THE L'EAU RIVER DAM
A FICTIONAL MEGAPROJECT CYCLE CASE STUDY

ANSWER SHEET

UN Special Rapporteur on the human rights to water and sanitation, Mr. Léo Heller

The Special Rapporteur thanks Ms. Henna Shah (HennaJShah@gmail.com) for her contribution to the training material during her internship with the Special Procedures Branch of the Office of the High Commissioner for Human Rights.
The first stage of Watertopia’s and Sanitania’s seven stage plan is the macro-planning stage. This stage occurs before any formal agreement has been entered into and refers to the planning of all national interventions in a given area. In this case, both countries develop plans for generating hydroelectricity with neighboring nations.

Watertopia proposes using an impoundment facility and turbines for the construction of the dam. It purports that hydroelectricity will be produced when water passes through the dam and causes the turbines to spin. Watertopia claims that this construction method will provide clean and pollution free energy.

However, Sanitania proposes an alternative plan. In its plan, Sanitania wants to divert a portion of the L’eau River through a canal or penstock. Rather than using an impoundment facility, the hydropower will be created through a pump storage model that works like a battery. In essence, it will store the electricity generated for later uses.

After seeing news reports about these two competing plans, the Droplenian prefer Watertopia’s plan. They fear that Sanitania’s river diversion plan will cause the water to be inaccessible and infringe upon their human rights to water and sanitation. Moreover, although Sanitania has assured that they will mitigate all human rights impacts by providing water for drinking and sanitation purposes through relief efforts to the Droplenian population, the Droplenians still favor Watertopia’s dam construction proposal because their water source will remain readily available.

Exercise 1: Describe the macro-planning stage and relevant human rights concerns.

Macro-planning is the stage at which the national development agenda and plans are established. While not often understood as being part of a specific mega-project, macro-planning is a strategic stage, as it allows actors to take into consideration the combined and cumulative impacts of mega-projects included in the development agenda.
Exercise 2: You are a Droplenian living on the Watertopian side of the L’eau River border. After reading the briefing note published by the Sanitanian Government’s Ministry of Infrastructure, you still remain concerned about the future dam construction plans on the L’eau River. You use the water from the L’eau River for drinking and washing, and most importantly, for the practice of your religion. You are outraged that no one asked for your opinions about the dam construction mega-project, despite the briefing note asserting that consultation with the Droplenian community is paramount. You want to become more involved in the negotiations of the Treaty of the L’eau River Dam.

Describe the steps you should take.

Under the Making Rights Real approach, there are six steps that you can take.

First, you should consider who can be a “hero.” A hero is someone who will address and help solve the problem. When identifying a potential “hero,” you should contact people who are interested in talking about the problem. These can be individuals in the local government who may be open to new ideas. As well, a persona document can be used to identify possible people to engage with. In identifying people who may be a “hero,” you consider the local representative you spoke to regarding the L’eau River dam construction mega-project.

After identifying your hero, the next step is to consider what may be holding the hero back from taking action. To determine what challenges local government officials may face in their work for water and sanitation services, you first have a conversation with “your” local government officials to understand what struggles they face. To guide the discussion, you use the baseline questionnaire provided on the Making Rights Real webpage.

Following the discussion with your hero, you have identified what problems the hero is facing. The next step is to determine how you can better inspire your hero to do better. To do so, you consider what small changes “your” local government officials can make to solve some of their challenges. After suggesting some changes, you also introduce the Making Rights Real materials to “your” local government officials and have a conversation on how the principles and concepts explained therein relate to their work.

Fourth, after asking your hero to make changes, you should spend time reflecting on what you think the hero knows now. You reflect on how “your” local government officials think about the principles and concepts explained in the Making Rights Real materials. In doing so, you use a midline questionnaire to structure this reflective conversation.

Fifth, during a subsequent conversation with your hero, you ask what the hero will do differently. Ask whether “your” local government officials identified any actions they can take to address the challenges they face using the principles and concepts explained in the Making Rights Real materials. It is important to talk about concrete actions they will take and any support you may be able to provide.

Lastly, ask your hero what changes have occurred. You should reflect on whether “your” local government officials have become super heroes for water and sanitation services, what action they have taken, and what you have learned using human rights in practice. To guide this conversation, you use an endline questionnaire.
In the course of Watertopia’s and Sanitania’s negotiations to enter into the Treaty of the L’eau River Dam, the Droplenian people allege that Watertopia and Sanitania are violating the national and international laws of their respective governments. In particular, the Droplenians claim that the construction of the dam conflicts with their human rights under the Treaty of Aquarius to water and sanitation. The Droplenians assert that Watertopia’s and Sanitania’s digging plans will destroy the banks of the L’eau River, thereby, impacting Droplenian’s access to their primary water and sanitation source. Furthermore, the Droplenians claim that Watertopia and Sanitania are breaching their obligations under the International Covenant on Economic, Social and Cultural Rights.

After consulting the Droplenian people about the plans for the dam construction, the Governments of Watertopia and Sanitania have developed a joint Environmental and Social Impact Assessment, specifically addressing the human rights impact of the dam construction, to acquire licensing or approval for their project. The Governments of Watertopia and Sanitania submitted their application to the L’eau River Council. The L’eau River Council is the chief body of review for all mega-projects on the L’eau River. This Council is tasked with reviewing Watertopia’s and Sanitania’s applications, issuing all licenses and permits, and granting approval for the dam construction mega-project. As part of their work, the L’eau River Council reviews all mega-project requests to ensure that construction of the dam mega-project will not infringe upon the human right to water and sanitation under the Treaty of Aquarius, the ICESCR, and the ICCPR.

**Exercise 3:** Describe the licensing or approval stage and the human rights issues relevant to the stage.

The licensing or approval stage of a mega-project is the process whereby public authorities grant permission for a mega-project’s implementation after reviewing its compliance with laws and regulations. Irrespective of the formality of the procedure, licensing, authorization, or approval processes for mega-projects are essential measures to guarantee a mega-project’s alignment with the human rights to water and sanitation.
First, the briefing note will acknowledge the importance of water and sanitation and the impact on access to those services. The briefing note will emphasize the importance of creating strategies and plans of actions, such as a National Action Plan or National Agenda. This is true even in a seemingly unrelated sector such as infrastructure and development. Both national development policies and specific sector policies must drive the development of the industry and mega-project.

Secondly, the briefing note will discuss the importance of consulting with the affected population, the Droplenians. The consultation can be part of the human rights impact assessment or a stand-alone process. Per Article 32 of the United Nations Declaration on the Rights of Indigenous Peoples, the views and concerns of civil society should be taken into account when making crucial decisions, such as those related to development agendas. As well, any development project should not move ahead without the free, prior, and informed consent of the affected peoples, who must be consulted in good faith. Policies and legislation that are human rights-based can provide a framework and guidelines to ensure that mega-projects incorporated in national development plans are in line with the human rights to water and sanitation.

Third, the briefing note will address the advantages and the adverse effects of the dam construction mega-project on human rights. A balancing exercise will be used and based on the principles of necessity. The necessity principle requires States to determine whether the chosen mega-project is the most suitable option for increasing economic growth and is the least intrusive measure which will not undermine human rights, in particular, to the access to water and sanitation services. According to the International Covenant on Economic, Social, and Cultural Rights, where several policy options are available, State parties to the Covenant must adopt the option that least restricts the rights under the Covenant. To do so, States should examine whether there are alternative options for achieving the same goals. A careful comparative study examining the various technical options and their impacts on affected populations should be carried out before deciding to implement mega-projects.
Exercise 5: You are an independent expert appointed by the Droplenians to oversee the dam construction process. You have been assigned to examine Watertopia’s and Sanitania’s application for the dam construction mega-project. You are aware of the recent Droplenian protests and the public’s concerns. Describe the steps you should take to prepare your assessment of the application.

In preparing your assessment of the application, you must keep in mind that States have the obligation, prior to granting authorization or license to the project, to accurately assess the possible impacts that a mega-project may have on the human rights to water and sanitation. Where human rights violations related to water pollution and over-abstraction result from States’ actions, States may be in breach of their human rights obligation.

The decisions of certain licensing or approving mechanisms are based on information contained in impact assessments that have often been carried out with a strong influence from business interests. Consequently, they often do not reflect human rights perspectives. Strengthening the human rights focus on the environmental assessments, as well as the capacity of institutions that evaluate them, is an essential enabling element for this stage.

Exercise 6: You are a member of a Droplenian civil society association living near the proposed construction site of the dam. You are very worried that the dam construction will cause the water of the L’eau River to become polluted and unsafe for drinking, bathing, and practicing your religion. At the licensing or approval stage, what can you do as a concerned citizen? Please discuss.

At this stage, you can request to have a meeting with Watertopia’s and Sanitania’s government officials. States are required to accurately assess the possible impacts of a mega-project’s construction. At this meeting, you should present an alternative plan that would be safer for you and the environment. If the alternative proves to be safer and protects the human right of water and sanitation, the L’eau River Council will advise Watertopia and Sanitania to revise their application to better address the safety concerns of the affected population and the environment.
After reviewing Watertopia’s and Sanitania’s mega-project licensing application, the L’eau River Council granted approval for the mega-project’s construction. The next step for Watertopia and Sanitania is to plan and design the dam. Watertopia and Sanitania have hired the Dam Corporation, a business that is incorporated along the L’eau River in Sanitania, to help with the planning and designing of the dam. While planning and designing, the Droplenians assert that Watertopia and Sanitania are not incorporating their ex-ante impact assessments, nor allowing their participation at this stage. As such, the Droplenians believe that their right to water and sanitation will be infringed upon, and fear that the construction of the dam will displace their community along the L’eau River. They urge Watertopia and Sanitania to implement mitigation and preventive measures. However, the Droplenian’s requests are met with resistance by the Governments of Watertopia and Sanitania.

Exercise 7: You are the head member of the Watertopian and Sanitanian Governments’ joint task force. This task force is assigned to plan and design the dam construction mega-project. What should you consider when planning and designing the dam? Please discuss.

As the head member of the task force, you must consider the project’s specifications and choose the strategies, means, methods, and resources for the project’s implementation. As well, you must identify the location for the site operation and construction.
In your newsletter, you acknowledge the Droplenians’ allegations and the task force’s failure to incorporate the ex-ante assessments into the planning and designing stage. You write that States, like Watertopia and Sanitania, involved in mega-projects are responsible for incorporating and implementing an ex-ante assessment grounded in human rights at the planning stage of the mega-project. As such, you ensure the public through your newsletter that the task force will re-evaluate their planning and design plan for the dam to incorporate the ex-ante assessments.

Private companies involved in mega-projects are responsible for incorporating and implementing an ex-ante assessment grounded in human rights at the planning stage of the mega-project. As well, according to Principle 17 of the Guiding Principles on Business and Human Rights, businesses, in fulfilling their human rights due diligence, should assess the actual and potential human rights impact on their activities, integrate and act upon the findings, track responses, and communicate how the impacts detected are addressed.

Participation is a human right and States have corresponding obligations to ensure participation, especially from the affected community. As such, Watertopia and Sanitania must allow the Droplenians to participate in the planning and designing stage because the Droplenians are at risk of being displaced. As a Droplenian, you should make the task force aware of your human right to participate in the discussions of the planning and designing stage. This can be done by contacting your local government official or “hero.”
Mega-projects often involve the displacement of populations which forces communities to move to new locations. It is vital that water services are available for drinking, domestic uses, food production, agriculture or livestock breeding, and sanitation facilities at these new locations. Resettled communities often find that new houses and basic services, such as water and sanitation that have been promised to them during pre-resettlement, are not provided or, if provided, are non-functional.

According to the Basic Principles and Guidelines on Development-Based Evictions and Displacement, accountable actors must include in the planning and design of mega-projects a thorough review of the needs of displaced populations. Where displacement is inevitable, the Watertopian and Sanitanian Governments must develop plans to provide adequate water before and after eviction. All resettlement measures, including provision of water and sanitation, must be consistent with the human rights principles and completed before those affected are moved from their original areas of dwelling. Moreover, accountable actors must ensure that evicted persons or groups have guarantees that identify relocation sites that provide housing, services, materials, and infrastructure, such as water and sanitation.

Exercise 11: How should the Watertopian and Sanitanian Governments address the possibility of displacement of the Droplenian communities? What risks do the Dropliens living along the L'eau River face if they are displaced? Discuss.

Exercise 12: Explain why, generally, it is important to have mitigation and preventive measures included at the planning stage?

It follows that, when not duly considered, reparation of the harm caused is time- and resource-consuming and that such harm is sometimes irreparable in the short- or medium-term. This entails a traumatic process for the affected population. States should therefore put an emphasis on preventive measures to avoid or mitigate the consequences for human rights, in particular, the rights to water and sanitation, rather than take the risk of negative impacts. The application of the precautionary principle at the planning stage is an important step, in particular to address impacts with high levels of uncertainty. The guidance in the principle is to avoid the adoption of a mega-project, or the endorsement of some of its features, while definitive scientific evidence about the impact is incomplete.
Fulfilling their human rights obligations, Watertopia and Sanitania have solicited the input of Droplenians in the planning and designing stage. These states have incorporated their ex-ante impact assessments successfully into their plan and have created mitigation and prevention measures to address potential Droplenian community displacement.

The Dam Corporation is now ready to begin construction. The Dam Corporation outsourced the construction to another local company, Digging Masters, which is incorporated in Watertopia. The Droplenians are concerned that Dam Corporation’s and Digging Masters’ human rights obligations and responsibilities are vague and unclear. As such, the Droplenians fear that the Dam Corporation and Digging Masters will violate their human rights to water and sanitation because their human rights obligations may be lacking or unclear. Due to these concerns, human rights defenders in the Droplenian communities begin to riot and protest along the L’eau River. There have been reports of Droplenians damaging construction tools and instruments, throwing garbage at the construction workers, and orchestrating sit-ins at the mega-project site.

Construction is the stage at which action taken by accountable actors (building companies) has a direct effect on the population and their access to water and sanitation.

Exercise 13: Describe the construction stage of the mega-project cycle the human rights issues relevant to the stage.

Exercise 14: You are the CEO of Dam Corporation. Due to the recent protests, there have been several stories alleging Dam Corporation’s non-compliance with human rights obligations and its non-observation of the safeguards in the previous stages of the mega-plan in the national and international news. The Droplenians are urging that Dam Corporation’s human rights obligations be transparent and known to the public. Describe how, as the CEO, you should make Dam Corporation’s human rights obligations to the Droplenians clear.

As the CEO of Dam Corporation, it is paramount that you make Dam Corporation’s human rights obligations transparent and clear to the public and affected population. The adequate implementation of accountability requires a clear definition of who is accountable, who may hold actors accountable, and what actors must be accountable for. A clear understanding of who has human rights obligations and responsibilities at the construction stage is crucial in order to identify who is also accountable for providing explanations and justification and for imposing sanctions for remedial actions for violations and abuses enforced.

In particular at the construction stage, private sector participation is complex. Per Principle 11 of the Guiding Principles on Business and Human Rights, private businesses involved in mega-projects have human rights responsibilities to respect human rights and to address adverse human rights impacts involved.

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Exercise 15: The CEO of Dam Corporation recently published a press release detailing its human rights obligations to the Droplenians under Principle 11 of the Guiding Principles on Business and Human Rights. As a sub-contractor, the CEO of Digging Masters is curious as to whether he needs to make Digging Masters' human rights obligations transparent. You are head of Digging Masters’ Legal Affairs Department. Describe the advice you should give the CEO of Digging Masters regarding whether the company’s human rights obligations should be transparent and publicly known.

As the head of Digging Masters’ Legal Affairs Department, you advise the CEO that the company is also bound to Principle 11 of the Guiding Principles on Business and Human Rights. Moreover, the same accountability requirement applies to Digging Masters. Per Principle 11 of the Guiding Principles on Business and Human Rights, private businesses involved in mega-projects have human rights responsibilities to respect human rights and to address adverse human rights impacts involved, irrespective of the status in the supply chain. Irrespective of the status in the supply chain, private businesses involved in mega-projects have human rights responsibilities to respect human rights and to address the adverse human rights impacts involved.

Exercise 16: You are a member of the affected Droplenian community. You are worried that construction of the dam will result in unsafe water and sanitation for you and your community. How may the construction stage affect you and the Droplenian population directly? Discuss.

The construction stage is when actions taken by accountable actors may have a direct effect on the population and their access to water and sanitation. Examples of how construction may affect a population include pollution, depletion, or blockades to adequate water and sanitation resources.

Exercise 17: Tensions between Droplenian human rights defenders and the construction workers at the dam construction site are growing. You are the head of the task force created by the Watertopian and Sanitanian Governments. In light of the social conflict, you have been assigned to mitigate the tension between the Droplenians and Dam Corporation and Digging Masters. Describe the measures you should take to ensure that the Governments of Watertopia and Sanitania address and mitigate the social conflicts between Dam Corporation and Digging Masters and the Droplenians effectively.

During the construction phase, social conflicts may occur as affected communities see their drinking water, food, living environments, or land ownership threatened. Confrontations frequently take place at the construction stage, when the affected populations become aware that a licence for a mega-project has been granted and realize that they have not been duly consulted or heard. States, businesses, and investors have obligations and responsibilities to take concrete measures to de-escalate conflicts, and to address the concerns of human rights defenders, including the underlying root cause of such conflicts.
Two years have passed since construction began on the mega-project. The dam construction is completed and the dam is ready for operation. After the Dam Corporation, through Digging Masters, finished the construction in accordance with the Treaty of the L’seau River Dam, the Governments of Watertopia and Sanitania contracted Aqua Infrastructure to oversee the operation of the dam. During the first month of its operation, the Droplenians living along the L’seau River noticed that their drinking water was polluted. They suspect that the dam is the source of the pollution and think that the turbines are collecting residue and releasing this waste into the water as it spins to produce hydroelectricity. After addressing their concerns with the Governments of Watertopia and Sanitania, the Dam Corporation, and Aqua Infrastructure, the Droplenians were assured that this problem will be resolved quickly. However, the Droplenians are unpersuaded because it is not clear which actor is responsible during this short-term operation stage.

Exercise 18: Describe the short-term operation stage and the human rights issues relevant to the stage.

The short-term operation stage beings when the mega-project infrastructure enters into use to fulfil its purpose.

Exercise 19: Explain why, in general, it is important that actors’, such as governments, corporations, and individuals, human rights obligations and responsibilities are clear at the short-term operation stage?

Clarification as to the accountable actors involved at the short-term operation stage is essential for transparent accountability processes and for clarification as to those involved at the construction stage. This is because the actors at the two stages may not necessarily be the same.

Exercise 20: As the head of the task force, what responsibilities do the Watertopian and Sanitanian Governments have during the short-term operation stage? Discuss.

During the short-term operation stage, the Governments of Watertopia and Sanitania still remain accountable to the Droplien people. The specific responsibilities are confined to each government’s national policies and laws and the provisions agreed upon in the Treaty of the L’seau River Dam.
During the short-term operation stage, Aqua Infrastructure is responsible to respond and provide solutions to any management problem of the mega-project. This is because it is managing the operations, per contract, for the Governments of Watertopia and Sanitania. As such, Aqua Infrastructure is the main point of contact for the Droplenian’s concerns.

In the short-term operation stage, negative impacts and missteps in the planning and designing of mega-projects may materialize. Contamination, for example, may increase progressively as the mega-project operates. In this period, some types of mega-projects, such as mining or industrial projects, may start releasing waste generated by their activities into water bodies and contaminate them.

Affected populations, such as the Droplenisans, must be able to file complaints and report such new impacts on their rights to water and sanitation. They should be able to withdraw their consent or request a review of the license granted to the projects on the basis of the changed situation.

Exercise 21: You are the CEO of Aqua Infrastructure. Explain what responsibilities, as the short-term operator of the dam, Aqua Infrastructure has during the short-term operation stage.

Exercise 22: As a member of the Droplenian community, you are worried that you will be displaced if Aqua Infrastructure cannot solve the water pollution problem. What methods of recourse do you and the Droplenian community have at the short-term operation stage if the water pollution problem cannot be solved? Discuss.
Fortunately, Aqua Infrastructure was able to fix and resolve the water pollution problem affecting the L'eau River. The Droplenians are very pleased by Aqua Infrastructure's prompt response. A decade has passed since the completion of the dam's construction, and last week, in Watertopia's and Sanitania's national news, it was broadcasted that Aqua Infrastructure would no longer be managing the operations of the dam mega-project. The Governments of Watertopia and Sanitania have entered into a contract with another corporation, HydroEnergy, which will be managing the mega-project. Recently, the Droplenians saw cracks on the dam and are concerned whether the dam is safe.

**Exercise 23:** Explain why the long-term operations of mega-projects need to be carefully considered.

The long-term operations of mega-projects need to be carefully considered because the biosocioeconomic environment is dynamic, the deterioration of the infrastructure may occur, and the prolonged exploitation of resources may exacerbate or introduce new and unforeseen impacts. A combination of such factors may increase the risk of negative impacts on the human right to water and sanitation of affected populations.

**Exercise 24:** Generally, why should the human rights obligations and responsibilities of actors be clear at the long-term operation stage? Discuss.

In certain projects, the long-term operator may be different from the entity that constructed and operated the project in the short term. As well, changes in the actors involved may not be apparent. Therefore, the roles and responsibilities of the accountable actors at the long-term operation stage should be made clear to the affected population.

Answerability is the requirement for actors to provide explanations and reasoned justifications for their actions, inaction, and decisions to people affected by them, as well as, the public at large.
Per the requirement of answerability, Watertopia and Sanitania should include terms in their contract with HydroEnergy that delineate and ensure that HydroEnergy will be responsible for all concerns, complaints, problems, or allegations that the Droplenians may have or purport. As well, Watertopia and Sanitania should make clear in their agreement that HydroEnergy will be managing the long-term operations of the megaproject under the supervision of the Governments of Watertopia and Sanitania.

HydroEnergy is responsible and is accountable for all of the dam’s potential impacts and risks during its long-term operation. As such, safeguards must be put in place by HydroEnergy to protect the human right to water and sanitation. The complexity and long duration of the lifecycle of mega-projects calls for response to long-term impacts and contemplation of impacts that will persist for future various generations. In this regard, active involvement of affected communities in monitoring the security, performance, and impacts of the mega-project is key.

Since HydroEnergy is the long-term operator of the mega-project, the Droplenians can voice their concerns to HydroEnergy directly. Per HydroEnergy’s contract, it is responsible to respond to the Droplenians’ concerns.
For the next five years, HydroEnergy successfully managed the long-term operations of the mega-project. However, due to a lack of maintenance by HydroEnergy, the dam collapsed and ceased to function. Due to this disaster, the Droplenians living near the dam lost their homes and are displaced. As well, the water of the L’eau River is no longer safe for drinking and sanitation. Unfortunately, the dam was damaged and could not be repaired. As a result, HydroEnergy has entered into the final stage of the mega-project – decommissioning and disaster management. HydroEnergy has hired Disaster Relief, a consulting firm that specializes on the decommissioning of mega-projects after natural disasters, for help.

**Exercise 28:** You are the head of Disaster Relief’s response and mitigation team. In responding to the earthquake and its effects, what are some challenges you, on behalf of Disaster Relief, may face at the decommissioning stage? Please discuss.

You may face problems relating to the lack of regulation at the decommissioning stage. The lack of regulation requiring mega-projects to include a decommissioning stage as part of a mandatory planning process is a reason for inadequate procedures, or a lack of appropriate procedures, at the end of the cycle. However, even where such a binding requirement exists, decommissioning is not always implemented, as actors find it more beneficial and in their interest not to adhere to the requirement of decommissioning and to pay fines through corrupt practices. Often, the cost associated with decommissioning is higher than the fines and sanctions imposed, which are at times compensated for by insurances protecting the investment of the actors involved.

**Exercise 29:** Describe what, overall, is a way to prevent and mitigate the impact of non-compliance with decommissioning.

A way to prevent and mitigate impacts arising from non-compliance with decommissioning is to establish plans at the planning stage for the closure of the operation and the de-installation of physical infrastructure. Such decommissioning processes identified at the planning stage will ensure that resources will be allocated to comply with the plan. Inclusion of decommissioning strategies and resources in legislation reinforces the accountability framework by facilitating complaints and redress procedures for negative impacts due to the lack of or inadequate decommissioning of mega-projects.
The human rights impact assessment on water and sanitation should include not only the negative impacts that the removal of infrastructure and the remnants of the operation may have on the quality of water, but also the way in which certain parts of the infrastructure can be used to enhance water access for the population living in the vicinity.

**Exercise 30:** On behalf of Disaster Relief, what should your assessment of the human rights impact, in particular on water and sanitation, at the decommissioning stage include? Please describe.

The Governments of Watertopia and Sanitania should have implemented preventive measures and compensation, redress, and reparation procedures during the planning and designing stage. Preventive and non-repetition measures are essential to prevent recurrence of disasters. States must assess possible risks and damages that may occur in the event of disasters. Preventive measures include measures to avoid or reduce the likelihood of adverse impacts. States are obliged to have plans in place to respond to potential emergency situations. Even during an emergency, immediate obligations of access to the minimum essential level of water and sanitation on a non-discriminatory basis apply. Compensation and redress, especially for disaster situations, need to be provided in an appropriate and timely manner with close consultation with affected communities. A clear and transparent explanation of the reasons why a disaster occurred is the first step to achieving appropriate redress and remedy for harm caused to the affected communities.

**Exercise 31:** Should the Governments of Watertopia and Sanitania have implemented preventive measures and compensation, redress, and reparation procedures at the planning and designing stage to facilitate the decommissioning process in the event of a natural disaster? Explain why/why not.

The Governments of Watertopia and Sanitania should have implemented preventive measures and compensation, redress, and reparation procedures during the planning and designing stage. Preventive and non-repetition measures are essential to prevent recurrence of disasters. States must assess possible risks and damages that may occur in the event of disasters. Preventive measures include measures to avoid or reduce the likelihood of adverse impacts. States are obliged to have plans in place to respond to potential emergency situations. Even during an emergency, immediate obligations of access to the minimum essential level of water and sanitation on a non-discriminatory basis apply. Compensation and redress, especially for disaster situations, need to be provided in an appropriate and timely manner with close consultation with affected communities. A clear and transparent explanation of the reasons why a disaster occurred is the first step to achieving appropriate redress and remedy for harm caused to the affected communities.