U MUNT: WATER SIMULATION GAME

U munt is the word for water in Temne, one of Sierra Leone’s languages.

OBJECTIVE //

• Learn about water scarcity in the Global South and the threat of privatization
• Develop ideas and take action in response to new information

TIME // 60-90 minutes

GROUP SIZE // 10-30

MATERIALS //

• Water jug
• Envelopes
• Photocopied role descriptions (Appendix II: one for every six participants)
• Photocopied family descriptions (Appendix III: one description for every six participants)
• 25 tokens for every six participants (Appendix IV)
• Cards printed and cut out (Appendix V)
• Flipchart and markers

PREPARATION //

• Draw on a flipchart a map of the community showing the three regions of Watopia, Flowdia, and Desertia. (See map template below, Appendix I.)
• Assign areas in the room for each community. Watopia families are closest to the well and Desertia families are furthest from the well. You may wish to represent the danger of assault that Flowdia and Desertia children and women encounter when walking long distances to gather the family’s water.
• Photocopy family role descriptions. You’ll need one description for each group of 6 people (maximum) and an equal number of families in each region.
• Photocopy and cut out a set of role descriptions and 25 tokens for each family.
• Prepare an envelope for each group containing a family description, one set of role descriptions, and 25 tokens. Indicate on the envelope in which region the family lives.
• In addition to a facilitator, you will need one “banker” and one “well monitor” for each 6 families, as well as an “events monitor” and a “radio announcer.” The facilitator can play the roles of events monitor and radio announcer too.
• Photocopy the cards in Appendix V: Deck 1, Deck 2, and RISK Cards. Keeping them separate, mix each deck well. Set up a table for events monitor and Deck 1 and 2.
1. Divide participants into groups of 4-6. Each group represents a family living in Sierra Leone.

2. Read: This simulation game will give some sense of what life is like when one’s access to clean water is limited and under threat. In this game, each of your groups represents a family living in Sierra Leone. The country experiences periodic droughts and flooding which have increased due to climate change. It is a country with a history of civil war, human rights abuses and disparity between rich and poor.

   You can see from the map of the region where you live that there are three (fictional) communities: Watopia, Flowdia, and Desertia. A river runs through this region. Watopia is on the north side of the river. This is the most fertile land since it is a river valley. Flowdia is located several kilometres south of the river. Desertia is far from the river in a mountainous and dry area. Most of the land in Desertia is owned by an absentee landlord who has decided not to farm here because of the poor soil. Many poor people have built their homes here. Each day they worry that the landlord may come and evict them. Separating Flowdia from Desertia is abandoned land.

   Women and children are the main water gatherers in Sierra Leone, as elsewhere in Africa. 14 million women and 3 million children in sub-Saharan Africa gather water every day. They are vulnerable to assault when walking long distances. Water gathering also interferes with children’s ability to attend school.

   Recently, the government completed construction on a public well for your community. It is just north of the river, near the families of Watopia.

   - Create a “well” in the room with a water jug – a place for the RISK cards and well monitor.

   - Draw the following table on flipchart; the number of rows should equal the number of families:

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>Family Name</th>
<th># of tokens after Round 1</th>
<th># of tokens after Round 2</th>
<th># of tokens after Round 3</th>
<th># of tokens after Round 4</th>
<th># of tokens after Round 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watopia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desertia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flowdia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. Give each group one of the prepared envelopes. Ask each family to read their family description to find out where they live, and then develop a more detailed description of their family. Write the following on a flipchart for each family to decide and then share with the larger group.

- family name
- first names
- ages
- hobbies

PHASE 2 – ACTION

1. Explain the following:

- The game lasts five rounds
- In each round, your family must complete three tasks:
  2. Pick an event card: event pickers take turns, pick card and report back.
  3. Record what happened: recorder notes event that happened and number of tokens.
- Get water: water carriers take turns.
- The cost of water is based on where you live:
  Watopia → one token
  Flowdia → two tokens
  Desertia → four tokens for the longer, safer route; two tokens for a lucky pass through the shorter risky route, and six tokens for an unlucky pass through the shorter risky route
- Each family needs a recorder, a treasurer, two water carriers, and two participants to choose events.
- Each family begins with 25 tokens.
- The goal of the game is to have the most tokens by the end of the fifth round.

2. Introduce the facilitators:

- Well Monitor – Collects payment from families.
- Events Monitor – Facilitates event card-picking.
- Banker – Collects tokens from families after they have read their event card.
- Community Radio Announcer – Makes general announcements as below.
- Overall activity facilitator – Begins and ends rounds and keeps track of scores.

* Facilitation roles can overlap if fewer people are available.
3. To ensure that each family has identified roles amongst themselves, ask for all the water carriers, all treasurers, etc. to raise their hands.


5. When all families have finished their three tasks and the banker has collected tokens, record scores on the chart. (Repeat after every round.)

6. Community Radio announces News Bulletin number one:
   *News just in that a multinational soft drink company will begin operation of its water bottling plant just down the road. They chose our area because it is cheaper to operate here than in North America. They will be draining our groundwater. The water in the well is at record low levels. Each family loses three tokens.*

7. Play and record Round Two.

8. Play and record Round Three.

9. Community Radio announces News Bulletin number two:
   *We’ve just received word that an international water corporation received a contract from our government to set up a privately owned water system. They’ve promised safe drinking water to all our houses. This is a huge relief for our government and for us – no more walking to the well! The corporation will build pipes to all the houses. You will save the time that you spend collecting water and your girls can go to school again instead of going to get water. Each family gets three tokens and doesn’t need to go to the well this round.*

10. Play and record Round Four.

11. Community Radio announces News Bulletin number three:
   *The company contracted to supply water has just decided to charge higher rates for the water to our homes. The top third of the families with the most tokens can afford it. They get eight more tokens. The bottom two thirds of the families cannot afford to pay their water bill and are locked out. The bottom two thirds must now depend on well water again. Getting water from the well has become illegal since privatization. Lose three tokens.*

12. Play and record Round Five.
PHASE 3 – COMMUNITY MEETING

1. A facilitator introduces him/herself as a community organizer who is doing community consultations across the country to find out what people want. With this information, the organization will make recommendations to the governments. Access to clean drinking water is a human right and our government must ensure we all have water. Call a community meeting of all the families to discuss water concerns. Summarize the situation of the families according to the number of tokens recorded on the flip chart paper.

2. Pose the question, “What should be done?” Refer participants to the questions on the bottom of the family card sheet under “COMMUNITY MEETING” which asks them to record obstacles they faced and positive events which happened to them, and then come up with recommendations to improve access to water.

3. Families then present their proposals and their rationale. Record these recommendations on the flipchart. Thank the families for their participation and let them know that you will report back to them in several months.

END OF GAME

DEBRIEF & CONCLUSION //

1. To contextualize the activity, lead a group analysis and make connections to the real world. Explain that Watopia, Flowdia, and Desertia are not real places that you can visit, but unfortunately they do represent experiences similar to those of people in many regions in the Global South.

2. Move into a large circle; take time to debrief, paying particular attention to emotions that participants experienced during the game. Add some of the facts below from “The Real Story” throughout the discussion. Some discussion starters:

   - People don’t always have control over what happens to them.
   - Should access to water be a human right, or a commodity?
   - Is it the responsibility of governments to ensure all citizens have access to clean water?
   - The safety of girls and women - traditional water-gatherers - is at risk when they walk long distances.
   - The lives of many people are seriously affected by actions taken by large corporations. Some lease formerly communal wells and drain precious groundwater for bottled water to be sold elsewhere.
   - What do you know about bottled water in Canada?
THE REAL STORY //

- **Water gathering can be dangerous**: 14 million women and three million children in sub-Saharan Africa gather water every day. The average daily walk for water in Africa and Asia is six kilometres. Women and children are at risk of being assaulted while walking alone. Their necks and backs are damaged from the weight of water; and, the task interferes with going to school.

- **Water rates go up after water services are privatized**: After the water system in the city of Manila, Philippines was initially privatized, water rates rose 300%. As of 2015, another 10% increase was expected, while some neighbourhoods still did not receive piped water.

- **Poor water causes illness**: At any one time, close to half of all people in developing countries are suffering from health problems caused by poor water and sanitation. Together, unclean water and poor sanitation are the world’s **second biggest killer** of children. It has been calculated that 443 million school days are lost each year to water-related illness.

- **Bottled water threatens community water sources**: Soft drink companies privatize formerly communal water sources and drain the water table for bottled water. In 2010, Development and Peace partner KRUHA (Indonesia’s People’s Coalition for the Right to Water) shared their research about the Indonesian government leasing water sources to private companies such as Danone for bottled water. This was happening even though local farmers and residents relied on those same sources, and groundwater was diminishing over time. In exchange, the companies promised to limit their extraction and provide equivalent running water and sanitation services to the communities. However, with no consistent government monitoring in place, there was no way of gauging how much water was extracted. The communities received little of the promised sanitation and water services. In one community they were now at risk of losing access to their only remaining communal water source.

- **Privatization of water leads to higher water prices**: Around the turn of the century, some cities, notably Jakarta in Indonesia, Manila in the Philippines, Cochabamba in Ecuador, and Johannesburg in South Africa, privatized their water systems to access needed infrastructure loans from institutions like the World Bank. Lenders required these cities to allow private companies to run the water services in return for loans. Called “privatization,” this often led to spikes in water prices. In many cases, the poorest neighbourhoods were still excluded from water services and had to depend on falling rain, unprotected wells or expensive bottled water. In recent years, there has been a movement towards “remunicipalization” of water services in a growing number of cities worldwide. The World Bank has revisited its policies and no longer insists on the private partnership requirement. In Jakarta, water activists recently won a second court case to return the city’s water service to public control. The Johannesburg private partnership was not renewed in 2006. Some cities, such as Manila, remain under long-term contracts with private operators.

- **“Free Water” can become illegal after water is privatized**: In 1999, the city of Cochabamba, Bolivia leased its water system to a subsidiary of the Bechtel Corporation. Water prices went up and it became illegal to get “free water” or to collect rainwater.
REFERENCES //

Water as a Human Right; average time water gathering in Asia and Africa:

UN-Water Decade Programme on Advocacy and Communication and Water Supply and Sanitation Collaborative Council, “Water as a Human Right Media Brief”

Women, children and water gathering:

Indonesia: the commodification of water

Indonesia: Water as a Human Right with Muhammad Reza of Indonesia’s KRUHA, 2012.
https://www.youtube.com/watch?v=5CojqP0icA8

Harsono, Andreas, Human Rights Watch, October 12, 2017. “Indonesia’s Supreme Court Uphold Water Rights.”

Municipal water privatization

Transnational Institute. “180 Cities take back public control of water showing remunicipalisation is here to stay.” 13 November 2014.
APPENDIX I: MAP

U MUNT: WATER SIMULATION GAME
APPENDIX II: ROLE DESCRIPTIONS

Photocopy one set for each family.
Cut up and put in envelopes. Smaller families just use top four roles.

You are the Recorder. Each round you record the events that happen to your family and the amount of tokens you have on your family card.

You are the Treasurer. You are in charge of the tokens.

You are a Water Carrier. You take turns going to the well to get water.
Use water tokens to get water.

You pick the event cards.
You take turns picking the event card for your family and reporting back.

You are a Water Carrier. You take turns going to the well to get water.
Use water tokens to get water.

You pick the event cards.
You take turns picking the event card for your family and reporting back.
NAME: Your family’s name is _______________

LOCATION: You live in Desertia. Desertia is far from the river in a mountainous and dry area. An absentee landlord who has decided not to farm here because of the poor soil owns most of the land in Desertia. Many poor people have built their homes here. Each day you worry if the landlord will come and kick you off his land. Separating Flowdia from Desertia is an abandoned field which attracts strangers. You fear for the safety of the women and children in your family who gather water.

INCOME: You live on less than $1 a day.

ACCESS TO WATER: It takes six hours to fetch water at the new well. There is a shortcut though. The shortest path to the well leads through an abandoned and dangerous field. This route saves time and is less tiring, but risky. Decide what you want to do.

If you take the short route, you will have to pick a RISK card at the well.
If you are lucky, you pay 2 tokens. If you are unlucky and are injured, you pay 6 tokens.
If you take the longer route, you pay 4 tokens.

GAME INSTRUCTIONS for each round:
2. Pick an event card: event pickers take turns, pick card and report back.
3. Record what happened: recorder notes event that happened and number of tokens.

<table>
<thead>
<tr>
<th># of tokens after each round</th>
<th>Round 1</th>
<th>Round 2</th>
<th>Round 3</th>
<th>Round 4</th>
<th>Round 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Events happened to your family (point form)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

COMMUNITY MEETING:
- Obstacles:
- Positive things:
- Recommendations:

www.devp.org/activities
NAME: Your family’s name is _______________

LOCATION: You live in Flowdia. Flowdia is located several kilometres south of the river. It is between Desertia and Watopia.

INCOME: You live on less than $1 a day.

ACCESS TO WATER: You can cross the river at three points to get to the new well. It takes three hours to get water, a long and dangerous trip for the women and children who collect water. You pay 2 tokens.

GAME INSTRUCTIONS for each round:
2. Pick an event card: event pickers take turns, pick card and report back.
3. Record what happened: recorder notes event that happened and number of tokens.

<table>
<thead>
<tr>
<th></th>
<th>Round 1</th>
<th>Round 2</th>
<th>Round 3</th>
<th>Round 4</th>
<th>Round 5</th>
</tr>
</thead>
<tbody>
<tr>
<td># of tokens after each</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>round</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Events happened to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>your family (point form)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

COMMUNITY MEETING:
- Obstacles:
- Positive things:
- Recommendations:

www.devp.org/activities
NAME: Your family’s name is _______________

LOCATION: You live in Watopia. Watopia is on the north side of the river. This is the most fertile land since it is a river valley.

INCOME: You live on less than $1 a day.

ACCESS TO WATER: You can get clean water at the new well, which is only 10 minutes away. This is a huge improvement over depending on the river. You pay 1 token for water.

GAME INSTRUCTIONS for each round:
2. Pick an event card: event pickers take turns, pick card and report back.
3. Record what happened: recorder notes event that happened and number of tokens.

<table>
<thead>
<tr>
<th>Round 1</th>
<th>Round 2</th>
<th>Round 3</th>
<th>Round 4</th>
<th>Round 5</th>
</tr>
</thead>
<tbody>
<tr>
<td># of tokens after each round</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Events happened to your family (point form)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

COMMUNITY MEETING:
- Obstacles:
- Positive things:
- Recommendations:
You’ll need 1 sheet per family in your game. Print and cut.
### U MUNT: WATER SIMULATION GAME

**APPENDIX V: CARDS**

Photocopy and cut one copy per 3 groups, e.g. 2 copies for 6 groups.

<table>
<thead>
<tr>
<th>EVENT CARDS – DECK 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Your neck is sore because of carrying the water.</strong></td>
</tr>
<tr>
<td>Lose 2 tokens</td>
</tr>
</tbody>
</table>

| **A factory in a nearby city is polluting the river. The fish from the river are no longer safe to eat.** |
| Pay 3 tokens. |

| **There is a drought this summer and it just doesn’t rain.** |
| Lose 4 tokens. |

| **Your children are sick because they drank unsafe water.** |
| Lose 2 tokens |

| **There was a flood when the first rain started after a long period of dryness. Your small garden is flooded and the food that you are growing has gone bad.** |
| Lose 3 tokens |

| **There is a cholera outbreak in your village, and many people are dying. Your child is sick. If you can pay 10 tokens, a doctor can see your child. If not, your child is going to die.** |
| Pay 2 tokens. |

| **Further up the river, a dam was built in order to provide rich people in the capital city with electricity. The water level is lower in the river. People are now using more well water.** |
| Pay 2 tokens. |

| **It is harvest season and you have to help your father in the coffee fields. You will miss school for 3 weeks.** |
| Lose 2 tokens |
AWARENESS ACTIVITY

U MUNT: WATER SIMULATION GAME

APPENDIX V: CARDS

Photocopy and cut one copy per 3 groups, e.g. 2 copies for 6 groups.

EVENT CARDS – DECK 1 (continued)

- Your grandmother died. Now you have to look after your smaller siblings while your mom collects water. You have to stay home from school in the mornings.
  Lose 1 token.

- Your husband leaves you to go to the city where he is hoping to find a job. Now you are alone with your children and need to manage everything by yourself. You have just enough time to look after the kids and get water, but you can’t afford to buy much food.
  Lose 2 tokens.

- You join a women’s group that is working for water tanks close to your home. A tank would save you time for collecting the water and will provide you with enough water for bathing, drinking and cleaning.
  Get 3 tokens.

- You learn how to collect rainwater from one of your neighbours. If you live in Flowdia or Desertia, you get 1 token because now you don’t have to get as much water from the well. If your family lives in Watopia, it doesn’t really matter since the well is so close.

- Your house caught on fire and burned down. You did not have enough water to douse the flames.
  Lose 2 tokens.

- Your mother is feeling sick, so you and your siblings have to walk to collect the water for your family. You miss school.
  Lose 4 tokens.

- A thief attacked you on the way to the well.
  Lose 2 tokens.

- You lost your job on a farm, because there was no water and the production had to be stopped.
  Lose 3 tokens.
APPENDIX V: CARDS

Photocopy and cut one copy per 3 groups, e.g. 2 copies for 6 groups.

EVENT CARDS – DECK 2

- You participate in a training on sustainable consumption and saving of water.
  - Get 2 tokens.

- You participate in a class on water and health. This helps you avoid drinking unsafe water. You are happy because your health will improve.
  - Get 2 tokens.

- You participate in a training on sustainable farming which requires less water.
  - Get 3 tokens.

- If you pay 4 tokens, you can buy a piece of land and grow your own food. This will enable you to independently feed your family. However, your crops require water which means there will be less for others. Collect 2 tokens from each of the other families because there will be even less water available to them.
  - Get 3 tokens.

- You participate in a training on sustainable farming which requires less water.
  - Get 3 tokens.
AWARENESS ACTIVITY

U MUNT: WATER SIMULATION GAME

APPENDIX V: CARDS

Photocopy and cut one copy per 3 groups, e.g. 2 copies for 6 groups.

RISK CARDS

- You are lucky, you made your way safely through the field.
  - Pay 2 tokens for your water.

- You were badly injured when a stranger attacked you while you were walking. You could have been killed.
  - Pay 6 tokens for your water.

- You are lucky, you made your way safely through the field.
  - Pay 2 tokens for your water.

- You were badly injured when a stranger attacked you while you were walking. You could have been killed.
  - Pay 6 tokens for your water.

- You were badly injured when a stranger attacked you while you were walking. You could have been killed.
  - Pay 6 tokens for your water.

- You were badly injured when a stranger attacked you while you were walking. You could have been killed.
  - Pay 6 tokens for your water.

www.devp.org/activities