

POVERTY REDUCTION AND ENVIRONMENTAL MANAGEMENT: Challenges and Opportunities Eng. Prof. JHY Katima

Abstract

"The protection of the environment and of natural resources is an essential part of development: without adequate environmental capital, development is undermined and this in turn may reduce the resources available for investing in combating environmental damage, and hence poverty alleviation is not only a moral imperative but also a prerequisite for environmental sustainability and sustainable development (World Bank 1992)"

In five people on the planet-two-thirds of them women live in abject poverty. While the last century saw great efforts towards reducing poverty and improving well-being, poverty remains a global problem of huge proportions. Of the world's 6 billion people, 2.8 billion live on less than US\$2 a day, and 1.2 billion on less than US\$1 a day. To address this challenge, the world's governments committed themselves at the United Nations Millennium Summit to the Millennium Development Goals, including the overarching goal of halving extreme poverty by the year 2015.

At the same time, however, our planet's capacity to sustain us is eroding. The problems are well known. They include degrading agricultural lands, shrinking forests, diminishing supplies of clean water, dwindling fisheries, and the threat of growing social and ecological vulnerability from climate change and loss of biological diversity. While these threats are global, their impacts are most severe in the developing world especially among people living in poverty, who have the least means to cope.

Is this environmental degradation inevitable in order for poverty to be reduced? The answer is definitely NOT. Indeed, quite the opposite is true. If we do not successfully arrest and reverse this degradation of natural resources, the world will not be able to meet the Millennium Development Goals, particularly the goal of halving extreme poverty.

UN Millennium Development Goals (by year 2015)

*Eradicate extreme poverty and hunger; Achieve universal primary education; Promote gender equality and empower women; Reduce child mortality; Improve maternal health; Combat HIV/AIDS, malaria and other diseases; Ensure environmental sustainability; Develop a global partnership for development
(www.undp.org/mda)*

Poverty and Environment

Poverty and environment are related through a complex web of relationships. The World Bank's Environment Strategy identifies three major links between environmental degradation and impacts on poor people:¹

- **Environmental health:** poor people suffer most when water, air and land are polluted;
- **Livelihoods:** poor people tend to be most directly dependent on natural resources, and are therefore the most severely affected when soils, vegetation and water resources are degraded;
- **Vulnerability:** the poor are often exposed to environmental hazards, and are the least capable of coping when they occur.

Both environmental degradation and poverty alleviation have a lot in common, but are often treated separately. Consider the following:

- i. Human activities are resulting in mass species extinction rates higher than ever before, currently approaching 1000 times the normal rate;
- ii. Human-induced climate change is threatening an even bleaker future;
- iii. At the same time, the inequality of human societies is extreme:
 - The United Nations 1998 Human Development Report reveals that, "Globally, the 20% of the world's people in the highest-income countries account for 86% of total private consumption expenditures - the poorest 20% a minuscule 1.3%"²

To highlight this inequality further,

- a) Consider that approximately 1 billion people suffer from hunger and some 2 to 3.5 billion people have a deficiency of vitamins and minerals. Yet, some 1.2 billion suffer from obesity;
- b) One billion people live on less than a dollar a day, the official measure of poverty. However, half the world — nearly three billion people — lives on less than two dollars a day. Yet, just a few hundred millionaires now own as much wealth as the world's poorest 2.5 billion people.

It can therefore be seen that issues about environment, economics and politics are inter-related through the way humans interact with their surroundings and with each other.

¹ *Making Sustainable Commitments: An Environment Strategy for the World Bank, 2002*

Biological diversity allows a variety of species to all work together to help maintain the environment without costly human intervention. We benefit because the environment sustains us with the variety of resources produced. Experience so far has shown that social economic development may be achieved at the expense of biological diversity. This belief has made some people to argue that for poor countries to develop, environmental concerns have to be disregarded. In other words, taking similar development path that was taken by the developed world.

However, the concept of Sustainable Development recognises the interconnectedness between human beings and the environment if true environmental and social justice is to be obtained.³ As Delhi-based environment organization, the Centre for Science and Environment, points out, if the poor world were to develop and consume in the same manner as the West to achieve the same living standards, “we would need two additional planet Earths to produce resources and absorb wastes ... and good planets are hard to find!”⁴

The Impact of Poverty on the Environment

Poverty and third world debt has been shown to result in resource stripping just to survive or pay off debts. For example, Nepal and Bangladesh have suffered from various environmental problems such as increasingly devastating floods, resulting from large-scale deforestation. Forests around the world face increased pressures from timber companies and agricultural businesses.

Some environmentalists, from rich nations especially, also raise concerns about increasing populations placing excessive burdens on the world’s resources as the current major source of environmental problems. This makes for a worrying situation for third world development and poverty alleviation.

However, an **environment-only** approach risks “blaming the victims.” While humans are largely responsible for many problems of the planet today, not all humans have the same impact on the environment. It is important to consider, for example, that the consumption of just the worlds wealthiest fifth of humanity is so much more than the rest of the world. Thus, putting emphasis on population growth in this way is perhaps over-simplistic. However, this does not mean we can be complacent about future population burdens. Sustainability is critical for the world’s majority to develop without following the environmentally damaging processes of the world’s currently industrialized nations.

² *Human Development Report 1998 - Consumption for Human Development*

³ *Agenda 21 - United Nations Conference on Environment and Development 1992*

⁴ www.cseindia.org

The Impact of Richer Nations on the Environment

The relationship between the rich and poor, and the impacts on the environment go deep. Economics is meant to be about efficient allocation of resources to meet everyone's needs. However, international power politics and ideologies have continued to influence policies in such a way that decision-making remains concentrated in the hands of a few narrow interests. The result is that the world's resources are allocated to meet a few people's wants, not everyone's needs.

Indian activist and scientist, Vandana Shiva⁵, shows in her work that many people have been forced into poverty due to politics and economics such as concentrated land rights, pressure from industry to exploit the environment in ways that destroy diversity and affect local populations, etc. Shiva also highlights that the poor often have a lot of knowledge about their environment and are often sustainers and efficient users of it, as they recognize their link to it for their survival.

Excessive third world debt burden has meant that it has been harder to prioritise on sustainable development. Unfair debt, imposed on the third world for decades by the global institutions, the International Monetary Fund (IMF) and World Bank through their harsh Structural Adjustment programmes (SAPs)⁶ have opened up of economies rapidly, in socially, politically, environmentally and economically destructive ways, while requiring a prioritisation on debt repayment and cut backs on health, education and other critical services. They have encouraged concentration on producing just a few cash crops and other commodities primarily for export.

Unfortunately, the poor exporters have no say on the price of their produce at the world market. This has resulted in dwindling market prices. Considering that the agricultural inputs are imported from developed countries at high prices, most of poor peasants cannot afford to buy farm inputs. This couple with dwindling soil fertility, the final outcome is to expand the farm, in order to produce same or less output, this in turn accelerates biodiversity degradation and deforestation.

Those who can afford to use environmentally damaging "industrial agriculture", which reduces biodiversity and requires costly inputs such as environmentally damaging pesticides and fertilizers. Some of the pesticides have been to be persistent in the environment with severe health and environment impacts.⁷

⁵ Vandana Shiva, *Stolen Harvest*, (South End Press, 2000), pp. 12-13

⁶ <http://www.chebucto.ns.ca/Current/P7/bwi/cccsap.html>

⁷ *Stockholm Convention on Persistent Organic Pollutants*, 2001

Mainstream economists and politicians have long been criticized for concentrating on economic growth in ways that ignores humanity and the environmental costs. Perhaps one of the harshest ironies is how food and farm products flow from areas of hunger and need, to areas where money and demand is concentrated. Farm workers, and women especially, are amongst the worlds most hungry.

It is not just a problem in agriculture but other industries too. In 1991, then Chief Economist for the World Bank, Larry Summers⁸, (and later U.S. Treasury Secretary, under the Clinton Administration), had been a strong backer of the SAPs. He wrote a leaked internal memo in 1992, revealing the extent to which international policies have an impact on nations around the world when it comes to environmental and other considerations:

“Just between you and me, shouldn’t the World Bank be encouraging more migration of dirty industries to the LDCs [less developed countries]? ... The economic logic behind dumping a load of toxic waste in the lowest wage country is impeccable, and we should face up to that... Under-populated countries in Africa are vastly under-polluted; their air quality is probably vastly inefficiently low compared to Los Angeles or Mexico City... The concern over an agent that causes a one in a million change in the odds of prostate cancer is obviously going to be much higher in a country where people survive to get prostate cancer than in a country where under-five mortality is 200 per thousand”.

For years, rich countries have been migrating some polluting industries to poor countries, but still producing primarily for rich countries. This has been possible insofar as it is cheaper than to pay for costly environmentally clean technologies that people in the developed countries demand.

This kind of thinking still exists in some decision makers of the developed countries and world institutions such as World Bank. We have to be careful when we are opening up our countries for foreign investment.

Diverting Resources to Non-Productive Uses

⁸ Lawrence Summers, *Let them eat pollution*, *The Economist*, February 8, 1992. Quoted from Vandana Shiva, *Stolen Harvest*, (South End Press, 2000) p.65; See also Richard Robbins, *Global Problems and the Culture of Capitalism* (Allyn and Bacon, 1999), pp. 233-236 for a detailed look at this.

It is perhaps natural to assume that we are growing food to feed people, but are struggling to keep up. Reasons are frequently attributed to the effects that rapid population growth experienced in developing poor countries as the ultimate cause. However, the world is producing more than enough food to keep up with population growth, although environmentally damaging industrial agriculture threatens future sustainability.⁹ Yet how is it that there is so much hunger, and that farm workers are usually the hungriest people in the world? An indication of the answer lies in what is less discussed in the mainstream: the purpose of agriculture in today's world. Like many other markets, food is available to those who can afford it, not necessarily those who need it. Most food is therefore produced to meet consumer demands, not the needs of the poor or hungry. When money talks, the poor have no voice.

This leads to a major diversion, and even wastage, of environmental resources from productive uses to non-productive uses. For poor countries that need to earn foreign exchange to pay off huge debts, cash crops offer the chance of money. For elite landowners, this is the only way they can make money, as the poor have little. As professor of anthropology, Richard Robbins, summarizes:¹⁰

To understand why people go hungry you must stop thinking about food as something farmers grow for others to eat, and begin thinking about it as something companies produce for other people to buy. Food is a commodity. ...

Much of the best agricultural land in the world is used to grow commodities such as cotton, sisal, tea, tobacco, sugar cane, and cocoa, items which are non-food products or are marginally nutritious, but for which there is a large market. Millions of acres of potentially productive farmland is used to pasture cattle, an extremely inefficient use of land, water and energy, but one for which there is a market in wealthy countries.

More than half the grain grown in the United States (requiring half the water used in the U.S.) is fed to livestock, grain that would feed far more people than would the livestock to which it is fed. ...

The problem, of course, is that people who don't have enough money to buy food (and more than one billion people earn less than \$1.00 a day), simply don't count in the food equation. In other words, if you don't have the money to buy food, no one is going to grow it for you. Put yet another way, you would not expect The Gap to manufacture clothes, Adidas to manufacture sneakers, or IBM to provide computers for those people earning \$1.00 a day or less; likewise,

⁹ http://www.geog.ouc.bc.ca/conted/onlinecourses/geog_210/210_4_6.html

¹⁰ R.H. Robbins (1972) *Global Problems and the Cultural of Capitalism* SUNY at Plattsburgh (Allyn & Bacon Publishing, Inc)

you would not expect ADM (“Supermarket to the World”) [A large food processing company] to produce food for them.

What this means is that ending hunger requires doing away with poverty, or, at the very least, ensuring that people have enough money or the means to acquire it, to buy, and hence create a market demand for food.¹¹

In addition to minor nutritional quality, or damaging consumer’s health, some major agricultural products also involve production practices that damage the health and safety of workers and the environment.

For example, rainforests are often cleared to make way for grazing animals to be slaughtered for unhealthy fast food meat consumption, while prime land and the surrounding environment is often degraded when producing cash crops for the wealthier parts of the world. The effects are numerous. Vandana Shiva also captures this issue:¹²

Junk-food chains, including KFC and Pizza Hut, are under attack from major environmental groups in the United States and other developed countries because of their environmental impact. Intensive breeding of livestock and poultry for such restaurants leads to deforestation, land degradation, and contamination of water sources and other natural resources. For every pound of red meat, poultry, eggs, and milk produced, farm fields lose about five pounds of irreplaceable top soil. The water necessary for meat breeding comes to about 190 gallons per animal per day, or ten times what a normal Indian family is supposed to use in one day, if it gets water at all. ... Overall, animal farms use nearly 40 percent of the world’s total grain production. In the United States, nearly 70 percent of grain production is fed to livestock.

Industries such as the fast food industry benefit from people consuming more fast food meats and sugar-based products. Excessive consumption of coffee, alcohol, tobacco, etc, place an extra burden on the poor and on environmental resources, both in production of these products as well as at the other end, where health departments are already strained.

Yet this all contributes to economic measures such as Gross National Product. Economists and politicians look at these to see how well their policies are faring. Selling more sugary products or fast foods to children and adults results in more sales! Many environmental costs are either not accounted for or only partly so. For example, if the full cost of water by the meat industry in the United States was accounted for, common hamburger meat would cost US\$ 35 a pound.

¹¹ Richard H. Robbins, *Readings on Poverty, Hunger, and Economic Development*

¹² Vandana Shiva, *Stolen Harvest*, (South End Press, 2000), pp. 70-71.

We end up in a situation where 1 billion suffer from hunger, while another billion suffer from obesity.

Environment and Poverty are Related Issues

The above just scratches the surface, but highlights the interconnectedness of humanity, the environment and all other forms of life. We cannot take the environment for granted. Humanity has a responsibility not only to each other, but to the environment as well, as the environment has long sustained us and can only continue to do so if we do not destroy it.

Technological solutions, such as more environmentally friendly technologies, while extremely important, do not address underlying political, social and economic causes. Just as doctors highlight the need to prevent illnesses in the first place, and resort to cures when needed, so too do we need to understand these deeper issues in a more holistic manner. The interconnectedness needs more recognition if environmental degradation, poverty and other global problems can begin to be addressed.

Challenges

Improve governance

- Integrate poverty-environment issues into national development frameworks: The Environmental Management Act 2004 makes mandatory that all development projects should undertake environmental assessment before they are given licences to operate. While this is a positive move, national development framework goes beyond project development. Environmental and Social Impacts need to be assessed in policies, decisions, development plan etc. We still have a long way to go.
- Strengthen decentralization for environmental management: EMA 2004 also recognised the need to have an environmental management system all the way to village level where environmental committees need to be put in place. However, empowerment of these committee is very essential if is to succeed.
- Empower civil society, in particular poor and marginalized groups. Civil societies are still weak and because of the urgent need to survive, very few NGOs and Civil Society have a focussed intervention. That is why you may find some of them in almost every issue e.g. in HIV/AIDS, Children, Women, Forestry, Orphans, Water, Chemicals Management, Climate Change. This kind of involvement does not allow an NGO to build strength and expertise needed to effectively contribute to an issue in question.
- Address gender dimensions of poverty-environment issues: For the time being a clear focus on gender and environmental problems is lacking. This is because gender dimensions, gender mainstreaming are still high on the agenda.

- Strengthen anti-corruption efforts to protect the environment and the poor: Corruption will definitely derail environmental protection. Consider an hypothetical example that Company X may be emitting pollutants into the environment because of corrupt influences the Company X will continue emitting despite cries of the communities living close this company.
- Reduce environment-related conflict
- Improve poverty-environment monitoring and assessment

Enhance the assets of the Poor:

- Strengthen resource rights of the poor
- Enhance the poor's capacity to manage the environment
- Expand access to environmentally-sound and locally appropriate technology
- Reduce the environmental vulnerability of the poor.

Improve the quality of growth:

- Integrate poverty-environment issues into economic policy reforms
- Increase the use of environmental valuation
- Encourage appropriate private sector involvement in pro-poor environmental management
- Implement pro-poor environmental fiscal reform.

Reform international and industrial country policies

- Reform international and industrial country trade policies
- Make foreign direct investment more pro-poor and pro-environment
- Enhance the contribution of multilateral environmental agreements to poverty reduction
- Encourage sustainable consumption and production
- Enhance the effectiveness of development cooperation and debt relief.

