

Statistics

Data Collection



Statistics

Data Collection

- data collection activities should be established, adapted to countries' national circumstances
- main sources of information – establishment surveys and censuses
- resource constrains for conducting new surveys
- alternative- collect data by extending existing surveys rather than by initiating totally new ones



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Establishment surveys and censuses

Optimising resources

- Focus on key economic activities and industries
  - the largest in terms of their contribution to the production of environmental goods and services, and/or
  - those that have the greatest potential to change.
- Surveys limited to some producers and not to the entire population of the EGSS (e.g. renewable energy, organic agriculture, ecotourism or sustainable forestry), where clear benchmarks exist

Reducing respondent burden

- Filtering questions that identify possible in-scope respondents



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Establishment surveys and censuses

(a) Employment in environmental output

Minimum set of variables

- Type of environmental goods and services
- The value of sales revenue from EGS
- The number of persons employed

Employment by type of environmental output

Additional information

- Primary or secondary activity
- List of EGS
- Revenue by type of EGS



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Establishment surveys and censuses

(b) Employment in environmental processes

Minimum set of variables

- Type of environmental technologies used
- Number of employed directly involved in these technologies
  - distinction between those that spend less and more than 50% of their time
  - distinction between employment in environmental processes for internal and external consumption



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Establishment surveys and censuses

(a) Employment in environmental output and

(b) Employment in environmental processes

Minimum set of variables

- Share of environmental turnover in total turnover
- Information that would allow determination of the proportion of employees who are directly involved in the production/provision of environmental technologies, goods and services or who carry out environment-related activities for consumption within the enterprise
- Number of employed



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Surveying the agricultural and informal sectors

- Establishment surveys based on business registers are unlikely to be the best option
- Household based surveys, agricultural censuses and area based establishment surveys are more suitable
  - employment on organic farms (direct measurement or indirect based on production or sales of organic products)
  - Environmental employment in agriculture could also be determined on the basis of use of chemical fertilisers and pesticides
- Interviews with experts in certain sectors could be helpful in designing the surveys



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Surveying the agricultural and informal sectors

Informal sector

- Compiling information more difficult
- Collection may focus on selected sectors (e.g. waste collection, ecotourism that are by nature environmental or activities where clear benchmarks exist)



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Inventories of producers of environmental goods and services

- A simple and effective way of estimating the jobs if they are kept up-to-date consistently over a prolonged period
- May contain data on
  - establishments that produce environmental goods and services,
  - establishments employing environmental processes.
  - lists of environmental goods and services produced and technologies used
- Need to be updated on a regular basis
- Business registers, Industry and business associations, Patent registers and Registers of recipients of clean-tech venture capital



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Modelling to estimate employment growth

- Input-output and other Computable General Equilibrium and related complex models may need to be used in order to estimate employment/employmnet growth
- These models rely on the construction of a matrix or table listing all subsectors in an economy and detailing how outputs from one sector are used as inputs to others.
- Models combine empirical data with a series of economic equations designed to comprehensively capture the dynamism and complexity of an entire economy
- Can estimate the long-term effects of policies on employment