




*Ministry of
Environment*



Egypt Achievements Toward Environmental and Sustainable Development Indicators

The Second Meeting of the Arab Working Group
on Environment and Sustainable Development
Indicators
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- Achievements to implement the priority Environmental and Sustainable development indicators.
 - Administration and Infrastructure Support.
 - Egyptian Environmental Indicators.
 - Currents Situation in the implementation of Environmental and Sustainable Development Indicators.
- Challenges, needs and Solutions.

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Administration and Infrastructure Support

1. Establishment of the National Committee of Sustainable Development (Declare of the prime minister in 2006).
2. Establishment of the Environmental Reporting and Indicator Unit in the Ministry of Environment in 2007.

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Environmental Indicators and Reporting (SOER).

- ◉ Environmental Policies.
- ◉ Importance of Indicators
- ◉ Methodology.
- ◉ Fact Sheet of Indicators.
- ◉ List of Environmental indicators.

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Environmental Policies

- Encourage the green economic development, less dependent on carbon.
- Support the Integrated Environmental Management Systems.
- Implement the Sustainable development Policies, and support small and medium size projects in the environmental sector.
- Fight against the harmful effect of the climate changes.
- Protect the natural resources.
- Raise the environmental behavior for the society through public awareness's.


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Environmental Policies

- Adapt internal financial policies which encourage and support Environmental Friendly Facilities, and take actions against the environmental violation.
- Implement and improve the environmental legislation system.
- Integrated environmental work through the cooperation between different governmental and nongovernmental organization on the national, regional, and international levels.
- Support the decentralized environmental management and building capacity.
- Include the gender issues and encourage the role of women and youths in the environmental planning.

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Importance of Indicators

- MSEA has prepared the necessary plans to implement the above mentioned Environmental policies in coordination with various stakeholders in the Environmental field.
- The success of the implementation of these plans depends on the presence of effective system for monitoring and evaluation that includes indicators aimed to:
 1. Monitor the achievement to reach the goal.
 2. Measure the effect of the on ground activities.
 3. Help in Design making .
 4. Monitor the achievement in sustainable development.
 5. Support the financial requirement for projects and programs.

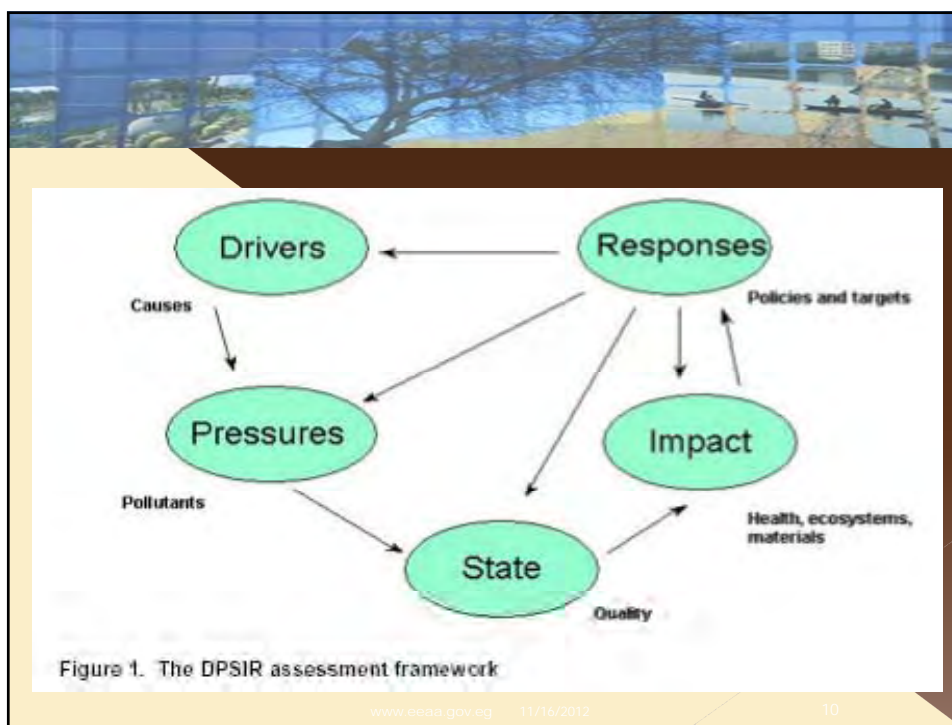
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Importance of Indicators

- In this context, MSEA issued The Environmental data & indicators index for 2009. The index includes a number of 84 indicators for (Air Quality, climate change, ozone layer protection, noise, fresh water, coastal water, coastal & marine zones, biodiversity, a forestation, energy, solid waste, hazardous substance & waste,...etc).
- These indicators are prepared according to the European model known as (DPSIR: Driving force, Pressure, State, Impact & Response).


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Fact sheet of Indicators

- A fact sheet is a tool to collect homogenous information and data for indicators relating different environmental issues. Its main objective is effective communicate information summaries general concepts and emphasize points of interest and concerns.
- The fact sheet attempts to answer the following questions:
 - Is the indicator easy to interpret correctly? Does it match the interest of the target audience?
 - Is the indicators representative of the monitored environmental issue?

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Methodology

The preparing methodology sheet of each indicator includes the data of:

- What is Indicator.
- Measurement unit.
- Source of information.
- Reason of chosen certain Indicators.
- Target according to the law.
- Actual value of Indicator.
- Comments on indicator results and comparisons with previous years.

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List of Environmental Indicators

Air Quality:

- PM₁₀ concentrations.
- SO₂ concentrations.
- NO₂ concentrations.
- Lead concentrations (Pb).
- Ozone concentrations (O₃).
- CO concentrations (CO).
- Total Solid Particulates from Cement Companies.
- Rice Straw Burning emissions.
- Proportion of reconciled cars through vehicle exhaust examination program on roads (Greater Cairo).
- Proportion of reconciled mass transit buses.

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List of Environmental Indicators

Climate Changes

- Total CO₂ concentrations.
- Total Amount of green house gases (CO₂ equivalent).
- Per capita GHGs emissions, Human origin (CO₂ equivalent).


Ozone Layer Protection:

- Rate of annual consumption of ozone depleting substances.
- Ozone Measurements in Egypt.

Noise

- Noise levels in different areas in Cairo Governorate along the day three intervals.
- Noise levels in different areas along the day three intervals in new cities.

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List of Environmental Indicators


Fresh water Quality

- Proportion of COD.
- Proportion of BOD.
- DO.
- Nutrients concentrations.
- Annual rate of surface & underground fresh water.
- Amount of annually used water in different activities.
- Coverage Proportion with safe waste water for cities & villages.
- Coverage Proportion with drinking water for cities & villages.

Coastal Water Quality

- Bacterial count of coli forms, E.coli and Fecal streptococci.
- Nutrients concentrations (Ammonia- Total nitrogen)

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List of Environmental Indicators


Coastal & Marine Zones

- Marine extinct or Endangered Species.
- Mangrove Trees.
- Area Proportion of protected marine coastal areas to total area of protectorates in Egypt.
- Area of Coral reefs in marine environment.

Biodiversity

- Total area & number of Egyptian natural protectorates.
- Classification of natural protectorates according to International Union for Nature Conservation.
- Red list & species classification according to International Union for Nature Conservation.
- Number of invasive registered species in the Egyptian Environment.

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List of Environmental Indicators

A Forestation & plantation

- Total Area of forests irrigated with treated waste water.

Energy

- Generated Electrical Power from wind power (Million KWH).
- Proportion of renewable energy from total used electrical power sources.
- Amount of consumed electrical power in Egypt according to different sectors (Million KWH).

Solid Waste

- Total Amount of annually resulted solid waste (Million tons/ year).
- Total Amount of annually generated municipal waste.
- Total Amount of annually collected municipal waste (Million tons/ year).
- Proportion of collected municipal waste to amount of resulted municipal waste (Collection efficiency).
- Municipal Waste composition
- Number of Waste Sanitary dumpsites.

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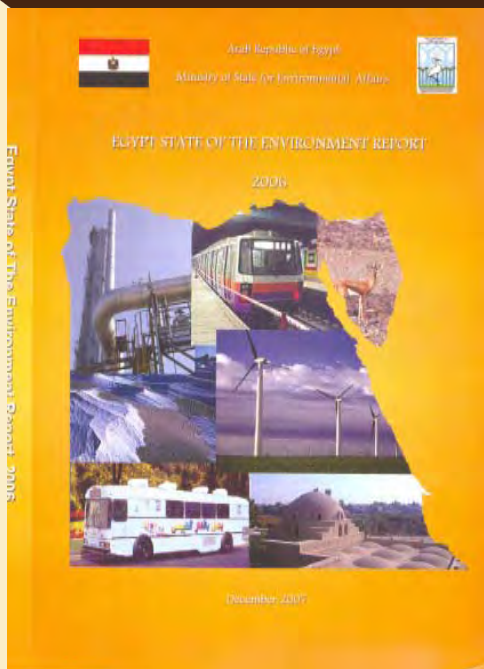


List of Environmental Indicators

Hazardous substance & Waste

- Amount of hazardous chemicals in industrial sector.
- Amount of hazardous chemicals in agricultural sector.
- Amount of hazardous chemicals imported to countries through custom releases (Ton/ Year).
- Number of accidents resulted from hazardous substance.
- Amount of obsolete pesticides.
- Amount of generated hazardous waste from Health Sector.
- Amount of Suez Canal transboundry hazardous waste.
- Amount of hazardous waste exported outside countries.
- Fluorescent Lambs waste.
- Number of Hazardous waste dumpsites.

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Methodology for preparation of SOER depends on four main principals:

- Transparency
- Participation
- prepared according to the international standards
- Emphasis the importance of the connection between Egypt International Commitments and effort done on the national levels.

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**National Environmental Action Plan
(NEAP 2002-2017)**

**The National
Environmental Action Plan
of Egypt 2002/17**

Environment at the Center of Modernizing
Egypt

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**The National Environmental Action Plan 2007-
2012 includes 8 main National programs:**

1. Air Quality Improvement Program.
2. Water Quality Improvement Program.
3. Safe Managements of waste program.
4. Industrial pollution control program.
5. Natural protectorate program.
6. Capacity building, media, public awareness's and Inspection program.
7. Decentralization of Environmental Management program.
8. Sustainable Development program.

Sustainable Development

- To cope with the challenges, the government recognised the necessity of managing economic, social and environmental sectors in a comprehensive and integrated way when formulating and implementing national policies.
- The Government of Egypt recognized the importance of preparing and adopting a national strategy for sustainable development which builds upon and harmonizes the various sectoral, economic, social and environmental policies and plans that are operating in the country. Its goal is to ensure socially responsible economic development for the benefit of future generations.

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Sustainable Development Indicators in Egypt

National efforts

- National committee for SD established by Decree No. 64/ 2006
- National Technical Secretary for SD with participation of 27 ministries.
- Egyptian Vision and framework for the National Strategy for Sustainable Development finalized/ approved
- Some SD indicators prepared

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ت ذات الأولوية التي تم تغطيتها.

1. النسبة المئوية للسكان القادرين على الوصول إلى المرافق الصحية السليمة بالمحافظات المختلفة		1
2. كمية مياه الصرف المعالجة سنوياً.		
3. النسبة المئوية للسكان القادرين على الوصول إلى مياه شرب آمنة.		
4. نسبة الأسر الذين يتوفر لهم مصدر طاقة		
5. النسبة المئوية للسكان الذين يعيشون في سكن عشوائي.		
6. معدل وفيات الأطفال دون الخامسة.	الصحة	2
7. توقع الحياة عند الولادة.		
8. نسبة المحصنين ضد الأمراض المعدية في الطفولة.		
9. معدلات انتشار وسائل تنظيم الأسرة.		
10. معدل الإلمام بالقراءة والكتابة حسب النوع.	التعليم	3



11. نسبة سكان الريف من عدد السكان الكلي.		4
12. نسبة الاعتماد.		
13.		5
14.		
15.		
16.	/	6
17. معدل السكان الذين يعيشون في السواحل.		7
18. صيد الأسماك السنوي.		
19. الفسفور والنيتروجين الذي يتم إطلاقه في المياه الساحلية.		



.20		
.21		
BOD .22		8
.23		
.24		
.25		
.26		9
.27		
.28 الدين الخارجى كنسبة من الناتج المحلى الإجمالى.		
.29 معدل البطالة حسب النوع.		10
.30 وضع العمالة حسب النوع.		



.31 خطوط الهاتف الرئيسية وعدد الهواتف النقالة.		10
.32 عدد اشتراكات الانترنت.		
.33 حجم التبادل التجارى بين جمهورية مصر العربية ودول العالم (الصابرات والواردات).		
.33 صافى الاستثمار الأجنبى المباشر فى مصر كنسبة مئوية من الناتج الإجمالى.		11
.34 إجمالى تحويلات المصريين العاملين بالخارج.		
.36 متوسط استهلاك الطاقة الكهربائية السنوى الاجمالى وحسب القطاع.		
.37 حصة استهلاك الموارد المتجددة (طاقة الرياح) من الطاقة الكهربائية.		12
.38 كثافة استهلاك الطاقة للناتج القومى الاجمالى.		



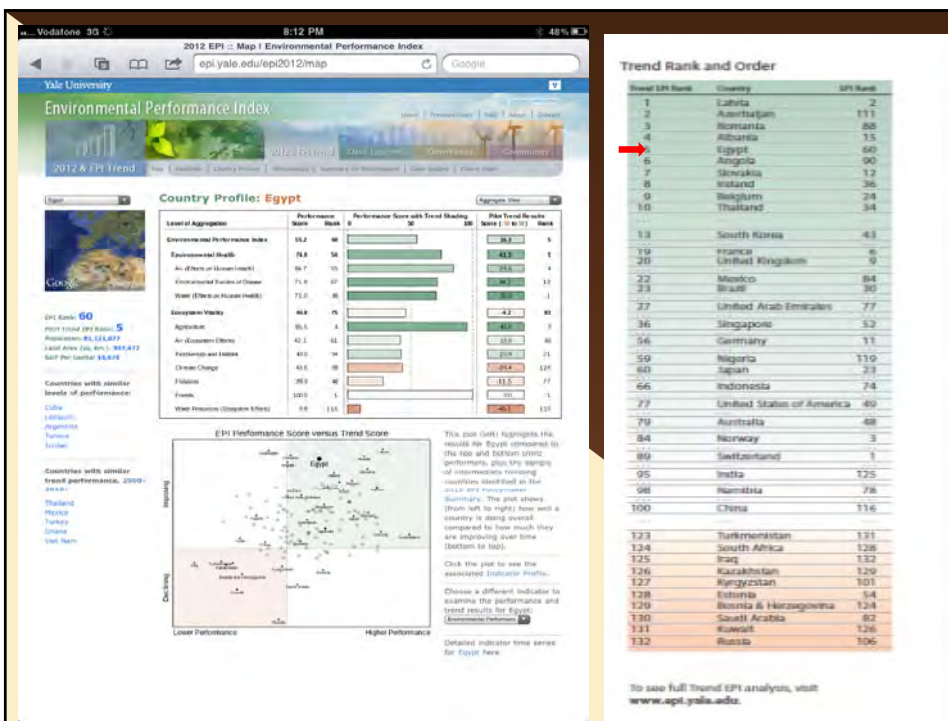
EPI Rankings

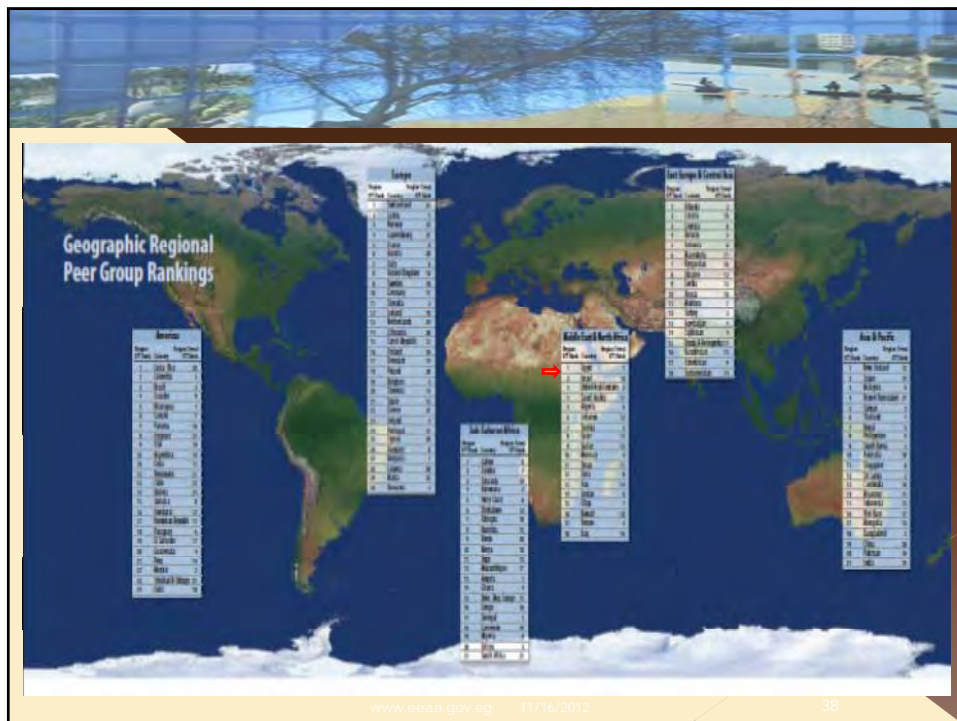
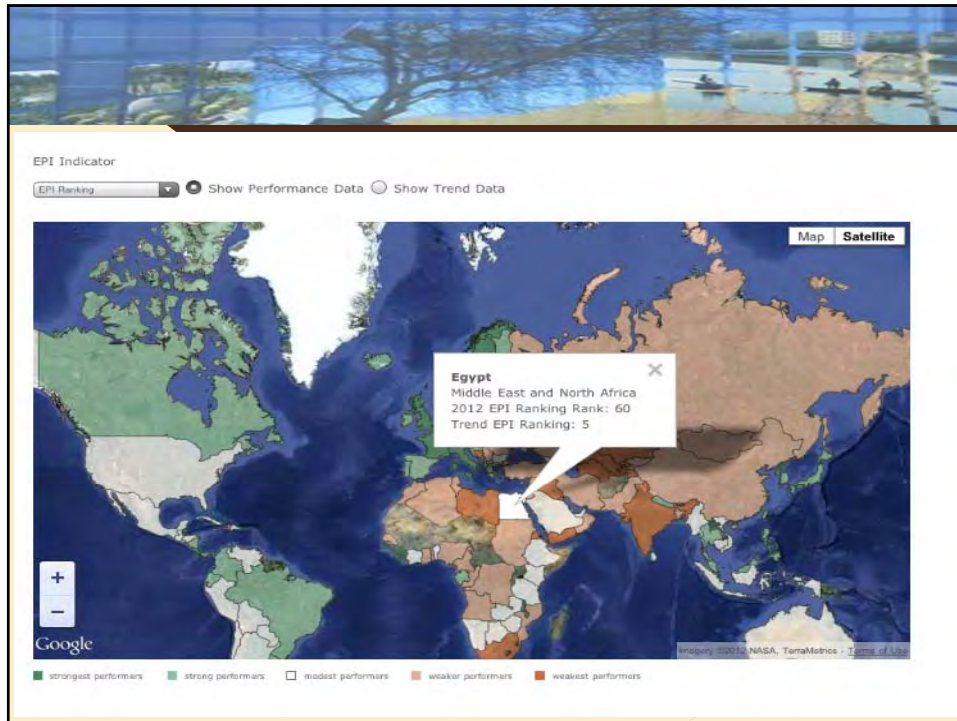
The 2012 EPI rankings are comprised of both a snapshot of performance based on the latest available data (the 2012 EPI) and a trend rank based on performance over the last decade (the Trend EPI).

View: ☒ EPI Rank ☐ Pilot Trend EPI Rank

EPI Rank strongest performers			EPI Rank strong performers			EPI Rank modest performers			EPI Rank weaker performers			EPI Rank weakest performers		
1	Switzerland	76.69	11	Germany	66.91	47	Georgia	56.84	85	Togo	48.66	121	Tajikistan	38.78
2	Latvia	70.37	12	Slovakia	66.62	48	Australia	56.61	86	Algeria	48.56	122	Eritrea	38.39
3	Norway	69.92	13	Iceland	66.28	49	United States of America	56.59	87	Malta	48.51	123	Libyan Arab Jamahiriya	37.68
4	Luxembourg	69.2	14	New Zealand	66.05	50	Argentina	56.48	88	Romania	48.34	124	Bosnia and Herzegovina	36.76
5	Costa Rica	69.03	15	Albania	65.85	51	Cuba	56.48	89	Mozambique	47.82	125	India	36.43
6	France	69	16	Netherlands	65.65	52	Singapore	56.36	90	Angola	47.57	126	Kuwait	35.54
7	Austria	68.92	17	Lithuania	65.5	53	Bulgaria	56.28	91	Ghana	47.5	127	Yemen	35.49
8	Italy	68.9	18	Czech Republic	64.79	54	Estonia	56.09	92	Dem. Rep. Congo	47.49	128	South Africa	34.55
9	United Kingdom	68.82	19	Finland	64.44	55	Sri Lanka	55.72	93	Armenia	47.48	129	Kazakhstan	32.94
9	Sweden	68.82	20	Croatia	64.16	56	Venezuela	55.62	94	Lebanon	47.35	130	Uzbekistan	32.24
			21	Denmark	63.61	57	Zambia	55.56	95	Congo	47.18	131	Turkmenistan	31.75
			22	Poland	63.47	58	Chile	55.34	96	Trinidad and Tobago	47.04	132	Iraq	25.32
			23	Japan	63.36	59	Cambodia	55.29	97	Macedonia	46.96			
			24	Belgium	63.02	60	Egypt	55.18	98	Senegal	46.73			
			25	Malaysia	62.44	61	Israel	54.64	99	Tunisia	46.66			
			26	Brunei Darussalam	62.49	62	Bolivia	54.57	100	Qatar	46.59			
			27	Colombia	62.33	63	Jamaica	54.36	101	Kyrgyzstan	46.33			
			28	Slovenia	62.25	64	Tanzania	54.25	102	Ukraine	46.31			
			29	Taiwan	62.23	65	Belarus	53.88	103	Serbia	46.14			
			30	Brazil	60.9	66	Botswana	53.74	104	Sudan	46			
			31	Ecuador	60.55	67	Côte d'Ivoire	53.55	105	Morocco	45.76			
			32	Spain	60.31	68	Zimbabwe	52.76	106	Russia	45.43			
			33	Greece	60.04	69	Myanmar	52.72	107	Mongolia	45.37			
			34	Thailand	59.98	70	Ethiopia	52.71	108	Moldova	45.21			
			35	Nicaragua	59.23	71	Honduras	52.54	109	Turkey	44.8			
			36	Ireland	58.69	72	Dominican Republic	52.44	110	Oman	44			
			37	Canada	58.41	73	Paraguay	52.4	111	Azerbaijan	43.11			
			38	Nepal	57.97	74	Indonesia	52.29	112	Cameroon	42.97			
			39	Panama	57.94	75	El Salvador	52.08	113	Syria	42.75			
			40	Gabon	57.91	76	Guatemala	51.88	114	Iran	42.73			
			41	Portugal	57.64	77	United Arab Emirates	50.91	115	Bangladesh	42.55			
			42	Philippines	57.4	78	Namibia	50.68	116	China	42.24			
			43	South Korea	57.2	79	Viet Nam	50.64	117	Jordan	42.16			
			44	Cyprus	57.15	80	Benin	50.38	118	Haiti	41.15			
			45	Hungary	57.12	81	Peru	50.29	119	Nigeria	40.14			
			46	Uruguay	57.06	82	Saudi Arabia	49.97	120	Pakistan	39.56			
						83	Kenya	49.28						
						84	Mexico	49.11						

Egypt





General Remarks

- Importance of having time serious data (historical data), which explain the trend and expect the future changes.
- Working on a add new set of indicators (EPI, SDI, PBI, GEI).
- Quality of data used (certified Lab. ISO)
- Fact sheets are available for measured indicators.
- Indicators Policies Plans and programe.
- Priorities in selection of indicators .
- Relation between Research and Policies.
- Regular Indicators report.

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Common mistakes encountered while developing indicators include selecting indicators that are not linked to the assessment questions, developing indicators prior to posing an assessment question, and setting for indicators based on the currently available data
(www.water.epa.gov/type/oceb/nep/upload/indicator).

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