National Environmental
Management Agency (ANGE)

TOGO Environmental Information
System Improvement Project (PASIET)

Global
Partnership
for Sustainable
Development Data

AN ANALYSIS OF
ENVIRONMENTAL INDICATORS
IN TOGO

IsDB
البنك الإسلامي للتنمية
Islamic Development Bank

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Cover Page Photo: Simple settlement of mud huts in the Northern Togo (Shutterstock)

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AfDB	:	African Development Bank
ANGE	:	National Environmental Management Agency
FDES	:	Framework for the development of environment statistics
CIE	:	Inter-ministerial Commission for the Environment
CNDD	:	National Commission for Sustainable Development
CNS	:	National Statistical Council
CPDN	:	Planned contribution determined at the national level
CRED	:	Centre for Research on the Epidemiology of Disasters
CSIGERN	:	Strategic Investment Framework for Environmental and Natural Resources Management
DEIAE	:	Division of Impact Studies and Environmental Audits
DEP	:	Directorate of Studies and Planning
DGE	:	Directorate General of Energy
ECOWAS	:	Economic Community of West African States
EMS	:	Environmental monitoring system
FAO	:	United Nations Food and Agriculture Organization
FDES	:	Framework for the Development of Environment statistics
FNE	:	National Environment Fund
GDSS	:	General Data Dissemination System
GHG	:	Greenhouse gas
GPSDD	:	Global Partnership for Sustainable Development Data
IMF	:	International Monetary Fund
INDC	:	Intended Nationally Determined Contribution
INSEED	:	National Institute of Statistics and Economic and Demographic Studies
LEC	:	Local Environmental Committees
MALRD	:	Ministry of Agriculture, Livestock and Rural Development
MWRH	:	Ministry of Water and Rural Hydraulics
MEFR	:	Ministry of Environment and Forest Resources
MPDC	:	Ministry of Development Planning and Cooperation
MUHRF	:	Ministry of Urban Development, Housing and Land Reform
NDC	:	Nationally determined contribution
NDP	:	National Development Plan
NEC	:	National Environment Committee
NFI	:	National Forest Inventory
NSS	:	National Statistical System
PASIET	:	Togo Environmental Information System Improvement Project
PGES	:	Environmental and Social Management Plan
SCAPE	:	Accelerated Growth and Employment Promotion Strategy
SDG	:	Sustainable Development Goal
SEAA	:	System of Environmental Economic Accounting
SIE	:	Togo Energy Information System
SISE	:	Information and Environmental Monitoring System
UNDP	:	United Nations Development Programme
UNEP	:	United Nations Environment Programme
UNF	:	United Nations Foundation
UNICEF	:	United Nations Children's Fund
UNSD	:	United Nations Statistics Division

Foreword and Acknowledgements

The Ministry of Environment and Forest Resources (MEFR) is pleased to make available to stakeholders and partners the results of the work on environmental indicators in Togo.

Environmental challenges are increasingly the focus of socio-economic policies, both internationally and nationally. These challenges cannot be met without the availability of scientifically reliable information based on the knowledge of what is happening quantitatively and qualitatively. In this sense, environmental statistics are the basic tool for organising environmental information and a prerequisite for environmental indicators, environmental accounting and the state of the environment at the national level.

However, one of the major difficulties in supporting and assessing fact-based decision-making process has been the lack of basic environment statistics and indicators. It is therefore important to remedy this situation by putting in place specific arrangements for producing reliable, relevant and updated environment statistics to inform related policies and decisions.

This study responds in a timely manner to the Togolese Government's concern to give, through this publication, an overview of the situation of the National Development Plan (NDP), the Sustainable Development Goals (SDGs), the Strategic Investment Framework for Environmental and Natural Resources Management (CSIGERN), and the Nationally Determined Contribution (NDC).

We hope that this document, which is in its first edition and will be enriched with new approaches over time, will be useful for advocacy.

Executive Summary

In order to effectively support an environmental data ecosystem, the Government -through the Ministry of Environment and Forest Resources (MEFR) - has sponsored this study on the situation of environmental data in connection with the National Development Plan (NDP), the Sustainable Development Goals (SDGs), the Strategic Investment Framework for Environmental and Natural Resources Management (CSIGERN), and the Nationally Determined Contribution (NDC). The purpose was to:

- Assess current data availability, accessibility, sources, production frequency and production agencies;

- Analyze stakeholders (government, civil society, research centres/universities, development partners) who are responsible for the production of data on the environment and climate change;

- Analyze existing organizational arrangements and institutional frameworks focused on the production of environmental data in Togo;

- List and describe the barriers to data collection that have been identified during the process, mainly through contact with agencies, and make recommendations.

To achieve the objectives, the methodological approach consists of three steps: making a literature review, visiting relevant organizations for data collection and compilation, processing and analysing the data collected to develop the study report.

At the end of this work, it appears that environment statistics involve several actors both within and outside MEFR. This multiplicity of actors is not an asset for quality environment statistics, but rather a real obstacle for the promotion of environment statistics in Togo. Whether they are indicators of the NDP, SDGs, the CSIGERN or the NDC, the deficiencies in their production are the same and consist in the following:

- Disconnection between data producers and very limited or non-existent collaboration: each entity collects, processes and manages its environment statistics information separately given the very strong sectoral silos;

- Unbalanced capacity to produce statistics among data producers (expertise, equipment and means of production) of structures;

- Lack of a national dedicated unit to compile, centralize, coordinate and provide technical services, and lack of a monitoring-assessment system;

- Inadequate human, material and financial resources;

- Lack and/or the insufficiency of effective tools: internet connection, database, means of storing and transmitting data;

- Deficiencies in data quality control in terms of data verification, validation, multiplicity and scattering of data on the same themes;

- Inadequate and/or difficulties in the adoption and application of internationally accepted methodologies;

- Non-harmonization of methodologies and standards of production, storage and dissemination of environment statistics;

- Lack of a statistical culture in the community of data producers and users and lack of environmental statisticians;

- Resistance (deliberate refusal) of data producers to share their data;

- Insufficient dissemination of existing data;

- Lack of regular consultation between data producers and users;

- Deficit in communication between stakeholders to increase public awareness;

- Inadequate human resources in terms of quantity and quality;

- Weakness in the centralization, coordination and harmonization of methodologies and tools and in consultation in the production of environment statistics;

- Data producers' unawareness of international and regional standards for processing statistical data;

- Increased dependence on external inputs.

Based on the deficiencies identified, we make the following recommendations:

Short-term:

- Organize a consultation about sector indicators on SDGs, NDP, CSISGERN and NDC and assess MEFR's intelligence capabilities, which will result in a breakdown of indicators by department;

- Build capacities by applying and implementing

Beautiful green forest view from a road winding down Mount Agou in Togo (Shutterstock)

international statistical standards as contained in the Framework for the Development of Environment statistics (FDES 2013) and the System of Environmental Economic Accounting (SEAA);

- Provide the financial and human resources necessary for the collection, compilation, processing and dissemination of environmental data;
- Create a national platform for monitoring environmental indicators;
- Create an accessible national website/portal on environmental indicators;
- Establish cooperation between government organizations involved in the collection of environmental data;
- Enact legislation for regular production and distribution of environment statistics;
- Raise awareness among the various stakeholders about the importance of environment statistics and indicators, as well as environmental accounting and data collection.

Medium-term:

- Strengthen the mobilization of technical and financial partners to finance the Environmental Monitoring System (EMS);
- Train statisticians and environmental

managers in the collection of environment statistics;

- Improve the accessibility of available data and develop a concept on how to collect and compile data;
- Establish an environment statistics programme, including the setting of priorities;
- Develop an environmental dashboard;
- Design, plan, and implement studies/ assessments primarily intended to produce environment statistics;
- Establish environmental statistical units, equipped with appropriate resources, at INSEED and in the departments and institutions where data is collected and processed.

Long-term:

- Develop a database of available environmental data;
- Document data collection and compilation methodology and align it with international standards;
- Develop, implement and maintain an online information and monitoring system for environment statistics;
- Implement environmental and economic accounting;
- Promote inter-institutional collaboration.

AN ANALYSIS OF ENVIRONMENTAL INDICATORS IN TOGO

1.   Background

The environment undergoes continuous changes of all kinds under the combined effect of various forces, pressures and impacts resulting mainly from natural phenomena and human activities. The analysis of the current situation of the environment and natural resources clearly shows that environmental degradation is worsening and is now manifested by such factors as the disruption of ecosystems, depletion of natural resources, erosion of soils and coastal areas, loss of biodiversity, contamination of food chains, pollution of the atmosphere, water and soil, degradation of the living environment, and recurrent flooding in cities. However, the ability to inform about environmental sustainability is severely reduced by the insufficient production of environment statistics.

In Togo, despite significant progress in protecting the environment, major challenges remain. Indeed, in response to the lack of environmental information amid little or no coordination between environmental data producers, Togo is committed to effectively supporting the establishment of an environmental data ecosystem through an initiative led by the Ministry of Environment, Sustainable Development and Nature Protection (MESDNP). This should help to meet the information needs of policy makers and other users on the changing state of the environment as a whole and its impact on people's lives and natural resources.

In addition, the country has adopted a National Development Plan (NDP) for the period 2018-2022. It is a new framework that aims to reconcile and reflect the ambitions of emergence and sustainable development through the structural transformation of the economy and the professionalisation of the different sectors of the value chains, the acceleration of growth, the reduction of poverty and inequality and the preservation of the environment. The priority objectives to achieve are to (i) reduce anthropogenic pressure on forest resources, (ii) further secure the state's forest area equally involving men and women, (iii) promote good practices of climate change adaptation and sustainable management of land, forest and water, (iv) make rural development a priority that integrates agriculture, forestry and livestock, and (v) sustainably conserve and exploit oceans, seas and marine resources for sustainable development purposes.

Dry rural landscape in the dry season in Northern Togo (Shutterstock)

In this context, it becomes imperative to strengthen statistical production capacity and improve data in order to compile indicators and monitor regularly the achievement of environmental objectives and the progress made in sustainable development, both nationally and internationally.

This work on environmental data is part of this framework and was done in two parts. The first part consisted of assessing availability, accessibility, current data sources, frequency of data production and data production agencies (government, civil society, research centres/ universities, development partners). The second part included an inventory of all data and indicators related to the environment in the NDP, the CSIGER and the NDC. It identified current data gaps for environmental indicators in the NDP and the CSIGERN, in terms of availability, accessibility, use, sources, production agencies and production frequency.

This report features the following eight sections: background of the study, the importance of environment statistics, the environmental statistical standard of economic and environmental accounting, the analysis of organizational arrangements and the institutional framework for environment statistics in Togo, environmental indicators of the NDP, the NDC, SDGs and the CSIGERN, stakeholder analysis, and constraints related to the production of environmental indicators.

1.1 Goals

The purpose of the study is to provide an overview of environmental data related to the NDP, SDGs, the CSIGERN and the NDC.

Specifically, the study aims to:

- Conduct a review of environmental-related SDGs data in Togo and an inventory of environmental indicators in Togo;

- examine and evaluate institutional frameworks and make recommendations; and

- prepare Togo's environmental and climate change data analysis report.

1.2 Expected results

The expected results are as follows:

- Completing the review of SDG data and the inventory of environmental indicators in Togo in connection with the NDP, the CSIGERN and the NDC;

- Reviewing and assessing the institutional framework;

- Making recommendations;

- Publishing the report on the state of environmental indicators in Togo.

1.3 Methodological approach

In order to achieve the objectives of the study, the methodological approach includes three phases:

- Phase 1: The documentary review;

- Phase 2: visiting entities for data collection;

- Phase 3: The compilation, processing and analysis of the data collected for the development of the study report.

- **Documentary review**

The review consisted of doing a bibliographic analysis, which allowed mobilizing and exploiting relevant environmental documentation and data. It involved physical and digital documents

Traditional red dirt road in Togo
(Shutterstock)

to take stock of the existing institutional and environmental management framework in Togo. Finally, the results of the documentary review made it possible to better define all environmental indicators.

- **Data collection and interviews**

This phase involved consulting resource persons at the level of the various entities that produce environmental data through a data collection matrix and a specific interview guide. The documentary review and direct interviews with resource persons allowed to better understand the shortfalls in the functioning of database-producing entities as well as the main strengths and weaknesses in information collection and management.

- **Data processing and report writing**

The processing consisted of addressing the baseline situation, the metadata and the mapping of indicator-producing entities. For each indicator selected, its baseline situation and metadata are determined in terms of data sources or data producers, collection methods and production frequency. The data collected and processed are compiled in the study report.

2. The importance of environment statistics in policy-making

The demand for environment statistics is growing at the same rate as the environmental challenges that modern society is constantly facing. Indeed, for more than 20 years, environmental concern has been growing steadily.

The "strict" protection of the environment has evolved towards the ambition of ensuring sustainable development for all humanity. This has implications for public statistics, which must adapt to meet the demands of this new concept.

Environment statistics have the advantage of providing essential information on the state of the environment, its most important changes over time and space, and the main factors influencing them. They aim at providing high-quality statistical information in order to improve environmental awareness and evidence-based policy action and decision-making and provide information for the general public and for specific user groups. These statistics are multidisciplinary and cross-cutting, involving many sources and stakeholders.

Environment statistics aggregate, synthesize and structure environmental and other data according to statistical methods, standards and procedures. They provide a fundamental basis for research and policies related to the green economy, the blue economy, disaster risk management, sustainable waste, land and biodiversity management, climate change and sustainable development. At a time when demand for such statistics is on the rise amid the continued degradation of the environment and the challenges associated with its better management, it is necessary to strengthen national capacities for adequate data collection.

Photo captured on a Lomé beach in Togo (Shutterstock)

Environmental statistical information is a major challenge for monitoring progress in implementing the United Nations 2030 Agenda (SDGs) and the African Union Agenda 2063. Both programmes seek to establish inclusive growth, sustainable development and peace and security in the continent. They advocate a transition to green and blue economies. Countries are then trying to strengthen the production of environment statistics and promote them as much as economic statistics.

To overcome this challenge and meet expectations, Togo has embarked on a process of developing environment statistics. This process aims to strengthen environment statistics by taking into account all new conceptual, methodological and strategic developments for monitoring SDGs and other international requirements. Initiatives in this process have been strongly supported by the international community, mainly the United Nations Statistics Division and the European Union. Thanks to the combined efforts of the Government and development partners, significant results have been achieved. These include:

- "Regional workshop on environment statistics to support the implementation of the Framework for the Development of Environment Statistics (FDES 2013) for the Economic Community of West African States (ECOWAS)" organized in Lomé in October 2015;

- High-level forum on environment statistics, held in 2015 under the theme "Issues and Challenges for Sustainable Development", advocating the production of environment statistics for sustainable development purposes;

- A national workshop on the FDES, held in July 2016, resulting in the adoption of a list of FDES priority indicators for Togo;

- The study on "State of environment statistics and definition of the environmental statistical information system according to the FDES".

The Togo Environmental Information System Improvement Project (PASIET) was formulated in response to recommendations from these activities and submitted in 2017 to the Korea-Africa Economic Cooperation Trust Fund (KOAFEC) managed by the African Development Bank (AfDB). The overall objective is to contribute to building and strengthening a mechanism to measure and monitor SDGs and measure Togo's environmental and ecological sustainability.

3. International statistical standard of economic and environmental accounting: System of Environmental-Economic Accounting — Central Framework

The System of Environmental-Economic Accounting — Central Framework (SEEA Central Framework), which the United Nations Statistical

View over the landscape at lake bevore dam near Dapaong in Togo (Shutterstock)

Commission (UNSC) adopted as an international standard at its 43rd session in March 2012, is the first international statistical standard for economic and environmental accounting.

It is a multifunctional conceptual framework for understanding the interactions between the environment and the economy. Because it provides internationally agreed definitions and concepts for environmental economic accounting, it is an essential tool for establishing integrated statistics, calculating consistent and comparable indicators, and measuring progress towards SDGs. It is also the multi-faceted conceptual framework for understanding the interactions between the economy and the environment and describing environmental assets and their variations. It places environment statistics and their relationship with the economy at the heart of official statistics. Togo will benefit from implementing SEEA Central Framework as recommended by UNSC.

As an international statistical standard for measuring the environment and its relationship with the economy, the SEEA is well positioned to support integrated policies based on a better understanding of the interactions and trade-offs between the environment and the economy to the extent that it provides statistics for governments to determine priorities, monitor more accurately the impacts of economic policies on the environment, establish more effective environmental regulations and develop strategies to manage resources and, finally, design more effectively market instruments for environmental policies.

4. Analysis of organizational arrangements and institutional frameworks for the production of environment statistics in Togo

4.1 International legal framework

The production of environment statistics is of high political relevance as international discussions on sustainable development are strongly influenced by the availability of data. It is in this context that Togo has joined the rest of the world in recognizing environmental issues by signing and ratifying several international conventions, including:

- Nationally Determined Contribution (INDC);
- Paris Agreement of 2015;

- Vienna Convention for the Protection of the Ozone Layer and Montreal Protocol on Substances that Deplete the Ozone Layer;
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal;
- United Nations Convention to Combat Desertification;
- United Nations Framework Convention on Climate Change and Kyoto Protocol;
- Convention on International Trade in Endangered Species of Wild Fauna and Flora
- Convention on Wetlands of International Importance (the Ramsar Convention);
- United Nations Convention on the Law of the Sea;
- Comprehensive Nuclear-Test-Ban Treaty;
- International Tropical Timber Agreements of 1983 and 1994;
- Convention on the Conservation of Migratory Species of Wild Animals;
- Convention for Cooperation in the Protection, Management and Development of the Marine and Coastal Environment of the Atlantic Coast of the West and Central Africa Region;
- International Convention for the Prevention of Pollution from Ships (MARPOL);
- International Plant Protection Convention;
- Cartagena Protocol on Biosafety.

All these conventions require the production of environmental data at the national level. Despite all the will to work for the management and protection of the environment, the lack of resources hinders the Government's efforts to effectively implement most of these instruments.

4.2 National legal framework

Analysis of the legal framework reveals that the production of environment statistics is part of a more comprehensive formal framework of official statistics production in Togo governed by regulatory texts (laws, ordinances, decrees, decisions, etc.).

The Constitution of 14 October 1992 (Articles 41, 50 and 84) and the Environment Framework Act No. 2008-005 of 30 May 2008 state that "Everyone has the right to a healthy environment. The State shall protect the environment". Thus,

the Constitution gives the Togolese Government full responsibility for monitoring environment protection through conventions, laws, permits and programmes.

Togo has paid particular attention to achieving sustainable environmental development and has worked on mobilizing all resources to preserve and sustain it for future generations. The regulatory framework for environmental management is very broad and varied and includes texts with a clear impact on promoting environmental action in the country, including:

- Act No. 98-00 of 11 February 1996 on the decentralization of urban and rural municipalities and special commissions on environmental issues at the local, provincial and regional level;
- Act No. 98-012 of 11 June 1998 on fisheries resources;
- Biosafety Act of 2009;
- Environment Framework Act No. 2008-005 of 30 May 2008;
- Forest Act No. 2008-009 of 19 June 2008;
- Environment Act No. 88-14 of 3 November 1988;
- Mining Act No. 96-004/PR of 26 February 1996;
- Act No. 96-007/PR of 3 July 1996 on the protection of plants;
- Hydrocarbons Act No. 99-003 of 18 February 1999;
- Water Act No. 2010-004;
- Statistics Act No. 2011-014;
- Decree No. 2006-058/PR of 5 July 2006 defining the list of works, activities and planning documents subject to environment impact study and the main rules of this study;
- Decree 2009-090 /PR on the powers, organisation and functioning of the National Environmental Management Agency;
- Decree 2011-041/PR setting out the procedures for implementing the environmental audit;
- Decree No. 2011-142 /PR of 8 September 2011 regulating the import, export, re-export and transit of wood forest products;
- Ministerial Order No. 005/MPDAT/CAB appointing members of the Sectoral Committees of the National Statistical Council;

- Ministerial Order No. 013/MERF of 1 September 2006 regulating the procedure, methodology and content of environmental impact studies;
- Ministerial Order No. 018 setting out the modalities and procedures for informing and involving the public in environmental impact studies;
- Ordinance No. 4 of 16 January 1968 regulating the protection of wildlife and hunting.

4.3 Institutional framework

The Ministry of Environment was established in 1987. In 2001, it no longer included the tourism department and changed its name to the "Ministry of Environment and Forest Resources (MEFR)" by Decree No. 2001-203 PR of 19 November 2001. However, there are several national departments with environmental responsibilities, which has undoubtedly hindered the ministry's effectiveness. In order to facilitate the coordination of the various environmental programmes between ministries and departments, numerous committees have been created: the Inter-ministerial Commission for the Environment (ICE), the National Environment Committee (NEC), the environmental protection and management committees, and the local planning committees. But unfortunately, due to lack of funding and staff, most of the above commissions are inactive.

4.3.1 National statistical system

Article 17 of the Statistics Act No. 2011-014 defines the composition of the national statistical system (NSS) as follows:

- National Statistical Council (CNS);
- The National Institute of Statistics and Economic and Demographic Studies (INSEED);
- Statistics sections at ministries and public and para-public institutions;
- Statistics and/or demographics academic or research institutions.

The National Statistical Council (Conseil National de la Statistique - CNS) is a multidisciplinary structure responsible for coordinating the production and dissemination of statistical data from NSS services and agencies. The CNS prepares and submits the national statistics policy to the Government for adoption. It has two bodies: the sectoral committees and a statistical litigation committee. Each sectoral committee

is responsible for the issues, decisions and recommendations to be presented to the CNS.

The sectoral committee "Rural Sector and Environment Statistics Committee" is responsible for examining issues related to statistics on agriculture, livestock, fisheries, water and forests and the environment. It gives its opinion on statistical production and the quality of statistics on the rural sector and the environment. It is composed of the focal points of the statistical sections concerned. For the time being, much remains to be done in order to ensure the proper functioning of this Committee which involves three directorates of the MEFR, namely the Directorate of Studies and Planning, the Directorate of the Environment and the Directorate of Forest Resources.

4.3.2 Advisory bodies and public environmental management institutions

Pursuant to the Environment Framework Act No. 2008-005 of 30 May 2008, the MEFR works closely with other ministries and institutions by the environmental issue. In addition, advisory bodies and environmental management institutions have been created and placed under its authority, including:

- The National Commission for Sustainable Development (Commission Nationale du Développement Durable - CNDD): an advisory body responsible for monitoring the integration of the environmental dimension into development policies and strategies and

ensuring compliance and implementation of international environmental instruments ratified by Togo;

- The National Environmental Management Agency (Agence Nationale de Gestion de l'Environnement - ANGE): supports the implementation of the national environmental policy defined by the government as part of the National Development Plan;

- The National Environment Fund (Fonds National de l'Environnement - FNE): intended to finance the national environmental policy.

5. Environmental indicators of the National Development Plan

Following the implementation of the Accelerated Growth and Employment Promotion Strategy (SCAPE), Togo has established a National Development Plan (NDP) for the period 2018-2022. It is a new unifying framework for government action to reconcile and better translate the ambitions of emergence and sustainable development through the structural transformation of the economy and the professionalisation of the different sectors of the value chains, the acceleration of growth, the reduction of poverty and inequality and the preservation of the environment.

The development of the NDP therefore responds to a profound paradigm shift based on the need to refocus development efforts. The overall objective of the NDP is to transform the economy
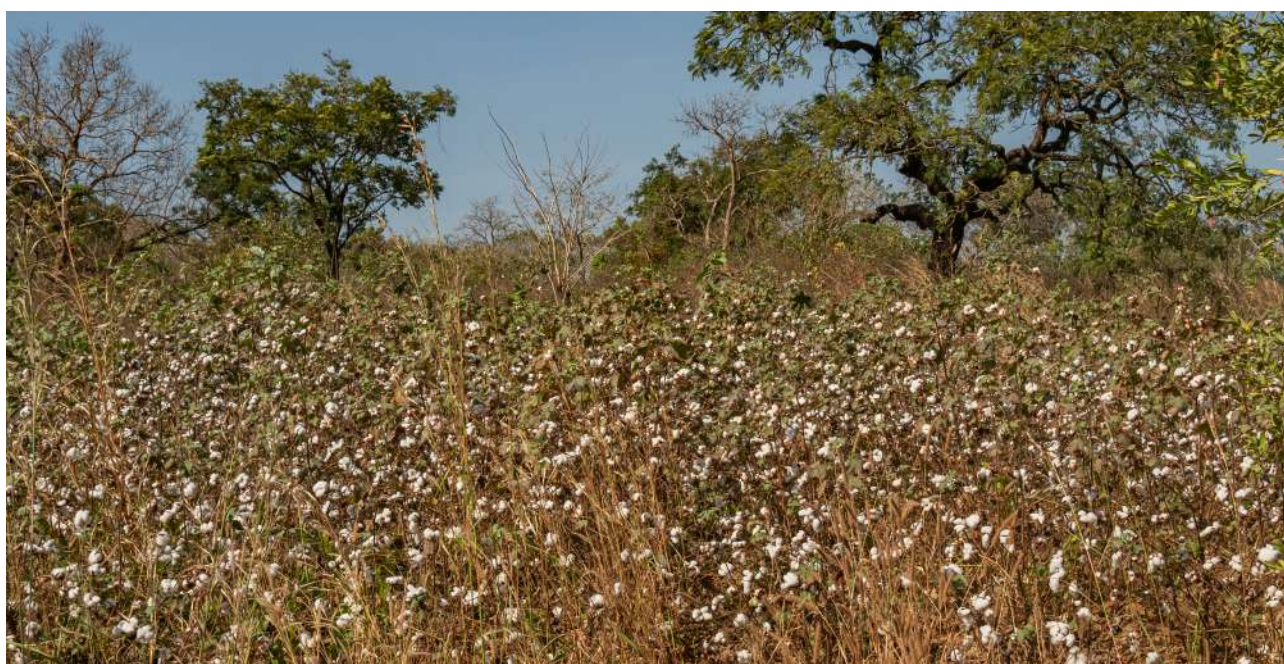
Plantation of cotton plants in Togo (Shutterstock)

structurally in order to achieve strong, sustainable, resilient, inclusive and job-creating growth, thus inducing the improvement of social well-being. The ambition of the authorities is to make Togo a middle-income nation that is economically, socially and democratically strong and stable, united and open to the world.

The guiding principles for the implementation of the NDP are: (i) leadership and ownership; (ii) partnership and mutual accountability; (iii) results-based management and sustainability; and (iv) equity, gender and inclusion. It is built around three strategic thrusts:

1. Thrust 1: Establishing a logistics hub of excellence and a first-class business centre in the sub-region;

2. Thrust 2: Developing hubs of agri-food, manufacturing and extractive industries;

3. Thrust 3: Consolidating social development and strengthening inclusiveness mechanisms.

The table below shows the situation and metadata of environmental indicators contained in the NDP.

6. Environmental indicators of the Nationally Determined Contribution

Unlike many countries, Togo emits very few greenhouse gases (GHGs), and therefore has virtually no responsibility for global warming. Nevertheless, it ambitions -through its Intended Nationally Determined Contribution (INDC)- to move towards low-carbon sustainable development by encouraging sustainable practices.

According to the Intergovernmental Panel on Climate Change (IPCC), global GHG emission estimates for 2010 were around 40,000 MtCO2e. Togo's emissions in the same year were estimated at about 20.45 MtCO2e and represent about 0.05% of the global volume. These emissions are therefore insignificant compared to global emissions.

Nevertheless, through this contribution, Togo reaffirms its adherence to the principle of common but differentiated responsibility and commits to take ambitious measures to contribute to the 2oC target. This contribution ensures fairness of commitment.

Thanks to the measures already undertaken, Togo will unconditionally reduce its emissions by 11.14% compared to the baseline scenario in

2030. It is committed to implementing its strategy for adaptive capacity-building and fulfilling its development imperatives, alongside a low-carbon growth trajectory that will result in a conditional 20% reduction in GHG emissions. This ambitious contribution will support the commitments of the international community.

Togo's contribution is also ambitious, as it will lead to long-term transformations in key energy, agriculture and land use sectors, thereby reducing the future vulnerability of the populations and territories concerned. The NDCs were developed as part of the Paris Climate Agreement in 2015 but apart from targets, NDC indicators are not available.

7. Environmental indicators of the Sustainable Development Goals

In 2015, UN member states adopted a new 2030 sustainable development agenda set around 17 Sustainable Development Goals (SDGs), comprising 169 targets measured by 232 indicators. This new 15-year agenda commits the entire international community to take bold and transformant steps that are necessary to place the world on the path of sustainable development, marked by resilience, "leaving no one behind". The implementation of this new, universal and highly ambitious programme faces immense challenges, requiring revitalized global partnerships, supported by coherent public policies, increased resource mobilization, a statistical data revolution, and respect for the principle of mutual responsibility and accountability.

The adoption of the new agenda has placed an obligation on each State to decide how these aspirations and targets should be integrated in the national planning mechanisms and in national policies and strategies. It is in this dynamic that Togo has made the prioritization of SDG targets a major objective as planned in the 2030 Agenda, taking into account national constraints and specificities.

The prioritisation of SDG targets has allowed selecting a set of national targets to be prioritised in the national and sectoral strategies. It is within this framework that the globally selected targets are vetted through different selective criteria that define national constraints and priorities in terms of their relevance, priority and the quality of the statistical data needed to assess them.

Table 3.1 Access to sustainable domestic energy services

Result	Selected indicators	Producing entity	Calculation method	Reference situation & unit		Source/data collection means (survey, inventory, remote sensing, etc.)	Availability and accessibility (reports, website, publication, etc.)	Frequency of production
				Year	Value			
Expected effect 3.7: Increased access of people, especially the poorest, to sustainable domestic energy services	Proportion of households with access to electricity at the national level	Ministry of Energy INSEED DGE	Ratio of households with access to electricity to all households	2017	52.7%	INSEED Household Survey / INSEED Estimates	Ministry of Energy Activity Report	Annual
	Proportion of the poorest rural households with access to electricity	Ministry of Energy INSEED	Ratio of rural households with access to electricity to all households	2015	4.5%	INSEED Household Survey / INSEED Estimates	Survey report, INSEED website	Annual
	Electricity access rate	Ministry of Energy INSEED	Ratio of households with access to electricity to all households	2018	46.23%	SIE report, 2019	SIE report, 2019	Annual
	Rural electricity access rate	Ministry of Energy INSEED	Ratio of rural households with access to electricity to all households	2018	17.0%	SIE report, 2019	SIE report, 2019	Annual
	Biomass-energy share in household final consumption	Ministry of Energy INSEED	Amount of biomass consumed annually in TOE /all energy consumed in the year	2018	76.2%	SIE report, 2019	SIE report, 2019	Annual

Table 3.2: Sustainable management of natural resources and resilience to climate change impacts

Result	Selected indicators	Producing entity	Calculation method	Reference situation & unit		Source/data collection means (survey, inventory, remote sensing, etc.)	Availability and accessibility (reports, website, publication, etc.)	Frequency of production
				Year	Value			
Expected effect 3.12: Sustainable management of natural resources and resilience to climate change impacts	3.12.1 Forest cover rate	MEFR	Ratio of total forest area to total territory	2016	24.24%	Mapping and inventory	Reports (NFI) MEFR	Every five years
	3.12.2 Proportion of protected territory for biodiversity conservation	MEFR	Ratio of protected areas to total territory	2015	7.5	National Forest Inventory (NFI)	MEFR reports	Every five years
	3.12.3 Proportion of coastline protected against coastal erosion	MEFR	Total length of coastline protected against coastal erosion	2019	21 170 20 820 42.34%	Technical Report WACA/MEFR	DEP/MEFR	Annual
	3.12.4 Proportion of threatened species benefiting from protective measures	MEFR	Ratio of threatened and protected species to all threatened species	-	NA	NA	NA	Annual

Table 3.3: Living and decent housing indicators

Result	Selected indicators	Producing entity	Calculation method	Reference situation & unit		Source/data collection means (survey, inventory, remote sensing, etc.)	Availability and accessibility (reports, website, publication, etc.)	Frequency of production
				Year	Value			
Expected effect 3.10: Access to a better living environment and decent housing	3.10.1 Rate of access to decent housing	Ministry of Urban Development, Housing and Land Reform (MUHRF)	-	-	NA	NA	NA	Annual
	3.10.2 Proportion of municipalities with up-to-date master plans for urban planning and development	MUHRF	Ratio of municipalities with master plans for urban planning and development to the total number of municipalities	2018	37%	Annual Performance Report	Report	Annual
	3.10.3 Urbanization rate	MUHRF	The rate of urbanization is the ratio of urban population to the total population	2020	43.5%	Survey/ Estimates	Survey report	Annual

Table 3.4: Sustainable management of natural resources and resilience to climate change impacts

| Result | Selected indicators | Producing entity | Calculation method | Reference situation & unit | | Source/data collection means (survey, inventory, remote sensing, etc.) | Availability and accessibility (reports, website, publication, etc.) | Frequency of production |
				Year	Value			
Expected Effect 3.12: Sustainable management of natural resources and resilience to climate change impacts	3.12.1 Forest cover rate	MEFR	Ratio of total forest area to total territory	2016	24.24%	Mapping and inventory		Every five years
	3.12.2 Proportion of protected territory for biodiversity conservation	MEFR	Ratio of protected areas to total territory	2015	7.5	National Forest Inventory (NFI)		Every five years
	3.12.3 Proportion of coastline protected against coastal erosion	MEFR	Total length of coastline protected against coastal erosion	2019	20 820	Survey		Annual
	3.12.4 Proportion of threatened species benefiting from protective measures	MEFR	Ratio of threatened and protected species to all threatened species	2020	NA	MEFR activity report		Annual

Table 3.5: Access to improved safe drinking water, hygiene and sanitation

Result	Selected indicators	Producing entity	Calculation method	Reference situation & unit		Source/data collection means (survey, inventory, remote sensing, etc.)	Availability and accessibility (reports, website, publication, etc.)	Frequency of production
				Year	Value			
Expected effect 6: Improved access to drinking water, hygiene and sanitation, especially for the poorest	National access rate to drinking water	Ministry of Water and Rural Hydraulics (MWRH)	Proportion of population with access to a drinking water source (standpipes, private connections, boreholes equipped with human-operated pumps, developed source) according to national standards / total population	2019	53%	MWRH activity report	MWRH activity report	Annual
	Access rate to drinking water in rural areas	MWRH	PROGRES Database routine data Population with a drinking water source (boreholes equipped with human-operated pumps) according to national standards / total population	2019	64%	MWRH activity report	MWRH activity report	Annual
	Access rate to drinking water in urban areas	MWRH	Household survey and population with a drinking water source (standpipes, private connections) according to national standards / total population	2019	53%	MWRH activity report	MWRH activity report	Annual
	Access rate to drinking water in semi-urban areas	MWRH	Household survey and population with a drinking water source (standpipes, private connections and boreholes equipped with human-operated pumps) according to national standards / total population	2019	45%	MWRH activity report	MWRH activity report	Annual
	Proportion of households using improved drinking water sources	MWRH	Households using improved drinking water sources to total households	2017	74.6%	Household survey Population census	Survey report, flyer, website	Annual
	Proportion of households using an improved latrine	MWRH	Households using improved toilets king water sources to total households	2017	19.1%	Household survey Population census	Survey report, website, flyer, etc.	1, 3, 5, 10 years
	Proportion of households with access to wastewater disposal works	MWRH		2015	7.0%	Household survey Population census	Survey report, website, flyer, etc.	1, 3, 5, 10 years

Table 4.1: NDC indicators

Priority targets	Selected indicators	Producing entity	Calculation method	Reference situation & unit		Source/data collection means (survey, inventory, remote sensing, etc.)	Availability and accessibility (reports, website, publication, etc.)	Frequency of production	Difficulty in data production
				Year	Value				

Table 5.1: Goal 1 End poverty in all its forms everywhere

Priority targets	Selected indicators	Metadata	Production entity	Reference year and value		Source data	Availability and accessibility	Publication frequency
1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters	1.5.1 Number of deaths due to disasters per 100,000 people	Number of deaths due to disasters per 100,000 people	MEFR	NA	-	Survey	No	Annual
	Number of deaths due to disasters	Number of deaths due to disasters	National Civil Protection Agency	2019	12	NDP 2010	Yes	Annual

Table 5.2: Goal 2 End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Priority targets	Selected indicators	Metadata	Production entity	Reference year and value		Source data	Availability and accessibility	Publication frequency
2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment	2.3.1 Volume of production per labour unit by classes of farming/ pastoral/forestry enterprise size	Calculation based on survey weights for food production, extrapolation using growth rates for livestock, forest production not available	Ministry of Agriculture, Livestock and Rural Development (MALRD)	2012	Cereals: 1265244 T Tubers: 1595355T Legumes: 249261T Cash crops: 160380T Cattle: 428772 head Sheep: 1111784 heads Caprine animals: 2590449 heads Pigs: 951755 heads Poultry 18153557 heads	Permanent Surveys Systems	Agricultural campaign report	Annual
	2.3.2 Average income of small-scale food producers, by sex and indigenous status	Calculated based on samples with average calculation estimators	MALRD	2015	118936,662 FCFA	Agricultural economic account	ATOR Report	Annual
2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality	2.4.1 Proportion of farms complying with agroforestry techniques	Proportion of farms complying with agroforestry techniques to total farms	MALRD	2012	NA	Report	No	Annual
	2.4.2 Surface area of improved lowlands	Surface area of improved lowlands	MALRD	-	NA	Report	No	Annual
	2.4.3 Number of varieties adapted to extreme weather events	Number of varieties adapted to extreme weather events	MALRD	-	NA	Report	No	Annual
	2.4.4 Proportion of bio-inputs used	Proportion of bio-inputs used to total inputs	MALRD	-	NA	Report	No	Annual

Table 5.3: Goal 6 Ensure availability and sustainable management of water and sanitation for all

Priority targets	Selected indicators	Metadata	Production entity	Reference year	and value	Source data	Availability and accessibility	Publication frequency
6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all	6.1.1 Proportion of population using safely managed drinking water services	Proportion of households with an improved source of drinking water at home, without E. coli and available if necessary	MERH	2017	6.2%	Survey	Yes Website INSEED Survey report	Annual
6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	6.2.1 Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water	Proportion of households having a hand-washing facility with water, soap or a detergent	MERH	2017	20.3%	Survey	Yes Website INSEED	Annual
6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	6.3.1 Proportion of wastewater safely treated	Proportion of treated wastewater to total wastewater	MERH	-	NA	Survey	Report	Annual
	6.3.2 Proportion of bodies of water with good ambient water quality	Proportion of domestic/administrative/industrial buildings with access to a collective wastewater disposal system	MERH	-	NA	Survey	Survey report	Annual
6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	6.4.1 Change in water-use efficiency over time		MERH	-	NA	Survey	Survey report	Annual
	6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources		MERH	-	NA	Survey	Survey report	Annual
6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate	6.5.1 Degree of integrated water resources management implementation (0-100)	Reflects the degree to which integrated water resource management is implemented.	MERH	-	NA	Survey	Survey report	Annual
	6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation		MERH	-	NA	Survey	Survey report	Annual
6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	6.6.1 Change in the extent of water-related ecosystems over time		MEHV	-	NA	Survey	Survey report	Annual
6.a By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies	6.a.1 Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan		MEHV	-	NA	Survey	Survey report	Annual

Table 5.4 Goal 7 Affordable and clean energy

Priority targets	Selected indicators	Metadata	Production entity	Reference year and value		Source data	Availability and accessibility	Publication frequency
7.1 By 2030, ensure universal access to affordable, reliable and modern energy services	7.1.1 Access to electricity	The proportion of the population having access to electricity, whether through a grid or off-grid connection	Ministry of Mining and Energy (MME)	2018	46.2%	SIE report 2019	Report SIE 2019/ DGE	Annual
	7.1.2 Use of clean fuels and technologies	Proportion of the population using mainly clean fuels and technologies	MME	2017	7.0%	MICS6 survey	Survey report Website INSEED	3 years, 5 years
7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	7.2.1 Renewable energy share in the total final energy consumption	It is the ratio between renewable energy consumption and final total energy consumption	MME	2019	25%	MME activity report	MME activity report	Annual
7.3 By 2030, double the global rate of improvement in energy efficiency	7.3.1 Energy intensity	Energy intensity is the ratio between total energy supply and GDP	MME	2018	NA	Survey	Survey report Website INSEED	Annual

Table 5.5: Goal 9 Industry, innovation and infrastructure

Priority targets	Selected indicators	Metadata	Production entity	Reference year and value		Source data	Availability and accessibility	Publication frequency
9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	9.4.1 CO_2 emission per unit of value added	Ratio between CO_2 emissions from fuel combustion and the added value of associated economic activities	Ministry of Industry	-	NA	Survey	Survey report Website	Annual

Table 5.6: Goal 11 Sustainable cities and communities

Priority targets	Selected indicators	Metadata	Production entity	Reference year and value		Source data	Availability and accessibility	Publication frequency
11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons	11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities	Share of the population that has convenient access to public transport	Ministry of Road, Rail and Air Transport	2015	70.6%	Survey - Administrative data	Report	Annual
11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	11.3.1 Ratio of land consumption rate to population growth rate	Ratio between land consumption rate and population growth rate	MUHRF	-	NA	Administrative data - Survey	Report	Annual
	11.3.2 Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically	Ratio between cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically to all cities	MUHRF	-	NA	Administrative data - Survey	Report	Annual
11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	11.7.1 Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities	Share of the built-up urban area open to public use in proportion to total urban areas	MUHRF	-	NA	Administrative data	Report	Annual
11.a Support positive economic, social and environmental links between urban, per-urban and rural areas by strengthening national and regional development planning	11.a.1 Proportion of population living in cities that implement urban and regional development plans integrating population projections and resource needs, by size of city	Proportion of population living in cities that implement urban and regional development plans integrating population projections and resource needs, by city size	MUHRF	-	NA	Administrative data	Report	Annual

Table 5.7: Goal 12 Ensure sustainable consumption and production patterns

Priority targets	Selected indicators	Metadata	Production entity	Reference year and value		Source data	Availability and accessibility	Publication frequency
12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	12.5.1 National recycling rate, tons of material recycled	Share of recycled material	MEFR	-	NA	Administrative data	Report	Annual
12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production	12.a.1 Amount of support to developing countries on research and development for sustainable consumption and production and environmentally sound technologies	Total amount of support to developing countries for research and development activities on sustainable consumption and production and environmentally sound technologies	MEFR	-	NA	Administrative data	Report	Annual

Table 5.8: Goal 13 Take urgent action to combat climate change and its impacts

Priority targets	Selected indicators	Metadata	Production entity	Reference year and value		Source data	Availability and accessibility	Publication frequency
13.2 Integrate climate change measures into national policies, strategies and planning	13.2.1 Number of policy documents and strategies that incorporate climate change	Number of policy documents and strategies incorporating climate change measures	MEFR	-	NA	Administrative data	Report	Annual

Table 5.9: Goal 14 Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Priority targets	Selected indicators	Metadata	Production entity	Reference year and value		Source data	Availability and accessibility	Publication frequency
14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans	14.2.1 Proportion of coast protected from coastal erosion	Ratio between length of protected coasts and the total length of coasts	MEFR	2019	42.44%	MEFR Report	Report	Annual
14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics	14.4.1 Percentage of the tonnage of fish caught by species	Ratio between the volume of fish per species caught/total quantity of fish caught	The Ministry of Economy, Fisheries, and Coastal Protection (MEFCP)	-	NA	Administrative data	Report	Annual
14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information	14.5.1 Coverage of protected areas in relation to marine areas	Ratio between the volume of fish per species caught/total quantity of fish caught	MEFCP	-	NA	Administrative data	Report	Annual

Table 5.10: Goal 15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Priority targets	Selected indicators	Metadata	Production entity	Reference year	value	Source data	Availability and accessibility	Publication frequency
15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	15.1.1 Forest area as a proportion of total land area	Ratio between forest areas and total land area	MEFR	2016	24.24%	Survey Forest Inventories	Reports	Quinquennial
	15.1.2 Proportion of protected areas coverage	Ratio between protected areas and total area of the country	MEFR	2015	7.4%	Survey Forest Inventories	Reports	Quinquennial
15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world	15.3.1 Proportion of degraded land	Ratio between degraded land and total land area	MEFR	2015	11.5%	Survey Forest Inventories	Reports	Annual
15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development	15.4.2 Mountain Green Cover Index		MEFR	-	NA	Forest inventories	Reports	Annual

At the end of this prioritization exercise under the leadership of the Ministry of Development Planning and Cooperation, a national package of targets has been selected from the SDGs as well as their related indicators for the next five-year period (2018-2022). The environmental indicators presented in this section are derived from the indicator prioritization exercise for monitoring the SDGs.

8. Environmental indicators of the Strategic Investment Framework for Environmental and Natural Resources Management

In order to ensure the protection of the environment within a sustainable development perspective, the Ministry of the Environment and Forest Resources (MEFR) has developed and implemented the Strategic Investment Framework for Environmental and Natural Resources Management (CSIGERN) for the period 2018-2022 in order to pool interventions and gain more visibility for actions undertaken.

Overall objective

The overall objective is to sustainably manage the environmental and natural resources in order to contribute to the enhancement of food security, the country's economic growth and poverty reduction.

Development objectives

Development objectives are divided into institutional objectives, socio-economic objectives and environmental objectives.

- Institutional objectives: promote the proper functioning of State institutions and strengthen the technical and financial capacities of the concerned stakeholders to integrate Environmental and Natural Resources Management (ENRM) in the country's development policies;

- Socio-economic objectives: create favourable conditions for food security and economic growth;

- Environmental objectives: mitigate climate change effects and disaster risks and fight against land degradation, loss of biodiversity, pollution and nuisances.

Specific objectives

Five specific objectives are targeted within the CSIGERN:

- Improve governance of the environment sector;

- Promote the sustainable management of land and water ecosystems and biodiversity;

- Support the fight against climate change and the integrated management of the marine and coastal environment;

- Sustainably manage the living environment, including risks and pollution;

- Promote eco-citizenship, sustainable development and the transition towards green economy.

The CSIGERN is based on the following five (05) strategic pillars:

1. **Strategic pillar 1**: Improved governance of the environment sector: The objective of this pillar is to strengthen the achievements of National Investment Programme for Environment and Natural Resources (NIPENR) in terms of sector governance by revisiting the institutional implementation framework so as to have more favourable conditions for the Environment and Natural Resources Management (ENRM).

2. **Strategic pillar 2**: Sustainable management of land and aquatic ecosystems and the preservation of biodiversity and environmental services. This strategic pillar aims to capitalise on and maximize the good practices of the ENRM already initiated during the implementation of the NIPENR.

3. **Strategic pillar 3**: Fight against climate change and integrated management of the marine and coastal environment. The objective of this strategic pillar is to mitigate disaster risks, reduce the vulnerability of populations and ecosystems to the adverse effects of climate change and develop mitigation actions in key development sectors.

4. **Strategic pillar 4:** Improvement of the living environment and reduction of pollution risks. This strategic pillar aims to sustainably improve the living environment of the Togolese population in urban and rural areas.

5. **Strategic pillar 5**: Promotion of eco-citizenship, sustainable development and the transition towards green economy. This strategic pillar aims to promote more awareness-raising and education actions among the population on

eco-citizenship and sustainable development so as to cultivate spontaneous habits at school, both in urban and rural areas, to transform the current mode of consumption into a sustainable one and to promote small and medium-sized enterprises wishing to embark on the development of more sustainable and environment-friendly technologies.

The implementation of the CSIGERN relies on the availability and effective dissemination of information on the state of the country's natural resources for better environmental monitoring and better decision-making. To do this, the collection of data and information required to calculate the selected indicators on a regular basis is necessary.

The results from the inventory on the baseline situation of the CSIGERN indicators along with metadata are presented in the table below to serve as a benchmark and later allow to inform the products, effects and impacts indicators.

9   Analysis of environment and climate change data producers

The production of environmental statistics in Togo involves several public and private institutions.

9.1   Ministry of Environment and Forest Resources

The Ministry of Environment and Forest Resources (MEFR) is itself a producer of environmental statistics through its two central directorates, namely the National Environment Management Agency and the Study and Planning Directorate.

The National Environment Management Agency (Agence Nationale de Gestion de l'Environnement-ANGE) is responsible for managing the Environmental Information and Monitoring System (EIMS) pursuant to the Environment Framework Act and Article 24 of Decree No. 2009- 090/PR on the remit, organization and functioning of the Agency. It is a public institution with legal personality and financial autonomy placed under the supervision of the Ministry of Environment and Forest Resources. It is a support institution for the implementation of the national environmental policy as defined by the government in the National Development Plan. Its mission is to:

i)   Develop and coordinate the implementation of the National Environment Management Programme;

ii)   Put in place national procedures for environmental and social assessments (ESA) and environmental impact assessments (EIA);

iii)   Establish a national environmental information system;

iv)   Coordinate the preparation of the annual report on the state of the environment;

v)   Seek and mobilize the financial and technical resources necessary for the performance of its specific missions and other missions that may be entrusted to it.

The Agency is operational but the insufficient financial and material resources and / or the lack of regulatory texts on environmental standards do not allow it to carry out effective control of potential harm to the environment. Some of its responsibilities are still carried out by the Directorate of the Environment with many difficulties which also limit its performance. It should also be noted that to date, the ANGE does not have regional directorates yet to expand its actions.

The Studies and Planning Directorate (DEP) is responsible, among other things, for:

• Coordinating the technical preparation of the investment budget and medium-term sector expenditure frameworks (Draft Budget/ Medium-Term Sectoral Expenditure Framework) in collaboration with the other concerned business units;

• Coordinating and following up the Directorate's planning activities;

• Preparing sectoral development plans and providing the planning elements to be taken into consideration in strategy documents at the national level;

• Organizing and managing the ministry's database.

The DEP has two (2) divisions, namely the resource mobilization and partnership division and the programming, statistics and follow up-evaluation division. The latter is responsible, among other things, for:

• Collecting, centralising, processing and disseminating sectoral statistics;

• Coordinating the realisation of prospective studies;

Table 6.1 Strategic investment framework for environmental and natural resources management

Level	Objective	Code	Indicator	Metadata	Measurement unit	Reference situation		Frequency (Monthly, quarterly, annual)	Owner Directorate, Agency, Institution, Donor
						Base year	Base value		
IMPACT	Overall objective (OO)		Prevalence of monetary poverty decreased by 10.5%, i.e. reaching 44.6% by 2022		%	2015	55.1	Annual	INSEED
IMPACT	Overall objective (OO)		ENRM's contribution to the national economy will increase by 3% by 2022		%	-	NA	Biannual	MEFR / MALRD / INSEED
IMPACT	Development objective (DO)	INST-DO	A performance rate higher than 90% is achieved within the framework of CSIGERN by 2022		%	2017	53	Annual	MEFR
IMPACT	Development objective (DO)	INST-DO	A budget execution rate higher than 90% is achieved within the framework of CSIGERN by 2022		%	2017	43.5	Annual	MEFR
IMPACT	Development objective (DO)	SE-DO	100% achievement rate of the objective of creating 10,000 additional sustainable jobs in the sector		%	2017	NA	Annual	MEFR
IMPACT	Development objective (DO)	SE-DO	100% achievement rate of the objective of supporting 200,000 AGR under the programme for 2022		%	2017	NA	Annual	MEFR
IMPACT	Development objective (DO)	E-DO	Increasing the forest cover rate to 28% by 2022		%	2016	24.24	Annual	MEFR

EFFECT	E-DO	Reducing net GHG emission rate by 11.14% with reference to the 2030 scenario	MtCO2	2010	24.5	Annual	MEFR
	E-DO	Halving the percentage of loss of human life due to environmental disasters (floods, landslides, etc.)	%	2016	14	Annual	MEFR, National Civil Protection Agency
		Victim care rate					
		Rate of territory coverage by an early warning system					
Specific objective (SO) 1: Improve the governance of the environment sector							
	SO 1	Overall performance rate of MEFR institutions	%	2015	78	Annual	MEFR
		Budget consumption rate	%	2017	NA	Quarterly	MEFR
SO 2: Promote the sustainable management of terrestrial and aquatic ecosystems and biodiversity							
	SO 2	Budget mobilized for sustainable land management	%	-	NA	Annual	MEFR
		Percentage of adoption of sustainable techniques	%	-	NA	Annual	MEFR
		1.1% increase in the share of protected territory for biodiversity conservation by 2022	%	2016	7.4	Annual	MEFR
SO 3: Strengthen the fight against climate change and the integrated management of marine and coastal environment							
	SO 3	Budget mobilized for the protection of the environment	%	-	NA	Annual	MEFR
		Number of SMEs launched or set up in the blue economy	Number	2017	NA	Quarterly	MEFR

SO 4: Sustainably manage the living environment, including risks and pollution

Code	Indicator	Unit	Baseline Year	Baseline Value	Frequency	Source
SO 4	50% increase in municipal waste collection rate	%	2017	30	Monthly	MEFR, National Agency for Sanitation and Public Health
	Area of green space created or maintained nationally	m2	2017	NA	Monthly	National Agency for Development Support at the Base, Municipalities
	Pollutant reduction rate	%	2010	24.5	Annual	MEFR

SO 5: Promote eco-citizenship, sustainable development and the transition towards green economy

Code	Indicator	Unit	Baseline Year	Baseline Value	Frequency	Source
SO 5	Rate of citizens mobilized for eco-citizenship	%	2017	NA	Quarterly	MEFR
	Rate of green jobs created	%	2017	NA	Quarterly	MEFR
R1-SO1	Level of institutional framework operationality	Level	2017	4	Quarterly	MEFR
	Level of stakeholder satisfaction with the information system	Level	2017	1	Quarterly	MEFR
	Share of public expenditure allocated to the sector	%			Quarterly	MEFR
	Financial execution rate	%	2017	NA	Quarterly	MEFR
R2-SO1	Number of texts revised and applied	Number	2017	26	Quarterly	MEFR
R3-SO1	Number of cross-cutting projects supported	Number	2017	27	Quarterly	MEFR
	Number of new projects developed and implemented	Number	2017	0	Quarterly	MEFR
R4-SO1	Number of communication actions undertaken on ENRM	Number	2017	0	Quarterly	MEFR

RESULTS

Code	Indicator	Unit	Year	Value	Frequency	Source
	Number of SMEs supported	Number	2017	0	Quarterly	MEFR
R5-SO1	Financing allocated to innovative sectors	%	2017	NA		
R6-SO1	Number of additional people hired	Number	2011	178	Annual	MEFR
	Number of officials promoted	Number	2011	8	Annual	MEFR
R7-SO1	Number of stakeholders supported and strengthened	Number	2011	25	Quarterly	MEFR
R8-SO1	Number of awareness events organized	Number	2017	NA	Quarterly	MEFR
R1-SO2	Number of resource evaluation studies	Number	2017	NA		
	Area of new plantations (target: 34,400 ha)	ha	2016	5,698,778	Quarterly	MEFR
R2-SO2	Area of restored forests (265,600 ha);	ha	2017	NA	Quarterly	MEFR
	Area of sustainably managed forests (?)	ha	2017	NA	Quarterly	MEFR
R3-SO2	Number of publications issued on the management of aquatic ecosystems	Number	2017	NA		
	Area of protected areas tracked	ha	2017	0	Quarterly	MEFR
R4-SO2	Frequency of endangered species evaluation	Times/year	2017	NA	Annual	MEFR
R1-SO3	Financing level of resilience projects	%	2017	NA	Annual	MEFR
	Strategic plan prepared for the protection and development of the coastal zone	Adoption	2017	NA	Annual	MEFR
R2-SO3	Linear of developed and protected coastline	Meter	2015	21175	Quarterly	MEFR
	Marine and coastal environment observation mechanism	Listing	2017	1	Annual	MEFR
R3-SO3	3% reduction in GHG emissions by 2022	MtCO2	2010	24.5	Annual	MEFR

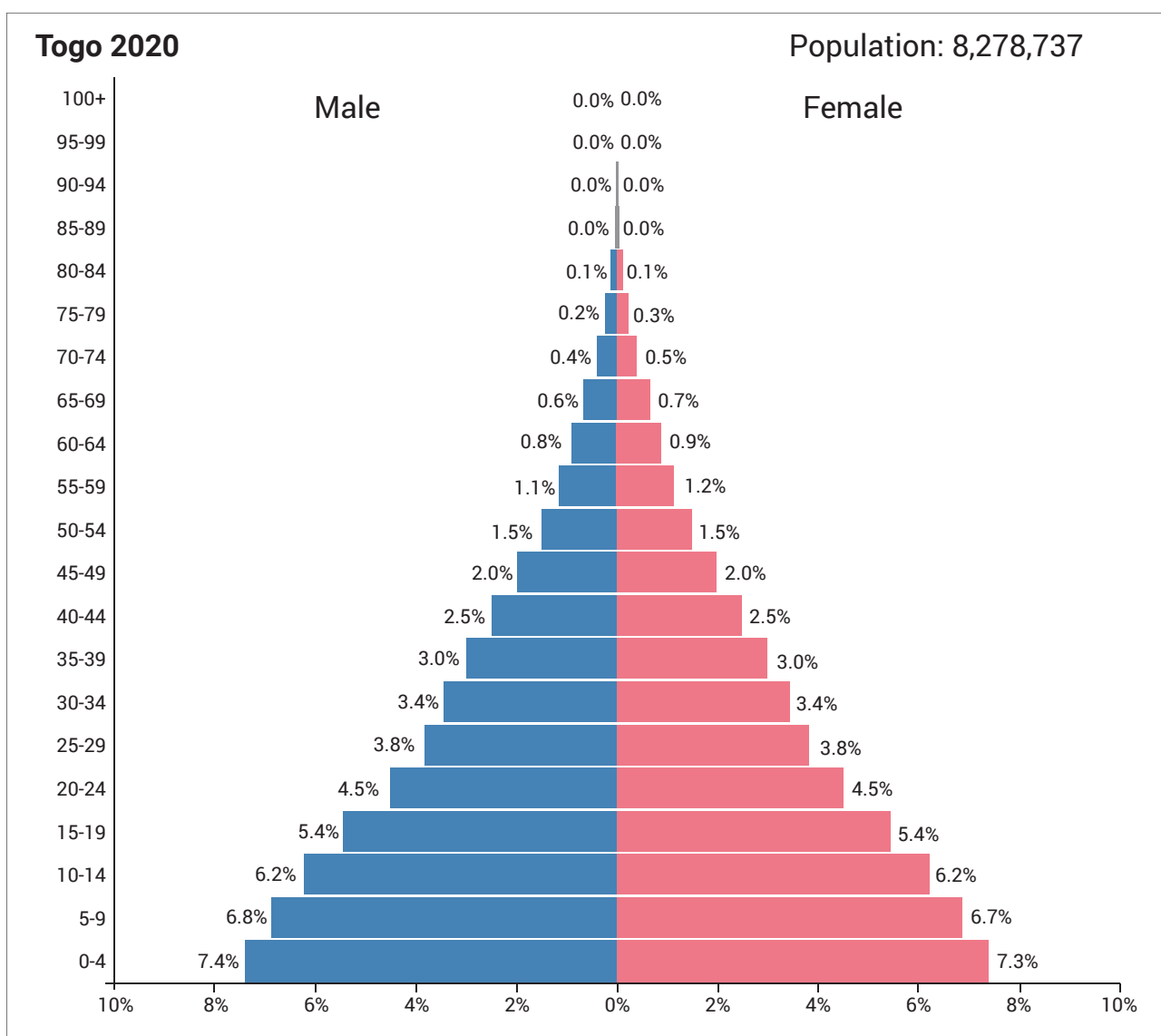| ID	Indicator	Unit	Baseline Year	Target	Frequency	Source
R4-SO3	Number of projects financed	Number	2017	NA	Quarterly	MEFR
	Number of blue jobs created	Number	2017	NA	Annual	MEFR
	HCFC / 11.6.2 elimination rate (3% increase in the elimination rate by 2022)	%	2017	NA	Annual	MEFR
R1-SO4	Decrease in the annual average level of fine particles (e.g. PM 2.5 and PM 10) in cities, weighted by the number of inhabitants	%	2017	NA	Annual	MEFR
R2-SO4	Number of awareness raising days	Number	2017	NA	Quarterly	MEFR
R3-SO4	Number of strategic environmental and social assessments (SESA) and environmental and social impact assessments (ESIA) carried out	Number	2017	NA		
R1-SO5	Number of green jobs created	Number	2017	NA	Quarterly	MEFR
	Income level of sub-sector stakeholders	Number	2017	NA		
R2-SO5	Number of SMEs or SMIs developed	Number	2017	NA	Quarterly	MEFR
	Number of sensitized people	Number	2017	NA	Quarterly	MEFR
	Number of reviews developed on sustainable development	Number	2017	NA		
	Number of documents published	Number	2017	NA		
R3-SO5	At least 50% of Togo's inhabitants have the necessary information and knowledge on sustainable development and an environment-friendly lifestyle	Number	2017	NA	Annual	MEFR

- Setting up and managing the ministry's database;

- Developing and managing the ministry's information system;

- Monitoring the implementation of strategies, programmes and projects for the preservation of the environment and forest resources;

- Ensuring the monitoring and evaluation of environmental management actions undertaken by the ministry's affiliated institutions;

- Monitoring the use of the ministry's budget and off-budget resources.

The analysis of the institutional framework of the MEFR relating to the powers of the ANGE and the DEP shows a pressing need to specify, through another law, which of the two institutions should be responsible for producing and managing environmental statistics.

9.2 National Institute of Statistics and Economic and Demographic Studies

The National Institute of Statistics and Economic and Demographic Studies (INSEED) was created by Law No. 2011-014 dated 3 June 2011 on the Organization of Statistical Activity in Togo. Its powers, organization and functioning are determined by Decree No. 2015-020 / PR dated 24 February 2015. It therefore enjoys autonomous management and budget and its management is supervised by a Board of Directors which takes the strategic decisions of the Institute. Its structure currently comprises a general directorate, a general secretariat, five central directorates and eight affiliated services as well as five regional directorates.

INSEED oversees and coordinates the National Statistical System (NSS) and holds a large amount of data. It plays an instrumental role in the data revolution for sustainable development. As experts in measuring the social, economic

Togo 2020

Population: 8,278,737

Age	Male	Female
100+	0.0%	0.0%
95-99	0.0%	0.0%
90-94	0.0%	0.0%
85-89	0.0%	0.0%
80-84	0.1%	0.1%
75-79	0.2%	0.3%
70-74	0.4%	0.5%
65-69	0.6%	0.7%
60-64	0.8%	0.9%
55-59	1.1%	1.2%
50-54	1.5%	1.5%
45-49	2.0%	2.0%
40-44	2.5%	2.5%
35-39	3.0%	3.0%
30-34	3.4%	3.4%
25-29	3.8%	3.8%
20-24	4.5%	4.5%
15-19	5.4%	5.4%
10-14	6.2%	6.2%
5-9	6.8%	6.7%
0-4	7.4%	7.3%

and environmental situation, statisticians regularly support the sector's departments and provide data deemed reliable and useful for research, analysis and policy formulation. As independent institution bound by transparency and compliance with standards, the INSEED is the guarantor of the quality of official statistics and increasingly gains trust in the policy-making process. Its other functions include:

- Producing and making available to users relevant, up-to-date and reliable statistics relating to all areas of the nation's life;

- Harmonising, centralising and securing NSS data;

- Promoting applied research methodologies and analysis in the collection, processing and dissemination of statistical data;

- Promoting the training and development of officials in specialised institutions in the fields of statistics, demography, information technology and other basic or related disciplines.

9.3 Other sectoral structures producing environmental statistics

Many other sectoral structures are involved in the production of environment statistics. Each of them collects, processes and manages its environmental statistics separately. The methods of data collection are censuses, surveys and the use of administrative records and remote sensing networks. These structures include departments or directorates of technical ministries and other public or para-public bodies. However, for the time being, only a few ministries, such as those of education and health, have statistical "task forces / units" and mechanisms to report data to the central level.

Furthermore, it should also be noted that there is a Directorate of Agricultural Statistics, Information and Documentation (DSID). Its role is to collect and produce reliable statistical data on the primary sector (Agriculture, Livestock, Fishing, etc.). This role is reflected each year in the assessment of the agricultural and food situation of the country in order to inform the authorities in time on the measures to be taken in the event of a food surplus or deficit.

The other structures involved in the production of environment statistics are:

- Ministry of Urban Planning, Housing and Land Reform: General Directorate of Cartography, National Agency of Public Sanitation, Directorate of Urban Planning and Living Environment;

- Ministry of Agriculture, Livestock and Rural Development;

Colorful fisher boats lying on the sand at the beach of Lomé in Togo (Shutterstock)

- Ministry of Water and Rural Hydraulics: with its units in charge of water management, including the Water Resources Directorate, the Sanitation Directorate and the Planning Directorate;

- Ministry of Health, Public Hygiene and Universal Access to Health Care, with its bodies and projects including the National Institute of Hygiene;

- Ministry of Infrastructure and Transport with its attached structures including the General Directorate of Public Works, the General Directorate of National Meteorology, and the Directorate of Maritime Affairs;

- Ministry of Mining and Energy;

- Ministry of Territorial Administration, Decentralisation and Territory's Development, responsible for territory's development;

- Ministry of Higher Education and Research with its attached bodies and projects including the University of Lomé, the Integrated Coastal and Environment Management Centre, West African Science Service Centre on Climate Change and Adapted Land Use (WASCAL);

- Ministry of Trade, Industry and Domestic Consumption;

- Ministry of Economy and Finance and related bodies including the Togolese Revenue Office, the Customs and Indirect Duties Commission;

- Ministry of Security and Civil Protection;

- High Council of the Sea.

In addition to these national structures generating environmental data, there are certain international organizations such as the United Nations Development Programme (UNDP), the UNICEF and the United Nations' Food and Agriculture Organisation (FAO) which produce and use data relating to the environment in Togo.

10. Constraints related to the production of environmental indicators

• Inadequate legal and institutional framework

The weakness of the legal and institutional framework governing statistical production is reflected in:

- The lack of legal texts clearly defining the missions and roles of most public sectoral statistical structures;

- The dysfunction of the National Statistical Council (CNS) and its sectoral committees in terms of the regulatory provisions in force (the sessions of the CNS are not held according to the indicative schedule as provided for by its rules of procedure). This dysfunction is linked to the administrative inefficiency and the unavailability of funds;

- The weak coordination / collaboration between data producing structures and the INSEED, due to the improper functioning of the frameworks encompassing INSEED and all the structures of the NSS;

- The lack of implementing texts for the provisions in force for obtaining a visa for any official statistical operation on the national territory;

- The non-transposition of certain provisions of the African Charter into the Statistics Act.

• Methodological and technical difficulties

Environment statistics are a very complex field. Most environmental statistics do not exist because the methodology is yet to be improved, designed or mastered. Methodological or technical problems therefore result in the lack of methodology, including concepts, as well as in difficulties to gather large primary data into statistical series and in technical problems of interpretation.

It should also be noted that the data used to generate environmental statistics come from different institutions and are often compiled using various collection techniques. They are inaccessible and difficult to obtain from the responsible agency or the primary source. Sometimes data cannot be provided in a ready-to-use format.

It is also important to note the weakness of the institutional or coordination framework which does not allow better collaboration between the different institutions and, therefore, does not guarantee optimal and adequate production of all primary data or environmental statistics.

• Lack of material and financial resources

Financial resources remain one of the factors that determine the level and quality of statistical production. However, the data production activity in general requires significant financial resources that require rationalisation for optimal productivity. In Togo, the production of public

statistics in general and environmental statistics in particular mostly faces financial difficulties, with too much dependence on external support. Most of the production structures do not have enough financial resources for statistical production. The financing of the NSS activities is mainly provided by technical and financial partners whose disbursement procedures are often not well controlled. The agencies of the United Nations system represented in Togo by the UNDP, the World Bank, the European Union, ECOWAS, FAO, etc. (who are also users) truly promote the production of environmental statistical data through regular financial and technical support for the implementation of development projects and programmes.

Environmental data are large quantities of observations and measurements about the environment and related processes. For these reasons, surveys for environment statistics are not always economically feasible with limited budgets. Given this situation, it is almost impossible to properly generate environmental data meeting users' needs. The resources allocated by the Togolese government to the entire NSS are insufficient, but they also are diminishing considerably every year due to a lack of interest and definition of priorities in terms of environmental data management.

- **Problems of environmental data communication, dissemination and archiving**

The data produced on the environment is indeed sparse, not up-to-date and not readily available. Unfortunately, the updating and availability of data evolve in a vacuum, making it difficult to access information. The lack of communication and consultation between the institutions in charge of the environment's management means that the accumulated mass of information still does not constitute usable capital. Information remains too dispersed, compartmentalised and not easily accessible to users both nationally and internationally. This results in an apparent lack of information at the local level, whereas it actually exists in national or international institutions or in specialised organizations around the world.

Thus, from the point of view of the archiving and dissemination of environmental data, one may note:

- The lack of an archiving, dissemination and communication policy;

- The lack of documentation centres in certain sectoral structures resulting in a low level of dissemination;
- The low level of awareness of decision-makers on the importance of regular and reliable statistical information;
- The lack of websites for certain sectoral structures;
- The lack of periodic surveys on user satisfaction and their statistical data needs;
- The lack of an electronic archiving system.

11. Conclusion and recommendations

The availability of reliable quantitative and qualitative data on the environment has become now a necessity and should be an essential prerequisite for decision-making processes and operational mechanisms for the preservation and sustainable management of the environment. Environmental statistics cover a wide range of information and are interdisciplinary in nature. Their sources are scattered among various data producers, and the methods used for their compilation are just as numerous. In fact, due to the weakness of the statistical coordination system, each structure collects, processes and manages environmental statistics in isolation and with the collection and processing procedures that it deems appropriate, because of the lack of harmonised procedures.

The study on the data ecosystem of the SDGs focused on the environment in Togo, including (i) the inventory of SDGs indicators related to the environment and the NDP, the CSIGERN and the NDC and the baseline situation of the said indicators, revealed that environmental statistics are practically non-existent. The rare data that do exist are still very sparse, unreliable and difficult to access.

To produce valid environmental statistics, specialised statistical and environmental skills, scientific knowledge, institutional development capacities and enough resources are all needed.

Based on the difficulties identified, we make the following recommendations:

Short-term:

- Organize a consultation on the SDGs, the NDP, the CSIGERN, the NDC, the situation of sector indicators and the evaluation of MEFR's information capacities which will lead to a breakdown of indicators by directorate;

- Capacity building through the application and implementation of international statistical standards as set out in the Framework for the Development of Environment Statistics (FDES 2013) and the System of Environmental Economic Accounting (SEAA);
- Provide financial and human resources necessary for the collection, compilation, processing and dissemination of environmental data;
- Create a national stakeholders' platform for the follow up of environmental indicators;
- Create an accessible national website / portal on environmental indicators;
- Enhance cooperation between government organisations involved in the collection of environmental data;
- Enact legislation to formalize the generation and dissemination of environmental statistics;
- Sensitize the various stakeholders on the importance of environmental statistics and indicators, as well as environmental accounting and related data collection.

Medium-term:

- Enhance the mobilisation of technical and financial partners for the financing of the environmental monitoring system;
- Train statisticians and environmental officials in the collection of environmental statistics;
- Improve the accessibility of available data through a policy of official statistics dissemination and develop a methodology for data collection;
- Develop an environmental statistical programme;
- Develop an environmental dashboard;
- Design, plan and implement studies/ assessments intended primarily to produce environmental statistics;
- Set up an environment statistics unit with appropriate resources, to make them accessible and inform socio-economic decision-makers with the aim of maximising the well-being of the population.

Long-term:

- Develop an environmental database based on available data;

- Document the data collection and compilation methodology and align it with international standards;
- Develop, implement and maintain an online information and monitoring system for environmental statistics;
- Implement environmental and economic accounting;
- Enhance inter-institutional collaboration.

Environment statistics cover several topics for which data are generated by the INSEED, specialised agencies, ministries, provincial or municipal authorities and scientific institutions. This requires the collaboration of stakeholders, both at the strategic and technical level. The collaboration of national and sub-national institutions can be a multi-stakeholder or inter-agency platform responsible for coordinating the strategic development and production of environmental statistics.

Inter-agency platforms bring together environmental statistics users and producers to identify users' needs and coordinate the production of environment statistics from different data sources. One of the tasks of the platform is to ensure that the same methodology or protocol is used to ensure comparability and soundness of statistics. Another useful function is to maintain continuity over time, despite staff changes in partner institutions.

In some countries, national statistical institutes (NSIs) are responsible for compiling and disseminating environmental statistics. One of the advantages of this situation is that NSIs already rigorously apply statistical standards for data collection and dissemination. They are usually responsible for surveys that they could easily extend to environmental issues or specialised surveys of environmental statistics. Therefore, it would be easy to integrate environment statistics with sectoral statistics such as energy and transport; and to link environmental statistics with economic and socio-demographic statistics, among others. However, if environment statistics are collected and/or coordinated by another institution, the latter should retain this responsibility, but in this case coordinate activities with the INSEED.

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Annexes

A. Environment-related Sustainable Development Goals (SDGs)

Goal 1: End poverty in all its forms everywhere

By signing the 2030 Agenda, governments around the world have committed to eradicate poverty in all its forms, including the most extreme ones, over the next 15 years. They vowed that all the peoples of the world should enjoy a minimum standard of living. This includes social protection benefits for the poor and most vulnerable and ensuring that people affected by conflict and natural disasters receive adequate assistance, including access to basic services.

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Goal 2 seeks sustainable solutions to end hunger in all its forms by 2030 and achieve food security. The aim is to ensure that everyone, everywhere, has access to sufficient, good-quality food to be able to stay healthy. Achieving this goal will require better access to food and widespread dissemination of sustainable agriculture. This means improvements in the productivity and incomes of smallholder farmers, promoting equal access to land, technology and markets, viable food production systems and resilient farming practices. It is also necessary to invest more in international cooperation, in order to strengthen the productive capacity of agriculture in developing countries.

Goal 6: Ensure availability and sustainable management of water and sanitation for all

SDG 6 goes beyond drinking water, sanitation and hygiene by also taking into account the quality and viability of water resources, which are essential for the survival of populations and of the planet. The 2030 Agenda recognizes the central place of water resources for sustainable development and the vital role played by improved drinking water, sanitation and hygiene in achieving progress in other areas, including health, education and poverty reduction.

Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all

Access to reliable, sustainable and affordable energy services is crucial for the achievement of many sustainable development goals, from poverty eradication to advances in health, education, water supply and industrialisation, up to climate change mitigation. Access to energy services, however, varies widely among countries, and current progress falls short of what is required to achieve the target. Major efforts will be needed, in particular for countries with significant gaps in access to energy services and high energy consumption.

Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

Sustainable Development Goal 9 addresses three important aspects of sustainable development: infrastructure, industrialisation and innovation. Infrastructure provides the basic material means essential to businesses and society; industrialisation boosts economic growth and job creation, thereby reducing income inequalities; and innovation improves the technological capabilities of industrial sectors and enables the acquisition of new skills.

Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

nowadays, more than half of the world's population lives in cities. By 2030, 6 in 10 people are expected to be city dwellers. Despite the many challenges with planning, cities offer more efficient economies of scale at various levels, including the provision of goods, services and transportation. Through sound planning and management which take into consideration risks, cities can become centres of innovation and growth, and contribute to sustainable development.

Goal 12: Ensure sustainable consumption and production patterns

Sustainable growth and development require minimising the use of natural resources and toxic materials, as well as the generated waste and pollutants, throughout the production and consumption process. Sustainable Development Goal 12 encourages more sustainable consumption and production patterns through various measures, including specific policies and international conventions on the management of environmentally toxic materials

Goal 13: Take urgent action to combat climate change and its impacts

Climate change is the greatest threat to development, and its widespread and

unprecedented effects weigh disproportionately on the poorest and most vulnerable. Goal 13 calls for urgent action not only to tackle climate change and its impacts, but also to strengthen adaptive capacity in the face of climate-related hazards and natural disasters.

Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Oceans, seas and other marine resources are essential for human well-being and for global social and economic development. Their conservation and sustainable use are crucial for the achievement of the 2030 Agenda, especially for small island developing States. Marine resources are particularly important to residents of coastal communities, representing 37% of the world's population in 2010. The oceans provide means of existence and subsistence and make possible certain economic activities such as fishing and tourism. They also help regulate the global ecosystem by absorbing heat and carbon dioxide (CO2) from the atmosphere. However, the oceans and coastal areas are extremely vulnerable to environmental degradation, overfishing, climate change and pollution.

Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Preserving the various forms of life on earth requires focused efforts to protect, restore and promote the conservation and sustainable use of terrestrial and other ecosystems. Goal 15 places emphasis on the sustainable management of forests, stopping and reversing the process of land and natural habitat degradation, successfully combating desertification and stopping the loss of biodiversity. All these efforts combined aim to ensure that the benefits of terrestrial ecosystems, including sustainable livelihoods, are enjoyed by generations to come.

B. Organisation of the Ministry of Environment and Forest Resources (MEFR)

The MEFR comprises the Minister's executive office, the departments reporting to the Minister, the central administration, the external departments and affiliated institutions and bodies.

a. The Executive Office

It comprises:
- Director of the Executive Office;
- Technical advisor;
- Legal advisor;
- Special advisor;
- The press secretary;
- Office attaché;
- Head of the Minister's secretariat.

b. Departments reporting to the minister
- Inspector of the MESDNP departments;
- Manager of government procurement;
- Government Procurement Committee
- Government Procurement Control Committee;
- The Environment's police;
- Forest Resources Inspectorate.

c. The central administration is composed of:
- The General secretariat;
- The Administrative and Financial Affairs Directorate;
- The Studies and Planning Directorate;
- The Environment Directorate;
- The Forest Resources Directorate.

d. The external departments are:
- Regional directorates for the environment and forest resources;
- The prefectural directorates for the environment and forest resources.

e. The institutions and bodies affiliated to the ministry are:
- The National Environment Management Agency (ANGE)
- The Forests Development and Exploitation Office
- The National Commission for Sustainable Development
- The National Environment Fund
- The National Consultative Commission for Forest Resources Management

C. Framework for the Development of Environment Statistics

The Framework for the Development of Environment Statistics (FDES) is a tool for developing and/or strengthening environment statistics at the national level. The FDES provides a framework that defines the environmental data that fall within its application scope, then structures, synthesises and compiles them into meaningful statistics. The FDES provides a systematic approach to the development of environment statistics and serves as a framework for the compilation / integration of data collection institutions to make such data more useful in the design and evaluation of socio-economic and environmental policies and programmes.

The FDES was published in 1984 by the United Nations Statistics Division (UNSD). In 1984, the FDES was a useful framework to guide countries in the development of their environment statistics programmes. It had grouped the components of the environment (flora, fauna, atmosphere, land, water and soil, mineral and energy resources and human settlements) into four categories of information namely (1) Social and economic activities and natural events ; (2) Impact of activities and events on the environment; (3) Reactions to environmental impact; and (4) Inventories, stocks and reference conditions.

Since its publication, there have been numerous scientific, political, technological, statistical, experience-based developments and especially environmental concerns which suggest that the FDES was ready for revision.

As a result, the United Nations Statistical Commission, at its 41st session (23-26 February 2010), approved a work programme and the establishment of an Expert Group for the revision of the FDES and the development of a basic set of environment statistics. The 44th meeting of the Statistical Commission endorsed the revised FDES as a useful instrument to adequately respond to the growing demand for information in the follow-up to Rio + 20 and the post 2015 development agenda, including the SDGs.

Components of FDES 2013

The FDES 2013 is intended to be a conceptual, flexible and versatile statistical framework that allows or facilitates the compilation, collection and production of environment statistics. This framework structures environment statistics into six components (see Figure 2). The first component gathers statistics relating to the conditions and quality of the environment and their change. The second component brings together statistics related to environmental resources and their use (ecosystem supply services, terrestrial and subsoil resources). The third component includes statistics related to the use of environmental services regulations for the disposal of residues from production and consumption processes. Statistics on extreme events and disasters (natural and technological) and their impact are covered by the fourth component. The fifth component groups statistics on human settlements and environmental health. The sixth component's category of statistics concerns the relevant responses of society and economic measures to protect the environment and the management of environmental resources.

Environmental conditions and quality (Component 1) are at the core of the FDES. The other five components were put in place based on their relationship with Core Component 1. Each of the components is divided into sub-components which, in turn, contain Relevant Statistical Subjects. Statistical subjects represent the measurable aspects of the components of the FDES, taking into account the types and sources of data necessary for their description. The last level contains the actual values of the environment statistics.

Figure 2: Structure of the FDES 2013
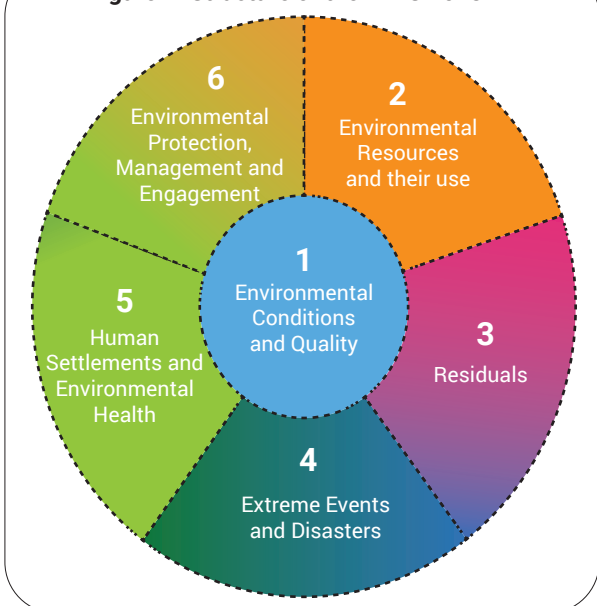
The CDSE lists the most important environment statistics to describe statistical subjects, thus providing guidance to developing countries on statistics from national environment programmes. The statistics included in the basic set are complete, but they are neither exhaustive, nor the only ones possible for the evaluation of statistical subjects. They should be seen as a set of statistics that can help in decision making on priorities for the development of statistics. To do this, the basic set of environment statistics was put in place following a progression of three levels, depending on the level of relevance, availability and methodological development of the statistics.

Level 1 serves as an agreed limited set of environment statistics that are considered high priority and relevant to most countries.

Level 2 includes environment statistics that represent a priority and an interest to most countries, but need greater investment in time, resources or methodological development; therefore, countries are recommended to consider their production in the medium term.

Level 3 includes environment statistics which are either lower priority or require significant methodological developments; and their production is possible in the long term.

2.2.1 Component 1: Environmental conditions and quality

This component covers the condition and quality of the country's environment and mineral resources. It includes statistics on the meteorological, hydrographical, geological, geographical, biological, physical and chemical characteristics of the environment and their evolution over time.

It is important to note, however, that some of the environmental conditions change very slowly due to natural processes or human influence while others show immediate and spectacular effects. In many cases, it is not possible to determine direct causation relationships between changes in environmental conditions and quality, as these results are combined and accumulated effects of natural and human processes.

2.2.2 Component 2: Environmental resources and their use

The FDES is based on the interaction between the environment and human activities. Component 2 highlights this hypothesis by examining the availability and use of environmental resources.

The availability of resources is of immediate concern because of their link to production, consumption and well-being. Environmental conditions and quality may alter the way humans manage available resources. For example, poor environmental conditions and qualities can lead to management practices and political interventions that could influence people's behaviour.

Conversely, human activities, as well as natural processes, affect environmental conditions and quality. Human consumption and production have often relied on environmental supply and regulatory services. Non-renewable resources can be depleted, and renewable resources can be utilised beyond their natural rate of replenishment.

This component includes the following sub-components: mineral resources, energy resources, land, soil resources, biological resources, and water resources. These basic statistics mainly report on stocks and changes in stocks of these categories of resources.

2.2.3 Component 3: Residuals

Residues are generated from human production and consumption processes, their management and their final release into the environment.

Residues include emissions, sewage and wastes that are released into the air, water, soil and land. Emissions, sewage and waste can have different impacts and effects on human health and the environment. Residues absorbed into the environment continue to exist depending on their nature, magnitude and local environmental dynamics, such as wind and currents, as well as the characteristics of land, air and water masses. In the past, substances have generally been released or eliminated to the environment with little or no treatment. Currently, emissions are treated before they are released to the environment. The treatment and management of emissions and their infrastructure are included in this component.

This component covers emissions to air, the generation and management of wastewater, and the generation and management of waste. Its basic statistics generally reflect the quantity, characteristics, treatment and management of such residues. At present, statistics on the production and management of wastewater are not included.

2.2.4 Component 4: Extreme events and disasters

Component 4 organizes statistics regarding the frequency and consequences of events and disasters on the well-being of human society and on the infrastructure of the extreme human subsystem. It has two sub-components, namely natural extreme events and disasters and technological disasters. The FDES has identified four basic statistics under the first sub-component, three of which have available data and are included in this publication.

The extreme natural events and natural disasters sub-component quantifies the frequency and intensity of extreme events and disasters resulting from natural phenomena such as tropical cyclones and earthquakes and their impact on human lives and habitats and the environment. It consists of 17 statistics, 4 of which are basic statistics. These statistics are the type of natural disaster, location of the event, the number of people killed at the event, and the economic losses incurred during the event.

The Centre for Research on the Epidemiology of Disasters (CRED) describes disasters as "unforeseen and often sudden events that cause great damage, destruction and human suffering." The other Technological Disasters

subcomponent organises statistics on events that result from human intent, neglect or error, or faulty or failing technological applications such as industrial disasters (leaks of toxic chemicals' fluids, hydrocarbons and explosions), arson or transport accidents.

2.2.5 Component 5: Human settlements and environmental health

In Component 5, statistics cover the environment in which humans live and work, especially those that detail their living conditions and environmental health. It is divided into two sub-components: Human habitat and environmental health.

The first sub-component organises statistics describing the basic services and infrastructure put in place where humans live and work. Human habitat is defined in the FDES as the entire human community or more precisely, as the human population that lives in a human settlement, physical elements (e.g. shelter and infrastructure), services (e.g. example, water, sanitation, waste disposal, transportation) and the exposure of humans to potentially harmful environmental conditions.

The second sub-component, Environmental Health, organises statistics on mortality, morbidity, and incidence associated with specific types of diseases and conditions that are strongly influenced by environmental conditions. Other estimates are related to the loss of working days and economic losses. Environmental health is defined by the World Health Organization (WHO) as "those aspects of human health and diseases that are determined by factors in the environment. It also refers to the theory and practice of assessing and controlling factors in the environment that can potentially affect health".

FDES covers less environmental health subjects than the WHO. There are 5 subjects under each sub-component. There are 27 statistics under Human Habitat and 25 under Environmental Health.

2.2.6 Component 6: Environmental protection, management and engagement

Component 6 addresses environmental protection, resource management and economic and social instruments to regulate and manage various environmental issues and concerns, with the aim of improving the environment and

maintaining healthy ecosystems. It includes statistics that are organized into four sub-components, namely, environmental protection and resource management expenditure, environmental governance and regulation, extreme event preparedness and disaster management, and environment information and awareness.

Three basic statistics are grouped into the first two sub-components, namely the annual government environmental protection expenditure, the list and description of regulated pollutants, and the list and description of multilateral environmental agreements and other global conventions on the environment.

Dry tree in riverbad without water in the North of Togo (Shutterstock)

D.   Index of Components, Sub-components and Subjects of FDES 2013

Component 1:Environmental conditions and quality

Subcomponent 1.1:Physical conditions

Subject 1.1.1: Atmosphere, climate and weather conditions

Subject 1.1.2: Hydrographic characteristics

Subject 1.1.3: Geological and geographic information

Subject 1.1.4: Soil characteristics

Subcomponent 1.2: Land cover, ecosystems and biodiversity

Subject 1.2.1: Land cover

Subject 1.2.2: Ecosystems and Biodiversity

Subject 1.2.3: Forests

Subcomponent 1.3: Environmental quality

Subject 1.3.1: Air quality

Subject 1.3.2: Fresh water quality

Subject 1.3.3: Sea water quality

Subject 1.3.4: Soil pollution

Subject 1.3.5: Noise

Component 2: Environmental resources and their use

Subcomponent 2.1: Mineral resources

Subject 2.1.1: Stocks and variations of mineral resources

Subject 2.1.2: Minerals' production and trade

Subcomponent 2.2: Energy resources

Subject 2.2.1: Stocks and variations of energy resources

Subject 2.2.2: Energy production, trade and consumption

Subcomponent 2.3: Land

Subject 2.3.1: Land utilisation

Subject 2.3.2: Forest land utilisation

Subcomponent 2.4: Soil resources

Subject 2.4.1: Soil resources

Subcomponent 2.5: Biological resources

Subject 2.5.1: Wood resources

Subject 2.5.2: Aquatic resources

Subject 2.5.3: Agricultural crops

Subject 2.5.4: Livestock

Subject 2.5.5: Other uncultivated biological resources

Subcomponent 2.6: Water resources

Subject 2.6.1: Water resources

Subject 2.6.2: Water withdrawal, use and return

Component 3: Residuals

Subcomponent 3.1: Emissions to air

Subject 3.1.1: Greenhouse effect gas emissions

Subject 3.1.2: Consumption of ozone-depleting substances

Subject 3.1.3: Emissions of other substances

Subcomponent 3.2: Generation and management of wastewater

Subject 3.2.1: Production and pollutant content of wastewater

Subject 3.2.2: Wastewater collection and treatment

Subject 3.2.3: Discharge of wastewater into the environment

Subcomponent 3.3: Generation and management of waste

Subject 3.3.1: Waste production

Subject 3.3.2: Waste management

Subcomponent 3.4: Release of chemical substances

Subject 3.4.1: Release of chemical substances

Component 4: Extreme events and disasters

Subcomponent 4.1: Natural Extreme Events and Disasters

Subject 4.1.1: Prevalence of natural extreme events and disasters

Subject 4.1.2: Impact of natural extreme events and disasters

Subcomponent 4.2: Technological disasters

Subject 4.2.1: Prevalence of technological disasters

Subject 4.2.2: Impact of technological disasters

Component 5: Human settlements and environmental health

Subcomponent 5.1: Human settlements

Subject 5.1.1:Urban and rural population

Subject 5.1.2: Access to selected basic services

Subject 5.1.3: Housing conditions

Subject 5.1.4: Exposure to ambient pollution

Subject 5.1.5: Environmental concerns specific to urban areas

Subcomponent 5.2: Environmental health

Subject 5.2.1: Airborne diseases and conditions

Subject 5.2.2: Water-related diseases and conditions

Subject 5.2.3: Vector-borne diseases

Subject 5.2.4: Health problems related to excessive exposure to UV rays

Subject 5.2.5: Diseases and conditions associated with toxic substances or nuclear radiation

Component 6: Environmental protection, management and engagement

Subcomponent 6.1: Environmental protection and resource management expenditure

Subject 6.1.1: Public expenditure on environmental protection and resource management

Subject 6.1.2: Environmental protection and resource management expenditure by businesses, non-profit institutions and households

Subcomponent 6.2: Environmental governance and regulation

Subject 6.2.1: Institutional strength

Subject 6.2.2: Environmental regulations and instruments

Subject 6.2.3: Participation in Multilateral Environmental Agreements (MEAs) and environmental conventions

Subcomponent 6.3: Extreme event preparedness and disaster management

Subject 6.3.1: Preparation for extreme natural events and natural disasters

Subject 6.3.2: Preparation for technological disasters

Subcomponent 6.4: Environmental information and awareness

Subject 6.4.1: Environmental information

Subject 6.4.2: Environmental teaching

Subject 6.4.3: Environmental perception and awareness

Subject 6.4.4: Commitment to the environment

Corn fields in Togo (Shutterstock)

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