National activities

Overview of data sources



Uganda June 2, 2023

Uganda – Monitoring of the Sustainable development goals until 2030

The Uganda Bureau of Statistics (<u>UBOS</u>) releases <u>Statistical Abstracts</u> reports yearly. These include information on the following:

- Solid waste collected (tons) from Kampala and other municipalities
- Quantity of hazardous waste collected by National Environment Management Authority (NEMA) licensed hazardous waste agents
- Quantities of electric and electronic equipment placed on the market and the amount of e-waste generated estimated using the UNU tool for E-Waste using the data for imports and Exports of Electrical and Electronic Equipment
- Production of round wood
- Production of major cash and food crops
- Information on the import and sales of petroleum products
- Mineral production

National Food and Agricultural Statistics System (<u>NFASS</u>) Database provides information on crops, livestock, fisheries, and agricultural imports and exports.

Data availability for indicators 12.2.1, 12.2.2, 12.4.2, and 12.5.1

Information on indicator 12.2.1 *Material footprint* is available from the <u>UNEP IRP Global Material</u> <u>Flows Database</u>.

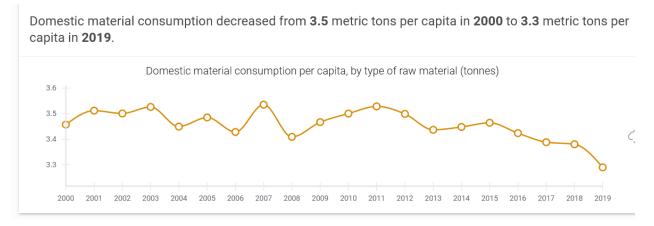
Information on indicator 12.2.2 *Domestic material consumption* is available from the <u>UNEP IRP</u> <u>Global Material Flows Database</u>.

Data for indicator 12.4.2 *Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment*: UBOS compiles data on hazardous waste collected.

Data for indicator 12.5.1 *National recycling rate, tons of material recycled*: UBOS data on municipal waste collected.

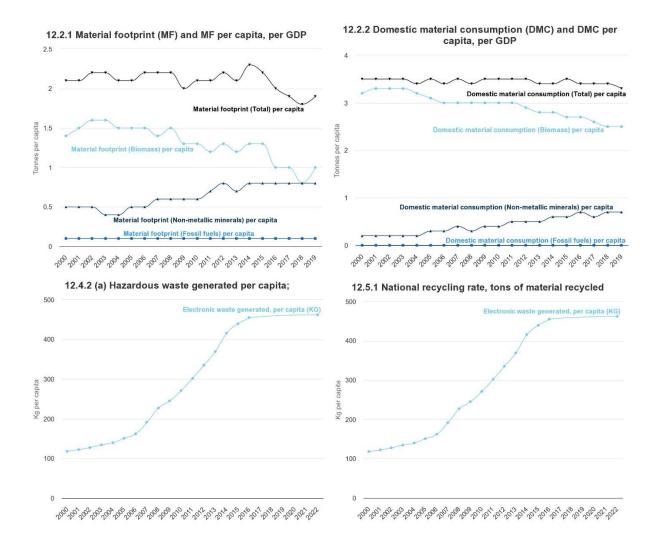
Information on indicators 12.2.1, 12.2.2, 12.4.2, and 12.5.1 is also available in the UNSD country profile and the WERS Scorecard as shown below. The data in these dashboards are taken from national sources though instruments such as the UNSD/UNEP questionnaire or from international sources such as UNEP's International Resource Panel, Global Material Flows Database.

The following visualization is available in the UN Statistics Division's Country Profile for Uganda (<u>https://unstats.un.org/sdgs/dataportal/countryprofiles/uga#goal-12)</u>:



Data source: World Environment Situation Room (WESR)

The WESR scorecard (<u>https://wesr.unep.org/scorecard/</u>) includes the following visualizations for Uganda:



Note that the visualizations for 12.4.2 and 12.5.1 present data on e-waste generation per capita only.

Summary of data availability

a) Material footprint and domestic material consumption

Material category	Information needed	Data availability
Biomass Material of vegetable origin extracted by humans and their livestock – crops, used crop residues, fodder crops, grazed biomass, wood, capture of wild fish, and the biomass of hunted animals.	Statistics on the production, import, export and use of agricultural crops, crop residues, wood, wild harvests (fishing, hunting, gathering of terrestrial and aquatic plants).	UBOS NFASS Nationally reported data are also available in FAOSTAT and FISHSTAT
Metal ores Deposits of metal compounds in the Earth's crust which can be processed to produce desired metals at an economically viable cost. Only the portion of the excavated rock which is to be processed in some way to obtain the desired metals is included in the accounts. Data is compiled in three ore categories: iron,	Statistics on production, import, export of metallic ores. This includes information on ore type, ore grade, recovery rate, estimated total tonnage of Run of Mine (ROM) ore extracted, quantity of waste rock. This information may be collected from mine operators	UBOS
Non-metallic minerals "stone quarries and clay and sand pits; chemical and fertilizer mineral deposits; salt deposits; deposits of quartz, gypsum, natural gem stones, asphalt and bitumen, peat and other non-metallic minerals other than coal and petroleum."	Statistics on production, import, export of non-metallic ores Data from official national statistical reports on consumption of cement, bitumen and bricks can indirectly indicate consumption of non-metallic minerals.	UBOS
Fossil fuels Includes coal and peat, crude oil, natural gas and natural gas liquids, and oil shale and tar sands.	Statistics on production, import, export of fossil fuels	<u>UBOS</u> <u>Ministry of Energy and</u> <u>Mineral Development</u>

Material category	Information needed	Data availability
Emissions to air Includes Emissions of greenhouse gases (Carbon dioxide (CO2), Methane (CH4), Dinitrogen oxide (N2O), Nitrogen oxides (NOx), Hydroflourcarbons (HFCs), Perflourocarbons (PFCs) Sulphur hexafluoride (SF6)	Annual quantities of pollutants emitted to air	Potential source of information: <u>Ministry of Water and</u> <u>Environment</u>
Common air pollutants (Carbon monoxide (CO), Non- methane volatile organic compounds (NMVOC), Sulfur dioxide (SO2) Ammonia (NH3), Particles (e.g. PM10, Dust)		
Toxic pollutants (Heavy metals		
Persistent organic pollutants (POPs)		
Other emissions to air		
Waste landfilled (uncontrolled) Waste refers to materials that are of no further use to the generator for production, transformation or consumption. Waste may be generated during the extraction of raw materials, during the processing of raw materials to intermediate and final products, during the consumption of final products, and in the context of other activities.	Total quantities of uncontrolled municipal and industrial waste produced per year In addition to the national environmental authority, sources of this information may include municipal governments and industries	Potential source of information: <u>Ministry of Water and</u> <u>Environment</u> <u>Ministry of Local Government</u>
Emissions to water Substances and materials released to natural waters by human activities after or without passing wastewater treatment. It includes the following pollutants: Nitrogen (N), Phosphorus (P), Heavy metals, Other substances	Information on outflows from municipal or industrial sewage treatment plants	Potential source of information: <u>National Water</u> <u>and Sewerage Corporation</u>

Material category	Information needed	Data availability
and (organic) materials, Dumping of materials at sea		
Dissipative use of products Materials that are deliberately dissipated into the	Agricultural statistics on sale or use of fertilizers, pesticides, seeds.	Pesticides/fertilizers: <u>Ministry of Agriculture,</u> <u>Animal Industry and Fisheries</u>
environment such as organic fertilizer (manure), mineral fertilizer, sewage sludge, compost, pesticides, seeds, salt and other thawing materials spread on roads, solvents, laughing gas, and	For manure, an estimate could be based on the number of livestock	Other potential source: <u>Ministry of Water and</u> <u>Environment</u>
	Information on the use of lime (e.g. as a fertilizer in forestry)	
other materials.	Information on compost	
	Information on amount of salt or other materials spread on roads	
	For data on non-methane volatile organic compounds solvents, information on use and emissions from paint application, degreasing and dry cleaning, chemical products manufacture and processing, and other sources. Information on use of laughing gas.	
Dissipative losses Dissipative losses are unintentional outputs of materials to the environment resulting from abrasion, corrosion, and erosion at mobile and stationary sources, and from leakages or accidents. This includes abrasion from tyres, friction products, buildings and infrastructure, leakages (e.g. of gas pipelines), or from accidents during the transport of goods.	Abrasion from tyres, particles worn from friction products, such as brakes and clutches, losses of materials due to corrosion, abrasion, and erosion of buildings and infrastructure, dissipative losses from the transport of goods, and leakages during (natural) gas pipeline transport (if not reported as emissions to air).	Potential source of information: <u>Ministry of</u> <u>Water and Environment</u>
Balancing items The oxygen demand of	For balancing items – input side:	None identified
various combustion processes (both technical	Oxygen for combustion processes	

Material category	Information needed	Data availability
and biological ones), water vapour from biological respiration, and from the combustion of fossil fuels containing water and/or other hydrogen compounds. Also, flows of considerable economic importance such as nitrogen which is withdrawn from the atmosphere to produce fertilizer in the Haber-Bosch process or groundwater used in the production of beverages are accounted for as balancing items.	Oxygen for respiration of humans and livestock; bacterial respiration from solid waste and wastewater Nitrogen for Haber-Bosch process Water requirements for the domestic production of exported beverages For balancing items – output side: Water vapour from combustion Water vapour from moisture content of fuels	
	Water vapour from the oxidized hydrogen components of fuels	
	Gases from respiration of humans and livestock (CO2 and H2O), and from bacterial respiration from solid waste and wastewater (H2O)	
	Carbon dioxide (CO2)	
	Water vapour (H2O) Excorporated water from biomass products	
Material footprint and domestic material consumption	Not applicable	Information on Material Footprint and Domestic material consumption is available at <u>UNEP IRP Global</u> <u>Material Flows Database</u>

b) Waste indicators

Indicator: 12.4.2 (a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment

Indicator	Information needed	Data availability
Hazardous waste generated	"the quantity of hazardous waste generated within the country during the reported year, prior to any activity such as collection, preparation for reuse, treatment, recovery, including recycling, or export, no matter the destination of this waste".	<u>UBOS</u> and waste management facilities
Hazardous waste generated by type, including e-waste	A breakdown of hazardous waste generated by key type of waste, including e-waste, waste engine oils, Hazardous household waste, Healthcare waste	Potential source of information: <u>UBOS</u> UBOS estimates quantities of E-waste generated using data for imports and exports of electrical and electronic equipment and the UNU tool for E-Waste.
Proportion of hazardous waste treated	The total quantity of hazardous waste treated = sum of quantities of hazardous waste treated, per each type of treatment (recycling, incineration with/without energy recovery, landfilling or other) + Exports - Imports. Proportion of hazardous waste treated = Quantity of hazardous waste treated ÷ Total quantity of hazardous waste generated	Potential source of information: <u>UBOS</u>
Hazardous waste intensity of production	= Quantity of hazardous waste generated ÷ Domestic material consumption	Domestic material consumption is available at <u>UNEP IRP Global Material</u> <u>Flows Database</u>

c) National recycling rate

Indicator	Information needed	Source
National recycling rate	Amount of waste generated, material recycled, material exported for recycling, material imported intended for recycling in the country Total MSW generated (t/day) Quantity of material recycled from MSW stream	Potential source of information: <u>UBOS</u>
Total Waste Generated (excluding construction, mining and agriculture) by type, including e-waste	Waste from manufacturing (ISIC 10-33) + Waste from electricity, gas, steam and air conditioning supply (ISIC 35) + Waste from other economic activities (excluding ISIC 38) + Municipal waste (excluding construction and demolition)	UBOS: E-waste data estimated using the UNU tool for E-Waste using the data for imports and Exports of Electrical and Electronic Equipment.
National recycling rate by type of waste	Waste streams can include e-waste metals (ferrous, non-ferrous) packaging waste	Potential source of information: <u>UBOS</u>
Waste intensity	Total waste generated ÷ Domestic material consumption	Domestic material consumption is available at <u>UNEP IRP Global Material</u> <u>Flows Database</u>

Stakeholders

a) National Government Stakeholders

The <u>Ministry of Finance, Planning and Economic Development</u> co-ordination of development planning; mobilization of public resources; and ensuring effective accountability for the use of such resources for the benefit of all Ugandans.

• The <u>Uganda Bureau of Statistics</u> (UBOS) is an autonomous agency affiliated with the ministry. It the maintains the National Statistical System (NSS) to ensure collection, analysis and publication of integrated, relevant, reliable and timely statistical information. UBOS is the coordinating, monitoring and supervisory body for the National Statistical System.

<u>Ministry of Agriculture, Animal Industry and Fisheries</u> formulates, reviews and implements national policies, plans, strategies, regulations and standards along the value chain of crops, livestock and fisheries including enforcement of laws, regulations and standards.

• The <u>Statistics Division</u> maintains the National Food and Agricultural Statistics System (NFASS) Database.

The <u>Ministry of Water and Environment</u> has the overall responsibility of the development, managing, and regulating water and Environment resources in Uganda.

- The National Water and Sewerage Corporation (NWSC) provides water and sewerage services for 23 large urban centres across Uganda.
- The National Environment Management Authority (NEMA) is responsible for the regulatory functions and activities that focus on compliance and enforcement of the existing legal and institutional frameworks.
- The National Forestry Authority (NFA) is responsible for sustainable management of Central Forest Reserves (CFRs), the supply of seed and seedlings, and provision of technical support.

The <u>Ministry of Local Government</u> is responsible for guidance and overall vision of Government in local Governments and acts as a Liaison/Linkage Ministry with respect to other Central Government Ministries and Departments, Agencies.

<u>Ministry of Energy and Mineral Development</u> manages the utilization of energy and mineral resources for development of Uganda and its people.

- The Directorate of Geological Survey and Mines promotes the rational and sustainable exploitation of mineral resources.
- The Petroleum Authority of Uganda manages all the data generated from oil and gas activities in Uganda.

The <u>Ministry of Trade, Industry & Cooperatives</u> is responsible for promoting trade and industry and cooperatives and is spearheading e-waste programs.

Other stakeholders

Municipalities

- Uganda Local Government Association (ULGA) is the national Association of Districts and Lower Local Government Councils whose prime objective is to unite and strengthen the local governments and build their capacity for efficient and effective delivery of public services to the population.
- Urban Authorities Association of Uganda (<u>UAAU</u>) is an umbrella association for urban authorities in Uganda

Industry

- Uganda Chamber of Mines and Petroleum (<u>UCMP</u>) creates, receives & disseminates news for, from and to all stakeholders respectively in the minerals and petroleum industry.
- Uganda Waste Management & Administration Confederation (<u>UWMAC</u>) a forum to bring together and support the development of a thriving waste management industry in Uganda and beyond.
- The <u>WEEE Centre</u> Uganda is a limited liability company that safely manages electronic waste (e-waste) for a safe environment.