Global Drylands:
A UN system-wide response

Prepared by the Environment Management Group

UNITED NATIONS

The following key findings are from the forthcoming report *"Global Drylands: A UN System-wide Response"* by the Environment Management Group. The report will be launched at the 10th meeting of the Conference of Parties to the United Nations Convention to Combat Desertification in October 2011 in Gyeongnam, Republic of Korea.

Drylands, or ecosystems characterised by a lack of water, cover some 40% of the world's terrain. Ranging from cultivated lands and grasslands to savannas and deserts, these parched environments support two billion people, 90% of them in developing countries. Half these inhabitants rely directly on dryland ecosystem services for their daily survival, either through rain-fed or irrigated farming, or widespread pastoralism. Yet drylands are being degraded and this is threatening the well-being of communities on every continent on Earth.

The report *"Global Drylands: A UN System-wide Response"* highlights the need to include drylands within debates on contemporary global issues. In it, United Nations' experts present a coherent strategy to address the unique needs of fragile dryland environments and the people they support. The report synthesizes findings from extensive consultations involving UN agencies, as well as researchers and practitioners working on dryland and development issues.

Supporting the drylands agenda by 'delivering as one'

- Relevant UN agencies have joined forces to highlight the importance of drylands to key emerging issues on the global agenda, including climate change, food security and human settlements.
- The UN believes alleviating dryland issues requires a positive and proactive development approach.

How dryland degradation affects people's lives

- Drylands become degraded when water and land are used unsustainably. These effects are exacerbated by climate change.
- Desertification, the primary process by which drylands become degraded, affects 6 million km2. The loss of plants and trees causes soil to blow away, initially reducing crop yields and eventually rendering land infertile.
- Up to 6% of dryland inhabitants live in areas already affected by desertification, and a much larger percentage of people live with the threat of desertification.
- Climate change is already causing significant decreases in crop yields within some rain-fed African agricultural lands, and some models forecast a worsening of the situation by 2020.
- Dryland degradation reduces the gross domestic product of some developing countries by as much as 48%.

Preserving dryland biodiversity brings multiple benefits

- Dryland biodiversity provides important ecosystem services that benefit local communities. Forests and woodlands are particularly important as they provide shade and moisture, house pollinators, protect nutrients, are fire resistant and reduce water run-off, erosion and flooding.
- Healthy drylands can help mitigate climatic changes. The carbon stored in dryland ecosystems, primarily within soils, accounts for more than one third of the global carbon stock. Myths, market failures, weak incentives and gender inequalities have contributed to preventing the potential benefits of drylands from being fully realised.

Investments in drylands can pay off

- Many drylands in developing countries have become investment deserts, yet sustained higher levels of investment can enhance productivity and boost incomes.

- For the greatest gains, investments need to be configured to the short- and long-term variability of these human-ecological systems.

There are opportunities to suit all sectors

- There are opportunities for the public, private large-scale commercial, community and household, and private small-scale sectors to invest.
- Investments can be focused on areas such as renewable energy, education, health, water, farmland, pasture and livestock, woodland and trees, land use, conservation and tourism, urban development, markets, innovation and risk management.

The UN is uniquely placed to promote investments in drylands

- A coherent and holistic UN-wide response, benefiting from the organization's global reach, diversely focused activities and wide-ranging expertise, can be the catalyst for increasing investments in drylands.
- The 10-year strategic plan of the United Nations Convention to Combat Desertification (UNCCD) presents a major opportunity to address the underlying causes of land degradation. It aims to facilitate partnerships that will reverse current degradation and prevent future desertification, in turn reducing poverty and underpinning environmental sustainability.
- The UN can contribute to the international drylands agenda by:

    → enhancing the economic and social well-being of dryland communities in a sustainable manner.

    → enabling dryland inhabitants to sustain their local ecosystem services and contribute to safeguarding global public goods.

    → strengthening the capacity of global dryland ecosystems and communities living within them to manage and adapt to environmental change, including climate change.

The UN's cohesive response will address causes of land degradation and create conditions that promote sustainable land management and development in drylands

Different UN agencies can play complementary roles that:

1. help governments create an **enabling environment** for dryland development by: improving governance, infrastructure and education; harmonising natural resource strategies; and supporting appropriate investment policies
2. promote the concept of **value chains**, by working with the private sector to develop tools (such as eco-labelling) that encourage sustainable production and consumption
3. encourage **diversification** of income streams and livelihoods in drylands to reduce land-use pressures
4. encourage the **intensification** of water-efficient agriculture by adopting sustainable land management practises
5. work towards **reducing transaction costs** for investments into drylands, for example by promoting risk management and climate-aware technologies
6. support **public and private investments in drylands** by classifying these to match sustainability, carbon sequestration and renewable energy goals
7. support **social protection**, for example by using scenario modelling to forecast winners and losers, or virtuous and vicious outcomes, of adopting certain investment proposals, taking into consideration impacts related to gender and age.

What are drylands?

Drylands are ecosystems that receive relatively little rain or snow. They exist on every continent and host diverse cultures and landscapes. The report *"Global Drylands: A UN System-wide Response"* defines drylands as terrains with an aridity index of less than 0.65. The aridity index is a measure of the ratio between average annual precipitation and total annual potential evapo-transpiration.

The Environment Management Group's report *"Global Drylands: A UN System-wide Response"* signifies a milestone in the effort made by diverse UN agencies to implement the UNCCD's 10-year strategic plan. By 'delivering as one', the UN has effectively used its extensive expertise, operational capabilities and advocacy role at national, regional and global levels, to successfully address interlinked environment, development and humanitarian issues.

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