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Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development

Report of the Special Rapporteur on the human right to safe drinking water and sanitation, Catarina de Albuquerque

Addendum

Mission to Thailand (1-8 February 2013)*

Summary

Thailand made enormous achievements in the last decades to ensure access to water and sanitation, particularly in the challenging area of basic rural sanitation. At the same time, striking contrasts in access to safe drinking water and sanitation continue between those who have benefited from the rapid development the country has achieved and those groups of people who have been left behind from improvements including migrants, indigenous peoples, informal settlement dwellers and prisoners. Other remaining challenges with regard to the human rights to water and sanitation are water quality, safe management, disposal and treatment of wastewater and treatment of sewage from septic tanks. The Special Rapporteur strongly encourages the Government of Thailand to revisit the situation of access to safe drinking water and sanitation from a human rights point of view to ensure these human rights are fully realized for all in terms of quality, availability, affordability, accessibility and adaptability of services and that inequalities in access are eliminated. She also reiterates that every individual, regardless of nationality, language or ethnicity, is entitled to the human rights to water and sanitation, and their legal status cannot exempt the State from its obligations to ensure access to water and sanitation. Furthermore she calls on the Government to take more vigorous, efficient and targeted measures to address and mitigate pollution and bring greater transparency to the processes of licensing of industries and enhanced accountability for those who violate the law.

* The summary of the present report is circulated in all official languages. The report itself, which is annexed to the summary, is circulated in the language of submission only.
Annex

*Report of the Special Rapporteur on the human right to safe drinking water and sanitation, Catarina de Albuquerque, on her mission to Thailand (1-8 February 2013)*

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I. Introduction

1. From 1 to 8 February 2013, the Special Rapporteur on the human right to water and sanitation, Catarina de Albuquerque, undertook an official visit to Thailand, to examine the progress and remaining challenges in ensuring the full realization of the human rights to water and sanitation in the country. During the mission, she met with different interlocutors including the Ministries of Foreign Affairs, Interior, Natural Resources and Environment, Justice and Public Health and the local government of Chiang Mai. She also met with the Bangkok Metropolitan Administration, the Provincial Waterworks Authority (Headquarters and Region 9), the Metropolitan Waterworks Authority and the Royal Project Foundation. She was also given an opportunity to meet with the National Human Rights Commission of Thailand and civil society organizations, to visit several communities and talk to people in Bangkok and Chiang Mai. The Special Rapporteur expresses her appreciation to the Government of Thailand for the cooperation extended, as well as for the excellent organization and facilitation of the visit. She also extends her thanks to the United Nations country team, in particular the Office of the High Commissioner for Human Rights Regional Office for South-East Asia. Finally the Special Rapporteur wishes to thank all those who took the time to meet with her and help her better understand the situation of access to water and sanitation in Thailand.

II. Legal and institutional framework

A. International human rights obligations

2. The Government of Thailand has ratified several international human rights instruments and hence has legal obligations to take concrete and deliberate steps to ensure the progressive realization of the human rights to water and sanitation. Safe drinking water and sanitation are a human right and derive from the right to an adequate standard of living, enshrined in, inter alia, article 11 of the International Covenant on Economic, Social and Cultural Rights. This was explicitly recognized by the General Assembly in its resolution 64/292, which enjoyed the support of Thailand, and by the Human Rights Council, in its resolution 15/9, which was adopted without a vote.

3. Human rights are for all. Every individual is entitled to access to drinking water and adequate sanitation that are accessible, available, affordable, socially acceptable and safe in all spheres in his or her life.1 The realization of these rights also requires ensuring access to adequate and affordable hygiene practices, including hand washing and menstrual hygiene management while ensuring privacy and dignity. Effective measures have to be taken in order to ensure adequate disposal and treatment of human waste, including of wastewater.

B. National legal framework

4. The Constitution of Thailand provides for the protection of several social rights. While it does not specifically refer to the human rights to water and sanitation, it does state that sanitary conditions need to be protected. The Constitution provides that the State shall enact policies with relation to natural resources and the environment, including water.

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1 See the Committee on Economic, Social and Cultural Rights general comment No. 15 (2002) on the right to water.
5. Thailand does not yet have a comprehensive water law, but a Draft Water Act has been under discussion since 1992. Its section 36 categorizes the usages of water into three parts: (1) for subsistence; human consumption and domestic use; household agriculture, animal husbandry and industry including usage of water in small quantities as specified in the ministerial regulations; (2) for commercial agriculture and animal husbandry; industry; tourism; electricity generation; waterworks; and other activities as specified in the ministerial regulations; and (3) for big businesses using a large amount of water or water which can affect transbasin diversion of water or which covers a large area of water as specified in the ministerial regulations. Section 37 indicates that the guidance set by the Minister must “give priority” to human consumption and domestic use of water. These provisions are important as the prioritization of water for personal and domestic use over other water uses is required by the human right to water. The Special Rapporteur encourages the Government to adopt the Act urgently and to fully integrate the human right to water into it, so that the normative content of the human right to water and the principles of equality and non-discrimination and sustainability in access to water are fully and explicitly enshrined therein. The Government of Thailand is organizing public hearings on the Act across the country, which is an important process. The Special Rapporteur considers that the involvement of the Ministry of Justice and of the National Human Rights Commission, as well as of relevant national and international human rights and environmental civil society organizations in the consultations would be a very welcome initiative.

6. Sanitation is regulated mainly by the 1992 Public Health Act and the National Environmental Quality Act among others. The latter Act contains provisions on environmental quality management, including provisions that are especially relevant to water quality management and pollution control. Based on this Act, sub-laws and ministerial regulations have been put in place for domestic, industrial, and agricultural wastewater treatment and effluent standards.

C. National institutional framework

7. In Thailand, under the Determining Plans and Process of Decentralization to Local Government Organization Act (Decentralization Act 1999), the Committee of Decentralization to Local Government Organizations, composed of ministers, representatives of local government and experts, has the competence to establish a decentralization plan for local government organizations. Under this Act, the local authorities have the “power to systematize the public services for the benefit of local communities” in such areas as water drainage and waste management.²

8. The institutional framework for water and sanitation in Thailand is quite dispersed among different national level agencies and local authorities. A fragmented distribution of responsibilities for different sources of water, sanitation issues and quality control of both water and sanitation can be identified as one of the challenges for the Government to ensure the quality of drinking water, sound sanitation management and reaching the unserved and underserved populations in Thailand.

9. Central government assumes the duties and privileges of states and bears the main responsibility for ensuring the realization of human rights. The reality, however, is that central government rarely exercises direct power over the issues that are of most immediate concern to the vast majority of the people, including the management and provision of water and sanitation services. Hence decentralization is a process that aims at strengthening

² Sect. 16 (18) and sect. 17 (10) of the Decentralization Act 1999.
local governments so that they may deliver specific services to the populations living in the areas they administer. Decentralization, however, does not exempt central government from its human rights obligations. Irrespective of the responsibilities of the local authorities, central government remains the primary duty-bearer for the realization of human rights. Hence it has a duty to regulate and monitor the way in which local governments respect, protect and fulfil the human rights to water and sanitation. Moreover, it may need to adopt supplementary measures depending on the circumstances, for instance to ensure the affordability of services. Furthermore central government has the obligation to develop an overall strategy on how to fully realize the rights to water and sanitation. Hence in Thailand, central government remains obliged to ensure that local governments have the necessary financial, human and other resources to regulate their activities and to monitor and control their performance.

10. The National Human Rights Commission of Thailand has a mandate to receive complaints related to economic, social and cultural rights, and it has filed several cases on alleged violations of human rights related to water and sanitation. The Commission can, when it finds that any provision of a law, by-law, order or any other administrative act affects human rights and creates a question of constitutionality, refer the matter to the Constitutional Court or Administrative Court, together with its own opinion about the case. In appropriate cases and in the public interest, the Commission can file a lawsuit before the Court of Justice on behalf of the injured person to find a solution to the human rights violation.

1. Water

11. According to the Metropolitan Waterworks Authority Act of 1967 and the Provincial Waterworks Authority Act of 1979, State enterprises under the Ministry of Interior – the Metropolitan Waterworks Authority (MWA) and the Provincial Waterworks Authority (PWA) – provide piped water, their waterworks covering a little over 20 per cent of the households across the country located mainly in urban areas. Local authorities are responsible for the supply of both piped and non-piped water to the rest of the population. In the eastern region, a private company (Eastern Water Resources Development and Management Public Company Limited (East Water) established by PWA in 1992) operates and provides raw water and other water supplies for industrial usage in the Eastern Seaboard, comprising seven provinces.

12. Another State enterprise, the Industrial Estate Authority of Thailand, attached to the Ministry of Industry, is responsible for implementing the Government’s industrial development policy, including the control and monitoring of industrial pollution.

13. The Ministry of Public Health sets basic minimum water quality standards and carries out some limited sampling of tap water, rainwater and bottled water.

14. The Ministry of Natural Resources and Environment monitors the situation of some of the groundwater and surface water sources.

2. Sanitation

15. According to the Public Health Act, local governments have the power and duty to collect and dispose of sewage in their respective areas. The Act further provides for local authorities to issue a licence to private entities for the disposal of sewage. The Department of Public Works and Town and Country Planning of the Ministry of the Interior is responsible for controlling the construction standards of wastewater treatment systems by local authorities.

16. The Department of Health of the Ministry of Public Health is currently drafting a ministerial regulation defining the standards of septic tanks. While the Public Health Act
states that the Minister of Public Health shall be in charge of and control the execution of the Act and that it shall have powers to appoint public health officials and issue ministerial regulations, Ministry officials told the Special Rapporteur that they do not have enough human and financial resources to ensure monitoring and implementation of their guidelines and regulations at the local level.

17. According to the National Environmental Quality Act, the Ministry of Natural Resources and Environment regulates sewage and wastewater, as well as the quality of groundwater resources and surface water. A State enterprise under the Ministry, the Wastewater Management Authority, in cooperation with local authorities, is responsible for wastewater treatment.

18. The Ministry of Finance supervises the performance of State enterprises. In the case of MWA and PWA, their performance is evaluated every year against 18-19 criteria, including, among others, water quality, the number of water breakdowns and the leakage level.

D. Budget

19. As at 2009, the nominal income per capita in Thailand was US$ 4,115 and the State’s annual water budget per capita was US$ 30. The annual sanitation budget per capita was not available.\(^3\) While the Special Rapporteur did not receive updated information on the national and local budgets allocated for water and sanitation, she was informed that 45 per cent of the profits that MWA and PWA make are credited as Government revenue. It is important for such revenues to be appropriately invested for maintenance and other necessary measures to ensure the progressive realization of the human rights to water and sanitation for all in Thailand. It is crucial that the national and local budgets adequately account for the amount of expenditures in the sector and for how, where and by whom expenditures in the water and sanitation sector will be allocated. The Government should also ensure that funding to the sector is reported by all those concerned, including donors, private providers and non-governmental organizations (NGOs), in order to obtain a complete picture of the resources allocated to the sector and how they are being used.

III. The human rights to water and sanitation in Thailand

20. Thailand has achieved 96 per cent coverage of improved drinking water sources and 93 per cent coverage of improved sanitation in 2011, according to global monitoring of the situation of access to water and sanitation.\(^4\) While access to drinking water in the central provinces was above 98 per cent, in the southern provinces it was almost 20 per cent lower. These figures, however, do not portray an accurate picture of the real situation that the Special Rapporteur observed in the country, because current global monitoring does not measure quality, quantity or affordability of access to water and sanitation. The Special Rapporteur also learned that national monitoring excludes stateless people, refugees, undocumented migrants or migrants in an irregular situation – including sex workers – and those in informal settlements. Several million people are thus left out of the statistics.

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21. In Thailand, as a result of the Government’s consolidated efforts to improve rural sanitation and public health, the number of deaths caused by diarrhoea has decreased significantly since the late 1990s. This was a result of strong political will combined with targeted actions by the Government. Surprisingly, according to the Government, from 2000 to 2009 the number of diarrhoea cases witnessed an opposite trend and increased by 31 per cent. This may have been caused by unsafe water, inappropriate management of human faeces and a lack of hygiene practices – this will be analysed further below.

22. Significant progress was made in terms of access to public toilets as well. Whereas the rate of access to clean public toilets in 2006 was 9 per cent, it is now already above 62 per cent. This is another sign that when there is political will and vision, immense progress can be achieved in the country. The Special Rapporteur visited and used one of the public “Happy Toilets” and was very positively impressed by its level of cleanliness.

A. Invisibility of people caught in a protection gap

23. During her mission, the Special Rapporteur was struck by the contrast in access to safe drinking water and sanitation between modern cities under rapid development and left-behind areas such as migrant workers’ camps, hill tribes and informal settlements. Despite the progress which has benefited the majority of the population, a significant number of people are left behind due to their personal status, since the current structure of water and sanitation supply only covers the registered population.

1. Migrant workers

24. There are reportedly as many as 3 million migrant workers in Thailand mainly from bordering countries, Cambodia, Laos and Myanmar, the majority of whom are in an irregular situation, and many of whom are accompanied by their families, including children. They make up as much as 10 per cent of the national workforce.

25. The Special Rapporteur is concerned about access to water and sanitation for migrants, in particular migrant workers in an irregular situation. She visited a migrant construction workers’ camp in Chiang Mai. Access to water and sanitation in the camp was far below the standard set by the Building Control Act (1979) which requires any building to have water and proper systems for wastewater collection and solid and human waste management as per the established standards. The camp visited only had 10 non-sex-segregated toilets and 1 open bathing point. These were shared by the nearly 300 workers, including 70 women, as well as by 40 children living in the camp. This situation contravenes the normative content of the rights to water and sanitation – these migrants suffer not only from a lack of access to sufficient water and sanitation, but also from stigma and denial of privacy and dignity. When the Special Rapporteur asked one migrant worker how she bathed in the open bathing point especially during menstruation, she said: “I just shut my eyes and wash myself as quickly as possible, so that it is done.” The Special Rapporteur was also surprised to learn that the women in the camp needed to spend 10 per cent of their daily wage on sanitary napkins – this is explained due to the fact that migrants

5 Ministry of Public Health and Ministry of Natural Resources and Environment of Thailand, The Second National Environmental Health Strategic Plan, 2012-2016, p. 59. Their disease investigation identified drinking water as a major source of infection.

6 Human Rights Watch, From the Tiger to the Crocodile: Abuse of Migrant Workers in Thailand (February 2010), p. 6.

7 Female workers in the camp are allegedly paid 140 Thai baht per day while the minimum wage in Thailand is 300 baht. Four sanitary napkins cost from 12 to 16 baht.
in irregular situations receive a salary that is below the national minimum wage set by law, although the Government explained that they can file a complaint to the Provincial Labour Protection and Welfare Officers if they receive less than the minimum wage. In addition, these families have to incur additional expenses since they are forced to buy purified water, as the water they are provided with by their employers is not safe to drink. It is the employer’s responsibility, from a human rights perspective, to respect human rights. Furthermore, State authorities have an obligation to monitor compliance with the law and punish any violations of the law. According to information received by the Special Rapporteur, the situation on the construction site she visited is not unique in the country, and it rather reflects a pattern of indifference on behalf of the national authorities regarding the situation of migrant workers in an irregular situation.

26. Migrant sex workers also experience difficulty accessing water and sanitation. Since prostitution is illegal in Thailand under the Prevention and Suppression of Prostitution Act (1996), migrant sex workers in irregular situations are doubly vulnerable to a denial of human rights as they have to hide themselves from society: they are in an irregular situation and practising an illegal profession. These circumstances put sex workers at a high risk of abuse from their employers. A civil society representative told the Special Rapporteur that sex workers were often charged by their employer for use of a bathroom after they performed their services, while their clients were provided with clean bathrooms. Such a condition might lead to situations where sex workers refrain from washing themselves after serving a client so as to save money. This creates potential hygiene concerns, and affects sex workers’ right to sanitation, including hygiene. The right to sanitation has to be accessible in all spheres of a person’s life, including in the workplace. The Committee on Economic, Social and Cultural Rights specified that, with regard to the right to healthy natural and workplace environments, “[t]he improvement of all aspects of environmental and industrial hygiene’ (art. 12.2 (b)) comprises, inter alia … the requirement to ensure an adequate supply of safe and potable water and basic sanitation … [and it embraces] safe and hygienic working conditions”. Furthermore, International Labour Organization (ILO) Convention No. 120 (1964) concerning Hygiene in Commerce and Offices provides that “[s]ufficient and suitable washing facilities and sanitary conveniences shall be provided and properly maintained.”

2. Indigenous peoples

27. In Thailand, there are no comprehensive data available on the indigenous population and the term “indigenous peoples” is not officially recognized under the Thai Constitution and relevant legislation, but it is estimated that between 600,000 and 1.2 million indigenous peoples (approximately 1-2 per cent of the total population) live in Thailand, especially in forests, mountains or on the sea coast. The Department of Welfare and Social Development has recorded 3,429 hill tribe villages with 93,257 villagers.

28. Over 60 per cent of Thailand was forested 60 years ago, but today forests represent only 28.4 per cent of the land. As economic and industrial development in the country advances and forest areas are reduced, indigenous peoples have faced eviction, including forced eviction, as well as limitations in access to and availability of natural resources upon which they depend, including water. The indigenous peoples’ right to the conservation and protection of the environment recognized under the United Nations Declaration on the Rights of Indigenous Peoples is of particular importance to them because of the “special

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8 Committee on Economic, Social and Cultural Rights general comment No. 14 (2000) on the right to the highest attainable standard of health, para. 15.

ties” that they “maintain with the natural habits of the territories in which they live”. In this connection, the Government has announced that it is pushing forward with passing a Community Rights Act to protect the management of natural resources (land, water, forests and sea) by communities themselves, which is a positive policy. The implementation of such an act, if adopted, will be key, and its implementation should include awareness-raising among indigenous peoples on the law and on their rights, overcoming the language barrier so that they fully understand their rights.

29. The lack of citizenship of many indigenous peoples bars their access to water and sanitation as well to other basic services like health care and education. Approximately 30 per cent (296,000) of indigenous peoples lacked citizenship as at 2011, due to a complex process which requires them to produce birth certificates or other registration which they usually do not have, as well as money and time. Indigenous peoples often live in remote areas which makes access to water more difficult. The Committee on the Elimination of Discrimination against Women (CEDAW) noted that access to sanitation and water by rural and hill tribes, in particular women, is a concern. In one of the hill tribes near the border with Myanmar, for instance, the Special Rapporteur was informed that stateless people and people without Thai nationality had not even been counted during the national census survey. This fact contributes to a higher coverage rate of access to water and sanitation in the records than in reality. In their village, women and girls fetch water from three reservoirs and need to queue for three hours during the dry season because there is not enough water available. This restricts their access to other rights including education and work. Schools also run out of water during the dry season, and a teacher shared the view that toilets would be kept cleaner if enough water were available. In addition, there has reportedly been a stigma attached to some hill tribes labelled as “drug addicts”, and such stigma has justified denial of their access to basic services. Some of the villagers, for instance, still go to the forest to defecate in the open, while others dig big holes in which they relieve themselves.

3. Informal settlement dwellers

30. In Thailand 10 per cent of families in urban areas reportedly live in informal settlements and a large proportion of families have problems accessing basic services, including water and sanitation. There have been efforts to improve urban conditions on the part of the Government, civil society and international organizations, and many people in informal settlements have gained access to basic water and sanitation. During her mission, the Special Rapporteur visited one of the informal settlements on the outskirts of Bangkok where people – after struggling for the past 10 years – had finally managed to get connected, as a group, to MWA. She was, however, surprised to learn that the water tariff for industries applied to these households because they were connected as a group of almost

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13 According to Government data, some 506,200 people are without a nationality or stateless in total as at 31 December 2011.
14 “Concluding comments of the Committee on the Elimination of Discrimination against Women: Thailand” (CEDAW/C/THA/CO/5), para. 33.
This means that these visibly very poor people pay 2.5 times more per cubic metre than an individual private household. This situation makes the price of water unaffordable for this group of people who live in a very precarious economic situation. Moreover, even though connected to the water network, many people opt for buying big containers of water for drinking, as they are not sure about the quality of tap water. The cost of bottled water is even higher than tap water, a situation that raises affordability concerns and clearly discriminates against this group of people.

4. Prisoners

31. There are currently over 262,000 prisoners in 143 prisons in Thailand.¹⁶ Both civil society and prison authorities informed the Special Rapporteur that prisons in Thailand, in particular women’s prisons, are overcrowded. The occupancy rate is 231 per cent, which makes them the ninth most crowded prisons in the world and the third in Asia.¹⁷ This inevitably causes overcrowding of sanitation and hygiene facilities.

32. The Special Rapporteur visited the Central Women Correctional Institution in Bangkok in order to assess the way in which the inmates enjoyed their human rights to water and sanitation. She regrets the fact that private interviews with inmates could not be arranged by the authorities and that she could not visit all sectors of the prison as she had requested. The Special Rapporteur again regrets that she could not meet with prisoners sentenced to heavy penalties, including those on death row. Although the Special Rapporteur received information from the Government regarding conditions of detention as well as from civil society organizations, in order for her to be able to undertake an impartial assessment of the situation, it was indispensable to be able to talk to inmates in privacy and not limit the visit to the observation of sanitized empty cells and toilets.

33. Although the Special Rapporteur was not given an opportunity to collect first-hand information from the inmates, it was still evident that the prison was overcrowded, and also that access to showers and toilets did not comply with human rights requirements of respect for privacy and dignity. The showers and toilets were open, without doors or curtains both for men and women. According to interviews with women prisoners conducted by a civil society organization in 2011, the shower time is “the most tense and stressful part of the day as one must compete with others for a limited water supply. The time to shower is also limited”.¹⁸ The organization also raised concerns about there being no doors to the toilets and observed that it takes time for a woman prisoner to get used to such lack of privacy. In contrast, when the Special Rapporteur asked a prison official whether it was not embarrassing for the women to defecate and urinate in sight of dozens of other inmates and prison guards, the answer she received was simply that: “After one month they get used to it.” The lack of access to sanitation in conditions of safety and dignity can be tantamount to inhuman or degrading treatment especially in the context of detention. Therefore, the Government must adopt urgent measures to ensure dignity and privacy in access to water and sanitation, including hygiene, for all inmates.

34. The Special Rapporteur reiterates the observation made to Thailand by the Human Rights Committee in 2005, in which it stated its concern “at the overcrowding and general conditions of places of detention, particularly with regard to sanitation and access to health care and adequate food”.¹⁹ She also reaffirms the recommendation made then to “guarantee the right of detainees to be treated humanely and with respect for their dignity, particularly

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¹⁷ Union for Civil Liberty, “Prisons in Thailand 2011”, p. 3.
¹⁸ Ibid., p. 51.
¹⁹ “Concluding observations of the Human Rights Committee” (CCPR/CO/84/THA), para. 16.
with regard to hygienic conditions” and calls on the Government to guarantee that the exercise of the right to sanitation is ensured in conditions of privacy.

35. The Government of Thailand has been making efforts to ensure the right to water in prisons, based on a policy to provide 5 litres of drinking water and 45 litres of water for other purposes per inmate per day. The prison authorities filter the tap water and test coliforms in the water. They also carry out awareness-raising on hygiene. The authorities of the Central Women Correctional Institution explained that each inmate receives a hygiene kit containing, among other things, a bar of soap, toothpaste and 10 sanitary napkins per month, additional sanitary napkins needing to be requested if those provided are insufficient. It is reported that such a kit is provided to an inmate on death row only once in six months, which is a practice obviously contravening the principle of non-discrimination, moreover raising severe hygiene concerns.

36. The marginalized people that the Special Rapporteur met during her mission represent a significant number of people living in Thailand. Every individual, regardless of national origin, race, language and status, is equally entitled to the human rights to water and sanitation. The Committee on the Economic, Social and Cultural Rights noted that: “The ground of nationality should not bar access to Covenant rights… The Covenant rights apply to everyone including non-nationals, such as refugees, asylum-seekers, stateless persons, migrant workers and victims of international trafficking, regardless of legal status and documentation.” People’s status cannot be used as a pretext to deny them access to water and sanitation.

37. The Special Rapporteur also recalls that experience in seeking to achieve the Millennium Development Goals (MDGs) has shown that “trickle-down” effects cannot be expected in development. Without specific, direct and targeted measures to address the most disadvantaged and marginalized groups of people, development may never reach them. Hence, instead of focusing on low-hanging fruit, the Government should make an additional effort to target the above-mentioned groups of people.

B. Water quality

38. Quality is fundamental to the human right to water. This means that drinking water should not put human health in danger. In Thailand this requirement is partially met, but a large proportion of the country’s population has no assurances in that regard. During her mission, the Special Rapporteur observed that Thai people do not trust tap water. This might be one reason why almost 30 per cent of the population rely on bottled water as their main source of drinking water, while 39 per cent of tap-water drinkers have the water filtered first and 16 per cent have it boiled before drinking it. The high prevalence of diarrhoea might further explain why people avoid drinking tap water. Information on water quality is not easily available either.

39. The water quality standards in Thailand were set in 2000 by the Department of Health. They are based on, but are less strict than, the World Health Organization (WHO) Guidelines for Drinking-water Quality as, according to the Ministry of Public Health, some parameters were not relevant to the Thai context. MWA in Bangkok and PWA in other cities have their own water standards. Clients of MWA and PWA benefit from water

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20 Ibid.
22 Committee on Economic, Social and Cultural Rights general comment No. 20 (2009), para. 30.
provision that meets quality requirements at the water plant and in the main pipes. While the quality control they undertake complies with high standards, there are cases where cracks in pipes and low pressure could cause water contamination by allowing infusion of external substances, including wastewater, particularly in locations far from the water plants. Uncertainties regarding the quality of the water exist at the tap level because there is no State entity mandated to monitor quality at the drinking point inside the household. Sometimes household pipes are old and no repairs are done since this is each household’s responsibility. Often households illegally install water pumps or boosters connected to the water pipes to increase the water pressure particularly in apartments or buildings – these do not only suck water, but in case of cracks in the pipes, also bring dirt into the pipes. Occasionally water filters are not adequately maintained at the household level. These circumstances lead to possible interference with water quality standards.

40. In Thailand, the Ministry of Public Health has overall responsibility for ensuring the quality of drinking water. According to the Ministry, most of the tap-water samples taken in 2008 and 2010 did not meet the drinking-water standards set by the Department of Health, apart from some sampled water produced by the Public Waterworks Authority.\(^\text{24}\) According to the sampling only 40 per cent of municipal water and 20 per cent of water provided by subdistrict authorities was safe. Also a large portion of the random testing of water quality in schools and at street food vending stalls conducted by the Department of Health did not meet drinking-water standards.\(^\text{25}\)

41. According to estimates based on limited sampling by the Ministry of Public Health, the current rate of access to safe water both in rural and urban areas is roughly half of the target. It is welcoming that Thailand is not satisfied with targets set under the MDGs for water – which is silent regarding water quality – and has set the bar higher by aiming to cover 80 per cent of the people living in urban areas and 50 per cent of the people living in rural areas with safe drinking water by 2015. This is a good example of the progressive realization of economic, social and cultural rights as the Government has a concrete plan to gradually achieve the full realization of the human right to water. The Ministry of Public Health, however, is not given enough means to achieve this goal as it only has financial and human capacities to carry out sampling of water quality on a very limited scale.

42. The Department of Groundwater Resources of the Ministry of Natural Resources and Environment manages the development of groundwater resources and carries out regular monitoring of them. According to the Ministry, the majority of major wells in Bangkok are monitored systematically on a monthly basis, including for water level and quality. It is important to monitor and conserve the quality of groundwater for a sustainable supply of safe drinking water in particular during emergencies, like droughts. The Special Rapporteur welcomes the systematic monitoring of groundwater at the observation well she visited in Bangkok. She was also encouraged by the initiative of the Government to expand such groundwater monitoring mechanisms outside Bangkok for monitoring and preserving vulnerable water resources.

43. Despite the steady expansion of the water network there is a growing tendency to rely on bottled water in Thailand, which is not only a concern from an affordability and availability point of view, but also a serious environmental problem. According to a study, Thailand is ranked as one of the top 10 countries both in per-capita bottled water consumption (114 litres per person per year in 2010)\(^\text{26}\) and in bottled water consumption by

\(^{24}\) Ibid., p. 50.
\(^{25}\) Ibid., p. 58.
\(^{26}\) Pacific Institute, “The World’s Water: Per-Capita Bottled Water Consumption by Top Countries, 1999-2010”, available at
It is estimated that 3 litres of water are needed to produce a bottle of 1 litre of water, and bottled water is much more expensive than tap water. An enormous amount of plastic bottles has a negative impact on the environment, also because manufacturing, recycling and incinerating bottles uses energy and fuel. In this connection, it was encouraging to witness a campaign to promote tap water by PWA and the Ministry of Public Health through expanding the tap water coverage area across the country, small-scale sampling of water quality and awareness-raising on the safety and affordable price of tap water. Such a promotional activity should come with accessible and accurate information on the quality of water. The Special Rapporteur also encourages civil society not to be satisfied with bottled water as the primary source of safe drinking water as it is not a sustainable solution. The human right to water is not met if people living in Thailand have no other choice but to buy costly bottled water.

44. MWA and PWA are State enterprises permitted to make a profit. They adopt a cross-subsidy tariff mechanism. For the consumption range of 0-10 cubic metres per month, MWA charges 8.5 baht per cubic metre for domestic water, and 9.5 baht per cubic metre for commerce, government agencies, State enterprises and industry. PWA charges 10.20 baht per cubic metre for domestic users, 16 baht for the Government and small-scale businesses; and 18 baht for State enterprises and industries. The Special Rapporteur is of the opinion that the profits made by MWA and PWA should be kept within the sector for further investment in maintenance, expansion, upgrades and other necessary measures. She also recommends that the Government of Thailand monitor the quality of drinking water inside households and create a system, like a revolving fund aimed at enabling the reparation of pipes inside households and buildings, so as to ensure drinking-water quality.

C. Safe disposal of sewage and wastewater management

45. The progress that Thailand has made over the last 50 years in relation to access to sanitation, especially basic rural sanitation, is impressive. Whereas its coverage rate was below 1 per cent in 1960, it rapidly rose to near universal coverage of the registered population by 1999. While the Government’s objective was to reach a high coverage rate, the current challenge is to ensure quality, as well as safe disposal and treatment of human waste – which are essential measures to realize the right to sanitation. Deficient sludge collection and disposal, as well as lack of wastewater treatment are issues of particular concern. Safe disposal of the faeces of children between 0 and 2 years old was only 64.6 per cent. These circumstances explain the increasing rate of diarrhoea morbidity in the country.

46. In Thailand, wastewater management is under the responsibility of the local authorities. According to the Wastewater Management Authority, a State enterprise, only 20 per cent of local authorities have wastewater treatment plants and only 20 per cent of total domestic wastewater is treated. In the city of Bangkok, the Bangkok Metropolitan Administration only treats 40 per cent of the wastewater, dumping the remaining 60 per cent directly into the canals with only initial treatment. About 40 to 50 regional officers of the Pollution Control Department monitor the negative impact of untreated wastewater on

surface water by sampling, and according to government officials, building of treatment plants will be a priority in areas where such a negative impact has been detected.

47. The collection of the contents of septic tanks falls under the responsibility of the local authorities according to Ministry of Public Health regulations. A high percentage of households in Bangkok still rely on septic tanks. The high population density in the capital city, the high water table and septic tanks with open bottoms might lead to water contamination. Furthermore, in other areas of the country, licensed vacuum trucks are supposed to collect the sludge or septage contained in septic tanks and dispose of it at designated places for adequate treatment. However, the Special Rapporteur was informed that there was very poor control of the trucks by the competent local governments, that the majority of trucks operate freely without the necessary licence and that they often simply dump collected untreated sludge anywhere in the vicinity of the city. Reportedly, some local governments have received complaints from the people about unsanitary transport and unsafe disposal of septage, but they do not have the capacity to provide adequate collection or treatment services. According to the Public Health Act, the local government has powers to issue local provisions on a rate of maximum charges collectable by the persons obtaining a licence. However, illegal private vacuum trucks often charge people prices that are not affordable to low-income families. Since the number of licensed vacuum trucks is insufficient, illegal trucks are needed especially in times of flooding, when people are forced to hire them. In the hill tribe in the north-eastern area, for instance, the villagers declared that a Thai ethnic group which collects sludge charges 200 baht (US$ 7) per septic tank. In that village, the average annual income of people is of about 80,000 baht (approximately US$ 2,730) and poor people earn only 10,000 baht (US$ 342). Hence desludging their septic tank can be very expensive, representing a considerable percentage of the household income.

48. Regarding wastewater, the Ministry of Interior issued a ministerial regulation for the imposition of a wastewater tariff in 2004 based on the Enhancement and Conservation of National Environmental Quality Act (1992). A tariff was set at between 2 and 5 baht per cubic metre. Each household is charged 60 baht (US$ 2) per month and hotels or other business entities are charged a higher tariff. The imposition of a tariff is intended to provide the necessary funds for expansion of the sewerage system and maintenance and operation of the existing systems. The Act allows for penalties in case of lack of treatment and disposal of untreated wastewater, but in reality the local authorities do not have the capacity to police illegal disposal and the penalty is not enforced.

49. One of the significant challenges is the legal and institutional separation of powers over septage, sewage and wastewater falling under the Ministry of Public Health and the Ministry of Natural Resources and Environment, operated by the local authorities. The management of septage, sewage and wastewater is physically connected, and it needs a comprehensive policy, plan and executive bodies. It is recommended that both ministries take a more coordinated approach to the management of septage, sewage and wastewater and provide the necessary support and supervision to the local authorities who manage them on the ground.

IV. Water pollution by industrial projects

50. According to water quality monitoring in major rivers and lakes conducted by the Pollution Control Department, the number of surface water sources with very good or medium quality is decreasing, while the number of surface water sources with deteriorating
quality is on the rise. It is a serious concern that water pollution is being exacerbated by faecal coliform, and also by large-scale industrial, mining and agricultural projects which have had a severe impact on the environment in general, and on water sources, including drinking-water sources in particular. According to official data produced by the Industrial Estate Authority, the amount of toxic chemicals and hazardous substances used has increased significantly over the last few years. While the Industrial Works Department is competent to license waste-disposal plants to dispose of chemical substances, such licensed plants still dump waste in inappropriate places and contaminate the environment. In terms of agriculture, there are currently no clear regulations on hazardous waste management in the agricultural sector. WHO estimated that: “Enforceable standards have yet to be set for permissible levels of hazardous chemicals in food, water and the environment. An effective surveillance system must also be established to monitor compliance with standards and be directly linked to enforcement and punitive action when violations are detected.” The Ministry of Public Health registers an increasing number of chemical poisoning cases caused by both the agricultural and industrial use of hazardous chemicals. Many civil society organizations and journalists also talked to the Special Rapporteur about several recent cases of severe pollution by industrial or mining activities, which caused death, blindness and other serious sicknesses.

A. Environmental impact assessments

51. In Thailand, environmental impact assessments (EIA) are required for 35 types of development project and activities of any government agency, State enterprise or private entity that are likely to have an environmental impact under the 1992 Enhancement and Conservation of National Environmental Quality Act and the relevant Notification of the Ministry of Natural Resources and Environment. EIA reports, usually prepared by consultancy firms registered with the Ministry, are submitted to the Office of Natural Resources and Environmental Policy and Planning (ONEP) for preliminary review, and then to the Expert Review Committee for the final decision. The ONEP Environmental Impact Evaluation Bureau is mandated to review EIA reports and other documents submitted within 30 days from the date of receiving the reports. According to the Government, the Bureau has 73 staff members, and on average, the total number of projects submitted for EIA approval is around 282 per year. During her mission, the Special Rapporteur received complaints that the review of EIA reports was limited to a brief desk review by government officials with no meaningful on-site visits, despite a relatively well-staffed bureau. Several NGOs the Special Rapporteur met with affirmed that often these reviews were a simple formality given the lack of capacity on the part of the governmental entities to critically examine them.

52. A guideline on EIA reports developed by the Ministry of Natural Resources and Environment states that these must include “results of the environmental study in its present state, its value to human life quality”. On water specifically, source, quantity, quality, adequacy of drinking and domestic water, as well as water source, quantity, quality and

31 Ibid., p. 71.
32 Ibid.
34 The Second National Environmental Health Strategic Plan … (see footnote 30 above), p.72.
35 Between 1998 and 2011, a total of 3,940 projects were submitted for EIA approval (Office of the Auditor General, 2012).
flow rate of surface and groundwater must be studied. The Special Rapporteur was
informed, however, that no baseline data on water quality are usually available because no
examination of water bodies is carried out before permission is granted for activities. Hence
it is very difficult to assess whether subsequent pollution of water bodies is due to
industrial, mining or agricultural activities.

53. Participation in the EIA process of people likely to be affected is not clearly defined
either in the Act or the ministerial guidelines, while the Act provides that individual persons
may be accorded the right “[t]o be informed and obtain information and data from the
government service in matters concerning the enhancement and conservation of
environmental quality...”. While the relevant Notifications of the Ministry of Natural
Resources and Environment on EIAs state that public hearings have to be held, the public
has no access to draft EIA reports and they can only see the approved EIA reports. The
Government has no obligation to respond to public concerns either.

54. Public hearings are required only for 11 types of large-scale project. Civil society
informed the Special Rapporteur that companies try to avoid public hearings by naming the
projects differently or designing projects to be just below the size that requires a public
hearing. Even when a public hearing is held, it seems that the affected populations do not
always participate, either because they are not informed in advance to prepare themselves,
they are required to register on the Internet beforehand or they do not realize how such
projects will affect their health or access to safe water, food and environment, again owing
to a lack of information. When a public hearing was held in November 2012 on the
expansion of a gold mine, for example, only those who had registered in advance were
allowed to participate in the public hearing. The villagers affected, however, claimed that
they had not been notified of the need for registration and hence had not been allowed to
participate. There were apparently many military and police officials deployed to secure the
site as well, so as to ensure that people who failed to register within the established deadline
did not attend the meeting. Another example is a dam project in north-east Thailand about
which the villagers affected were not consulted nor were they involved in decision-making
at the early stages. The World Commission on Dams estimated that “[e]xclusion of affected
people from the decision-making process gave rise to protracted protests, demonstrations
and confrontations”.

B. Accountability and compensation

55. According to the Organization of Ministries, Sub-Ministries and Departments Act
2002, the Pollution Control Department of the Ministry of Natural Resources and
Environment monitors and examines the quality of the environment and annually reports on
pollution conditions to the Pollution Control Committee and the National Environment
Board. According to the Government, there are currently 489 sampling stations, 392 of
which monitor surface sources and 97 of which monitor groundwater sources in 25 river
basins. Water quality samples are taken four times a year for surface water and twice a year
for groundwater. In addition, there are at least 44 automatic water sampling and monitoring
stations on major rivers in Thailand.

56. The Enhancement and Conservation of National Environmental Quality Act
provides the right “to be remedied or compensated by the State in case damage or injury is
sustained as a consequence of dangers arisen from contamination by pollutants ... caused
by any activity or project initiated, supported or undertaken by government agency or state

37 S. Amornsakchai and others, Pak Mun Dam, Mekong River Basin, Thailand, WCD case study,
enterprise”. The Ministry of Industry grants the permits and, jointly with the Ministry of Natural Resources and Environment and the Industrial Estate Authority of Thailand, monitors compliance with environmental standards. The Ministry of Natural Resources and Environment is authorized to take action only after a problem is detected. Furthermore, the criminal penalty against industrial companies is very light as illustrated in the case mentioned below, and does not provide any efficient disincentive for polluters. On the other hand, people affected have themselves to prove the actual damage in order to receive compensation, which is particularly difficult when baseline data on the environmental situation are usually unavailable. As such, the accountability mechanism to protect the environment and hence to protect the well-being of the people concerned is weak.

57. During her mission, the Special Rapporteur received information on the lack of accountability cases related to pollution, especially those caused by large-scale development projects. One of them was the Klity Creek case in Kanchanaburi province on the Thai-Myanmar border, which was the first case in which the Supreme Administrative Court ordered the Pollution Control Department to pay compensation to the victims of water pollution. In 1967, a lead mining company and treatment factory initiated its activities upstream from Klity village. In the late 1970s, the villagers noticed that the water in the creek had become murky and putrid and that their fish and cattle had started to die. In 1998, the Department of Mineral Resources of the Ministry of Industry ordered the closure of the company because of the illegal discharge of sewage and lead sediments from its tailing pond into the Klity Creek, and it fined the operator 2,000 baht (about US$ 67) which was the maximum penalty stipulated in the 1967 Minerals Act. The year 1998 was the first time that some of the villagers had managed to access to the hospital, 100 km away, for a health check-up and they realized that they had been suffering from lead poisoning. By this point, one villager had allegedly died and one had gone blind. In 2004, 22 villagers, victims of lead poisoning, filed a complaint before the Central Administrative Court against the Pollution Control Department, and in 2008, the Court ruled that the Department was guilty of negligence for having been slow in preventing further damage from the lead contamination and ordered the Department to pay compensation of 33,783 baht (approximately US$ 1,100). In January 2013, the Supreme Administrative Court upheld the lower Court’s ruling, but ordered an increased compensation of 177,199 baht (US$ 5,900) per victim.

58. The Special Rapporteur was informed that the Pollution Control Department had not cleaned up the creek to rehabilitate the contaminated water, claiming that the natural healing system would work, based on the conclusion made by the National Environment Committee in 2005. According to a study conducted by civil society organizations in May 2012, however, the lead levels in water near the mining area were mostly lower than the national standard, but the lead levels in the riverbed were much higher than the standard at the processing plant point and down to a 11.5 km downstream point. Since the lead level had never been measured before the industry had started, it appears difficult to prove the natural level of lead in this creek. According to the Supreme Court’s verdict, the Department must come up with a plan for rehabilitating the creek water as well as a remedy for drinking water, among others, during the rehabilitation process. The Government should act immediately according to its plan to clean up the lead-contaminated sediment between 2013 and 2016 to ensure the villagers’ access to safe drinking water.

38 According to a study conducted by Environmental Litigation and Advocacy for the Wants and two other organizations, the lead levels of the riverbed soil were 3,595 mm per kg at processing plant point and 4,082 mm per kg at a point 11.5 km down from the plant while the national standard is less than 30 mm per kg.
59. Participation, access to information and other procedural rights inform policies and development projects for the affected populations and at the same time these rights ensure better protection of their human rights to water and sanitation, as well as health. This is particularly the case with environmental issues. The rights to information and petition are guaranteed by the Constitution of Thailand. The Constitution further provides that: “The State shall organise public consultation thoroughly before the making of social, economic, politic and cultural development plan, the expropriation of immovable property, the making of town and country planning, the determination of land use, and the enactment of rule which may affect material interest of the public.”39 The implementation of such rights is still relatively new to Thailand, and is carried out in a restrictive manner. “Participation must be active, free and meaningful and thus needs to go beyond mere consultation and provision of information. It requires a genuine opportunity to express demands and concerns and influence decisions. It is also crucial for all concerned individuals, groups and communities to be able to take part or be represented in participatory processes. In particular, the inclusion of women must be ensured. Failing to do so may undermine a project.”40 In this regard, the Special Rapporteur calls on Thailand to create a fully independent environment or water and sanitation regulator. This issue will be developed further below.

V. Monitoring and accountability mechanism

60. As noted above, the lack of systematic independent monitoring of drinking water quality and water resources, as well as of wastewater management is one of the crucial defects in the water and sanitation provision system in Thailand. The absence of any regulation of water tariffs and the lack of implementation of the wastewater tariff regulation are also concerns in relation to the affordability of services.

61. Human rights impose three types of obligation on States parties: obligations to respect, to protect and to fulfil. With regard to water, the obligation to protect requires “State parties to prevent third parties from interfering in any way with the enjoyment of the right to water”.41 This obligation requires the adoption of all necessary measures to restrain third parties from, inter alia, denying equal access to adequate water, polluting or inequitably extracting water from water resources, including natural sources, wells and other water distribution systems. In the case of sanitation, States must ensure that non-State players act in accordance with human rights obligations, including through the adoption of legislative and other measures to prevent the negative impact of non-State players on the enjoyment of sanitation. Such abuses can be avoided through the creation of an effective regulatory system, which includes independent monitoring, genuine public participation and imposition of penalties for non-compliance.

62. The Special Rapporteur underlines the importance of establishing strong accountability mechanisms to ensure full compliance by all – including the private sector – with the human rights to safe drinking water and sanitation. A transparent and comprehensive regulatory framework would help to reduce the potential for abuse, would ensure appropriate monitoring and regulation of the behaviour of water and sanitation service providers, as well as of companies, industries and the agricultural sector, make sure

39 Constitution of the Kingdom of Thailand 2007, part 10, sect. 57.
they complied with environmental protection standards and the water quality was controlled. The Special Rapporteur strongly recommends the establishment of an adequately funded independent regulator, which would undertake independent monitoring of companies, industries and the agricultural sector with environmental protection standards, ensure genuine public participation and impose penalties for non-compliance. This independent regulator should also be given competence in terms of tariff-setting.

63. Progress towards the full realization of the human rights to water and sanitation cannot be sustainable unless it occurs within the context of a strong regulatory framework. National regulatory frameworks will make it easier to improve the remaining challenges in Thailand, such as setting clear targets and benchmarks for implementation; clarifying and harmonizing the responsibilities of those involved; setting minimum standards for quality, accessibility and affordability, and improving accountability by creating incentives for compliance. Effective regulation depends on the capacity to carry out regulatory functions. Regulation must be independent and shielded from political interference and control on behalf of specific groups or politicians. A transparent and comprehensive regulatory framework would help to reduce the potential for abuse.

64. Furthermore, the Special Rapporteur is of the view that a policy disconnect seems to exist between polluting activities and their ultimate impact on the safety of drinking water sources. The absence of an integrated policy and structure has generated enormous burdens, including detrimental health outcomes for individuals and communities. She recommends a holistic consideration of the right to water by factoring it into policies that have an impact on water quality, ranging from agricultural use of chemical products to mining activities.

VI. Conclusion and recommendations

65. Thailand has an obligation to take steps towards the progressive realization of the human rights to water and sanitation. The Special Rapporteur commends Thailand for the impressive progress achieved particularly in rural sanitation, which has demonstrated its competence to continue its efforts towards fully realizing this human right.

66. The Special Rapporteur reiterates that everyone is entitled to the human rights to water and sanitation, and status cannot exempt the State from its obligations to ensure access to water and sanitation. Non-discrimination and equality is a State’s immediate human rights obligation. In this regard, the Government is urged to take affirmative action to reach “invisible” individuals caught in a protection gap, including migrants, indigenous populations, informal settlement dwellers and prisoners.

67. One of the issues repeatedly drawn to the Special Rapporteur’s attention during the visit to Thailand was the disconnection between the laws, regulations and by-laws, and their actual implementation. The lack of appropriate and independent monitoring means that water and sanitation service providers remain to a large extent unaccountable to the authorities and the users.

68. The Special Rapporteur calls on the Government of Thailand, which has been a leader in advocating the importance of water quality in the framework of the global development agenda, and also a lead member of the Friends of Water Group in New York, to promote the inclusion of quality and elimination of inequalities, as well as other criteria, into the post-2015 water and sanitation global development agenda.
69. In this regard, the Special Rapporteur recommends that the Government of Thailand:

(a) Establish strong independent accountability mechanisms to ensure full compliance by all – including the private sector – with the human rights to safe drinking water and sanitation, in all aspects of safety, affordability, availability, accessibility, adaptability, equality and non-discrimination;

(b) Establish, in particular, an independent regulator to undertake independent monitoring, particularly of water and sanitation quality and affordability, ensure genuine public participation and impose meaningful penalties for non-compliance;

(c) Strengthen the supervisory role of the central government over local authorities in providing water and sanitation services. Even in this decentralized structure, the central government remains obliged to ensure people’s human rights to water and sanitation and to guide and monitor the way in which local authorities are implementing the legal framework in the area of water and sanitation;

(d) Provide the Ministry of Public Health with strengthened authority to monitor the quality of drinking water as well as for the implementation of safe disposal and treatment of septic tanks under local authorities. It should also be provided with adequate human and financial resources to be able to play a strong supervisory role over local authorities;

(e) Take a comprehensive and integrated approach to the management of septage, sewage and wastewater by more coordinated policies and plans by the Ministries of Public Health and Natural Resources and Environment. Both ministries should provide necessary human, technical and financial resources to local authorities to implement such policies and plans;

(f) Create a separate budget line for sanitation to assist local authorities to improve the sanitation situation and to enable the central government to monitor such a development;

(g) Create a sustainable funding mechanism to ensure the quality of drinking water;

(h) Ensure that funding of the water and sanitation sectors is reported by all concerned, including donors, private providers and NGOs, in order to obtain a complete picture of the resources allocated to the sectors and how different groups of the population are being targeted;

(i) Place emphasis on education and awareness-raising of hygienic practices to address waterborne diseases as well as contamination of water sources. Additional resources should also be allocated to the competent authorities, including the Ministry of Public Health, to enable them to undertake intense, constant and universal awareness-raising and education to shift people’s mindsets;

(j) Strengthen meaningful public participation in decision-making processes related to water and sanitation, as well as other social, economic, political and cultural development activities that affect the human rights of the people as guaranteed by the Constitution of Thailand;

(k) Revise and strengthen, with the support of experts from organizations, including the Office of the United Nations High Commissioner for Human Rights and the Special Rapporteur, the procedure of public participation, including public hearings, particularly in the EIA process in order to protect procedural rights;
(l) Ratify the Optional Protocol to the International Covenant on Economic, Social and Cultural Rights;

(m) The Special Rapporteur calls upon the Parliament of Thailand to adopt a comprehensive water act which places the human rights to water and sanitation at the centre and which is developed through a participatory process.