

Components, sub-components and statistical topics of the FDES 2013

Component 6: Environment Protection, Management and Engagement

Introduction



This component Organizes information on environment protection and resource management measures and expenditure as well as social responses that aim at improving the environment and maintaining the health of ecosystems.



Scope and content

- Statistics on environment protection and natural resource management expenditure
- Statistics about environmental governance, institutional strength, enforcement of regulations and extreme event preparedness.
- Contains information on programmmes and actions to increase awareness, including environmental information and education, as well as private and community activities aimed at diminishing environmental impacts and improving the quality of local environments.



Overview

Environment Protection, Management and Engagement	Sub-Component 6.1 Environment Protection and Resource Management Expenditure (two topics, 8 statistics)	Topic 6.1.1: Government environment protection and resource management expenditure Topic 6.1.2: Corporate, non-profit institution and household environment protection and resource management expenditure							
	Sub-Component 6.2 Environmental Governance and Regulation (three topics, 19 statistics)	Topic 6.2.1: Institutional strength Topic 6.2.2: Environmental regulation and instruments Topic 6.2.3: Participation in MEAs and environmental conventions							
	Sub-Component 6.3 Extreme Event Preparedness and Disaster Management (two topics, 10 statistics)	Topic 6.3.1: Preparedness for natural extreme events and disasters Topic 6.3.2: Preparedness for technological disasters							
	Sub-Component 6.4 Environmental Information and Awareness (four topics, 13 statistics)	Topic 6.4.1: Environmental information Topic 6.4.2: Environmental education Topic 6.4.3: Environmental perception and awareness Topic 6.4.4: Environmental engagement							



Sub-Component 6.1: Environment Protection and Resource Management Expenditure

- This subcomponent is closely related to the environmental activity accounts of the SEEA-CF and is based on the CEA.82 Expenditure on environmental protection and resource management.
- Can be used as one measure of the public and private engagement in protecting, restoring and managing the environment towards its more sustainable use.
- Important for policy makers, analysts and civil society to determine the current and desired levels of engagement and commitment from the government and the private sector.





Sub-Component 6.1: Environment Protection and Resource Management Expenditure

- Environmental protection activities: the primary purpose is the prevention,
 reduction and elimination of pollution and other forms of degradation of the
 environment which include the protection of ambient air and climate, wastewater
 management, waste management, protection and remediation of soil, groundwater
 and surface water, noise and vibration abatement, protection of biodiversity and
 landscapes, protection against radiation, research and development for
 environmental protection and other environmental protection activities.
- Resource management activities: the primary purpose is preserving and
 maintaining the stock of natural resources and hence safeguarding against
 depletion which include reducing the withdrawals of natural resources; restoring
 natural resource stocks; the general management of natural resources; and the
 production of goods and services used to manage or conserve natural resources.



Sub-Component 6.1: EP and Resource Management Expenditure

Topic 6.1.1: Government environment protection and resource management expenditure

- Government expenditure (local, regional and central) aiming primarily to protect the environment and manage its resources. It is calculated by identifying and aggregating the expenditures used primarily for environmental protection and resource management. These expenditure are in the official government finance statistics in government budgets and/or administrative reports on actual government expenditure incurred.
- Institutional partners: official institutions in charge of reporting government expenditure (e.g., internal revenue services) and the national and subnational level institutions (e.g., municipalities) and NSO where national accounts and government finance statistics also contribute to the development of government expenditure statistics



Sub-Component 6.1: EP and Resource Management Expenditure

Topic 6.1.1: Government environment protection and resource management expenditure

Statistics and related information for To	pic 6.1.1										
Component 6: Environmental Protection, Manage	ement and Enga	gement									
Subcomponent 6.1: Environmental Protection and Resource Management Expenditure											
Topic 6.1.1: Government environmental protection and resource management expenditure											
Statistics and related information											
(Bold text—Core Set/Tier 1; regular text—Tier 2; italicized text—Tier 3)	Category of measurement	Potential aggregations and scales	Methodological guidance								
a. Government environmental protection and resource management expenditure		By environmental activityBy type of expenditure: current, investment	Eurostat-SERIEE Environmental Protection Expenditure Accounts Compilation Guide (2002)								
Annual government environmental protection expenditure	Currency	By ministry National	 Eurostat-Environmental Expenditure Statistics. General Government and Specialised Producers Data Collection Handbook (2007) 								
Annual government resource management expenditure	Currency	SubnationalBy funding	Classification of Environmental Activities (CEA) SEEA Central Framework (2012) Annex 1								

- The resulting statistics will usually be at the national level and can sometimes be disaggregated by functional governmental entities or level of government.
- The statistics are expressed in monetary units, typically with annual periodicity, depending on the availability of resources



Sub-Component 6.1: EP and Resource Management Expenditure

Topic 6.1.2: Corporate, non-profit institution and household EP and resource management expenditure

This topic supplement 6.1.1 and Includes:

- Corporate, non-profit institution and household environmental expenditure aiming primarily to protect the environment and manage its resources.
- Statistics on environmental protection and resource management expenditure for corporations, non-profit institutions and households usually require the use of specific surveys of establishments in different sectors and industries (business surveys) and households.

Statistics and related information for Topic 6.1.2

Co	mponent 6: Environmental Protection, Management and E	ngagement												
Su	Subcomponent 6.1: Environmental Protection and Resource Management Expenditure													
То	Topic 6.1.2: Corporate, non-profit institution and household expenditures on environmental protection and resource management expenditure													
St	atistics and related information													
(Bold text—Core Set/Tier 1; regular text—Tier 2; italicized text—Tier 3)		Category of measurement	Potential aggregations and scales	Methodological guidance										
a.	Private sector environmental protection and resource management expenditure		By environmental activity By type of expenditure: current, investment	• Eurostat-Environmental expenditure statistics. Industry data collec-										
	1. Annual corporate environmental protection expenditure	Currency	By ISIC economic activity	tion handbook (2005)										
	2. Annual corporate resource management expenditure	Currency	• National	Eurostat-Environmental expendi- ture Statistics, General Govern-										
	3. Annual non-profit institution environmental protection expenditure	Currency	Subnational	ment and Specialised Producers Data Collection Handbook (2007)										
	4. Annual non-profit institution resource management expenditure	Currency												
	5. Annual household environmental protection expenditure	Currency	-											
	6. Annual household resource management expenditure	Currency												

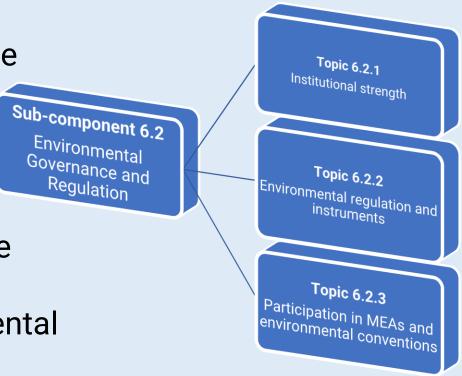


Sub-Component 6.2: Environmental Governance and Regulation

 This sub-component provides a holistic view of a country's efforts towards sustaining and protecting the environment, policymakers, analysts and civil society require statistics on environmental governance and regulation at the national level.

 It includes setting standards and norms, providing adequate resources and ensuring the ability to enforce those standards and norms

A nation's participation in MEAs and global environmental conventions





Topic 6.2.1: Institutional strength

- This topic Includes statistics on environmental institutions and their resources organized according to the main environmental authority (name, budget and staff), and other relevant environmental bodies (names, budget and staff).
- The information should be mainly descriptive but can also include monetary statistics on budgets. It is usually compiled at the national level but should also cover sub-national authorities.
- Institutional Partners: Environmental authority, other environmentally relevant authorities, and other institutions where environmental regulations are enforced (e.g., local governments or sectoral authorities).



Topic 6.2.1: Institutional strength

Statistics and related information for Topic 6.2.1

Cor	mponent 6: Environmental Protection, Management and Engagement			
Sub	ocomponent 6.2: Environmental Governance and Regulation			
Top	oic 6.2.1: Institutional strength			
Sta	tistics and related information	_ Category of	Potential aggregations	
(Bo	ld text—Core Set/Tier 1; regular text—Tier 2; italicized text—Tier 3)	measurement	and scales	Methodological guidance
a.	Government environmental institutions and their resources		National	
	1. Name of main environmental authority and year of establishment	Description	 Subnational 	
	2. Annual budget of the main environmental authority	Currency		
	3. Number of staff in the main environmental authority	Number	_	
	4. List of environmental departments in other authorities and year of establishment	Description		
	5. Annual budget of environmental departments in other authorities	Currency		
	6. Number of staff of environmental departments in other authorities	Number		
b.	Other environmental institutions and their resources			
	1. Name of institution and year of establishment	Description	_	
	2. Annual budget of the institution	Currency	_	
	3. Number of staff in the institution	Number	_	



Topic 6.2.2: Environmental regulation and instruments

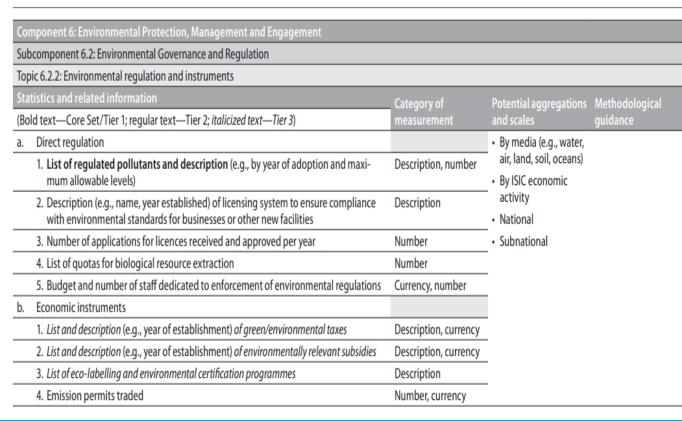
This topic Includes information on **social responses** aiming to regulate and establish acceptable limits for protecting the environment. It entails:

- Direct regulation includes environmental and related laws, standards, limits
 and their enforcement capacities. They can be measured through statistics
 about regulated pollutants, licensing systems, applications for licences, quotas
 for biological resource extraction, as well as budget and the number of staff
 dedicated to enforcement of environmental regulations.
- Economic instruments may be exemplified by the existence and volume of green taxes, green subsidies, eco-labelling and certification, as well as emission permits.



Topic 6.2.2: Environmental regulation and instruments

Statistics and related information for Topic 6.2.2



Information mainly descriptive but may also include quantitative data on budgets or emission permits traded.

Institutional Partners: Environmental authority, internal revenue services, other relevant authorities, and other institutions where environmental regulations are enforced (e.g., local governments or sectoral authorities).



Topic 6.2.3: Participation in MEAs and environmental conventions

- This topic includes information on a country's participation in different MEAs and other global environmental conventions. Such conventions include the Montreal and Kyoto protocols.
- The information to be produced in this topic is mainly descriptive, however, comparable time series can also be derived from these statistics.
- Institutional partners: The environmental authority, along with other possible institutions in charge of MEAs or environmental conventions.



Topic 6.2.3: Participation in MEAs and environmental conventions

Statistics and related information for Topic 6.2.3

Component 6: Environmental Protection, Management and Engagement											
Subcomponent 6.2: Environmental Governance and Regulation											
Topic 6.2.3: Participation in MEAs and environmental conventions											
Statistics and related information		Potential									
(Bold text—Core Set/Tier 1; regular text—Tier 2; italicized text—Tier 3)	Category of measurement	aggregations	Methodological guidance								
a. Participation in MEAs and other global environmental conventions			MEA Secretariats								
 List and description (e.g., country's year of participation^d) of MEAs and other global environmental conventions 	Description, number										



Q & A



Sub-Component 6.3: Extreme Event Preparedness and Disaster Management

- This subcomponent covers statistics describing extreme event preparedness and disaster management will differ by country, based on the type of extreme event and disaster that usually occurs or may occur. The statistics also detail existence and strength of the disaster management agency's facilities and infrastructure
- Extreme event preparedness and disaster management expenditure refers to any public or private expenditure whose primary purpose is to help inform, educate and protect the population from extreme events and disasters



Examples: The set up and maintenance of warning systems, monitoring stations and systems, signals, communication systems, emergency centres and shelters, etc.



Topic 6.3.1: Preparedness for natural extreme events and disasters

- This topic Includes Statistics such as existence and description of national disaster plans; the type and number of shelters in place; the type and number of internationally certified emergency and recovery management specialists; the number of volunteers; the quantity of first aid, and emergency supplies and equipment that are stockpiled. The existence of early warning systems for all major hazards, as well as the expenditure on disaster prevention, preparedness, clean-up and rehabilitation.
- Data sources: National and sub-national authorities responsible for disaster management and assistance, emergency management agencies and municipalities, global and regional meteorological forecasting agencies, NSOs, authorities responsible for flood and drainage control and the agro-meteorological collaboration



Topic 6.3.1: Preparedness for natural extreme events and disasters

Statistics and related information for Topic 6.3.1

Component 6: Environmental Protection, Management and Engagement			
Subcomponent 6.3: Extreme Event Preparedness and Disaster Management			
Topic 6.3.1: Preparedness for natural extreme events and disasters			
Statistics and related information	Potential		
(Bold text—Core Set/Tier 1; regular text—Tier 2; italicized text—Tier 3)	Category of measurement	aggregations and scales	Methodological guidance
a. National natural extreme event and disaster preparedness and management systems		 National 	 International Emergency
1. Existence of national disaster plans/programmes	Description	 Subnational 	Management Organization
2. Description (e.g., number of staff) of national disaster plans/programmes	_	(IEMO)	
3. Number and type of shelters in place or able to be deployed	Description, number	_	UNISDR Hyaga Framework for Action
 Number and type of internationally certified emergency and recovery management specialists 	Description, number		Hyogo Framework for Action
5. Number of volunteers	Number	_	
6. Quantity of first aid, emergency supplies and equipment stockpiles	Number	_	
7. Existence of early warning systems for all major hazards	Description	_	
8. Expenditure on disaster prevention, preparedness, clean-up and rehabilitation	Currency	_	



Topic 6.3.2: Preparedness for technological disasters

- This topic covers Information about emergency management plans, as well as the expenditure on disaster preparedness, clean-up and rehabilitation.
- It Measures of corporate disaster preparedness vary according to size of enterprise, its location and historical profile for technological disasters.
- Preparedness for technological disasters can be quite different from that of natural extreme events and disasters.
- Technological disasters usually arise at an industrial location or on a mode of transportation where it is often the corporate sector which has a vested interest or legal obligation in contributing to preparedness and clean-up.



Topic 6.3.2: Preparedness for technological disasters

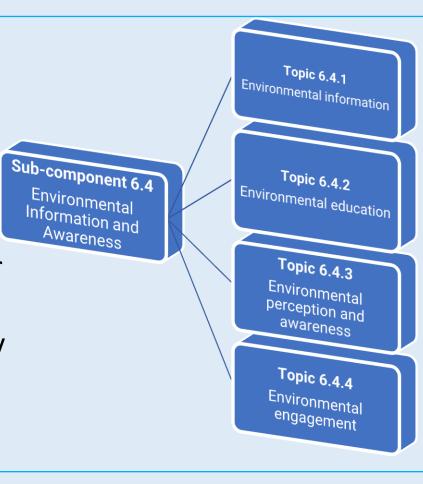
Statistics and related information for Topic 6.3.2

Component 6: Environmental Protection, Management and Engagement			
Subcomponent 6.3: Extreme Event Preparedness and Disaster Management			
Topic 6.3.2: Preparedness for technological disasters			
Statistics and related information	Category of	Potential aggregations	
(Bold text—Core Set/Tier 1; regular text—Tier 2; italicized text—Tier 3)		and scales	Methodological guidance
a. National technological disaster preparedness and management systems		National	• IEMO
Existence and description (e.g., number of staff) of public disaster management Description plans/programmes (and private when available)		Subnational	UNISDRHyogo Framework for Action
2. Expenditure on disaster prevention, preparedness, clean-up and rehabilitation	Currency		.,,-,,



Sub-Component 6.4: Environmental Information and Awareness

- This subcomponent covers information about diverse processes that contribute to increasing social awareness of environmental issues, thereby promoting pro-environmental engagement and actions by the public and decision-makers at both local and national levels.
- Statistics relevant for policy makers, analysts and civil society to understand information and education programmes in their country, also on refining policies and programmes
- Understanding environment perceptions of the public and key local constituencies, also useful for policy makers when shaping local and national environmental policies and programmes.





Topic 6.4.1: Environmental information

This topic includes information on the characterization:

- National environmental information systems (e.g., existence of publicly accessible systems and number of users)
- Environment statistics programmes within national statistical systems (e.g., description of programme, number and type of environment statistics products, inter-agency platforms or committees).

Environment information includes quantitative, qualitative or geographically referenced facts representing the state of the environment and its changes, as described in FDES.



Topic 6.4.1: Environmental information

- The production and dissemination of environment statistics within national statistical systems enables the production of robust environmental and sustainable development indicators (SDIs) to substantiate reports on the changing environment, and to guide policy making.
- Determining which institution is responsible for producing which types of information can be helpful in identifying information gaps, areas of overlapping responsibility or efforts, and areas where efficiency gains can be achieved.
- Institutional partners: The environmental authority and the NSO, and other institutions where databases containing environmental information and reports containing environmental statistics and indicators are produced.



Topic 6.4.1: Environmental information

Statistics and related information for Topic 6.4.1

Component 6: Environmental Protection, Management and Engagement			
Subcomponent 6.4: Environmental Information and Awareness			
Topic 6.4.1: Environmental information			
Statistics and related information	_ Category of	Potential aggregations	Methodological
(Bold text—Core Set/Tier 1; regular text—Tier 2; italicized text—Tier 3)	measurement	and scales	guidance
a. Environmental information systems		National	
1. Existence of publicly accessible environmental information system	Description	Subnational	
 Annual number of visits/users of specific environmental information programmes or environmental information systems 	Number		
b. Environment statistics			
 Description of national environment statistics programmes (e.g., existence, year of estab- lishment, lead agency, human and financial resources) 	Description		
2. Number and type of environment statistics products and periodicity of updates	Description, number		
 Existence and number of participant institutions in inter-agency environment statistics platforms or committees 	Number	-	



Topic 6.4.2: Environmental education

- This topic includes specific actions associated with environmental education and the results they achieve in terms of the number of people participating in these programmes.
- Can include allocation of resources for education, the number and description of the education programmes in schools, and the number of students pursuing environment-related higher education.
- Institutional partners: The ministry of education, ministry of environment or equivalent institution, and the NSO, along with other institutions, such as universities and non-profit institutions, where curricula on environmental education are developed and delivered.



Topic 6.4.2: Environmental education

Statistics and related information for Topic 6.4.2

Co	mponent 6: Environmental Protection, Management and Engagement			
Suk	ocomponent 6.4: Environmental Information and Awareness			
Top	oic 6.4.2: Environmental education			
Sta	tistics and related information	_ Category of	Potential aggregations	
(Bold text—Core Set/Tier 1; regular text—Tier 2; italicized text—Tier 3)		measurement	and scales	Methodological guidance
a.	Environmental education		National	
	 Allocation of resources by central and local authorities for environmental education 	Currency	Subnational	
	2. Number and description of environmental education programmes in schools	Description, number		
	3. Number of students pursuing environment-related higher education (e.g., science, management, education, engineering)	Number	-	



Topic 6.4.3: Environmental perception and awareness

- General public or a specific group's perceptions and awareness of the environment through the measurement of knowledge, attitudes, values and actions.
- It also encompasses people's perceptions about governments' environmental
 policies aimed at addressing pressing environmental concerns. Increasingly,
 countries and international polling companies have been surveying the public to
 measure such information across society.
- Knowledge about environmental issues influences people's attitudes (predispositions for action/participation in pro-environmental activities).
- Institutional Partners: The environmental authority, NSO, and other institutions where environmental perception surveys are carried out (e.g., by local governments or polling companies).



Topic 6.4.3: Environmental perception and awareness

Statistics and related information for Topic 6.4.3

C		at and Forest and										
Component 6: Environmental Protection, Management and Engagement												
Suk	Subcomponent 6.4: Environmental Information and Awareness											
Top	oic 6.4.3: Environmental perception and awareness											
Sta	tistics and related information											
	old text—Core Set/Tier 1; regular text—Tier 2; icized text—Tier 3)	Category of measurement	Potential aggregations and scales	Methodological guidance								
a.	Public environmental perception and awareness		National									
		Description	Subnational									
	Knowledge and attitudes about environmental policies	Description	_									



Topic 6.4.4: Environmental engagement

- Environmental engagement involves the progression of transforming perception and attitudes into concrete, pro-environmental actions.
- Includes statistics on the existence of pro-environmental NGOs and their, human and financial resources, as well as on pro-environmental activities and the number of people participating in them.
- Data about environmental participation and actions are based on either administrative records or are obtained from surveys and are usually produced at the sub-national level.



Topic 6.4.4: Environmental engagement

Statistics and related information for Topic 6.4.4

Cor	Component 6: Environmental Protection, Management and Engagement												
Sub	Subcomponent 6.4: Environmental Information and Awareness												
Тор	Topic 6.4.4: Environmental engagement												
Sta	tistics and related information												
		Category of measurement	Potential aggregations and scales	Methodological guidance									
a.	Environmental engagement		National										
	 Existence of pro-environmental NGOs (number of NGOs and their respective human and finan- cial resources) 	Currency, number	Subnational										
	2. Number of pro-environmental activities	Number	-										
	3. Number of pro-environmental programmes	Number	-										



Q & A



Exercise

Component 6: Environmenta	l Protect	ion, Manaş	gem	ent	and	Er	ıga	gen	1en	t														
Statistics and Related Information		and Scales	(ational Level t/Not Applicable)	illection riority)	- 1	Inst Resp Co	Primary Institution(s) Responsible for Collecting Statistic Check all that apply		e for ng that		Requirements or User Requests for Collection/ Reporting on this Statistic Check all that apply		her [specify])	ole	le	ndividual records)		Mai	is	not A	s why vailal that a		stic	
Bold Text - Core Set/Tier 1 Regular Text - Tier 2 Italicized Text - Tier 3	Category of Measurement	Potential Aggregations and	Relevance of Statistic at the Nation (High/Medium/Low/Not Relevant/Not	Priority for National Data Colle (High /Medium /Low/Not a Prior	Availability of Statistic at the Natio (Identical/Similar/Not Availal	NSO	Ministry of Environment or equivalent institution	Other (specify):	Type of Data Source	Sub-national	National	Regional	International	Periodicity (Annual/Monthly/Daily/Hourly/Other	Earliest Year Available	Latest Year Available	Format of Statistic (Publication/Excel/Database/Website/Indi	Unit of Measurement	Resource constraints	Methodological/Technical difficulty in data collection	Insufficient quality	Inaccessibility	Lack of institutional set-up /coordination	Other (specify):



Primary institution (s) responsible for the following statistics

Topic 6.1.1: Government environmental protection and resource management expenditure	
Statistics	Institution (s)
a.1. Annual government environmental protection expenditure	
Topic 6.2.2: Environmental regulation and instruments	
a.1. List of regulated pollutants and description (e.g., by year of adoption and maximum allowable levels)	
Topic 6.2.3: Participation in MEAs and environmental conventions	
a.1. List and description (e.g., country's year of participation(d)) of MEAs and other global environmental conventions	



Thank you



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