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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 adverse effects of  
the illicit movement and dumping of toxic and dangerous  
products and wastes on the enjoyment of human rights,  
Okechukwu Ibeanu**

**Addendum**

**MISSION TO THE UNITED REPUBLIC OF TANZANIA\* \*\***

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\* The summary of this report is being circulated in all official languages. The report, which is annexed to the summary, is circulated in English only.

\*\* The present document is submitted late in order to reflect the most recent information.

## Summary

At the invitation of the Government, the Special Rapporteur undertook a mission to the United Republic of Tanzania from 21-30 January 2008. The principal aim of the mission was to study and gather first-hand information about the impact of both small-scale and large-scale mining activities in the country. In addition, the Special Rapporteur wanted to acquaint himself with chemicals management in the country and its safe handling, as well as the waste management for both industrial and domestic waste.

The Special Rapporteur also took the opportunity to study the existing legal framework and its enforcement, as well as international, regional and national trade agreements on the transboundary movement of toxic waste and hazardous materials.

The Special Rapporteur was pleased to note that there is an adequate legal framework to deal with the transboundary movement of toxic and dangerous products and wastes. He noted, however, that many of the laws and subsidiary instruments are recent and is looking forward to monitoring the implementation of these laws.

While visiting the country, the Special Rapporteur was concerned at the lack of regulation for both small-scale and large-scale mining activities. He has proposed a number of recommendations to the Government, encouraging it (in no order of priority) to:

- (a) Ensure that the right of its people to a safe and adequate environment is progressively fulfilled;
- (b) Step up its sensitization efforts on educating the public as to the effects that artisanal and small-scale mining can have on their health and livelihood;
- (c) Provide more resources to local and national authorities to step up inspection of artisanal and small-scale mining areas;
- (d) Be mindful of the specific concerns of indigenous communities and land rights when allocating land for artisanal and small-scale or large-scale mining;
- (e) Pay extra attention to the situation of vulnerable groups, including women and children, due to the exposure to highly toxic substances while engaging in artisanal and small-scale mining activities;
- (f) Set up a database of mining-related illnesses to improve the monitoring of environmental and human rights impacts of mining activities;

(g) Consider renegotiating contracts that were granted to large-scale mining corporations before the Environmental Management Act No. 20 of 2004 was enacted, to ensure that the contracts are consistent with the Act;

(h) Monitor the operations of large-scale mining corporations, particularly on the issue of occupational health and safety standards and the level of compliance with environmental and other relevant legislation;

(i) Encourage large-scale corporations to carry out social impact assessments to better protect and promote the human rights of the local population;

(j) Consider being a candidate country for the Extractive Industries Transparency Initiative.

## Annex

### REPORT OF THE SPECIAL RAPPORTEUR ON THE ADVERSE EFFECTS OF THE ILLICIT MOVEMENT AND DUMPING OF TOXIC AND DANGEROUS PRODUCTS AND WASTES ON THE ENJOYMENT OF HUMAN RIGHTS, OKECHUKWU IBEANU, ON HIS MISSION TO THE UNITED REPUBLIC OF TANZANIA (21-30 January 2008)

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## Introduction

1. In accordance with the mandate entrusted to him by resolution 1995/81 of the Commission on Human Rights and Human Rights Council resolution 5/1, the Special Rapporteur carried out a fact-finding mission to the United Republic of Tanzania from 21 to 30 January 2008 at the invitation of the Government.
2. The objective of the mission was, inter alia, to hold consultations with a variety of stakeholders including governmental, non-governmental and private sector representatives; to study the existing constitutional and legal frameworks, and their enforcement, and to acquaint himself with governmental policy and the impact of bilateral and multilateral trade agreements on the transboundary movement of toxic waste and hazardous materials; to consider trends in the transboundary movement of toxic waste and hazardous materials; to learn about chemicals management in the country and its safe handling, as well as the waste management system for both industrial and domestic waste; to gather first-hand information on the impact of mining activities in the country; and to share with the Tanzanian authorities on the work of the mandate, in particular using a human rights-based approach to the management of toxic products and wastes.
3. The Special Rapporteur is grateful to the Government of the United Republic of Tanzania for its invitation and the cooperation that was extended to him during the course of his mission. He would like to highlight in particular, the excellent cooperation and assistance that was extended to him by the Ministry of Foreign Affairs and International Cooperation and the Ministry of Energy and Minerals. It is his hope that the Government will be better prepared after this mission for future country visits by special procedures mandate-holders.
4. The Special Rapporteur would also like to thank the United Nations country team in Tanzania, particularly the United Nations Resident Coordinator's Office and the United Nations Industrial Development Organization (UNIDO) for their efficient support in assisting in the organization and providing the technical and local knowledge for the mission.
5. During his visit, the Special Rapporteur was able to have meetings with a variety of stakeholders including the Division of Environment in the Vice-President's Office, the National Environment Management Council, Dar es Salaam City Council, the Ministry of Health and Social Welfare, the Tanzania Ports Authority and the Government Chemist Laboratory Agency, the Lake Victoria Environmental Management Project, academics, non-governmental organizations and a wider range of civil society, mining consulting companies as well as individuals and villagers practising small-scale mining. He regrets that it was not possible to brief governmental officials on his preliminary findings at the end of the mission and looks forward to continuing dialogue with the authorities on his recommendations.
6. The Special Rapporteur also visited areas within and around Dar es Salaam including the Mtoni and Pugukinyamwezi dump sites. He also visited the Lake Victoria zone including the cities and regions of Mwanza, Geita and Shinyanga. In Geita, he had the opportunity to visit the Geita Gold Mine and to visit Nyaragusu area where small and medium-scale gold mining is taking place. In Shinyanga, he was able to visit areas where small-scale diamond mining is

taking place. Finally, the Special Rapporteur was also able to visit the Williamson Diamond Mine in Mwadui, Shinyanga region. His warm thanks are extended to all the individuals and villagers, who shared with him valuable information and perspectives that enriched his analysis of the situation.

## **I. LEGAL AND INSTITUTIONAL CONTEXT**

### **A. Constitutional framework**

7. The United Republic of Tanzania is a unitary republic with a Government based on multiparty parliamentary democracy.
8. All State authority in Tanzania is exercised and controlled by the Union Government and the Revolutionary Government of Zanzibar. The President is the Head of State, the Head of Government and the Commander-in-Chief of the Armed Forces. The Executive of the United Republic comprises the President, the Vice-President, the President of Zanzibar, the Prime Minister and Cabinet Ministers. Issues related to toxic and dangerous products and wastes and their impact on the enjoyment of human rights lie within the purview of the Vice-President, who has within his office a Division of Environment.
9. The legal system is based on common law. The Tanzania Law Reform Commission is responsible for the review of the country's laws. The Government has for the past several years been engaged in comprehensive economic, political and social reforms, focusing on broadening the role of market forces in the economy, strengthening human rights within the context of a liberal, constitutional order, and promoting democracy, good governance and protection of the environment.<sup>1</sup>

### **B. Multilateral and regional arrangements**

10. Tanzania is party to many of the main multilateral environmental agreements, notably the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, including the Ban Amendment to the Basel Convention, the Stockholm Convention on Persistent Organic Pollutants and the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.
11. At the regional level, Tanzania is party to the Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa.

### **C. Institutions**

12. Institutional responsibility pertaining to the issue of toxic and dangerous products and wastes is spread across several authorities including the Vice-President's Office (Division of Environment) which has the overall lead role on all issues of environmental policymaking, coordination and monitoring, planning and research, including the issue of hazardous wastes.

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<sup>1</sup> <http://www.tanzania.go.tz/administration.html>.

The other bodies concerned are the National Environment Management Council, which oversees environmental management issues; the Ministry of Energy and Minerals, which is responsible for the exploration and exploitation of all mineral resources in the country, in addition to being responsible for policy development and oversight which includes licensing, regulation and legislation; the Government Chemist Laboratory Agency, which is responsible for the registration and overall movement of industrial and consumer chemicals; the Ministry of Agriculture, which is responsible for registering of pesticides in the country; and the Occupational Safety and Health Agency (OSHA), which oversees health standards and safety in the workplace. In addition to these agencies of the central government, local authorities, such as the Dar es Salaam City Council, have responsibility for domestic, industrial and hospital waste disposal and management within their jurisdictions.

13. The Special Rapporteur was informed that there are monthly inter-agency meetings under the name of the Environment Working Group to ensure that there are inter-agency cooperation and joint initiatives, as well as information sharing on environmental issues. The monthly meetings also monitor progress on environmental issues and provide technical comments on environmental issues to sectors of the economy and the Poverty Reduction Strategy (PRS) Technical Committee.

#### **D. Legal framework relating to the mandate on toxic and dangerous products and wastes in Tanzania**

14. The Government of Tanzania has a comprehensive and wide range of laws and subsidiary instruments that deal with the particular issue of toxic and dangerous products and wastes. They include the Mining Act of 1998, the Industrial and Consumer Chemicals (Management & Control) Act of 2003, the Environmental Management Act of 2004 and the Land Act of 1999. The Special Rapporteur notes that there is other relevant legislation that is not listed in this report. He would like to commend the efforts of the Government in enacting relevant laws on these important issues.

15. The Special Rapporteur notes that such legal developments are relatively recent. He looks forward to monitoring the wider implementation of these laws and their ability to limit the adverse effects of toxic and dangerous products and waste on the environment and on the human rights of the local population.

## **II. ISSUES IN FOCUS**

16. The mining industry is one of the fastest growing economic sectors in Tanzania. Its contribution to exports has significantly increased from 26.9 per cent in 2000 to 52.1 per cent in 2004. Significant mining started in the 1990s following the introduction of a new trade liberalization policy.<sup>2</sup> Gold mining is concentrated in three main areas: Lake Victoria greenstone belts, Mpanda mineral field and Lupa goldfields.

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<sup>2</sup> See “Impact Assessment and the Mining Industry: Perspectives from Tanzania” by Prof. Raphael B.B. Mwalyosi [www.iaia.org/.../IAIA04/04%20CD-ROM/Keynote-Speeches/OP%20Raphael%20Mwalyosi%20-%20IA%20&%20Mining.pdf](http://www.iaia.org/.../IAIA04/04%20CD-ROM/Keynote-Speeches/OP%20Raphael%20Mwalyosi%20-%20IA%20&%20Mining.pdf).

### **A. Artisanal and small-scale mining**

17. Artisanal and small-scale mining (ASM) takes place on a large scale in different parts of the country. According to the Ministry of Energy and Minerals, it is estimated that over 1 million people are involved in ASM activities. Artisanal and small-scale mining is expanding as it provides rare alternative economic opportunities to rural communities.

18. There are some characteristics that distinguish artisanal from small-scale mining activities. Artisanal mining may involve individuals or families, or both, usually using only manual and simple methods. Small-scale mining is usually more mechanized and more extensive. In some circumstances, small-scale miners have the legal title to the land on which they work, which is recognized by both the State and other relevant authorities. In other circumstances, work takes place in the area that the local population has traditionally inhabited and used for their livelihood, but there is often no recognition of land rights by the State. Thus, miners are treated as illegal squatters by local or State authorities or as persons working on the land informally.<sup>3</sup>

19. The main shared characteristics of artisanal and small-scale miners include the exploitation of marginal or small deposit areas, the fact that they often lack capital and in general do not have the ability to purchase safety equipment. Thus, they often work under low safety health standards. Artisan and small-scale mining is also often labour-intensive, with low rates of recovery. Miners have poor access to markets and support services. As a result of a general lack of regulation by governmental bodies and local authorities, ASM activities often have a significant impact on the environment and its degradation.<sup>4</sup>

20. The Special Rapporteur had the opportunity to visit several areas where artisanal and small-scale mining takes place. He visited the Lake Victoria zone, in particular the Nyaragusu and Shinyanga areas, where ASM for gold and diamond extraction takes place.

21. According to the Ministry of Energy and Minerals, the Government of Tanzania has issued a total of 2,055 primary mining licences to small-scale miners. For each of these primary licences, there are over 50 miners working. In addition, there are also miners working in the processing centre, whilst others work at providing basic services to the miners. The Special Rapporteur has been informed that in the Lake Victoria zone alone, there are estimated to be more than 150,000 artisan and small-scale miners in the district. Due to the lack of technical knowledge and enforcement of existing regulations, ASM activities have caused negative impacts on the environment and created social tensions.<sup>5</sup>

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<sup>3</sup> See chapter 13, Artisanal and small-scale mining, at [www.ied.org/mmsd/pdfs/finalreport\\_13.pdf](http://www.ied.org/mmsd/pdfs/finalreport_13.pdf).

<sup>4</sup> Ibid.

<sup>5</sup> Final project report, UNIDO project No. EG/GLO/01/G34 - "Community Awareness of the Hazards of Mercury Exposure and Demonstration of Cleaner Gold Processing Technologies to Mining Communities within the Geita Mining District of Tanzania".



## **1. District authorities and zonal mines offices**

22. The Special Rapporteur met with relevant district officials and zonal mines officers in the Lake Victoria Region. He was provided with statistics on the number of primary mining licences issued in the area and the number of prospecting licences about to be issued. He also received information about the lack of data on illegal miners and about conflicts arising due to tensions between large-scale mining companies and local communities.

23. The representative of the Zonal Mines Office informed the Special Rapporteur about the practice of issuing primary mining licences, as well as the different areas and forms of mineral and metal extraction. The Special Rapporteur was also informed that there are very few occasions where villages get first priority in the issuance of mining licences in their own area. The issuance of primary mining licences is done on a “first-come, first-served” basis.

24. The Special Rapporteur expressed his concerns about the policy of issuing primary mining licences on a “first-come, first-served” basis. The Special Rapporteur is of the view that such a policy encourages conflicts and tensions between communities, as well as among miners that may come from neighbouring communities. In addition, he is concerned about the rights of the indigenous communities and traditional landowners who may hold communal rights to the land for their livelihood and survival. The Special Rapporteur is also further concerned about religious or cultural sites that may be affected due to mining activities.

25. The Special Rapporteur was briefed about the number of large-scale mining companies that are present in the Lake Victoria zone which includes Barrick Gold Corporation, Resolute (Tanzania) Ltd. and AngloGold Ashanti Ltd.

26. The Special Rapporteur was further informed that ASM activities that take place in the Geita area are for gold extraction, while in the areas around Shinyanga, diamond was the mineral that was most commonly extracted. He was informed that the National Environment Management Council (NEMC) was in charge of supervising ASM activities and that non-governmental organizations visit the areas regularly to educate local communities on the dangers of such activities to their health and on ways to protect themselves, as well as on the safer handling of chemicals.

27. The Representative of the Zonal Mines Office also informed the Special Rapporteur that Tanzania, as part of its Poverty Reduction Strategy, is prioritizing the interests of local villagers when issuing primary mining licences.

## **2. The hazards associated with artisanal and small-scale mining**

28. The method used by artisanal and small-scale miners to extract gold usually depends on the location of the ore: whether it has to be mined underground, can be reached via an open hole in the ground, or is available as an alluvial deposit in rivers and streams. The tools and techniques

used are in general, fairly rudimentary - extracting with pickaxes and shovels, and sluicing and panning with simple equipment. Artisanal and small-scale miners tend to use materials that are easy to process, simple to use and most of all, cost-effective. The chemicals used are mercury and in some instances, cyanide.<sup>6</sup>

29. During his visit to Geita and Nyaragusu, the Special Rapporteur was able to witness artisanal and small-scale miners using mercury in the gold extraction process. The Special Rapporteur was also able to observe ASM activities around Shinyanga, where diamond extraction takes place.

**(a) Impact on health**

30. The Special Rapporteur was very concerned to see that workers did not use safety equipment such as gloves, dust masks, boots and glass retorts in the course of extracting and processing gold. He was particularly concerned because dangerous chemicals, mercury and in rare cases, cyanide, were used in the extraction process, particularly in the amalgamation of gold.

31. The processing of gold involves grinding the ore so as to free the gold, and then adding mercury, which combines with the gold to form an amalgam that is denser than the residual material and can be separated (as “cake”). The miners then heat this “cake” to burn off the mercury as a vapour, leaving a residue of gold. Mercury is a highly toxic chemical, the inappropriate use of which has serious health consequences.

32. There are several health risks associated with the activities of artisanal and small-scale miners. In addition to exposure to mercury and other dangerous products and chemicals, mining for gemstones in underground tunnels entails the use of tools and instruments that release powerful water jets. The effects of the resulting noise and vibration can be dangerous and the lack of ventilation can lead to respiratory and auditory problems. There are also problems of over-exertion, inadequate workspace and inappropriate equipment.

33. Artisanal mining is widespread in Tanzania due to the abundance of natural resources, the lack of employment and livelihood opportunities and limited regulation by Government. The Special Rapporteur was able to speak to a number of local miners and representatives of miners associations during his visit. He was informed that there were instances of miners not receiving adequate information on the impact mercury can have on their health. In other cases, however, local miners were sensitized through efforts made by the Government, non-governmental organizations and through projects such as the Global Mercury Project, launched by UNIDO and the Ministry of Energy and Minerals with the support of other stakeholders. They informed the Special Rapporteur that they were made aware of the dangers of using mercury and other chemicals in the extraction process. However, due to poverty and the lack of a suitable alternative, the miners continue to use mercury and other dangerous products without supervision, endangering both the environment and their health.

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<sup>6</sup> Ibid.

**(b) Environmental impacts**

34. The Special Rapporteur observed villagers and local miners using their bare hands for the washing, amalgamation and processing of the tailings. He also observed large holes in the ground where soil was excavated for the extraction process, and numerous heaps of tailings that were scattered around the area. The Special Rapporteur was concerned at the improper disposal of tailings and its likely effect on the local people's livelihood and environment. He is further concerned that in different parts of the country, land, water, plants and livestock may be at high risk of contamination from mercury and other dangerous wastes.

35. The Special Rapporteur notes that, in addition to the immediate health risks that are associated with artisanal and small-scale mining, there are longer-term effects on the environment and livelihoods of local communities, due to the toxicity of the chemicals used. Environmental concerns include deforestation, leaching soil erosion and contamination of water sources such as rivers, lakes and other bodies of water.

36. The Special Rapporteur noted that both large-scale and small-scale mining take place in the Lake Victoria zone where many rivers and streams intermesh and connect to Lake Victoria. While visiting the city of Mwanza, the Special Rapporteur had the opportunity to visit the agency involved in managing the lake and its environs, namely the Lake Victoria Environmental Management Project (LVEMP) under the Vice-President's Office (Division of the Environment). Two of the main components of the project are monitoring the water quality and ecosystem management. As part of these, the project explores and tests for point source pollution, i.e. pollution that is carried into the lake via rivers and the atmosphere.

37. The Special Rapporteur was informed that the first phase of the project began in 1997 and ended in December 2005. According to the results of the first phase, there is a problem of pollution in and around the Lake Victoria basin but not in the lake itself. Some of the problems include point source pollution from different municipalities due to the lack of a sewerage system around the area, except in Mwanza city centre. The Special Rapporteur heard that LVEMP personnel were monitoring several mines for chemicals leaching into the lake through frequent visits to the mines and testing of samples. Project staff noted that the method of artisanal and small-scale mining was rudimentary, which could be an increasing factor contributing to the pollution in the lake. This was typically the case due to the sluicing and panning during the gold extraction process alongside different rivers that flow into Lake Victoria. LVEMP personnel indicated that current levels of pollution remain very low and that they are working with the authorities to ensure that they remain so.

**(c) Vulnerable groups: women and children miners**

38. The Special Rapporteur was concerned about the number of women and children he saw during his visits to the ASM areas. There are no current statistics on the ratio of women and children among miners. He is deeply concerned that the children may be skipping school to help their parents in the mining business.

39. Some of the obstacles hindering the economic and social well-being of women and children in mining communities include poverty, ignorance and traditional norms. Many of the women and children are unaware of the health and safety hazards that are associated with

artisanal and small-scale mining, such as mercury poisoning in the long term, amongst others.<sup>7</sup> Often it is the case that women are in charge of running the household, child-rearing and engaging in economic activity to supplement the overall income of the family. This presents a great burden on the women, especially those that are engaged in manual-intensive work such as artisanal and small-scale mining. They often work long hours in extremely harsh conditions. It is often the case that during the processing of gold, ore is moved to the milling centres using trucks, tractors, donkeys, bicycles and humans, in the latter case in particular it is done by women and children.<sup>8</sup>

40. In addition to working in harsh environments, often exposed to direct sunlight and not able to afford safety equipment, the women are sometimes subjected to threats and intimidation by other members of the community, especially when they are migrants.

41. Child labour in mining and in other forms of work is rooted in poverty. Children often work in artisanal and small-scale mining to help the family and supplement total household income in order to buy basic goods and food. In Tanzania, child labour in the mining sites is common from the age of 10. The Special Rapporteur saw children working and playing with their bare hands with toxic mercury, a particularly dangerous state of affairs as they are vulnerable to physical and chemical hazards. Mercury can cause severe damage to the developing brain, especially for an unborn child.<sup>9</sup>

42. While the Special Rapporteur understands that families are often left with little choice than to send their children out to work to ensure survival, he notes that child labour only reinforces the cycle of poverty. Since the children are working in the mining areas, they are unable to attend school and are therefore not receiving education. The Special Rapporteur is particularly concerned that children as young as 10 are being exposed to dangerous chemicals and wastes.

43. The Special Rapporteur was also informed that there are many children involved in the extraction of gemstones, because they are often small enough to work underground in snake-like burrows in order to extract gemstones such as tanzanite and diamonds.

44. The Special Rapporteur would like to remind the Government of Tanzania of its obligations under International Labour Organization (ILO) Conventions No. 138 (1973), on the Minimum Age for Admission to Employment and No.182 (1999) on the Worst Forms of Child Labour. Children working in mines constitute one of the worst forms of child labour. The Special Rapporteur would like to call on the Government to step up its efforts to eliminate child labour and particularly its worst forms.

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<sup>7</sup> See chapter 13, Artisanal and small-scale mining at [www.iied.org/mmsd/pdfs/finalreport\\_13.pdf](http://www.iied.org/mmsd/pdfs/finalreport_13.pdf).

<sup>8</sup> [www.unido.org/fileadmin/import/44419\\_Information\\_on\\_project\\_sites\\_in\\_Tanzania\\_Tesha.pdf](http://www.unido.org/fileadmin/import/44419_Information_on_project_sites_in_Tanzania_Tesha.pdf).

<sup>9</sup> Ibid.

**(d) Lack of statistics on mining-related illnesses**

45. The Special Rapporteur regrets the lack of statistics on mining-related illnesses. He was informed by the authorities, non-governmental organizations and mining associations that there is no system of recording mining-related incidents, such as accidents that occur during the processing of gold amongst others. This is particularly worrying given the fact that artisanal and small-scale miners are often some of the poorest people and are therefore unlikely to have access to health-care facilities. The Special Rapporteur was further informed that while many miners are aware of the toxicity and dangers of mercury poisoning as well as other chemicals that may be harmful to their health, the miners and communities do not know when deaths and illnesses are related to their work, or to HIV/AIDS-related illnesses, since they sometimes show identical symptoms.

**B. Large-scale mining**

46. There are six large-scale gold mines operated by Barrick Corporation, AngloGold Ashanti and Resolute (Tanzania) Ltd. Williamson Diamond Mine is operated by the De Beers Group and the Government of Tanzania. The Tanzania Chamber of Minerals and Energy estimates that these mines employ more than 10,000 people, including those providing services to the mines.

47. The Special Rapporteur had an opportunity to visit Geita Gold Mine, wholly-owned by AngloGold Ashanti, which is Tanzania's largest gold producer. He also had the opportunity to visit the Williamson Diamond Mine, owned by the De Beers Group and the Government of Tanzania.

**1. Geita Gold Mine**

48. The Geita Gold Mine commenced operations in 1999 and is expected to cease operations in 2029. It currently employs around 3,000 personnel. At Geita Gold Mine, the Special Rapporteur met with the Managing Director, and visited the Environmental, Operations and Medical Services Departments. He was given a tour of the mine where he was informed of the safety standards adopted by the management and was also given a presentation on the gold extraction process on a large scale, and was shown the environmental impact assessments that were carried out in compliance with local environmental guidelines as outlined by the Government of Tanzania and the World Bank.

49. The Special Rapporteur was impressed by the scale of the operations at the Geita Gold Mine. It is the second largest opencast gold mine on the African continent and Tanzania is currently the fourth largest gold producer in Africa. While acknowledging that the mine provides significant employment for a large number of Tanzanians, the Special Rapporteur noted that although the mine has been in operation for almost 10 years, the district of Geita remains impoverished and lacks roads, adequate housing and standard health facilities. The Special Rapporteur is concerned that current Tanzanian mining laws do not set out rules regarding a certain percentage of taxes returning to the municipality. This may be a contributing factor to Geita visibly not receiving much of the benefit of gold production in the region.

50. The Special Rapporteur was further informed about the Kanga dam that was constructed for use during gold processing and about water pumped from Lake Victoria in order to prevent water shortages. He is very concerned about access to water for communities that live further down the river as a result of the construction of the dam for the use of the mine. He also noted that there is a large tailing storage facility on the south side of the Geita Gold Mine. He was particularly concerned about the possible contamination of groundwater and leakages that may occur. He was informed that in 2001, there was an incident in which a number of cattle died close to the embankment of the tailing storage facility. However, he was further informed that tests in the area found that the contamination was not due to cyanide or other toxic discharges used by the mine. Instead, it was found to be caused by thionin, which is used by cotton farmers.

51. Geita Mine personnel informed the Special Rapporteur that the groundwater is monitored regularly to ensure that contamination by cyanide, acids, arsenic and other toxic matter does not exceed levels set by the World Health Organization for safe drinking water. The mine currently does its own testing and monitoring of the facilities.

## **2. Williamson Diamond Mine**

52. The Special Rapporteur was given the opportunity to visit the Williamson Diamond Mine, an opencast diamond mine (also known as the Mwadui mine) which began its operations in the 1940s. It currently has about 1,100 employees and is located in the Shinyanga area. The Special Rapporteur was given information about the process of diamond extraction and the different chemicals, such as hydrofluoric acid, which are used to process the ore to extract the diamonds although not many chemicals are used. The geology of the area is not suitable for using groundwater in the extraction of diamonds. As a result, the mine is dependent on rainwater and has built three facilities to collect it.

53. The Special Rapporteur was informed of the challenges that the mine faces in the extraction of diamonds. Some of the environmental challenges include the pollution of hydrocarbons at the plant, deforestation and the environmental degradation caused by an opencast mine. While acknowledging that there are many environmental challenges that they face, Williamson Mine has taken active steps to address them. One such initiative is the replanting of indigenous plants in areas experiencing deforestation. The Special Rapporteur looks forward to receiving information about other good practices by Williamson and hopes that other mines in Tanzania and in Africa will take more active steps to address the environmental issues associated with the mining industry.

54. The Special Rapporteur was very impressed with the Williamson Diamond Mine and the town of Shinyanga, a strong and vibrant town with much development potential. He was further impressed by the engagement of the mine with the local communities and villages that surround it. De Beers has launched the Mwadui Community Diamond Partnership which aims to empower the local communities in finding an alternative source of livelihood apart from artisanal and small-scale diamond mining. They estimate that there are more than 10,000 small-scale diamond miners in the Shinyanga area. Part of the project would also involve improving the health,

education and water facilities for Shinyanga and surrounding communities and villages. De Beers is seeking the support of other stakeholders in the execution of this project.<sup>10</sup>

### **C. Relationship between large-scale and small-scale miners**

55. The Special Rapporteur heard about tensions and unrest among communities hosting large-scale mining companies. Companies should endeavour to understand the needs, perspectives and concerns of artisanal and small-scale miners and respect their right to secure a livelihood. The Special Rapporteur, however, acknowledges that companies are entitled to safe operations and protection of their staff and assets. Still, he cautioned companies against using intimidation and harassment against the local population.

56. Following the good practice of Williamson Diamond Mine, large-scale companies should see good business sense in having a positive relationship with artisanal and small-scale miners. In the short term, it will help to avert tensions and potential conflict with local miners. In the longer term it could develop into a more stable relationship with miners and the community as a whole, such as projects like the Mwadui Community Diamond Partnership which facilitates and supports local community development. The local population is more likely to take greater care of the site after the mine has closed and is less likely to restart mining in rehabilitated areas or in waste facilities for which the mining company may still retain environmental liability.<sup>11</sup>

57. Artisanal and small-scale miners can also benefit from having a large-scale mining corporation in the town or community. There are cases such as in the Lake Victoria zone where artisanal and small-scale miners congregate around a larger-scale mine, taking advantage of the better access to extraction sites and, in some cases, re-mining some of the larger company's wastes or tailings.

58. The Special Rapporteur believes that Tanzania needs to acknowledge that artisanal and small-scale mining will not disappear. Large-scale mining companies and the Government must work out a strategy to improve relations in order for both types of operation to have a mutually beneficial relationship. One strategy would be for the Government to ensure that before a large-scale mining company commences operations, it facilitates an early process of dialogue and participation, not just with local miners' associations and village elders/leaders but also with the local population in general. This would include giving an honest assessment of the operations, what can be expected and what the company intends to do for the local community. It is imperative that the Government be involved in this process as the land concession for the mining area may have been previously considered as indigenous land and the local population

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<sup>10</sup> <http://www.debeersgroup.com/Sustainability/Ethics/ethical-initiatives/Mwadui-Community-Diamond-Partnership/>.

<sup>11</sup> See chapter 13, Artisanal and small-scale mining, [www.iied.org/mmsd/pdfs/finalreport\\_13.pdf](http://www.iied.org/mmsd/pdfs/finalreport_13.pdf).

may believe it has ownership of the natural resources found in the land. Non-governmental organizations and other local institutions could play the role of independent facilitators.<sup>12</sup>

#### **D. Good practices: the Global Mercury Project and other initiatives**

59. During his mission, the Special Rapporteur was informed of several initiatives that the Government was undertaking in cooperation with the World Bank, United Nations specialized agencies such as UNIDO and non-governmental actors, including transnational corporations such as De Beers Consolidated Mines, to sensitize the population to the dangers of artisanal and small-scale mining, and provide opportunities and alternative forms of livelihood which may prove to be more sustainable economically and better for their health, amongst other reasons.

##### **1. Global Mercury Project**

60. The Global Mercury Project, launched by UNIDO and the Ministry of Energy and Minerals with the help of external consultants, aims to raise community awareness of the hazards of mercury exposure and demonstrate cleaner gold-processing technologies to mining communities within the Geita mining district in Tanzania.

61. The first phase of the project was launched in 2002 and ended in 2007 and had some immediate impact on community awareness of the dangers of mercury exposure. The village leaders lent their support in educating and sensitizing the community to encourage them to adopt safer occupational and health standards when engaging in artisanal and small-scale mining. Some village leaders, through the village councils, also went further in campaigning for the allocation of new gold-processing areas and the project team trained local fabricators to make retorts used in processing gold.<sup>13</sup>

62. The project team encountered difficulties in sensitizing miners to change their behaviour. One example was that owners of processing centres were reluctant to use some appropriate technologies which might cost a little more, as they feared losing earnings from current customers. Indeed, exploitative practices limit the use of better sluices by disadvantaged groups of miners because what is left as tailings has become the main source of income for owners of washing ponds.

63. The project team recommendations include suggesting to the Government of Tanzania that they allocate more land for artisanal and small-scale mining in order to minimize illegal and clandestine mining. In addition, the project team has called for village councils to have sufficient powers to deal with irregular migrant miners who do not want to adhere to local environmental regulations.

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<sup>12</sup> Ibid.

<sup>13</sup> Final project report, UNIDO project No. EG/GLO/01/G34 - "Community Awareness of the Hazards of Mercury Exposure and Demonstration of Cleaner Gold Processing Technologies to Mining Communities within the Geita Mining District of Tanzania".



64. The project team further recommends that entrepreneurial training and credit facilities for cooperative groups will improve the incomes of poorer groups and further protect artisanal and small-scale miners from the dangers of mercury exposure.

65. The Special Rapporteur endorses most of the recommendations made by the Global Mercury Project team. He would like to inject a note of caution, however, concerning the recommendation that was made on giving more power to local village leaders to deal with irregular migrant miners. This could lead to exclusionary practices and create tensions or conflicts between migrants and their hosts.

66. The Special Rapporteur welcomes the fact that the Global Mercury Project is currently trying to secure funding for its second phase and there are suggestions that it may become a larger project for the next five years.

## **2. Mwadui Community Diamond Partnership**

67. Williamson Diamond Limited operates an opencast diamond mine at Mwadui in the northern part of Shinyanga region in Tanzania. The company is a joint venture between the De Beers Group and the Government.

68. Tanzania was considered a pilot country as it is the only country where informal small-scale diamond mining and significant De Beers operations coexist. The immediate goal of the project is to contribute to the alleviation of poverty in the Shinyanga region by formalizing artisanal and small-scale mining through a multi-stakeholder partnership and the introduction of a new business model that is more advantageous for the diggers, local communities, local traders and the Government. The objectives of the project include developing a multi-stakeholder partnership to formalize, transform and support ASM communities and to promote sustainable economic development in the areas surrounding the mine.<sup>14</sup>

69. The overall goal of the project is to produce a sustainable model to improve the livelihoods of artisanal and small-scale miners. While in Shinyanga, the Special Rapporteur was able to meet with the team involved in launching the project. The team briefed him on the project and informed him that they had completed the election of members of the local management bodies for the project in all the communities involved. At the time of writing, the project team was visiting different villages to speak to village elders and inform the communities of the project and its proposed operations. The Special Rapporteur looks forward to receiving information about the development and outcomes of the project.

## **3. Sustainable Management of Mineral Resources - World Bank**

70. The World Bank is funding a large project known as the Sustainable Management of Mineral Resources in Tanzania. Its overarching aim is to use sustainable development approaches to address poverty. This includes capacity-building of local small-scale mining populations and introduction of effective social and environmental policies.

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<sup>14</sup> [http://www.unglobalcompact.org/NewsAndEvents/event\\_archives/ghana\\_2006/MCDP.pdf](http://www.unglobalcompact.org/NewsAndEvents/event_archives/ghana_2006/MCDP.pdf).

71. The project is also a response to the National Strategy for Growth and Reduction of Poverty (MKUKUTA), which seeks to update mining policy and related legislation and provide support to the country's medium to long-term strategies for private sector growth in the rural economy. It is hoped that the national strategy will increase government capacity to manage artisanal mining by fostering the formalization and reorganization of artisan and small-scale mining as legitimate, non-agricultural income-generating activities, while promoting more socially and environmentally responsible mining and processing practices, and the manufacture of downstream products. A major aim will be to identify and promote connected and alternative opportunities for local economic development, and to identify, assess and propose options for diversified rural livelihood strategies intended to reduce local and regional poverty, and provide a more sustainable economic basis for community life.<sup>15</sup>

72. The Special Rapporteur looks forward to receiving more information on this initiative.

## **E. Hazardous waste and chemicals management**

### **1. Government Chemist Laboratory Agency**

73. The Government Chemist Laboratory Agency (GCLA) regulates the import and export of hazardous products and their management. Compliance with the Industrial and Consumer Chemicals (Management & Control) Act 2003 requires that all chemicals be registered and if the chemicals are imported or exported out of the country, the receiving jurisdiction must declare that it consents to the import of any form of chemicals, including industrial and consumer chemicals.

74. The mandate to implement the Industrial and Consumer Chemicals (Management & Control) Act 2003 has been given to the GCLA under the Ministry of Health and Social Welfare. The GCLA acts as a regulator, assesses the capacities of institutions and individuals to manage chemicals, and monitors manufacturing plants, storage premises, transportation facilities and their wastes through a registration process. It also monitors compliance with the requirements of the Act. Compliance with the Act will guarantee the use of safe and quality chemicals and facilities; ensure there are qualified personnel in the management of chemicals and reduced exposure to hazardous products and wastes for the local population and the environment.<sup>16</sup>

75. The Special Rapporteur was briefed on the chemicals management policies used to regulate the mining industry. All large and medium-scale mines have to be registered with the GCLA and must register the chemicals they use. Every consignment of chemicals that is imported for use by the mines has to be approved by the GCLA.

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<sup>15</sup> <http://web.worldbank.org/external/projects/main?pagePK=64283627&piPK=73230&theSitePK=40941&menuPK=228424&Projectid=P096302>.

<sup>16</sup> GCLA pamphlet, "Compliance to the Industrial and Consumer Chemical (Management & Control) Act 2003".

76. The Special Rapporteur was informed that the Ministry of Energy and Minerals has allowed some medium-scale mines to use cyanide (most commonly used by gold mines). However, the Special Rapporteur was also informed that there may be a significant number of additional medium-scale mines that have not been registered and thus have not been given permission to use cyanide for their operations.

77. In the discharge of its mandate, the GCLA also carries out inspections on all parties dealing with chemicals to verify whether they are complying with the Act. Some of the subjects for inspection include the chemicals production area, warehouse and storage facilities, transport facilities, disposal facilities, marketing firms and supervisor qualifications.

78. The GCLA does not have a regular routine for monitoring areas of high risk, unless there is a particular case that requires urgent intervention. It works closely with the Ministry of Energy and Minerals when carrying out inspections. One example of cooperation is water samples sent to GCLA by the Ministry of Energy and Minerals for analysis of toxic chemicals or hazardous wastes. While water sampling is carried out frequently, plant and soil testing do not take place.

79. The Special Rapporteur discussed with GCLA the issue of mercury used frequently and often unsafely by artisanal and small-scale miners. The GCLA acknowledged that there is a lack of regulation with regards to the use of mercury by these miners and acknowledged that more can be done on this issue. The GCLA however reassured the Special Rapporteur that glass retorts are being developed by the University of Dar es Salaam and that the Ministry of Energy and Minerals, together with other stakeholders, is carrying out training and a sensitization campaign on the safer handling of mercury. The GCLA also informed the Special Rapporteur that the mercury used is sometimes obtained from unofficial sources.

## **2. Ports Authority**

80. The Special Rapporteur met with the Ports Authority. Given the geographical importance of Tanzania and since Dar es Salaam is a major port, it can play an important role in regulating the transboundary movement of wastes and hazardous chemicals.

81. The Port of Dar es Salaam serves several countries including Malawi, Zambia, the Democratic Republic of the Congo, Rwanda, Burundi and Uganda. It is the main hub of East African trade and serves six land-locked countries. The Special Rapporteur was informed that 20 per cent of the cargo handled is in transit. Many of the countries making use of the port are involved in mining, including for cobalt, diamonds, uranium, gold and other commodities. The port ensures safe handling of cargo for neighbouring countries.

82. In terms of handling hazardous cargo, the port is overseen by different authorities including the National Environment Management Council, the Government Chemist Laboratory Agency and the Tanzania Atomic Energy Commission. The Special Rapporteur was briefed about the occupational safety measures in place to ensure workers' safety and to ensure that cargo, including dangerous chemicals, is handled safely and in compliance with the IMO International Convention for the Prevention of Pollution from Ships (MARPOL Convention) and its 1978 Protocol. The Tanzania Harbours Regulations 1991 provide for the control and discharge of pollutants from vessels into the harbours of Tanzania.

83. The Special Rapporteur was concerned that the port scans only imports but not exports. The lack of regulation in this regard may lead to the illicit movement of wastes and dangerous products to dumping sites around the world.

### **3. Municipal waste management**

84. The Special Rapporteur received a number of reports from a variety of sources on the numerous waste dumps, landfills and municipal waste management problems that have plagued the city of Dar es Salaam.

85. He was briefed by the City Council and was given a tour of two new dumping facilities, the Mtoni and Pugukinyamwezi dump sites, which were under construction, to ensure improved management of municipal waste. In accordance with the Environmental Management Act, 2004 and the Land Act of 1999, environmental impact assessments were carried out before construction commenced. The land allocated for the dump sites was as far as possible from communities and villages. The City Council acknowledged that there were some houses in the area but stated that villagers that needed to be relocated were adequately compensated.

86. During the visit to the Pugukinyamwezi dump site, a lorry which was arriving with a new truckload was met with a dozen or so individuals scrambling to sort out the waste to find goods that can be recycled or sold to local industries.

87. The Special Rapporteur acknowledges that such actions are difficult to control as they provide a means of survival for individuals living in extreme poverty. However, this is a matter that should be addressed by local authorities. They must take steps to address the problem, as these so-called “waste-takers” are endangering their health by being exposed to hazardous wastes and dangerous products.

88. The Special Rapporteur was informed of a waste contractor who chose to incinerate medical waste in the vicinity of human dwellings on the outskirts of Dar es Salaam. This caused health problems for residents and the facility was subsequently closed down.

89. The Special Rapporteur commends the Dar es Salaam City Council, and its participating stakeholders, for the steps they are taking to address the problem of waste management in the city.

### **III. CONCLUSIONS AND RECOMMENDATIONS**

**90. The Special Rapporteur commends the Government for a well-developed and comprehensive range of laws and subsidiary instruments that deal with the particular issue of toxic and dangerous products and wastes. Although the legal developments are recent, the Special Rapporteur calls on the Government to be diligent in the implementation and monitoring of these laws. He would welcome being kept informed of developments in this regard.**

**91. Based on his visit to the country and after consultations with a variety of stakeholders and interlocutors, the Special Rapporteur would like to make the following comments and recommendations.**

#### **A. Artisanal and small-scale mining**

92. **The Special Rapporteur recognizes the challenge that the Government faces, with limited capacity and the fact that as much as 1 million citizens are engaged in artisanal and small-scale mining. Nonetheless, he calls on the Government to step up its efforts in protecting the human rights of its people, covering their economic, social and cultural rights, and particularly the right to a safe and adequate environment.**

93. **The Special Rapporteur welcomes the sensitization efforts undertaken by the Government and other stakeholders for artisanal and small-scale miners to raise their awareness of the effects of mercury and other dangerous chemicals. However, he urges the Government and other stakeholders, including the United Nations country team and civil society, to step up efforts to inform the public of the risks posed by mining as well as by toxic chemicals used in other industries, such as tanneries and textiles. Requisite media and formats should be used throughout rural and urban areas in the local languages and dialects to communicate these issues to the populace. Attention should be paid to isolated rural areas and illiterate populations to ensure that the effort is comprehensive.**

94. **The Special Rapporteur calls upon donor countries and international financial institutions, such as the World Bank, to provide the necessary technical and financial support to assist the Government of Tanzania in setting up entrepreneurship training and small-scale credit programmes in mining and other forms of income-generating activities. This will provide the means for artisanal and small-scale miners to acquire the necessary safety equipment. It could also provide the opportunity for them to pursue other forms of livelihoods.**

95. **The Special Rapporteur calls on the Government to provide more resources for vital local and national authorities such as the district authorities and the Zonal Mines Office (under the auspices of the Ministry of Energy and Minerals), the National Environment Management Council and the Government Chemist Laboratory Agency to create an inter-agency task force that will step up inspections of artisanal and small-scale mining areas. This is necessary to harmonize the monitoring activities of the various agencies and make the process more efficient and cost-effective.**

96. **The Special Rapporteur would like to remind the Government to ensure that primary mining licences are awarded not just on a “first-come first-served” basis, but build in an equity principle that ensures that local communities and villages are not excluded. It is also important for the Government to be mindful of the specific concerns of indigenous communities and their land rights. He acknowledges that there are irregular and regular migrants from neighbouring countries that may be engaging in artisanal and small-scale mining activities in the same area, but efforts should be made to provide protection against harassment and forced eviction from the area.**

97. **The Special Rapporteur calls on the Government to pay additional attention to the situation of vulnerable groups, including women and children. Once again, he recognizes the difficulties in trying to regulate artisanal and small-scale mining activities. However, he is particularly concerned about children being exposed to highly toxic substances such as mercury and other dangerous chemicals. He calls on the Government, the United Nations**

**Children's Fund (UNICEF) and other stakeholders to treat the issue as a matter of urgency and to try and find a way to reduce the number of children engaged in such mining activities. He welcomes being informed of good practices in other countries in the hope that they may be replicated in Tanzania.**

**98. In order to improve the monitoring of the environmental and human rights impacts of mining activities, the Special Rapporteur urges the Government to develop a database of mining-related illnesses that have affected communities in the mining areas.**

**99. The Special Rapporteur greatly welcomes the initiatives of the Government, United Nations agencies, the World Bank, civil society, and especially transnational corporations, in launching projects on community development and sensitizing the local population to the dangers of unsafe practices in artisanal and small-scale mining activities. Since the Mwadui Community Diamond Partnership was only at its inception during his visit, he would like to be informed of the results of the first phase in order to have the opportunity to provide his comments and suggestions.**

**100. The Special Rapporteur notes with interest the recommendations set forth in the final report of the Global Mercury Project. However, he would like to caution against providing village leaders with power to expel irregular migrants. From what the Special Rapporteur observed, it is already a challenge for local authorities to regulate the activities of artisanal and small-scale miners given that there are as much as 1 million of them around the country. Therefore, it would be difficult to assess whether a miner is of regular or irregular status. While the Special Rapporteur acknowledges and respects that the role of village leaders is very important in the local context in Tanzania, the Special Rapporteur believes that empowering them to deal summarily with irregular migrants could have negative social and political consequences. In addition, the Special Rapporteur believes that the implementation of environmental legislation is better done by appropriate bodies such as the National Environmental Management Council and the Ministry of Energy and Minerals, rather than local leaders.**

### **B. Large-scale mining**

**101. The Special Rapporteur is concerned that the large-scale mining corporations are largely in charge of regulating their own activities. This raises concerns about transparency and accountability on the part of the corporations. He calls on the Government to monitor more closely the operations of large-scale mining companies, particularly on issues of occupational health and safety standards and the level of compliance of corporations with environmental and other legislation, and to ensure good relations between the mining corporation and surrounding communities.**

**102. The Special Rapporteur calls on the Government to consider renegotiating the contracts that were granted to large-scale mining corporations before the Environmental Management Act was adopted in 2004, to ensure that the contracts are consistent with the Act. He was informed that corporations that were granted mining licences prior to the adoption of the Act may not have been required to carry out environmental impact assessments, which are now mandatory. He calls for increased participation of the public**

**and civil society organizations, local villagers and elders during the renegotiation of contracts. The non-State actors should also be given sufficient notice of time in order to effectively contribute to the process.**

**103. While the Special Rapporteur welcomes the Government's initiative to ensure that environmental impact assessments are carried out before granting mining licences, it should be noted that they do not fully take into account the human rights impact of environmental degradation in mining areas. The Special Rapporteur urges the Government and mining corporations to also carry out social impact assessments to better protect and promote the human rights of the local population.**

**104. The Special Rapporteur commends corporations such as the De Beers Group, which has made an effort to engage with its surrounding communities and commit technical and monetary resources to community development. The Special Rapporteur calls upon other corporations, such as Barrick Gold Corporation and AngloGold Ashanti, to do more in engaging with its surrounding communities in fostering development and poverty reduction efforts.**

**105. The Special Rapporteur would like to remind corporations such as AngloGold Ashanti and De Beers of their commitment to the Global Compact and encourages other corporations who have not done so, to join this important initiative to advance responsible corporate citizenship.**

**106. The Special Rapporteur implores the Government to pursue the option of being a candidate country for the Extractive Industries Transparency Initiative. The initiative aims at strengthening governance by improving transparency and accountability in the extractive sector. This would in turn, encourage foreign investors whose resources can be used to fulfil the development needs of the country.**

### **C. Hazardous waste and chemicals management**

**107. The Special Rapporteur welcomes the different checks and balances that are currently in place for hazardous waste and chemicals management in the country. While he acknowledges the great efforts made by the different agencies, much work remains to be done. He recommends that the Government allocate more resources to safer waste disposal in urban areas.**

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