How does resource efficiency relate to the Millennium Development Goals?

POVERTY
MDG1: Eradicate extreme poverty and hunger
- Greater efficiency in resource use and reduced environmental impact from the production of goods and services can reverse their cycle of poor performance and reduced costs. In short, it allows more to be done with less.
- Growth in consumer demand for sustainable products can provide sustainable producers in developing countries with access to new markets as well as price premiums for their products.
- Provision of cleaner and more resource efficient services (such as water energy and food) allows more people to meet their basic needs.

GENDER & EDUCATION
MDG2: Achieve universal primary education
MDG3: Promote gender equality and empower women
- Collecting water and fuel wood places a burden on women and children (especially girls), reducing the time they have available for education in generating income activities. Providing clean and efficient services and water services will help to reduce this burden. Providing clean and sustainable energy will also allow children to do homework after daylight hours.
- Including resource efficiency issues (such as the three Rs of reduce, re-use and re-cycle) in the school curriculum can influence the behavior of young people and their parents.

HEALTH
MDG4: Reduce child mortality
MDG5: Improve maternal health
MDG6: Combat HIV/AIDS, malaria and other diseases
- Water and sanitation-related diseases and acute respiratory infections (primarily from indoor air pollution) are two of the leading causes of under-five mortality. Providing cleaner and more resource-efficient energy and water services will help to reduce the prevalence of these diseases.
- Damage to women’s health from indoor air pollution or from carrying heavy loads of water and fuel wood can make women less fit for childbirth and at greater risk of complications during pregnancy. Providing cleaner and more resource-efficient energy and water services will help to reduce the prevalence of these risks.
- Malnourished, undernourished or malnourished children are at greater risk of death and of poor health outcomes. Improving resource efficiency would help to reduce these pressures.

ENVIROMENT
MDG7: Ensure environmental sustainability
- Improved resource efficiency helps to achieve the objective of decoupling economic growth from environmental degradation, thereby slowing biodiversity loss.
- Promoting the efficient use of limited water resources through techniques such as drip irrigation and rainwater harvesting helps to lower stress on water resources and improve access to water supplies.
- Integrated waste management, including through the three Rs approach of reduce, re-use and re-cycle, can help to improve the lives of people living in cities, as can the adoption of sustainable urban transport solutions such as integrated rapid transport systems.

DEVELOPMENT PARTNERSHIP
MDG8: Global partnership for development
- Technology transfer through development assistance can allow developing countries to "leapfrog" to a sustainable development path, bypassing inefficient, polluting and ultimately costly phases of development.
- International coordination and cooperation efforts to promote resource efficiency such as those based on the Marrakech Process on Sustainable Consumption and Production and Production to help to promote international partnerships, efforts and initiatives to stimulate resource efficiency.
- The Green Economy initiative endeavours to mobilize and redirect the global economy on investments in clean industries and technologies and natural infrastructure. In doing so, it aims to contribute to the crafting of a global set of actions that will allow the world to meet the MDGs and to achieve the Millennium Development Goals.

To find out more about the linkages between poverty alleviation and environmental sustainability in more detailed case studies, please read the Environment and Poverty Times.

The 6th issue of the Environment and Poverty Times, launched in September 2009, includes thought-provoking articles on economic shifts that provide alternatives for a more sustainable future. These are complemented by concrete examples from the world highlighting initiatives on energy, waste management, agriculture, construction and tourism, which promote sustainable consumption and production.

Please visit the interactive e-book or download the PDF at www.grida.no/publications/et/ep6/ebook.aspx.

Global partnership for development
The Marrakech Process is a global process to support the implementation of projects and strategies on Sustainable Consumption and Production (SCP) and the elaboration of a 10-Year Framework of Programmes (10YFP). The process responds to the call of the World Summit on Sustainable Development (WSSD), that took place in Johannesburg in 2002, to develop a 10YFP to support regional and national initiatives to promote the shift towards SCP patterns. The proposal of the 10YFP will be reviewed by the Commission on Sustainable Development (CSD) during the 2010/11 biennium cycle. The Marrakech Process is named after the city where the First International Expert Meeting on the 10YFP took place in 2004.

Notes: South Korea investments and variations relative to 2008-2009.

India
China and India.

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Resource Efficiency for Development

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Exploring the linkages between resource efficiency/ sustainable consumption and production and poverty alleviation.

Resource efficiency (RE) is about ensuring that natural resource use and pollution associated with the production and use of goods and services is reduced over their full life cycle. This contributes to human wellbeing by delivering more product. In a cleaner and safer way, using less materials and energy. More human needs can be met using fewer resources and natural capital on earth. The sustainable consumption and production (SCP) patterns thus generated effectively expand the natural resource base underpinning development processes.

Why are RE and SCP relevant for developing countries?

Many people in developing countries are directly dependent on their natural environment to create economic activities and meet their basic needs. They are often also the most vulnerable to pollution, climate changes and other consequences of environmental degradation. Growing demand for sustainable environmental services and goods will be driven by the twin demands for improved living standards of the world’s growing cities and the need to avoid environmental degradation.

Many developing countries have committed to sustainable development. SCP modes of production are becoming necessary to harmonise growth and environmental protection. SCP modes of production can help countries to meet basic needs in an efficient, equitable and sustainable way. Many developing countries give developing countries the opportunity to bypass inefficient phases of development; reducing costs and accelerating and strengthening economic development.

What is the relevance of ‘sustainable consumption’ to poor people?

Meeting human needs in a sustainable manner is at the heart of SCP. SCP must deliver better goods and services to people. It is about delivering more efficient goods and services. It is about making the most of our available resources. This is clearly relevant to poor people who often consume too little to meet their basic needs. The increasing demand for more efficient and sustainable products can also create new jobs and income for poor communities that are able to meet that demand. Developing regions of organic food crops from developing countries could also provide new opportunities, and help communities to improve their livelihoods. Therefore, sustainable consumption in developing countries supports people and governments to develop in arid areas. Sustainable forest management maintains more water efficient irrigation techniques, or enhancing traditional water harvesting techniques. Sustainable forest management and traditional water harvesting techniques can also help to prevent desertification and to protect watersheds and soil resources and offers opportunities to harvest wild, non-timber food and fibre crops. Sustainable forest management and traditional water harvesting techniques can also help to prevent desertification and to protect watersheds and soil resources and offers opportunities to harvest wild, non-timber food and fibre crops.

What is leapfrogging?

Leapfrogging is the possibility offered to developing countries to bypass the inefficient, polluting, and ultimately costly phases of development. The possibility is offered to developing countries to leapfrog the inefficient, polluting, and ultimately costly phases of development, reducing costs and accelerating and strengthening economic development.

Examples of leapfrogging include:

- Some 1,400,000 US dollars in coffee revenues were invested in a community-based eco-friendly coffee cultivation programme.
- The wind power industry employs more than 400,000 people; the solar photovoltaics sector, an estimated 170,000; and the solar power industry, more than 600,000 worldwide.
- Estimated 18%.
- The South-South initiative on non-timber food and fibre crops.
- The wind power industry employs more than 400,000 people; the solar photovoltaics sector, an estimated 170,000; and the solar power industry, more than 600,000 worldwide.
- The ‘agua para todos’ (water for all) initiative brings together the municipal water company, a water consulting and the local community, via the national nonprofit foundation for water or environmental partnerships to greatly extend access to water in rural areas.
- In addition to providing clean and affordable water, education is provided to local communities about water quality and health issues. The initiative even goes beyond what the water company can do by construction with the participation of water-educational training facilities.
- The organisation Water for Life in Nigeria has increased its overall income by 9% per year as local communities keep 70% of the tour fees. The organisation has also shown that the cycle of poverty and environmental degradation can be broken through sustainable management of their natural resource, and that they can improve their living conditions by taking care of their environment.

SOME PRACTICAL EXAMPLES FROM AROUND THE WORLD

**Latin America**

- **Costa Rica** is an example of how market-based strategies can be used to recycle recyclable waste. This allows the community to generate employment and earnings from recycling; and offers the opportunity to local communities to take action in the face of global environmental challenges.

**Asia-Pacific**

- **Cambodia** - has developed an innovative approach to recycling electronic waste. This ensures the collection and appropriate disposal of hazardous waste and recycling of materials such as semi-precious metals; creating benefits in terms of environment, health and jobs. Furthermore, it highlights the potential for local communities to take control of their destiny.

- **Indonesia** - light design, a for profit social enterprise, drives to replace at least 30 million incandescent lamps with energy efficient LED lamps in the provinces of Java and Bali. The company is striving to save energy and reduce costs, while enhancing the quality of lighting for southern Indonesia’s capital city of Jakarta. The company is committed to reducing the city’s carbon footprint while improving the quality of life of millions of people.

- **Bhutan** - the country has embarked on an ecological civilization pathway that’s expected to bring millions of dollars of income from hydropower, without putting its rich biodiversity at risk. The country's government has set a goal of achieving carbon-neutrality by 2020 and making 10% of its national budget revenue come from renewable energy. The government has also committed to preserving 60% of its land in protected areas, with the aim of maintaining its rich biodiversity and ensuring that its natural resources are sustainably managed.

- **South-East Asia** (excluding Thailand) - after the tsunami devastated the area in 2004, the government launched a programme working for the sustainable management of its natural resources. The government has been able to quickly recover from the disaster and to establish sustainable practices to ensure the long-term sustainability of its natural resources. The government has also been able to attract foreign investment to help develop the area, resulting in a significant increase in the area’s economic growth.

**Africa**

- **Nigeria** - the country has embarked on an ecological civilization pathway that’s expected to bring millions of dollars of income from hydropower, without putting its rich biodiversity at risk. The government has set a goal of achieving carbon-neutrality by 2020 and making 10% of its national budget revenue come from renewable energy. The government has also committed to preserving 60% of its land in protected areas, with the aim of maintaining its rich biodiversity and ensuring that its natural resources are sustainably managed.

- **Senegal** - the country’s government has been able to quickly recover from the disaster and to establish sustainable practices to ensure the long-term sustainability of its natural resources. The government has also been able to attract foreign investment to help develop the area, resulting in a significant increase in the area’s economic growth.

- **Tanzania** - the government has been able to quickly recover from the disaster and to establish sustainable practices to ensure the long-term sustainability of its natural resources. The government has also been able to attract foreign investment to help develop the area, resulting in a significant increase in the area’s economic growth.

**Europe**

- **Dutch NGO** - has been able to quickly recover from the disaster and to establish sustainable practices to ensure the long-term sustainability of its natural resources. The government has also been able to attract foreign investment to help develop the area, resulting in a significant increase in the area’s economic growth.

**Middle East**

- **Saudi Arabia** - the government has been able to quickly recover from the disaster and to establish sustainable practices to ensure the long-term sustainability of its natural resources. The government has also been able to attract foreign investment to help develop the area, resulting in a significant increase in the area’s economic growth.

**North America**

- **Canada** - the government has been able to quickly recover from the disaster and to establish sustainable practices to ensure the long-term sustainability of its natural resources. The government has also been able to attract foreign investment to help develop the area, resulting in a significant increase in the area’s economic growth.

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