THE IMPACT OF MEGA-PROJECTS ON
THE HUMAN RIGHTS TO WATER AND
SANITATION

Report to the 74th session of the UN
General Assembly by the UN Special
Rapporteur on the human rights to
water and sanitation

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Throughout the stages of their lifecycle, mega-projects have a long-lasting impact on various aspects of society, including human lives, the economy, and the environment. Mega-projects are promoted through the narrative of contributing towards the enhancement of the livelihood of the people, but they often impede the enjoyment of the human rights to water and sanitation.

In the report (A/74/197), the Special Rapporteur clarifies each stage of the megaproject cycle and provides a list of questions that constitute guidelines for accountable actors to implement their human rights obligations and responsibilities. Such questions stem from existing human rights norms and principles and are therefore aimed at providing guidance as opposed to creating new standards or obligations. He recommends that accountable actors use this list of questions to prevent and mitigate risks arising from megaprojects and to ensure that human rights are complied with at every stage of their lifecycle.

The wide range of mega-projects mirrors the extensive array of impacts arising thereof and the implication on the exercise of various human rights, by groups in vulnerable situations and in particular by indigenous peoples, whose lifestyles are often centred around water. Therefore, the report also takes into account broad-ranging issues, in line with the concept of ‘environmental injustice’, which includes the negative impacts caused by humans on the environment, focussing on the unjust inequalities and discriminations that lead to the increased impacts on certain groups and populations who are already in vulnerable situations. The impact of mega-projects on the environment, water resource governance, social conflicts, livelihoods or human rights may be either exacerbated by or aggravate critical global challenges such as climate change, demographic changes, the migration crisis, and armed conflicts.
CURRENT TRENDS

6 - 9 trillion USD per year
8% of the global GDP

The global mega-project market represents

with projections for a further increase due to its trend.*

CUMULATIVE GROWTH, CUMULATIVE IMPACTS

Mega-projects may be characterized by a multiplying effect where implementation of one project leads to the implementation of other mega-projects that are necessary to their operation, thus resulting in an amplified consequence. Another distinct feature of mega-projects are their cumulative impact, where insignificant impacts on the environmental and society can become highly significant and damage can be extended in a complex manner over time and space, through the combination of several contexts, including the interaction between a project, other mega-projects and the environmental conditions. In some situations, those impacts can be irreversible.

MEGA-PROJECTS AND DEVELOPMENT

Mega-projects are often argued as being necessary to meet different targets of the SDGs, in order to end poverty and inequalities and to achieve sustainable development. The outcome of this narrative is a likely increased incentive to implement mega-projects, through the involvement of private actors or capital investors who often prioritize their economic interests.

POWER IMBALANCES

There is an imbalance of power between the people who are adversely affected by mega-projects and the proponents of mega-projects who frame them as solutions for development. The affected population is often reluctant to accept mega-projects as the most suitable solution for development as for them the negative impacts exceed the benefits provided. At times, the polarized vision of mega-projects further aggravates social conflicts and may increase incidents of corruption by certain actors in the pursuit of economic interests.

GAPS IN THE EXISTING REGULATORY FRAMEWORK

Coupled with the diversity of mega-projects, the range of actors involved is also diverse and, therefore, various regulatory frameworks apply to these actors and to the different types of projects. Irrespective of this diversity, States have an important role and human rights obligations to protect by regulating third-parties so that those actors avoid, prevent, or redress the negative consequences of their actions. Non-State actors, including international funders and multilateral financial institutions, are also bound by international human rights law and international environmental law. Existing and new frameworks have been developed to identify, control and redress environmental and social impacts of actors involved in international development. However, they:

- target a limited set of actors or activities;
- are largely voluntary in nature, and;
- do not focus on the specificities of the human rights to water and sanitation.

Furthermore, these instruments often fail to fully incorporate the normative content of the human rights to water and sanitation and human rights principles, as they are included in a partial manner which inevitably translates into protection gaps in practice, particularly for mega-projects.

SOCIAL CONFLICTS AND HUMAN RIGHTS DEFENDERS

The impacts arising from the human rights gaps in the existing regulatory framework, as well as the power imbalance between proponents and those impacted by projects, have spurred the emergence of social conflicts, particularly in the field of the human rights to water and sanitation. Communities affected by such negative impacts protest against mega-projects in various ways ranging from peaceful protest to occupation of the project premises.

These situations often generate reactions from the related actors, involving private military and security contractors or public security forces, as well as confrontations with employees working on the project which may lead to physical conflicts. At times, conflicts are also provoked by the nonexistent or improper consultation, where the concerns of affected communities are not taken into account. Human rights defenders advocating the rights of those affected by mega-projects have faced harassment, physical assault, bodily injuries, and even death.

In addition, several allegations have been made that the implementation of mega-projects have been associated with persecution, judicialization and other forms of attacks against human rights defenders which violate a number of their rights, such as freedom of expression and freedom of assembly.
The normative content of the human rights to water and sanitation and human rights principles provide a framework to identify abuses and violations of human rights due to the impact of megaprojects on the access to the services, as well for identification of accountable actors and the way forward for megaprojects to take into account the priorities of affected populations.

A specific feature of megaprojects impacts is that they are observed beyond national boundaries. Impacts of megaprojects on transboundary watercourses include contamination originating in one country that affects communities in another country and the retention or over-use of water in an upstream country, causing water scarcity in downstream countries. The Special Rapporteur reiterates that States have obligations to ensure that any activities undertaken in their territory do not deprive another country of the ability to realize the right to water for persons in its jurisdictions (CESCR, general comment No. 15, para. 31).

**AVAILABILITY**

Human rights impact assessment on water and sanitation should ensure that water used for human and domestic purpose is prioritized and that, in the event water sources are deviated to meet the requirement of mega-projects, alternative solutions must be in place. Those alternative solutions should comply with the human rights standards and respect the cultural values of affected populations. Further, measures should be in place to ensure that displaced population are provided with adequate water and sanitation facilities.

For instance, POSCO Corporation, a steel company, carried out several projects in India including mining, steel processing plant and associated infrastructure. Projects resulted in a diversion of 120 billion litres of water used for domestic purposes, which resulted in serious risks to the ability of families to access sufficient water for their household use (IND 7/2013).

**ACCESSIBILITY**

Human rights impact assessment on water and sanitation should include plans and implementation measures to avoid and redress impact on the physical accessibility of water sources or sanitation facilities and, when necessary, provide alternative services. Additionally, the impact on access to sanitation facilities due to lack of accessibility to water needs to be taken into account.

In Colombia, for example, the construction of the El Cercardo Dam, located in the La Guajira municipality, led to temporarily drying up considerable parts of the river. As a result, the water supply of the Wayuu indigenous peoples discontinued and women and children had to travel long distances to access water from a well and to transport it by donkeys (COL 8/2016).

**QUALITY AND SAFETY**

Human rights impact assessment, particularly on water and sanitation, should take into account how effluents released by mega-projects impact water quality and the existence of preventive measures to avoid contamination of water resources in the first place. Further, alternative sources as a means of redress should meet the quality standard for drinking water.

In the case of the Nihuel Hydroelectric Dam in Argentina, an aqueduct was set in place to provide populations with drinking water; however, the infrastructure did not meet the minimum requirements and water provided by the aqueduct - installed as an alternative source - was often dirty and contaminated (ARG 1/2014).
**Affordability**

Human rights impact assessment on water and sanitation should ensure that impact on accessibility, availability and quality of water should not lead to a secondary impact where the alternative source of water is unaffordable or where the sanitation facilities in relocated areas are unaffordable.

As a consequence of the contamination of water resources by mining industries in the Cerro de Pasco Basin, Peru, some residents used shallow wells as alternative water sources; however, due to heavy metal contamination found in such alternative sources, access to drinking water was mostly restricted to bottled water which was an expensive option for the affected population (PER 1/2018).

**Acceptability**

Human rights impact assessment on water and sanitation should ensure to avoid and mitigate a secondary impact, where the alternative source of water and sanitation facilities are not acceptable.

**Access to Information**

Human rights impact assessment on water and sanitation should ensure that information provided is relevant, pertinent and timely. It should also be accessible according to the means available to relevant population and presented in a manner understandable to them.

**Participation**

Human rights impact assessment on water and sanitation should identify the affected population including both the population whose access to water and sanitation is directly impacted as well as indirectly impacted. The population should be consulted in good faith and the project initiated only after the free, prior and informed consent of the affected population.

In 2013, the Supreme Court of Mexico took a decision on a grievance presented by representatives of the Yaqui people on the violations of their human rights to the territory, to consultation and to a healthy environment by the project Independencia Aqueduct (an aqueduct transferring water from the Yaqui River to the city of Hermosillo). The Court declared that the environmental impact assessment, according to which the operation clearance of Independencia Aqueduct was granted in 2011, was groundless because the authority did not meet its duty to obtain a free, prior and informed consent of the Yaqui people, directly affected by the project. In accordance with the Court decision, in 2013 the Environment Secretary initiated a consultation process with the Yaqui people (MEX 10/2015).

**Access to Remedy**

Human rights impact assessment on water and sanitation should assess whether there are adequate guarantees that redress and reparation measures would be provided in an appropriate and timely manner. Appropriate and enforceable frameworks should be in place to ensure that redress measures are implemented.
The Special Rapporteur introduces the framework of the mega-project cycle for the realization of the human rights to water and sanitation, composed of seven stages, each of which entails different impacts on access to water and sanitation, challenges and enabling factors to realise the human rights to water and sanitation.

The seven stages of mega-projects are not representative of a universal process nor do they address each and every cycle of a particular mega-project. The first two stages – macro-planning stage and licensing or approval stage – refer to the general procedures that are found in a country and the subsequent stages - from planning to decommissioning of mega-projects – describe the stages that are relevant to a mega-project.
Mega-projects are first identified as pillars of the development agenda, and are conceptualized.

The process through which public authorities grant permission for its implementation after having reviewed its compliance with laws and regulations.

This stage takes into consideration the specifications of the project and involves selection of strategies, means, methods and resources for the implementation as well as identification of the location of the site operation and construction.

The stage when actions taken by accountable actors have direct effect on the population and their access to water and sanitation.

The operation stage begins when the infrastructure of a mega-project starts to be used to fulfil its purpose.

In the long-term, the bio-socio-economic environment is dynamic, the deterioration of the infrastructure can occur and the prolonged exploitation of resources may exacerbate or introduce new and unforeseen impacts.

The last stage is associated with various processes including decommissioning, or the closure of the mega-project. Additionally, in the event of disasters, the mega-project can also come to an end of its cycle where its physical structures are destroyed partially or as a whole.

- Decision of the legal and policy framework applicable to mega-projects
- Consideration of alternative development models
- Environmental and social impact assessments
- Authorisation for actors involved to undertake next stages
- Control of megaprojects that do not fulfil human rights standards
- Designation of concrete roles and responsibilities of actors
- Ex-ante assessment and participatory processes
- Monitoring of physical or legal impacts on lands and natural resources
- Impacts due to pollution or depletion or blockades by affected populations
- Monitoring of impacts due to construction errors
- Assessment of possible gaps between outputs expected and real outputs
- Deterioration of infrastructure (increased risk of disaster)
- Monitoring of long-term negative impacts that may appear
- Removal or destruction of relevant physical structures
- Application of contingency or redress plans for negative impacts caused by their decommissioning or deactivation
QUESTIONS AS GUIDELINES FOR IMPLEMENTING HUMAN RIGHTS OBLIGATIONS AND RESPONSIBILITIES

Supplementing the mega-project cycle, the Special Rapporteur clarifies each stage and provides a list of questions that help in acting as guidelines for accountable actors to implement their human rights obligations and responsibilities. Such questions stem from existing human rights norms and principles and therefore are aimed to provide guidance as opposed to creating new standards or obligations.

ASSESSMENT AND FEEDBACK

The cycle is complemented by a cross-cutting stage: assessment and monitoring in different stages of a given mega-project. The assessment and monitoring is a constructive learning process that feeds back to stages of subsequent mega-projects. This includes the examination of the impacts of mega-projects on the human rights to water and sanitation, including the access to information and remedy, as well as participation of the affected persons.

Question 1: Are lessons learned from assessments of one stage taken into account as feedback for subsequent stages of mega-projects or new mega-projects?

The lessons learned from the assessment of human rights impacts, particularly on water and sanitation, performed in different stages of one or various mega-projects, should feed into the subsequent stages of the lifecycle and other new mega-projects. Such procedure ensures a progressive improvement of how mega-projects are conceptualized, implemented and operated, and further ensure that repetitions of human rights infringement are prevented from reoccurring.
Macro-planning is the stage during which national development agenda and plans are established together with identification of means to achieve related goals. This is the stage where mega-projects are first identified as pillars of the development agenda and are conceptualized.

Question 2: Does the national development planning explicitly incorporate impact assessment that includes the human right to water and sanitation?

The human rights to water and sanitation are not only relevant to national planning exercises in the water sector but should also be considered in other national development planning and infrastructure development involving projects that can have an impact on the water availability and quality, among other elements of the normative content of the rights.

Question 3: Is the formulation of national development plans grounded on a consultation process?

Consultation with the population can be part of the human rights impact assessment or as a standalone process. The views and concerns of civil society should be taken into account when making crucial decisions, such as those related to development agendas, and 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 (art. 32 of the UN Declaration on the Rights of Indigenous Peoples).

Question 4: Is there legislative and regulatory framework compliant with the human rights to water and sanitation that guides the macro-planning stage?

Government entities carry out the predominant role of formulating development agenda and policies. In doing so, the legal and policy framework that incorporates international human rights obligations function as a guide to formulate those agenda in accordance with human rights standards and principles.

Question 5: Has a comparative study examining different alternative options to mega-projects carried out in the macro-planning stage?

Where several policy options are available, State party to ICESCR must adopt the option that least restricts the Covenant rights (E/C.12/2007/1, para. 8(d)). States should examine whether alternative options to reach the same goals exist. In this regard, a careful comparative study examining different technical options and their impacts on affected populations should be carried out before deciding to implement mega-projects.
The licensing or approval of a mega-project is the process in which public authorities grant permission for its implementation after having reviewed its compliance with laws and regulations. Environmental or social impact assessments inform these processes and those studies and the bodies mandated to grant authorizations are key elements for preventing, minimizing and mitigating impacts. Irrespective of the formality of the procedure, licensing, authorization or approval processes of mega-projects are essential measures to guarantee their alignment with the human rights to water and sanitation.

Question 6: Are participatory processes, especially including the affected population, part of license/approval stage?

Licenses of mega-projects are usually granted by the time communities become aware of those projects and start mobilizing or requesting to participate in the licensing process. The affected population should be consulted properly prior to granting licensing or approval as a compulsory step, and in the case this is not respected, the possibility of annulling the authorisation based on an ex-post consultation should be available.

Question 7: Is the assessment of human rights to water and sanitation a precondition for granting license/approval?

States have the obligation to accurately assess the possible impacts that a mega-project might have on the human rights to water and sanitation prior to granting authorizing or licensing to the project. In the event human rights violations related to water pollution and over-abstraction result from State actions, States may be in breach of their human rights obligation (A/HRC/27/55, para. 20).

Question 8: Is the license periodically reassessed and renewed?

Mega-projects are granted with the approval to proceed with their activities for a specific period of time and often no oversight mechanisms exist to monitor whether the project still meets the requirements at the time the license or authorisation was granted. License, even after it is granted, must be reassessed periodically particularly when substantive modifications are introduced into the mega-project or when its impacts on the environment and the human rights of affected communities have changed in an unforeseen way.
The actual lifecycle of a specific mega-project begins at the planning and designing stage at which practical and technical aspects of the project are ascertained. Also known as pre-construction planning, this stage takes into consideration the specifications of the project and involves selection of strategies, means, methods and resources for the implementation as well as identification of the location of the site operation and construction.

Question 9: Has an ex-ante impact assessment, grounded on human rights including the human rights to water and sanitation, been carried out in the planning stage?

Both State and private companies involved in mega-projects have the responsibility to incorporate and implement an ex-ante assessment grounded on human rights in the planning stage of the mega-project. The assessment to identify potential impacts arising from mega-projects is frequently incorporated in the early stages of the lifecycle. It is essential that environmental impact assessments include how the potential impact that mega-projects have on the environment affects the drinking water of affected populations.

Question 10: Are mitigation and preventive measures included in the planning stage?

The perpetuation in the impact of mega-projects leads to environmental damage that due to its nature and characteristics cannot be remedied, is difficult to mitigate and has the potential to persist for several generations. Hence, States should put an emphasis on preventive measures to avoid or mitigate consequences on human rights, particularly of water and sanitation, rather than taking the risk of assuming such negative impacts. Contingency plans for disasters caused by mega-projects or disasters due to the collapse of mega-projects should be addressed in the planning stage.

Question 11: Are participatory processes, especially including the affected population, set up for decision making at the early phases of the planning and designing stage?

The affected population must be part of the decision-making from early phases of the planning and designing stage. Sufficient time and resources, access to information in transparent manner and interactions between those that plan mega-projects and the stakeholders including civil society should be ensured for both parties to decide, plan and adopt adequate and efficient options and particularly for accountable actors to protect, promote and fulfil the human rights to water and sanitation.

Question 12: Are specific measures in place for the communities that will be displaced as a result of the mega-project? Are those measures guided by the human rights framework?

Mega-projects often imply the displacement of populations, forcing them to move to new locations where water services need to be available for drinking, domestic uses, food production, agriculture, or livestock breeding, as well as sanitation facilities. Accountable actors must include in the planning and designing of mega-projects a thorough review of the need for displacement of the population. In the event displacement is inevitable, those actors must establish plans to provide adequate water before and after eviction.
Construction is the stage when actions taken by accountable actors have direct effect on the population and their access to water and sanitation.

Question 13: Are the human rights obligations and responsibilities of actors clear in the construction stage?

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. The clear understanding of who has human rights obligations and responsibilities in the construction stage is crucial to identify who is furthermore accountable to provide explanations and justification and to have sanctions and remedial actions for violations and abuses enforced (A/73/162). Particularly at the construction stage, private sector participation is complex, as mega-projects involve a range of technical expertise and the supply-chain that includes different contractors and subcontractors in addition to the primary business entity that is responsible for the construction.

Question 14: Are measures in place to address social conflicts?

During the construction phase, social conflicts might occur as affected communities see their drinking water, food, living environments, or land ownership threatened. As illustrated in the section above, in those conflicts human rights defenders and community leaders are often harassed and threatened. States, businesses and investors have obligations and responsibilities to take concrete measures to de-escalate conflicts, addressing measures to face the narrative of human rights defenders, including underlying root causes of such conflicts, related to power imbalance, commodification and corruption, among others.
The operation stage begins when the infrastructure of a mega-project starts to be used to fulfil its purpose. Conflicts existing in the phase of construction may be aggravated and others may emerge if the operation deviates from its plan or agreed terms and conditions or if unpredicted consequences emerge.

Question 15: Are the human rights obligations and responsibilities of actors clear in the short-term operation stage?

Clarifying the accountable actors in the short-term operation stage is essential for a transparent accountability process, in addition to the clarification of actors involved in the construction stage, as the actors of the two stages may not necessarily be the same.

Question 16: Has an assessment of the human rights impacts, particularly on water and sanitation, been carried out in the short-term operation stage?

In the short-term operation, negative impacts and missteps in planning and designing of mega-projects may materialize. Contamination, for example, may increase progressively while the mega-project operates. In this regard, it is necessary that affected populations are able to complain and have the means to report such new impacts on their rights to water and sanitation. Further, they should be able to withdraw their consent or request a review of the license granted to the projects, on the basis of this change of situation.
The long-term operation of mega-projects needs to be carefully taken into consideration, as the bio-socio-economic environment is dynamic, the deterioration of the infrastructure can occur and the prolonged exploitation of resources may exacerbate or introduce new and unforeseen impacts.

Question 17: Are the human rights obligations and responsibilities of actors clear in the long-term operation stage?

In certain projects, the operator in the long-term may differ from the entity that constructed and operated the project in the short-term. It may also be that the changes to the actors involved may not be evident and, therefore, roles and responsibility of accountable actors in this stage should be made clear to the affected population.

Question 18: Has an assessment of the human rights impacts, particularly on water and sanitation, been carried out in the long-term operation stage?

Potential impacts and risks of mega-projects at the long-term operation must be identified, and safeguards put in place in order to protect the human rights to water and sanitation. The complexity and long duration of lifecycle of mega-projects calls for response to long-term impact and contemplate impacts that will persist during various generations. In this regard, active involvement of affected communities in monitoring the security, performance and impacts of the mega-project is key.

Question 19: Is information adequately provided to the affected people in the long-term operation stage?

Answerability refers to the requirement for actors to provide explanations and reasoned justification for their actions, inaction and decisions to the people affected by them, as well as the public at large (A/73/162). However, in many cases, affected populations have not been properly informed or consulted in the preparation and implementation phases of mega-projects or in reparation processes to redress the harm caused by a mega-project.
The last stage of the lifecycle is associated with various processes including decommissioning, or the closure of the mega-project, according to an established formal procedure that includes both administrative and technical processes. Additionally, in the event of disasters, the mega-project can also come to an end of its cycle where its physical structures are destroyed partially or as a whole. The disasters can be man-made or from natural causes, such as floods, earthquakes, tsunamis, or technological causes. Disasters are commonly considered man-made, since their occurrence are either provoked by technological activities or natural causes could be prevented by the mega-project management.

**Question 20:** Is the decommissioning stage part of the project planning?

The lack of regulation requiring the mega-project to have a decommissioning stage as part of a mandatory planning process is a reason for inadequate or lack of appropriate procedures at the end of the cycle. A way to prevent and mitigate the impact arising from non-compliance with decommissioning is to establish plans for the closure of operation and de-installation of physical infrastructure at the planning stage.

**Question 21:** Has an assessment of human rights impacts, particularly on water and sanitation, been carried out at the decommissioning stage?

The human rights impact assessment on water and sanitation includes not only negative impacts that the removal of infrastructure and the remnants of the operation may have on the quality of water but also how certain parts of the infrastructure can be used to enhance the water access to the population living in the vicinity. A decommission plan can also include not only removal of infrastructure but a way to hand-over part of facilities to the local communities, in accordance with a needs assessment that involves the participation of the communities.

**Question 22:** Are preventive measures, as well as compensation, redress and reparation procedures in place in the event of a disaster that affects the enjoyment of the human rights to water and sanitation?

Preventive and non-repetition measures are essential to prevent recurrence of disasters and 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 situations of emergencies. Even during an emergency, immediate obligations of access to the minimum essential level of water and sanitation on a non-discriminatory basis apply (A/HRC/39/55, para. 14). 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 took place is the first step to achieve appropriate redress and remedy for harm caused to affected communities.
LIST OF QUESTIONS AS GUIDELINES FOR IMPLEMENTING HUMAN RIGHTS OBLIGATIONS AND RESPONSIBILITIES

1. Are lessons learned from assessments of one stage taken into account as feedback for subsequent stages of mega-projects or new mega-projects?

2. Does the national development planning explicitly incorporate impact assessment that includes the human right to water and sanitation?

3. Has a comparative study examining different alternative options to mega-projects carried out in the macro-planning stage?

4. Is the formulation of national development plans grounded on a consultation process?

5. Is there legislative and regulatory framework compliant with the human rights to water and sanitation that guides the macro-planning stage?

6. Are participatory processes, especially including the affected population, part of license/approval stage?

7. Is the assessment of human rights to water and sanitation a precondition for granting license/approval?

8. Is the license periodically reassessed and renewed?

9. Has an ex-ante impact assessment, grounded on human rights including the human rights to water and sanitation, been carried out in the planning stage?

10. Are mitigation and preventive measures included in the planning stage?

11. Are participatory processes, especially including the affected population, set up for decision making at the early phases of the planning and designing stage?

12. Are specific measures in place for the communities that will be displaced as a result of the mega-project? Are those measures guided by the human rights framework?

13. Are the human rights obligations and responsibilities of actors clear in the construction stage?

14. Are measures in place to address social conflicts?

15. Are the human rights obligations and responsibilities of actors clear in the short-term operation stage?

16. Has an assessment of the human rights impacts, particularly on water and sanitation, been carried out in the short-term operation stage?

17. Are the human rights obligations and responsibilities of actors clear in the long-term operation stage?

18. Has an assessment of the human rights impacts, particularly on water and sanitation, been carried out in the long-term operation stage?

19. Is information adequately provided to the affected people in the long-term operation stage?

20. Is the decommissioning stage part of the project planning?

21. Has an assessment of human rights impacts, particularly on water and sanitation, been carried out at the decommissioning stage?

22. Are preventive measures, as well as compensation, redress and reparation procedures in place in the event of a disaster that affects the enjoyment of the human rights to water and sanitation?