FACTS ABOUT... Consumption and Production Patterns

The Problem

"The major cause of the continued deterioration of the global environment is the unsustainable pattern of consumption and production, particularly in industrialized countries," according to Agenda 21, the action plan for sustainable development adopted at the 1992 Rio Earth Summit.

The 15 per cent of the world's population living in high-income countries account for 56 per cent of the world's total consumption, while the poorest 40 per cent, in low-income countries, account for only 11 per cent of consumption. While most people are consuming more today — with the expansion of the world's economy in the 1990s and rising living standards in many countries — consumption for the average African household is 20 per cent less than it was 25 years ago.

But sustainable consumption is not only a matter of the equitable use of resources. If everyone in the world were to live like an average person in the high-income countries, we would need 2.6 additional planets to support us all, according to the Ecological Footprint Sustainability Measure, an independent measurement based on UN statistics.

Even current consumption and production levels, based on the global average ecological footprint, are 25 per cent higher than the earth's ecological capacity. This means that even at current levels, humanity is eroding the planet's natural capital at a significant rate.

There is some good news. Production and consumption in industrialized societies have shifted from material and energy intensive sectors to services. Coupled with energy efficiency improvement, this has resulted in lower consumption of raw materials per unit of production. The European Union, for example, succeeded in achieving significant economic growth in the 1990s without significant increases in its consumption of fossil fuel. However, these gains in efficiency have been offset by an increase in the volume of goods and services consumed and discarded. More natural resources are being consumed and more pollution is generated.

Since the Earth Summit, new approaches have been used to improve the sustainability of consumption and production. For example:

- **Many governments** have used economic as well as regulatory inducements, such as: environmental taxes; pollution charges; tradable permits for pollution emissions and water use; deposit-refund schemes for waste management; non-compliance fees and performance bonds; and voluntary codes of conduct.
- **Many businesses** have introduced cleaner and more eco-efficient production processes and have reduced pollution and other environmental impacts with eco-friendly design, packaging and labelling.
- **The public** has become more aware of consumer responsibilities and options. In addition to more widespread practice of the three "Rs" — reduce, reuse and recycle — there is a willingness to pay more for organic and environment-friendly products.

Key Statistics

- The annual output of the world economy grew from $31 trillion in 1990 to $42 trillion in 2000, compared to just $6.2 trillion in 1950. This increase in economic activity created millions of new jobs and allowed people to consume more. For example, global telephone connections grew from 520 million in 1990 to 844 million in 1998 — an increase of 62 per cent.
- Although per capita income has increased 3 per cent annually in 40 countries since 1990, more than 80 countries have per capita incomes that are lower than they were a decade ago. A fifth of the world population lives on less than a dollar a day, without the means to purchase basic necessities such as food, clean water and health care.
- World energy consumption has increased significantly since 1992 and is expected to grow at a rate of 2 per cent a year until 2020. Global consumption of fossil fuels has increased by 10 per cent from 1992 to 1999. Per capita use remains highest in developed countries, where people consumed up to 6.4 tons of oil equivalent per year, ten times the consumption in developing countries.

- Consumers will often pay 50 to 100 per cent more for chemical- and pesticide-free produce. As a result, the organic food industry grew by more than 20 per cent annually in the 1990s in the United States, with similar growth rates in other industrialized countries.

What Needs to Be Done

Continuing to live beyond the earth's means is not a viable option in the long term. The issue is how to change consumption and production patterns fast enough to keep pace with economic growth. This cannot be achieved simply through technological change. Businesses are unlikely to take "greening" initiatives voluntarily if they are costly. More people need to change their attitudes that increasing material consumption constitutes progress or success. A more fair and equitable use of resources will also reduce social conflicts.

According to the UN Secretary-General's report on implementing Agenda 21, major improvements in the efficiency of resource use are required in both developed and developing countries. Proposals include:

- Achieving a fourfold increase in energy and resource efficiency in developed countries in the next two or three decades and a possible tenfold increase in resource efficiency in developed countries in the long term;
- Enhancing corporate responsibility and accountability through such initiatives as the Global Compact and the Global Reporting Initiative, and such tools as environmental management accounting and environmental reporting;
- Providing incentives to industry and public institutions to step up research and development into cleaner production technologies;
- Promoting sustainable consumption through government action, including "green" national accounts, tax reform favouring resource conservation and "green" procurement measures.