National activities

Overview of data sources



Senegal – Monitoring of the Sustainable development goals until 2030

Reports of l'Agence Nationale de la Statistique et de la Démographie (ANSD) du Sénégal are <u>available online</u>. These are grouped under four themes: The economy, demography, society and other statistics. Other statistics includes data on <u>agriculture</u>, construction, <u>environment</u>, <u>industry</u>, <u>mining</u>, tourism and <u>transport</u>. The annual report <u>Situation économique et sociale du Sénégal</u> includes the following data relevant to material flow accounts:

Agriculture:

- o Quantities of seeds planted
- o Fertilizer and pesticide use
- o Production of cereals, vegetables, fruits and oil-bearing seeds
- <u>Livestock</u> population
- Fish landings

• Environment:

- o Status of implementation of the climate change convention
- Extraction of forest products
- Buildings and public works:
 - o Production of cement
 - Road construction
- Mining, quarries and energy:
 - o Production of phosphate, gold, salt, zircon, titanium dioxide
 - Materials extracted from quarries
 - Oil and gas production

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

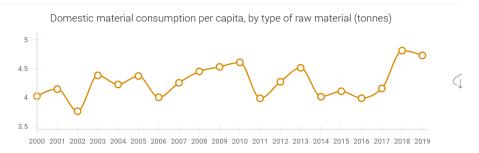
Information on indicator 12.2.1 (Material footprint, material footprint per capita, and material footprint per GDP) and indicator 12.2.2 (Domestic material consumption, domestic material consumption per capita, and domestic material consumption) is available from the <u>UNEP IRP Global Material Flows Database</u>.

No national sources of data were identified for indicator 12.4.2 (Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment) and indicator 12.5.1 (National recycling rate, tons of material recycled). The <u>Global E-waste Statistics Partnership</u> has estimated that amount of e-waste generated in Senegal.

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.

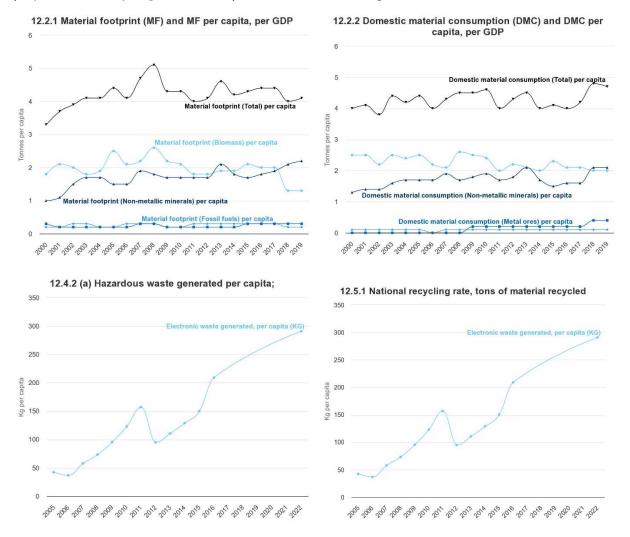
The following visualization is available in the UN Statistics Division's Country Profile for Senegal (https://unstats.un.org/sdgs/dataportal/countryprofiles/sen#goal-12):

Domestic material consumption increased from **4.0** metric tons per capita in **2000** to **4.7** metric tons per capita in **2019**.



Source: Global Material Flows Database, WESR

UNEP's World Environment Situation Room (WESR) scorecard (https://wesr.unep.org/scorecard/) includes the following visualizations:



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	Statistics on the production, import, export and use of agricultural crops, crop residues, wood, wild harvests (fishing, hunting, gathering of terrestrial and aquatic plants).	Agence nationale de la Statistique et de la Démographie: <u>Data on</u> <u>agricultural production</u>
		Ministère de la Pêche et de l'Économie Maritime: <u>Data on</u> <u>fisheries</u> and game
fish, and the biomass of hunted animals.		Ministère de l'Environnement et du Développement Durable: <u>Data on forestry</u>
		Nationally reported data are also available in <u>FAOSTAT</u> and <u>FISHSTAT</u>
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, aluminium and other metals.	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	Agence nationale de la Statistique et de la Démographie: Data on mining Ministère des Mines et de la Géologie: Mining production statistics
"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.	Agence nationale de la Statistique et de la Démographie: Data on non- metallic minerals and quarries

Material category	Information needed	Data availability
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	Agence nationale de la Statistique et de la Démographie: <u>Data on fossil</u> <u>fuel production</u>
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)) Common air pollutants (Carbon monoxide (CO), Nonmethane 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	Annual quantities of pollutants emitted to air	Ministère de l'Environnement et du Développement Durable: Greenhouse gas emissions Air pollutants: none identified.
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	Municipal waste: None identified Industrial waste: None identified

Material category	Information needed	Data availability
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 and (organic) materials, Dumping of materials at sea	Information on outflows from municipal or industrial sewage treatment plants	None identified
Dissipative use of products Materials that are deliberately dissipated into the 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 other materials.	Agricultural statistics on sale or use of fertilizers, pesticides, seeds. For manure, an estimate could be based on the number of livestock Information on the use of lime (e.g. as a fertilizer in forestry) 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.	Fertilizer and pesticide consumption: Situation économique et sociale du Sénégal, chapter on Agriculture Seed quantities: Situation économique et sociale du Sénégal, chapter on Agriculture Number of livestock (Direction de l'Analyse, de la Prévision et des Statistiques agricoles - DAPSA)
Dissipative losses Dissipative losses are unintentional outputs of materials to the environment resulting from abrasion, corrosion, and erosion at mobile and stationary	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	None identified

Material category	Information needed	Data availability
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.	goods, and leakages during (natural) gas pipeline transport (if not reported as emissions to air).	
Balancing items The oxygen demand of various combustion processes (both technical 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.	For balancing items – input side: Oxygen for combustion processes 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)	None identified

Material category	Information needed	Data availability
	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".	None identified
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	E-waste: Global E-waste Statistics Partnership
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	None identified

Indicator	Information needed	Data availability
Hazardous waste intensity of production	= Quantity of hazardous waste generated ÷ Domestic material consumption	None identified

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	None identified
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)	None identified
National recycling rate by type of waste	Waste streams can include e-waste metals (ferrous, non-ferrous) packaging waste	None identifed
Waste intensity	Total waste generated ÷ Domestic material consumption	None identified

Stakeholders

a) National Government Stakeholders

Ministère de l'Économie, du Plan et de la Coopération (MEPC): The Minister of Economy, Planning and Cooperation is responsible for the preparation and implementation of economic and financial policies, development planning, population, statistics and cooperation.

• L'Agence Nationale de la Statistique et de la Démographie (ANSD): The Agency is responsible for the technical coordination of the activities of the national statistical system and for the production and dissemination of statistical data to meet the needs of government, public administration, private sector, development partners and the public.

Ministère de l'Agriculture, de l'Equipement Rural et de la Souveraineté Alimentaire (MAERSA): The Minister of Agriculture and Rural Equipment prepares and implements agriculture and rural equipment policy. In this capacity, it is responsible for establishing a coherent framework for strategic planning, monitoring and evaluation of agricultural policies, strategies and programmes with the aim of achieving self-sufficiency and ensuring food security.

Ministère de l'Eau et de l'Assainissement (MEA): The mission of the Ministry of Water and Sanitation is "to promote, in a sustainable and equitable manner, the integrated management of water resources and universal access to drinking water and adequate sanitation systems."

Ministère de l'Élevage et des Productions Animales (MEPA): The Ministry of Animal Husbandry and Livestock Production develops and implements strategies for the promotion and development of livestock sector. It also collects and processes statistics related to livestock production and pastoral agriculture.

Ministère de l'Environnement, du Développement Durable et de la Transition Écologique (<u>MEDDTE</u>): The Ministry of Environment, Sustainable Development and Ecological Transition is responsible for environmental monitoring, protection of nature, fauna and flora, retention ponds and aquaculture, and pollution control.

Ministère des Collectivités Territoriales, de l'Aménagement et du Développement des Territoires (MCTADT): The Ministry of Local Authorities, Planning and Territorial Development is responsible for the preparation and implementation of Senegalese policy on decentralization, local development, support and control of local authorities and the implementation of the policy of training elected officials and the conduct of local development policy.

Ministère des Infrastructures, des Transports Terrestres et du Désenclavement (MITTD): the Ministry of Infrastructure, Land Transport and Access Improvement prepares and implements land transport and infrastructure policy including urban and inter-urban transport policy. It is responsible for the construction and maintenance of major road and rail infrastructure and implements and ensures the coherence and good condition of the road and rail networks.

Ministère des Mines et de la Géologie (MMG): The Ministry of Mines and Geology is responsible for the institutional framework and mining policy with the aim of improving the governance of Senegal's natural resources so that their exploitation contributes to sustainable development.

Ministère des Pêches et de l'Economie Maritime (MPEM): the Ministry of Fisheries and Maritime Affairs prepares and implements policies related to fisheries, fish farming, development of the seabed, port infrastructure and maritime transport.

Ministère du Pétrole et des Energies (MPE): The Ministry of Oil and Energy is responsible for the promotion, regulation, and coordination of crude oil, natural gas and other hydrocarbons extraction and production activities.

b) Other stakeholders

Regional and municipal governments

- L'Association des Maires du Sénégal (<u>AMS</u>): the Association of Mayors of Senegal promotes the development and capacity building of its members. The AMS supports initiatives that strengthen relations between Senegalese municipalities and development partners.
- L'Agence du Développement Local (<u>ADL</u>): The Agency is an advisory, monitoring and decision-making support body for local development. It promotes and coordinates local development actions and aims to establish and promote coherent local development.
- L'Association des Départements du Sénégal (ADS): The association promotes the
 departmental decentralization in Senegal. It brings together the departments of Senegal
 around a common ideal of continuous improvement of decentralization including the
 promotion of the department, local authority, for the economic and social development of
 Senegal.
- Le Haut Conseil des Collectivités Territoriales (<u>HCCT</u>): The Council participates in monitoring the development and implementation of decentralization, development and spatial planning policies and contributes to the strengthening of dialogue between the State and territorial actors

Industry

- Chambre de Commerce d'Industrie et d'Agriculture de Dakar (<u>CCIAD</u>): The Chamber of Commerce represents all economic operators and defends the general interests of industrial, commercial and agricultural enterprises. See also other <u>chambers of commerce</u> in Senegal.
- La Chambre des Mines du Sénégal (<u>CMS</u>): The Chamber of Mines of Senegal represents the
 private mining sector. Its membership currently includes about 50 local and international
 companies.
- La Société des Mines du Sénégal (<u>Somisen SA</u>): Somisen is a public company wholly owned by the State of Senegal. Its mission is to 1) manage the State's participation in mining operations; 2) market the State's mineral products; 3) hold mining titles alone or in association with other enterprises, and 4) implement government's decisions and guidelines applicable to the mining sector.