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Expert Group Meeting on the Framework for the Development of Environment Statistics

Session 1

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November, 2009



Overview

- Why do we need a framework for developing environmental statistics?
- What is a framework?
- What will a framework do for us?
 - Define boundary and scope
 - Guide collection, organization and publication of data
 - Provide links to other frameworks
 - Help assess gaps in existing statistics

Why do we need a framework for developing environmental statistics?

- Evidence-based approaches to decision making becoming more and more important
- Environment statistics collection and reporting is largely *ad hoc*
- Environment statistics are generally collected and reported in response to the issues of the day
- This results in statistics that are a patchwork of varying quality
- Our view is that a framework is needed if we are to overcome these problems

What is a framework?

- A framework comprises two elements
 - A conceptual foundation laying out the theory that underpins the framework
 - A statistical system that elaborates the theoretical concepts in a set of statistical concepts, principles, and methods
 - Economic statistics are the “gold standard”
 - Macroeconomic theory provides the conceptual foundation
 - The SNA provides the statistical guidance
 - Together, they have resulted in economic statistics that are of generally high quality
 - We need an environmental framework that emulates the SNA’s qualities without being a “green” copycat

What will a framework do for us?

1. Define the boundary and scope of environmental statistics

- A framework provides *theoretically robust* guidance on what environmental statistics must cover
 - Leads to stability, as theories evolve slowly over time rather than abruptly
- Statistical resources are scarce and can be better targeted through a framework than through *ad hoc* processes
- A environmental framework will not define every variable that is of interest
 - Just as the SNA does not cover every economic variable of interest
- But a framework will give clear guidance on what should be the *core* set of official national environmental statistics

What will a framework do for us?

2. Ensure quality in the collection, organization and publication of environmental data

- A framework is essential if environmental statistics are to meet the the quality standards of official statistics
 - Relevance, accuracy, timeliness, accessibility, interpretability and coherence
- *Ad hoc* data collection is unlikely to yield quality statistics
 - Coherence, for example, is hard to achieve when statistics are collected without a guiding framework
 - In Canada, this has resulted in a variety of problems
 - For example, air pollution data lack coherence

What will a framework do for us?

3. Provide links to other frameworks

- At the moment, environmental statistics are difficult to integrate with other statistics
 - This limits our ability to do empirical analysis of environmental problems and their causes
 - As a result, environmental policy is disadvantaged *vis a vis* other policy domains
- An environmental framework should correct this by building linkages to other frameworks
 - For example, choosing ISIC as the basic structure for organizing environmental statistics by industry ensures easy integration with economics statistics by industry

What will a framework do for us?

4. Help assess gaps in existing statistics

- By clearly establishing the scope and boundary of environmental statistics, the framework allows existing statistics to be compared against the “ideal”
 - The gaps in existing statistics can then be targeted for filling through new data collection
- The framework will not, however, help prioritize gap filling
 - This is a political process that will involve various departments and agencies
 - The framework will help by eliminating arguments over what statistics are missing, allowing the debate to focus on relative priorities

Conclusions

- Environmental statistics have become too important to continue with current *ad hoc* approaches
- A framework is needed if we are to make major improvements in quality
 - First, the conceptual foundation must be agreed upon
 - Then, it must be codified in sound statistics concepts, principles and methods
- Economic statistics provide the best road map for success