UNITED NATIONS ENVIRONMENT PROGRAMME

Programme des Nations Unies pour l'environnement   Programa de las Naciones Unidas para el Medio Ambiente

Программа Организации Объединенных Наций по окружающей среде   برنامج الأمم المتحدة للبيئة

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UNEP

XIX Reunión del Foro de Ministros de Medio Ambiente de América Latina y el Caribe

Los Cabos, México
11-12 de marzo de 2014

    A. REUNIÓN PREPARATORIA DE EXPERTOS

"Strengthening regional networks and national capacities on environmental information"
13-14th November 2013 Panama City
Meeting report

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I.   Introduction

1. The United Nations Environment Programme (UNEP) convened a regional meeting on "Strengthening regional networks and national capacities on environmental information" on the 13 and 14th of November, 2013 in Panama City. The meeting was attended by delegates from 20 countries from Latin America and the Caribbean, as well as representatives of nine international organizations. The list of participants is attached as Annex 1. The presentations delivered by them can be downloaded (during 2013 and early 2014) from the following web link: https://www.dropbox.com/sh/8ew6k3oou7yj9dk/s4YHqlt2CT

2. The main subjects discussed at the meeting were cooperation for the development of environmental information and indicators of sustainable consumption and production (SCP).

3. The meeting objectives were:

- Present the progress made at the country level in the generation and management of environmental information (including associated geographic information), and identify opportunities for regional cooperation as well as priorities for capacity building in the framework of the Environmental Indicators Working Group of the Latin American and Caribbean Initiative for Sustainable Development (ILAC) and the "Eye on Earth" initiative;

- Identify priority regional indicators on sustainable consumption and production, and priorities for regional cooperation on this theme;

- Provide feedback on the prototype "UNEP Live" platform.

4. Meeting participants expressed the following expectations:
- Learn about the latest developments and national initiatives in the region;

- Strengthen regional networks to develop synergies and share experiences, best practices, contacts and information;

- Develop cooperation on indicators of sustainable consumption and production, and learn about national initiatives and practical approaches and constraints to monitoring different types of indicators;

- Obtain support from international agencies and create synergies between global, regional and national initiatives with regard to environmental information, state of the environment reports, green growth and other related topics;

- Learn how to effectively organize and manage an environmental information system;

- Gain a deeper insight about ILAC indicators and how these can support environmental assessments and country priorities;

- Understand the importance of international statistical standards to improve environmental information;

- Work towards common standards and methodologies for regional indicators.

5. Opening remarks were made by Margarita Astrálaga, UNEP's Regional Director, and Arturo Flores-Martinez, Director General of Statistics and Environmental Information, Secretariat for Environment and Natural Resources (SEMARNAT), Mexico, in his capacity as Chair of the ILAC Working Group on Indicators.

6. The main topics presented and discussed are described below.

II.   Indicators of Sustainable Consumption and Production (SCP)

7. The session began with an overview of international initiatives related to indicators of sustainable consumption and production, summarizing a paper circulated to the meeting on this topic. The paper and presentation highlighted the 12 existing ILAC indicators covering themes relating to SCP, the Regional Strategy on SCP, work on green economy indicators, the System of Environmental-Economic Accounting (SEEA) and Material Flows analysis recently published by UNEP together with the Commonwealth Scientific and Industrial Research Organization (CSIRO) through the report "Trends in material flows and resource productivity in Latin America". Additional examples of SCP-related indicators included: efficiency and productivity indicators, resource rent and revenue from environmental pollution. Last, potential areas of work that could be addressed by ILAC were mentioned.

8. Representatives of Brazil, Mexico, Peru, the Dominican Republic and Saint Lucia presented their experience in developing SCP indicators. The presentations addressed the following guiding questions:

  a. Which SCP indicators are being monitored at the national level?
  While some countries have large sets of indicators on SCP (over 30), others have a smaller number (10-15). Priority issues include cleaner production, sustainable procurement, productivity and environmental quality. In several case, countries have started work on SCP indicators (e.g., sustainable public procurement) but significant additional work is required to develop methodologies or data sources.
  b. What is the policy context underlying SCP indicators?
  -   Mexico: Green Growth Initiative;

  -   Dominican Republic: Law on Core Principles of Cleaner Production, as well as the National Policy on Sustainable Consumption and Production;

  -   Saint Lucia: The Country Vision and all environmental laws, plans and policies, as well as the National Policy on Environmental Education;

  -   Peru: The government's work "cornerstones" and strategic goals, particularly those on sustainable development and the environment.

  c. What practical aspects and limitations are being faced? What are the gaps and top-priority capacity needs on this matter in the country?

- SCP and the green economy are closely related, according to some differing only depending on the scale of analysis (micro- and macro- scale, respectively);

- Lack of tools and mechanisms to acquire data to monitor indicators; limited financial and human resources, equipment, etc.; need to develop methodologies mechanisms for monitoring indicators; technical assistance for compliance with international agreements; training to SMEs;

- Insufficient coordination, despite the existence of government-wide SCP policy instrument;s;

- Management of limited resources is key; avoidance of duplication of efforts is imperative;

- Need to avoid contradictions between national and international initiatives;

- Lack of updating of information; information is not shared between agencies and a multi-sectoral vision is missing; inadequate funding.

d. What experience could the country contribute to ILAC's future work on this subject?
- Design of SCP policies; organization of Cleaner Production Award processes; establishment of networks for Cleaner Production and Efficient Use of Resources;

- Use of satellite imagery for monitoring indicators;

- The National Environmental Information System as a decentralized environmental management tool; pollutant release and transfer register (PRTR); adoption of Organisation for Economic Co-operation and Development (OECD) indicators, sectoral indicators for agriculture and forestry.

e. Recommendations for regional priority indicators that could be included in ILAC
- OECD Indicators and those related to PRTR;

- A limited number of indicators covering different types of environmental-economic links (stocks, flows, efficiency, footprinting), in line with regional policy priorities and appropriate for different groups of countries.

f. Recommendations for future ILAC activities
- Implementation of a working group to review the ILAC indicators on SCP and define an approach to monitor them at the regional level;

- Invite the United Nations Industrial Development Organization (UNIDO) to participate in the Working Group on Indicators in an advisory role on this theme.

Discussion:

9. Since SCP and green economy indicators measure relationships between environment and economy, the discussion focused on indicators that can be communicated and understood by professionals and institutions in both sectors, and effectively guide policy making. Understanding the varying levels of statistical development in the region and availability of financial resources is important in selecting appropriate regional indicators.

10. The importance of having statistically sound methodologies and published metadata was pointed out, with the possibility to link with approaches such as SEEA, heritage accounting and decoupling analysis. It was suggested that the information available at the national level should be identified in order to verify the feasibility of calculating any indicators proposed. In general, the group recommended to identify only a limited number of regional SCP indicators to facilitate their use in the national context, in view of the challenges already faced by many countries to monitor the existing ILAC indicators.

11. Nicaragua, Guatemala and Mexico shared experiences on SCP indicators in the course of the discussion. Nicaragua has started an SCP analytical process to inform policy making, aiming to improve welfare through increased productivity. A Pact for Economic Development has been established in Guatemala, which has fostered information on production and competitiveness. This was also a good strategy increase the consideration of environmental information within national policy making processes. In addition, Guatemala is planning to initiate the development of environmental accounts. In Mexico, a competitiveness index incorporating social and environmental components had proved controversial since it was calculated by a non-governmental body; on the other hand, it provided an opportunity to make environmental issues more visible.

12. Several participants stressed the need to strengthen linkages between environmental information and policy development, through mechanisms such as reporting processes to multilateral environmental agreements and funds such as the Global Environment Facility (GEF), and in the context of operational plans of the relevant ministries and institutions. In addition to green-economy indicators, "blue growth" indicators were also needed to reflect the environmental services provided by oceans.

13. There was a broad consensus on the need to build synergies and networks of partners to share and manage information derived from individual projects, such as the initiatives related to marine issues (pointed out by the representatives from Chile and the UNEP Caribbean Environment Programme).

Next steps:

14. Next steps are as follows:

a. The WGEI Chair and the Secretariat (UNEP) would work with ECLAC and interested countries to develop a proposed revision of ILAC indicators on SCP for possible consideration by the Forum of Ministers.

b. This process should aim to identify indicators that are appropriate to a wide range of different countries. In addition to proposing new indicators, the possibility of deleting indicators that have not been adopted by many countries should be evaluated. The environmental statistics project coordinated by the Economic Commission for Latin America and the Caribbean (ECLAC) and Mexico´s National Institute for Geography and Statistics (INEGI) might contribute to this work, as it envisions conducting a regional diagnostic of environmental statistics.

c. Analysis of ILAC indicators should focus on those actually monitored by countries, and ensure the indicators are relevant to a broader range of policy making on socio-economic issues.

d. The exercise should also take into account a mapping of various initiatives and information sources on SCP indicators, and promote synergies between them.

III. Environmental Information - Cooperation and geographic information

15. The session started off with a review of various regional and international initiatives on environmental information, including Rio Declaration's Principle 10, the Eye on Earth initiative, and their implications for the development of environmental information systems. What are the options to address these issues? Should we make major changes to our statistical or information systems?

16. International initiatives have increased the number and types of users of environmental information. Just as there are different objectives and audiences, there are also different options for classifying, organizing and communicating environmental information. The traditional "thematic" organization of environmental information (for reporting the state of the environment, for instance) can be based on analytical methodologies (e.g. "pressure-state-impact-response") and use a set of core indicators. This approach may also focus on specific policies (e.g. green economy, well-being and equity), including indicators that are of particular policy relevance for the country.

17. New international statistical frameworks and standards being gradually adopted at the country level include the Framework for the Development of Environment Statistics (FDES) and the System of Environmental-Economic Accounting. At the regional level, ECLAC and Mexico's INEGI are conducting a regional project on environmental statistics involving nine countries in the region. This project will conduct a diagnosis of the current state of environmental statistics; design a strategy and action plan for their development and strengthening; develop a "toolbox" to guide national environmental statistics development; and support other capacity building activities.

National Environmental Information Systems (NEISs)

18. The representatives of Argentina, Belize, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Mexico, Panamaand Uruguay described their experience in developing environmental information systems. All the presentations are summarized below according to the following guiding questions:

a. State of national environmental information systems (NEIS), including geographic information:

  - NEISs are primarily platforms for inter-agency coordination aimed to improve management of the country's environmental information;

  - Some of them have centralized information technology systems (including national environmental information websites);

- NEISs are generally divided into subject areas[1], or structured according to the Pressure-State-Response framework, especially for reporting the state of the environment;

- Costa Rica and Ecuador are working on a data reclassification based on FDES;

- Chile and Ecuador are building systems that link with the national Spatial Data Infrastructure;

- In Panama and Uruguay, agreements are being negotiated between the various relevant institutions to share information to systems coordinated by the Ministries of the Environment of each country. Environmental management is currently being evaluated through a small set of high-impact indicators.

b. What environmental indicators are included?
  - Strategic objectives of the National Environmental Strategy;
  - Indicators relating to international conventions and commitments;
  - Indicators to monitor the impact of key environmental policies (in some cases including pollutant emissions and concentrations);
  - The Millennium Development Goals indicators;
  - ILAC indicators.;
  - Indicators derived from environmental-economic accounts.

c. How is the system organized and administered? What are the underlying institutional mechanisms, including collaboration between environment, cartography/geography and statistics agencies?

- Main actors: Ministry of Environment and National Statistics Office;

- Other institutions: All agencies that, according to their mandate, generate environmental data;

- In some countries, there is a system or network of institutions that, according to a National (Access to) Information Policy, cooperate in the development of indicators;

- Those institutions do not always work according to the same standards;

- The quality of the data is responsibility of the institutions that generate them;

- Many NEISs include geospatial information viewers; Some of them also allow the user to download and/or analyse data online;

- A long-term view on the system design should be adopted to ensure information continuity.

d. How is the system funded?

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[1] Number of subject areas in different countries: Argentina - 12; Colombia – 5; Ecuador - 5 Guatemala – 4; México – 6; Panamá - 3

All countries reported that their environmental information system is funded by the national budget, with specific projects being supported by international funding.

e. Who are the main users of the information system (public access to information)? Is the system used for evaluation/reporting purposes or for policy formulation, design and monitoring?

- General public, academics, policy makers, non-government organizations (NGOs), municipalities, government and international agencies, productive sectors, territorial development programs;
- Information for reports on the state of the environment;
- Due to the limited supply of information, users occasionally seek other sources as well.

f. What are the country's top-priority capacity-building needs?

- Integrating disparate information into a single environmental information system;

- Human resources to make better progress in the development of NEIS;

- Strengthening the Geographic Information Systems Department;

- Economic valuation of ecosystems;

- Indicators of natural resource management;

- Environmental accounting;

- Environmental information systems at the local level;

- Practical aspects of environmental information management, acquisition, sharing and use:

  o Development of data-exchange protocols,

  o Development of databases and information systems

  o Design of indicators

  o Application of models

g. What technical resources and best practices could the country contribute through ILAC's regional work?

- Establishment of an information providers network;

- National experience, inter-institutional strengthening and scientific expertise in various areas;

- Experience in outreach and awareness raising;

- Training other countries in developing indicators.

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Recommendations on priority work on this area in the framework of ILAC

19. Speakers stressed the need to continue reviewing the status of environmental information systems in the region and areas requiring technical and financial support, as well as promoting the update of national environmental assessment

reports. In addition, the need to disseminate good practices on environmental information was emphasized.

20. Regarding indicators, it was proposed that the WGEI should continue to focus on strengthening the monitoring and analysis of existing indicators, before adding new indicators to the list.

21. It was also proposed to step up efforts to improve coordination and collaboration between the various specialized UN agencies and international organizations involved in environmental information development, in order to better coordinate technical cooperation and financing activities of specific projects on this subject.

International platforms for environmental and geographic information

22. The United Nations Food and Agriculture Organization (FAO) and the Central American Commission on Environment and Development (CCAD) delivered presentations on their work through the FAOSTAT and Regional Observatory websites, respectively. The former compiles and disseminates information on agriculture, forests, water, fisheries, aquaculture and natural resources. One of the key outcomes of this work is the Global Forest Resources Assessment, which is published every five years based on country reports that are fed in through a virtual platform.

23. The CCAD Observatory encompasses four areas: environmental governance, environmental quality, natural heritage, climate change and risk management. Indicators are grouped into five categories[2]. The module on forest resources is already operating online.

24. Some of the major challenges highlighted include the consistency of data from different sources (FAO operates several communication channels with countries), terminology and the platform's sustainability once the donor's funding has ceased (in the case of the Observatory).

25. Recommendations for integrating environmental information at national and international levels included avoiding duplication of efforts and reporting; assigning the responsibility for data quality to source institutions; conducting technical reviews and harmonization work; and fostering collaboration and coordination among different agencies and reporting processes at national and regional levels.

26. The session on geospatial information systems started off with a presentation of the ILAC Data Viewer[3], a platform developed by SEMARNAT-Mexico as the WGEI Chair. The platform was created to display ILAC indicators for different Latin American and Caribbean countries. It includes simple tools for spatial analysis, as well as a metadata viewer (essential for the correct interpretation of indicators). Participants were invited to upload their own country's data to the platform using web-based mapping services (WMS).

27. A proposal to consider the development of tools for exchanging documents, ideas and national experiences about issues of common interest, such as those addressed in this meeting, was put forward.

28. The Latin American Development Bank (CAF) presented the GeoSur[4] platform, which provides spatial data from over 20 countries and 60 national agencies in Latin

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[2] Energy, socio-economic aspects, risk management, waste and pollutants, environmental management

[3] http://gisviewer.semarnat.gob.mx/gisflex/ilac/index.html

[4] www.geosur.info

America. GeoSur's objective is to support the planning, execution and implementation of development projects in the region. Main services provided by this platform includ geospatial data search, visualization and processing through its Geo Portal, a Regional Map Service, a Topographical Processing Service and a Regional Geoservices Network. GeoSur provides technical assistance and training in the use of the portal, as well as in publishing data on the web and using cloud computing through cooperative work with various partners, mainly geographic institutes and ministries of environment.

Discussion

29. The frequency with which environmental information should be reported depends on the nature of the data and their intended purpose. Some types of information (e.g. weather data) are acquired daily, while others (e.g. deforestation) are generated and best interpreted over a longer period of time (years). Costs also play a key role in data acquisition. It is important that indicators included in different reports and communications to decision makers can be monitored on a time scale appropriate to their needs.

30. Different types of users of environmental information, ranging from students to authorities, will make decisions either in the presence or absence of supporting information. It is therefore essential to focus both on information quality and timeliness.

31. Inter-agency cooperation is essential for the effective operation of environmental information systems, both at national and international levels. It is also a key factor in the processes of technical review and harmonization of methods, standards, definitions and data-exchange protocols. Beyond the legal framework of NEISs, it is necessary to demonstrate their usefulness for decision making and involve partners outside the environmental sector.

32. The ILAC WGEI has discussed the possibility of adopting an indicator of progress made in the development of NEISs, which would regularly measure the degree of development of these systems, based on a questionnaire administered to institutions that participate in each national system. A draft indicator and questionnaire was formulated and put forward by Colombia's National Bureau of Statistics (DANE). While setting common criteria at the regional level is difficult (because of the different characteristics of NEIS in different countries), the criteria discussed in the context of this indicator could serve as a guide for the development of NEISs and networks of institutions that generate environmental information and contribute to NEISs.

33. Responsibility for data generation, quality, and updating should reside in the institutions that have the original mandate of generating the information in question. That said, ensuring data integration and interoperability is essential.

34. It is necessary to avoid the duplication of efforts in reporting the same type of information. Environmental information systems can be used to manage data and information more efficiently, generating and gathering data only once and allowing free access to this information for purposes of reporting, research and decision making.

35. The sustainability of information systems (including databases, and human and other resources) is of the utmost importance, especially when platforms are

developed with external funding and/or under specific (time-bound) projects. In this regard, it is recommended to develop a budget and legal framework that institutionalize the system beyond the project duration. Whenever possible, it is advisable to have permanent staff in charge of developing NEISs, and use a consistent methodology for collecting each type of data. Inter-agency coordination and cooperation networks can contribute to cost distribution / reduction, as well as to optimize the technological resources required.

36. A participatory group exercise explored different ways to strengthen NEISs links with different user groups and sustainability with sample project proposals developed focusing on these issues at the subregional level (English-speaking Caribbean; Central America, Mexico and Spanish-speaking Caribbean; South America).

Suggested next steps:

37. Next suggested steps include:

a. Message to the Forum of Ministers: ILAC can serve as a space for collaboration and exchange, building upon the capacity already existing in countries and international organizations for the dissemination of environmental indicators to support decision making on sustainable development.

b. Develop the ILAC indicators viewer based on common data-exchange protocols.

c. Provide training opportunities through international initiatives and South-South cooperation.

d. Promote synergies among the various environmental information initiatives at both national and international levels.

IV.   UNEP Live

38. UNEP Live is an environmental information platform designed for data sharing and conducting environmental assessments. It provides access to data and knowledge about the state of the environment, linking data at global, regional and national levels. UNEP presented the latest status of the prototype UNEP Live platform, and also circulated a background paper on this topic in a question and answer format.

39. One of the objectives of UNEP Live is to support the generation, management, analysis and use of data and information. That is, to provide tools for improving the effectiveness, efficiency and timeliness of reporting the state of the environment, reporting to international conventions, environmental assessments and engagement of a wider group of environmental information users. Tools available or under development include:

- The "Environmental Data Explorer"[5], which contains data for over 500 variables at various scales;

- A dynamic reporting tool based on the "wiki"[6] model aimed to allow updating report contents without having to rewrite the whole text;

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[5] Currently available at: http://geodata.grid.unep.ch/

- A "National Reporting Toolkit", which will allow different types of data and information to be presented in different types of reporting template.

40. UNEP Live will have a national (My Country) section presenting environmental information that is publicly available and currently scattered across different sources. The contents of this section would include a country profile, maps, and a presentation of key environmental indicators, including options for conducting comparisons between countries. UNEP Live would also be complemented by a programme of capacity building aimed to support countries in managing, presenting and increasing the use of their environmental data.

41. UNEP Live users would include government institutions (including decision makers), professionals conducting environmental assessments, UN agencies and civil society.

Discussion:

42. Participants support the UNEP Live approach in moving towards more dynamic on-line environmental information and assessment, as well as the possibility to present data already available from a range of different initiatives and sources. UNEP Live capacity building activities could play an important role in strengthening NEISs and should be increasingly used to provide baseline information and data to monitor the impact of for various projects and environmental policy initiatives at the national level.

43. UNEP Live intends to align and increase the efficiency and consistency of national reporting processes, hence reducing duplication of efforts. The platform will publish country data that are already freely available either from the government or from other credible sources. While many data presently had to be uploaded manually into UNEP Live, the intention was to move towards automatic updating as soon as data are updated at source. In addition, UNEP Live will supply the NEISs' web addresses as the main source of the countries' official environmental information.

44. Some of the primary benefits that the countries might gain were identified, namely:
- A presentation bringing together official environmental information from different countries (especially in the case of countries still lacking a NEIS), which would promote initiatives to increase the comparability and coherence of data produced by different countries and international sources. Similarly, the dissemination of information products from different sources could serve to replicate good practices in other countries.

- Reporting tools could be very useful, especially if they allowed information to be organized in a customized way, according to each country's needs.

- UNEP Live has the potential to foster research to develop indicators for different theme subjects of interest.

- UNEP Live could support cooperative work between different countries to support greater comparability of data on transboundary environmental issues, and joint analysis in support of decision making.

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[6] This model is being constructed in a way that preserves a rigorous scientific and peer review process for published information.

45. Some countries raised the following concerns that they recommended UNEP Live development to consider, including:

- Concerns with the possible inclusion of non-official, outdated or estimated information, as well as information either lacking metadata or at an inappropriate scale.

- The need for national capacities to be strengthened (including human and financial resources) before data is of sufficient quality for publication.

- The application of global indicators at national or subnational level.

- UNEP Live would need to be available in Spanish in order to be widely used by Latin American countries.

Next steps:

46. Next steps is:

➢ UNEP was encouraged to take the above points into account in the continued development of the UNEP Live platform, especially as regards the work in Latin America and the Caribbean.

V. Conclusions

47. Latin America and the Caribbean is one of the most advanced regions regarding the development of environmental information, a subject to which the ILAC Working Group and other initiatives have made a substantial contribution over the years. A number of achievements in developing technical and analytical capabilities at the national level were presented. A commitment and willingness for regional cooperation present a positive outlook for the continued development of NEISs and strengthening the use of environmental information for decision-making in the region.

48. To best exploit the region's potential, the meeting participants and their networks should lead cooperation and synergies between different countries, projects and initiatives, to ensure the regional network and technical cooperation remains active whether or not funding is available.

49. Finally, it was agreed that the minutes and background documents of the meeting would be shared with WGEI members, including those unable to participate, and possible messages to be submitted to the Forum of Ministers of Environment would be discussed with all members of the Group. Since work on indicators should link with and support the region´s sustainable development goals, one important question to the Forum is whether the ILAC goals remain valid or need to be updated.

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Annex 1.

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