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|  |  | A/HRC/34/49/Add.1 | |
|  | **Advance unedited version** | | Distr.: General  6 March 2017  Original: English |

**Human Rights Council**

**Thirty-fourth session**

27 February-24 March 2017

Agenda item 3

**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 issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, on his visit to Madagascar[[1]](#footnote-2)\*

Note by the Secretariat

In the present report, John H. Knox, the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment gives his findings and makes recommendations on the basis of his visit to Madagascar from 25 October to 31 October 2016. During the visit, he examined how the country was implementing human rights related to environmental protection, identified good practices and considered the challenges the country faces in the promotion and protection of environmentally related human rights.

Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment on his mission to Madagascar[[2]](#footnote-3)\*\*

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I. Introduction

1. At the invitation of the Government, the Special Rapporteur visited Madagascar from 25 October to 31 October 2016. The purpose of the visit was to examine how Madagascar is implementing human rights related to environmental protection, to identify good practices and lessons learned, and to consider the challenges the country faces in the promotion and protection of environmentally related human rights.

2. The Special Rapporteur expresses his gratitude to the Government for its invitation and his appreciation to the Ministry of Justice for coordinating official meetings. He also thanks the United Nations Resident Coordinator and the country team in Madagascar.

3. In Antananarivo, the Special Rapporteur met with the Minister of Justice, Mr. Charles Andriamiseza; the Minister of the Environment, Ecology and Forests, Ms. Johanita Ndahimananjara; the Minister attached to the Presidency in charge of Mining and Oil, Mr. Ying Vah Zafilahy; the Minister of Fishery Resources and Fishing, Mr. Gilbert Francois; the Vice-President of the National Assembly, Ms. Hanitra Razafimanantsoa; the chair of the judicial committee of the National Assembly, Ms. Marie Thérèse Volahaingo; and the Director of Operations of the Madagascar National Parks, Mr. Mamy Rakotoarijaona. The Special Rapporteur also met with the 11 Commissioners of the Independent National Human Rights Commission, former president Marc Ravalomanana, members of civil society, academics, representatives of the diplomatic community, and representatives of international organizations. In and around Andasibe, the Special Rapporteur met with the Mayor of Andasibe, representatives of local community associations and the manager ad interim of the Andasibe-Mantadia National Park. He also met with employees of Ambatovy, a mining company, in Antananarivo and Moramanga. He is grateful for the warmth and openness of all those who took time to meet with him and for their cooperation during his visit.

II. Legal and institutional frameworks

A. Legal framework

1. International law

4. Madagascar achieved its independence and joined the United Nations in 1960. It belongs to many human rights treaties, including the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights and the African Charter on Human and Peoples’ Rights. Effective protection of the human rights recognized in these treaties, including the rights to life and health, requires States to take measures to protect the environment (see A/HRC/25/53).

5. Madagascar also belongs to many international environmental treaties, including the Convention on Biological Diversity, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Convention concerning the Protection of the World Cultural and Natural Heritage.

2. Constitutional and statutory law

6. In 2009, governmental authority was seized by what came to be called the transitional government. In response to the irregular transfer of power, the membership of Madagascar in the African Union was suspended and many foreign donors froze their aid. In 2010, Madagascar held a national referendum at which citizens approved a new constitution. After presidential and parliamentary elections in 2013, the current president, Hery Rajaonarimampianina, took office in January 2014. The suspension from the African Union was lifted and international relations were restored.

7. The Constitution adopted in 2010 recognizes human rights, including the rights to non-discrimination (art. 6), to life (art. 8), to freedom of opinion and expression (art. 10), to information (art. 11), to freedom of association and democratic opposition (art. 14), to health (art. 19), to education (art. 23), to participation in cultural life (art. 26) and to property (art. 34). Its preamble emphasizes “the exceptional importance of the wealth of the fauna, of the flora and of the mining resources of high specificities with which nature has provided Madagascar”, and underlines the importance of preserving these natural resources for future generations.

8. Madagascar adopted an Environmental Charter in 1990 and amended it in 2015, in Law No. 2015-003. The Charter states, among other things, that everyone has the fundamental right to live in a healthy and balanced environment (art. 6), and is entitled to access to environmental information and to participation in decision-making with environmental effects (arts. 7, 14). The Charter incorporates the polluter-pays and precautionary principles (arts. 10, 11), and provides that implementation of environmental actions is based on three components: socio-economic development, sustainable environmental management and good environmental governance (art. 17).

9. Various laws and decrees address conservation, effluent disposal, mining, fisheries and other environmental issues.[[3]](#footnote-4) The Government has recognized that the laws on pollution, in particular, are not well-integrated, and that there has been a lack of implementing regulations and coordination among the relevant agencies. The Government recently adopted a National Strategy for Pollution Management that seeks to adopt a more integrated approach. Important regulatory gaps remain, however, including in relation to pesticides and herbicides.

10. The procedure for environmental impact assessment is based on Decree No. 2004-167 (known as MECIE, for Mise en Compatibilité des Investissements avec l’Environnement). Under the Decree, proponents of a project must show how it will meet environmental standards.[[4]](#footnote-5) The law requires impact assessments for listed types of projects and for any other activities that could cause a negative impact on the environment. Assessments are required to include environmental management plans. The process provides for public participation through review of the relevant documents, a public inquiry or a public hearing. The assessment provides a basis for the decision whether to issue an environmental permit allowing the action to go forward.

11. In his visit to Madagascar in 2011, the then Special Rapporteur on the right to food identified several defects in the assessment procedure, including that local communities often do not have the capacity to take part in public consultation effectively, taking into account the limited information they have about the effects of proposed projects, that the results of the assessment are not required to be made public and that local communities do not have access to an independent mechanism to review decisions to grant environmental permits (A/HRC/19/59/Add.4, para. 30). More recently, the World Resources Institute raised concerns that the procedure does not provide for public participation early in the decision-making process, that data on air and water quality are not made publicly available and that the law does not provide procedures for appeal when the Government denies requests for environmental information.[[5]](#footnote-6) In connection with his current visit, the Special Rapporteur also heard complaints that the assessment procedure was too expensive and onerous for local communities and, even more troubling, that the decision-making process was often corrupted by the companies seeking permits.

B. Institutional framework

12. Madagascar is a constitutional republic. The executive branch is headed by the President, who is elected for a five-year, once-renewable term. The constitution provides that the President determines the general policy of the State and controls the implementation of that policy (art. 55). The President signs decrees deliberated in the Council of Ministers, appoints officials, and is the Supreme Commander of the armed forces (arts. 55, 56), among other powers.

13. The Parliament is composed of the National Assembly and the Senate (art. 68). The members of the National Assembly are elected for five-year terms. The composition of the Senate is two-thirds members elected in equal number for each province, and one-third members appointed by the President of the Republic by virtue of their particular competence (art. 81). The President nominates the Prime Minister, who is presented by the majority party or group of parties in the National Assembly (art. 54).

14. The High Constitutional Court of Madagascar has nine members, whose non-renewable terms are for seven years (art. 114). The President appoints three of the members and the National Assembly, the Senate and the Supreme Council of the Magistrature each elect two. The Supreme Court has the mandate to oversee the regular functioning of the jurisdictions of the judicial, administrative and financial order (art. 121). The High Court of Justice has jurisdiction over crimes and misdemeanours committed by public officials during the exercise of their duties (arts. 131-135). It is composed of the president of the Supreme Court, four other judges, two members of the National Assembly, two Senators, and two members of the High Council for the Defense of Democracy and the Rule of Law (art. 136). However, the High Court of Justice has not been operationalized.

15. The chief environmental agency is the Ministry of the Environment, Ecology and Forests. Within the Ministry, the National Office for the Environment (ONE, for Office National pour l’Environnement) is mandated, among other things, to oversee and manage the environmental impact assessment process; issue environmental permits and environmental project closure certificates; monitor marine and terrestrial environments to better manage biodiversity; conduct environmental awareness training; and prepare reports on the state of the environment. Under Decree No. 2003-439, ministries with responsibilities for development are required to establish environmental units, to participate in the assessment process and to integrate environmental concerns into their work.

16. The Independent National Human Rights Commission has a broad mandate, which includes promoting and protecting all human rights, providing advice to government bodies, and promoting the harmonization of national laws with international human rights instruments (Law No. 2014-007, art. 2). The Commission is mandated to publish an annual report and present it to the Parliament (art. 19) and is empowered to receive complaints and investigate cases (see arts. 21-28). The members were appointed and took their positions in 2016, but the Commission still lacks basic institutional support, including equipment and a website through which it can provide information about its work, and an office that is conducive to the effective implementation of its mandate.

III. Environmental conditions in Madagascar

17. The environment of Madagascar, sometimes called the eighth continent,[[6]](#footnote-7) is a treasure house of biological diversity (biodiversity). The fourth largest island in the world, its ecosystems include tropical rain forests, dry spiny forests, savannahs, steppes, wetlands, drylands and coral reefs. Because the island separated from other land masses more than 80 million years ago, most of its flora and fauna are endemic, native only to Madagascar. Of its 12,000 species of vascular plants, 96 per cent are endemic. All of its 278 species of amphibians are endemic, as are 90 per cent of its 389 species of reptiles.[[7]](#footnote-8) Six of the world’s nine species of baobab trees and approximately one-half of the 150 species of chameleons are native to Madagascar. Perhaps its most famous animals are the more than 100 species and subspecies of lemurs, which range in size from 30-gram mouse lemurs to indris that weigh almost 10 kilograms. In all, Madagascar, which covers only one-half of one per cent of the world’s land, is home to five per cent of the world’s plant and animal species. New discoveries continue to be made: more than 600 new species were identified between 1999 and 2010, including 69 amphibians, 61 reptiles and 41 mammals.[[8]](#footnote-9)

18. Like other countries, Madagascar faces many threats to its biodiversity. Invasive species such as the Asian common toad (*Duttaphrynus melanostictus*) threaten to devastate ecosystems that have not evolved protections against them.[[9]](#footnote-10) Illegal hunting and logging drive many species closer to extinction. The demand is often from foreign markets, including for tortoises sought as pets and rosewood trees used for furniture. Domestic demand also plays a role: many wild animals, including tortoises and many species of lemurs, are hunted for food.[[10]](#footnote-11) There are also growing domestic as well as foreign markets for lemurs as pets.[[11]](#footnote-12)

19. An overarching problem is habitat loss. Although estimates vary, it is clear that Madagascar has lost much of its primary forest over the past century.[[12]](#footnote-13) As in other countries, much of the loss has been to make room for agriculture. A traditional practice of rice farmers in Madagascar has been to cut and burn areas on the edges of forests to plant and harvest crops. At relatively low population levels, this practice, known as *tavy*, was sustainable. But with the increase in the population from about five million people in 1960 to 24 million today, unchecked *tavy* places unsustainable demands on shrinking forests. Other demands on land, including mining, also contribute to the loss of habitat. Climate change is already causing losses in coral reefs, and threatens to drastically reduce the habitat available for lemurs and other species.[[13]](#footnote-14)

20. That so many of the species on the island are unique means that “the loss of one hectare of forest in Madagascar has a larger effect on biodiversity than forest loss elsewhere in the world”.[[14]](#footnote-15) Threats to biodiversity have already taken a toll: as of 2013, 11 species in Madagascar were declared extinct, 290 species were endangered and another 166 species were critically endangered.[[15]](#footnote-16) Other species close to extinction include the angonoka or ploughshare tortoise (*Astrochelys yniphora*) and the radiated tortoise (*Astrochelys radiata*), which are hunted for food as well as for their beautiful shells. There may only be 200 mature angonoka tortoises left in the wild.[[16]](#footnote-17) Lemurs have been called the most endangered mammals in the world; 48 of the species are endangered and another 22 are critically endangered.[[17]](#footnote-18) Some are down to very low numbers. The silky sikafa (*Propithecus candidus*), for example, is believed to have fewer than 250 remaining members.[[18]](#footnote-19)

21. The loss of such unique biodiversity would be a loss to the world, but it would most drastically affect the people of Madagascar themselves. As Madagascar has reported to the Convention on Biological Diversity, 85 per cent of its population live in rural areas, and “forest biodiversity is the very basis of their livelihood”.[[19]](#footnote-20) In addition to food and fuel, the forests provide over 2,000 plants for medicinal purposes.[[20]](#footnote-21) A famous example is the rosy periwinkle (*Catharanthus roseus*), long used as a traditional medicine, which became the basis for treatments of childhood leukemia and Hodgkin’s lymphoma. Only about ten per cent of these traditional medicines have been commercialized, leaving enormous room for scientific and commercial development.[[21]](#footnote-22) In addition, there is great potential for growth in tourism, which is currently the third largest source of foreign currency. Perhaps most important, the culture of the country closely depends on its biodiversity. Some species of animals have special cultural value, and many forests, lakes, waterfalls and rock masses are considered sacred.[[22]](#footnote-23)

22. The people of Madagascar face many other environmental threats, which often, unfortunately, receive less attention from the international community. The most urgent may be air pollution. A World Bank study recently estimated that the number of premature deaths in Madagascar attributable to air pollution increased from approximately 12,764 in 1990 to 18,718 in 2013.[[23]](#footnote-24) During the visit of the Special Rapporteur, the ambient air pollution from vehicles was noticeable in Antananarivo but, as in much of the world, household air pollution is the deadlier problem. Almost all of the homes in the country depend on solid biomass (e.g., charcoal, wood, crop waste) as the main fuel for cooking, and as a result over 98 per cent of the population is exposed to levels of particulate pollution in excess of WHO standards.[[24]](#footnote-25)

23. Access to water and sanitation is also of great concern. Only 48 per cent of the population had access to safe water sources in 2015, an moderate improvement from 1990, when only 29 per cent had such access.[[25]](#footnote-26) Access to safe and clean sanitation is even worse. In 2015, only 12 per cent of the population had access to improved sanitation, only a marginal change from 1990, when nine per cent of the population had access to improved sanitation.[[26]](#footnote-27) The Special Rapporteur was also informed during his visit that solid waste disposal is becoming an increasingly difficult issue in the capital and other urban areas.

IV. Good practices

24. This section describes three good practices in relation to human rights and environmental protection: (a) the development of a comprehensive network of protected areas; (b) community participation in the conservation of biodiversity; and (c) capacity building at the local level in the context of a major mining operation.

A. Protected areas

25. As the Special Rapporteur describes in his thematic report to the present session of the Council, biodiversity is necessary for healthy ecosystems, which in turn are necessary for the full enjoyment of human rights, including the rights to life, the highest attainable standard of health and an adequate standard of living (A/HRC/34/49). To conserve its unique biodiversity, Madagascar has actively employed protected areas. It strengthened its already-existing network of protected areas in the early 1990s, and it greatly expanded the network after 2003, when then-President Marc Ravalomanana announced a new commitment, later called the Durban Vision, at the fifth World Parks Congress. The proposal was to triple Madagascar’s protected area coverage, from 1.7 million hectares to 6 million hectares. In 2014, the Government reported to the Convention on Biological Diversity that the pledge had been more than accomplished: the areas under legal protection had grown to 6.9 million hectares, nearly 12 per cent of the country.[[27]](#footnote-28)

26. Madagascar’s national biodiversity strategy and action plan lists 122 protected areas, covering all of the types of ecosystems in Madagascar.[[28]](#footnote-29) The protected areas are under the overall supervision of the Ministry of Environment, but individual areas are managed by a wide range of actors. The most important manager is Madagascar National Parks, which administers more than fifty protected areas totalling about three million hectares. Almost all of its sites are National Parks (IUCN category II, which allows tourism but few other uses) or Special Reserves (IUCN category IV, designed to protect particular species or habitats). Other actors, including international conservation organizations, have the responsibility for managing other protected areas, most of which were established pursuant to the Durban pledge. Almost all of the new protected areas are classified as Protected Landscapes (IUCN category V) or Natural Resource Reserves (IUCN category VI), which allow human uses of natural resources as long as the uses are compatible with conservation.

27. The Government has reported that between 2000 and 2005, the deforestation rate within protected areas was 0.12 per cent a year, about one-fifth that of non-protected forests. Between 2005 and 2010, the rate increased to 0.2 per cent, however, possibly showing the difficulty of managing the transition to a larger amount of protected areas.[[29]](#footnote-30) Nevertheless, while forest cover continues to decrease,[[30]](#footnote-31) the overall rate of deforestation in the country has slowed significantly, from 0.83 per cent during the 1990s to 0.53 per cent between 2000 and 2005, and 0.4 per cent between 2005 and 2010.[[31]](#footnote-32) This is an admirable achievement, especially compared to many countries that are still struggling to reduce their rate of deforestation. Still, as the Government states, “Even if it is lower than the rate in the world for tropical forests, this deforestation level is alarming for Madagascar where natural forest cover is less than 12% of the territory”.[[32]](#footnote-33)

28. Now that the Durban pledge has been achieved, the greatest current challenge with respect to terrestrial protected areas is ensuring that they are effectively managed, including by obtaining sustained financial commitments. In that respect, it is understandable that Madagascar has relied on innovative partnerships with conservation organizations. Nevertheless, the Government remains responsible for enforcing criminal laws, including against poaching. The Special Rapporteur was impressed by the dedication of the staff of Madagascar National Parks, but they do not have the authority or the resources to police protected areas. Similarly, the Government is responsible for ensuring that the managers of the protected areas are working with local communities. This is particularly important in the many category V and VI areas, which allow substantial human uses of the resources.

29. At the World Parks Congress in Sydney in 2014, Madagascar made another ambitious commitment: to triple the number of marine protected areas over the next five to ten years. In implementing this commitment, it is important to ensure that local communities are consulted throughout the process, including in the delimitation of the protected areas and in the recognition of the rights of local communities.

B. Community participation in the protection of biodiversity

30. The Universal Declaration of Human Rights (art. 21) and the International Covenant on Civil and Political Rights (art. 25) recognize the right of everyone to take part in the government of their country in the conduct of public affairs. Human rights bodies have made clear that in the environmental context, States have a duty to facilitate public participation in environmental decision-making, which derives not only from the general right of public participation, but also from the fact that public participation helps to safeguard a wide range of other rights, including the rights to life and health, from environmental harm. Meaningful participation of stakeholders supports more effective environmental programmes, reduces exclusion and enhances accountability.

31. States have heightened duties with respect to those who are particularly vulnerable to environmental harm (A/HRC/34/49, paras. 50-65). Those who depend most closely on natural ecosystems for their material and cultural needs are especially vulnerable to actions that adversely affect those ecosystems. States should ensure that such actions, whether carried out by Governments or private actors, do not prevent the enjoyment of their human rights, including their rights to life, health, food, water, housing and culture.

32. Protecting the rights of those who live closest to nature is often the best way to protect biodiversity. Since the 1990s, Madagascar law has recognized the importance of involving local communities, through community associations, in the management of protected biodiversity, but community-based natural resource management has not always been effectively implemented. For example, the decisions as to which areas to include as protected areas under the Durban Vision have been criticized as failing to adequately consult local communities.[[33]](#footnote-34)

33. Even involvement of local communities will not necessarily avoid all conflicts over land use.[[34]](#footnote-35) Stakeholders may simply disagree over the proper management of a protected area. Nevertheless, involving local communities is clearly preferable to top-down control that ignores local concerns, as Madagascar has recognized. During the visit, the mayor of Andasibe emphasized to the Special Rapporteur that disputes in that region were more likely with respect to protected areas with which the locals did not feel that they had been consulted.

34. The Special Rapporteur visited a park in Andasibe that is managed by a community association, VOI MMA (the abbreviation of the full name in Malagasy, vondron’olona ifotony mitia sy miaro ny ala). Its members are not merely implementing pre-designed plans; rather, they are independent decision-makers in natural resources management. He saw the care with which the community members monitor critically endangered species such as the indri, protect against unlawful logging, maintain a plant nursery, remove invasive eucalyptus trees and plant seedlings. The protection of biodiversity by the community association helps to decrease pressure on nearby protected areas, including the Analamazaotra Special Reserve and the Andasibe-Manatadia National Park. In addition to the environmental benefits, the community park has also improved the local standard of living. Since the community took over the management, the number of paying visitors to its park has greatly increased, from about 1,000 in 2011 to 4,600 in 2015.[[35]](#footnote-36)

35. Not all efforts to protect biodiversity in Madagascar facilitate public participation and local management to this extent. Two challenges, in particular, stand out. First, to be sustainable, community associations need to receive sufficient technical and financial support, especially early in the process. Critical to the success of VOI MMA was a grant of $26,000 over two years from the Global Environmental Facility Small Grants Programme, managed by UNDP. Among other things, the grant enabled the community association to build a two-room shop in which it sells souvenirs, including crafts made by its own members. Second, there is a danger that community associations may exclude the poorest and most marginalized members of the community, who may not possess the status within the community to participate. Because they may be particularly dependent on the forest for their livelihoods, their exclusion means that they will be likely to violate the agreed protections for biodiversity. In the words of one scholar, in addition to heightening social inequity, this would inevitably lead to the compromise of conservation objectives as well.[[36]](#footnote-37)

36. The Special Rapporteur was impressed by many other examples of efforts by Malagasy communities, associations and individuals to protect the environment in a variety of ways. There are too many to list here, but notable examples include: Alliance Voahary Gasy, which brings together many Malagasy environmental organizations into a network for information-sharing and coordination; project ALARM (Application de la Loi contre les Abus sur les Ressources naturelles de Madagascar), which addresses illegal trade in tortoises, and has contributed to the arrest of nine traffickers since August 2016; the Anja Community Reserve, another community-run conservation area famous for its ring-tailed lemurs; the Turtle Survival Alliance, which provides a temporary home for tortoises seized by the government before they can be illegally exported, and which received 3,000 radiated tortoises in 2015 alone;[[37]](#footnote-38) and Blue Ventures, which has worked in the Velondriake locally managed marine area to integrate community-based reproductive health services with local marine conservation initiatives.[[38]](#footnote-39)

C. Local capacity building in the context of mining

37. States have obligations to adopt legal frameworks that protect against, and respond to, environmental harm that interferes with the enjoyment of human rights (A/HRC/25/53, para. 47). Under the Guiding Principles on Business and Human Rights, those obligations include duties to protect against human rights abuses by businesses, and businesses themselves have a responsibility to respect human rights (A/HRC/17/31).

38. Human rights abuses by businesses often involve environmental harm (A/HRC/8/5/Add.2, para. 67). Mining can cause especially massive damage, and its harms are often felt predominantly by indigenous peoples and other local communities who depend on the forests, rivers, wildlife and other natural resources that are destroyed or damaged by the extraction of mineral resources. Even relatively careful mining operations cause environmental harm. While it is unrealistic to expect countries to forego all resource extraction, States can and should allow only activities that respect and protect human rights, especially the rights of those who reside most closely to the activities, and corporations should comply with their responsibility to respect those rights.

39. The largest mining project in Madagascar is the Ambatovy mine, which is operated by Sherritt International Corporation, a Canadian company, and owned by a consortium of Sherritt (40%), Sumitomo Corporation (32.5%), and Korea Resources Corporation (27.5%). The operation extracts red earth from an open pit mine 24 kilometres from Moramanga and conveys it as slurry through a 220-kilometre underground pipeline to a processing plant near the port of Toamasina on the eastern coast. There, nickel and cobalt are refined and shipped to the global market. Ambatovy is the largest foreign investment in Madagascar, with a total cost of about eight billion dollars. It employs approximately 7,500 people in the country, over 90 per cent of whom are Malagasy. In 2013, refined nickel became Madagascar’s top export product, bringing in about one billion dollars annually in foreign currency.

40. The footprint of the mine is 1,600 hectares, in an environmentally sensitive area. Ambatovy committed to “no net loss” of biodiversity and ecosystem services by following the widely accepted “mitigation hierarchy”, which requires (1) the avoidance of harm to the extent possible; (2) the minimization of unavoided harm; (3) the restoration of harmed ecosystems; and (4) the “offset” of residual harmful effects with positive actions.[[39]](#footnote-40) To ensure that the “no net loss” goal is satisfied, at least three conditions must be met: biodiversity gains must be comparable to the losses that remain after avoidance, minimization and restoration; they must be “additional to outcomes that would have resulted in the absence of an offset”; and they must be lasting.[[40]](#footnote-41)

41. The Special Rapporteur does not have the resources to verify independently all of Ambatovy’s actions. However, it appears that Ambatovy has taken seriously its commitments. It identified a wide range of values, including cultural and spiritual values, that would be affected by its actions, and it developed indicators that allow continuing monitoring and assessment. It set aside for conservation 3,600 hectares of forest around the mine site, including two areas directly above the nickel deposit that have atypical characteristics and therefore cannot be easily offset. With respect to the mining footprint itself, Ambatovy employed paced directional clearing to push animals such as birds and lemurs eastward toward the conservation zone. Up to one year before the clearing, it collected and relocated plants and smaller animals. It rerouted the pipeline to avoid places of special environmental and cultural concern, including sacred sites and a breeding pond for an endangered species of frog. It has restored the rice fields disturbed by construction of the pipeline, and it plans to restore the mining site itself. While restoring old-growth forest is difficult if not impossible, Ambatovy has a nursery of plants to help prepare for the restoration, and intends to integrate the resulting forest with the forests around it.

42. With respect to offset actions, Ambatovy supports conservation of several areas away from the mining site, including the Ankerana forest of 5,700 hectares. In total, the offset conservation areas are approximately nine times the size of the mining site. Within the conservation areas, forest clearing, logging, poaching and grazing are prohibited. Ambatovy also supports community development activities. Community associations near the mine are invited to choose one environmental activity, e.g., concerning conservation, and one development activity, e.g., ecotourism training, building irrigation dams, training in agricultural techniques other than *tavy*. Ambatovy supports the activities, carefully monitors their outputs and rewards improved performance with greater support. Ambatovy also supports a number of educational and other initiatives. For example, the Special Rapporteur visited a school in Moramanga where youths from nearby villages are trained in agricultural techniques.

43. A study of perceptions of communities near some of the conservation areas reveals mixed feelings.[[41]](#footnote-42) The authors of the study concluded that, in general, “the type of development activities provided by Ambatovy were well received locally and well implemented with a high proportion of respondents feeling that they delivered benefits or had the potential to deliver benefits in the future.”[[42]](#footnote-43) However, many individuals were also concerned about the effect of the conservation measures on their ability to support their livelihoods. In these areas without electricity, access to treated water or sanitation, where very few of the residents pursue education beyond primary school, many still rely on the products of the forest for food and fuel. As a result, while the villagers generally appreciated and supported the importance of conservation, some stated that the effects of the conservation measures on their livelihoods outweighed the benefits of the development activities.[[43]](#footnote-44) It seems likely that the negative effects of the conservation measures are felt disproportionately by the poorest members of the community, who are most dependent on the forest and may also be among the least able to take advantage of new development opportunities.

44. The Special Rapporteur urges Ambatovy and the community associations with which it partners to take these concerns into account as they proceed with their valuable programs. He believes that they are well positioned to do so. He was impressed with the commitment of the Ambatovy employees he met in Moramanga who work on community support. Finally, it appears from anecdotal evidence, at least, that Ambatovy has been open to hearing the concerns of local communities. For example, the mayor of Andasibe told the Special Rapporteur that Ambatovy responded promptly and at a high level to his concerns.

45. The Special Rapporteur is aware that there are serious criticisms of offsetting in many situations and that the practice has been abused. But he believes that it would be a mistake to reject the concept entirely. States will continue to seek to exploit valuable minerals and other resources in their territory and, in doing so, they will award concessions to corporations. Corporations cannot be expected to substitute for Governments and corporate conservation and social development activities can never excuse human rights abuses. Nevertheless, properly employed, such activities can help to fulfil the duties and responsibilities of States and corporations to protect and respect the human rights of those most directly affected by the commercial exploitation of natural resources.[[44]](#footnote-45)

V. Issues of concern

46. This section addresses four environmental issues that particularly implicate human rights: (a) climate change; (b) mining conflicts; (c) illegal logging and trafficking; and (d) environmental human rights defenders. This is not an exhaustive list, but these issues were all raised by multiple interlocutors during the visit.

A. Climate change

47. As the Human Rights Council has recognized, climate change contributes to the increase of both sudden-onset natural disasters and slow-onset events.[[45]](#footnote-46) Madagascar is highly vulnerable to both. Five million Malagasy live in regions regularly subject to natural disasters such as cyclones, flooding and droughts. Of the 22 regions of Madagascar, 17 are at high risk for cyclones. The most recent severe cyclone, Ivan, which struck the island in 2008, killed over 80 people and left nearly 200,000 homeless. Damages were estimated at $330 million, amounting to four per cent of GDP (DP/DCP/MDG/3, para. 7). In the decade 2006-2015, disasters killed over 700 people and affected over 9 million, an average of almost one million every year.[[46]](#footnote-47)

48. Under the World Risk Index, which rates the disaster risk from earthquakes, cyclones, foods, droughts and sea-level rise, Madagascar is the most susceptible country in the world – that is, the country most likely to suffer harm in the event of natural hazards.[[47]](#footnote-48) Taking into account its capacity to cope with and adapt to such disasters, it is the ninth most vulnerable country in the world.[[48]](#footnote-49) Similarly, the Global Climate Risk Index, which analyses the extent to which countries have been affected by the impacts of weather-related events such as storms, floods and heat waves, states that Madagascar was the eighth most vulnerable country in the world to such events in 2015, and the most vulnerable country in Africa over the previous twenty years.[[49]](#footnote-50)

49.Climate change is already beginning to exacerbate the frequency and intensity of extreme weather events. In 2016, Madagascar, like other countries in eastern and southern Africa, continued to experience one of the worst droughts in its history, attributed to the El Niño effect but strengthened by global warming.During the Special Rapporteur’s visit, the United Nations announced that the drought had caused nearly 850,000 people in southern Madagascar to become acutely food insecure. To assist them, the Government of Madagascar and international agencies have requested $154.9 million in additional funding, of which only 32 per cent had been secured by December 2016, leaving a funding gap of $106.7 million.[[50]](#footnote-51)

50. UNDP reports that Madagascar has taken steps to increase its disaster response capacity, including by developing a national contingency plan, working with local communities to develop their own capacity and conducting simulation exercises. However, UNDP states that “post-disaster recovery mechanisms need to be strengthened in order to increase community resilience and minimize the risk of relapses” (DP/DCP/MDG/3, para. 11). The Government of Madagascar has also taken measures to address climate change, including by formulating a national climate action plan in 2011 and establishing a national carbon registry in 2012. The effective implementation of these and other adaptation measures is difficult, however, because of the lack of adequate resources.[[51]](#footnote-52)

51. It would be unjust to expect States such as Madagascar, which contribute very little to the greenhouse gases that cause global warming, to try to deal alone with the consequences of climate change for their people. The Human Rights Council has emphasized “the urgent importance of continuing to address, as they relate to States’ human rights obligations, the adverse consequences of climate change for all, particularly in developing countries and the people whose situation is most vulnerable to climate change, especially those in a situation of extreme poverty, and deteriorating livelihood conditions”.[[52]](#footnote-53) States must comply with their obligation of international cooperation to address this global threat (A/HRC/31/52, paras. 42-46).

52. Specifically, to protect the most vulnerable, including in Madagascar, States must not only fulfil their commitments to reduce their greenhouse gas emissions; they must also act swiftly and effectively to strengthen those commitments. In addition, developed countries must do more to provide international assistance, including through climate finance mechanisms, to assist the people of Madagascar and other vulnerable countries.

B. Mining conflicts

53. An issue that repeatedly arose during the visit was the regulation of mining activities. In recent years, Madagascar has seen a rapid increase in mining concessions, which has led to an increase in the number of protests against mining operations. The conflict that received the most attention during the visit concerned a mining concession in Soamahamanina to a Chinese company, Jiuxing Mines, which was the subject of protests throughout 2016. In July 2016, a coalition of organizations sent a letter to the President of Madagascar requesting that the Government revoke the mining permit on the grounds, among others, that the permit was issued without the participation and consultation of the local communities and that it would cause environmental harm, including to a tapia forest. The Government suspended the mining activities but did not revoke the permit, and weekly protests continued. At two protests in September, the Government arrested five persons, including two directors of a local association, VONA Fitiavan-Tanindrazana, and charged them with a breach of internal State security, unauthorized demonstrations, and destruction of public property. They were given one-year suspended sentences and released from detention in November 2016.

54. For mining to accord with human rights obligations, it must be undertaken only after prior assessment and consultation with the people most affected. Effective remedies must be provided for violations of their rights. Mining activities should be authorized only if they avoid, minimize and, to the extent possible, restore and offset environmental harm. Mining concessions should result in benefits not only for the country as a whole, but for the local communities most directly affected by the mining. The Government must impose restrictions that ensure that the mining activities proceed only if these requirements are met, and the regulations themselves must be considered, adopted and implemented in a transparent manner that allows for free and informed public debate. Everyone must be able to exercise the rights of freedom of expression, association and peaceful assembly in the context of mining operations, without fear of harassment or detention.

55. The Special Rapporteur appreciated the willingness of the Government, including the Ministry of Mining, to engage in a candid discussion of these issues. The Government acknowledged serious problems with the mining law, including that it has been far too easy to obtain and transfer research and mining permits. The Government stated that most of the current permits were granted by the previous transitional government, which often failed to ensure that proper environmental assessments and local consultations were conducted before granting mining permits. However, the Government indicated that because the permits were issued in accordance with the laws in force at the time, they cannot simply be revoked as illegal. The Government also stated that officials of the transitional government had engaged in corruption, but it denied that such corruption was a continuing problem. Many other interlocutors, however, told the Special Rapporteur that corruption is still a significant problem, including in respect of mining concessions. The Government acknowledged the importance of putting into place safeguards against corruption. This issue is addressed further in the next section of the present report.

56. The Government plans to submit a revision of the current Mining Code to the Parliament in 2017. The Special Rapporteur strongly urges the Government to ensure that the revisions meet the requirements set out above, and that the process of considering the revisions is itself transparent and open to public discussion. He also urges the Government to review the mining permits issued by the transitional government and to revoke or suspend those permits that were not issued in accordance with the MECIE Decree on environmental impact assessment and other applicable laws, until the proper procedures, including consultation with local communities, are followed.

57. With respect to conflicts between local communities and mining companies, the Ministry stated that it has tried to hold dialogues with local communities but that the attempts did not lead to successful resolution of the conflicts. The Government also suggested that the conflicts were due in large part to opposition politicians promoting discord.[[53]](#footnote-54) Without attempting to judge the merits of any particular case, the Special Rapporteur reminded the Government that the rights of protestors to freedom of expression, association and peaceful assembly must always be respected. He also noted that conflicts over mining are common everywhere in the world, and that even relatively minor disagreements can escalate quickly. To avoid such escalation, the Special Rapporteur suggested to the Government that it consider the institution of a standing mediation/conciliation commission with the authority to hear grievances of local communities about mining and to work to resolve those grievances peacefully and expeditiously. Such an institution could be established as part of the revisions to the Mining Code or as an independent matter.

58. The nature of this commission would be for Madagascar to decide, but the Special Rapporteur draws the Government’s attention to some potential models, ranging from governmental to independent.[[54]](#footnote-55) An example of a governmental mediation mechanism is the Office of the Extractive Sector CSR Counsellor,[[55]](#footnote-56) set up by the Government of Canada, which aims to reduce and to constructively resolve conflict between affected communities and Canadian oil, gas and mining companies operating outside of Canada. Through a dispute resolution mechanism, called the Review Process, the Counsellor works toward resolving disputes through dialogue and joint problem-solving between Canadian businesses and people affected by the business activities. Another approach is to create local commissions for different localities, each composed of representatives of the mining companies doing business there, the local governments and community associations. In Mongolia, for example, these Local Multi-Stakeholder Councils appear to have contributed to facilitating dialogues early in the process and avoiding later disputes.[[56]](#footnote-57)

59. Third-party mediation is also possible. The Government may wish to consider adapting an approach similar to that taken by the EU-UN Partnership on Land, Natural Resources and Conflict Prevention.[[57]](#footnote-58) Its implementation in the Democratic Republic of the Congo included a mediation programme, built upon the work previously done by UNHABITAT. A “Dialogue and Mediation Committee” contributed in reducing tension and mitigation of environmental degradation by hosting dialogue between miners and mining companies.

60. Finally, the Special Rapporteur suggests that the Government provide the Independent National Human Rights Commission a formal role in the peaceful resolution of mining conflicts. Article 28 of Act No. 2014-007, which established the Commission, states that it may proceed to conciliation to resolve complaints of violations. Encouraging the Commission to exercise this authority in mining disputes might help to avoid escalation of disputes. It would be necessary to provide the Commission additional resources to enable it to fulfil this responsibility.

C. Illegal logging and trafficking

61. Illegal trafficking in endangered species is a long-standing problem that grew enormously under the transitional government. Trafficking has occurred in tortoises and other wildlife, as well as in precious woods such as ebony (*Diospyros*), palisander and, especially, rosewood (both of which are in the *Dalbergia* genus). Logs have been exported as raw material for highly valuable furniture in foreign markets, especially in China, where a metric ton of rosewood is worth about $25,000.[[58]](#footnote-59) Madagascar rosewood is now found only in protected areas, including in particular the Masoala National Park in the northeast. Although selective logging of valuable trees might seem to be less harmful than clear-cutting, many other trees must also be cut to remove the trees of value. Illegal logging also contributes to other problems, including harassment and violence directed against those who try to defend the protected areas. The failure to stop illegal logging sends a discouraging message to local communities that their efforts to conserve these forests are pointless, because the resources will be exploited by the so-called rosewood mafia barons, the relatively small number of individuals in Madagascar who profit from the trafficking.

62. In 2013, the Conference of the Parties to the Convention on International Trade in Endangered Species (CITES) added *Dalbergia* and *Diospyros* from Madagascar to Appendix II of the Convention, which lists species that are not currently threatened with extinction but may become threatened unless their trade is subject to strict regulation. An export permit for a specimen of an Appendix II species may be granted only if the export would not be detrimental to the survival of the species and the specimen was not obtained illegally. At the same meeting, the Conference of the Parties adopted an Action Plan for Madagascar, which required that the country strengthen its enforcement efforts and that it place an embargo on export of any stockpiles of the woods “until the CITES Standing Committee has approved the results of a stockpile audit and use plan to determine what component of the stockpile have been legally accumulated and can be legally exported”.[[59]](#footnote-60)

63. Since then, the CITES Secretariat and Standing Committee (an intergovernmental body that reports to the Conference of the Parties) have repeatedly stated that Madagascar has failed to comply with the Action Plan. The Secretariat has reported that “illegal harvest of ebony/rosewood or its subsequent illegal export do not seem to be slowing or stopping” (SC 66 Doc. 46.1, para. 7), and cited multiple seizures by other countries of illegal shipments, the largest of which was of 3,000 tons of rosewood in Singapore in March 2014 (ibid.,paras. 26-33). On the Secretariat’s recommendation, the Standing Committee recommended in January 2016 that CITES Parties suspend commercial trade in specimens of *Dalbergia* and *Diospyros* from Madagascar.

64. For Madagascar to demonstrate strengthened enforcement, “the successful identification, arrest, prosecution and conviction of individuals managing and organizing the illegal trafficking within the country is particularly crucial”, but in September 2016, the Secretariat reported that only nine out of 203 reported infractions of various environmental laws over the 2003-2016 period had led to a conviction, that no prosecutions at all had been completed in relation to cases involving illegal logging or trade in *Dalbergia* or *Diospyros* species, and that Madagascar still had no law penalizing the logging of palisander (SC 67 Doc. 19.1, paras. 8, 9, 20). The Secretariat recommended that trade in *all* CITES-listed species be suspended until Madagascar demonstrates a significant increase in enforcement actions, it prohibits trade in palisander species, and the Standing Committee approves the results of an inventory, audit and use plan of at least a third of the stockpile (ibid., para. 32). In response, the Standing Committee requested Madagascar to report on the implementation of those three proposed conditions by 31 December 2016. The Committee deferred the decision to suspend commercial trade until after that report (SC 67 Summary Record, para. 19).

65. Illegal logging and trafficking are closely connected with corruption. Environmental investigators and journalists have repeatedly reported that illegal logging is conducted openly. The identity of many of the chief “rosewood barons” seems to be common knowledge. Under these circumstances, it is difficult to understand the failure to prosecute those responsible for illegal logging and trafficking if not for corruption. Many people informed the Special Rapporteur, before and during his visit, that they believe corruption is an on-going problem in Madagascar, including at many levels of the Government. This perception applies to mining concessions and environmental permits, among other areas. But rosewood trafficking may be its most obvious manifestation. The Government itself stated in its submission to the Standing Committee that “local courts are influenced by private interests” (SC 67 Doc. 19.2 (rev. 1), para. 3.1.1).

66. The Special Rapporteur recognizes that on this issue, as well as others, the Government believes that it is being blamed for actions taken – or not taken -- by the previous transitional government. The Government assured the Special Rapporteur, as it has done to others, including the CITES Standing Committee, that it is taking effective steps to address corruption. For example, the Government pointed to a new law (Law No. 2015/056) establishing a “special chain” to fight against trafficking of rosewood and ebony, which includes three enforcement mechanisms: a new national court, an inter-institutional investigative unit, and a stockpile management commission. Other steps with broader scope include the creation of new anti-corruption centres, or “pôles”. But most of these steps do not appear to have taken effect. In particular, it is troubling that the High Court of Justice, the court mandated by the Constitution to have jurisdiction over crimes committed by high public officials, has still not been operationalized.

67. The Government knows what it needs to do to “end the corruption that has weakened Malagasy society”, in the words of then Secretary-General Ban Ki-moon when he visited Madagascar in May 2016. It is not enough to announce anti-corruption measures. It must implement them, including by arresting, trying and convicting those who have engaged in illegal activity. Doing so is critical to protecting its environment and the human rights of its people.

68. The Government can and should take other steps as well. For example, all officials of the State should formally declare their assets, in accordance with the requirement to do so set out in the Constitution (art. 41(2)). With respect to illegal trafficking of rosewood, in particular, the Government could signal its commitment to make the trade unprofitable by requesting countries that seize rosewood to sell the seized stocks themselves, rather than return them to Madagascar, and to place the funds in a trust administered by the CITES Secretariat or another independent body, to be used for the enforcement of conservation laws in Madagascar.[[60]](#footnote-61)

D. Environmental human rights defenders

69. As the Special Rapporteur on the rights of human rights defenders recently emphasized, environmental defenders are human rights defenders (A/71/281). The Human Rights Council has recognised the important role played by human rights defenders in “the promotion and protection of human rights as they relate to the enjoyment of a safe, clean, healthy and sustainable environment”, (A/HRC/RES/25/21, para. 9) and has recognised that environmental and land defenders are among the human rights defenders most at risk (A/HRC/RES/31/32). States have obligations to protect environmental human rights defenders in accordance with the United Nations Declaration on Human Rights Defenders. Unfortunately, in many countries, it is increasingly dangerous to be an environmental defender. Global Witness reported 185 murders of environmental and land defenders in 2015, an average of more than three a week.[[61]](#footnote-62)

70. To its credit, Madagascar is not among the countries that have been identified as having suffered the murder of an environmental defender. However, activists have stated that they are afraid of identifying themselves as human rights defenders due to the lack of a legal structure to ensure their security (A /HRC/WG.6/20/MDG/3), and during his visit the Special Rapporteur heard several reports of threats against environmental defenders. Moreover, in the last two years, two individuals opposing illegal logging were imprisoned. In May 2015, Armand Marozafy, an eco-tourist guide and environmental activist, was imprisoned for five months and ordered to pay 12 million ariary ($3,650) after being found guilty of defamation under a cybercrime law, after trying to bring attention to illegal rosewood trafficking. Clovis Razafimalala, coordinator of the Lampogno coalition, is currently in prison for allegedly destroying public property during a demonstration against rosewood traders in Maroantsetra. The Special Rapporteur notes that these cases are consistent with a growing global trend of using suits based on defamation or minor legal violations to silence the voices of those trying to oppose untrammelled development of natural resources. That the cases occurred in a region of the country, where, by the Government’s own admission, the courts are susceptible to influence by private interests, makes the verdicts even more questionable.

71. There is a need for clear, effective laws protecting the rights of environmental and other human rights defenders, including by ensuring that the laws do not criminalise or otherwise prevent the exercise of their rights to freedom of expression, association and assembly.

VI. Conclusions and recommendations

72. **During his visit, the Special Rapporteur was impressed by the commitment of so many Malagasy to the protection of their unique environment. The good practices in Madagascar in relation to the protection of environmentally related human rights include the realization of its commitment to triple the coverage of its protected areas, the involvement of local communities in the management of protected areas and efforts to build the capacity of local communities near the Ambatovy mining operations.**

73. **Madagascar also faces challenges in respect of human rights and the environment. Without repeating all of the suggestions in the present report, the Special Rapporteur wishes to highlight several recommendations.**

74. **First, the Government should provide institutional support to the Independent National Human Rights Commission that enables it to do its vital work of promoting and protecting human rights. The Special Rapporteur also encourages the Government to request the Commission to become involved in the peaceful resolution of mining conflicts.**

75. **Second, the Special Rapporteur encourages Madagascar to strengthen its environmental laws, including by:**

(a) **closing regulatory gaps (e.g., with respect to pesticides and herbicides);**

(b) **improving the environmental assessment procedure, e.g., by providing for public participation earlier in the procedure, streamlining access to the procedure by local communities and providing for appeals of denials of requests for environmental information;**

(c) **facilitating citizen access to courts to ensure that environmental laws are being enforced; and**

(d) **continuing to work to address household pollution.**

76. **Third, the Special Rapporteur agrees with the Government that the greatest current challenge with respect to terrestrial protected areas is ensuring that they are effectively managed. A critical step in this respect is for the Government to improve its enforcement of laws against prohibited uses of the protected areas, including in particular poaching and illegal logging.**

77. **Fourth, in implementing its Sydney promise to triple its marine protected areas, Madagascar should ensure that local communities are consulted throughout the process, including in the delimitation of the protected areas and in the recognition of the rights of local communities. Among other things, this process should provide set-aside zones for traditional fishers that protect their customary rights. The Government should seek assistance to combat illegal fishing by foreign vessels.**

78. **Fifth, with international assistance, the Government should continue to improve its disaster response capacity and implementation of adaptation measures.**

79. **Sixth, the Special Rapporteur urges the Government to ensure that the revisions to the Mining Code meet human rights standards (see para. 55) and that the process of considering the revisions is transparent and open to public discussion. He also urges the Government to review the mining permits issued by the transitional government and to revoke or suspend those permits that were not issued in accordance with applicable laws, until the proper procedures are followed. He encourages the Government to consider instituting a mediation/conciliation commission or other mechanism to peacefully resolve conflicts between local communities and mining companies.**

80. **Seventh, Madagascar should take the steps necessary to become a fully compliant member of the Extractive Industries Transparency Initiative.**

81. **Eighth, the Government should satisfy the recommendations of the CITES Standing Committee and Secretariat, including by greatly strengthening the effective enforcement of its laws against illegal logging and trafficking. To signal its commitment to make the trade unprofitable, the Special Rapporteur suggests that the Government request countries that seize illegal shipments of rosewood to sell the stocks themselves, rather than return them to Madagascar, and to place the funds in a trust for the enforcement of conservation laws in Madagascar.**

82. **Ninth, Madagascar should fully operationalize the High Court of Justice and the other anti-corruption measures and take effective measures against corruption.**

83. **Tenth, the Special Rapporteur urges the Government to implement the recommendations of the Special Rapporteur on human rights defenders on creating a safe and enabling environment for human rights defenders (A/HRC/25/55), and to respond quickly and effectively to threats against environmental defenders. The Government should always respect the rights of freedom of expression, association and peaceful assembly, including in the case of opponents of particular programs and policies, and it should review its laws, including on defamation, to ensure that they cannot be used to silence legitimate efforts to draw attention to human rights and environmental abuses.**

84. **Although these recommendations are primarily aimed at the Government of Madagascar, the Special Rapporteur requests the many other entities working in Madagascar, including corporations, conservation organizations and international donors, to take them into account as well. To fulfil its obligations to respect, promote and fulfil human rights in these respects, Madagascar may well need international financial and technical assistance. The Special Rapporteur urges international financial institutions and other donors to provide this assistance, in order to enable these recommendations to be met. More generally, businesses, conservation organizations and financial institutions working in Madagascar should ensure that in all of their actions affecting local communities, from conducting mining operations to managing protected areas, they respect the human rights of the members of those communities, including their rights of information, participation and remedy.**

1. \* The present report was submitted late in order to reflect the most recent developments. [↑](#footnote-ref-2)
2. \*\* Circulated in the language of submission and French only. [↑](#footnote-ref-3)
3. E.g., Law No. 98-029 (Water Code); Law No. 99-021 (Management and Control of Industrial Pollution). See Bryony Walmsley and Saphira Patel, *Handbook on environmental assessment legislation in the SADC region* (3rd ed. 2011), pp. 166-168 (listing laws). [↑](#footnote-ref-4)
4. See ibid., p. 154. [↑](#footnote-ref-5)
5. See http://www.environmentaldemocracyindex.org/country/mdg. [↑](#footnote-ref-6)
6. E.g., Peter Tyson and Russell A. Mittermeier, *The Eighth Continent: Life, Death, and Discovery in the Lost World of Madagascar* (Morrow, William & Co. 2000). [↑](#footnote-ref-7)
7. *Fifth National Report of Madagascar to the Convention on Biological Diversity* (2014), p. 8. [↑](#footnote-ref-8)
8. World Wildlife Fund, *Treasure Island: New biodiversity on Madagascar (1999-2010).*  [↑](#footnote-ref-9)
9. Jessica Aldred, “Scientists warn of last chance to rid Madagascar of invasive toxic toad”*, The Guardian* (2 February 2016). [↑](#footnote-ref-10)
10. Kim Reuter *et al.,* “Capture, Movement, Trade, and Consumption of Mammals in Madagascar”, *PLOS One* 11(2) (2016). [↑](#footnote-ref-11)
11. Kim Reuter *et al.*, “Live capture and ownership of lemurs in Madagascar: extent and conservation implications”, *Oryx* 50(2), p. 344 (2016). [↑](#footnote-ref-12)
12. William McConnell and Christian Kul, “Deforestation in Madagascar: Debates over the island’s forest cover and challenges of measuring forest change”, in *Conservation and Environmental Management in Madagascar* (Ivan Scales ed., 2014), p. 67. [↑](#footnote-ref-13)
13. Jason Brown and Anne Yoder, “Shifting ranges and conservation challenges for lemurs in the face of climate change”, *Ecology and Evolution* 5(6), p. 1131 (2015). [↑](#footnote-ref-14)
14. Secretariat of the Convention on Biological Diversity, *Madagascar - Country Profile,* <https://www.cbd.int/countries/profile/default.shtml?country=mg>. [↑](#footnote-ref-15)
15. Ibid. [↑](#footnote-ref-16)
16. IUCN Red List, *Astrochelys yniphora,* <http://www.iucnredlist.org/details/9016/0>. [↑](#footnote-ref-17)
17. Michelle Douglass, “The future of Madagascar’s lemurs,” BBC Earth (27 February 2015), http://www.bbc.com/earth/story/20150226-what-hope-is-there-for-madagascars-threatened-lemurs. [↑](#footnote-ref-18)
18. IUCN Red List, *Propithecus candidus,* http://www.iucnredlist.org/details/18360/0. [↑](#footnote-ref-19)
19. *Fifth National Report*, p. 10. [↑](#footnote-ref-20)
20. Secretariat of the Convention on Biological Diversity, *Madagascar - Country Profile*. [↑](#footnote-ref-21)
21. Ibid. [↑](#footnote-ref-22)
22. *Madagascar National Biodiversity Strategy and Action Plan 2015-2025* (December 2015), pp. 26-27. [↑](#footnote-ref-23)
23. *The Cost of Air Pollution: Strengthening the Economic Case for Action*, p. 97. <https://openknowledge.worldbank.org/bitstream/handle/10986/25013/108141.pdf?sequence=4&isAllowed=y>. [↑](#footnote-ref-24)
24. See Susmita Dasgupta and others, *Addressing Household Air Pollution*, World Bank Policy Research Working Paper 6627 (September 2013). [↑](#footnote-ref-25)
25. *Progress on Sanitation and Drinking Water: 2015 Update and MDG Assessment*, p. 67, at <http://www.unwater.org/fileadmin/user_upload/unwater_new/docs/Progress_on_Sanitation_and_Drinking_Water.pdf>. [↑](#footnote-ref-26)
26. Ibid.*,* p. 66. [↑](#footnote-ref-27)
27. *Fifth National Report*, p. 82. [↑](#footnote-ref-28)
28. *Madagascar National Biodiversity Strategy and Action Plan*, p. 179. [↑](#footnote-ref-29)
29. Ibid.,p. 41. [↑](#footnote-ref-30)
30. The Government reported that forest cover fell from 9.45 million hectares in 2005 to 8.49 hectares in 2013. *Fifth National Report*, p. 21. [↑](#footnote-ref-31)
31. *Madagascar National Biodiversity Strategy and Action Plan,* p. 37. [↑](#footnote-ref-32)
32. Ibid. [↑](#footnote-ref-33)
33. See Catherine Corson, “Conservation politics in Madagascar: the expansion of protected areas”, in *Conservation and Environmental Management in Madagascar*, p. 193. [↑](#footnote-ref-34)
34. See Jacques Pollini and others, “The transfer of natural resource management rights to local communities”, in *Conservation and Environmental Management in Madagascar,* p. 172. [↑](#footnote-ref-35)
35. See <https://sgp.undp.org/index.php?option=com_sgpprojects&view=projectdetail&id=15465&Itemid=272> [↑](#footnote-ref-36)
36. Antonie Kraemer, “Whose forests, whose voices? Mining and community-based nature conservation in southeastern Madagascar”, *Madagascar Conservation and Development* 7(2), p. 87 (2012). [↑](#footnote-ref-37)
37. “The top-secret tortoise sanctuary of Madagascar”, BBC News (16 August 2016). [↑](#footnote-ref-38)
38. Laura Robson and Fanjavola Rakotozafy, “The freedom to choose: integrating community-based reproductive health services with locally led marine conservation initiatives in southwest Madagascar,” *Madagascar Conservation and Development* 10(1), p. 6 (2015). This effort has led to a national network seeking to advance integrated health-environment initiatives. See [www.phemadagascar.org](http://www.phemadagascar.org). [↑](#footnote-ref-39)
39. See *Ambatovy 2015 Sustainability Report*, at [www.ambatovy.com/docs/](http://www.ambatovy.com/docs/). Ambatovy also committed to other standards, including the Equator Principles. Information about the Principles is available at <http://www.equator-principles.com/>. [↑](#footnote-ref-40)
40. Toby Gardner and others, “Biodiversity Offsets and the Challenge of Achieving No Net Loss”, *Conservation Biology* 27(6), pp. 1254, 1258 (2013). [↑](#footnote-ref-41)
41. Cécile Bidaud and others, “The Sweet and the Bitter: Intertwined Positive and Negative Social Impacts of a Biodiversity Offset”, *Conservation and Society* (2016). [↑](#footnote-ref-42)
42. Ibid., p. 11. [↑](#footnote-ref-43)
43. Ibid. [↑](#footnote-ref-44)
44. Another major mining project in Madagascar is the ilmenite mine near Fort Dauphin, in southeast Madagascar, owned and operated by QIT Madagascar Minerals, 80 per cent of which is owned by Rio Tinto and 20 per cent by the Government. This project has also employed conservation zones and taken other “offset” actions, but the Special Rapporteur is not in a position to assess those actions in the present report. [↑](#footnote-ref-45)
45. Resolution 29/15, para. 1. [↑](#footnote-ref-46)
46. *World Disasters Report 2016: Resilience: saving lives today, investing for tomorrow* (2016). [↑](#footnote-ref-47)
47. *World Risk Report 2016*, pp. 46, 47, <http://collections.unu.edu/eserv/UNU:5763/WorldRiskReport2016_small.pdf> . [↑](#footnote-ref-48)
48. Ibid*.*,p. 49. [↑](#footnote-ref-49)
49. Sönke Kreft, David Eckstein and Inga Melchior, *Global Climate Risk Index 2017: Who Suffers Most From Extreme Weather Events?* (November 2016), pp. 7, 13. [↑](#footnote-ref-50)
50. See http://reliefweb.int/report/madagascar/madagascar-drought-office-resident-coordinator-situation-report-no-4-december-2016. [↑](#footnote-ref-51)
51. *Fifth National Report,*  pp. 66-67. [↑](#footnote-ref-52)
52. Resolution 29/15, para. 2. [↑](#footnote-ref-53)
53. After the visit, the Government arrested Augustin Andriamananoro, a former minister in the transitional government, apparently due to his alleged involvement in the Soamahamanina protests. He was convicted on a charge of unauthorized demonstration, and released on 27 December with a three-month suspended sentence. [↑](#footnote-ref-54)
54. See generally *Natural Resources and Conflict - A Guide for Mediation Practitioners*, <http://peacemaker.un.org/sites/peacemaker.un.org/files/NRCMediation_UNDPAUNEP2015_0.pdf>. [↑](#footnote-ref-55)
55. See http://www.international.gc.ca/csr\_counsellor-conseiller\_rse/index.aspx?lang=eng. [↑](#footnote-ref-56)
56. See http://asiafoundation.org/resources/pdfs/MongoliaESECFactSheet2013.pdf. [↑](#footnote-ref-57)
57. See <http://www.un.org/en/land-natural-resources-conflict/>. [↑](#footnote-ref-58)
58. Environmental Investigation Agency, *The Ongoing Illegal Logging Crisis in Madagascar* (2014), https://s3.amazonaws.com/environmental-investigation-agency/assets/2014/05/EIA\_Madagascar\_Report\_SC65.pdf. [↑](#footnote-ref-59)
59. Decision 16.152, Annex 3. According to the Government, it has seized about 27,000 logs, another 270,000 have been declared by rosewood operators, and approximately two million remain hidden. SC67 Doc. 19.2 (Rev. 1), para. 3.2.1. Rosewood trafficking appears to follows a cycle, in which the illegal loggers accumulate logs and hide them during periods of heightened attention, waiting for the next opportunity to export the logs to foreign markets. Hery Randriamalala and Zhou Liu, “Rosewood of Madagascar: Between democracy and conservation”, *Madagascar Conservation and Development* 5(1), p. 11 (2010). [↑](#footnote-ref-60)
60. This would be in accordance with the views of the CITES Secretariat, which recommends against the unrestricted return of such stocks or funds to Madagascar (SC66 Doc. 46.1, para. 35). [↑](#footnote-ref-61)
61. Global Witness, *On Dangerous Ground* (2016), www.globalwitness.org/en/reports/dangerous-ground/. [↑](#footnote-ref-62)