Law, Religion and the Environment in Africa

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6 THE ISSUE BETWEEN THE EXPLOITATION OF NATURAL RESOURCES AND THE PROTECTION OF THE ENVIRONMENT AND PUBLIC HEALTH IN AFRICA

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INTRODUCTION

Human action is one of the leading causes of environmental degradation and public health problems in Africa. The exploitation of the continent's immense mineral, agricultural and hydraulic resources, the importation of consumer products (such as fuel, second-hand vehicles, electronic devices, and appliances from Western countries), along with the frequent lack of regulations in which these operations take place, all too often has negative consequences on people's living environment and health. In recent years, international environmental awareness, thanks to the Roman Catholic Church and various international conferences organised by the United Nations on global warming, has enabled several local and international NGOs, such as Green Peace and OXFAM, to name a few, to work to establish an environmental framework about Africa and to lay bare actions that do not leave a "a safe and healthy environment" for future generations.²

During the Second Synod of Bishops on Africa in 2009, the issue was raised with respect to energy, out of a sense that there could not be peace, well-being and social development without taking care of the environment where millions of Africans live. The bishops denounced how the wild and reckless exploitation of natural resources and the environment "has a negative impact on Africans and threatens their prospects of being able to live in peace"³ They maintained that "environmental degradation in Africa is linked to this problem" and that "countries are destroyed by deforestation, oil spills, discharges of toxic chemicals, plastic or cellophane containers".⁴ In addition, they noted: "The erosion caused by man sweeps away agricultural land, devastates the roads and sands the water sources. These factors further impoverish African communities and aggravate tensions and conflicts."⁵ The Archbishop of Freetown and Bo in Sierra Leone, Edward Tamba Charles, suggested

- 1 Professor of Communications, Saint Augustine University of Tanzania; Founder and President, Center for Documentation and Research on Art and Social Sciences, Republic of Benin.
- 2 See Sourou JB. 2010. *L'Ora della maturità* [The Hour of Maturity – The Church in Africa at the time of the second synod]. Bologna: EMI, 22.
- 3 Sourou, *L'ora della maturità*, 22.
- 4 Sourou, *L'ora della maturità*, 22. See also Pope Francis. 2015. *Laudato si'* (On Care for Our Common Home), 24 May. Chapters IV and V of *Laudato si'* are useful for conceiving a new global start.
- 5 Sourou, *L'ora della maturità*, 22.

that his colleagues from the countries of origin of the multinational corporations responsible for the environmental disaster in Africa help their African colleagues to put pressure on them.⁶ He stressed the need for collaboration between African and Western bishops to tackle the issue in Africa, because without resolving the question of minerals exploitation, peace and well-being will be threatened on the continent for long time.

In fact, Pope Emeritus Benedict XVI, in the post-synodal exhortation, *Africae munus*, endorsed the cries of distress of the African bishops, who were rebelling against all that “threatens the entire ecosystem and consequently the survival of humanity”.⁷ Four years later, Pope Francis in his encyclical letter, *Laudato si’* drew the attention of all the world, with urgency, to the issue of respect for the environment, above all to the responsibility to change attitudes towards it.⁸ In examining these phenomena, this chapter will be based on two main axes: first, the exploitation of natural resources and its impact on the environment and, second, the various actions under way or that should be initiated for the protection of the environment and the health of citizens.

EXPLOITATION OF RAW MATERIALS AND THE IMPACT ON THE ENVIRONMENT

Africa has many natural resources. Alongside underground raw materials, such as oil and natural gas,⁹ gold, uranium, diamonds, cobalt, iron, bauxite and others, there are agricultural raw materials where it often establishes itself as a world leader, such as cocoa, of which Côte d’Ivoire and Ghana are the world’s leading and second largest producers, respectively. Africa produces 75 percent of the world’s cocoa consumption. Other such resources include coffee, palm oil, rubber, tea, cotton and maize. The soil on which all this grows is fertilised by significant hydraulic resources, such as the Nile River, which is the longest river in the world, along with the Congo, Niger and Zambezi Rivers and lakes such as Victoria, Albert and Tanganyika. All of this also forms an important network of water supply, fishing, shipping, transportation, trade and tourism. All of these resources are an important lever for the development of the continent.

Unfortunately, the exploitation of these resources is mostly at the expense of the nature that generates them and graciously puts them at the service of humanity. Meeting at the Vatican in 2009, the African bishops rightly deplored how the savage exploitation of natural resources and the environment “has a negative impact on Africans and threatens their prospects to live in peace”.¹⁰ To understand

⁶ See Sourou, *L’ora della maturità*, 11.

⁷ Pope Benedict XVI. 2011. *Africae munus* [The Role of Africa], 19 November, para 80.

⁸ See Pope Francis, *Laudato si’*.

⁹ See “Un continent toujours plus riche en hydrocarbures” [A continent everrich in hydrocarbons], *Jeune Afrique* [Young Africa], 2858 (18-24 October 2015):118.

¹⁰ Sourou, *L’ora della maturità*, 22.

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the prelates' statement, one only has to look at the situation in the Niger Delta oil region of Nigeria, the eastern Democratic Republic of Congo rich in gold, diamond, cassiterite and coltan, to name a few examples of mineral resources,¹¹ as well as the gold mines of Burkina Faso and Ghana and the cocoa groves in the Côte d'Ivoire.

According to a recent survey by French media, over the last 25 years, 90% of Ivorian forests have given way to cocoa plantations.¹² Because the price of the bean is constantly falling on the world market, a family of cocoa farmers harvesting a tonne of cocoa now earns half of what it earned years ago.¹³ To bring more cash in, the Ivorian peasant is obliged to expand his plantation, and to do so he must destroy the virgin forest.

The Niger Delta, for example, is a territory of 75 000 kilometres² with a very rich biodiversity made up of mangroves, rivers, backwaters and marshes. It is home to a population of 33 million people. It is also rich in oil and natural gas deposits.¹⁴ The world's largest oil companies: Shell, Total, Eni, Agip, Exxon, Mobil have taken up residence there. More than 45% of the crude extracted in Nigeria is destined for the Western market. To transport oil these companies have built a complex network of miles of pipelines, from wells to tankers. Over the years, due to lack of care, aging and the humid climate and scorching heat of the region, these pipelines crack and dump crude into the ground. It seeps into the underground, polluting fertile land and drinking water sources (rivers, lakes) rich in fish. Birds and other forest animals are often food sources for the population. The people of the Niger Delta, although living on one of the most fertile land in the world, find themselves deprived of food and water.¹⁵

Between 2014 and 2015, of the 1800 and more crude leaks, in only 600 cases is the exact amount of crude poured into the soil known.¹⁶ According to Stakeholders

11 See Ngaboyeka M and Sanganyi N. 2008. "L'exploitation du Coltan en République Démocratique du Congo: Trafic et Guerre" [Coltan exploitation in the Democratic Republic of Congo: Traffic and War]. Johannesburg: Southern Africa Resources Watch (SARW). Online at: <https://bit.ly/2xOaoG1>

12 See Maoreira P. 2019. "Dans certaines plantations de cacao en Côte d'Ivoire, des enfants manipulent du glyphosate sans protection" [Children on cocoa plantations in Côte d'Ivoire handletrappedglycophosphate], *Franceinfo*, 10 January.

13 See Public Eye. 2017. "La face obscure du chocolat" [The dark side of chocolate]. Lausanne: Public Eye. Online at: <https://www.publiceye.ch/fr/publications/detail/la-face-obscur-du-chocolat>

14 About 90% of Nigeria's exports and 75% of the country's budgetary inflows come from oil and gas largely extracted in the Delta.

15 See Maitland A and Chapman M. 2014. "Oil Spills in the Niger Delta: Proposal for an Effective Non-Judicial Grievance Mechanism". Port Harcourt and London: Stakeholder Democracy Network, July. Online at: <https://bit.ly/2YOKPjq>

16 See Stakeholders Democracy Network. 2015. "Addressing the South South's Environmental Emergency: The Vital Importance of Environmental Issues in Securing Stability and Prosperity in the Niger Delta", Abuja: SDN, 4 October. Online at: <https://bit.ly/2yRxIIJ>. See also Maitland and Chapman, "Oil Spills in the Niger Delta".

Democracy Network (SDN), a group working on economic development, environmental issues, and human rights in the Niger Delta, only 60 of the reported cases have been cleaned, 431 surpass the 800 litres, 86 the 1 500 litres, 51 the 30 000 and 10 the 50 000 litres poured into the ground.¹⁷ In the same area as these spills, there is the very harmful practice of gas flaring. This is the burning of associated gas that escapes from oil wells, without taking advantage of its energy potential. The extractive companies are more interested in crude oil than in gas, which they say is not profitable, therefore they avoid building infrastructure that they consider unprofitable and transport it to local household that can use and benefit from it.

Since 1969, successive governments in Nigeria have sought in vain to ban the practice of gas flaring because of the large amount of CO₂ it releases, which has disastrous consequences for wildlife and populations. Gas flaring generates methane, sulphur dioxide, nitrogen and hydrogen sulfide. Other volatile organic elements contained in ash from torches lit night and day throughout the year are carcinogenic with neurological, reproductive and growth effects, as well as causing fetal malformation. The ashes are also dangerous to the airways and lungs and cause problems to the skin.¹⁸ On the other hand, studies show that they make the rains acidic and therefore increase the diversity of arable land and streams.¹⁹ In addition, the light torches attract and destroy insects and nocturnal birds. Some of the gas emanating from oil wells and used for burning is released into the atmosphere and causes inflammation in the eyes and breathing pathways. In these areas of the Niger Delta, people complain that they have “never seen the darkness of the night”,²⁰ because of the powerful torches whose heat makes an already humid and hot area even more hot. Carbon dioxide emitted in the Niger Delta by gas flaring accounts for 3% of the CO₂ produced globally.²¹ Nigeria burned 17.3 billion cubic metres of natural gas each year,²² and it releases 17 tonnes CO₂ into the Delta to generate 27 million GWh of energy.²³

HIGHLY TOXIC FUEL AND E-WASTE: AFRICA AS A DUMPING GROUND FOR WESTERN COUNTRIES

In 2016, the Swiss organisation Public Eye published an interesting report, following a three-year investigation in several African countries, including Angola, Benin, the Republic of Congo, Ghana, Côte d’Ivoire, Mali, Senegal and Zambia. Titled “Dirty Diesel: How Swiss Traders Flood Africa with Toxic Fuels”, the study demonstrated

17 See SDN, “Addressing the South’s South Environmental Emergency”.

18 See Nigerian Gas Flare Tracker; Ajugwo, “The Negative Effects of Gas Flaring”.

19 See Nigerian Gas Flare Tracker; Ajugwo, “The Negative Effects of Gas Flaring”.

20 “Nigeria l’altro costo del Petrolio” [Nigeria, the other Cost of the Oil], *RAI3*, 4 May 2014. Online at: <https://www.youtube.com/watch?v=368-IJiodyI>

21 See “Nigeria l’altro costo del Petrolio”, confirm experts.

22 See Ajugwo, “The Negative Effects of Gas Flaring”.

23 See Nigerian Gas Flare Tracker.

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how these “Swiss commodity trading companies take advantage of weak fuel standards in Africa to produce, deliver and sell diesel and gasoline, which is damaging to people’s health”.²⁴ According to Public Eye, “Their business model relies on an illegitimate strategy of deliberately lowering the quality of fuels in order to increase their profits.”²⁵ The report describes how the “trading companies mix cheap but toxic intermediate petroleum products to make what the industry calls ‘African Quality’ fuels”.²⁶ This is “blending on spec” – that, is goods prepared ad hoc according to the final destination.²⁷ It happens on board tankers moored on the Atlantic Ocean not far from the African coast or in the famous Amsterdam-Rotterdam-Antwerp (ARA) zone from which the largest quantity (80%) of fuel destined for Africa originates.²⁸ The report notes, “These intermediate products contain high levels of sulphur as well as other toxic substances such as benzene and aromatics.”²⁹ These fuels “increase outdoor air pollution, causing respiratory disease and premature death, “affecting West Africa, in particular, because this is the region where the authorised levels of sulphur in fuels remain very high”.³⁰ The report points out that “Swiss traders contribute to the increase in air pollution to fine particulate matter, whose adverse health consequences are very important: respiratory and cardiovascular diseases, cancers”; thus the authors of the report recommend that “the permitted sulphur content in fuels should be gradually reduced to the same level as in the EU to prevent 25,000 premature deaths in Africa by 2030, and nearly 100,000 by 2050”.³¹ Surprisingly, because of use of dirty fuels, the air quality in Lagos and Dakar is worse than Beijing.³²

To the list of practices harmful to the environment and public health in Africa, it is essential to add the importation of cigarettes with higher levels of nicotine and tar in Africa than in Europe.³³ There are also vehicles, household appliances and used computer equipment from Europe. In the lots where these cars are displayed, there

24 Public Eye. 2016. “Dirty Diesel: How Swiss Traders Flood Africa with Toxic Fuels”. Lausanne: Public Eye, September, 3. Online at: <https://bit.ly/3bjYaTp>

25 Public Eye, “Dirty Diesel”, 3.

26 Public Eye, “Dirty Diesel”, 3.

27 Public Eye, “Dirty Diesel”, 6, 53, 90.

28 Public Eye, “Dirty Diesel”, 5.

29 Public Eye, “Dirty Diesel”, 3. The results from samples taken at the pump by Public Eye are shocking: Fuels analysed have a very high sulphur content, several hundred times above the limit authorised in Europe (10 ppm), indeed, more than two-thirds (17 out of 25) of diesel samples 1 500 ppm. A sample from an Oryx gas station in Mali and had a 3 780 ppm sulphur content. Public Eye, “Dirty Diesel”, 5.

30 Public Eye, “Dirty Diesel”, 5.

31 Public Eye, “Dirty Diesel”, 6.

32 Public Eye, “Dirty Diesel”, 10.

33 See Maurisse M. 2019. “The blazing success of Swiss cigarettes in Africa”. Lausanne: Public Eye, January. Online at: <http://stories.publiceye.ch/tabac>

are all qualities and for all budgets.³⁴ The newer they are, the more expensive they cost to buy, but the more worn-out they are, the more harmful exhaust gases and harmful particles they emit into the atmosphere. Another tragedy is that at the end of the journey or at the end of their life, these cars become waste that the states do not have the means to manage or recycle. The same is true for computers, televisions and other devices containing toxic products that are abandoned in nature after use.

THE ISSUE OF REGULATIONS

Are regulations lacking in terms of environmental protection and public health in Africa? Yes and no. Since 1969, the practice of gas flaring has been banned in Nigeria. From 1984, gas flaring was illegal without written permission from the Nigerian Ministry of Petroleum Resources. There is a risk of a fine of \$3.50 for 28 cubic metres of burnt gas. However, since the federal government states that it does not have the means to limit the amount of gas burned by extractive companies, it becomes difficult for it to impose fines or estimate the exact amount of gas burned. Worse still, those who pay the fine prefer to follow the old standards of 10 nairas (0.02 euros) instead of 9 euros per thousand cubic feet, thereby paying less than they should.³⁵

With regard to fuel sold to Africans, the Public Eye survey shows how the lack of adequate regulations in the countries where the survey was conducted facilitates the practice of blending on spec. Some African states do not have laws on the quality of imported petroleum products. As the Public Eye report notes, "Africa's weak fuel standards allow traders to use cheap blendstocks, dropping production costs and making the production of low fuels a lucrative business model."³⁶

Yet, even if states do not have national regulations, there are international restrictions and standards dictated by international agencies such as the United Nations Environment Programme (UNEP), which through awareness campaigns lead many states, as early as 2002, to ban lead in gasoline. The WHO also intervenes on the harmful effects of air pollution in cities. UNEP, WHO and IEA (International Energy Agency) are campaigning for transport methods using low-sulphur fuel.

34 An estimated 30 000 vehicles are imported per month to the port of Cotonou, Benin. Most take the road to Nigeria or other landlocked states of the subregion. It is a cost-effective sector for customs and operators. According to the Benin Institute of Statistics, the sector contributes 9% to the GDP of the Benin and creates between 15 000 and 20 000 direct jobs and 90 000 indirectly. The volume increased from 12 000 tonnes in 1985 to more than 600 000 tonnes in 2014. See Vidjiningninou F. 2015. "Automobile: à Cotonou l'informel a toujours la cote" [Automobile: In Cotonou, the informal sector is still popular], *Jeune Afrique* [Young Africa], 24 May. But these effects on the environment and health are not to be underestimated.

35 See Nigerian Gas Flare Tracker, "About gas flaring". See also Otio D. 2013. "Gas Flaring Regulation in The Oil and Gas Industry: A Comparative Analysis of Nigeria and Texas Regulations", University of Tulsa, College of Law, May.

36 Public Eye, "Dirty Diesel", 6.

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Unfortunately, unlike the European Union, which has limited the sulphur content of fuels to a high 10 parts per million (ppm), or 0.001% of the volume, most African countries south of the Sahara have not adopted strict regulations on gasoline and diesel. “On average, African sulphur limits in diesel are 200 times above the European limit.”³⁷

Good news, however, comes from East Africa, where Kenya, Tanzania, Uganda, Burundi and Rwanda have, from 2015 on, reduced the sulphur content to 50 ppm, still far from the European standard. The fundamental question here remains the common sense and the will of traders in a trade that does not respect human lives and where they are more interested in profit at the expense of the lives of African people. How can these same people respect standards that protect the environment in Europe or the United States and not realise that life in Africa is worth as much as life in the West? By banning the entry, production and use of plastic bags on its soil from 1 June 2019, Tanzania became the thirty-fourth African state to take measures against what amounts to another environmentally harmful product in Africa. But as UNEP Regional Programme Officer Patrick Mwesigye points out, “the degree of success of such measures varies from country to country”.³⁸ It is important to introduce laws, but compliance also has to be ensured.

For its part, Côte d’Ivoire adopted a new forest code in July 2019 to seek to reforest the country. The legislature tasks planters and industrialists with this effort, while strengthening punitive measures against offenders.³⁹ This should further protect the rich Ivorian forest heritage, even if the question of the cost of cocoa and other agricultural products that generate income for peasants also negatively affects the conservation of the flora and the safeguard of the environment.

CONCLUSION

Africa is overwhelmed by practices that destroy its environment, and this is a blow not only to public health, but also to economic development. Humanity is primarily responsible for these harmful acts in most cases. This is why, beyond any regulation that African states might enact, the most important tool remains ecological education, or “ecological conversion”,⁴⁰ as stated by the Archbishop Lucius Ugorji, Bishop of Umuahia in Nigeria during the Synod of Bishops in 2009. Ecological conversion means that all have to become more sensible to environmental issue and make all efforts to protect and preserve it from wild actions of destruction which could be exploitation of minerals, pollution of fauna and flora. Archbishop Ugorji said it was

37 Public Eye, “Dirty Diesel”, 5.

38 “La Tanzanie devient le 34e pays africain à bannir les sacs en plastique” [Tanzania becomes the 34th African country to ban plastic bags], *Jeune Afrique* [Young Africa], 31 May 2019.

39 République de Côte d’Ivoire, Ministère des Eaux et Forêts. 2019. “Adoption du nouveau code forestier” [Adoption of the new forest code]. Online at: <http://www.eauxetforets.gouv.ci/actualites/details/adoption-du-nouveau-code-forestier146>

40 Sourou, *L’ora della maturità*, 22.

important to be able to help people be “more sensitive to frequent disasters caused by environmental damage and the need to reduce them”.⁴¹ “Everyone needs to be ever more aware that future generations have the right to live in a healthy and safe environment and to enjoy their resources,” he concluded.⁴²

In *Laudato si'*, Pope Francis appeals also to an ecological conversion which “can inspire us to greater creativity and enthusiasm in resolving the world’s problems” without understanding “our superiority as a reason for personal glory or irresponsible dominion, but rather as a different capacity which, in its turn, entails a serious responsibility”.⁴³ In Pope Francis’s estimation, “we are faced with an educational challenge ... It needs educators capable of developing an ethics of ecology, and helping people, through effective pedagogy, to grow in solidarity, responsibility and compassionate care.”⁴⁴

Legislation and education are an important duo to protect the environment. Because if the laws exist and there are public servants who allow themselves to be corrupted into not enforcing them, then the laws are useless. The same is true if citizens are not convinced of the usefulness of environmental protection and the consequences of its deterioration on their health and future generations. Education can make everyone aware of the tragedy of the harmful effects of our actions on ourselves, our planet and others. Then laws might be made more effective and enforceable. Measures to this effect are under way in Africa locally, and they can be regionalised. But who will convince multinational corporations to respect the environment and the health of African populations?

41 Sourou, *L’ora della maturità*, 22.

42 Sourou, *L’ora della maturità*, 22.

43 Pope Francis, *Laudato si'*, para 220.

44 Pope Francis, *Laudato si'*, para 209, 210.