Sustainable Consumption and Production and the SDGs

Achieving sustainable consumption and production patterns is not just an environmental issue; it is about maintaining the natural capital and hence productivity and capacity of our planet to meet human needs and sustain economic activities. Natural capital combines finite non-renewable and renewable natural resources, including ecological services and the capacity of biophysical systems to absorb pollution, and underpins human welfare and development. If this capital is eroded not only does productivity decrease, but so also does the potential to lift people out of poverty. By maintaining or even increasing natural capital, a shift to sustainable consumption and production (SCP) patterns creates expanded and even new opportunities for poverty eradication, and for enhancing prosperity for all.

Sustainable patterns of consumption and production in a world of limited resources is an essential requirement for sustainable development, as recognized by the World Summit on Sustainable Development, Rio+20 and the High Level Panel (HLP) of Experts on the post-2015 development agenda. The HLP also noted that the Millennium Development Goals did not address this key objective of achieving SCP patterns. Many governments in the Open Working Group on Sustainable Development Goals (SDGs) have recognized that this objective should be embedded in the SDGs, either as a stand-alone goal, or cutting across other goals that may be established on food, health, economic growth, industrialization, cities, and ecosystems.

The issue of food loss and waste is probably the most striking evidence of the dysfunction of our production and consumption patterns. Worldwide, about one-third of all food produced, worth around US$1 trillion, is lost or wasted in producing or consuming food. This loss occurs mostly at the production stages – harvesting, processing and distribution – while food waste typically takes place at the retailer and consumer end of the food-supply chain. In industrialized regions, almost half of the total food wasted, around 300 million tonnes annually, occurs because producers, retailers and consumers discard food that is still fit for consumption. This is more than the total net food production of Sub-Saharan Africa, and would be sufficient to feed the estimated 842 million undernourished people in the world today[1]. It is also an unnecessary waste of resources that the poorest most depend on. Food loss and waste are associated with approximately 173 billion cubic meters of water consumption per year, which represents 24 percent of all water used for agriculture. The amount of cropland used to grow this lost and wasted food is 198 million hectares per year, an area about the size of Mexico.

SUSTAINABLE PRODUCTION

More-sustainable, clean and efficient production of goods and services is central to sustainable development. The supply side of the SCP challenge requires attention to the following objectives: 1) sustained provision of **natural resources** that are key to human survival, such as water, food, energy and productive/habitable land; 2) sustained provision of **factors of production** for economic development, which implies measuring and sustainably managing key renewable and non-renewable resources (such as timber, fibre, metals and minerals); and 3) reducing **pollution** associated with human and economic activity—such as greenhouse gas emissions, toxic chemicals, particulates, and excess nutrient release—that can harm human health or degrade ecosystems.

More emphasis is required on resource efficiency in government policies, public and private sector management practices, technology choices, and investments, so as to deliver more output per unit of input, as well as less associated environmental damage. A shift towards sustainable production can contribute to green, inclusive, and decent employment. For example, sustainable agricultural systems tend to be more labour intensive, as this input replaces often-toxic or polluting chemical inputs. However, creating more decent jobs from sustainable production will in some cases require additional policies. These may include policies to re-direct investment, transfer technologies, and measures to re-train workers.

SUSTAINABLE CONSUMPTION

On the demand side, with current trends, there will be around 9.5 billion people by 2050, and a growing global middle class likely to reach three billion by 2030. However, it is important to understand that sustainable consumption is not necessarily

about consuming less; it is about consuming better – i.e. more efficiently, with less risk to our health and environment. It recognizes that current consumption patterns are drivers for unsustainable production and resource degradation. Sustainable consumption implies not only purchasing behaviours, but includes all types of interactions between individuals and infrastructures (mobility, leisure, housing), which together make up lifestyles and livelihoods. Sustainable consumption requires a convergence of current consumption patterns, and a need for all to consume responsibly. It can be promoted through a mix of policy, economic and voluntary instruments, including formal and informal education. Sustainable consumption can generate economic benefits, social wellbeing, and social inclusion (access to markets, innovation, job creation, healthier livelihoods, and lifestyles), in addition to reducing environmental risks and capitalizing on environmental opportunities.

Achieving sustainable consumption patterns is more technically and politically complex than changing production patterns, because it raises important issues such as human values, equity and lifestyle choices. The sustainable consumption challenge has generated fewer policy initiatives than those seen on sustainable production. There are, however, some large-scale initiatives aimed at improving and spreading the use of energy-efficient appliances and on promoting access to cleaner, affordable forms of energy and related energy services (e.g. Sustainable Energy for All) or reducing food loss and waste. Elevating sustainable consumption to the necessary level of policy and decision-making will require work on education and awareness-raising among consumers, civil society, private sector, and policymakers. At an international level it may also require negotiations which, in an inclusive and objective manner, take account of current imbalances in and impacts of unsustainable consumption patterns.

INTEGRATED SOLUTIONS AS TARGETS

The sustained provision of five essential resources/services (materials, energy, food, water, and shelter) are central to ensuring that one billion people are lifted out of absolute poverty, and that the welfare of many others is improved and maintained. This can be achieved through economic growth that does not degrade resources and by enhancing resource efficiency through a life-cycle management approach that also reduces pollution and avoids "burden-shifting" along supply chains. Solutions already exist that could enable the following targets to be achieved by 2030:

- **Raw materials:** Improve overall resource productivity by 30% in 2030 as a stepping stone towards doubling the resource efficiency of production and consumption by 2050; achieve a national average material intensity of consumption per capita (tonnes per capita) of 10.5 tonnes/capita/year in 2030, with the ultimate aim of achieving 8-10 tonnes/capita/year in 2050.
- **Energy:** Doubling the global rate of improvement of energy efficiency from -1.3 per cent for 1990-2010 to -2.6 per cent; doubling the share of renewable energy in the energy mix (from 18 per cent in 2010 to 36 per cent in 2030); reducing premature deaths due to air pollution by 50 per cent.
- **Food:** Doubling the yearly rate of energy and water productivity increase in food systems; enhancing productivity (by 40 per cent) of food systems by improving ecosystem management and maximizing resource efficiency through sustainable agriculture, fisheries and consumption patterns; reducing by 50 per cent food loss and waste.
- **Water:** Bringing freshwater withdrawals in line with sustainably available water resources to maintain ecosystem and human wellbeing; increasing the safe reuse of urban and industrial wastewater flows; reducing contamination from chemicals and waste of ground and surface waters resulting from human activities;
- **Shelter:** Achieving a 50 per cent reduction in energy-related CO_2 emissions from buildings; achieving a 25 per cent decrease in the rate of raw material extraction for building and construction; renovating all existing social housing to meet energy-efficiency standards, thus reducing costs for the poor and providing healthy environments.

At Rio+20, world leaders adopted the Ten-Year Framework of Programmes on Sustainable Consumption and Production Patterns (10YFP). They also recognized that SCP is a universal concern, and that developed countries should provide leadership in promoting the shift to SCP patterns. The SDGs and Post 2015 Agenda should build on these commitments, so as to accelerate the shift towards SCP patterns and to promote socio-economic development within the safe operating space of the earth's life support systems.

References can be found at: http://www.unep.org/post2015

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