

Author(s): Paula Fe Francisco, Mariko Nakagawa, Renea Cox, 2010

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MDG GOAL #7



 The Noun Project

Paula Fe Francisco, Mariko Nakagawa, Renea Cox

INITIATIVES TO ENSURE ENVIRONMENTAL SUSTAINABILITY

- http://www.youtube.com/watch?v=X_khs-lvmXg

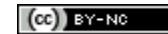




The Noun Project

TARGET 1

Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources




ajagendorf25, flickr

- The rate of deforestation shows signs of decreasing, but is still alarmingly high
- Global deforestation—mainly the conversion of tropical forests to agricultural land—is slowing, but continues at a high rate in many countries. Over the last decade, about 13 million hectares of forest worldwide were converted to other uses or lost through natural causes each year, compared to 16 million hectares per year in the 1990s.

TARGET 1

- South America and Africa continue to show the largest net losses of forests, at just under 4 million and 3.4 million hectares per year, over the period 2000–2010
- In the developed regions, Australia experienced a large loss, partly due to severe drought and fires since 2000
- Asia, registered a net gain of some 2.2 million hectares annually in the last decade, mainly because of large-scale afforestation programs in China, India and Vietnam.
- These 3 countries have expanded their forest area by a total of nearly 4 million hectares annually in the last 5 years

TARGET 1

- A decisive response to climate change is urgently needed
 - In 2007, global emissions of carbon dioxide (CO₂) again rose, reaching 30 billion metric tons, an increase of 3.2% from the previous year.
 - Per capita emissions remain highest in the developed regions—about 12 metric tons of CO₂ per person per year in 2007, compared to about 3 metric tons on average per person in the developing regions and 0.9 metric tons in sub-Saharan Africa, the lowest regional value.
 - The rate of growth in global CO₂ emissions is expected to have declined in 2008 as a result of the global financial crisis, and global emissions may even have fallen between 2008. But the same estimates also suggest that the decline will be short-lived: following economic recovery.
- 

TARGET 1

- Atmospheric levels of ozone-depleting substances would grow 10-fold by 2050 without intervention.
- The resulting exposure to the sun's ultraviolet radiation would likely have led to up to 20 million additional cases of skin cancer and 130 million more cases of eye cataracts; it would also have caused damage to human immune systems, wildlife and agriculture.
- For much of the world, the time it takes to get sunburned would have been dramatically reduced, due to a 500-per cent increase in DNA-damaging ultraviolet radiation.





The Noun Project

TARGET 2

Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss



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tcktcktck, flickr

- Key habitats for threatened species are not being adequately protected
- Biodiversity is vitally important for human well-being since it underpins a wide range of ecosystem services on which life depends
- Billions of people, including many of the poorest, rely directly on diverse species of plants and animals for their livelihoods and often for their very survival.
- The irreparable loss of biodiversity will also hamper efforts to meet other MDGs, especially those related to poverty, hunger and health, by increasing the vulnerability of the poor and reducing their options for development.

TARGET 2

- Although nearly 12% of the planet's land area and nearly 1% of its sea area are currently under protection, other areas critical to the earth's biodiversity are not yet adequately safeguarded.
- In 2009, only half of the world's 821 terrestrial ecoregions—large areas with characteristic combinations of habitats, species, soils and landforms—had more than 10% of their area protected.
- Under the Convention on Biological Diversity, one tenth of the areas of all these ecoregions should have been under protection by 2010.






The Noun Project

TARGET 3

Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation



 Energy for All 2030, flickr

- Safe water supply remains a challenge in many parts of the world
- Accelerated and targeted efforts are needed to bring drinking water to all rural households
- The world is on track to meet the drinking water target, though much remains to be done in some regions



TARGET 3

- Despite overall progress in drinking water coverage and narrowing of the urban-rural gap, rural areas remain at a disadvantage in all developing regions.
- The largest disparities are in Oceania and sub-Saharan Africa, but significant differences between urban and rural areas are found even in regions that have achieved relatively high coverage, such as Western Asia and Latin America and the Caribbean.



TARGET 3

- The proportion of people who have the benefit of piped water is more than twice as high in urban areas than in rural areas—79% versus 34%.
- Disparities are particularly evident in Oceania and sub-Saharan Africa, where rural coverage of piped water remains very low at 37% and 47%, as compared to 91% and 83% in urban areas.
- Globally, 8 out of 10 people who are still without access to an improved drinking water source live in rural areas.



TARGET 3

- In 2008, 48% of the population in developing regions were without basic sanitation.
- Improvements in sanitation are bypassing the poor
- Among sanitation practices, the one that poses the greatest threat to human health is open defecation.
 - This practice has declined in all developing regions.
- The largest relative decline was in two regions where open defecation was already practiced the least—Northern Africa and Western Asia.
- The least progress (a decrease of 25%) was made in sub-Saharan Africa, where rates of open defecation are high. Southern Asia, which has the highest rate of open defecation in the world (44% of the population), made only limited progress.

TARGET 3

- The practice of open defecation by 1.1 billion people is an affront to human dignity.
- Indiscriminate defecation is the root cause of fecal-oral transmission of disease, which can have lethal consequences for the most vulnerable members of society—young children.
- If open defecation rates continue to decline, the impact on reducing child deaths could be enormous, primarily by preventing diarrheal diseases and the stunting and under nutrition that tend to follow.





The Noun Project

TARGET 4

By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers



wallygrom (very busy at work), flickr

- The recent housing crisis, which contributed to the larger financial and economic downturn, may offset the progress that was made since 1990.
- Although the crisis did not originate in developing regions, it has hit their populations and cities, where millions continue to live in precarious conditions, often characterized by a lack of basic services and serious health threats.



TARGET 4

- Slum prevalence remains high in sub-Saharan Africa and increases in countries affected by conflict.
- In conflict-affected countries, where the proportion of urban populations living in slums increased from 64% to 77% between 1990 and 2010.
- The impact of conflict is also reflected in the increased proportion of slum dwellers in Western Asia, largely due to the deterioration of living conditions in Iraq.
- There, the proportion of urban residents living in slums has more than tripled—from 17% in 2000 (2.9 million people) to an estimated 53% in 2010 (10.7 million people).



TARGET 4

- Among developing regions, sub-Saharan Africa is estimated to have the highest prevalence of urban slums, followed by Southern Asia.
- Less than a third of the populations of other developing regions are living in slums.
- Despite the efforts of some sub-Saharan African countries and cities to expand basic services and improve urban housing conditions, inaction by others has prevented overall progress from keeping pace with rapidly expanding urban populations.




INDICATORS FOR MONITORING PROGRESS

- FOR GOALS 1 AND 2
 - Proportion of land area covered by forest
 - CO2 emissions, total, per capita and per \$1 GDP
 - Consumption of ozone-depleting substances
 - Proportion of fish stocks within safe biological limits
 - Proportion of total water resources used
 - Proportion of terrestrial and marine areas protected
 - Proportion of species threatened with extinction



 ronaldhole, flickr



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INDICATORS FOR MONITORING PROGRESS

○ FOR GOAL 3

- Proportion of population using an improved drinking water source
- Proportion of population using an improved sanitation facility



 Save The Children, flickr

○ FOR GOAL 4

- Proportion of urban population living in slums



 cplqn, flickr




KEY CONSTRAINTS & CHALLENGES TO ACHIEVING MDG 7

- Inadequate integration of environmental sustainability into national development plans
- Policy incoherence and weak institutional environments
- Lack of adequate incentives to conserve environmental resources
- Limited access to low-cost, appropriate technologies and innovative solutions; infrastructure and services for portable water and sanitation
- Unsustainable environmental practice including over-fishing, deforestation and poaching
- Capacity gaps
- Ineffective implementation practices
- Limited access to information and low awareness
- Inadequate resources and creative financing strategies



IMPROVING DEVELOPMENT RESULTS

- ***Build awareness of the issues locally & mobilize support for action***
 - Educates people of community, gains support for interventions, and enables the program to tap into indigenous knowledge to better achieve its goals and objectives.
 - ***National and local commitment and ownership***
 - Involvement of key stakeholders from the very start of program development, environmental policy, and planning processes
 - Ensures broad ownership, and improves the efficiency and effectiveness of its implementation.
 - Proposed solutions should respect local customs, social structures and traditional cultures
- 

IMPROVING DEVELOPMENT RESULTS

- ***Prioritizing gender equality and the needs of women***
 - Women carry most burden—responsible for supplying water to their family from distant places
 - Involve in identifying problems, collecting data, implementing the program, evaluating the approach
- ***Building on local traditions and practices***
 - Successful conservation approaches should build on traditional land use patterns and cultural resources, rather than seek to replace them, in order to maximize effectiveness and sustainability



INTEGRATING THE PRINCIPLES OF SUSTAINABLE DEVELOPMENT INTO COUNTRY POLICIES AND PROGRAMS

- <http://www.youtube.com/watch?v=Ix-1XFQDIUU>




What has worked?

○ *Reduction of ozone-depleting substances*

- **1987:** Montreal Protocol lead to depletion of 98% of ozone-depleting substances by 2008
- **2007:** Almost all governments committed to eliminating chloroflourocarbons
- **2010:** Marks the beginning of a world virtually free of the most widely used ODSs



 weegeebored, flickr



What has worked?

○ *Installation of water systems*

● **Brazil**

○ One Million Rural Cisterns Programs

- Innovative water harvesting technology helped bring clear water to about 36 million people in semi-arid North-Eastern Brazil since 2002
- Freed women from fetching water from distant sources and allow them to focus on income generation and education

● **Burkina Faso**

- Water tower and pipe system installed for 1,300 villagers in 2006
- 20 liters of affordable clean water available every day for each household

● **Sri Lanka**

- Rainwater harvesting tanks
 - Saves households an average of \$31 per month



 E>mar, flickr



What has worked?

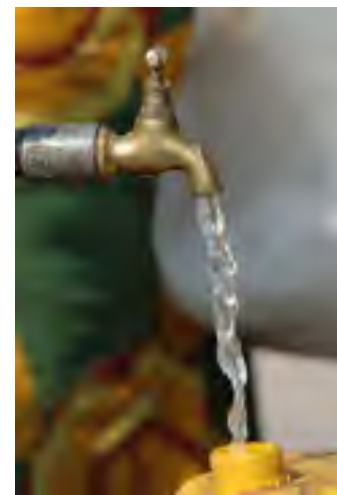
- ***Expanding good sanitation practices***


- **Kyrgyzstan**

- Community based project focused on good sanitation and hygiene practices
 - Improved water supply to school and hygienic education
 - Decline in incidence of lamblasis by 76% in villages

- **Urban South Asia**

- Women, Well-being, Work, Waste and Sanitation (4WS) projects
 - Increased use of sanitary toilets from 79% to 100% in Bangladesh, 91% India, and 89% in Sri Lanka



 Julien Harneis, flickr



CONTRIBUTORS

- United Nations (UN)
 - UN Development Programme (UNDP)
 - UN Children's Fund (UNICEF)
 - UN Economic and Social Commission for Western Asia (ESCWA)
 - UN Economic and Social Commission for Asia and the Pacific (ESCAP)
 - UN Educational, Scientific and Cultural Organization (UNESCO)
 - UN Department of Economic & Social Affairs
 - UN Industrial Development Organization (UNIDO)
 - United Nations Environment Programme (UNEP)
- Food and Agriculture Organization (FAO):
- Global Environment Facility (GEF)
- World Health Organization (WHO)
- World Bank



 Sweet Trade Photography, flickr



 PD-Self

Open Clipart Gallery



 PD-Self

Open Clipart Gallery



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www.unido.org

Please see original images of other logos at their respective websites (see Additional Resources)

WHAT ARE THE ORGANIZATIONS DOING?

UNIDO

Cleaner Production Centers

Partners with UNEP

Aim: Improve usage of energy, water and other natural resources, while also reducing waste and emissions, in developing and transition economies to create cleaner environment

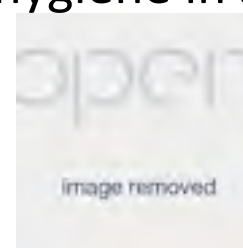
UNICEF

○ **Water quality surveillance systems**

- Screens for contaminants (human feces, arsenic, fluoride, nitrates)

○ **Low cost sanitation, water and hand washing facilities**

- Improve sanitation and hygiene in schools



Please see original image of the Tap Project at <http://www.tapproject.org/>



WHAT ARE THE ORGANIZATIONS DOING?

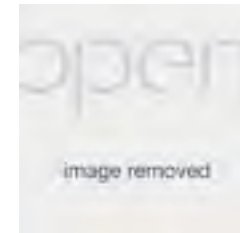
UNDP

Community Water Initiative

- Decentralized, demand driven funding mechanism for sustainable community-based water and sanitation development and management. Supports:
 - Community based water supply and sanitation services using low-cost system manageable by communities
 - Water resource conservation and sustainable land management to mitigate effects of drought and flooding in adapting to climate change
 - Provide clean energy from water pumping
 - Capacity building for community level governance

○ Solar energy systems

- 8,400 households in Tanzania
- Reduced carbon dioxide emissions (.93 metric tons/yr by the end of 2009)



Please see original image of UNDP Goal Wash at <http://www.undp.org/water/goal-wash.shtml>

○ GoAL WaSH

- Aim: accelerate achievement of the water and sanitation MDGs through strategically targeted interventions that strengthen governance of the water and sanitation

○ UN-REDD PROGRAM

- Partners: FAO, UNEP
- The United Nations Collaborative Program on Reducing Emissions from Deforestation and Forest Degradation in developing countries

WHAT ARE THE ORGANIZATIONS DOING?

ESCWA

- Establishment of regional mechanism for monitoring water supply and sanitation
 - Arab countries



 dibytes, flickr

UNECE

- Regional Biomass Action Plans
 - Help private sector and regional governments integrate sector with forestry, woodworking, agricultural, electricity, municipal heating, waste and recycling centers



 PD-SELF

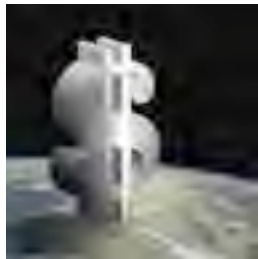
Gary Anderson, The Noun Project



WHAT ARE THE ORGANIZATIONS DOING?

ESCAP

- Turn trash into cash
 - Region wide project, launched in Bangladesh
 - Aim: allows developing countries across Asia and the Pacific to develop & implement solid waste management strategies that are decentralized, pro-poor, low carbon, and self financing



DonkeyHotey, flickr

UNESCO

- Education for Sustainable Development
 - Seeks to integrate the principles, values, and practices of sustainable development into all aspects of education and learning



Where do we stand?

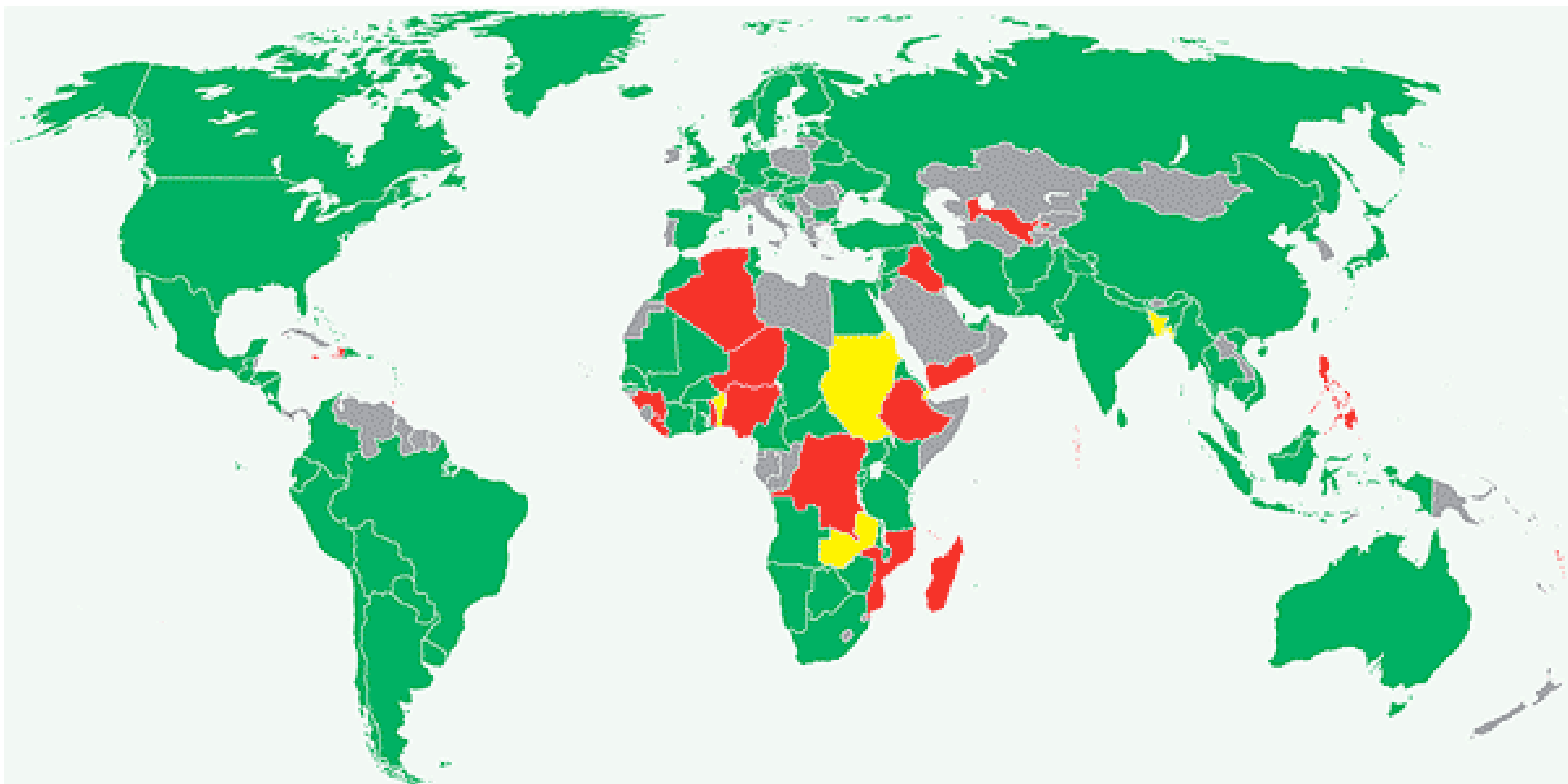


The Noun Project

The world will meet or even exceed the drinking water target by 2015 if current trends continue.

- By that time, an estimated 86% of the population in developing regions will have gained access to improved sources of drinking water, up from 71% in 1990
- Regions that have already met the target:
Northern Africa, Latin America and the Caribbean,
Eastern Asian and Southeastern Asia
- Globally, 8 out of 10 people who are without access to improved drinking water live in rural areas





Progress towards the MDG target, with countries classified according to the following thresholds:

- **On track:** Use of improved sources of drinking water in 2004 was less than 5 per cent below the rate needed for the country to reach the MDG target, or use was 95 per cent or higher
- **No progress:** Use of improved sources of drinking water in 2004 was more than 10 per cent below the rate needed for the country to reach the MDG target, or the 1990–2004 trend shows unchanged or decreasing use
- **Insufficient progress:** Use of improved sources of drinking water in 2004 was 5 per cent to 10 per cent below the rate needed for the country to reach the MDG target
- **Data were insufficient to estimate trends**

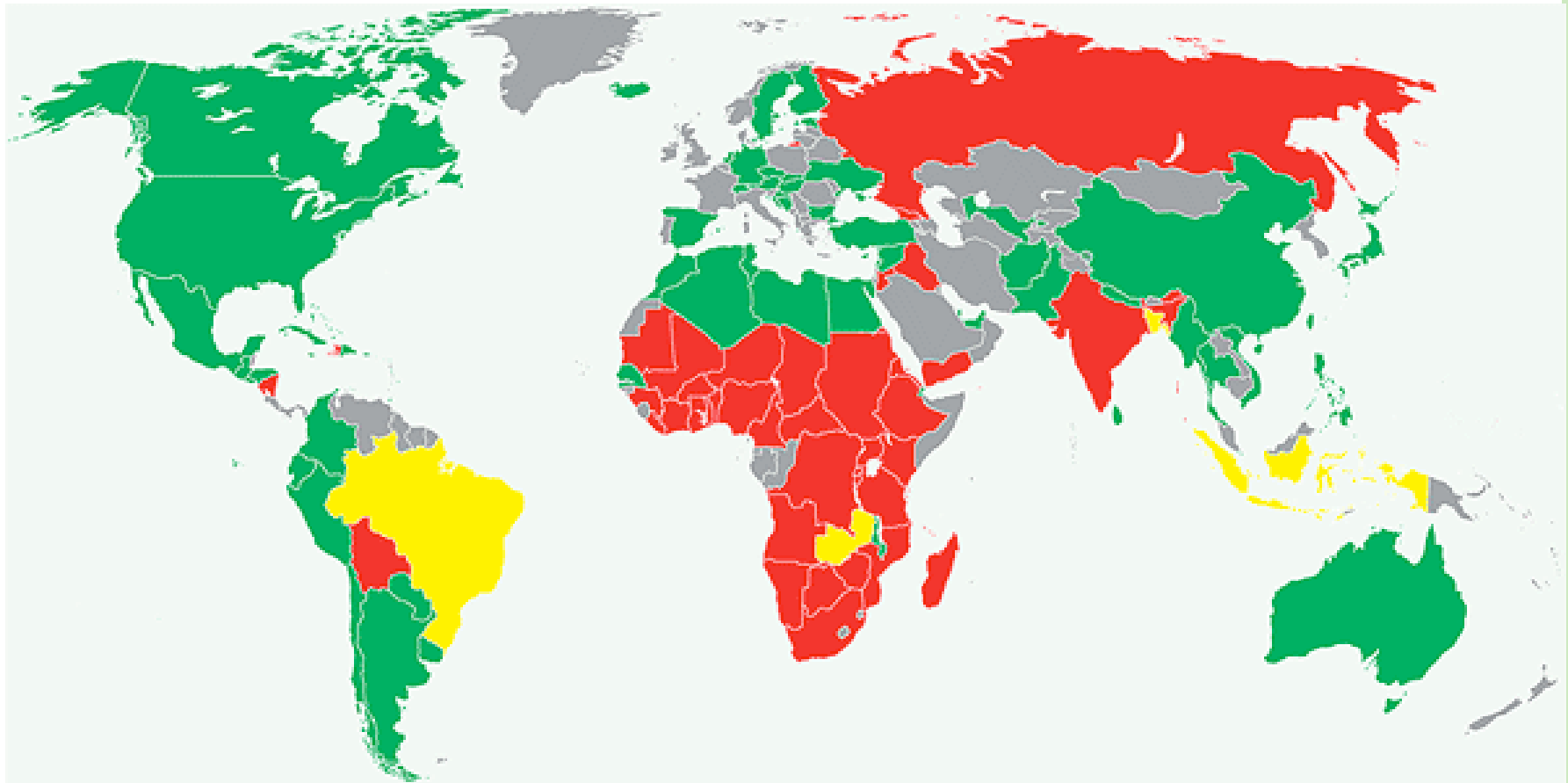
Where do we stand?



With half the population of developing regions lacking basic sanitation, the 2015 target appears to be out of reach.

- 2008: An estimated 2.6 billion people around the world lacked access to improved sanitation such as toilets or latrines
- The number will grow to 2.7 billion by 2015 if the trend continues
- Regions lagging behind: sub-Saharan Africa and South Asia
 - 69% and 64% of their populations still lack access, respectively





Progress towards the MDG target with countries classified according to the following thresholds:

- **On track:** Use of improved sanitation facilities in 2004 was less than 5 per cent below the rate needed for the country to reach the MDG target, or use was 95 per cent or higher
- **Insufficient progress:** Use of improved sanitation facilities in 2004 was 5 per cent to 10 per cent below the rate needed for the country to reach the MDG target
- **No progress:** Use of improved sanitation facilities in 2004 was more than 10 per cent below the rate needed for the country to reach the MDG target, or the 1990–2004 trend shows unchanged or decreasing use
- **Data were insufficient to estimate trends**

Where do we stand?



The Noun Project

The world has missed the 2010 target to slow the decline of biodiversity.

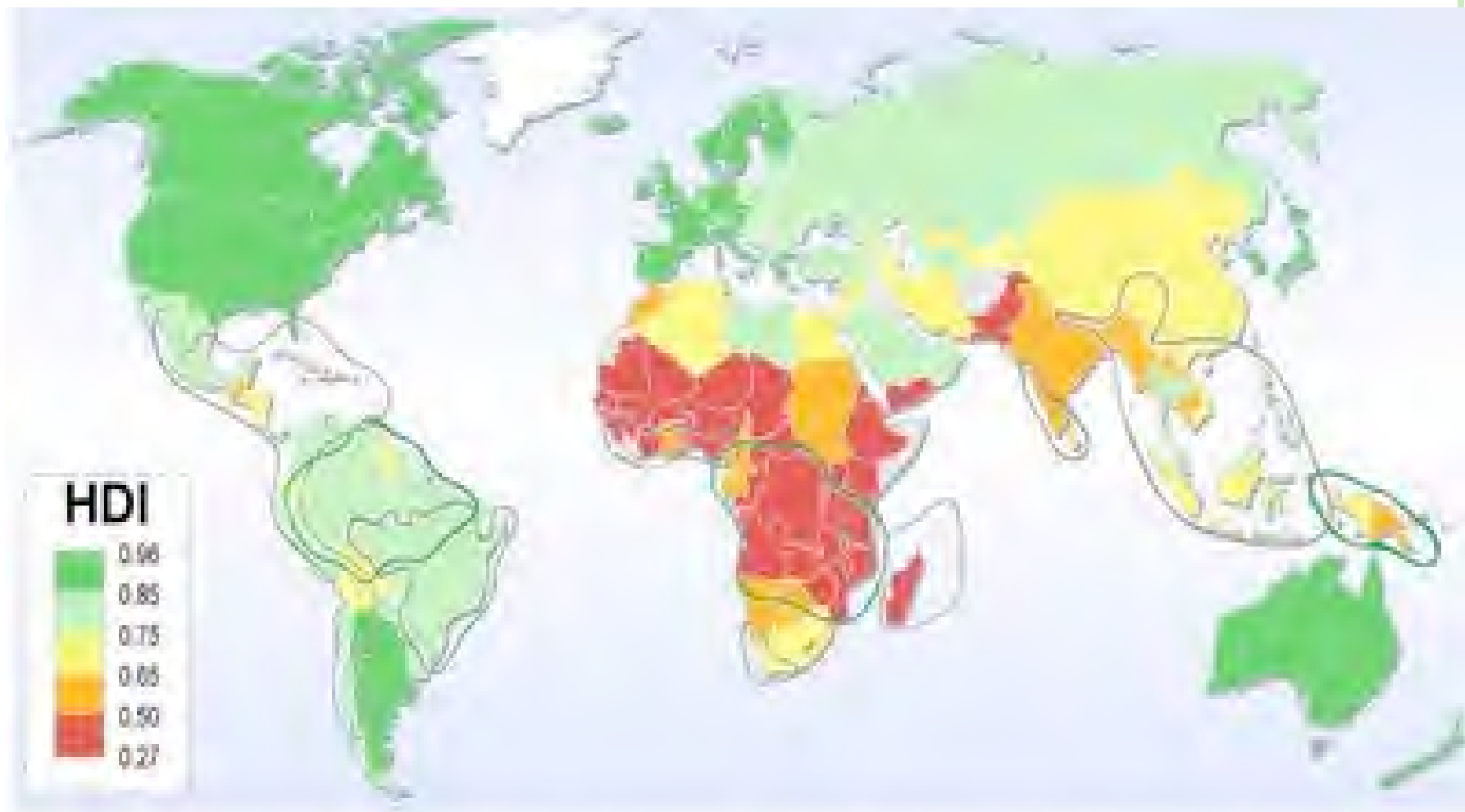
- 17,000 species of plants and animals currently at risk of extinction & threat of extinction is growing by the day
- Main causes of biodiversity loss:
 - High rates of consumption
 - Habitat loss
 - Invasive species
 - Pollution
 - Climate change
- Despite increased investment, these causes are not being sufficiently addressed



THE WORLD HAS MISSED THE 2010 TARGET TO SLOW THE DECLINE OF BIODIVERSITY.

- Rates of deforestation have slowed but remain fastest in some of the most biologically diverse regions
- Tree planting programs combined with natural expansion of forests have added more than 7 million hectares of new forest annually
- 2000-2010: The net loss of forest area was reduced to 5.2 million hectares per year, down from 8.3 million in 1990-2000
- Regions with the largest net losses of forests: South America and Africa





Selected terrestrial biodiversity hotspots

Selected major wilderness areas

Sources: UNDP 2004, Conservation International 2004

Where do we stand?



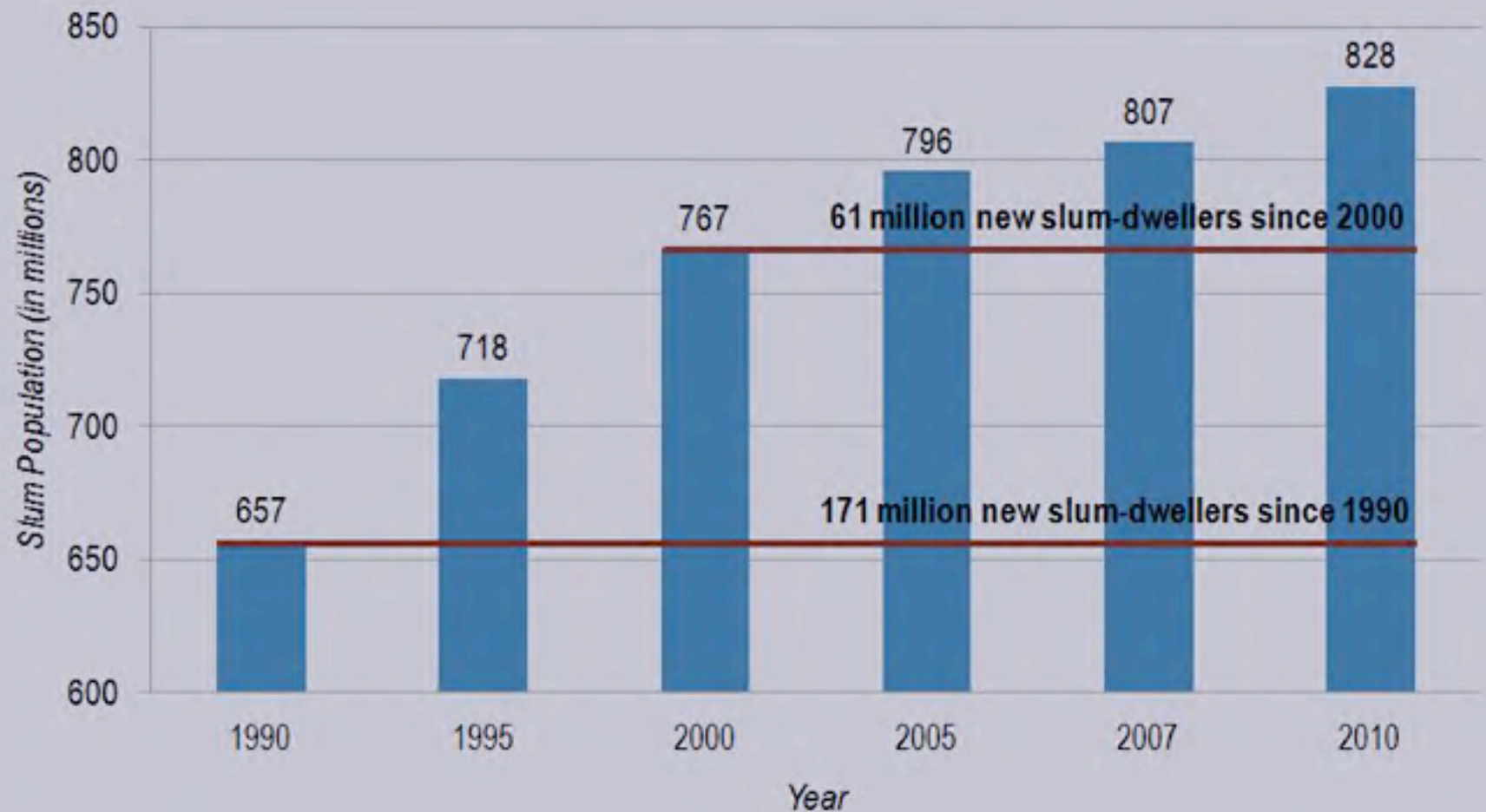
The target of improving the lives of at least 100 million slum dwellers has already been achieved twice-over.

- Last 10 years: More than 200 million slum dwellers have gained access to improved water, sanitation or durable and less crowded housing
 - Greatly enhancing their prospects of escaping poverty, disease, and illiteracy
- However, improvements fail to keep pace with the growing ranks of the urban poor



Global Urban Population Living in Slums 1990-2010

■ Global Urban Slum Population (in millions)



THE TARGET OF IMPROVING THE LIVES OF AT LEAST 100 MILLION SLUM DWELLERS HAS ALREADY BEEN ACHIEVED TWICE-OVER.

- Urban population living in slums has gone down from 39% to 33% but the absolute number of slum dwellers in the developing world grows and will continue to increase in the near future
- About 828 million urban slum dwellers in the developing world, up from 657 million in 1990 and 767 million in 1997
- The target in 2000 was set too low and was based on too small an estimated number of people living in sub-standard conditions
 - The target will require redefinition i.e. Have the proportion of slum dwellers by 2020



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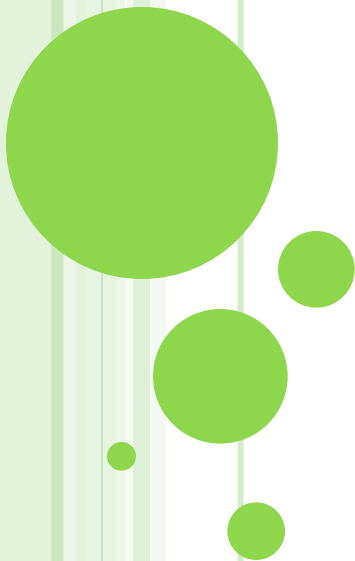


GIVE ONE EXAMPLE OF A POLICY OR PROGRAM THAT HAS WORKED IN ENSURING ENVIRONMENTAL SUSTAINABILITY

Reduction of ozone-depleting substances

Installation of water systems

Expanding good sanitation practices





NAME ONE CHALLENGE/BARRIER IN ACHIEVING MDG GOAL 7 TO ENSURE ENVIRONMENTAL SUSTAINABILITY

- Inadequate integration of environmental sustainability into national development plans
- Policy incoherence and weak institutional environments
- Lack of adequate incentives to conserve environmental resources
- Limited access to low-cost, appropriate technologies and innovative solutions; infrastructure and services for portable water and sanitation
- Unsustainable environmental practice including over-fishing, deforestation and poaching
- Capacity gaps
- Ineffective implementation practices
- Limited access to information and low awareness
- Inadequate resources and creative financing strategies

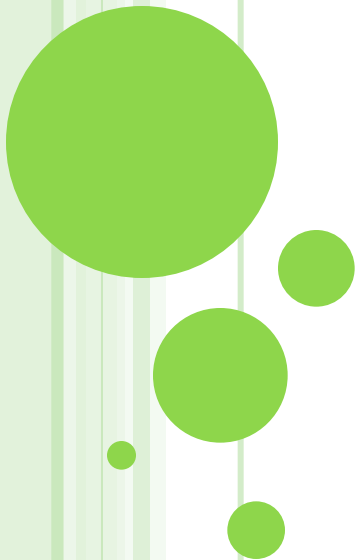
WHAT ARE SOME OZONE DEPLETING SUBSTANCES?

Carbon dioxide

Methane

Nitrous Oxide

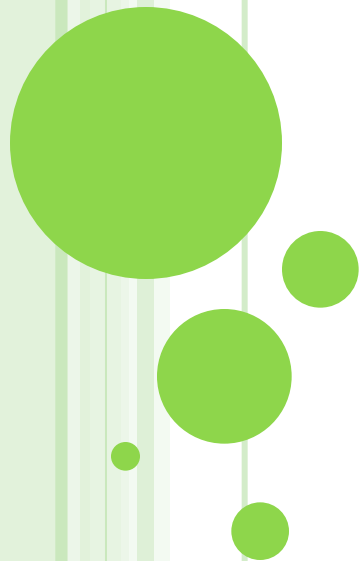
CFC' s



WHICH SANITATION PRACTICE POSES THE GREATEST THREAT TO HUMAN HEALTH?

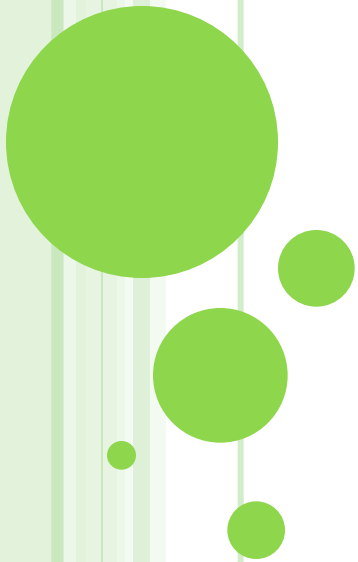
Open defecation.

(This practice has declined in all
developing regions)



SLUM PREVALENCE REMAINS HIGH IN WHICH AREAS OF THE WORLD?

- Sub-Saharan Africa
- Countries affected by conflict



IF CURRENT TRENDS CONTINUE, WILL THE WORLD MEET THE DRINKING WATER TARGET BY 2015?



Yes, we will meet or even exceed the target.

(However, safe water supply remains a challenge in many parts of the world)

WILL THE WORLD REACH THE 2015 TARGET TO ACHIEVE SUSTAINABLE ACCESS TO BASIC SANITATION?



No, the target seems to be out of reach.

(Half the population of developing regions without sanitation)

DID THE WORLD MEET THE 2010 TARGET TO SLOW THE DECLINE OF BIODIVERSITY?



**No, the threat of extinction grows by
the day especially in developing
countries.**

HAVE THE ABSOLUTE NUMBER OF URBAN SLUM DWELLERS IN DEVELOPING COUNTRIES CONTINUED TO INCREASE OR DECREASE?

The number has continued to increase.

(Even though more than 200 million
slum dwellers have gained access to
improved water, sanitation or durable
and less crowded housing)



Additional Source Information

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