

BRIEFING PAPER

The importance of natural resources in poverty eradication

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This text, as well as case studies to substantiate the ideas found in this briefing, can be found after 6 July 2005 in the publication 'Nature: Poor People's Wealth' online at the Friends of the Earth International website www.foei.org/publications

preface

meena raman, friends of the earth international chair, malaysia

Poverty is the greatest shame and scandal of our era. As we kick off the 21st century, more than one billion people around the world live in extreme poverty. Some 25 million people die from hunger each year, and a billion people lack access to clean drinking water. Nearly half of all Africans live on less than one dollar per day. The figures are numbing; however, a growing number of people believe that it is possible to eradicate poverty within the next few decades.

As an environmental organization, Friends of the Earth International campaigns to protect forests, agricultural lands, fisheries, wetlands, rivers and the climate, all of which support the livelihoods of people and communities. In fact, some 70 percent of the world's poor live in rural areas and depend upon their local environments for their daily survival.

There is a direct and critical link between environmental degradation and rural poverty. Our groups on the ground and the communities they work with can also bear witness to the fact that neoliberal economic globalization has increased environmental devastation and poverty among natural resource dependent people. In this publication, we will illustrate the tragic cycle between the over-exploitation of the environment; loss of cultural, political and economic self-determination; inequity; hunger; and poverty.

We will also look on the bright side, and offer living proof that communities around the world are able to lead rich, dignified and fulfilling lives when they are in charge of their natural resources. Rural people, especially women and indigenous peoples, often have a long-standing symbiotic relationship with their local environment. To many of these people, and particularly those who are considered "poor" in the economic sense of the word, a fulfilling life is about much more than simply money or possessions. It is about their access to and control over their natural resources and their involvement in decision-making processes about these resources.

We do not claim to have all of the solutions to the poverty crisis, but we can offer some essential insights into the relationship between the environment and sustainable livelihoods. Our approach to redressing poverty and inequity includes providing strong support to those local people who are promoting alternative models of development. We are also campaigning for measures to redistribute resources and wealth from the rich to the poor, such as addressing the historic ecological debt which is owed by the North to the South. At the same time, we are pressuring international financial institutions, trade bodies, corporations and governments to axe their environmentally and socially destructive policies that destroy natural wealth and create human poverty. We believe that the absolute eradication, and not simply the partial alleviation, of poverty is the most important challenge facing humankind today.

i - introduction

Poverty is a complex, multifaceted problem. Policy debates tend to emphasize the monetary aspect of poverty, whereas many other factors -- including access to and control over natural resources and land, employment, health, nutrition, education, access to services, conflict, political power and social inclusion -- also play crucial roles.

Poverty is thus as much a social, political and environmental problem as it is an economic one. According to the 1997 United Nations Development Report, "From a human development perspective, poverty means the denial of choices and opportunities for a tolerable life." In this publication, we will focus on the causes of rural poverty, and show how communities are protecting their livelihoods and their natural environments by making their own choices and creating opportunities for themselves.

Poverty can mean anything from the absence of a particular tree species, as in the case of the Pehuenche of Chile, to restrictions on bushmeat hunting, as for the Bagyeli "pygmies" of Cameroon). Poverty eradication solutions are similarly diverse, and may include initiatives like empowering women to become local entrepreneurs, implementing sustainable energy projects, waging legal battles for land rights, and cultivating medicinal plants.

International financial institutions and governments are learning to "talk the talk" when it comes to poverty alleviation, and recent moves towards debt cancellation, although not far reaching enough, are a critical and long-overdue first step. Nonetheless, the eradication of poverty and hunger are at odds with the current economic model that promotes growth and development, and nothing short of a structural overhaul is needed in order to move towards equitable societies and allow rural people to thrive in their local environments.

ii - poverty and natural resources

Environmental degradation is a major cause of poverty among rural communities around the world. Colonialization launched a process of natural resource exploitation by northern-based corporations in southern countries, and catalyzed the continuing intervention by industrialized governments in the political systems of resource-rich countries. Corrupt, repressive regimes in many countries also benefit from these neocolonial arrangements -- at the expense of their citizens and local environments. This exploitation of people and natural resources is fueled by overconsumption by people in wealthy industrialized countries and the southern elite.

As political leaders dither about how (and in some cases, whether) to address the poverty crisis, global inequities are steadily increasing. Many studies, including a 2004 International Labor Organization report, show that the income gap between the richest and poorest countries is widening. Today, on our planet of 6 billion people, one billion enjoy 80 percent of total global wealth and another billion struggle to get by on US\$1 per day.

It has long been popular among development "experts" to claim that the poor are largely responsible for destroying their environments as they sink deeper into poverty. This belief persists despite centuries of community experience which have shown that indigenous peoples and local communities are perfectly capable of living in harmony with nature. The livelihoods of many of the world's poorest people depend directly on unspoiled natural resources, from which they obtain food, housing, energy, water, medicine and income. When their traditional natural resource management practices are hampered, whether through environmental devastation, over-exploitation, privatization, or lack of access, they may be forced to make their livings in less sustainable ways in order to support themselves and their families.

The main culprits in the destruction of natural resources and livelihoods are transnational corporations, backed by their governmental friends and allies and enabled by trade agreements and international financial institutions. These actors promote inappropriate policies and technologies -- including large-scale dams, intensive agriculture, logging for export, commercial fishing, and oil, mining and gas operations -- that put enormous pressure on the environment and natural resources. Grossly unsustainable consumption patterns by higher-income people contribute to this downward spiral: more natural resources are expropriated, increasing poverty among the local people who depend on them. Furthermore, degraded environments are less productive, more prone to environmental hazards including floods, famine and desertification, and less able to support the people that depend upon them.

threatened forests

The Centre for International Forestry Research has calculated that 100 million people depend on forests to supply key elements needed for their survival, whether it be resources like food, fuelwood, medicine, bushmeat, housing, compost for agriculture, or income. However, half of global forests have already disappeared, deforestation continues apace, and the health of remaining forests is declining rapidly.

There are many pressures on forests, but the greatest threat is the expansion of large-scale monocultures like soy, oil palm and pulp plantations. An important underlying cause of deforestation is the growing production and trade of forest products fueled by rising consumption, especially in the wealthier countries. Paper, pulp and plywood are the fastest growing commodities, and make up the lion's share of the global forest trade in terms of value. Wood consumption is far from evenly distributed: in 2000, more than half of the industrial timber and 72% of the world's paper was consumed by the 22% of the world's population which lives in the US, Europe and Japan.

There is a clear link between forest degradation and human poverty. Friends of the Earth Costa Rica has documented a strong correlation between rural poverty and timber exploitation in tropical forests. Extensive logging in the past decades in Malaysia has destroyed the health, rivers and livelihoods of indigenous forest communities. The Katkari indigenous people of India have been forced to learn to cultivate land due to the disappearance of their native forests as a result of colonialization, leaving them vulnerable to malnutrition and starvation.

In addition to jeopardizing people's livelihoods, forest destruction increases the vulnerability of communities to environmental threats. It is widely acknowledged that the destruction caused by Hurricane Mitch in Central America in 1998 would have been significantly lighter if the affected areas had been less deforested. Similarly, the tsunami that ravaged Asia in 2004 would have been less devastating to coastline communities and ecosystems if mangroves and coastal forests had still been intact.

fisheries in trouble

Fishing has traditionally been a major source of livelihoods for coastal communities around the world, and fish are the primary source of protein for hundreds of millions of people. Fishing is also a culturally important activity, as skills are passed down from generation to generation.

Small-scale fisheries are also critical to many economies. In several countries in Africa, the Caribbean and the Pacific, for example, fish product exports, sourced primarily from small-scale fisheries, generate a higher income than exports of tea, coffee or cocoa. Small-scale fisheries also contribute to sustainability: around 99 per cent of fish catches have a commercial use or are consumed directly.

However, the livelihoods of small coastal fisherpeople are being jeopardized by the collapse of fish stocks, largely due to large-scale fishing by commercial trawlers for export markets. Industrial fishing is based on non-selective extraction; immature fish and other non-commercial species die and are thrown back into the sea. In the shrimp fisheries of the Gulf of Mexico, for example, this wasteful approach means that up to 90 percent of the total catch is discarded. Since 1982, the UN Convention on the Law of the Sea (UNCLOS) has recognized that fragile marine ecosystems need to be protected and preserved from large-scale fishing in order to conserve the oceans' biodiversity. In general, the trend towards economic globalization and market models, based on neoliberal policies, is leading to a drastic reduction in access rights for traditional fisherpeople. Coastal communities in Togo among other places are unable to compete with their high-tech rivals, and their local markets are being overwhelmed by cheap imports from Europe. The conversion of mangrove swamps into shrimp farms for export, as is happening in the Niger Delta also places enormous pressure on the local communities dependent on these ecosystems.

water woes

Water is becoming dirtier, scarcer and costlier for people in many parts of the world. More than one billion people do not have access to clean drinking water, and 1.8 million people die each year due to inadequate hygiene, sanitation or water supply.

International financial institutions, trade treaties and multinational water corporations also promote the privatization of water services, thus decreasing the access of poor people, and particularly women, to water. Pollution, industrialized agriculture and mining are also part of the problem, as are big dams. The World Bank, notorious for funding mega-dams which displace people and contribute to local poverty, is financing yet another destructive project in the Mekong Valley which will affect the livelihoods of more than 100,000 farmers.

Friends of the Earth believes that water is a human right, is essential to livelihoods, and should not be treated as an economic good. We are campaigning for water justice by promoting collective water management systems, urging water reduction and reuse, and restoring rivers and wetlands to more natural states. Friends of the Earth Middle East, for example, is harvesting rainwater in order to promote water conservation and recycling.

iii - how neoliberalism fails to alleviate poverty

Globally, we have the resources to eradicate poverty and hunger, both in rural and urban communities. However, this can only be achieved by moving away from the current neoliberal economic model, which advocates market-based solutions to poverty with minimal interference by governments. The push for expanded foreign direct investment into poor countries and increased exports is based on the false premise that the revenues generated will "trickle down" to the poor. This is the basis of the poverty alleviation approaches of international financial institutions like the World Bank and trade bodies including the World Trade Organization.

This kind of growth-oriented development has the primary goal of creating markets and wealth for the largest transnational corporations, the richest countries and the elite. Simultaneously, this approach impedes regulation by national governments and wipes out domestic industries and vulnerable small-scale businesses. Local communities are disempowered and left with polluted rivers, diminished forests and degraded land. In short, this kind of development is profitable for corporations and governments but is often devastating for rural, natural resource dependent communities.

This section provides a few examples of neoliberal schemes that claim to reduce poverty, but in fact have just the opposite effect, in no small part due to their damaging impacts on the environment. Trade liberalization, promoted by organizations like the World Trade Organization (WTO), exploits natural resources and increases rural poverty. Development aid, through governments and international financial institutions (IFIs) like the World Bank and IMF, promotes policies and projects that hurt the poor and the environment alike. Transnational corporations, the biggest winners of the neoliberal agenda, have been key to the push for socially and environmentally damaging industrialized and genetically-modified agriculture around the world. They are now profiting from various "poverty alleviation" partnerships with United Nations agencies with the not-so-hidden agenda of gaining access to new markets. The privatization of natural resources and services, pushed by the corporate, trade and IFI lobbies, decreases people's access to and control over natural resources and increases poverty. Policies to implement the Millennium Development Goals, however welcome, are doomed to fail in the long run as they leave the current environmentally and socially exploitative system intact.

trade liberalization: the "trickle down" myth

Contrary to popular belief, most trade liberalization does not lead to poverty reduction; in fact neoliberal policies often contribute to the global system of unsustainable production and consumption that benefits giant corporations but fails people. The United Nations Conference on Trade and Development's Least Developed Countries Report 2004 clearly demonstrates the fact that wealth is not 'trickling down' to the poor. There has been little correlation between export growth and sustained poverty eradication in least developed countries, many of which undertook far-reaching liberalization measures in the 1990s. The biggest losers from the World Trade Organization's Uruguay Round of trade negotiations, for example, were Sub-Saharan African countries, already among the poorest in the world.

Harvard University Professor Dani Rodrik has conducted empirical studies to show that trade liberalization does not necessarily lead to economic growth. In fact, he argues the causal relationship is the other way round - countries grow first and then integrate into the global economy. This is the case for China and India, which have been careful to retain significant amounts of government protection rather than simply following the WTO's prescriptions for liberalization and privatization. On the other hand, those countries that fully embraced the WTO's liberalization/privatization/globalization agenda in the 1990s, particularly those in Latin America, have faced financial crises and disappointing economic performances.

The benefits of unlimited economic growth are also questionable from an environmental point of view. Economic growth is based on the possibility of limitless expansion, but ecosystems have finite boundaries and will collapse if overstressed. Multilateral, regional and bilateral free trade agreements that open markets for penetration by transnational corporations often increase the exploitation of forests, fisheries, minerals, water and biodiversity, increasing poverty amongst those who depend on these resources for their livelihoods.

The World Trade Organization and other free trade agreements also reduce the space for governments to regulate in favor of people, local economies and the environment, both at the national level and internationally. The interests of communities are ignored, as they have no access to the negotiators deciding on rules and agreements, and the environment loses as international trade and investment flows take precedence over the protection of our natural resources. Furthermore, neoliberals insist on the use of the market to resolve various environmental problems, ignoring the fact that unfettered markets are very often part of the problem.

In particular, current negotiations in the WTO and regional and bilateral trade agreements that aim to liberalize trade in goods and services relating to water, energy, forests and fisheries should be stopped. Ultimately, the WTO should not be involved in the regulation of trade in food and agriculture. These changes would directly contribute to poverty eradication by allowing rural people to continue to manage and sustainably use their natural resources to meet their basic needs. In addition, trade liberalization negotiations must not be permitted to stop governments legislating in favor of social and environmental well-being and local economic development.

corporate greenwash allows business-as-usual

Trade liberalization has winners and losers - and the winners include transnational corporations scouring the globe for new markets, weak competitors, cheap resources and lower operating costs. These companies have privileged access to and influence upon governments and trade negotiators, enabling them to make and break the rules of the global economy to suit their commercial interests. All of this often comes at the expense of communities, local economies and the environment.

Corporate power has greatly increased in the past decades, and companies have managed to slip away from attempts to regulate their behavior. They have successfully coopted the concept of "sustainable development" while at the same time expanding their unsustainable practices in the agricultural, water, mining, energy, pharmaceuticals, chemicals and transport sectors. They have triumphantly promoted the idea of "voluntary initiatives" while continuing to pollute, exploit and degrade environments around the planet.

In recent years, the most influential corporations have managed to worm their way into various poverty-related initiatives, including some in alliance with the United Nations environment, labor and human rights agencies. These are some of the very corporations -- Nike, Shell, Rio Tinto, Novartis, BP, Daimler Chrysler, Bayer DuPont, McDonald's, Disney, Chevron, Unocal -- that are contributing to poverty around the world through their exploitative activities.

the failure of development aid

bilateral aid

There is a pervasive myth that governments give significant amounts of bilateral aid to the poor. However, nearly all of the rich nations consistently fail to meet their Official Development Assistance (ODA) target of 0.7 percent of GNP, most of them hovering in the area between 0.2 and 0.4 percent each year.

To a large extent, financing the demise of poverty is a matter of prioritizing. Kari Nordheim-Larsen, then Norwegian Minister of Development Cooperation, said in 1996 that "It has been estimated that the world would need to mobilize between 30 and 40 billion dollars annually for several years to achieve universal access to basic social services, including low cost water-supply and sanitation. While it definitely is a large amount of money, it only represents some 3 or 4% of what the world spends on the military every year."

The quality of aid remains an area of concern as well, as the real danger exists of locking people into dependency rather than promoting self-determination and empowerment. In recent years, after a range of aid scandals, development agencies have tried to move away from financing large, inappropriate development projects that have wasted millions of public euros. There is now a growing tendency to listen better to local needs when designing aid programs. While this is welcome, it is just as important to remove structural barriers that impede people's opportunities to create long-term sustainable livelihoods for themselves.

Generally, transnational corporations fare well as a result of aid programs; the Australian aid program is even explicitly formulated to promote Australian commercial interests. Furthermore, a large part of the multilateral aid channeled through international financial institutions directly supports northern corporations.

multilateral aid

Much of the world's multilateral development aid is channeled through the international financial institutions (IFIs) such as the World Bank. Although the mission of most of these banks is poverty alleviation, many of their projects and policies have the reverse effect.

By attaching conditions to their loans, the IFIs impose structural adjustment packages: neoliberal liberalization, privatization and deregulation policies on the governments of the world's poorest countries. In addition, they provide subsidies to transnational corporations for investments around the world. These policies and practices generally hurt the poor: the revenues that are supposed to trickle down are often minimal, end up in the wrong pockets and do not compensate for negative social and environmental impacts.

It is a well thought-out package. Liberalization allows transnational corporations free reign to out-compete local and small scale businesses. The privatization of public services opens more markets for big business, but makes essential resources such as water and energy unaffordable for poor people. Simultaneous deregulation limits governments' possibilities to protect people and natural resources by prohibiting them from placing social and environmental requirements on corporate activities. And to complete the picture, direct financing of megalomaniac projects like oil pipelines, gold mines and large hydro dams directly destroys environments and livelihoods for communities around the world.

Cost overruns, displaced communities, devastated environments and useless constructions have resulted. Communities are deprived of access to clean water, healthy forests and other natural resources they depend upon. And the few jobs created by these capital-intensive operations can not compensate for the livelihoods that are lost in the process.

The soaring debt burden, which increases as a result of these lending activities, makes it impossible for governments to invest in social and environmental sectors. Payment of interest on debt has created the unacceptable situation in which more money flows from developing countries to developed countries than vice versa. The poor are hit the hardest, all in the name of development.

The IMF and World Bank's Poverty Reduction Strategies, launched in 1999, were supposedly symbolic of a change within these institutions, and were touted as a sign of their commitment to real poverty reduction, equity and participation instead of pure economic growth. However, time has shown that the change is only a superficial one. Conditions remain, and people in poor countries still have no voice in international deliberations on poverty reduction.

It is no secret that these institutions are failing in their poverty alleviation missions. The World Bank's 2003 Extractive Industries Review report "Striking a Better Balance" found that: "Increased investments have not necessarily helped the poor; in fact, oftentimes the environment and the poor have been further threatened by the expansion of a country's extractive industries sector"; and that "the World Bank Group does not appear to be set up to effectively facilitate and promote poverty alleviation through sustainable development in extractive industries in the countries it assists." In its March 2005 analysis of the reasons for Africa's economic woes, UK Premier Tony Blair's Commission for Africa concluded that: "Evidence shows that IMF and World Bank economic policy in the 1980s and early 1990s took little account of how these policies would potentially impact on poor people in Africa."

In short, Friends of the Earth International believes that steep increases in bilateral and multilateral development aid are necessary, but will only succeed in alleviating poverty when technocratic and top-down solutions are substituted for participatory, equitable and sustainable alternatives. We also believe that development agencies and international financial institutions must accept joint responsibility for the marginalization of communities and the destruction of natural resources their projects and policies have caused, and ensure that the needs of the poor take priority over corporate interests.

Many examples can be found of IFI policies and projects that were supposed to alleviate poverty and have instead harmed the poor. The Shell and Exxon-led Sakhalin oil and gas project in the Russian Far East, which is awaiting funding from international financial institutions, illustrates how the health and livelihoods of communities can be threatened by exploitative projects. The Nam Theun II Dam in Laos, funded by the World Bank, will displace more than 6,000 people and threaten the livelihoods of more than 100,000 farmers. Fortunately, many communities are fighting poverty by demanding control of their natural resources, including the Bagyeli pygmy of Cameroon whose livelihoods have been impacted by the World Bank funded Chad-Cameroon pipeline.

privatization puts nature up for sale

Over the past decade, many governments have privatized publicly owned assets, often under duress, due to structural adjustment programs imposed as loan conditions by international financial institutions. Neoliberal policy-makers in the field of biodiversity and water management have promoted market-based conservation mechanisms including the privatization of the provision of drinking water, the sale of protected areas to eco-tourism companies and big conservation NGOs, the sale of genetic resources and associated knowledge to pharmaceutical companies, and the sale of forests to oil companies and other industries that want to offset their carbon emissions and other polluting activities. This has resulted in the emergence of an "environmental services market," which entails corporate "ownership" and management of vital livelihood resources like water, fuelwood and traditional medicinal plants.

Indigenous peoples and local communities increasingly find themselves excluded from the forests and other biologically rich areas where they have traditionally lived as their lands are handed over to logging, tourism and private park management companies. Land is also being reserved for a new breed of company that establishes "carbon parks" to offset the carbon dioxide emission of rich consumers in the North. As a general trend, these market-based conservation mechanisms tend to block access for those who cannot pay for the environmental "services" nature provides.

Friends of the Earth International is calling for common assets like water to be removed from the ongoing services liberalization negotiations in the World Trade Organization. The inclusion of natural resources in the environmental services market tends to make women, who rely more on natural resources in providing their families' livelihoods, more dependent on men, who have better access to paid work. It makes indigenous peoples and local communities more dependent upon jobs that provide them with a monetary income, forcing them to abandon their traditional lifestyles and seek external employment. In short, it makes those without money more dependent upon those with money.

corporate-driven agriculture does not feed the poor

Half of the world's hungry are smallholder farmers. In the case of Africa, three-quarters of the poor live in rural areas. The livelihoods of subsistence farmers around the world are being threatened by corporate-driven agriculture policies, including the neoliberal model of growing food for export, a second "Green Revolution" and the promotion of genetically-modified crops by biotech companies.

food for export, not for the hungry

Thanks to the neoliberal trade model, much of the food produced in developing countries is destined for export markets. This is a driving force behind the growth of hunger and poverty in rural areas, as large-scale export-oriented agriculture creates far fewer jobs than family farming, and expropriates land so that communities can no longer grow their own food. Export-oriented agriculture also has the ludicrous outcome in wealthy and poor countries alike that food flown in from across the world can be cheaper than locally-grown, environmentally-friendly produce. Furthermore, the monoculture crops promoted by corporate-led agriculture models destroy local genetic diversity, which is essential for both human nutritional needs and environmental sustainability. Expansion of large-scale monocultures like soy and oil palm into primary forests also forms one of the main causes of global biodiversity loss.

unsustainable green revolutions

A more recent threat is the push for a second "Green Revolution", which champions agricultural technology as the way to tackle hunger and poverty in rural areas. The first "Green Revolution," which played out primarily in the 1960s and 70s in Latin America and Asia, resulted in millions of indebted, landless and impoverished farmers due to an unhealthy dependence on chemical inputs and commercial seeds pushed by its corporate backers. The pesticides, fertilizer and new technologies used in the Green Revolution also increased biodiversity loss and genetic erosion. This in turn jeopardized food security for the poor, who depend on direct access to natural resources for up to 90 percent of their livelihood needs. In addition, the health of farmers and their families was jeopardized by the chemical pesticides that accompanies industrial agriculture. Furthermore, despite claims by its proponents that it would feed the poor, the Green Revolution did not reduce hunger. In South Asia, where food availability per person increased by 9 percent, the number of hungry people increased by the same percent. The United Nations estimated that in the early 1990s, 80 percent of all malnourished children in the developing world lived in countries with food surpluses. In addition, a 1999 study by the World Bank's International Food Policy Research Institute found that in 63 countries with malnutrition, improvements in social factors – health, environment, women's education and status – accounted for nearly three-quarters of the reduction in malnutrition since 1970. The World Bank further concluded in an 1986 study on world hunger and poverty that a rapid increase in food production would not necessarily provide food security. Hunger is not a problem of insufficient production but one of political will. While we believe that there is a need for policies and strategies to support and improve the livelihoods of smallholder farmers, we are in favour of a new "revolution against hunger and poverty" rather than another ill-fated "Green Revolution".

gmOs will not feed the world

One of the best examples of the threats posed by the corporate-driven agriculture agenda is the introduction of genetically-modified (GM) crops around the world. Although the biotech industry argues that GM crops will alleviate hunger and poverty in developing countries, the reality of the introduction of these crops in the last decade shows that biotech companies are motivated by a less noble goal.

Friends of the Earth International believes that the use of GM technology to address malnutrition and the problems of resource-poor farmers is simply part of a corporate-led push to open new markets. To date, there has been no convincing evidence that GMO technology is without risks, let alone useful for eradicating hunger and poverty. Firstly, over 99 percent of commercial GM crop acreage worldwide is confined to just four countries, three of them highly industrialized and export-oriented: the United States, Canada, Argentina and China. Secondly, over 99 percent of commercial GM crop acreage is comprised of just four crops used mainly for animal feed (soybeans & corn), oil (canola) or fiber (cotton), not for hungry or malnourished people. Thirdly, over 99 percent of commercial GM crops feature just two traits – herbicide-resistance for weed control and insect-resistance – designed for farmers in the industrialized world who practice a highly industrialized, export-oriented mode of agriculture. Finally, one single company, Monsanto, accounts for over 90 percent of the total area of the global area cultivated with GM crops, which clearly illuminates the corporate agenda behind the global push for GMOs.

GM technology has a dismal record of developing crops suitable for resource-poor farmers. In India, hundreds of transgenic cotton farmers have committed suicide in recent years due to mounting debt and failed crops. A joint project of the Kenyan Agricultural Research Institute (KARI) and Monsanto to develop a GM virus-resistant sweet potato took 12 years and cost US\$6 million, yet failed to develop a single suitable variety. In contrast, conventional breeding of sweet potatoes in Uganda produced a well-liked virus-resistant variety with yield gains of nearly 100 percent in a few years and with a very small budget.

The experience of the contamination of maize varieties in Mexico as a result of the import of GM maize highlights the dangers posed by the introduction of GM crops. Mexican corn varieties have been developed by indigenous and local farmer communities over thousands of years, and these varieties are a key reserve of genetic material for plant breeding and the basis for food security in the country. Cases like this offer a strong argument for promoting the existing alternatives to GM crops as a way to address poverty and to ensure environmental sustainability.

millennium goals fall short

The Millennium Development Goals, adopted by governments in 2000, set targets for reducing poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women by 2015. One aim is “to reduce by half the number of people living in extreme poverty by 2015”; another is to halve the proportion of people who suffer from hunger within the same period.

This ambitious initiative deserves to be taken seriously. However, it is far from perfect and current implementation policies fails to address some of the underlying structural causes of poverty and hunger. These policies tend to have a technocratic, neoliberal approach that defines poverty very narrowly, in terms of income (GNP) and consumption flows. Secondly, massive infrastructure projects are proposed in order to accelerate economic growth in developing countries without taking the social and ecological impacts into account. Thirdly, the proposal for a new "Green Revolution" and GM agriculture is doomed to fail in alleviating poverty and hunger. It is also important to note that global climate change, if not urgently addressed, could undermine all of the Millennium Development Goals.

A separate process, the Millennium Ecosystem Assessment, was released by the United Nations Environment Program, international scientific groups and NGOs in March 2005. The result of four years of research by 1300 scientists from 95 countries, it assesses the impact that changes to ecosystems will have on human well-being. The report found that humans have changed ecosystems more rapidly and extensively over the last 50 years than in any comparable period of time in history, and that the changes made are unsustainable and have left many in poverty. It concludes that the degradation of ecosystems could grow significantly worse over the next fifty years and could serve as a barrier to achieving the Millennium Development Goals.

Although assigning financial worth to natural resources can be a dangerous approach, it is interesting to note some of the Millennium Ecosystem Assessment's calculations of the value of various ecosystems and the services they provide. An intact mangrove in Thailand was valued at US\$1,000 per hectare; after clearing for aquaculture it was worth US\$200. A 3,000 hectare coastal peat bog in Sri Lanka is valued at \$5 million a year for the flood control services it provides locally. The burning of 10 million hectares of Indonesia's forests in the late 1990s cost an estimated \$9 billion in increased health care, lost production and lost tourism revenues. In short, taking care of ecosystems can save huge amounts of money in the long run, but it is doubtful whether this message will resonate well with short-sighted governmental and corporate actors.

iv - how people can prevail in poverty eradication

Institutional solutions to poverty and hunger, inspired by the neoliberal economic model, are doomed to fail. Friends of the Earth International believes that communities and local people can to a large extent determine their own sustainable and equitable futures when they are given access to and control over their natural resources and appropriate technology. The groups we work with around the world are living proof that alternatives to business-as-usual in the area of poverty eradication can succeed. Together with them, we campaign for the recognition of environmental rights, including collective rights to natural resources. We are also pushing for the inclusion of women in all aspects of poverty eradication, from defining the problem to implementing the solutions. Our answers include the promotion of sustainable energy, which is essential in addressing the dangers posed to people everywhere by climate change. We also believe in the power of sustainable agricultural practices to feed the world and to preserve ecosystems.

We are campaigning against regional and global trade agreements, and in particular for the removal of food and agriculture issues from the World Trade Organization's mandate, so that small, local and diverse rural economies can be created. Finally, we are pushing for the immediate and unconditional cancellation of the external debt owed by poor countries to international financial institutions and Northern private banks, and the repayment of the ecological debt owed by industrialized countries to southern people for decades of resource exploitation.

community-based resource management

The UN Universal Declaration on Human Rights states that: "Everyone has the right to a standard of living adequate for the health and wellbeing of himself and of his family, including food, clothing, housing and medical care." Yet for many people living in already impoverished countries, access to and control over the very resources they need to provide for their families is declining, with little or no compensation in the form of finance or social security.

Friends of the Earth International is calling for fair and sustainable economies with new economic goals, including the equitable and sustainable use of limited resources and the recognition of the importance of economic diversity. Communities, including indigenous peoples, small farmers, landless peasants and women, should have equitable access to agricultural land, water, seeds and other productive resources, and the ability to make decisions concerning the use of those resources. We also want new devolved, transparent and participatory economic decision-making processes based on the principle of economic subsidiarity. This means that communities can choose the extent to which they are self-reliant, generating their own wealth and jobs, yet retaining the option to trade.

Creating democratic and sustainable economies is an ambitious goal that can only be realized by ensuring that international policies genuinely reflect and address peoples' hopes, needs and aspirations. To achieve this, political decentralization is essential. It will be absolutely necessary to ensure that nations and communities are *the* key decision-makers; that all relevant decision-making bodies - from the local through to the international - are genuinely representative of women and men and participatory; and that people have real opportunities to develop themselves.

Many initiatives based on sustainable economies and local control over resources are already underway. In Ghana, women's activities have been diversified to include shea butter processing and trade of beans and groundnuts with other regions, and they have also reinvigorated traditional decision-making processes at the community level. In Chile, the Pehuenche indigenous peoples are designing community-based development projects including a health clinic and a storehouse for pine-nuts in order to improve their living conditions.

On the island of Atauro (formerly part of East Timor), people have decided to use their resources sustainably and only allow small-scale income-generating activities. In order to increase their self-determination, communities in Cameroon and Malaysia are engaged in participatory mapping initiatives which allow them to document the importance of natural resources in their subsistence strategies. In El Salvador and Paraguay, communities have reinvigorated the cultivation of medicinal plants which are threatened by the loss of biodiversity.

fighting for environmental rights

The legitimization of environmental rights is critical for communities around the world who are struggling to protect their livelihoods and ecosystems from the impacts of economic globalization. Among the most essential environmental rights is access to and control over the natural resources that enable survival, including land, shelter, food, water and air. Environmental rights also include political rights for indigenous peoples and other collectivities including fisherfolk and farmers; the right to information and participation in decision-making; freedom of opinion and expression; and the right to resist unwanted developments. Friends of the Earth International also believes in the right for people displaced by environmental destruction to claim reparations for violated rights; the right to claim ecological debt; and the right to environmental justice.

Environmental rights, and more specifically collective rights, are essential for indigenous and tribal people. There are some 370 million indigenous peoples in the world, constituting some 5,000 different cultures, and they live in some of the most biodiverse areas of the planet. When measured by most social and economic indicators, indigenous and tribal peoples generally rank among the poorest in the world. They are often afflicted with health problems, limited access to basic services, social conflict and migration. Their languages, cultures and livelihoods are often under siege.

However, indigenous peoples bring their own perspectives to development, which are based on principles of interdependence and the sustainable use of natural resources. Indigenous peoples also have their own perceptions of what poverty means and how it should be addressed.

For the Bagyeli "pygmies" of Cameroon, for example, one of the most important indicators of wealth is the access they have to the forest and its resources.

For the indigenous Katkari forest people of India, obtaining legal rights to land has allowed them to regain some of their previous economic self-sufficiency.

In the industrialized world, sustainable communities must often be created from scratch. In many southern countries, however, communities that manage their own resources have existed for centuries; their greatest challenge is simply to resist external threats by claiming their environmental rights.

mainstreaming gender into poverty eradication strategies

Statistically, women form the overwhelming majority of the world's poor due to the large amount of time they spend on economic activities that are not remunerated in monetary terms. Women in developing countries work 60 to 90 hours per week. They provide three-quarters of healthcare services. Over 75% of the food consumed throughout Africa is produced by women. Childcare, parental care, caring for domestic animals and the vegetable garden, cleaning the house and homestead, cooking: these are all essential economic activities that are not officially recognized as contributing to a country's national product.

Women have a special relationship with the environment. In many communities, they are the ones who are responsible for fetching water and fuelwood and gathering medicinal and edible plants. When their access to local natural resources is hampered, they face enormous pressures in order to feed and care for their families. When food is not plentiful, women are more likely to become malnourished as they focus on ensuring that the men and children have enough to eat. Very often, women are also excluded from political and economic decision-making processes, leading to their marginalization and impoverishment.

Friends of the Earth International believes that women must be involved in all steps of poverty eradication and environmental protection, from defining and analyzing the problems to choosing and implementing the solutions. Fortunately, projects that put women at the forefront of environmental protection and economic and political decision-making are popping up all around the world. Local women in the Periyar Tiger Reserve in India, for example, have learned to conserve fuelwood and protect the valuable Sandal tree despite needing to feed their families. A Friends of the Earth Ghana project ensures that girls are educated about environmental issues from a young age so that they can escape poverty and become involved in decision-making about natural resources.

sustainable energy and climate justice

Climate change, the biggest environmental threat to the planet, is already upon us. Vulnerable communities in some parts of the world are feeling its devastating impacts, through increased desertification, decreased food production, rising sea levels, heat waves and water insecurity.

It is the poorest people in the poorest regions who are suffering the burden of climate change, although these people have done the least to contribute to the problem. The Intergovernmental Panel on Climate Change noted that: "Small island states account for less than 1 percent of global greenhouse gas emissions, but are among the most vulnerable of all locations to the potential adverse effects of climate change and sea level rise." The current and historical greenhouse gas emissions of industrialized countries have far exceeded their *per capita* share. G-8 countries, with 13 percent of the world's population, account for 45 percent of global emissions -- 65 percent if historical emissions are taken into account.

The rich, industrialized countries have an obligation to take a lead in cutting their greenhouse gas emissions furthest and fastest and to help poor countries adapt to the unavoidable negative impacts of climate change through new funds and resources. The greater integration of climate impacts into development programmes and models is required. It is essential that women are involved in the design and implementation of climate adaptation programs: although gender equity receives little attention in climate change discussions, women tend to suffer most from climate change. Men have better access to adaptation resources, but women rely more on natural resources and agriculture for their livelihoods.

Some small island states face complete annihilation; some 7 million inhabitants of the 22 small Pacific Island states are seriously threatened by sea level rise. As more and more people find their homelands uninhabitable in the coming decades, the world is on the verge of being flooded with millions of "environmental refugees". Where will these displaced people go? There is currently no legal recognition or status for environmental or climate refugees, and their numbers in the coming years could be daunting. One of the major authorities on the topic, Norman Myers of Oxford University, says there could well be 150 million climate refugees on the move within 50 years, including at least 75 million in the Asia-Pacific region. So far, only New Zealand has publicly agreed to relocate climate refugees from Tuvalu over the coming decades.

Greater efforts can be made to facilitate grassroots, community-based approaches to reducing harm from extreme weather events. There are many practical examples - including seed banks, water management, disaster relief, storm and flood protection, and conservation of forests and other ecosystems which represent effective ways for threatened communities to protect themselves against poverty, hunger and climate change.

Many regions have enormous potential for renewable energy, which if promoted by governments and actively supported by community groups can also help to tackle poverty as well as reduce climate change. Access to electricity for the 2 billion people around the world currently in the dark could help to fulfil some of the most basic and necessary human needs, such as food storage, cooking, heating and lighting. The challenge is to create access to clean, affordable energy sources which allows these regions to avoid the dirty energy path that so many others have followed and at the same time meet real energy needs.

All of this will require political commitment and new financing from governments in all countries, and a major shift in priorities by the World Bank and other development bodies. International financial institutions and export credit agencies must adopt policies that widen the availability of sustainable energy measures. In 2003, fossil fuel projects represented 86 percent of the World Bank's spending on energy, as compared to 14 percent for renewables funding.

To meet escalating demand, according to the International Energy Agency, some US\$16 trillion of investments is expected in energy supply and distribution systems over the next 30 years. The challenge is to ensure that this money is invested into cleaner, more sustainable energies; otherwise we will be locked into a high emissions trajectory for many years to come, destabilizing our climate to catastrophic levels.

Friends of the Earth groups and the communities we work with are implementing sustainable energy projects in many countries. In Malaysia, the Long Lawen community in Sarawak has become the first inland Malaysian settlement to meet all of its electrification needs through sustainable energy. In El Salvador, Friends of the Earth has created jobs and reduced pollution by training people to build bicycles. In Argentina, the local Friends of the Earth group in Santa Fe has constructed a "bio-digester" in their office, which is now sustainably powered through a mixture of domestic garbage, leaves and sorghum.

[people's food sovereignty and sustainable agriculture](#)

The current system of agriculture is proving unable to deliver global food security and environmental sustainability. Shockingly, 826 million people, the majority of them women and children, suffer from hunger and malnutrition even though there is sufficient food for everyone being produced at a global level.

Industrial agriculture, which uses expensive and sometimes untested technologies, is characterized by large-scale, monoculture production and high levels of external inputs like pesticides and fertilizers. Although proponents argue that traditional forms of agriculture fail to produce adequate quantities of food, studies have shown that crop yields can be effectively increased via sustainable agriculture techniques. For example, a survey of nearly 9 million farmers working on 208 separate sustainable agriculture projects in 52 countries found "substantial increases in per hectare cereal production, typically up to 50-100 percent, and in some projects rising to 200 percent increases." Along the same lines, studies have shown that Uruguay, a country of 3 million people, could potentially produce food for 14 million people using sustainable agriculture techniques. It is clear that we need to change track: agriculture needs to focus on and promote food security,

food sovereignty and diverse sustainable agriculture practices, not "efficient" production for an ever more competitive global market.

Communities, people and countries should have the right to decide upon their own policies to secure adequate and affordable food supplies. Unsustainable, export-oriented and chemical-dependent production needs to be replaced with more sustainable agricultural practices.

Smallholder farmers and their families constitute about half of the world's extremely poor and hungry. There is a large amount of evidence to show that a farmer-led approach, utilizing known and proven agricultural techniques and practices, can transform the livelihoods of farmers, increase food security and reduce malnutrition while also preserving the environment. Studies have shown that improvements in food production can be achieved by increasing the diversity of crop production; diversity of production also helps to address malnutrition by broadening people's diets. Many communities around the world rely heavily on traditional agriculture methods and indigenous knowledge, key elements of sustainable agriculture. The loss of local plant species and traditional seed varieties in many places under environmental stress has given birth to community efforts to preserve them. In Uruguay, farmers are protecting local seed varieties which are on the brink of extinction, including butter beans.

cancellation of the external debt and recognition of the ecological debt

The debt owed by poor countries to the IMF and World Bank is crippling, and very often comes at the expense of essential investments in people such as education, health care and environmental services. Some African countries, for example, spend an average of \$US14 per person each year on servicing their debts, compared to only US\$5 per person on health care.

Friends of the Earth International and many other groups have been campaigning for many years for the unconditional cancellation of all outstanding foreign debt owed by poor countries to rich ones, and to international financial institutions like the World Bank and IMF. Many of these debts were accumulated by dictatorial and criminal regimes and should therefore be considered illegitimate. Debt and those who participated in creating it need to be investigated and judged: the global cry for debt cancellation is also a call for justice.

In June 2005, the world's richest governments formally agreed to cancel at least US\$40 billion of the debt owed by the 18 most heavily-indebted countries to the World Bank, the International Monetary Fund and the African Development Bank. However, this deal covers only a small number of heavily indebted countries, and does not include debt owed to the Inter-American Development Bank or the Asian Development Bank, major lenders in the respective regions. Also, the debt relief will likely be paid from existing budgets, meaning that the amounts received by developing countries will be cut from their aid flows. The G8 agreement does not impose additional conditions, which is a notable change from earlier initiatives. The countries that have been selected have already implemented economic reforms imposed by the financial institutions, often with devastating results.

Friends of the Earth International welcomes this initiative, as it is an important recognition that debt relief is necessary and possible. However we continue to demand 100 percent debt cancellation, including debts owed by all poor countries in economic and social crisis to all financial institutions, and the removal of all economic conditions. This is essential in order to ensure that people in the South can regain control over economic decisions that affect their lives.

We are also campaigning for the recognition of the ecological debt owed by northern countries to countries in the South for decades of resource exploitation. Affected communities in Paraguay and Argentina, for example, are calling upon international financial institutions to provide compensation and remediation for the environmental and social disruption caused by the Yacyretá mega dam. On the opposite side of the world, Friends of the Earth Scotland is building alliances between Scottish and southern communities in order to address the repayment of the ecological debt.

This text, as well as case studies to substantiate the ideas found in this briefing, can be found after 6 July 2005 in the publication 'Nature: Poor People's Wealth' online at the Friends of the Earth International website www.foei.org/publications