BACKGROUNDER

Greening Economies, Fighting Poverty, Living Better and Using Less

Countries meeting at the United Nations Commission on Sustainable Development from 2 to 13 May 2011 will be adopting a set of policy recommendations covering a range of issues that go to the heart of how we use and abuse the Earth's resources. The Commission's recommendations on sustainable consumption and production, mining, waste, transport and the use of chemicals will serve as an important foundation for the 2012 Rio+20 Conference which provides an historic opportunity for countries to plan for the sustainable future that we want.

Sometime this year, the Earth's population will top seven billion people -- seven billion people who will need food, water, affordable energy, clean air, jobs, and liveable communities.

And although our global community will continue to grow, to about nine billion in 2045, the good news is that fewer will live in extreme poverty than ever before.

In 1990 there were 1.8 billion people living below the global poverty line of \$1.25 a day. That number was down to 1.4 billion in 2005 and is projected to drop to 883 million in 2015, according to the World Bank. Taking into account population growth, the incidence of poverty in developing regions dropped from 46 per cent in 1990 to 27 per cent in 2005.

According to the Human Development Report, most people today are healthier, live longer, are more educated and have more access to goods and services. But there are major regional differences. Poverty is still pervasive in sub-Saharan Africa and South Asia, and there are still many people who are hovering just above the poverty line but could easily be pushed back into poverty by an economic downturn or a natural disaster. And there are stark inequalities within countries, too.

A growing global middle class

Still, the growth of a global middle class is undeniable. The McKinsey Global Institute projects China's middle class will increase from 43 per cent of the population today to 76 per cent by 2025. And the growing middle class is likely to seek out the emblems of middle class living — cars, computers, appliances and a higher caloric diet — the trappings of a lifestyle that have been extensively enjoyed in developed countries for years.

According to a study by the Organisation for Economic Co-operation and Development (OECD), while Asia now accounts for less than one-quarter of today's middle class, by 2020 that share could double. At that time, the report found, more than half the world's middle class could be in Asia, and Asian consumers could account for over 40 per cent of global middle class consumption. With the global middle class growing from fewer than half a million in 1960 to a projected four billion in 2030, it is expected that residential water and energy use, car ownership, personal travel, food consumption — notably of meat and dairy — and waste generation will all increase with income.



Burning our way to prosperity

There are many who question whether the traditional model for economic development is still valid.

"For most of the last century, economic growth was fuelled by what seemed to be a certain truth: the abundance of natural resources," United Nations Secretary-General Ban Ki-moon told an audience of business leaders at the World Economic Forum in Davos, Switzerland, in January of this year. "We mined our way to growth. We burned our way to prosperity. We believed in consumption without consequences."

"Those days are gone," he added. "In the 21st century, supplies are running short and the global thermostat is running high."

Already, there are many indications that the planet can no longer handle the demands made by the global economy and that the Earth's resources and ecosystems are overtaxed. According to the Ecological Footprint analysis, under a business-as-usual scenario, two planets would be required by 2030 to support the world's population. The World Wildlife Fund (WWF) estimates that three planets would be needed now if every citizen adopted the UK lifestyle, and five planets if they adopted the average North American lifestyle.

One of the key challenges for countries is to continue to grow and develop in a manner that is "decoupled" from continued growth in the use of resources and energy. According to Tariq Banuri, Director of the UN Division for Sustainable Development, if development continues to follow present consumption and production patterns, pressures on critical ecosystems and life-support systems will become intolerable.

"A key challenge facing the international community is how to sustain and even accelerate the development transition while also realizing the decoupling transition," says Banuri. "An energy transition is also crucial, combining energy access for the poor with diffusion of renewable energy. We must find pathways which simultaneously achieve upward convergence of living standards and downward convergence of resource use and environmental impacts."

Impacts on ecosystems and the climate

The impacts of unsustainable lifestyles are real. About 60 per cent of the world's natural ecosystems are already degraded, and the cost of not protecting these ecosystems is huge. An initiative hosted by the UN Environment Programme (UNEP), looking into the economic benefits of natural ecosystems, *The Economics of Ecosystems and Biodiversity* (TEEB), found that ecosystems and biodiversity clearly underlie all human activity. It found that the annual loss of land-based natural capital — in terms of lost human welfare benefits from forest loss alone — has reached \$2 trillion to \$4.5 trillion.

Global emissions of carbon dioxide have risen by 105 per cent, or on average 2.0 per cent per year, since 1971. They are projected to rise by another 39 per cent by 2030, or by 1.4 per cent per year, contributing to global climate change.



With just 15 per cent of the world's population, rich countries account for 45 per cent of the world's CO2 emissions, while low-income countries, with a third of the world's population, generate just seven per cent of emissions.

But energy use in developing countries is rising. In 1973, according to the International Energy Agency, OECD countries accounted for more than 60 per cent of fossil fuel energy use. In 2007, that share declined to 45 per cent, while energy use grew in all developing regions.

Awash with waste

Along with more than nine billion tons of carbon dioxide, more than two billion tons of municipal solid waste are produced each year by the seven billion people living on this planet.

According to the "Global Waste Management Market Assessment 2007" issued by Key Note, a UK-based private provider of market intelligence, the global volume of municipal solid waste has been increasing by approximately 8 per cent per year.

Electrical and electronic waste, known as E-waste, is one of the fastest growing segments of the waste stream: It is estimated that 315 million personal computers became obsolete in 2004, and 130 million mobile phones were disposed of in 2005, posing a growing environmental threat.

Marine litter is also costly. Modest estimates indicate that the 21 APEC countries spend as much as \$1.3 billion per year to clean up marine litter. In Australia, close to \$6.5 million is spent annually on marine clean-up activities.

The public sector is often ill-equipped to manage solid waste. In many cases in developing countries, between 20 and 50 per cent of a municipality's budget is spent on solid waste management alone while one per cent of the urban population is involved in informal scavenging.

A recent estimate reveals that up to 15 million people engage in waste collection for their livelihood, many of them women and children. Estimates from several cities and towns of developing countries in Asia and the Pacific indicate that as much as 20 to 30 per cent of urban waste is recycled by the informal sector.

Over half a million waste pickers have been reported in Brazil, and the country has close to 2,400 companies and cooperatives involved in recycling and scrap trading. In the Argentine capital, Buenos Aires, waste scavenging has been estimated to have an economic impact of \$170 million per year. India is estimated to have at least a million waste scavengers.

Changing habits and lifestyles

At the 2002 World Summit on Sustainable Development in Johannesburg, countries agreed to develop a global 10-Year Framework of Programmes to green their economies, help corporations develop greener business models, and encourage consumers to adopt more sustainable lifestyles. The Framework will be under consideration during this session of the UN Commission on Sustainable Development.



Developing countries have cautioned, however, that any such framework should not infringe on their right to develop. India, at a preparatory meeting for the Commission, said, "Even as we craft a meaningful sustainable consumption and production programme, we must bear in mind that such a programme should not jeopardise the developmental aspirations of developing countries while they call for decoupling of economic growth from environmental considerations."

Many governments, local and national, have taken steps to move toward cleaner consumption and production.

The city of Copenhagen puts only 3 per cent of its waste into landfill, while in Dhaka, Bangladesh, organic waste is composted and sold as bio-rich fertilizer — reducing emissions, generating jobs and cleaning up the city.

In Gothenburg, Sweden, an integrated waste system collects, sorts and burns 345,000 tons of rubbish annually. The incinerated waste creates energy and is used for heating and electricity, cutting carbon dioxide emissions by 200,000 tons a year.

In Hong Kong, the city is extracting gas from landfill sites to help reduce the use of fossil fuels in town gas production processes.

Near Seattle, a fuel cell power plant powered by digester gas — a by-product of anaerobic digestion of wastewater solids — now generates 1 MW of electricity, the first commercial megawatt-scale project of its kind.

Many other cities, including Oslo, Philadelphia, Sao Paolo, Sydney and Toronto, have built facilities to convert trash to energy, using a wide array of innovative solutions.

Japan has successfully implemented policies to minimize waste and promote effective recycling, resulting in relatively low quantities of waste disposed per capita (430 kg per capita, which is only about two-thirds of the OECD average and on a par with South Africa).

In China, the central government and provincial governments are asked to give priority to environment-friendly products listed in a "green product inventory."

Programmes such as LEED in the United States, PromisE in Finland and GRIHA in India have worked to promote greener standards for buildings, while the Republic of Korea, China, the United States and others have promoted energy efficiency and renewable energy through green stimulus packages.

More information on the Commission on Sustainable Development can be found at www.un.org/esa/dsd.

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