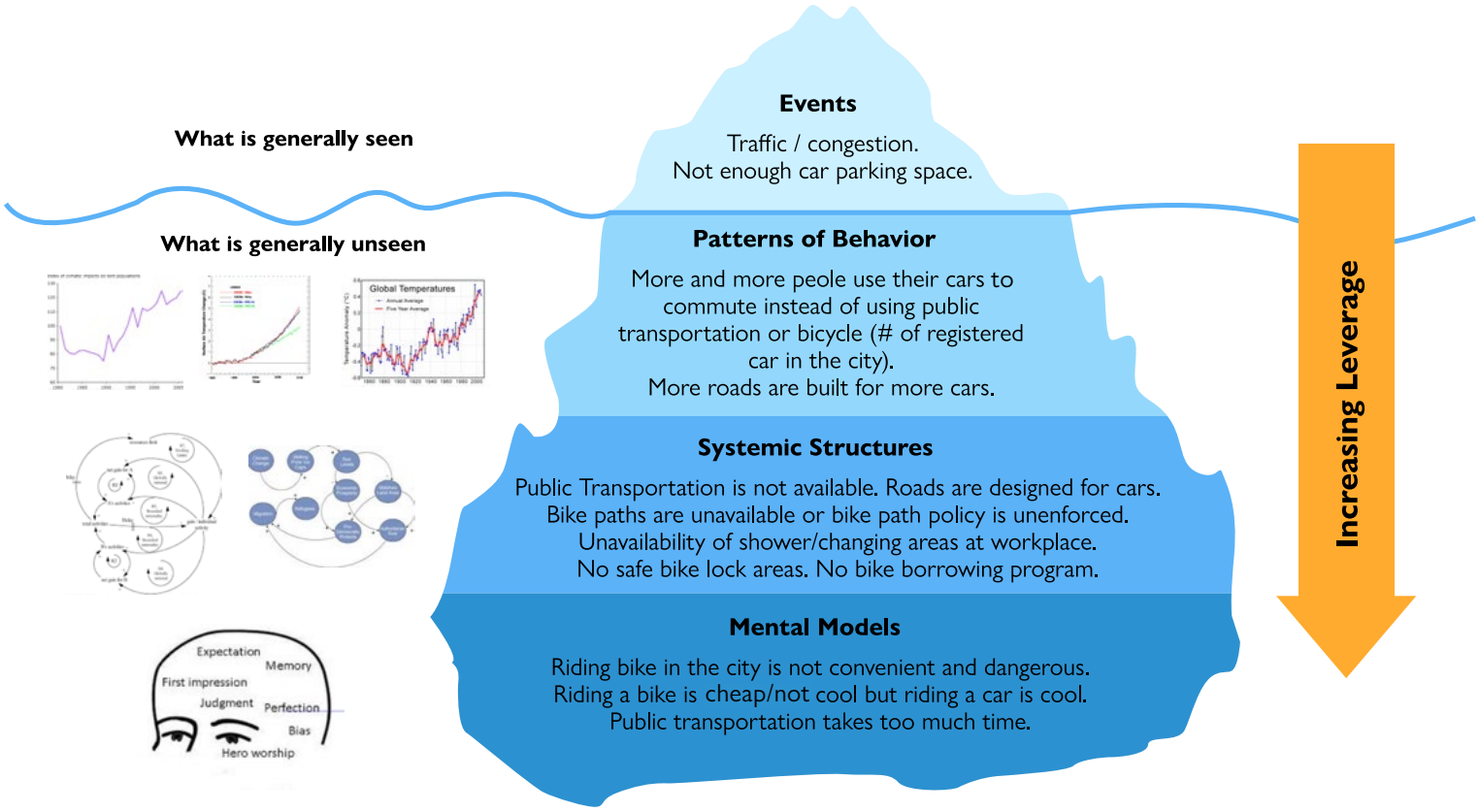
3. **Analyze Underlying Structures:** The structures layer of the iceberg consists of the systems, rules, and norms that shape the patterns and trends observed. This includes policies, feedback loops, and physical infrastructures. Analyzing these structures helps to understand why certain patterns persist and what forces are shaping the behavior of the system.



4. **Examine Mental Models:** At the deepest level of the iceberg are mental models: the beliefs, values, assumptions, and cultural norms that inform the structures. Mental models influence how we perceive the world and, consequently, how we design and interact with systems. To truly address an issue, it's important to uncover and possibly challenge these underlying mental models.



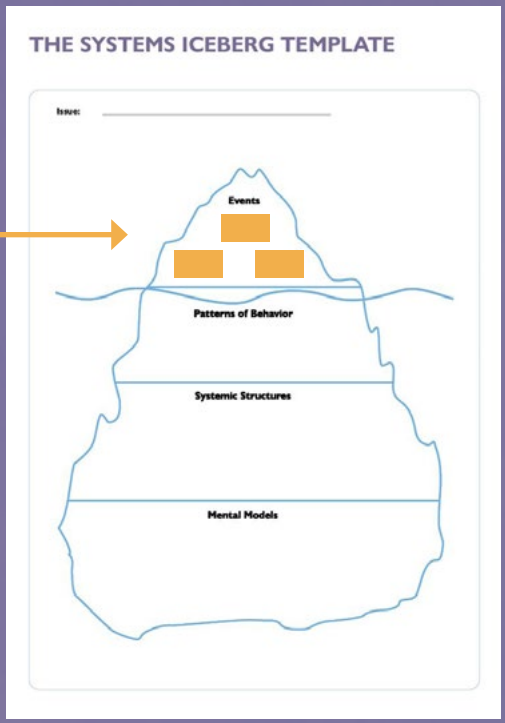
EXAMPLE OF THE ICEBERG MODEL



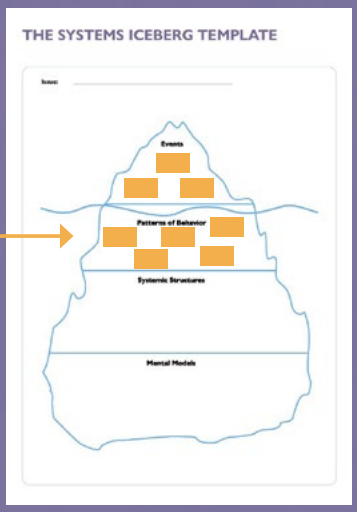
ACTIVITY INSTRUCTIONS

Now it's your turn!

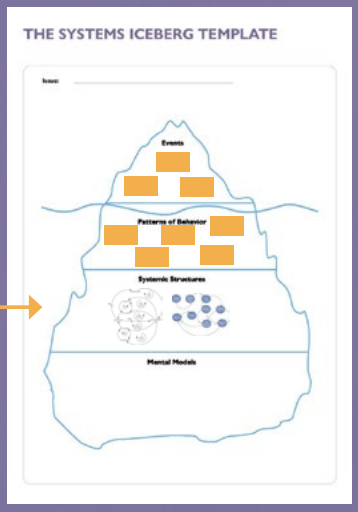
1. Based on your topic of interest, gather a group to look deeper and understand the underlying causes of a problem or event.
   - Place the Iceberg Systems template in the middle of the group
   - Watch the iceberg model explanation video and go through the example provided together.
   - Start the group discussion by looking at the **Events** level, asking yourself a question: *What are the day to day events or situations that we see in relation to our topic of interest?*
   - …Write your answers directly on the template or on post-it notes.



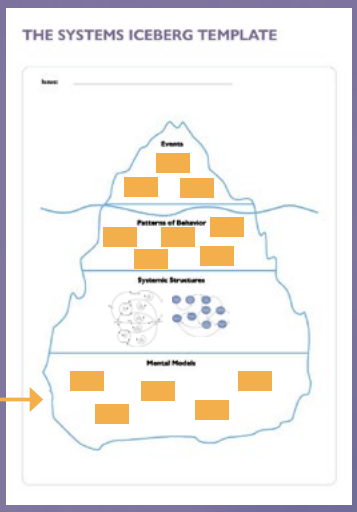
2. Next, look for **Patterns and Trends**: Identify any patterns or trends among the events you've observed. Patterns are recurring behaviors or outcomes that suggest a consistency over time. Ask yourself the questions below and record your answers on the second level of the Iceberg.
   - *What's been happening?*
   - *What are the trends?*
   - *What changes have occurred over time?*



3. Next, look for **Systemic Structures**: What structures have contributed to the behavior patterns and trends that we have identified?
   - *What are the policies, processes and practices that generate these pattern of behaviors?*



4. Then, explore the **assumptions, values, and beliefs** that people hold about this issue and system in general.
   - *What are the mental models and shared values that design the existing systems structures?*



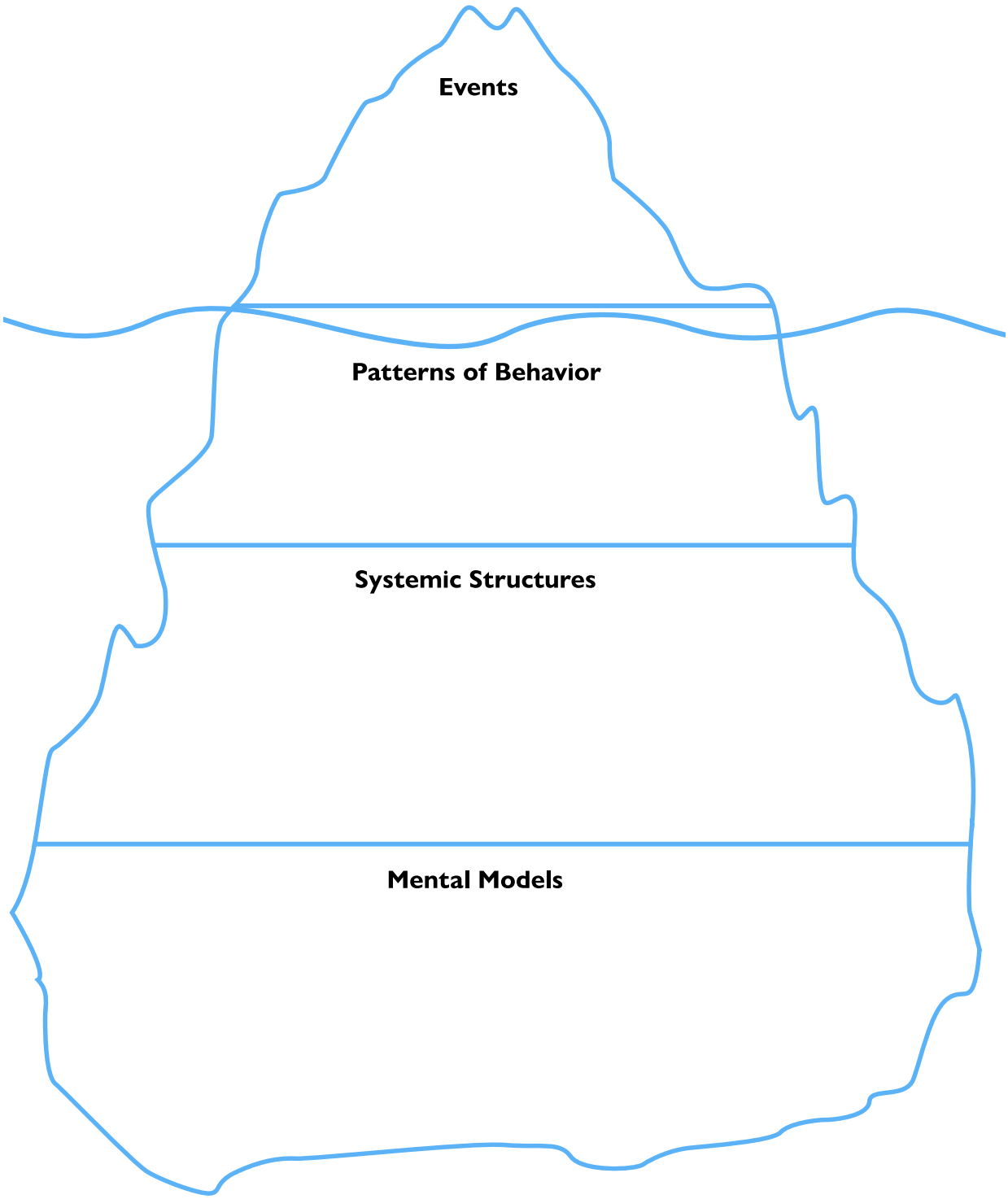
ANALYSIS & DEBRIEF QUESTIONS

When you've completed the Systems Iceberg analysis, try to go through some or all of these questions below…

1. What insights did the Systems Iceberg model analysis reveal about the situation or issue?
2. Did any unexpected factors emerge during the analysis that were not initially apparent?
3. How do the underlying factors identified in the analysis influence the visible situations or patterns?
4. What implications do these insights have for addressing the issue or making decisions moving forward?
5. Are there any gaps in the analysis that need further exploration or investigation?
6. How might stakeholders be affected by addressing the hidden factors identified in the analysis?
7. What strategies could possibly be implemented to address both the visible and hidden aspects of the issue effectively?
8. How can the insights gained from the Iceberg model analysis be communicated and utilized within the organization or team?
9. What lessons have been learned from this analysis that can be applied to future situations or projects?

THE SYSTEMS ICEBERG TEMPLATE

Issue: _____



2.3

TOOL: POLITICAL, ENVIRONMENT, SOCIAL, TECHNOLOGICAL, LEGAL AND ECONOMIC (PESTLE) ANALYSIS TOOL

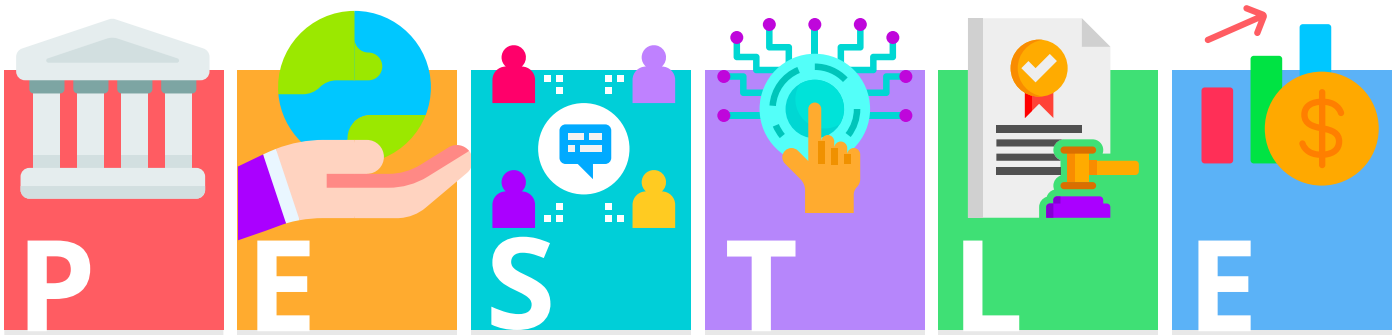
PESTLE analysis encourages you to think about what is happening in wider society that is influencing your issue. This tool has been used in business contexts to analyze the factors that impact an organization's strategies—we can adapt it to use in environmental advocacy projects too.

Age Group: 18 years old and above. For younger age groups, you may need a youth facilitator to provide guidance for discussion.

Time Required: 60-90 minutes

Group Size: This activity can be done individually or in small groups of up to 6 people maximum, to allow everyone to have the opportunity to share their knowledge and thoughts. If there are more people, consider having multiple groups and compare the answers.

Examples of factors that fall under the PESTLE analysis can be found below.



Political	Environment	Social	Technology	Legal	Economic
Government system	Environmental impact	Population growth	Access to technology	Laws and regulatory frameworks	Economic growth (GDP)
Level of corruption	Environmental education	Gender equality	Innovation culture	Enforcement of laws	Foreign investment
Policies	Protected areas	Media pressure	Impact of new technology (e.g. smart phones)	Labor rights	Wealth inequality
Government budgets	Pollution	Cultural beliefs and traditions	Internet access	Copyright laws	Tax incentives
Technical capacity	Environmental awareness	Education system (quality, level of attainment)		Health and safety standards	Infrastructure
					Corporate reporting
					Access to financing

Instructions:

Step 1: (30-45 minutes)

Complete a PESTLE analysis by looking at your study or the Iceberg analysis and brainstorm a list of the Political, Environment, Social, Technological, Legal and Economic factors you think have an impact on your topic of interest. Brainstorm a list of factors for each of the PESTLE aspects in the appropriate column.

Your Issue / Topic of Interest: _____

 Political	 Enviroment	 Social	 Technology	 Legal	 Economic

Step 2: (30-45 minutes)

Based on the list of factors you have identified in Step 1, transfer them onto this table and think about the impact each factor has on your topic of interest. What research methods can you use to find out more?

PESTLE Aspects	List of factors impacting your issue	In what ways are each of the PESTLE factors impacting your main issue?	What do you need to know more about concerning any of these factors to have a more solid understanding about the issue you want to address? Jot down your ideas. (e.g. related policies, international agreements, past or ongoing projects, trends, etc.)
Political			
Environment			
Social			
Technology			
Legal			
Economic			

2.4

CONNECTION CIRCLE

Connection Circle is a tool to help you visualize and understand the complex interactions and dependencies among different components within their issue, promoting a more holistic approach to advocacy efforts.

Age Group: 18 years old and above. For younger age groups, you may need a youth facilitator to provide guidance for discussion.

Time Required: 60 minutes

Group Size: While you can use the tool by yourself, it is recommended to work in a small team of 4-6 people so you can collaborate and get a wide range of perspectives looking at your issue.

Materials:

1. The Connection Circle Video
2. The Connection Circle Template. You can print the template on a big sheet of paper or you can draw a large circle on a flipchart paper
3. Pens, pencils or permanent markers
4. Sticky notes (if available)

KEY QUESTIONS

While drawing a connection circle, ask yourself these questions:

- What are the key variables or elements in this story and what are the cause and effect relationships between the variables?
- Where are the important connection hubs? Why are they so connected?
- Are there any complete feedback loops present?
- After gaining a big picture view of the various interconnections between linked elements in the system, what insights can draw out in terms of interventions to change the behavior of the system in a positive direction?

Instructions:

1. **Draw a Circle:** Begin by drawing a circle in the center of a piece of paper or a whiteboard. This circle represents the system you are examining, **in this case, water pollution**.

2. **Identify Key Elements:** Start by identifying the key elements related to the issue you would like to work on.

   Place each key element you identified around the circle. Try to keep it within 10-15 elements.

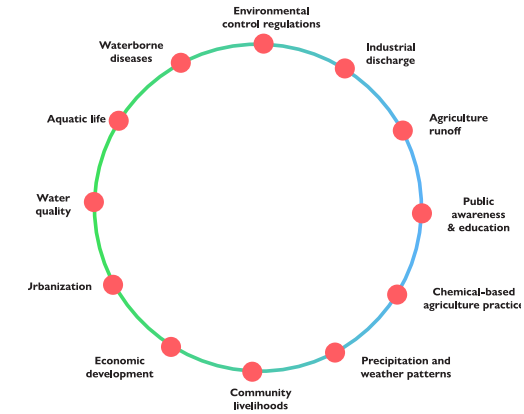
   For the water pollution example, these elements may include sources of pollution (e.g., industrial discharge, agricultural runoff, sewage), affected bodies of water (e.g., rivers, lakes, oceans), impacts on ecosystems and wildlife, and consequences for human health.

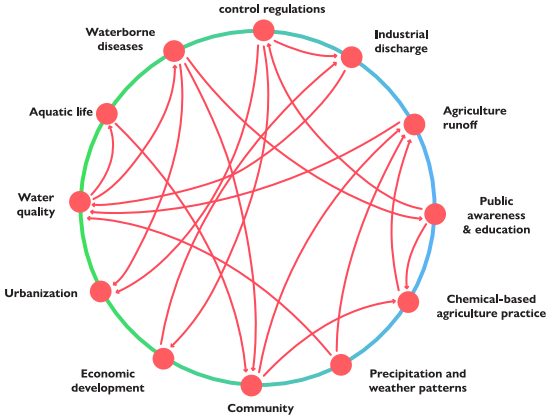
3. **Draw Arrows:** Draw arrows between the elements to indicate the directional relationships and connections between them. Use arrows to show how one element influences or impacts another. For instance, you can draw an arrow **from "Industrial Discharge" to "Water Quality"** to show how pollution from industries affects the quality of rivers.

   Continue this process until you cannot see any more direct causal connections between these elements. Links may be based on actual data or on hypotheses.

4. **Identify Feedback Loops:** Identify any feedback loops in the system. A feedback loop occurs when the output of a process loops back and affects the input.

Example using issue of Water Pollution





For example, Agricultural runoff negatively impacts water quality, which in turn harms aquatic life. This degradation of water quality and aquatic ecosystems affects community livelihoods, often driving farmers to increase chemical-based agricultural practices in an attempt to boost their income. These practices, however, exacerbate the agricultural runoff, creating a harmful feedback loop that further deteriorates water quality and aquatic life.

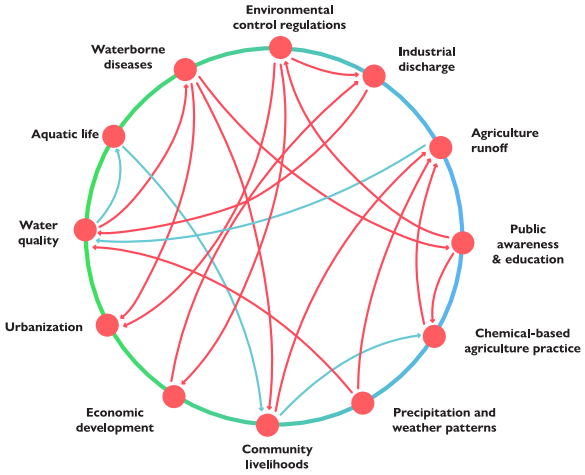
Draw feedback arrows to represent these loops. Use a different color to distinguish feedback loops from regular connections.

5. **Review and Refine:** Step back and review your diagram to ensure that the connections and feedback loops accurately reflect the complexity of the water pollution issue. Make any necessary adjustments or additions to improve clarity and understanding.

6. **Selecting an Advocacy Feedback Loop:** There might be several feedback loops represented in your connection circle. However, it is unlikely that you can effectively intervene in all of them. It is recommended to select the feedback loop sub-system that you and your team have the ability to intervene in and make some level of measurable change.

   Discuss with your team to select the feedback loop that most makes sense to you as a "story" of cause and effect. It should be a loop that you can build an advocacy campaign strategy around that will resonate with different stakeholders in your community.

   In Chapter 3 of the toolkit you will identify those stakeholders, and in Chapter 4, you will develop an advocacy plan that draws from this Connection Circle system feedback loop story.



ADDITIONAL TIPS: HOW TO READ AND ANALYZE A CONNECTION CIRCLE

Below are some key consideration points for you to look at in your Connection Circle. These are not strict rules, but can give you some insights about the connections you identified using the Connection Circle.

Which elements have lots of arrows around them? Why? Elements with lots of arrows moving to and from them tend to be leverage points in the story. Because of all their connections, key elements create lots of changes. In a connection circle about "French Fries in the economy", "French Fries Sold" might have lots of arrows pointing to and from it because it drives the key issues raised in the article.

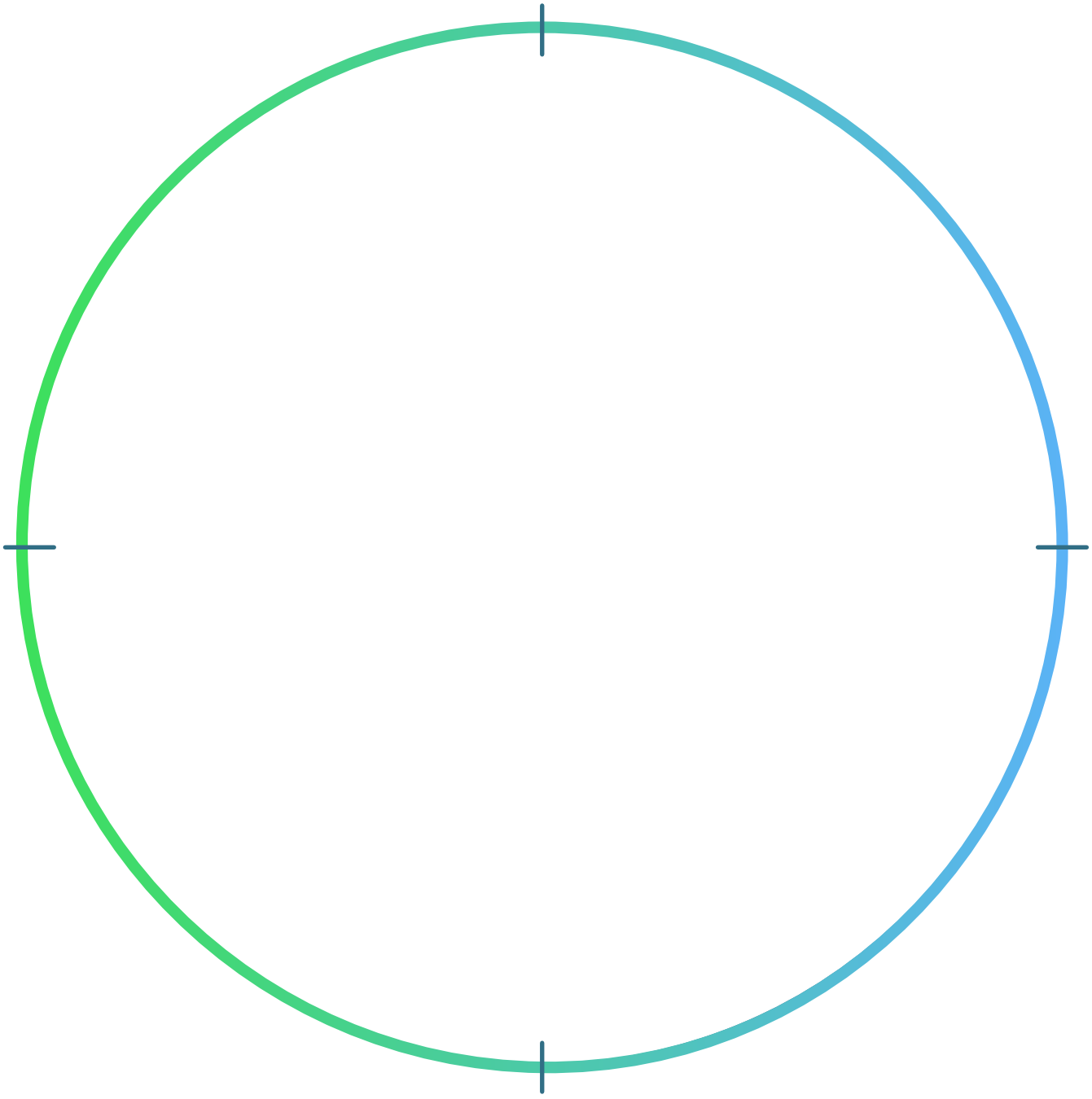
What is the significance of an element that has no arrows pointing to it? When an element has no arrows pointing to it, it is not being changed by any other element represented in the circle. If it is important, you may need to add another variable that causes the first variable to change.

What is the significance of an element that has no arrows coming from it? No arrows out means that the element doesn't influence anything that is currently in the circle. You may need to add one or more new elements.

What is the significance of an element with no arrows connected to or from it? No arrows at all means the element is not critical to the part of the story being traced, or other elements have been omitted that need to be included.

What does it mean when a pathway of arrows leads back to the starting element? When a pathway of arrows loops back to the original element, there is feedback in the story. Each closed loop identified is a feedback loop. When one element in the loop changes, the effect ripples through the whole loop, eventually affecting the original element as well.

CONNECTION CIRCLE TEMPLATE



2.5

TOOL: GMS YOUTH ADVOCATE RESEARCH PLAN TEMPLATE

Instructions:

1. **Write down the Issue or Problem:** Start by writing the specific issue or problem you have identified at the top of the template.
2. **Develop Specific Questions:** In Column A, write out questions that specifically reflect the issue or problem you want to address. For example, instead of a general question like "Is there a problem?" for the issue of "sand dredging in river systems, which is causing massive erosion of river banks," you could write ***"What are the associated problems caused by river sand dredging?"***
3. **Identify Key Stakeholders:** In Column B, list the ***stakeholders you need to speak with to find out more about the issue***. Include individuals or groups who are already working on this issue and try to consult with them early in your planning. They may become valuable collaborators in your advocacy journey.
4. **Choose Research Methods:** In Column C, select the research methods you will use to answer each question. Refer to the Research Methods section of the toolkit. You can use one method, such as interviewing, to answer multiple questions.
5. **Analyze and Reflect on Your Research:** Use the tools provided in the toolkit (or your own tools) to help you analyze, organize, and reflect on your research information. For example, to answer the question "What needs to change?" you could use a Problem Tree or the Systems Iceberg for analysis.

Example:

Issue Identified: Sand dredging in river systems causing massive erosion of river banks.

COLUMN A: Key Questions	COLUMN B: Stakeholders	COLUMN C: Research Methods	COLUMN D: Analysis Tools
What are the associated problems caused by river sand dredging?	Environmental scientists, local residents	Interviews, field observations	The Sustainability Compass, Problem Tree, Systems Iceberg, PESTLE
How does river bank erosion impact local communities?	Local community leaders, government officials	Surveys, focus groups	Stakeholder Mapping, System Mapping
What regulations exist regarding sand dredging?	Legal experts, regulatory agencies	Document analysis, expert interviews	Regulatory Framework Analysis
What are potential solutions to mitigate the erosion?	NGOs, environmental engineers	Literature review, case studies	SWOT Analysis

By following these steps, you will be able to systematically approach your issue and gather the necessary information for your advocacy efforts.

TOOL: GMS YOUTH ADVOCATE RESEARCH PLAN TEMPLATE

COLUMN A: Key Questions	COLUMN B: Stakeholders	COLUMN C: Research Methods	COLUMN D: Analysis Tools

3.3.1

SUSTAINABILITY COMPASS STAKEHOLDER IDENTIFICATION

The Sustainability Compass uses four key dimensions represented by the letters **N**(orth), **E**(ast), **S**(outh), and **W**(est), corresponding to Nature, Economy, Society, and Well-being. Each dimension of the Compass can lead to identifying specific persons, groups or entities that influence or impact the environmental issue you are working on.

The Compass helps identify how these dimensions interact, revealing stakeholders who might not be immediately obvious. For instance, for a particularly critical environmental issue, some stakeholders may be associated with both the Economy and Nature. Understanding these interdependencies ensures more effective engagement and strategy planning.

INSTRUCTIONS

- Write the topic you are focusing on in the middle of the Compass.Identify ways to reduce pollution.
- As a team, brainstorm stakeholders for each of the four directions of the Compass and list the stakeholder groups using the provided Compass Stakeholder Identification Template.

Consider the following questions for each Compass direction:

Nature (N)

- Who are the key environmental groups or organizations that could be affected by, or interested in, your work?
- Are there any local, regional, or national environmental agencies or regulatory bodies we need to consider?
- Which community groups or NGOs focus on environmental protection in your area?

Write these groups down in the Compass Nature Quadrant (Box).

Economy (E)

- Which businesses or economic entities are directly or indirectly involved?
- Are there any economic regulations or policies that need to be considered?
  Who can influence the decision-making process?

Write these groups down in the Compass Economy Quadrant.

Society (S)

- Are there any social issues, cultural or social norms that need to be addressed?
- Who are the community leaders or influential figures in the area? Are there specific demographic groups (e.g., youth, elderly, minority communities) that should be consulted?
- Which community-based organizations or social service providers could be relevant?

Write these groups down in the Compass Society Quadrant.

Well-being (W)

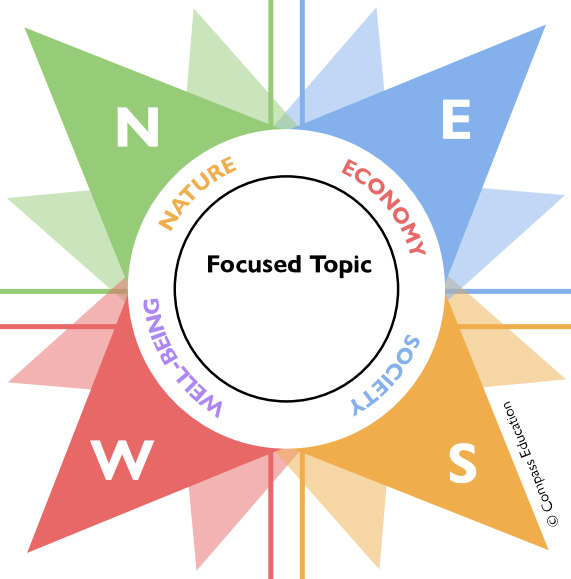
- How does this issue affect public health and safety?
- What are the potential benefits or risks to individual & community well-being?
- Who are the advocates for human rights and quality of life?
- Are there any health and well-being groups, organizations or agencies already engaging with the issue?

Write these groups down in the Compass Well-being Quadrant.

COMPASS STAKEHOLDER IDENTIFICATION TEMPLATE

NATURE

ECONOMY



WELL-BEING

SOCIETY

A REMINDER... WHAT DOES EACH LETTER OF THE SUSTAINABILITY COMPASS STAND FOR?

Use the description of each Compass quadrant below for reference when considering the stakeholder groups relevant to the environmental topic you are focusing on.

N is for Nature

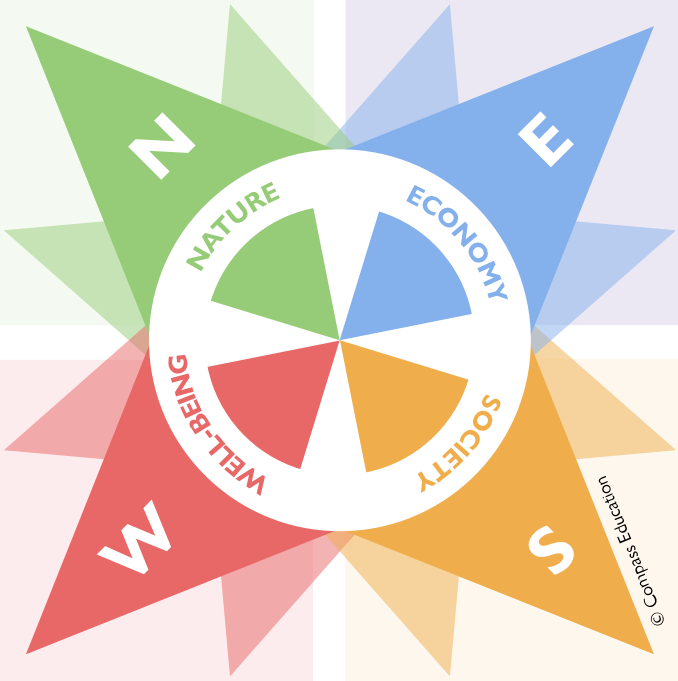
All of our natural ecological systems and environmental concerns, from ecosystem health to resource consumption and waste.

Identify key environmental groups; local, regional, or national agencies; and conservation-focused NGOs that could be affected by or have an interest in the issue.

E is for Economy

The systems and processes by which we use nature, together with our own ideas and work, to create goods, services, money and jobs.

Consider local businesses, economic development organizations, and financial institutions that might be impacted or interested in the issue.



W is for Well-being

Individual health, happiness and quality of life. This also includes the health and happiness of our families and others who are close to us—and our relationships to them.

Engage health & wellness organizations, mental & physical health advocates, and educational institutions that could have an interest in or be affected by the issue.

S is for Society

The institutions and structures that organize our collective life as humans, from government agencies to school clubs, as well as the cultural values that shape and guide them.

Include community leaders, community-based organizations, social service providers, and specific demographic groups.

EXAMPLE: COMPASS STAKEHOLDER IDENTIFICATION

NATURE

Natural scientists

Environment ministries

Environmental NGOs

Local conservation clubs

ECONOMY

Industry associations

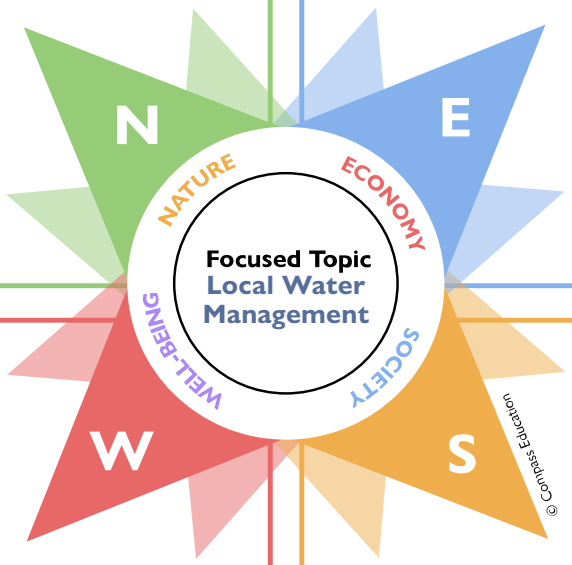
Agricultural planners and policy makers

Farmers

Local co-op group

Economic development authorities

Businesses



Health department: Water-borne disease prevention programs

Local school

Environmental NGOs

Landscape architects (e.g. park designers)

Sanitation experts

WELL-BEING

Water governance experts

Policy makers

Advocates for equitable access to clean water

Water management agencies

Traditional /indigenous users & practitioners

SOCIETY

3.3.2

STAKEHOLDER ANALYSIS

After compiling a comprehensive list of individuals and organizations who affect or are affected by your issue, it's both crucial and useful to assess their influence and impact using the Influence- Impact Matrix. This tool helps you to systematically identify and engage with stakeholders to maximize their support—and effectively advocate for your environmental issue.

INSTRUCTIONS

1. Review Your Stakeholder List

Start by looking back at your stakeholder identification efforts. Ensure you have a comprehensive list of all relevant people and organizations.

2. Assess Each Stakeholder's Influence

Determine how much power each stakeholder has over the environmental issue. Ask yourself these questions:

- Which stakeholders have the most influence or power to affect the change I am working on?
- Are they able to influence environmental policies or projects?
- Do they have access to funding, expertise, or information?
- Are they recognized experts or thought leaders in the environmental issues I am focusing on?
- Do they have connections that can help mobilize support?
- Are they able to shape public opinion or awareness?
- Are they able to enforce environmental regulations or policies?

3. Evaluate Each Stakeholder's Impact

- Assess how much each stakeholder is affected by or can affect the issue you are focusing on. Consider:
- Who are the stakeholders that could be most impacted by changing the environmental issue?
- Will they benefit from or be harmed by environmental changes?
- How will environmental policies affect their daily life or their organization's operations?
- What financial consequences will they face?
- How will their community be impacted?
- How will their public image be affected?
- What legal or regulatory consequences will they encounter?

4. Categorize Stakeholders Using the Matrix

Use the Influence and Impact Matrix provided on the next page to map each stakeholder. The Matrix has two axes:

- The horizontal axis represents the level of influence (low to high).
- The vertical axis represents the level of impact (low to high).

5. Place Stakeholders in the Appropriate Quadrants

Based on your assessment, write down each stakeholder's name or organization in one of the four quadrants.

- High Influence/High Impact (top right quadrant): Key players who are critical to the main issue and your advocacy efforts.
- High Influence/Low Impact (top left quadrant): Stakeholders who can sway others but are less directly impacted.
  Low Influence/High Impact (bottom right quadrant): Those significantly affected but with less power to change outcomes.
- Low Influence/Low Impact (bottom left quadrant): Stakeholders who are less involved but still worth considering/monitoring.

- Use the result of this analysis to help you design your stakeholder engagement strategies based on the quadrant each stakeholder falls into.
- Recognize that resources are limited and you cannot engage with all stakeholders equally. Identify a few key stakeholders from the High Influence/High Impact quadrant to focus your efforts on, as their support will be critical to your success.
- Stakeholder dynamics can change over time. Regularly review and adjust your stakeholder analysis and engagement strategies to reflect any changes in a stakeholder's influence, impact or priorities.

REFLECTION QUESTIONS

Discuss these questions with your team mates:

- Were there any stakeholders whose influence or impact was challenging to assess? If so, why?
- What did we learn from this stakeholder analysis process? Were there any surprises or insights gained about certain stakeholders that we did not anticipate?

STAKEHOLDER ANALYSIS - INFLUENCE AND IMPACT MATRIX

NOTE: Each box (quadrant) in the matrix provides specific advice on how to engage with stakeholders based on their position.

3.3.3

STAKEHOLDER CONSULTATION PLAN TEMPLATE

Creating a Stakeholder Consultation Plan is essential for engaging and involving relevant parties. Below is a template that you can customize based on the specific issue you're working on. You may want to print or replicate this template onto a larger A0 size poster paper to make it easier to fill out with your team. ***Use the information you have gathered from the "Sustainability Compass Stakeholder Identification" and the "Stakeholder Influence and Impact Analysis" to support your stakeholder consultation planning.***

Step 1: In Column A, list the key stakeholders that you have identified earlier using the Sustainability Compass and Stakeholder Analysis tool.

Note: Focus on the stakeholders who you feel have enough influence and impact with regards to your issue.

Step 2: In Column B, brainstorm why you feel it is important to talk with each of the stakeholders that you listed. Is it because of their influence on others, in policy making, law enforcement or education? Or is it something else, like the impact that this issue has on their lives and livelihoods?

Step 3: In Column C, discuss with your team and identify the best methods to engage the stakeholders—you want to be able to meet them and get their perspective in a safe and open manner. Depending on the type of group or the individuals, you will need to tailor your engagement and consultation methods accordingly.

Step 4: In Column D, you should try to identify the type of information that you want to find out from each stakeholder. Each stakeholder will be somewhat different as they will see the issue from different "points of view" (POV). So, depending on what relationship they have to the issue that you are addressing, they will provide different feedback. Discuss with your team and others and determine what type of information you will likely get from them. This step will assist you in coming up with some good and precise questions to use during your stakeholder consultations.

Step 5: In Column E, after you have thought about and recorded what you want to find out from each stakeholder, it will be time to brainstorm the specific questions you will ask them during the consultation. Good questions should be short, concise and clearly related to your topic. Your questions should mostly be "open-ended" questions that can have multiple possible answers, some of which can be long —in particular during focus group discussions and interviews. Survey questions should mostly come with multiple choice answers, true/false answers, or be answered in short sentences.

Step 6: Column F of your Stakeholder Consultation Plan is for recording the most current and correct contact information for each stakeholder group, organization or individual. This might be their email, their WhatsApp or Line number, their Facebook page or Instagram profile, or their website if they are an organization. Also try to find out and record what is the best time of the year, month, week and day that they would be available to engage with you.

STAKEHOLDER CONSULTATION PLAN TEMPLATE

Column A	Column B	Column C	Column D	Column E	Column F
Stakeholder	**Why it's crucial to talk to them**	**How to engage them?**	**What to find out from them?**	**Questions to ask**	**How to contact them (and the best times to do so)**
Example *Elders in the community*	*Example* *They have lived in this community for many decades, which means they have experience and have likely observed the changes in the environment over time.*	*Example* *In-person interviews; focus group discussions; and possible video interviews*	*Example* *How overall environmental quality, ecosystem health,and biodiversity in and around the community has changed over time.*	*Example* • *Are there any plants or animals that you saw, or were present in the ecosystem near the community that you do not see anymore?* • *What climate factors have changed since you were a child? (e.g. rainfall)* • *What is your opinion as to why these plants and animals no longer exist here*	*Example* *Visit their home in the morning (late morning)*

CASE STUDY EXERCISE: USING THE AMOEBA MODEL FOR POSITIVE AI CHANGE

LEARNING OBJECTIVE

This case study exercise will help you think about your own environmental issue. It uses a case example of changing the mindset and practice of IT and learning at a school with the introduction of Artificial Intelligence (AI), which as we know is still quite controversial.

Reading and thinking about the Amoeba change roles in this example can help you to more effectively reflect on how people will react to your call for change. This will help you to better understand the roles you and your team are playing in your own advocacy change process, as well as the roles played by others outside your group. It can also reveal some strategies to engage them and get them onboard with the change you want to make.

INSTRUCTIONS

1. Read through the Amoeba AI case example article from "Designing for Positive AI Change" with this link: https://www.linkedin.com/pulse/using-amoeba-model-positive-ai-change-kelly-schuster-paredes-tlnee/

2. Use the AI case example to answer the questions on the next page.

DESIGNING FOR POSITIVE AI CHANGE

USING THE AMOEBA MODEL

Artwork Generated by Dalle with Inspiration from the Amoeba Model

1. According to Alan AtKisson, the creator of the Amoeba Model, how is the way that the single-celled amoeba organism lives similar to the cultural change process? Describe what you think is the reason an amoeba is used as a metaphor for cultural change. What is its metaphorical value?
2. What is the concern about AI among educators as expressed in the case? Would there be similar concerns among people in your social context, who may also express reservations with your cause and your change efforts? Brainstorm how they might, and your thoughts on that possibility.
3. In the case example of AI diffusion in education, what distinguishes the change agent's role? Why is this person (i.e. the computer science teacher) identified as the change agent? What is the suggested strategy they should take to move the Innovator's idea forward at the school?
4. What is the difference between the change agent's role strategy and the iconoclast's role? What's the difference between their respective strategies for influencing organizational / cultural change (i.e. incorporating a new idea (AI) into an existing system? Could they accidently cancel out each other if they are not coordinated in their efforts?
5. Why is the Transformer's role so important in the AI Education change process? What leverage do they have and why would they help to "legitimize" the new idea so that others in the cultural system (i.e. the school) accept and adopt the new idea? Can you think of any possible transformers in your own environmental issue advocacy and change situation?
6. Based on this AI case example, what is the importance of the strategy used with either Laggards or Reactionaries? How are they different from the strategies used for the Change Agent or Transformer?

4.4.1

SMART GOALS WORKSHEET

Crafting SMART goals is a process to help you identify whether what you want to achieve is realistic, and to determine a deadline. When writing SMART goals use concise language, but include relevant information. The process is designed to help you succeed, so be positive when answering the questions.

INSTRUCTIONS

As a team, follow the steps below and develop a SMART goal.

FIRST STEP	Write the goal you have in mind
GOAL	**Example:** Local communities become actively engaged in environmental health protection.

S	What exactly do you want to accomplish? Why is this goal important? Who needs to be included? When do you want to do this? Where will it take place?
SPECIFIC	**Example:** Increase the number of volunteers for our community clean-up project.

M	How can you measure progress and know if you've successfully met your goal?
MEASURABLE	**Example:** Recruit 50 new volunteers within the next three months.

A	Do you have the skills required to achieve the goal? If not, can you obtain them? What is the motivation for this goal? Is the amount of effort required on par with what the goal will achieve? What are the potential obstacles?
ACHIEVABLE	**Example:** Partner with local schools and community centers to reach potential volunteers.

R	Make sure your goal aligns with broader objectives and is worthwhile. Does this goal matter? Is it the right time? Does it align with other efforts or needs?
RELEVANCE	**Example:** This goal supports our overall mission to improve community engagement and environmental health.

T	When will it be achieved? What can be done today? What can be done six weeks from now? What can be done six months from now?
TIME-BOUND	**Example:** Recruit 50 new volunteers by September 30th.

SMART	Review what you have written, and craft a new goal statement based on what the answers to the questions above have revealed.
GOAL	**Example:** "Our goal is to enhance community engagement and environmental health by recruiting 50 new volunteers for our community clean-up project by September 30th. We will achieve this by partnering with local schools and community centers to reach potential volunteers over the next three months."

Identify Objectives

Based on your SMART goal, define specific objectives—smaller, actionable steps that will help you achieve your goal(s).

Then test your goal(s) and objectives using a tool known as a Theory of Change. This is a testable hypothesis that guides decision-making and action during the development and execution of an advocacy strategy. It explains the process of change and helps you evaluate whether your advocacy actions are leading to the expected outcomes.

Then, the next step will be to develop strategies to accomplish these objectives. This could involve public awareness campaigns, lobbying for policy changes, building coalitions, or other methods, depending on the nature of your advocacy.

OBJECTIVES	**1.** **2.** **3.**

THEORY OF CHANGE	**IF...** **THEN...** **BECAUSE...**

4.4.2

TOOL: WHO AND WHAT STAKEHOLDER ADVOCACY TARGET ANALYSIS

INSTRUCTIONS:

Use the table below to understand your target stakeholders and think about what type of engagement strategy you will use to get them to support your issue and ideas for change.

1. Review the Stakeholder Influence and Impact Analysis you developed in Chapter 3. Add any additional key stakeholders that you see missing from the previous analysis. Discuss with your team and agree on who you need to persuade in order to bring about the change you're aiming for.

   Ask yourself two important questions about each of the people/organizations:
   a. Which stakeholders have the political, economic or social influence on decisions and behavior?
   b. Who has the ability to actually make this change a reality?

List the stakeholders you select in the Who and What Advocacy Target Template (Column A).

2. Understand their views of your advocacy issue, and identify what type of engagement strategy you will use in getting them to support your issue and ideas for change.

- Know ***WHAT side they sit on in relation to your issue.*** Are they for or against doing something to change the status quo around your issue? (Column B).
- Know ***WHO influences your target.*** You can ask them to act on your behalf or lend their support (Column C).
- Know ***WHAT influences your target.*** You can find ways to include what your targets care about in your advocacy message (Column D).

For each of your key targets, map out how they think in relation to your issue and the change you want to make, as well as the influences on their position around your issues.

EXAMPLE

Advocacy Objective: Promote experiential nature-based environmental education for primary and junior secondary school student

TARGET	What Side Do They Sit on in Relation to Your Issue (For or Against)?	WHO Influences Your Target?	WHAT Influences Your Target?
Vice Minister of Education	Not clear where he sits on this idea, but from what is publicly available he might be open to it.	• Two very close personal advisors • Education consultant • Influential Educators • Minister of Education • National Media	• Public negative sentiment on policies and project implementation • National elections • Influential international / regional media and political leaders • Used to work as advisor for Mekong River Commission (MRC)

WHO AND WHAT ADVOCACY TARGET TEMPLATE ANALYSIS - INFLUENCE AND IMPACT MATRIX

Advocacy Objective:			
Column A	**Column B**	**Column C**	**Column D**
TARGET	**What Side Do They Sit on in Relation to Your Issue (For or Against)?**	**WHO Influences Your Target?**	**WHAT Influences Your Target?**

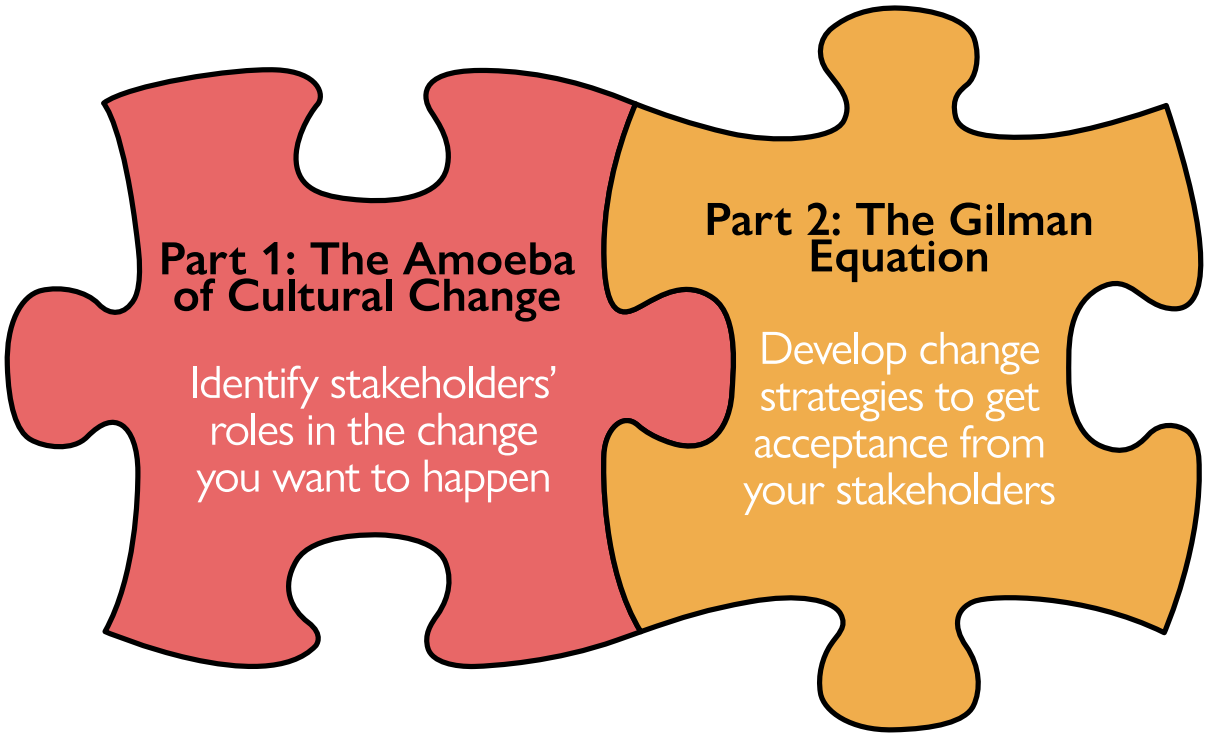
4.4.3

DEVELOPING SOCIAL CHANGE STRATEGIES

This tool is all about social change, including the perspectives and strategies required to move an idea forward. The tool combines two connected tools that will help you better understand your stakeholders and identify the roles they might play in the change process. You will then be able to develop strategies to ensure their acceptance and support of your idea/initiative.

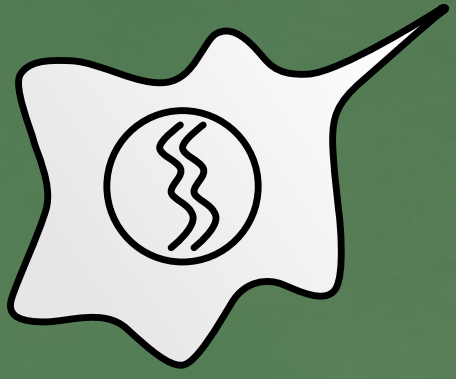
HOW TO USE THIS TOOL

Together with your team, sit down and go through the information and instructions provided on the following pages.



AMOEBA (PART 1)

1. Read the background information and the Amoeba role descriptions provided. Make sure that everyone in your team understands the Amoeba analogy and role characteristics.
2. Look at the list of stakeholders you have identified in the previous stage of advocacy, and identify, one by one, their Amoeba roles. Are they potentially reactionaries, transformers or mainstreamers?
3. ***Use worksheet 1 to create your own AMOEBA MAP***



THE GILMAN EQUATION (PART 2)

1. Read the explanation of Gilman's Equation. Make sure that everyone in your team understands it.
2. An example of strategies to be used with a transformer in the context of School Solar Panel Installation is provided to help get you started.
3. List each Amoeba role, and their names on Worksheet 2. Then follow the guiding statements to develop the change strategies.
4. ***Use Worksheet 2 to record your Gilman strategies.***

PART 1 THE AMOEBA OF CULTURAL CHANGE

A Metaphor for Cultural Innovation & Change Processes

Human cultural groups and organizations absorb new ideas the way an amoeba absorbs food

INTRODUCTION

Amoeba is a tool for understanding, mapping, and planning for cultural change processes. The Amoeba model at the heart of this tool assists changemakers to develop a sound strategy to support effective change duties for sustainability in a culture, group, organization, or community.

THE AMOEBA METAPHOR

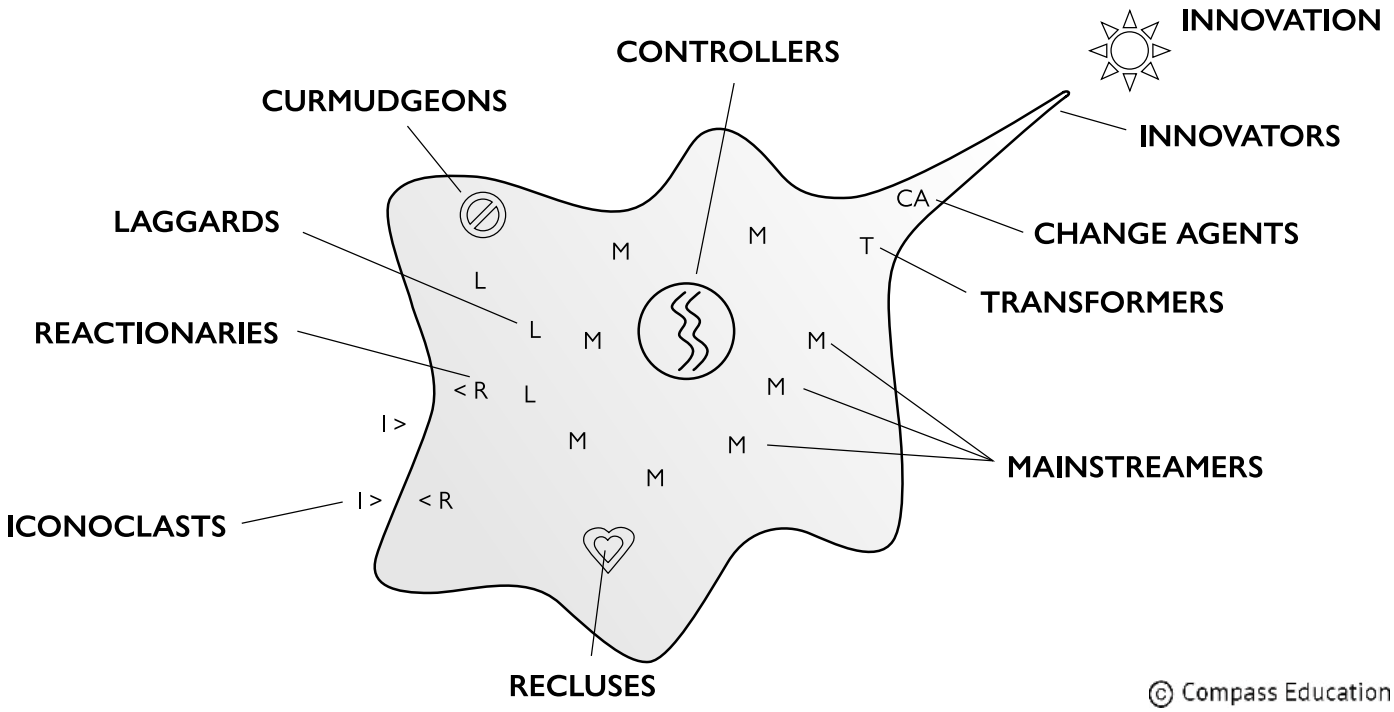
The learning model in Amoeba builds around a central metaphor: the idea that ***human cultures are like the amoeba, a single-celled organism.*** In nature, the amoeba is a predator. It is always seeking food—just as humans seek new ideas and solutions to problems. The amoeba aggressively hunts down and absorbs ("eats") other smaller microorganisms. When it senses food, it stretches out a pseudopod ("false foot"), an extension of itself, in the direction of the target. When the amoeba absorbs the food item, it does not draw the "foot" back: instead, it surges forward in that direction, and fully engulfs its prey. It must move and change shape in the process. The food, once ingested, then spreads throughout the amoeba's body. In other words, the search for new food, and the willingness of one part of the amoeba to "stick its neck (or foot) out," results in a shift in position and a re-shaping—a transformation!—of the entire amoeba. This is what makes the metaphor relating to bringing social change so powerful. Sometimes change causes many other changes in social groups, resulting in a major shift in how all the members of that culture behave—which is what we call a cultural transformation.

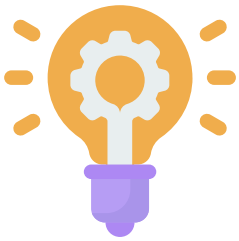
THE AMOEBA MODEL

- Helps you to understand the role you are playing, the roles played by others in your community and/or organization, and the dynamics affecting the innovation and change process.
- Helps you plan more effectively for the introduction of new ideas.
- Empowers you to enable other advocates, achieving greater multiplier effects. The Amoeba model itself can be viewed as an innovation designed to spread the principles of innovation diffusion theory.

ROLES IN AMOEBA MODEL - EXPLANATION

This is a map of the roles that people play in the cultural change process. Let's get familiar with each of them!





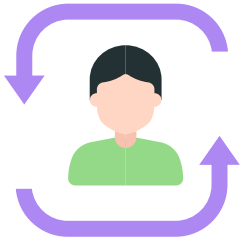
INNOVATOR:

The Innovator lives on the edge. S/he is the source of new ideas. Think of the leading-edge researcher, thinker, writer, or inventor. Sometimes people like this are thought of as eccentric by others. They are often obsessed with their ideas, or passionate about keeping them pure. For these reasons, they are often not very good at promoting their own ideas. That's why they need Change Agents.

Examples: *Thomas Edison and the light bulb; James Lovelock and the Gaia Hypothesis; Einstein and Relativity Theory, etc.*

Characteristics:

- They tend to think differently to the mainstream.
- Generate groundbreaking ideas and inventions.
- Often seen as eccentric or overly passionate.
- Not typically skilled at promoting their own ideas.



CHANGE AGENTS:

Change Agents translate the Innovator's ideas into a form that can sell. They move outside the mainstream, but they know how to communicate with the mainstream. The classic model of a Change Agent is a consultant who studies the works of new thinkers and translates them into a form that a client can digest. Change Agents are concerned with promotional strategy. But to succeed, they need to connect with Transformers.

Examples: *The entrepreneurs who brought Edison's inventions to the market; younger physicists who created experiments to prove Einstein right; today's journalists who write about global environmental issues, etc.*

Characteristics:

- They 'translate' and communicate the Innovator's ideas to the mainstream.
- They are skilled in promotional strategy and communication.
- They often act as consultants or intermediaries.

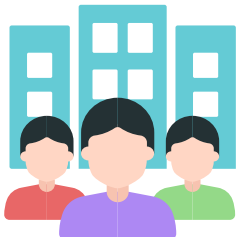
TRANSFORMERS:

Transformers are those who embrace new products or ideas before they become mainstream. They are open to new ideas, and they want to promote positive change. But they also do not want to sacrifice their own reputation, or their position of influence if they have one. They adopt the innovations they think will ultimately catch on with the rest of society. They serve as gatekeepers into the mainstream. A classic example would be the senior executive who hires the consultant, with an eye toward whether the ideas the consultant brings will both improve life in the organization and enhance her or his own reputation.

Examples: *Technology critics who get an early look at the latest technical equipment, before it is marketed to the general public. Their reviews will generally determine whether the product succeeds in the market.*

Characteristics:

- They embrace new products or ideas before others.
- They are open to new ideas and interested in promoting positive change.
- They serve as gatekeepers for new ideas entering the mainstream.



MAINSTREAMERS:

These are members of the 'noisy majority,' busy with the basic essentials of cultural life. Mainstreamers are neither for nor against change, in principle. In fact, they are often unconscious that change is happening. They adopt the innovation when they see that 'everybody else is doing it.

Examples: *The broad acceptance of any popular consumer product or mainstream fashion. The iPod, iPhone, and iPad come to mind.*

Characteristics:

- They make up the majority of the population.
- Broadly speaking, they are neither for nor against change.
- They adopt new innovations when they see widespread acceptance.

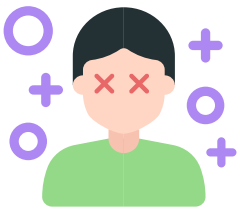
LAGGARDS:

Laggards are basically Mainstreamers who don't like change in general. They're the opposite of Transformers. They are happy and comfortable with the status quo. Diffusion theorists call them 'late adopters.' They usually only change when they can no longer avoid it, because the Mainstream has already done so.

Examples: *People who didn't want to give up vinyl for CDs — or later, give up CDs for digital services.*

Characteristics:

- They are resistant to change and prefer things as they are.
- They adopt new ideas and technologies very late.
- They change only when it becomes unavoidable.



CURMUDGEON:

Curmudgeons are cynical grouches. For them, nothing will ever change, and if it does, it probably won't be for the better. Their motto is, "Why bother?" They've seen it all— perhaps they even used to be idealistic dreamers themselves—but now they mostly complain. They act as wet blankets in any change process.

Examples: *People in the group will undoubtedly recognize this character in their own experience.*

Characteristics:

- They are cynical complainers ... "why bother?"
- They believe that change is futile or likely to be negative.
- They tend to complain and oppose change.

REACTIONARY:

Reactionaries react powerfully against change, because they believe it will harm culture—or harm them personally. Reactionaries generally are perceived as having a vested interest in keeping things as they are, or in moving things in the opposite direction. They actively resist the adoption of innovation, by any means in their power—sometimes very cleverly. They often have an economic or power interest in the status quo; or have their sense of identity or core values invested in it. They go along with change only if it is unavoidable, and then very late in the process.

Examples: *Car companies that resisted requirements for fuel efficiency; citizens' groups that resist the introduction of technologies they think are dangerous.*

Characteristics:

- They strongly resist change due to perceived harm to culture or personal interests.
- They have a vested interest in maintaining the status quo.
- They use various means to actively resist innovations.

ICONOCLAST:

The Iconoclast is the person who identifies the problem that the Innovator is trying to solve. The word means 'attacker of cherished beliefs.' Iconoclasts attack the status quo. Where the Innovator and Change Agent is trying to pull the Amoeba in a new direction, the Iconoclast is kicking it from behind. A classic example is the gadfly journalist or columnist, who attacks the powers that be and exposes problems in society. Protest groups are also Iconoclasts. In a contentious change process, Iconoclasts keep Reactionaries busy, so that Change Agents can effectively promote the new idea.

Examples: *Protest groups; social-protest comedians; politicians who "go negative"; critical journalists.*

Characteristics:

- They challenge and attack the status quo.
- They identify and highlight problems that need solving.
- They are often seen as disruptive or provocative.

RECLUSE:

The Recluse is somebody like a monk, an artist, a poet, or a peace activist, who is more preoccupied with discovering a 'great truth' than with something so mundane as changing the world. The person with this role usually doesn't actively engage with the change process, but they can still affect it, often in unpredictable ways.

Examples: *Recluses have existed within cultures for centuries.*

Characteristics:

- They are withdrawn from active participation in the change process.
- They focus on a personal search for truth or artistic expression.
- They impact change indirectly and unpredictably.

KEY STRATEGY POINTS TO WORK WITH PEOPLE IN DIFFERENT AMOEBA ROLES

Once you identify who plays what role in the community in relation to your initiative or idea, you can think about applying some of these ways to work with each of them.

Innovators and Change Agents

- Innovators need Change Agents to help spread their ideas.
- Innovators are often not as effective as Change Agents.
- Both Innovators and Change Agents sometimes fail to actively adopt and/or demonstrate the innovation themselves.
- Innovators can be overly attached to a "pure" version of their idea, hindering its spread.

Change Agents and Transformers

- Change Agents need to collaborate with Transformers.
- They are more effective when they work together.
- Trying to change Reactionaries can be a waste of time for Change Agents.

Reactionaries

- Reactionaries are effective when they discredit or disempower Change Agents.
- It's often easier to stop real change as a Reactionary than to be a Change Agent.
- Reactionaries often believe their actions benefit the whole community, and sometimes they are right.

Mainstreamers

- Mainstreamers often desire some change—but they fear too much change.

Iconoclasts

- Iconoclasts should keep Reactionaries busy.
- Iconoclasts often make terrible Change Agents, and vice versa because they are focused on the problems and not the practical solutions.

Curmudgeons

- Curmudgeons can hinder change, especially if they have a platform to voice their opinions and if Innovators and Change Agents engage with them too often.
- Many Curmudgeons were once Change Agents who became disillusioned.

Esteemed Persons (Recluses)

- Recluses or Esteemed Persons are highly respected and can either speed up or slow down the change process.

KEY POINTS TO CONSIDER

Adapt the Innovation

Make it suitable for the group you are trying to influence!

Motivate the Change Agents

This includes yourself (!) and any team you are working with to promote change within the system.

Organize the Transformers

Get them engaged in your effort—and bring them on board—as early as possible.

Easy Does It for the Mainstreamers

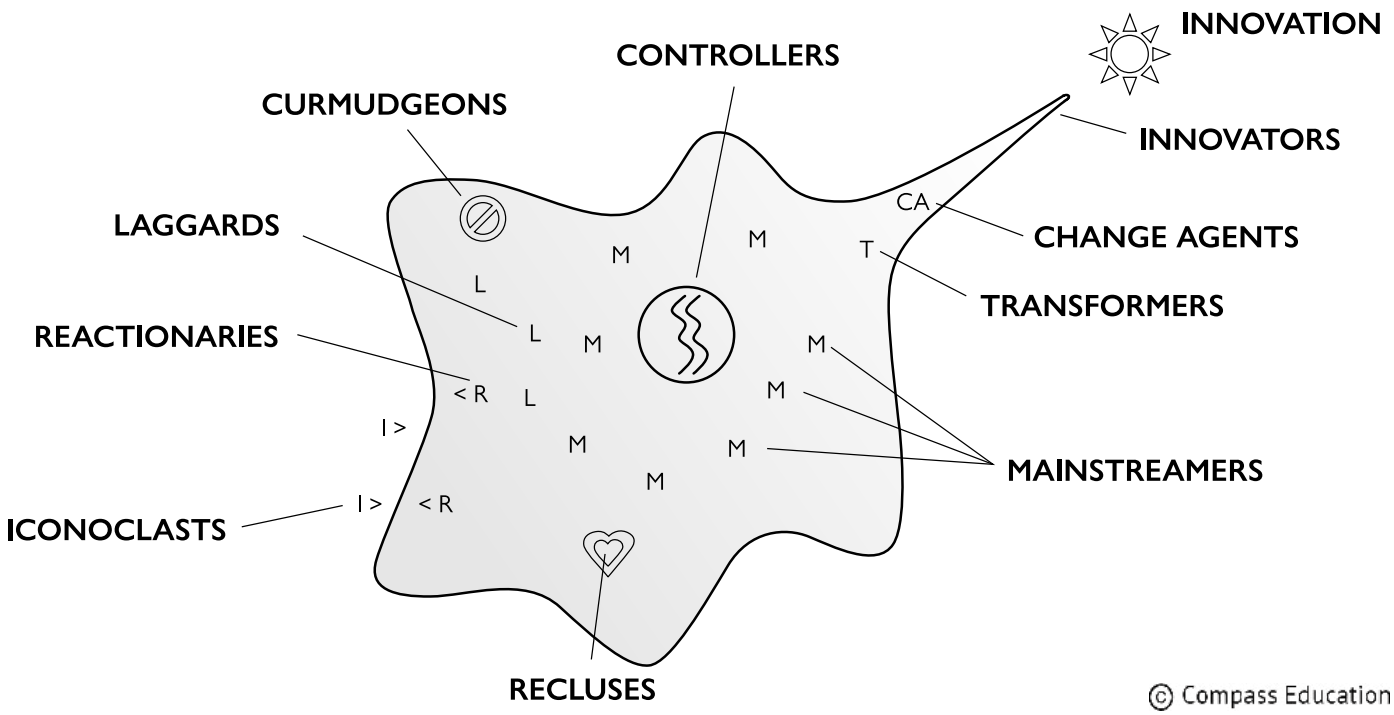
Don't go out trying to promote something to the Mainstream that "isn't yet ready for wider use." Take it easy, get it working with the Transformers first, then get them to help you plan the introduction to the Mainstream.

Build the Momentum

Create small successes that build one on each other, so that all involved in the change process can feel "the wave building up".

Avoid the Reactionaries

As much as you can, don't engage with the Reactionaries. Indeed, try to escape their attention! Let your new idea just ooze into the Amoeba, naturally and positively. If there is Reactionary resistance, try to get the Iconoclasts involved to keep them busy!



"Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has."

- Margaret Mead

WORKSHEET 1: CREATING YOUR AMOEBA MAP

Consider your project or initiative and identify the key Amoeba roles individuals play in relation to what you are trying to accomplish. In the table below, list their names, positions, and organizations. This information will help you identify strategies to effectively work with or address them.

AMOEBA ROLE	Names, positions, and organizations
CHANGE AGENTS	
TRANSFORMERS	
REACTIONARIES	
ICONOCLASTS	
RECLUSES	
CURMUDGEONS	

PART 2 THE GILMAN EQUATION (DEVELOPING CHANGE STRATEGIES)

Now that you have identified the roles each person plays in the Amoeba framework, it's time to develop strategies to spread your initiative.

Dr. Robert Gilman developed an "equation" to explain why a diffusion strategy for spreading ideas does or does not work. We call this the "Gilman Equation" to honor his insight. We can use this insight to develop strategies that can help to get our work supported by different stakeholders.

The Gilman Equation says that in order for a person to adopt an innovation, the following must be true...

THE PERCEIVED VALUE OF THE NEW WAY MINUS **THE PERCEIVED VALUE OF THE OLD WAY** MUST BE GREATER THAN **THE PERCEIVED COST OF CHANGE**

Here is another way to say it...

The Gilman Equation suggests that there are three basic strategies to pursue, to make an innovation more likely to be adopted.

1. **Increasing "N" — Promote the Perceived Value of the New Way.**

This is commonly known as marketing, which focuses on communicating the benefits of the new idea or thing to the target population.

2. **Decreasing "O" — Critique the Perceived Value of the Old Way.**

This is done by highlighting the problems, shortfalls, and failings associated with the idea, practice, or thing that the innovation is trying to replace. This is what Iconoclasts do.

3. **Decreasing "CC" — Reduce the Perceived Cost of Change.**

This can be done by making it easier for people to switch, through training, discounts, subsidies, cost-sharing, step-by-step guides, etc.

WORKSHEET 2: CHANGE STRATEGY DEVELOPMENT EXAMPLES

Use the table in the following pages to develop strategies for engaging stakeholders to promote the change you want to happen.

Initiative / Innovation: Installing Solar Photovoltaics (PV) on School Roof				
Amoeba Role	**Name**	**Perceived Value of New Way**	**Perceived Value of Old Way**	**Perceived Costs of Change**
Transformer	Mr./Ms. ... (School Principal	This is not the main mission of the school	If it isn't broken, don't fix it.	Costly and requires additional procurement process, adding extra workload to administration team
		Actions to Increase:	**Actions to Decrease:**	**Actions to Decrease:**
		Present/write to the school principal, emphasizing the school's vision and missions that incorporate sustainability as a key component of the overall mission. By installing solar PV, this will help to build the school's reputation as a leader in education for sustainability.	Conducting research and submitting a proposal for the project. Showcase other schools with solar PV and highlight the return of investment (RoI) and other benefits	Start with a pilot phase so the school doesn't have to make a large investment all at once. Identify in-kind expert support for system management to provide advice on operations at no or very low cost. Offer to collect and process data over time on the proportion of energy used from different sources by the school.

WORKSHEET 2: YOUR CHANGE STRATEGIES

Initiative / Innovation				
Amoeba Role	**Name**	**Perceived Value of New Way**	**Perceived Value of Old Way**	**Perceived Costs of Change**
		Actions to Increase:	**Actions to Decrease:**	**Actions to Decrease:**
		↑	↓	↓

Amoeba Role	**Name**	**Perceived Value of New Way**	**Perceived Value of Old Way**	**Perceived Costs of Change**
		Actions to Increase:	**Actions to Decrease:**	**Actions to Decrease:**
		↑	↓	↓

Amoeba Role	**Name**	**Perceived Value of New Way**	**Perceived Value of Old Way**	**Perceived Costs of Change**
		Actions to Increase:	**Actions to Decrease:**	**Actions to Decrease:**
		↑	↓	↓

Initiative / Innovation				
Amoeba Role	**Name**	**Perceived Value of New Way**	**Perceived Value of Old Way**	**Perceived Costs of Change**
		Actions to Increase:	**Actions to Decrease:**	**Actions to Decrease:**

Amoeba Role	**Name**	**Perceived Value of New Way**	**Perceived Value of Old Way**	**Perceived Costs of Change**
		Actions to Increase:	**Actions to Decrease:**	**Actions to Decrease:**

Amoeba Role	**Name**	**Perceived Value of New Way**	**Perceived Value of Old Way**	**Perceived Costs of Change**
		Actions to Increase:	**Actions to Decrease:**	**Actions to Decrease:**

4.4.4

DEVELOPING YOUR MESSAGE FOR DIFFERENT AUDIENCES

In advocacy work, tailoring your messaging to specific audiences is crucial because it ensures that the communication is relevant, engaging, and persuasive for those you are trying to reach. Different audiences will have varied values, concerns, and levels of knowledge about the issue at hand. By customizing the message, advocates can connect more effectively, sparking interest and motivating action. For instance, policymakers may require data-driven arguments, while the general public might be moved by emotional storytelling or personal experiences. Tailored messaging makes it possible to address these diverse needs and perspectives, maximizing the impact of the advocacy efforts. It helps break down complex issues into understandable and relatable terms, thereby enhancing the likelihood of support, engagement, and ultimately, the desired change.

INSTRUCTIONS

Look back at your **"WHO and WHAT" analysis** along with the **"Amoeba roles and Gilman's Equation strategies"** that you have identified. Write in the table below who you consider to be your key target audience and develop a message that you think will help motivate them to do what you want them to do.

Note: We have provided a few examples of stakeholders in the table below. Please remove and replace them with your own identified target groups.

Target Audience	What concerns them in relation to your primary issue(s)?	WHO" and "WHAT" influence them?	What strategies do you plan to use to get them to support your goals / objectives? (from Gilman's Equation)	What is a message that you can use to influence them the way you want?
Example: Decision-makers (government ministers, legislators, administrators, corporation heads)				
Example: Donors (foundations, bilateral agencies, multilateral agencies)				

Example: Journalists				
Example: Civil society organizations				
Example: Rural youth				
Example: Urban educated young adults				
Example: Opinion leaders (religious leaders, chiefs and traditional/community leaders)				

TOOL: ADVOCACY PLAN TEMPLATE

1. WHAT IS THE OVERALL CHANGE WE WANT TO SEE?
(Write out your long-term goal and campaign/project objectives)

2. WHAT ARE THE THINGS THAT WE EXPECT TO SEE HAPPEN AS A RESULT OF OUR ADVOCACY EFFORTS? (Tangible outcomes)

3. WHAT STRATEGIC ACTIONS NEED TO BE TAKEN TO MAKE THIS CHANGE HAPPEN? (List below)

HOW (Strategic actions & activities)	TO DO TASKS (What needs to be done to take this action?)	WHO WILL BE RESPONSIBLE	WHEN (What is your (time frame?)
1.			
2.			

3.			
4.			
5.			
6.			

MANAGING RISKS	HOW TO AVOID	HOW TO SOLVE / DEAL WITH
POSSIBLE RISKS		

MONITORING SUCCESS (INDICATORS)	SOURCES OF DATA & INFORMATION	WHEN TO MONITOR
WHAT TO MONITOR? (INDICATORS)		

COMPLETED TEMPLATE WITH EXAMPLE OF ADVOCACY PLAN

What is the overall change we want to see? (Write out your long-term goal and campaign/project objectives)	We are aiming to have outdoor, experiential environmental education become a standard part of teaching practice for teacher in all grades.
What are the things that we expect to see happen as a result of our advocacy efforts? (Tangible outcomes)	Integrate nature-based experiential environmental education (EE) into existing school curriculum so that students and teachers are more connected with natural ecosystems and learn to value nature (such as wetlands, rivers) as learning resources
What would make this change happen?	1. Catch the attention of Ministry of Education officials and influential education advisors and teachers 2. More and more schools are open to integrating nature-based experiential EE into their curriculum 3. Connect students and teachers with the natural world so that they understand it better and are more connected and care about natural ecosystems

HOW (Strategic Actions & Activities)	TO DO TASKS (What things need done to take this action)	WHO WILL BE RESPONSIBLE	WHEN (What is your (time frame?)
1. Raise awareness of the situation among school directors and teachers	• Develop presentation and issue brief paper on what experiential nature-based EE is and the benefits of it to student learning success • Make presentations to education officials and school heads/ district officials		
2. Create agreement with schools and district authority to test this type of learning	• Get approval from school heads/ district officials to co-develop this pilot learning program after school hours (as an extracurricular activity) • Sign Memorandum of Understanding (MoU) and/or Memorandum of Agreement (MoA) with district officials and School heads of participating schools		
3. Provide prototype syllabus with experiential EE learning activities	• Co-develop the syllabus of nature-based experiential EE activities with team, and EE experts and teachers • Conduct a review with outside advisors and experts		
4. Create alliance with video media producer	• Get agreement with visual media producer to film the learning process and make a short promotional documentary		

5. Train teachers on experiential learning for EE river and wetland activities	• Conduct teacher training on experiential EE for all teachers of participating schools, as well as other key educators		
6. Conduct lessons with schools, and film & document the process	• Prepare students for the outdoor lesson beforehand • Conduct a series of nature-based EE activities in tandem with teachers on subject of freshwater ecosystem and climate change		
7. Get Feedback from teachers and students on this learning experience	• Conduct in-person and online evaluation of the experiential lessons and document pre- and post-test results		
8. Use the film and report, posters, and brochures to advocate with education officials and teachers at conferences and events.	• Take the film and documents on the project on a roadshow, speaking and presenting at any relevant conference or meeting possible • Get people to sign a support statement for integrating more authentic experiential nature-based EE in school curriculums		

MANAGING RISKS	RISKS	HOW TO AVOID	HOW TO SOLVE / DEAL WITH
	• Cannot attract any school to test these type of outdoor experiential EE activities • Being manipulated and ignored because we do not know the system • Loss of motivation due to slow process of change	• Be realistic about expectations • Track and monitor involvement • Understand the system – get professional advice from inside • Inject energy often	Step up the pressure when you feel interest fades Refer to higher authorities
MONITORING SUCCESS	**INDICATORS**	**SOURCES OF DATA & INFORMATION**	**MONITORING SCHEDULE (WHEN)**
	• Number of schools participating • Number of students • Increase in knowledge and skills • Perception of school officials, education experts, teachers, students and parents		Throughout the process monitor schools and students At the start and end of pilot activities At the beginning and end of the entire project

4.4.6

TOOL: RISK ASSESSMENT

To help you identify your project's obstacles and risks—and also develop potential ways to mitigate and reduce them as much as possible—your advocacy team should use this "Risk Management" tool.

INSTRUCTIONS

1. With your team, brainstorm possible risks. Write each risk on a sticky note or piece of paper using the corresponding color based on the risk level.

Use a yellow sticky note or pen for low-risk items.

Use an orange sticky note or pen for medium-risk items.

Use a red sticky note or pen for high-risk items.

2. It may help to group the risks into categories and deal with them together.
3. Starting with the high-risk issues, discuss how each can be avoided or dealt with.
4. Put all your information in a table similar to the one below.

Example:

Possible Risks	How to avoid	How to deal with
Being over-ambitious with our goals, objectives and expected outcomes	Plan to start small and grow as we realize some early successes. Separate the advocacy work into phases.	Monitor and review our progress regularly to keep focused on the most important activities, and adjust as needed.
Insufficient funding to complete all activities	Do a good budgeting process with help from experts or others who have previous experience on what things cost.	Cut out low priority or unnecessary activities, materials, media, and try to get free volunteer 'in kind' assistance.

Important: Know your rights and keep yourself safe! In many countries the rights to free assembly are limited in certain circumstances. Make sure you have read up your rights before engaging in more high-risk forms of advocacy such as protesting.

RISK MANAGEMENT TEMPLATE

Possible Risks	How to avoid	How to deal with

4.4.7

TOOL: PROJECT INDICATORS DEVELOPMENT TEMPLATE

INSTRUCTIONS

1. Write the identified objectives and activities in the **Advocacy Indicators Development Table.**
2. Work with your team to identify some good indicators for each campaign / project objective and activity.
3. Once you have a list of candidate indicators, use the **Indicator Assessment Table** to rate how good your indicators are. Refer to the characteristics of Good Indicators explained in the graphic below

4. Based on the outcome of the **Indicator Assessment**, discuss with your team to finalize the indicators and mark them down in the **Project Indicators Development Table**.

PROJECT INDICATORS DEVELOPMENT TABLE

Use the template below to come up with and record some indicators that could be good for measuring the effectiveness and impact of your actions/objectives.

Our Advocacy SMART Objectives: (List below): 1. 2. 3.			
What are the Indicators that we will use to measure the success of the Advocacy Campaign?	Objective Success Indicator 1. 2. 3.		
Advocacy Actions / Activities that We Have Planned (list below)	**Indicators** How do we know if our actions are successful? Brainstorm a success indicator for each action / activity below.	**Sources of Data for Our Indicators**	**Time frame for Monitoring the Activity Indicators**
Activity 1:			
Activity 2:			

Activity 3:			

INDICATOR ASSESSMENT TABLE

Look at your indicators carefully, one-by-one, and rate them based on these criteria from 0-3, where…

0 = Not good 1 = Fair 2 = Good 3 = Very good

Indicators	Valid	Precise	Relevant	Measurable	Understandable	Reliable

If any of your indicators get a very low score, consider identifying a better indicator that more accurately measures the intended outcome.

PROPOSAL DEVELOPMENT GUIDELINE

ELEMENTS OF A GOOD PROPOSAL

PROPOSAL STRUCTURE

For a proposal to be successful, some sections need to be fully completed and comprehensive. This section of the guidebook will help you to understand the most important elements of a proposal.

1. **Cover Page:** Sometimes also referred to as the title page, it is the first page that introduces the document to the reader. The title page provides the reader with basic information about the content of the document. When developing the proposal, particular attention should be given to preparing an attractive cover page, as it is the first thing that the reader will see. A nicely prepared cover page can help create interest in your proposal. The cover page should:
    - Be attractive
    - Be professional and formal
    - Provide information about the proposal
    - Not be cluttered
    - Use official fonts and color scheme
    - Use an image that relates to your project and organization

    The cover page should also capture the essence of the project and proposal, and should immediately catch the attention of the donor. Most experts suggest including the following information in the cover page:
    - Title of the project
    - Organization name and logo
    - Name of the donor
    - Complete contact details of the organization (Address, Website, Email)
    - Submission date
    - Relevant image (optional)

2. **Table of Contents:** The table of contents goes after the cover page and provides the reader with an organized list of the various sections and subsections of the proposal. This gives the reader a clear idea of the way you have organized the proposal and they can move to the sections that are most relevant to them. Things to consider while you develop the table of contents are:
    - Use a simple format
    - Lists all the sections
    - Make sure that page numbers are correct
    - The titles and headings should match with what is in the text

3. **Executive Summary:** The executive summary is considered the most valuable and important part of the proposal. Its primary purpose is to create interest about your proposal and help convince the donor to support you with funding. In simple terms, it helps you sell your project.

    Things to consider while writing the executive summary:
    - You should analyze important points relating to the main problem that your project will address. What is the solution, how is your proposal unique, and why is your organization suitable to carry out such a project?
    - It needs to address the Why, How, and What of the proposal.
    - Restrict the length to one page (approximately 300-500 words).
    - It should capture the attention of the donor and entice them to read the entire proposal.
    - Important components of an executive summary:
        - **Opener/Problem (1-2 paragraphs):** Focus on the issue, challenge and the need. Include some information that comes from academic research to demonstrate that you understand the problem.
        - **Solution (1-2 paragraphs):** State the solution that you propose to solve the problem. Mention your strategy, the possible impact, how many people will benefit from the program, how/where it will be implemented, etc.
        - **Funding Requirement (1 paragraph):** Explanation of the estimated amount required for the project.
        - **Organization and Expertise (1 paragraph):** Talk about your organization and your organization's strengths. The emphasis should be on why and how your organization is the best suited to implement the project successfully.

- Questions that the Executive Summary should address:
    - Why is the project important?
    - What is the problem that you are addressing?
    - How do you intend to resolve the problem?
    - What is the total budget and duration for the proposed project?
    - What is your expertise?
    - What is the grant amount being requested?

- Tips for writing an excellent executive summary are as follows:
    - Be concise and clear
    - Don't use jargon (specialized words) and overly technical language
    - Focus on the benefits of the project
    - Use the right tone that suits your target reader
    - Do not include too much data
    - Make it exciting
    - Don't make it too long

4. **Problem Statement:** This is a key section of the proposal as it presents the argument for why your project needs funding. It describes the issues and problems that a particular community faces and how your organization would address the given problem. The primary purpose of the problem statement is to convince the donor that your project is important and the issue that you intend to solve is real. At the same time, it should also make the donor hopeful that their support can help in addressing the problem, and that practical solutions exist to reduce the problem or issue.

   While writing this section, it is critical that you quote facts and figures as evidence of your problem. These facts can be from data that your organization has collected or can be from research articles or government reports. Along with using data to justify the project, you should also mention why your organization is suitable to carry out the project (for example, mention similar projects that you have implemented in the past). The problem statement should answer the "5 Ws": (Who, What, Where, When and Why):
   - What is the problem that you intend to solve? What is its impact?
   - What will happen if the problem remains unsolved?
   - Who are the people/communities (i.e. target group) that the problem affects?
   - When did the problem/issue become critical?
   - Where is the issue occurring?
   - Why is it important that we fix the problem now?

5. **Project Description:** This is the main narrative of your project and provides the reader with all the necessary information about the project. This section will include important elements of the proposal and will describe the project goal, objectives, methodology, impacts, etc., to the reader.

   Below is an explanation of the various components of a project description:

   5.1. **Goal:** Goal is a broad statement that sets out what you plan to do in a project. The goal essentially defines the purpose of the proposal by making it clear to the reader what problem your organization intends to address. As the goal of the proposal demonstrates to the reader your intention to solve a particular problem, it should be linked with the problem statement. The following tips will help you to frame a quality goal:
   - Avoid being vague
   - Link the goal with the problem statement
   - The goal should be consistent with your organization's mission and vision statement
   - Use simple language to write a goal
   - Choose only one goal for a proposal

   5.2. **Objective:** Once you have a logical and well-reasoned goal, you have to frame three/four objectives that would help you to achieve it. Objectives are detailed statements describing the ways through which you intend to achieve the goal. Consider the following while framing the objectives of your proposal: Objectives should also address the "5 Ws" and fulfill or consider the following:
   - Objectives should support the goal
   - Objectives should follow a logical order.
   - Be SMART objectives: Specific, Measurable, Achievable, Realistic, and Time–bound.
   - Use action verbs while drafting objectives: Use active verbs like create, identify, promote, enhance, increase, and develop etc.
   - Have 3-4 objectives: Most experts recommend keeping three to four objectives in a proposal.

5.3. **Project Activities:** These refer to the smallest identifiable and measurable pieces of work planned for successful completion of the project. Defining the activities helps project staff to understand what actions to take and at what time. Every activity is associated with a definite interim goal or objective. The project activities will describe how each of your objectives will be achieved. Key questions that this section should answer include:

- What are the specific tasks?
- Who is responsible for each task?
- What resources are needed?
- When will these activities occur and over what time period?
- Are there other organizations in your community serving a similar audience?

5.4. **Staffing and Administration:** This section talks about project management aspects. Here, you can mention the implementation staff, the implementation schedule and other related information. You can describe the people who will be hired as part of the project, along with their respective roles. Some of the points that can be considered while writing this section include:

- The number of people to be hired for the project
- The role of each person
- The qualifications expected for each role

5.5. **Project Results:** Project proposals should explain the expected results that will be achieved by the project. Project results can be divided into three types:

- **Outputs:** These are immediate results obtained after implementing an activity. E.g. Number of hand pumps installed.
- **Outcomes:** Outcomes are the mid-term results which are not observed immediately but are felt after some time. E.g. Improvement in water availability.
- **Impact:** Impact is usually a long-term result and is normally not achieved during the life cycle of the project. E.g. Reduced water stress in villages.

5.6. **Project Timeline:** The project timeline indicates when the various activities and processes will be carried out during the course of the project duration. The primary purpose of the timeline is to help the project staff to carry out the various activities in a timely and smooth manner. Some suggestions about writing the timeline are:

- Use a simple format (e.g. in table or Gantt Chart form)
- Set realistic deadlines
- Allow some flexible buffer time to get things done by the completion deadline.

5.7. **Monitoring and Evaluation:** This section discusses the proposed mechanisms and procedures for monitoring the project activities so that one can ensure that all activities occur as planned. You should have a well-defined plan to monitor your project activities and also to evaluate the success of the project. Monitoring allows the project team to keep a check on the progress, while evaluation helps the team to appraise data and improve project implementation in the future. While working on the evaluation plan, the following questions should be addressed:

- How will success be measured?
- What do you consider success to be?
- How will the result be measured?
- What methods will be used to assess results?
- Who will conduct the evaluation and when?

5.8. **Risk and Assumptions:** This section of the proposal describes the external factors that may impact the success of the project. Identifying the risks and assumptions will help you not only in developing a stronger proposal, but will also show the donor that you have a good understanding of external and internal factors. By thoroughly analyzing these, you will also be in a better position to mitigate the risks and reduce the chances of project failure. While assessing the risks and assumptions you should look at:

- Political willingness
- Resource availability
- Climatic conditions
- Accessibility
- Support of government
- Internal organization issues (e.g. experts, trainers and staff)

5.9. **Sustainability:** To sustain the impacts of any community-based project, it is essential that suitable linkages are developed with the local community, government departments and all relevant stakeholders. You should clearly spell out the sustainability measures in your project, so that the donor is convinced that the project will sustain itself even after the funding ends. While describing the sustainability section you should include references to the following:

- **Participation:** Describe how the project will ensure ownership and participation throughout the planning, implementation and monitoring and evaluation phases.
- **Support from authorities:** Explain the linkages that will be developed with local authorities and government departments that will help strengthen and sustain the project.
- **Sustainability of the project:** Describe the measures that will be taken to help ensure that the project activities will continue —or that the project will have a lasting impact—after the funding ends.

5.10. **Communication:** An important aspect of the project is the communication plan that will be used to disseminate the project results and key project learnings. Your project proposal should mention how you would ensure that the project results are shared with relevant stakeholders and target groups. Here you can include references to the following:

- Use of social media
- Type of reports that will be published
- Field manuals and training booklets
- Workshops for sharing project results
- Best practices
- Case studies

6. **Budget:** Often, the most difficult part of a proposal is budgeting. While developing the budget, get one of your finance team members and project team members to sit together and work on a tentative budget. Give this team a brief overview of what you want to do in the project so that they can work out the costs. Your budget should be divided into categories such as salaries, expenses and fringe benefits, travel, supplies, and equipment.

7. **Organization Profile:** Your organization profile is an important document that presents information about the organization, such as: its background; where it has come from; its future plans and intended trajectory; who are the people running and leading it; and who are the people impacted by its action. A profile provides important information about your organization to the donor and should include the following:
    - Organization name
    - Established date
    - Registration details
    - Contact details
    - Aim and objectives
    - History
    - Track record of experience
    - Organization structure
    - Awards
    - Certifications

8. **Annexure:** The Annexure is the additional information that you wish to submit to the donor. All additional documents and reports should be submitted as appendices and should not be part of the main body of the proposal. Points to consider when preparing the annexure are as follows:
    - All documents should be properly numbered
    - Only the most relevant documents should be submitted
    - The following documents can be annexed:
        - CVs of the project team
        - Evidence of nonprofit status of your organization
        - Research reports/data to support your problem statement
        - Relevant experience of the organization

SAMPLE PROPOSAL TEMPLATES

There are several possible templates that can be used for preparing a proposal. The template you choose will depend on the following:

- ***Donor Requirement:*** This is the most important factor that should determine the template you choose. A donor usually provides a template for submitting your application. In case they have not, you can go through the application procedure to understand the donor's expectations and select a template accordingly.
- ***Technicality of the Proposal:*** If the proposal is too technical you should opt for a template that has several sections and subsections.
- ***Funding Volume:*** When applying for a large grant, the project template you select should be comprehensive and cover all the details of the project. If the grant size is small go for a simple and short proposal template.
- ***Time for Preparing the Proposal:*** When preparing a proposal with a tight deadline, select a simple template; if you have more time then go for a detailed proposal template.

No matter which project template you choose, you will have to include key elements such as the Executive Summary, Project Goals and Objectives, Activities and Budget.

Below we provide three proposal templates that can be used for writing quality proposals.

- Detailed Proposal Template
- Intermediate Proposal Template
- Short Proposal Template

1. **Detailed Proposal Template:** Such a proposal will be approximately 25-30 pages long and cover all the elements we have discussed in the section above. This kind of template is generally selected when preparing large projects.

Detailed Proposal Template

1. Cover Page
2. Table of Contents
3. Executive Summary
4. Introduction
5. Problem Statement
    - 5.1 Problem Analysis
    - 5.2 Beneficiary Profile
    - 5.3 Resource Assessment
6. Project Description
    - 6.1 Goal
    - 6.2 Objectives
    - 6.3 Project Strategy
        - 6.3.1 Key Approaches
        - 6.3.2 Activities
    - 6.4 Project Results
        - 6.4.1 Outputs
        - 6.4.2 Outcomes
        - 6.4.3 Impact
    - 6.5 Project Management
    - 6.6 Timeline
    - 6.7 Monitoring and Evaluation
    - 6.8 Risks and Assumptions
    - 6.9 Sustainability
    - 6.10 Communication
7. Budget
    - 7.1 Budget Narrative
    - 7.2 Detailed Budget
    - 7.3 Budget Summary
8. Organization Profile
9. Annexure

2. **Intermediate Proposal Template:** Such a proposal will have a length of approximately 15 to 20 pages. This kind of template will also include all the key elements of a proposal, but will not be as detailed as the detailed template.

Intermediate Proposal Template

1. Cover Page
2. Table of Contents
3. Executive Summary
4. Problem Statement
5. Project Description
    - 5.1 Goal
    - 5.2 Objectives
    - 5.3 Project Activities
    - 5.4 Project Results
    - 5.5 Timeline
    - 5.6 Monitoring and Evaluation
    - 5.7 Risks and Assumptions
    - 5.8 Sustainability
    - 5.9 Project Management
6. Budget
    - 6.1 Budget Narrative
    - 6.2 Detailed Budget
    - 6.3 Budget Summary
7. Organization Profile
8. Annex

3. **Short Proposal Template:** This template can be used when applying for a small grant—the length of the proposal can range between 8 and 12 pages. This template only includes a few important elements of the proposal.

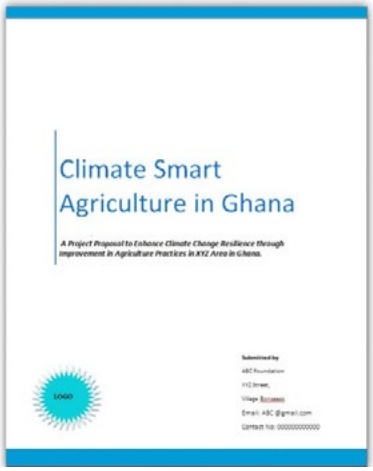
Short Proposal Template

1. Cover Page
2. Table of Contents
3. Problem Statement
4. Project Description
    - 4.1 Goal
    - 4.2 Objectives
    - 4.3 Project Activities
    - 4.4 Project Results
5. Budget
    - 5.1 Detailed Budget
6. Organization Profile
7. Annex

EXAMPLE PROPOSAL

Here is a sample proposal using the intermediate proposal template. The sample proposal has all the elements that you need to include in the proposal with a small description of each section and sub section. Please note that this is just a sample and the various sections do not have the complete description. It has been drafted to give you an idea of how each section is to be written. When writing the proposal for your organization, you will have to elaborate in each and every section so that it provides sufficient and adequate information to the donor.

1. Cover Page



2. Table of Contents

3. Executive Summary

Climate change poses a serious threat to people worldwide and impacts their livelihoods to different degrees. Studies reveal that the most vulnerable people belong to developing countries, and in particular rural communities.

The northern regions of Ghana are the poorest part of the country, with a high proportion of the population living in poverty. Most of the people are dependent on farming and related sectors as the country offers limited alternative income options. This makes the country highly susceptible to even a slight change in weather patterns, making the people severely vulnerable to climate change.

To address the issue of food insecurity, it is important that climate smart farming techniques are promoted and adopted. This would help make agriculture more resilient to climate change and also ensure food security. Climate smart agriculture is still in its nascent stage and the

project will open new gateways for the development of viable and sustainable agronomic practices in developing countries. Through this project, ClimateSmart Foundation aims to initiate a multi-stakeholder dialogue to develop a community-based adaptation strategy for the communities of Bonitot village. The project is in line with the existing issues being faced by the local people of the area and would focus efforts towards the following:

- Increasing awareness on linkages between climate change and food security.
- Improving food security through adoption of climate smart agriculture practices.
- Enhance adaptation and preparedness of the vulnerable communities of the area.

4. Problem Statement

Climate Change (CC) poses a severe threat to the underprivileged and the rural masses, by reducing their access to food, energy and water. Communities that rely heavily on natural resources are the worst hit and often fall victim even to a slight change in weather. The huge attention being given to CC issues is evident from the fact that several international and national agreements have been signed to reduce GHG emissions. Several multilateral and bilateral agencies are also routing funds for CC mitigation and adaptation.

Along with global mitigation and adaptation strategies to cope with climate change, there is also a need to preserve traditional practices. Farmers worldwide are facing tremendous pressure to meet the demand of growing populations and food consumption. CC further adds to this existing pressure. Studies reveal that CC will reduce food productivity by affecting all four dimensions of food security: food availability, access to food, stability of food supplies, and food utilization. There is a need to adapt to changing climatic conditions to reduce the vulnerability of rural communities to climate change. This would be possible by introduction of fundamental changes in agricultural practices. Integration of traditional knowledge with innovations in agriculture also has a huge potential to enhance the adaptive capacity of the rural communities. International organizations and research institutes worldwide have developed an approach that tackles both the issues of climate change and food insecurity.

The UN Food and Agriculture Organization (FAO) defines climate-smart agriculture as an approach to guide actions to transform and reorient agricultural systems to effectively and sustainably support development and food security under a changing climate. Climate-Smart Agriculture (CSA) promotes production systems that sustainably increases productivity, resilience (adaptation), reduces/removes GHGs (mitigation), and enhances achievement of national food security and development goals. Rural communities in Ghana are one of the most vulnerable to climate change impacts. Rising temperatures, erratic rainfall patterns and the increased frequency of natural disasters create challenges for the agrarian society of many West African Countries.

The Ghanaian economy is dominated by agriculture as more than 25% of the country's GDP derives from this sector. CC will therefore greatly impact existing farming practices and by extension the livelihoods of those dependent on it. The northern regions of Ghana are the poorest part of the country, with a high proportion of the population living in poverty.

Climate projections available for the northern regions of Ghana suggest the following changes in climatic conditions:

- Mean daily temperatures will increase by 2.5-3.2°C by 2100.
- Annual rainfall totals will decrease by up to 27% by the year 2100, causing increasing droughts.
- Increasing desertification.
- Decreasing river flows and recharge rates.
- Potential for increased floods as a result of increasingly erratic rainfall

5. Project Description

The project will provide scientific solutions to extend the adaptive capacities of rural peoples and farmers. It will provide a set of agronomic practices to suit the agro-ecology of the area and improve food security and increase productivity. The proposed project will be implemented over a period of two years. It will be implemented in Bonitot village, Amansie-West District of the Ashanti Region of Ghana. The area is characterized by hot, humid tropical climate conditions. 80% of the population practices agriculture, and the farmers mainly rely on small scale cash crop farming. Most farmers have small plots of land and use traditional farming practices. The project will benefit the farming communities of Bonitot village through an awareness campaign and will directly benefit the 500 farmers who will be trained on aspects of climate smart agriculture.

5.1 Goal

The overall goal of the proposed project is to increase food security through adoption of climate smart agriculture practices.

5. 2 Objectives

1. To sensitize the farming community in Bonitot village about the linkages between food security and CC.
2. To promote adoption of climate smart farming practices suitable for the agro- ecological region of Bonitot through capacity building and training of 500 farmers.
3. Establish a resource center to serve as an information hub and library for the farmers to get latest information on climate change.

5.3 Project Activities

a) **Mapping and Situation Analysis:** The purpose of this activity is to understand the current situation in the Bonitot district. This would include mapping of the various socioeconomic, political, and environmental aspects of the area.

b) **Development of Awareness Tools to Suit the Local Communities:** Audiovisual material will be developed to sensitize local communities on CC risks and threats. Leaflets, booklets and flashcards will be developed in vernacular to create greater impact. CC documentaries made by international agencies will also be translated.

c) **Awareness Campaign:** Awareness generation is a key activity for achieving project success. Farmers will adopt climate smart agriculture practices only after they understand the implications of CC on food security. Follow-up sub-activities will be undertaken to sensitize the communities.

- **Community Meetings:** Project team will initiate community meetings to discuss the project and also share information on climate change risks and food security threats.
- **Distribution of Leaflets and Pamphlets:** Communication material developed in the vernacular language will be distributed. Use of easy language will help in developing a better understanding of the issues.
- **Documentary Film Screening:** A documentary film will be screened in a community meeting hall, to showcase the threats of CC.
- **Mobile Information Centre:** A mobile van will be used for dissemination of information. This will serve as an information center that can be used by people who are not able to attend the awareness camp.

d) **Promotion of Area-Specific Agricultural Activities:** Area-specific technologies that are aligned with agro-ecological principles will be promoted in the villages. Adoption of such technologies will help in improving the biological, social and economic systems resilient to climate change.

e) **Trainings Will Be Focused on the Following Aspects of Climate Smart Agriculture:**

- Crop and nutrition management
- Conservation agriculture
- Livestock management
- Agro forestry
- Aquaculture
- Diversified energy systems
- Soil and water management
- Risk insurance
- Weather forecasting
- Technological interventions

Training sessions will also be given on some traditional agricultural practices such as mulching, intercropping and manure production. All the training sessions will be given in local vernacular so as to facilitate easy learning and understanding amongst the farmers.

f) **Establishment of Resource Center and Weather Forecasting Center:** The resource center will serve as an information hub for farming-related activities. In addition to the educational material, quality seeds, cropping material, organic manure, pesticides, insecticides, etc., will be made available to the farmers at lower prices.

5.4 Project Results

- Increased awareness among the community on linkages between CC and food security.
- Enhanced learning of various aspects of climate smart agriculture.
- 500 farmers adopt the climate resilient practices and supplement their income.
- Resource center established in the village becomes an information hub for neighboring villages, where farmers can gain knowledge about various new technologies and agriculture practices.

5.5 Project Timeline

No.	Activities	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
1	Mapping and Situation Analysis								
2	Development of Awareness Tools to Suit the Local Communities								
3	Awareness Campaign								
4	Promotion of Area-Specific Agricultural Activities								
5	Capacity Building								
6	Reporting and Documentation								
7	Monitoring and Evaluation								

5.6 Monitoring and Evaluation

The project will undertake monitoring and evaluation (M&E) at all levels as per the (M&E) plan. Monitoring will be carried out right from the project inception, so as to ensure that processes and results are documented regularly. This will in turn allow steering decisions and for modifying the project processes to meet the deliverables in a timely manner. Data gathered during monitoring will help in evaluating the project progress at the end. Quarterly activity reports will be submitted to the donor agency, which will help in project evaluation.

5.7 Risks and Assumptions

- Lack of involvement from the stakeholders.
- Poor participation of farmers in training workshops and demonstrations.
- Land is unavailable for establishing the resource center.

5.8 Sustainability

The project will ensure financial, institutional and environmental sustainability. To ensure long term impact and sustainability, the following strategies will be followed:

- Training and capacity building of the farmers will help in meeting the project objectives. The trained farmers will help in transferring the knowledge to their peers.
- As the material will be in the local language it will be easy for the participants to understand and share the knowledge.
- Establishment of the resource center in the area will help in the long run. After the project is completed, trained farmers will take charge of it and our NGO will support them with updating information.

5.9 Project Management

The project will be implemented by a team of five staff members and will comprise the following:

No.	Position	Responsibility
1	Project Director (1)	Responsible for the overall administration and management of the project. He/she will develop proposals for future funding and manage other staff.
2	Social Worker (1)	Responsible for mobilization and conducting initial village-level meetings and orientation sessions.
3	Trainers (3)	Two agriculture experts for training on various aspects of CSA will be hired for a period of two years. They will be responsible for initially imparting training and will them be responsible for managing the resource center.

6. Project Budget

Activity	Description	Total Cost	Requested Fund
Human Resource	1 Project Coordinator	1500 USD/Year	3500 USD
	2 Project Assistant	2000 USD/Year	
Activity	Awareness Camp	1000 USD	5000 USD
	Training Workshop	3000 USD	
	Study Tour	1000 USD	
Travel	Travel, accommodation, and per diem expenses	1500 USD	1500 USD
Total			**10,000 USD**

7. Organization Profile

ClimateSmart is a national NGO engaged in developing programs and material to increase awareness about the environment and sustainable development in Ghana. The organization was established in 2000 and has since worked towards creating awareness about the environment and conservation. ClimateSmart's primary objective is to improve public awareness and understanding of the environment, so as to promote nature conservation and sustainable development.

8. Annexure

1. Certification of Registration
2. Tax Exemption Certificate
3. Climate Vulnerability Report of Ghana
4. CV of Project Director

Good luck with your proposal writing!

5.5.1

BUILDING YOUR VOLUNTEER ADVOCACY TEAM

When building your volunteer advocacy team, there are several key factors to consider in order to ensure effectiveness and impact.

- Firstly, diversity in skills and expertise are crucial; team members should bring a range of talents including policy analysis, community organizing, media relations, and scientific knowledge, allowing for a comprehensive approach to advocacy.
- Secondly, passion and commitment to environmental issues are essential for sustained motivation and resilience in the face of challenges.
- Thirdly, the ability to work collaboratively within a team and with external stakeholders, including communities, policymakers, and partners. This is vital for leveraging collective strengths and achieving common goals.
- Additionally, consider the importance of leadership qualities among team members to inspire and guide the team towards achieving its objectives.
- Finally, understanding the social, economic, and political context surrounding the environmental issue is necessary for crafting effective advocacy strategies and messages. A well-rounded team with a shared vision and diverse capabilities can significantly enhance the impact of environmental advocacy efforts.

Where to Start?

When building a volunteer youth advocacy team, start by identifying passionate and motivated young individuals with a shared interest in your issue. Places to look for recruiting your advocacy team may include the following:

- Start with your own circle of friends and your networks, including:
    - Your close friends and their friends
    - Students currently studying in your faculty
    - Other faculties of your university
    - Students from other universities
    - Youth associations and groups interested in issues similar to yours

Brainstorm who to invite to join your team.

Use the space below to do a quick brainstorm of who you can reach out to when recruiting your advocacy team members.

Write your answers here

How to Best Announce Your Recruitment Efforts

Youth groups trying to build their volunteer advocacy team should announce their recruitment efforts through a strategic mix of channels in order to maximize outreach and engagement. It is very important that you develop clear and compelling messages that highlight the purpose of the advocacy, the roles available, and the impact potential recruits can make.

Utilizing social media platforms, school and community bulletin boards, and local youth organizations or clubs can help reach a wide audience.

Additionally, partnering with educational institutions and leveraging word-of-mouth through existing network members can attract passionate individuals. The announcement should emphasize the benefits of joining the team, such as skill development, networking opportunities, and the chance to make a meaningful difference on issues important to the youth community.

In the context of your own country and local situation, brainstorm ways in which you can reach out to other youth, as well as adult and professional advisors who could join your team.

Write your answers here

Recruiting Advisors and Mentors to Your Youth Advocacy Team

Any youth advocacy group or campaign should aim to recruit adult advisors and mentors who can bring a mix of expertise, experience, and passion for environmental advocacy to the team. This includes professionals with backgrounds in environmental science, policy, law, and education, who can provide knowledge-based guidance and strategic advice.

Additionally, experienced activists or community organizers can offer insights into effective advocacy techniques and campaign strategies. It's also beneficial to include mentors skilled in media relations and digital communication to help amplify the group's message.

The ideal advisors and mentors should share a commitment to environmental causes and possess the ability to inspire and empower young advocates, providing both practical skills training and moral support to navigate the challenges of advocacy work. Their diverse expertise and experiences can significantly enhance the group's capacity for making impactful changes.

Think about the kind of advisors, coaches and mentors that you feel would give your youth advocacy team the right kind of professional advice to increase the effectiveness of your team's knowledge, skills and overall capacity, and ability to develop a successful advocacy campaign.

Brainstorm the kinds of outside advisors, experts and mentors that you think would strengthen your team and its ability to influence policy, public awareness and behavior.

If you have specific people in mind, list them down as well.

Write your answers here

Qualifications of Youth Members in Your Advocacy Team

For a strong environmental youth advocacy campaign team, new youth volunteers should possess a genuine passion for environmental issues and a willingness to learn and engage in advocacy work. Specific qualifications may vary depending on the campaign's goals. Desirable characteristics include strong communication skills, the ability to work collaboratively in a team, and the ability to initiate —as well as participate—in campaign activities. Some background knowledge of environmental science, policy, or related fields can be beneficial but not mandatory, as diverse perspectives and skills can enrich the campaign. Additionally, commitment to the campaign's mission and values, alongside the readiness to dedicate time and effort to its activities, is crucial for effective participation and contribution to the team's success.

Brainstorm the qualifications that you expect youth applicants to have when applying to your advocacy campaign team.

These qualifications should be included in both your recruitment announcement and your selection process.

Write your answers here

5.5.2

PLANNING YOUR ADVOCACY EVENT

Events and activities aimed at advocacy efforts can take many forms. Be sure to use your creativity and have fun when planning and carrying out an event or an activity. Make sure it is designed to achieve your aims and not stray too far from your main purpose.

Use the following questions to help you think through what you want to achieve with the event or activity, in the context of your overall environmental issue advocacy campaign.

1. What is the topic and/or theme that we want to organize the event or activity around?

Describe the topic/issue in some detail.

Write here

2. Who is the audience that we would be targeting with the event or activity?

Describe the target audience in terms of who they are (e.g. students, youth, teachers, working adults, business people, civil society organizations, general public, etc.), their interests and general relationship to the issues you want to address.

Write here

3. **What is the purpose of the event or activity that we are organizing ? What do we hope to achieve? For example:**
    - Raising awareness or educating people more deeply about the issue(s)
    - Taking visible action addressing the issue
    - Sharing and exchanging ideas, perspectives, experiences, tools, etc.
    - Gathering support from identified target group(s)
    - Raising funds

4. **Clearly list the objectives and outcomes you would like to see. What would we like participants / attendees to do during the event?**

Objectives (What do you want the attendees to do during the event?)	**Outcomes** (What do you want to have as a result of this event?)

5. Brainstorm some event or activity ideas and rate their capacity to help achieve our stated purpose, objectives, outcomes and outputs.

(Examples: Exhibition or booth, public meeting, petition signing, march or rally, art/music, theater or other performance, conference, symposium, workshop, field trip, etc.)

No.	Event or Activity	Pros	Cons	Capacity to help (1-5) 1 = very low 5 = very high

6. Final event or activity decision

Write here

7. What type of venue or location is needed to organize this event or activity?

Describe the type of venue and/or location that you believe is appropriate to successfully carry out this event or activity.

Write here

8. What type of support do we need to successfully organize and conduct this event or activity?

Identify and describe the type of support you think you will need to carry out this event or activity, as well as ideas about where to find it / who to ask. (Examples: knowledge or expertise, equipment, decorations, volunteers, first aid, funding, food & drink, giveaways, etc.

Type of support we need	Where to find it / Who to ask

9. Who might we partner with in organizing and conducting this event or activity?

Brainstorm some potential partners to cooperate and/or collaborate with who can bring value to your event / activity, and identify what value they could contribute (e.g. expertise in something, more participants from their network, high media and/or public visibility to your event, in-kind equipment or other support, etc.)

Organization / Group / Individual Name	Added value they will bring

10. Optimal Scheduling: What is the best date / time for our event or activity?

Discuss and identify the time of year, day of the week, and time of day for holding your event or activity so that you will get maximum participation and exposure. Briefly explain your rationale or reason.

Write here

11. What are our next steps?

Brainstorm what you think your next steps should be to push your event or activity forward to the end.

Write here

5.5.3

LEARNING WHAT OTHERS ARE DOING THROUGH ONLINE ADVOCACY

For a new youth environmental advocacy group, learning about the activities of other similar groups, particularly their online advocacy campaigns, is important for several reasons:

- Firstly, it offers valuable insights into effective strategies and tactics that resonate with audiences and can be adapted and applied to its own efforts.
- Secondly, understanding the successes and challenges faced by other groups helps in avoiding common problems. It can also enable the use of best practices to your advantage, thereby increasing the chances of making a meaningful impact.
- Thirdly, it provides opportunities for collaboration and networking, as groups with similar goals can join forces to amplify their message and reach a wider audience.
- Finally, studying the past and present activity of established campaigns can inspire innovation and creativity. It can help new groups to explore new ways of carrying out advocacy in a way that engages and mobilizes supporters effectively.

Overall, learning from the experiences of others enriches a group's campaign strategy, builds a sense of community among environmental advocates, and enhances the overall effectiveness of their advocacy efforts.

Below are a series of questions to help guide you and your advocacy team in exploring the Internet. These questions will help you identify what others—in other countries as well as your own—are doing, and determine what works or doesn't work in relation to environmental issue advocacy.

1. **What are some online platforms/spaces that are doing environmental advocacy and running campaigns, particularly targeting youth? And what can we learn about our issues from them?**

   Spend about 30-45 minutes searching online about what others are doing in terms of raising awareness and engaging youth and young adults on environmental issues. Your search can be about issues that your group is focused on, as well as other environmental issues.

   Use the space below to document the hashtags (#) you found that are most helpful, as well as any other relevant information you discovered regarding your issue, planned activities, and anything else.

Write here

2. **From your online research of interesting youth advocacy groups and platforms, copy and paste some digital campaigns that you admire:**

   Insert links in the spaces below for reference.

3. **Use the questions below to reflect on the online campaigns that you found:**

What key features do we like in the online campaigns we found?
What do we feel are the benefits or advantages of the formats, styles and structures used in these online advocacy platforms, in relation to their intended audience?
What do we not like so much about the way the sites communicate their messages and try to engage the audience? What wouldn't work for us? (Explain why).

Are there any lessons learned that we can apply to our issue and campaign?

What changes would we need to make for something similar to work for our effort?

What are some actions that our team could adopt into our overall social media strategy to make our advocacy campaign posts more effective in engaging and impacting our target audience?

5.5.4

PLANNING FOR YOUR OWN DIGITAL ADVOCACY CAMPAIGN

Part 1: Pre-Planning: Digital Advocacy Campaign Exercise

Instructions: With your advocacy team, conduct the following exercise to get your team ready to develop your own advocacy campaign.

- Review the list of questions below with your core advocacy team.
- Collaboratively discuss and answer each question to the best of your ability.
- Use this brainstorming session to generate initial ideas for taking your campaign online.
- These ideas will be invaluable for developing your Advocacy Event Activity Plan later.

1. What are some initial ideas that we have for engaging our target audience on social media?

Write your answers here

2. Some digital campaigns we admire are:

Insert links in the spaces below for reference.

3. **Use the questions below to reflect on the online campaigns that you like:**

What are the key features of the campaigns that you like?
What do you feel are the benefits or advantages of this structure for the viewer, as well as their approach in regards to advocating for their issue message?
What do you not necessarily like about the site and how they are communicating their message and engaging the viewer?
Are there any lessons learned for my/our issue or campaign?
Are there any lessons learned for my/our issue or campaign?

4. **Based on the answers that you provided in the previous questions, develop some ideas regarding creating your own digital advocacy campaign:**

Write your answers here

Part 2: Planning - Digital Advocacy Campaign Planning Template

Use the steps outlined below to help you and your team develop your digital advocacy campaign.

Step 1: Defining the Campaign

What is the primary goal of the campaign?

Who is the target audience?

What specific environmental issue are we addressing?

What message do we want to convey?

Step 2: Knowing Your Audience

What are the key demographics and interests of our target audience?

Which social media platforms and digital channels does our audience use most?

How can we make our message relatable and engaging for our audience?

Step 3: Developing Content Strategy

What type of content will we create (e.g., articles, videos, infographics)?
How often will we post content, what is the best time for posting, and on which platforms?
Who will create and manage the content?

Step 4: Utilizing the Online Social Media Tools

Which digital tools and technologies will we use to execute the campaign (e.g. Hootsuite, Buffer, Mailchimp) ?
Will we use any hashtags, keywords, or slogans to unify the campaign?

Step 5: Looking for Partnerships and Collaborations

Are there any influencers, organizations, or stakeholders we can partner with?
How can we leverage these partnerships to amplify our reach?

Step 6: Managing Risk

What potential challenges or risks might we face during the campaign?
How will we address negative feedback or misinformation?

Step 7: Monitoring and Evaluation

How will we measure the success of the campaign? What are the metrics that you will use to measure your campaign performance (e.g. engagement metrics, website traffic, viewing clicks, petition signatures)?
What tools will we use to track and analyze the campaign's performance?
How often will we review and adjust our strategy based on the data?

Step 8: Sustaining and moving forward with your social media campaign

How will we sustain engagement and momentum after the initial campaign?
Based on the analytics, what things from your current media strategy and approach would you consider revising and/or changing / adding?
What are our plans for follow-up actions or future campaigns?

5.5.5

TOOL: PRESS RELEASE TEMPLATE

Press Release

Your name or the name of the campaign
Date: *Date of the event or activity*
Embargo: *The time and date that the information can be made public*
Headline: *Keep it short and sweet*
Paragraphs: *The first paragraph is crucial as it is the "hook" for the reader (especially a journalist) to want to write about this event or activity. Paragraphs 2 and 3 are used in order to expand on any newsworthy points. The fourth paragraph should then summarize the Who, What, Where, When, Why and How. Use quotes from respected people at the end, in order to communicate key points of the event or activity's purpose to the reader.*

Add any additional info about your organization or group and links that are important

Contact Information: *Your contact information goes here—provide details of who to contact for more information*

5.5.6

UNDERSTANDING & ENGAGING WITH POLICY

Understanding the policies that affect your issue is fundamental to your education as an advocate. In fact, dreaming up new policies and replacing outdated ones could be one of your key aims. By improving your understanding of the policies that impact your issue, you will improve your advocacy efforts. Remember, a policy is a set of plans or methods that guide decisions for achieving a course of action.

Instructions:

Go through the following steps to identify the policy / policies impacting the issue that you care about. These instructions will also help you analyze and understand the best ways your advocacy efforts can be applied, in order to amend existing policies—or to influence new ones—that will support your cause.

Which policy / policies have obvious (direct) and not so obvious (indirect) implications and impacts on the issues and problems that you are working to address?

Step 1: Identify the policy or policies that directly impact the issue or problem you are addressing.

Use the table below to list the policy document name, and the relevant section and article that relate to your issue. Policies can be found through online research, your university handbook, or legislative documents. Utilize the document search function to find keywords that help identify the key sections and articles related to your issue.

Policy Document Name	Policy Section / Article & Page # (copy the section text as necessary)	Online / offline location (where to find the document)

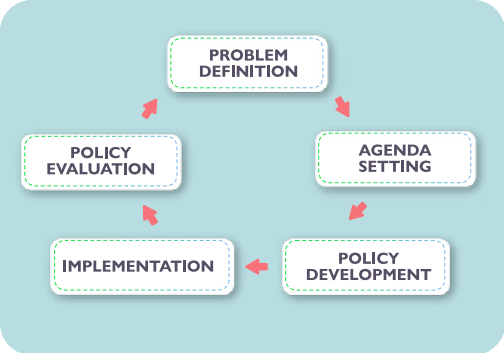
What new policy content and language would we like to change?

Step 2: Identify how you would change the existing policy to better support the goals and outcomes you are seeking for your issue. Start by considering a specific policy shift or change you would like to see. Based on the policy documents and the sections or articles identified in Step 1, draft new language for the sections you'd like to change to address your issue. Use the table below to organize your thoughts.

Ask yourself these questions to help you draft the new policy language:

- How effective is the existing policy?
- What is missing from your policy research? What do you need to research and find out?
- Is there any similar policy somewhere else i.e. from another country or another organization that we can compare to and learn from.

Policy Document Name	Policy Section / Article Text	Ideas for improving existing text or adding new text



What do you need to do to influence the policy development or policy revision process?

As a youth advocacy team, the most effective place to intervene and make changes in a policy is during the policy evaluation and problem definition stages. To influence the policy, ask yourself the following questions:

- Who is in charge of the policy development process and who influences the policy makers?
- What is motivating policy development at the level you are targeting (national, provincial, district, community, organization, etc.)?
- Where in the policy development process can you have the most impact and what do you need to do to influence the process?

Step 3: Map out the policy development process you want to influence. Brainstorm with your team to identify actions you and your group can take now or in the near future that would have a chance to influence these policies directly related to the issue and problem you want to address.

Policy Document Name	**Policy cycle stage to intervene in** (i.e. policy evaluation stage, problem definition stage, etc.)	**What do you need to do to influence the policy development or policy revision process?**

5.5.7

DEVELOPING YOUR ADVOCACY PITCH

An advocacy pitch is a concise and persuasive presentation designed to gain support, influence opinion, or prompt action on a specific issue or cause. It highlights the importance of the issue, the desired change, and how the audience can contribute to making that change happen.

How do you write an advocacy pitch?

Follow these 6 steps to create a concise, strong advocacy message for any audience.

1. Open with a statement that engages your audience.
2. Present the problem.
3. Provide facts and data about the problem.
4. Share a story or give an example of the problem.
5. Connect the issue to the audience's values, concerns, or self-interest.
6. Make your request (the "ask").

1. Develop your opening statement that engages your audience.

Make a statement that gets your audience's attention right away, perhaps by using a dramatic fact. This is your lead-in and should be only a sentence or two.

Example: "Did you know that every minute, the amount of sunlight that strikes the Earth could meet the world's energy needs for an entire year? This fact underscores the untapped potential of renewable energy, which we feel is crucial for the sustainable future of our own country."

Write here

2. Present the problem.

Describe the problem, who it affects, and its impact.

Example: "Climate change is starting to hit the poor and marginalized rural communities in our country the hardest, wrecking their crops, homes, and lives with extreme weather. And yet, they still do not have electricity in their villages, and certainly are not contributing to climate change themselves."

Write here

3. Provide facts and data about the problem.

Data is important to demonstrate that a problem exists and to support your position. Look for facts that are relevant to your audience.

Example: "According to a recent UNDP climate-related disaster report, Southeast Asia has experienced a significant rise in extreme weather events like typhoons and floods. These destroy homes and farmland with increasing frequency and severity, in particular affecting rural areas where people depend on agriculture for their livelihoods."

Write here

4. Share a story or give an example of the problem.

An example or story puts a human face on the issue and makes it real and more compelling. Again, make sure the example is relevant to your audience—for instance, it could be the experience of a family losing their home to a landslide caused by extreme rains in the same district as your audience.

Example: "In our own district, the Sok family lost their home to a devastating landslide caused by extreme rains last year. They have since struggled to find stable shelter and rebuild their lives, facing uncertainty and hardship every day."

Write here

5. Connect the issue to the audience's values, concerns, or self-interest.

Show your audience how this issue fits with what they care about, want or need. Learn what you can about the person. For example, is the person you are meeting an opponent of dam building, or a champion of social issues?

Example: "We understand your commitment to safeguarding our community and promoting sustainable development. Our focus on renewable energy directly aligns with your goals of reducing environmental risks and fostering resilience in vulnerable areas."

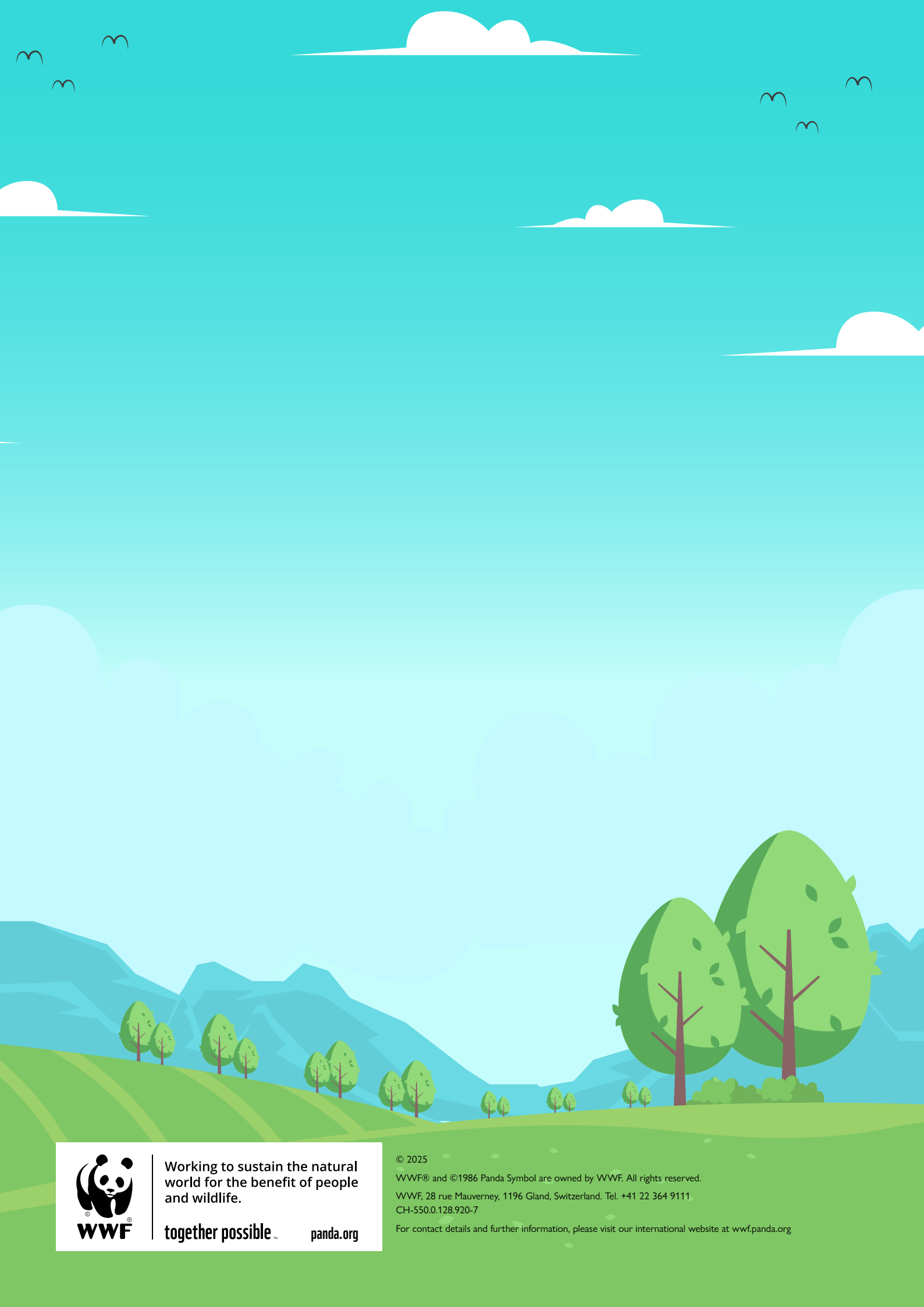
Write here

6. Make your request (the "ask").

Clearly state what you want the person to do.

Example: "We urge you to support and implement policies that prioritize the transition to renewable energy sources, ensuring funding and resources are directed towards sustainable projects that benefit both the environment and marginalized communities."

Write here



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WWF, 28 rue Mauverney, 1196 Gland, Switzerland. Tel. +41 22 364 9111

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