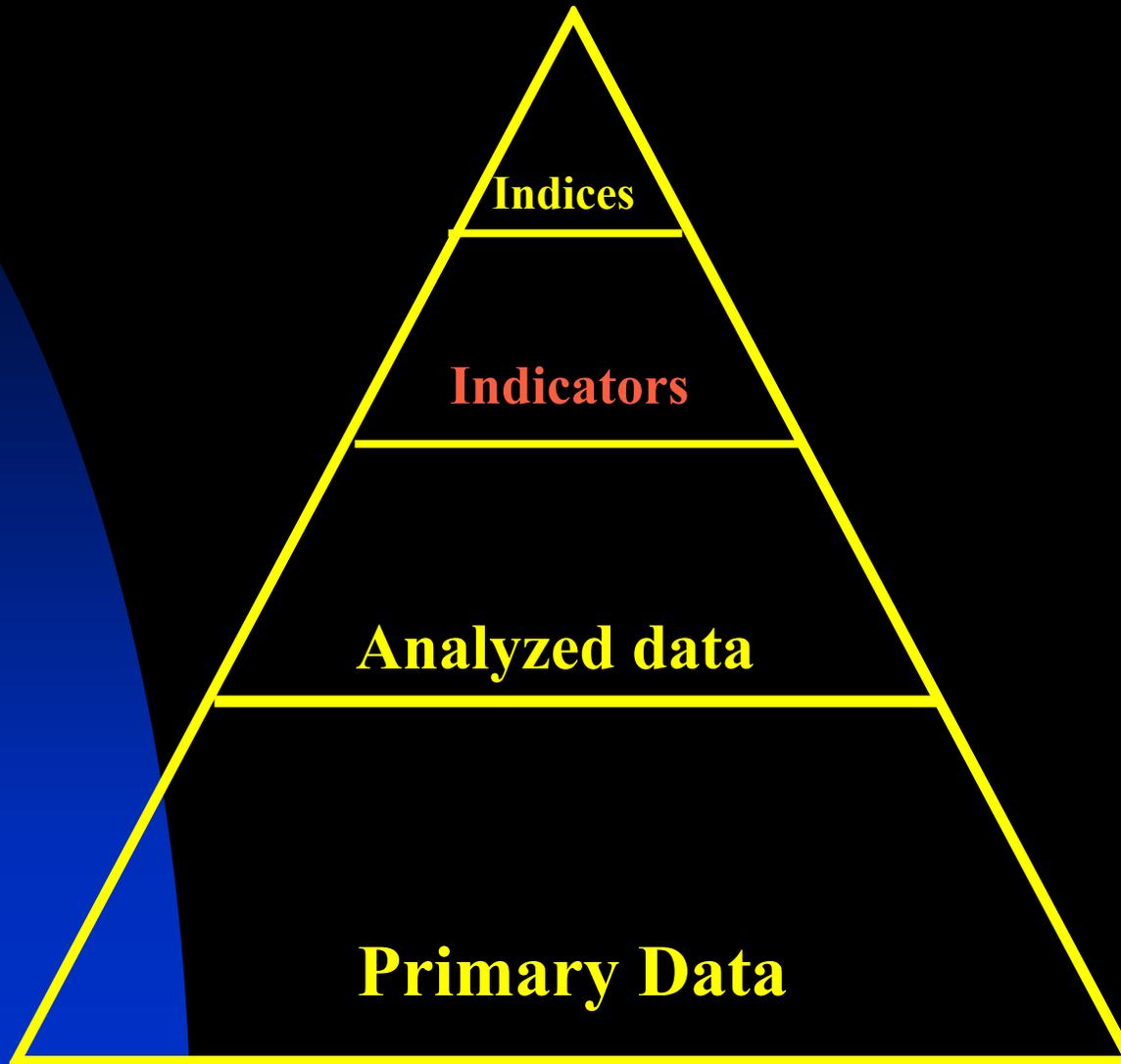


INDICATORS OF SD IN THE ARAB REGION

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INFORMATION PYRAMID



- data feeding system relies totally on the provision of reliable & continuous source of primary data derived from extensive monitoring & reporting programs to initiate the sequential build-up to reach SD indicators and indices.

ENVIRONMENTAL INDICATORS IN THE CONTEXT OF SD

- SD indicators consist of economic, social, institutional and environmental indicators. Progress towards SD thus requires directing equal policy attention to all four indicators.
- However, environmental indicators in the Arab Region are not adequately and/or routinely & publicly reported by most governments of the region or even by most international & regional development organizations

- Arab Region encompasses a wide spectrum of inherent country characteristics ranging from the richest to the poorest, from very rich in energy resources to very poor in water resources. Evidently, the identified environmental priorities are neither common nor harmonious, but vary dramatically among the countries of the region.
- In the Arab Region there has been a relatively ample supply of data to develop indicators on social, economic and to a lesser extent institutional aspects of development. This can be attributed to the long tradition of monitoring & reporting on these three aspects.

Primary environmental data is simply not available in the region in the same abundance or quality. This has been attributed to:

- The generation of primary environmental data is a highly technical process involving well-trained laboratory technicians, scientists, engineers and biologists.
- The institutions needed to generate the primary data in its acceptable form (quality and quantity) is not regularly available in all countries and/or localities.
- The capital and operation costs for environmental testing laboratories as well as monitoring stations are quite high and some times beyond the reach of some Arab Countries.
- The environmental management systems in some Arab Countries are not well developed yet to design and implement proper integrated national environmental monitoring programs for ambient environment as well as for discharges and emissions.
- The existing environmental legislations and by-laws regulating different aspects of monitoring of environmental quality & natural resources are either inadequate or out-dated.
- The inadequate enforcement of environmental legislation in some Arab Countries diminished the response of a number of relevant sectors to meet their environmental monitoring & reporting requirements.

CHALLENGES & CONSTRAINTS

Primary environmental data needed for integration with the developed SD indicators suffers from the following difficulties:

I - Environmental Indicators are Inadequate:

The infrastructure needed to generate the primary environmental data in most Arab Countries is not adequately developed yet. This weakness in the environmental monitoring infrastructure can be attributed to the following:

- 1. Inadequate and/or out-dated environmental monitoring systems,**
- 2. Out-dated or inadequate monitoring & reporting legislations,**
- 3. Powerless and sector based monitoring institutions,**
- 4. Insufficient technical capacity,**
- 5. Scarce financial resources and**
- 6. Poor design and/or management of existing environmental monitoring programs.**

II- Environmental Data is Often of Questionable Quality:

- A large portion of data suffers from significant quality uncertainty. Environmental data from some Arab States is lacking reliability & is unverifiable. This can be attributed to the lack of adequate QA/QC programs to cover sampling, analysis & reporting.
- The number of certified and/or accredited environmental laboratories is extremely limited in the Arab Region. National reference laboratories are also very few in number.
- Primary environmental data suffer from lack of comparability at the national, regional and global levels. The disregard of recognized uniform standard methods for environmental monitoring and analysis by some institutions contributed to this problem.
- Discontinuous data monitoring, in terms of both temporal and spatial distributions, provides mostly snap shots only for hot spot areas. This lack of time series data prevents the detection of environmental trends and patterns that can be used as indicators for SD.
- Environmental monitoring programs are mostly designed to focus on the traditional aspects of environmental health rather than the general environmental aspects of socio-economic development.

III- Environmental data is not disclosed, shared or reported:

1. Primary environmental data is usually generated in the Arab Countries by a large number of national and local institutions of relevance to SD. The lack of coordination among these institutions evidently resulted into the duplication, scattering and fragmentation of the generated primary environmental data.
2. The Arab Region also suffers from an underlying attitude & reluctance not to disclose or share environmental data with other bodies or the public. This phenomenon is due to several reasons:
 - Political Reasons: Information on environmental performance is considered as classified or restricted information not to be disclosed. This is attributed to the sensitivity of the data & to avoid any potential public pressure that might alter the socio-economic development agenda of governments. Also disclosure of some data on environmental quality deterioration might cause unnecessary public concern, unrest and confusion.
 - Economic Reasons: Unfavourable data on air quality and/or water quality might have negative impacts on the economic return of the tourism sector. Disclosure of environmental data on quality of irrigation water resources might affect the export of produce & fruits that doesn't meet environmental specifications.
 - Personal Reasons: In some cases government officials controlling environmental data feel that controlling information under their jurisdiction is giving them more leverage & authority. Often time these officials are hired as experts by international organizations & consulting firms to access the valuable data under their control.

RECOMMENDATIONS

- Undertake comprehensive regional knowledge mapping effort to assess development & implementation of SD indicators in terms of gaps, constraints, challenges, opportunities, lessons learned, best practices & coordination instruments.
- Identify capacity building needs to obtain reliable, continuous & harmonious primary data. This entails capacity building needs for establishing and operating monitoring facilities, strengthening national statistical bureaus, adapting standard monitoring procedures, applying QA/QC program, etc.
- Support national efforts for establishing means of coordination among various sectors that generate primary data for SD indicators.
- Provide technical support to integrate different components of SD indicators (social, economic, environmental & institutional) & develop aggregated indices for SD as a means of communicating information on SD to the community & to the decision-makers.

THANK YOU