

# WORKSHOP ON ENVIRONMENT STATISTICS

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UNECA-UNSD-UNEP

## CORE LIST OF ENVIRONMENTAL INDICATORS

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## Natural Disasters and Environmental Performance

Priority area	Proposed indicator	Code	Links to MDG, CSD, NEPAD, Other
Exposure to various types of natural hazards, drought, floods etc	Percentage of population living in hazard prone areas [CSD]	2	CSD/ NEPAD Other
	Frequency of extreme events*	3	NEPAD/ Other
Impacts to various types of natural hazards, drought, floods etc	Human and economic loss due to natural disasters [CSD]	1	CSD/ NEPAD/ Other
Inadequate early warning system for the timely prediction of location and intensity of future natural disasters	% of population having access to information from EWS	3	
Adaptive capacity	Public expenditure on disaster reduction and related measures	4	

- \* Indicates repetition of the indicator in the Air section, Climate change priority area
- Other: Indicates that the same or similar indicator is used by an International, Regional or Intergovernmental organization
- Coding:
  1. Identical indicator exists (MDG, CSD, etc.) Definition and methodology available.
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  5. Suggested for deletion
  6. Add new indicator

# Air

Priority areas	UNSD Proposals	Code	Links to MDG, CSD, NEPAD, Other
Air quality	Ambient concentrations of air pollutants in urban areas [CSD]	1	CSD/ NEPAD/ Other
Climate change	Carbon dioxide emissions, total, per capita and per \$1 GDP (PPP)[MDG]	1	MDG/ CSD/ NEPAD/ Other
	Emissions of greenhouse gases [CSD]	1	CSD/ NEPAD/ Other
	Frequency of extreme events <sup>*</sup>	1	NEPAD/ Other
	Annual variability of rainfall (at least 30 years)	4	NEPAD/ Other
	Annual variability of temperature (at least 30 years)	4	NEPAD/ Other
Ozone Layer Depletion	Consumption of ozone-depleting substances [MDG]	6/1	MDG/ CSD/ Other

- \* Indicates repetition of the indicator in the Natural Disasters and Environmental Performance, Exposure to various types of natural hazards priority area
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## Land use

Priority area	Proposed indicator	Code	Links to MDG, CSD, NEPAD, Other
Land tenure/ownership	% of population (by groups, gender) with secure land tenure	3	NEPAD/ Other
	% of land area by ownership categories	3	NEPAD
Land Quality (degradation)	Land affected by desertification [CSD]	1	CSD/ NEPAD/ Other
	Land degradation [CSD] -wind/water erosion -salinization	1	CSD/ NEPAD/ Other
	(%) proportion of land/area effected by contamination	3	NEPAD/ Other
Land use change	Land use change [CSD]	3/1	CSD/ NEPAD/ Other

## Agriculture

Priority area	Proposed indicator	Code	Links to MDG, CSD, NEPAD, Other
Agriculture	Agricultural Production Index [FAO]	1	NEPAD/ Other
Irrigation	% of land/agricultural area under irrigation	3	NEPAD/ Other
Use of pesticides/ fertilizers	Use of agricultural pesticides [CSD]	1	CSD/ NEPAD/ Other
	Number of reported cases of contamination of toxic substances	3	NEPAD
	Fertilizer consumption [FAO]	1	CSD/ NEPAD/ Other
Rangeland carrying capacity	Livestock pressure over carrying capacity [LADA]	1	NEPAD/ Other

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## Forests and woodlands

Priority areas	UNSD Proposals	Code	Links to MDG, CSD, NEPAD, Other
Forest change (loss/ degradation)	Proportion of land area covered by forest [MDG]	1	MDG/ CSD/ NEPAD/ Other
	% of forests damaged (abiotic, biotic and human induced) [UNECE/FAO]	1	CSD/ Other
	Area of forest under sustainable forest management [CSD]	1	CSD/ Other
	Rate of afforestation/ deforestation	3	NEPAD/ Other
Forest resources management	% of exports of forestry products	3	NEPAD/ Other
Established protected areas (forests etc.)	% of protected forest areas to the total forest area	1	Other

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## Coastal and Marine Resources

Priority areas	UNSD Proposals	Code	Links to MDG, CSD, NEPAD, Other
Urbanization of coastal zones	Percentage of total population living in coastal areas [CSD]	1	CSD/ NEPAD/ Other
Coastal and marine pollution	Proportion of coastal areas affected by pollution	3	CSD/ NEPAD/ Other
	Coastal water quality	6/1	NEPAD/ Other
	Number and area of marine aquaculture sites	3	
Coastal erosion/ sedimentation	% change in coastal areas lost	3	NEPAD/ Other
Marine biodiversity	Number of marine species (mangroves, fisheries, etc) threatened and extinct	3	NEPAD/ Other
	Change in area under mangrove forest	3	NEPAD/ Other
	Proportion of marine area protected [CSD]	1	MDG/ CSD/ NEPAD/ Other
	Total & per capita marine fish catch	1	NEPAD/ Other
	Total & per capita marine aquaculture fish catch	1	NEPAD/ Other
	Proportion of fish stocks within safe biological limits [MDG]	6/1	MDG/ CSD/Other
Climate change- sea level rise	Annual sea level change	3	NEPAD
Poverty eradication	Number of people making a living from marine resources	3	Other

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## Fresh water

Priority areas	UNSD Proposals	Code	Links to MDG, CSD, NEPAD, Other
Water Accessibility;	Proportion of population using an improved drinking water source [MDG]	1	MDG/ CSD/ NEPAD/ Other
	% of population connected to public water supply	1	NEPAD/ Other
Water Quantity;	Proportion of total water resources used [MDG]	1	MDG/ CSD/ NEPAD/ Other
	Ratio of external renewable water resources to total renewable water resources	6/1	Other
	Total annual renewable water resources per capita	6/1	NEPAD/ Other
	Change in surface water discharge	3	NEPAD
	Annual groundwater recharge	3	NEPAD/ Other
Water Quality (Pollution);	Emissions of organic water pollutants (BOD) total/per worker	3	NEPAD/ Other
	Biochemical oxygen demand in water bodies [CSD]	1	CSD / NEPAD Other
	Chemical oxygen demand in water bodies	1	Other
	Average annual concentration of total phosphorus in lakes and rivers	1	NEPAD/ Other
	Average annual concentration of total dissolved solids/sediment flux in lakes and rivers	1	NEPAD/ Other
	Average annual concentration of total nitrogen in lakes and rivers	1	NEPAD/ Other
	Average annual concentration of dissolved oxygen in lakes and rivers	1	NEPAD/ Other
	Presence of faecal coliforms in freshwater [CSD]	1	CSD / Other

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Water usage;	Total annual water use per capita	1	NEPAD/ Other
	% of (change in amount/volume) freshwater used for domestic use, irrigation, industry	1	NEPAD/ Other
	Water use intensity by economic activity [CSD]	6/1	CSD/ Other
Water borne diseases (bilharzias, river blindness, sleeping sickness, etc);	Incidence of water borne diseases	3	NEPAD/ Other
Water Mgt issues	Developed national & river basin IWRM plans	3	NEPAD
	Wastewater treatment [CSD]	1	CSD/ Other
	% of population connected to wastewater collecting system	6/2	Other
	Volume of treated wastewater for domestic use	6/3	Other
	Amount/volume of disposal of wastewater into wetlands	3	NEPAD
	% of treated waste water produced from wetlands	3	NEPAD
Water availability	Urban water supply from dams	4	NEPAD
	Abstraction from boreholes for domestic use in rural/urban settings (per capita yield)	3	NEPAD

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## Biodiversity

Priority areas	UNSD Proposals	Code	Links to MDG, CSD, NEPAD, Other
Ecosystem	-Proportion of terrestrial area protected by ecological region [CSD]	1	MDG/ CSD/ NEPAD/ Other
Wetlands	Number of wetland species threatened and extinct	3	NEPAD
	% change of the area of wetlands	3	NEPAD/ Other
	Number of Ramsar sites	1	Other
	% of rehabilitated/total area of wetlands	3	NEPAD
	Number of restored wetlands sites	3	NEPAD
Species	Threatened plant species as a % of total known plant species	1	NEPAD/ Other
	Threatened animal species as % of total known animal species	1	NEPAD/ Other
	Proportion of species threatened with extinction [MDG]	6/1	MDG
	Abundance of selected key species [CSD]	1	CSD/ Other
Invasive Species	Abundance of invasive alien species [CSD]	1	CSD/ NEPAD/ Other

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## Energy and minerals

Priority areas	UNSD Proposals	Code	Links to MDG, CSD, NEPAD, Other
Energy production	Primary energy production total, per capita and by source	1	NEPAD/ Other
Energy consumption	Share of renewable sources in total energy use [CSD]	1	CSD/ NEPAD/ Other
	Share of imports in total energy supply	6	Other
	Intensity of energy use, total and by economic activity [CSD]	1	CSD/ Other
	Annual energy consumption total and by main user category [CSD]	1	CSD/ NEPAD/ Other
	Total energy consumption per capita	6/1	Other
	Share of households with access to electricity	1	CSD/ NEPAD/ Other
	% of traditional fuel energy use	3	NEPAD/ Other

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## Waste

Priority areas	UNSD Proposals	Code	Links to MDG, CSD, NEPAD, Other
Development and population growth and urbanization	Generation of waste [CSD]	1	CSD/ Other
	Waste treatment and disposal [CSD]	1	CSD/ Other
	Municipal waste collected per capita	1	NEPAD/ Other
	Municipal waste collected as a % of the amount of waste generated	3	Other
Appropriate and sound guidelines for waste management systems appropriate for the environmental conditions	% share of population served by municipal waste collection	1	NEPAD/ Other
Hazardous substance (as defined in the Basel Convention)	Generation of hazardous waste [CSD]	1	CSD/ NEPAD/ Other
	Total hazardous waste imported	1	Other
	Total hazardous waste exported	1	Other
	Number and capacity of facilities for the disposal of hazardous waste	4	Other

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## Health and Environment

Priority areas	UNSD Proposals	Code	Links to MDG, CSD, NEPAD
Infant and child mortality	Under five mortality rate [MDG]	1	MDG/ CSD/ NEPAD/ Other
	Maternal mortality ratio per 100,000 live births [MDG]	1	MDG/ NEPAD/ Other
	Mortality rate	1	NEPAD
Burden of ill health	% of population with access to primary health care facilities [CSD]	1	CSD/ NEPAD
	Public expenditure in health (in % of GNP)	1	NEPAD/ Other
	Proportion of population using an improved sanitation facility [MDG]	1	MDG/ CSD/ NEPAD/ Other
Informal Settlements	Proportion of urban population living in slums [MDG]	6/1	MDG/ CSD/ Other
	Informal Settlements, area and percentage of population	6/3	NEPAD/ Other

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