

Environmental Pollution in Russia: Lessons for Nigeria

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Abstract

Environmental protection has been an important international issue since the past quarter of a century. The need to approach development with consideration for a healthy environment has been increasingly recognised as environmental problems such as global warming have caused extensive global concern. Nigeria has had its own share of environmental pollution. It has been a major cause of instability in the Niger Delta, where the youths have protested the destruction of their means of livelihood. This paper examines the nature and impact of environmental pollution in Russia and the lessons that Nigeria can learn from the Russian experience. The paper also examines contemporary national developmental issues in Nigeria and the place of environmental protection in Nigeria's public policy.

Key words: Environment, Coexistence, Ecology, Pollution, Deterioration, Catastrophic.

Introduction

The importance of the environment to man's survival on planet has been recognised for several centuries. The dual anthropological (biological) and sociological (societal) basis of man's origin have placed man above all other living things on earth. He is more universal. He changes his surrounding environment, creating a "secondary nature" even with himself remaining unchanged. His resources however, are not unlimited. The great German philosopher, Frederick Engels in his work *Labour* also once said that human being is a product of labour (I. P. Mamuikin, 1995, pp. 36 – 37). It is justifiable therefore to say that environmental pollution is a product of man's unethical exploitation of nature and its gifts.

Nigeria, the most populated country in the African continent, with about 150 million people, is richly blessed with mineral, as well as human resources but the environment has been obviously neglected since the colonial era, and this tendency has been on the rise till date, and the negative effects of which cannot be overemphasized, if not timely curbed.

Numerous reasons account for the increase in environmental deterioration in Nigeria. They include inadequate awareness (illiteracy), negligence, poor government policies, bribery and

corruption, inadequate funding and so on. But recently, awareness has gone on the increase, regarding the danger of environmental negligence as much is also being done by the media in this regard. Numerous journals are in circulation over this problem of mankind.

According to Ugal (2002:27), "One of the unfortunate dimensions of the bomb disaster that rocked Lagos on January 27, 2002 was that it called to question the relevance of the numerous agencies created to handle public emergencies..." (Journal of environment and culture, University of Ibadan, vol. 2, number 1, 2002, pp. 27-33) and in pages 1 – 8 of number 1, vol. 8 edition of the journal of environmental sciences of the University of Calabar, Ewa-Oboho and Otego were able to prove beyond doubts, the effects of water pollution on the Niger-Delta region of Nigeria. In his words: "... the water soluble fractions (WSF) of Nigeria light crude oil could be detrimental to *tympanomus fuscata* even at a concentration of as low as 100ml per liter of estuarine water". And on pages 31 – 40 of same publication, Chima *et al* identify that "the improperly disposed wastes within the Asata river catchment is a major threat to the quality of the river water." Therein, on pages 9-13, Okafor *et al* speak on the atmospheric corrosion of mild steel in the Niger-Delta region of Nigeria.

Pipeline vandalisation and gas flaring is no doubt a cause of one of the most hazardous ecological problems in Nigeria. However, to justify the title of this paper, let's take some lessons from the ecological history of Russia.

Ecological Problems in Russia

Russia with its dense population of over one hundred and fifty million faces a host of intractable problems, following the disintegration of the Soviet Union. One of the biggest of these problems – making Russia a menace to the whole world is the ghastly environmental legacy of reckless soviet industrialization and military buildup – tons of atomic wastes and crumbling nuclear – power plants are a time bomb threatening disasters far worse than Chernobyl (radioactive explosion in one of Russia's nuclear stations in the Chernobyl village) consequences of which remain indelible in the Russian history and that of the immediate neighbouring countries.

Horseman (1996:227), a Greenpeace environmental activist, in one of his reports on the disaster at Komi of the republic of Komi in Russia said: "A flaming red river flows across the tundra. Clouds of thick black smoke rise in to the Sky. North of Usinsk, lakes of oil are spreading, sometimes as much as 20 inches deep". Studies shows that in Russia, nature usually comes second to headless industrialization. The soviet economy was run at the cost of public health. The authorities fear that every third child may be sick because of environmental pollution. Right now, over 110 people have to breath air pollution beyond legal limits. According to Victor Danilov – Danilyan, a former minister of environment, the worst areas are the cities of Moscow, Chelyabinsk, Norilsk in northern Siberia and Kemerovo in Southern Siberia. Half of the Russian people drink water that does not meet safety guideline, according to the German institute for Economic Research. According to official reports, in Saint Petersburg, drinking water contains about 20 micrograms of chlorinated hydrocarbons, twice the level permitted under German standards. In Kemerovo, the chloroform in drinking water is 320 times higher than the German limit. Life within the deltas of such industrial sewers as the Ob and Yenisei rivers has fallen by

16 and 25 years below the Russian average. The worst of the desolation comes from the energy industry.

According to Aleksei Yablokov, former environmental adviser to President Boris Yeltsin and former president of the Russian National Ecological Security Council, things are even worse in the western Siberian oil fields. Hundreds of thousands tons of oil contaminate the southern Tyumen region annually. It is worthy of note that at low temperatures, it can take up to 50 years for oil to decompose. Moreover, more than half of the country's networks of pipelines were built some decades ago and no one seems to care about leakages and according to Greenpeace in Moscow, 10 percent of Russian oil is lost in transit.

The Russians have not always succeeded to control the atom, to fuel their economy. On September 29, 1957, at the Mayak reprocessing plant in Chelyabinsk, a plant holding 300 cubic meters of nuclear waste exploded and 250 thousand people were eventually exposed to the 20 million curies of radiation released. That was about half as much radiation as was released at Chernobyl. Even without accidents, the Mayak plant pollutes large areas. Its engineers have dumped radioactive wastes directly into the Techa River. There are dozens of nuclear reactors RBMK (Chernobyl) type in Russia. Experts from the West, including a former German environment minister, Klaus Topfer consider them essentially unrepairable and those of even older VVER types, also have serious safety problems.

Having a good knowledge of the availability of Russian resources, David Kyd, a former director of the International Atomic Energy Agency in Vienna says there is nothing Russia or the countries of the former Warsaw Pact can do to change the situation; as the "observer" of London says that \$20 billion is needed to repair Russian nuclear – power plants. Reporter Robin McKie concludes that Russia's nuclear industry "is now teetering on the brink of an environmental cataclysm".

"This is becoming critical" says David Kyd "One cannot run a railroad this way, much less a high-tech operation like a nuclear power plant". Several times since the collapse of the Soviet Union, Russia has come to the brink of disaster.

On March 24, 1992 a pipe burst in the cooling system of the Leningradskaya nuclear power plant complex near Saint Petersburg. A core meltdown was narrowly averted. Similarly, on April 6, 1993, at the Tomsk – 7 Plutonium processing facility, a tank filled with a uranium – plutonium solution exploded. About 77 square miles of forest were contaminated with radioactivity. And on May 6 1994, the fast breeder reactor at Beloyarsky, east of Yekaterinburg, in the Ural Mountains, caught fire. Between 1992 and 1994, in the nation's 54 industrial and research reactors, a total of 270 other accidents were reported.

In spite of these conditions, Russia's atomic-energy industry has decided to expand. The environment is also imperiled by radioactive wastes, especially those discarded by the military. In April, 1989, the Soviet Submarine, Komsomolets, the largest attack submarine ever built, sank in the northern Barent Sea. It carried two liquid – Sodium – Cooled 100 megawatt reactors, tons of uranium and 13 tons of highly toxic plutonium. At present, Russia is dumping only liquid nuclear waste at sea.

At least 17,000 containers are already in the Kara Sea, east of the Russian atomic test island of Novaya Zemlya. Bellona, the Norwegian environmental protection group estimates that merely to clean up the waste around Murmansk and Arkhangelsk would cost about SI 28 billion – twice the Norwegian national budget.

A huge area of the Kola Peninsula, where Murmansk is located, shows a land utterly sacrificed to industrial growth. The landscape is empty: not traffic, no houses, no people, no trees no bush or even grass grows there. The area is labeled “total environmental deterioration”. It is known that the average life expectancy in 1965 stood at 62 years, and today, it is 50. (Goldman M.F (1996) Global Studies, pp 227-231)

Findings

In the course of this research, we have discovered that:

1. Nature, man and society exist pari-pasu and are inseparable.
2. The inappropriate exploitation of nature and its resources, coupled with ethical negligence by man are major causes of environmental problems.
3. Environmental problems tend to increase by the day, owing to inappropriate exploitation of science and technology.
4. Environmental pollution has the ability to drastically reduce the life expectancy of man.
5. Poverty can enhance environmental pollution.
6. The history of environmental pollutions in Nigeria is similar to that of Russia and that the noticeable differences are obviously as a result of the difference in pace of development and functional governmental systems and policies.

Recommendations

Having researched into this topic of discussion, we hereby recommend the following measures as way of preventing or reducing environmental pollution and its negative effects on the societies.

Government must increase its budget for control and maintenance of the oil fields. This will serve as solid bases for the achievement of every other positive resolutions aimed at changing the present environmental decadences for the better.

1. Control and sanitary inspectors must be appointed with adequate reward. This can help to increase environmental sanitation in the area as well as to reduce the tendencies of possible bribery and corruption.
2. Illiteracy must be reduced, thereby enabling increased awareness. This can empower the people, justifying the saying “Knowledge is power” and the biblical saying that only knowledge of the truth can set a man free.
3. Poverty must be reduced by creating jobs with adequate competition or reward.
4. Lessons on ecological uprightness must be made compulsory for all, especially, it must be made compulsory in schools curricular this will serve as a fundamental step in combating environmental degradation on a long term bases.

5. Man must return to the initial “give and take” relationship with nature. Man must understand that whatever he takes from nature, he has to pay back equally and that practices like blocking of water ways without the provision of adequate canals or drainages, hewing down of trees without adequate replacement amounts to negligence of the “Give and Take” relationship which surly produces a “bounce back” effect with a bitter taste on mankind.
6. Lessons must be drawn from the practices of the advanced countries with similar historical experiences to serve as guide. And Russia stands out as adequate for emulation, hence, the title of this paper.
7. Appropriate punishment must be put in place for defaulters of existing rules and regulation geared towards promotion of the ecology.

Conclusion

The article has examined the nature and extent of pollution in Russia and the lessons to be learned from it. In contemporary times, the need for environmental protection and sustainable development has been globally recognised. This makes it important that Nigeria learns from the Russian example. As a country engaged in rapid industrial expansion, the tendency to focus on economic development without regard for the environment is high. Under the circumstances future healthy living is mortgaged for present economic gains. The challenges that rapidly industrialising countries such as China have faced with industrial pollution and the experience of Russia discussed above confirm the need for Nigeria to chart the right course in environmental protection as it seeks to fulfil its ambition for industrial transformation.

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