



الاسكوا  
ESCWA



UNSD



# Workshop on Environment Statistics and Information for Sustainable Development in the Arab Region

Beirut, Lebanon 12-16 November 2018

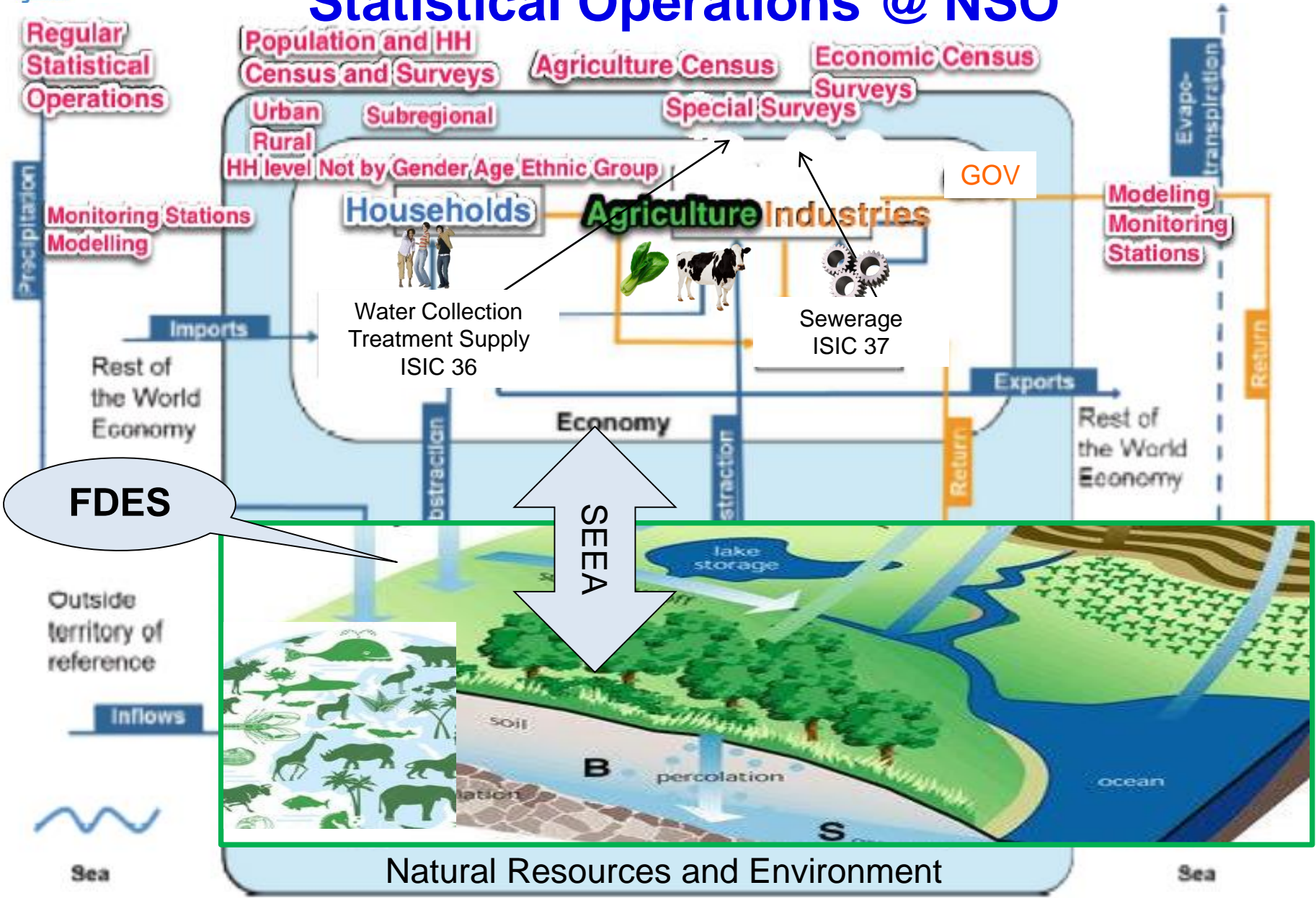
## Status and needs of environment statistics for sustainable development

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# Official Statistics

## Statistical Operations @ NSO



# Other Data Sources

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## Administrative Records

Records of Water Utilities and Sanitation Services on connected HH Farms Industries

Need Classifications, Conversions to be Integrated with Surveys

+ Regular , Frequent Data, Cost Effective, easily obtained

Water Collection Treatment Supply ISIC 36

Sewerage ISIC 37



## Science and Research

- Hydrological Models for precipitation, run off, recharge,
- Coefficients for calculations for water use in agriculture/other sectors
- Impact on Ecosystems

## Geospatial Data

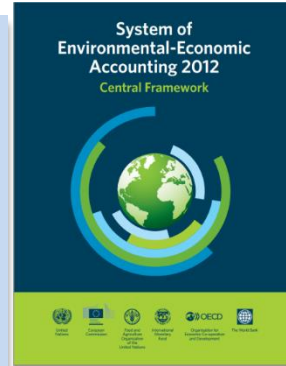
Dynamic information over space and time for the extent and quality of ecosystems, land use and hydrology



### SEEA-CF

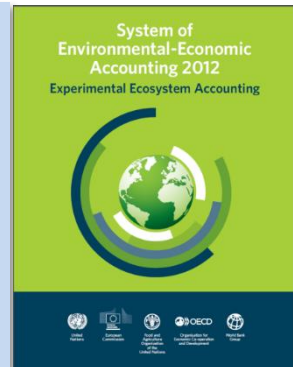
The SEEA Central Framework an international statistical standard that integrates environmental and economic data and describes relation between economy and the Environment

Focus on environmental assets: water energy land...



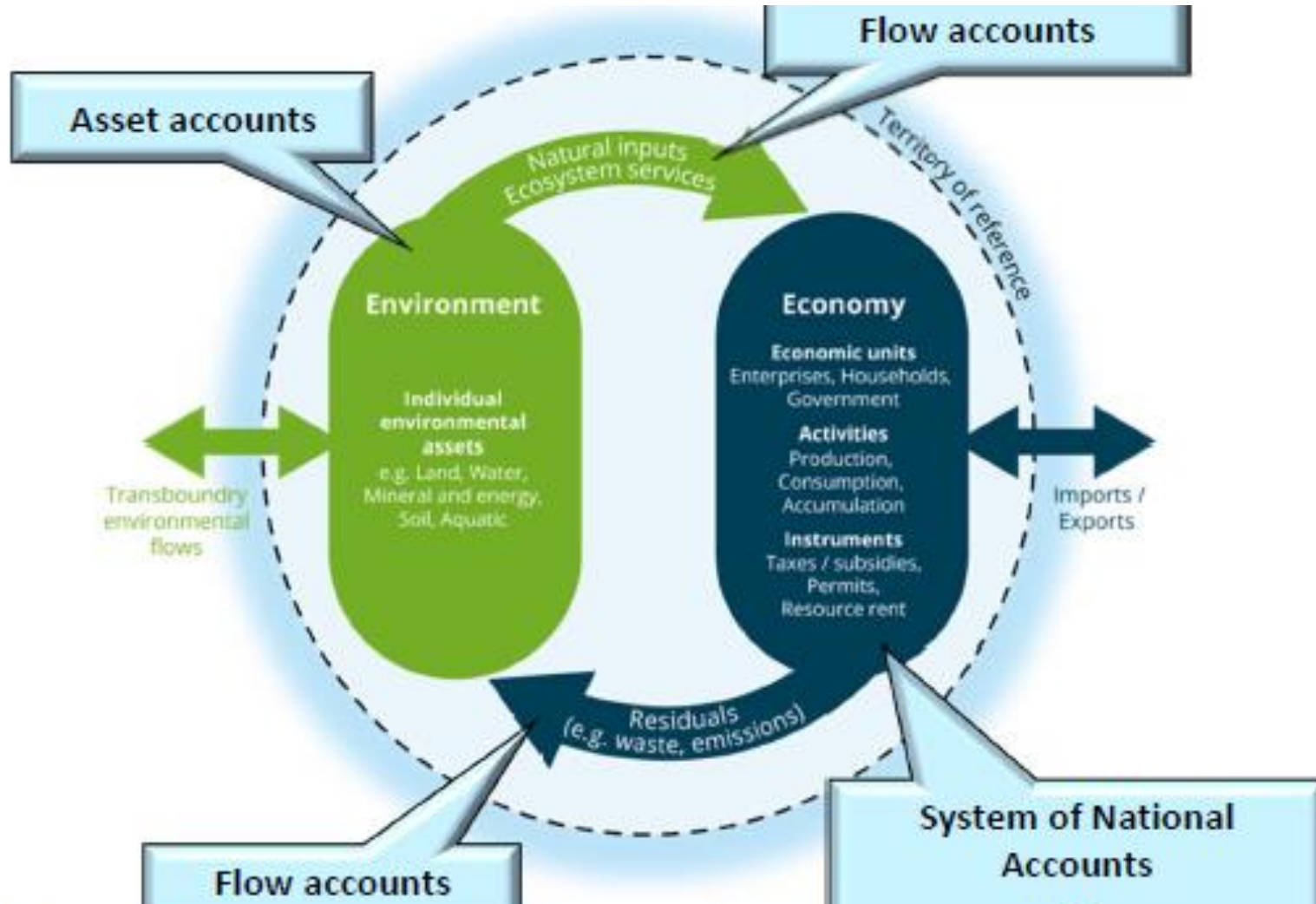
### SEEA-EEA

The SEEA -Experimental Ecosystem Accounting complements the Central Framework; Ecosystems-based, Assess how environmental assets interact within a spatial area to provide benefits.

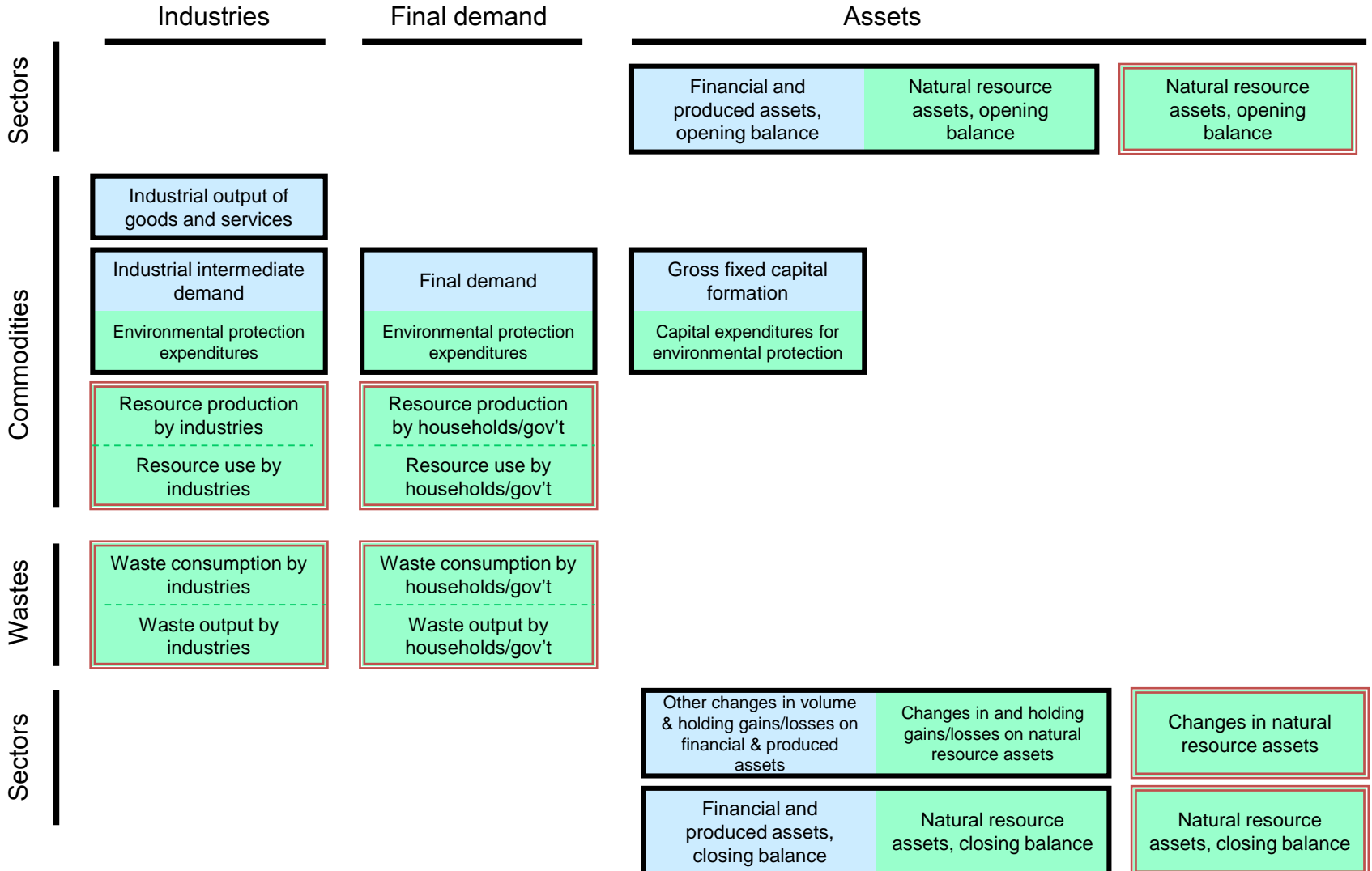


# The SEEA Central Framework Accounts

- 1. Stock accounts** for environmental assets: natural resources and land physical (e.g. fish stocks and changes in stocks) and/or monetary values (e.g. value of natural capital, depletion)
- 2. Flow accounts:** supply and use tables for products, natural inputs and residuals (e.g. waste, wastewater) generated by economic activities.
  - physical (e.g. m<sup>3</sup> of water) and/or monetary values (e.g. permits to access water, cost of wastewater treatment, etc.)
- 3. Activity / purpose accounts** that explicitly identify environmental transactions already existing in the SNA. e.g. Environmental Protection Expenditure (EPE) accounts, environmental taxes and subsidies
- 4. Combined physical and monetary accounts** that bring together physical and monetary information for derivation indicators, including depletion adjusted aggregates



# SEEA framework



# Flow Accounting: Supply Tables



Table 3.1  
General physical supply and use table

Supply table

	Production; generation of residuals		Accumulation			Total
	Production; generation of residuals by industries (including household production on own account), classified by ISIC	Generation of residuals by households	Industries —classified by ISIC	Flows from the rest of the world	Flows from the environment	
Natural inputs					A. Flows from the environment (including natural resource residuals)	Total supply of natural inputs (TSNI)
Products	C. Output (including sale of recycled and reused products)			D. Imports of products		Total supply of products (TSP)
Residuals	I1. Residuals generated by industry (including natural resource residuals)	J. Residuals generated by household final consumption	K1. Residuals from scrapping and demolition of produced assets	L. Residuals received from rest of the world	M. Residuals recovered from the environment	Total supply of residuals (TSR)
	I2. Residuals generated following treatment		K2. Emissions from controlled landfill sites			
Total supply						



# Flow Accounting: Use Tables

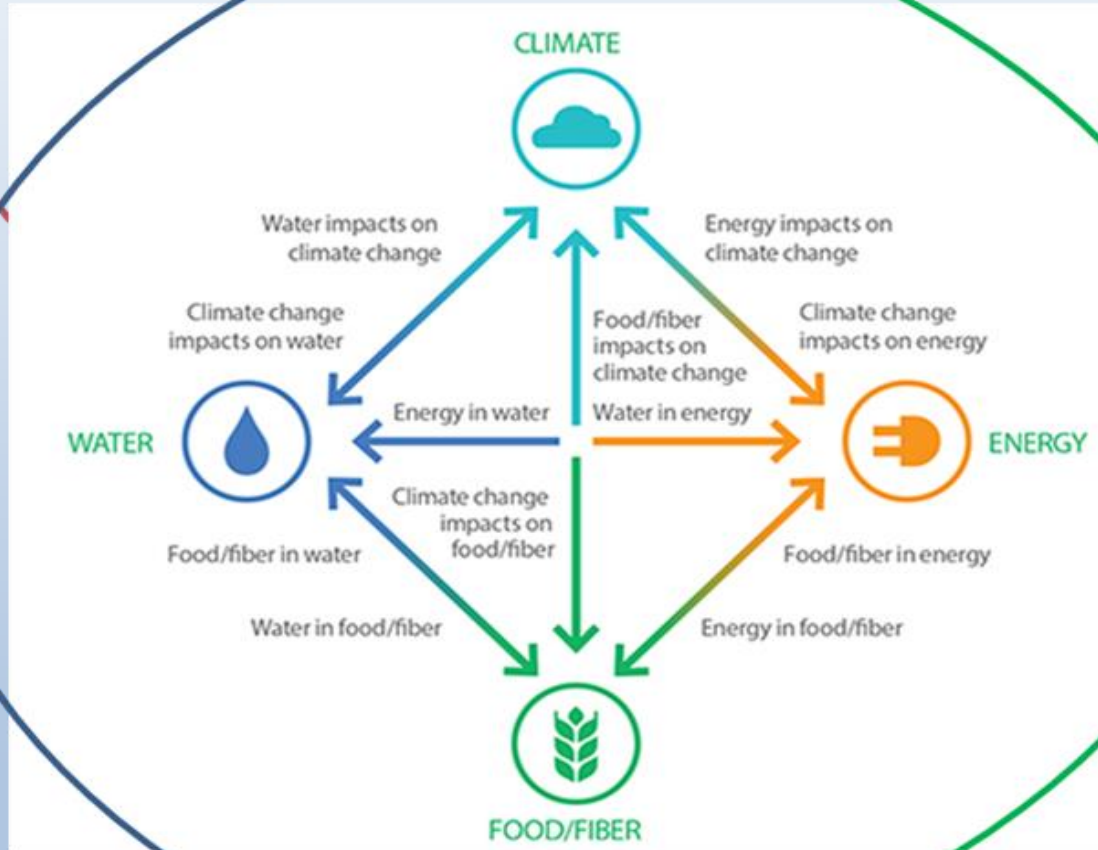


## Use table

	Intermediate consumption of products; use of natural inputs; collection of residuals	Final consumption <sup>a</sup>	Accumulation	Flows to the rest of the world	Flows to the environment	Total
	Industries—classified by ISIC	Households	Industries—classified by ISIC			
Natural inputs	B. Extraction of natural inputs B1. Extraction used in production B2. Natural resource residuals					Total use of natural inputs (TUNI)
Products	E. Intermediate consumption (including purchase of recycled and reused products)	F. Household final consumption (including purchase of recycled and reused products)	G. Gross capital formation (including fixed assets and inventories)	H. Exports of products		Total use of products (TUP)
Residuals	N. Collection and treatment of residuals (excluding accumulation in controlled landfill sites)		O. Accumulation of waste in controlled landfill sites	P. Residuals sent to the rest of the world	Q. Residual flows to the environment  Q1. Direct from industry and households (including natural resource residuals and landfill emissions)  Q2. Following treatment	Total use of residuals (TUR)
Total use						

<sup>a</sup> No entries for government final consumption are recorded in physical terms. All government intermediate consumption, production and generation of residuals is recorded against the relevant industry in the first column of the PSUT.

# Society



Environment

Economy



- SEEA is an accounting framework
- Integrates statistics into “accounts”
- (water, energy, land, ecosystems)
- Links to SNA by using same classifications and methods
- Good for compiling integrated indicators to assess trade-offs (water intensity of economy)
- Does not cover all issues of environmental issues

- FDES is an organizing framework
- Based on Pressure-State-Response
- Good for compiling basic statistics and reporting
- Covers most issues of concern

# SEEA and the SDG indicators



The **SNA and SEEA** are statistical standards that can be used to monitor a number of environmental-economic SDG Indicators **in an integrated way**.

# ESCWA's Role in SEEA Implementation

**Mandate** to work on SEEA from Countries: Recommendations from expert groups and intergovernmental meetings  
Interest from countries in environmental accounting and focus on water, energy and land accounts.

**Partner** with UNSD on International work on SEEA (UNCEEAA and London Group)  
International Recommendations and Sub-accounts on Water (IRWS & SEEA-Water) and on Energy (IRES & SEEA-Energy)

## **Regional dimension**

Studies on SEEA Framework for Arab region

Arabic Revision SEEA CF

On-line Arabic Training on SEEA

On-line Glossary of Eng Arab terms including SEEA

SDG Metadata translation into Arabic (SDGs Env Related)



# Recent Support on SEEA

Arab Working Group on Environment and Sustainable Development Indicators Third Meeting 13-15 March 2017  
Amman, Jordan

- Consultative Meeting on the Implementation Framework for the Environmental Dimension of the 2030 Agenda in the Arab Region 18-21 September 2017.

Training on Statistical Frameworks to compile SDG Indicators

- Arabic Version of e-learning Course on the System of Environmental-Economic Accounting 2012 - Central Framework (SEEA CF)
- National and Regional Workshop on Integrated Environmental and Economic Accounting Systems Sustainable Development Goals (SDGs) in the Arab Region 26 to 29 March 2018. Amman, Jordan
- Workshop on Environment Statistics and Information for Sustainable Development in the Arab Region (UNSD UNESCWA UNEP and EEA) 11-16 NOV2018 Beirut, Lebanon

## Technology and Official Statistics

- **UN-ESCWA and ETC-UMA** relevant geospatial information available, national workflows to monitor SDGs, build geospatial skills nationally address country challenges to SDG monitoring

# Environmental-Economic Accounting in ESCWA

Not started	Pilot Accounts Water	Pilot Accounts Energy	EPE	Published Accounts
<b>Kuwait</b> <b>Saudi Arabia</b> <b>Libya</b> <b>Sudan</b> <b>Yemen</b>	<b>2014:</b> <b>Jordan</b> <b>Tunisia</b> <b>Iraq</b>  <b>2010</b> <b>Lebanon</b> <b>Syria</b> <b>Bahrain</b> <b>Oman</b> <b>Morocco</b> <b>Palestine</b> <b>Qatar</b>	<b>Qatar</b> <b>UAE</b>	<b>Jordan</b>	<b>Jordan</b> <b>Started a unit for EEA- /Monetary accounts</b>

# Main Messages

1. FDES to compile basis environmental statistics
2. Implementing SEEA in an incremental way, starting from priority accounts that inform policies
3. Support official statistics in the implementation of the SEEA as it supports integrated policies called for by the 2030 Agenda for sustainable development
4. NSOs need to develop collaboration and partnerships with various stakeholders in the government to identify priorities and compile accounts in particular
  - Data producers of sectoral statistics
  - Data users to ensure that SEEA information compiled is in policy
  - Academia to support new tools
  - Global partners to share methods for estimating the data using innovative techniques such as from Earth observations
4. Support South-South cooperation and partnership to share knowledge on SEEA implementation