



**Economic and Social  
Council**

Distr.  
GENERAL

ECE/CES/2010/43  
26 January 2010

ENGLISH ONLY

---

**ECONOMIC COMMISSION FOR EUROPE**

**STATISTICAL COMMISSION**

CONFERENCE OF EUROPEAN STATISTICIANS

Fifty-eighth plenary session  
Paris, 8-10 June 2010  
Item 4 of the provisional agenda

**PROGRESS REPORTS AND WORK OF THE CES TEAMS OF SPECIALISTS**

**REPORT OF THE FIRST MEETING OF THE JOINT UNITED NATIONS ECONOMIC  
COMMISSION FOR EUROPE/ORGANIZATION FOR ECONOMIC CO-OPERATION  
AND DEVELOPMENT/EUROSTAT TASK FORCE ON MEASURING SUSTAINABLE  
DEVELOPMENT**

Note by the secretariat

**I. INTRODUCTION**

1. The Joint United Nations Economic Commission for Europe/Organization for Economic Co-operation and Development/Eurostat Meeting of the Task Force on Measuring Sustainable Development was held in Geneva on 23-24 September 2009. It was attended by Australia, Canada, France, Germany, Netherlands, New Zealand, Norway, Switzerland, United Kingdom, and United States. The European Commission (Eurostat and Directorate General Environment), International Monetary Fund, United Nations (New York), World Bank, and the United Nations Economic Commission for Europe also attended the meeting.
2. The Acting Deputy Executive Secretary of the United Nations Economic Commission for Europe, Mr. P. Robineau, opened the meeting and welcomed the participants.
3. The provisional agenda was adopted.

4. Mr. R. Hoekstra (Netherlands) chaired the meeting.
5. The Chair welcomed the participants and emphasised the importance of the Task Force's composition. It was noted that the participation of invited experts will ensure the continuation of the progress made by the previous Working Group, particularly in the difficult field of human and social capital. The participants were also informed that the work will be closely coordinated with the editor Mr. J.P. Smits, who will act as a co-chair.
6. The editor, Mr. J.P. Smits (Netherlands), stressed the high quality of the report produced by the previous Working Group, in particular the good representation of the theoretical background of the methods as well as the clear assessment of the fundamental differences in approaches. The editor considers that the work of the previous Working Group will provide a solid basis for the future work of the Task Force.

## **II. ORGANIZATION OF THE MEETING**

7. The following substantive topics were discussed at the meeting:
  - (a) Discussion of the final report of the Working Group on Statistics for Sustainable Development (WGSSD) and comments by countries and international organizations;
  - (b) Discussion of the work program and Terms of Reference of the Task Force on Measuring Sustainable Development;
  - (c) Country presentations: the experiences in measuring sustainable development of Norway, Switzerland and Canada;
  - (d) Institutions' presentations: the experiences of the World Bank, Eurostat and the United Nations Division for Sustainable Development (UNSD), New York;
  - (e) Human capital;
  - (f) General capital issues;
  - (g) Social capital;
  - (h) Conclusion and way forward.

## **III. SUMMARY OF THE MAIN CONCLUSIONS REACHED AT THE MEETING**

8. The meeting reached the following main conclusions.
  - A. Discussion of the final report of the Working Group on Statistics for Sustainable Development and comments by countries and international organizations**
9. It was noted that the report of the Working Group on Statistics for Sustainable Development (WGSSD) lays down a good terminology on the conceptual framework and on the

existing approaches. The distinction between the future oriented and integrated view of sustainable development particularly helps to clarify the different positions in the sustainable development debate. It was agreed that both viewpoints should be considered.

10. The participants debated on the two viewpoints of sustainable development which differ depending on whether current welfare is included in the definition of sustainable development (the integrated view includes current welfare, while the future oriented view does not). It was agreed that since both points of view should be taken into account, indicators for both current and future welfare should be considered in separate indicator sets (as recommended by the Stiglitz-Sen-Fittoussi report). Experiences in some countries confirm the importance of the inclusion of current welfare in the dashboard (New Zealand, Netherlands).

11. It was stressed that a more concrete output with regard to indicators and a stronger theoretical framework is needed. Specific suggestions for further work included additional research on market and non-market aspects of natural capital, critical capital levels, technological development and labour and resource productivity.

12. Based on the experience with the previous Working Group, the participants proposed to reinforce the Task Force with additional expertise on human and social capital. Furthermore, the participants agreed that social capital is not a developed research issue and caution is needed when approaching this difficult area.

13. For policy purposes, many countries choose to use flow as opposed to stock variables. The difficulty with this approach is that indicators may show movements in opposite directions which may complicate the interpretation and evaluation of progress.

#### **B. Discussion of the work program and Terms of Reference of the Task Force on Measuring Sustainable Development**

14. The members of the Task Force expressed support for the proposed work programme of the Task Force.

15. The participants discussed the audience that the final report of the Task Force should address. It was agreed that the main audience will be the statisticians undertaking relevant work for policy purposes while theoretical issue papers should be presented in an appendix. The report should achieve a broader appeal by producing summaries for different audiences (policymakers, press, general public). The report should contain recommendations.

#### **C. Country presentations: the experiences in measuring sustainable development of Norway, Switzerland and Canada**

16. National experiences in measuring sustainable development were presented by Statistics Norway, Swiss Federal Statistical Office and Statistics Canada. Statistics Norway described its work in six policy areas: international cooperation for sustainable development and combating poverty; climate, ozone and long range air pollution; biodiversity and cultural heritage; natural resources; hazardous chemicals; and sustainable economic and social development. Statistics Norway also demonstrated the links between policy issues and the components of wealth based

on capital. Swiss Federal Statistical Office shared its practice on developing an indicator system for monitoring sustainable development called MONET. Statistics Canada presented its capital-based accounting and examples of national indicators and shared experiences in the calculation of human capital – work that has been done in cooperation with the academia.

17. During the discussion the following points were made:

(a) It was recommended not to have too many indicators as the public may easily lose interest. Simple indicators should make insights into questions asked by businesses and governments. Experience from the United Kingdom has shown the importance of indicators that show trends and deviation from set targets;

(b) The process of indicators' dissemination was noted as important. Statistics Norway, for example, produces a report each year and a press release each summer with 18 main indicators. Statistics Norway also produces supplementary indicators to illuminate the set of main indicators;

(c) The participants agreed that identifying and measuring the resource rent is not straightforward and poses challenges. The resource rent from renewable resources was given as an example of resource rent that is managed inefficiently;

(d) An inherent problem with the resource rents is the calculation of the return of the assets in the future. At present, the most widely used approach is to simply extrapolate current resource rents. It was discussed whether a more sophisticated method should be investigated.

(e) It was suggested to give priority to critical capital and measuring thresholds. The main question is how to determine the thresholds when considering critical natural capital;

(f) It was suggested to explore possibilities to take the analysis to an international level by looking at embedded emissions, developing input/output databases connected to national accounts, etc.;

(g) Indicators on global aid and restriction on imports from other countries were given as examples of distributional effect in the international context.

#### **D. Institutions' presentations: the experiences of the World Bank, Eurostat and the United Nations Division for Sustainable Development, New York**

18. The institutions' presentations included the World Bank's presentation on wealth and adjusted net savings, Eurostat's approach to measuring sustainable development and the discussion by the UNDSO on the indicators developed under the auspices of the Commission on Sustainable Development (CSD).

19. During the discussion the following points were made:

(a) The participants were informed that the data on the indicators developed under the CSD mandate is compiled by the United Nations Statistical Division. Currently, a new tool

called UNData is launched to compile the available data at international and national levels;

(b) While the Organization for Economic Co-operation and Development (OECD) does not have a specific program on measuring sustainable development, a range of activities on measuring different types of capital stocks has been undertaken since 2001. These activities include an OECD innovation strategy (measuring intangible capital), a manual of material flow accounts, a project on measuring the capacity of institutions to deliver, etc.;

(c) The OECD stressed the follow-up actions to the Stiglitz report. It was noted that a roadmap on measuring and fostering well-being and progress will be discussed during the meeting in Busan in October 2009. The roadmap is now available on the Internet and includes a sentence which reads: "We have to measure capital stocks as much as flows, and expand the range of stocks that matter for the sustainability of our well-being – including the biosphere – and develop better metrics on how production impacts these stocks (i.e. "green growth").";

(d) Eurostat informed about the European Union (EU) study conducted in 2007 on sustainable development indicators used in EU countries;

(e) Biodiversity was mentioned as one of the challenging areas for measurement that needs further pursuit. Statistics Norway shared their experience with constructing a "nature index", a composite index of public and private processes. It was assumed that both public and private sectors benefit from the income from this natural resource;

(f) It was mentioned that the European Environment Agency (EEA) is working on accounting for ecosystem goods and services. At the moment, they are establishing physical accounts and valuing the ecosystems in terms of maintenance cost. A basic assumption is that biodiversity contributes to ecosystems services, while the total value of biodiversity is infinite;

(g) It was pointed out that the timeliness of indicators is important and could restrict the choice of indicators;

(h) Eurostat has undertaken some work to see how often the indicators are used. One of the ways suggested was to check the number of hits on the web. Many of the sustainable development indicators were among the most consulted of all Eurostat indicators. Nevertheless, problems of timeliness and the fact that the numbers do not change much may limit interest in the sustainable development indicators;

(i) It is difficult to use indicators as predictors of risks. The indicator should rather be a communication tool with a strong link to the capital stocks. A good indicator is the one that tells a story, and not the one created by political pressure.

## **E. Human capital**

20. The human capital discussion began with a presentation made by Ms. B. Fraumeni. She stressed the importance of human capital and described in detail the Jorgenson-Fraumeni approach to measuring human capital. Some issues were raised, among which the impact of human capital on natural and economic capital, and measurement problems (e.g. the mismatch of

age and the school grade). Human capital accounts have been constructed for Australia, Canada, China, New Zealand, Norway, Sweden and the United States.

21. The Australian Bureau of Statistics presented the latest developments in valuing human capital in Australia. It was noted that measuring human capital is challenging and that the Australian Bureau of Statistics is currently developing human capital estimates from a national economic accounting perspective. Some examples of measures of human capital stock were demonstrated.

22. Statistics Norway shared their experience in measuring the stock of human capital for Norway using the lifetime labour income approach proposed by Jorgenson-Fraumeni. As a result, the values of Norwegian human capital stock for 2000-2007 were estimated with certain assumptions (e.g. people are allowed to go back to studies at a later age). The results are sensitive to the choice of real income growth rate and discount rate. Further work is planned to construct an accumulation account combined with the stock account, and to further fine-tune the variables used in the analysis. Extension of the analysis to non-market activities and if possible to the whole population as well as introducing greater diversification by topics have also been considered.

23. During the discussion the following points were made:

(a) Given that some data sources do not exist, Statistics Canada encouraged the Task Force to look for simplification of the Jorgenson-Fraumeni approach to human capital;

(b) The link to policy was underlined as important – for example, indicators related to school leavers or expenditure on education were mentioned as being of possible policy interest;

(c) OECD offered a paper with empirical estimates on human capital to provide as a direct input to the Task Force report by June 2010. As a second stage, the OECD is planning to take stock of the experience gained and establish methodological guidelines for policy applications;

(d) It was proposed to also take into account the effects beyond the “headline” indicators by using “secondary” indicators in order to capture other dimensions such as health and capacity to participate in policies;

(e) The participants noted that a clear link is needed between human capital and sustainable development;

(f) It was underlined that cross-country comparisons are difficult to make (e.g. different assumptions, consistent time series not available, and need for quality adjustments);

(g) Distributional issues in the area of human capital were stressed as important, for example changes in educational quality and educational standards;

(h) It was suggested that health is one dimension of human capital that may be considered during the work of the Task Force;

(i) General capital issues.

24. The United States Bureau of Economic Analysis presented their experiences in expanding the capital boundary. It was stressed that the expansion of the capital asset boundary requires numerous measurement challenges to be addressed, including defining the asset and its score, defining and measuring investment, prices/valuation, depreciation, and rates of return/capital services.

25. Institut national de la statistique et des études économiques (INSEE), France, discussed the work of the Stiglitz Commission on measurement of economic performance and social progress. One important conclusion of the Commission is that a clear distinction should be made between current well-being and sustainability (potential basis for future well-being). The speaker underlined two main recommendations in the Report of the Commission related to sustainable development. The first one specifies the importance of a well-identified dashboard of indicators. It was pointed out that a monetary index of sustainability has its place in such a dashboard but, under the current state of the art, it should remain essentially focused on economic aspects of sustainability. The second main recommendation states the need for a separate set of well-chosen (and limited) physical environmental indicators.

26. During the discussion the following points were made:

(a) It was noted that the global public goods are part of wealth and should be accounted for in the national sustainable development indicators;

(b) The main message of the Report of the Stiglitz Commission is consistent with the Task Force's approach, where the concepts of both current and future well-being are addressed;

(c) The Task Force should reflect on the expansion of the national accounts production boundary (e.g. household production);

(d) The two dimensions of indicators on intra- and inter-temporal sustainable paths should be covered, but separately. It is important to take into account the fact that current well-being is not only about income but also about health, participating in cultural activities, environmental quality, etc.;

(e) The European Commission confirmed that their work is in line with the work of the Stiglitz Commission and that their initiative "GDP and beyond" incorporates the main ideas.

(f) INSEE, France, supports the recommendations of the international organizations and has already undertaken some initiatives, e.g. INSEE is to set up in parallel to national accounts a system for measuring people's well-being.

## **G. Social capital**

27. Statistics New Zealand presented the current thinking in the area of social capital and recommended more research into the topic. The importance of cultural diversity was stressed. It was made clear that, together, the cultural and social capitals create the so-called social cohesion.

Examples from Statistics New Zealand's experience on social connection and governance, and on culture and identity indicators were discussed.

28. The Australian Bureau of Statistics added useful information on the dimensions of social capital in the Australian context. Illustrations of composite measures of social capital that refer to support, feelings of safety and network type were shown. The Australian Bureau of Statistics demonstrated the results of their first attempt to analyse an expansive collection of information with great difference in incidence of low social capital, comprising various dimensions of low social capital and variation across demographic groupings. Proposals for further work included further research of these and other measures of low social capital, tests on the validity of measures for research and policy discussion, tests on the association between low social capital and aspects of well-being.

29. Statistics Netherlands presented a theoretical overview which argues that social capital can and should be treated as other types of capital. It is possible to view societal topics in terms of investment-stock relations. Furthermore, ample attention was paid as to the impact of social capital on current and future welfare.

30. During the discussion the following points were made:

(a) Social capital is a multidisciplinary topic. It is still in an early stage of examination – how to connect concepts in order to see the long-term elements and the influence of social capital;

(b) It was recognized that there is a strong demand for social capital measures, welfare effects of social capital, effects of social connections on subjective well-being, crime, etc.;

(c) Social capital is not always positive; there are also some negative examples of social capital;

(d) The issues of social cohesion and lack of shared values and norms were pointed out as a priority for long-term development;

(e) The question of how countries measure trust was raised. It was noted that large datasets are available on trust:

(f) Social capital can be closely connected with other forms of capital, e.g. produced capital and human capital;

(g) Social capital is also related to public networks, e.g. law enforcement and police jurisdictions;

(h) The lack of time series on social capital was noted. It was suggested that statistics on time use may give data for social capital;

(i) There are many rankings and assessments to draw on in relation to governance. A cross-country analysis was recommended;

(j) Three challenges of social capital measurement and its welfare effects were underlined: welfare data availability, identification of what should be measured and what is possible to measure;

(k) The discussion of non-market/market issue is also relevant to social capital.

## **H. Conclusion and way forward**

31. The Task Force identified a number of issues which were deemed important. The institutions and members that volunteered to prepare papers on these issues are mentioned below in brackets and were confirmed in a follow-up electronic exchange.

(a) The policy and capital approach to sustainability (Statistics Netherlands, Mr. J.P. Smits and Mr. R. Hoekstra). This paper will evolve into the conceptual backbone of the report. The paper will also include issues such as the future and integrated view of sustainability;

(b) Market and non-market aspects of human capital (Ms. B. Fraumeni and other contributors of the OECD Human Capital Accounts project: Mr. M. Mira d'Ercole, Mr. W. Gu, Mr. J. Russo, Mr. M. Greaker and others). In this paper, the market and non-market aspects of the Jorgenson-Fraumeni framework will be explored as well as possibilities for non-monetary indicators;

(c) The United Nations Commission for Sustainable Development (UN CSD) indicator set viewed from a capital perspective (UNSD, Mr. B. Milicevic). UNSD will review the CSD set from both future oriented and integrated perspectives;

(d) The international dimension of global capital stocks (public goods) (Statistics Norway, Mr. M. Greaker). Certain capital stocks are global by nature (climate, biodiversity), and therefore exhibit the properties of a public good. This poses problems for the capital approach from a national perspective. Statistics Norway is already in the process of writing a paper on this issue and will submit it to the Task Force;

(e) Sustainability and social capital (Statistics Netherlands, Mr. J.P. Smits, Statistics New Zealand Ms. R. Milicich, and Australian Bureau of Statistics, Mr. J. Russo). The paper will explore the theory, importance and measurement issues involved in social capital. Apart from issues such as networks, trust, bridging and bonding social capital, the paper will also explore the issue of institutions;

(f) Critical capital (Statistics Canada, Ms. R. Orok). The group discussed the importance of "critical capital" several times and Statistics Canada will explore this issue in depth;

(g) Distribution (Eurostat, Ms. A. Scheller). Eurostat will review the issue of inequality and the distribution of income and assets in society and will stress the important role of the integrated approach to sustainable development;

(h) Communication of sustainable development indicator sets (Australian Bureau of Statistics, Mr. J. Russo, and Statistics New Zealand, Ms. R. Milicich). The experiences of the Australian Bureau of Statistics and Statistics New Zealand will provide a useful input into ways of communicating sustainable development indicator sets to the general public and policy makers;

(i) The limitations of the capital approach (Eurostat, Mr. V. Tronet). The paper will discuss the conceptual reservations about the capital approach. It will refer to issues related to the difference between a policy-based indicator set and a conceptual framework;

32. In addition, a number of issues were identified which were deemed important but for which there were currently no authors. These issues are the following:

(a) Health: the area of human capital is usually dominated by education and skills but health is also an integral part of the equation. In this paper, the author should be looking for indicators for health status and the "investments" made;

(b) Time use: time is one of the most fundamental scarce resources. From a conceptual point of view it should be possible to split time use into current consumption (e.g. recreation) or production (e.g. working hours) or investment, particularly in human capital (e.g. education) and social capital. In this paper, the author should identify the relationship between time use and the conceptual sustainable development approach. Ms. B. Fraumeni suggested a United Kingdom group which Mr. J.P. Smits and Mr. R. Hoekstra will follow up on;

(c) Measuring "broad" capital: in the sustainable development debate, there is a broadening of the scope of "assets" from the narrow definitions in the System of National Accounts (SNA) and the "measuring capital" handbook to issues such as natural capital (for which a definition exists in the SEEA), intangibles and human and social capital. It is important to examine what binds these different types of capital and what measurement aspects they share. The Task Force suggested that this should be left to the second round of deliberations;

(d) Technology and Sustainability: the Ministry of Finance, Norway (Mr. T. Moe) suggested that the relationship between technology and sustainability should be explored further;

(e) Trade-offs and commonalities: one of the most important aspects of sustainability policy is the fact that positive direction in one area can lead to negative repercussions in another (win-win or lose-lose are, however, also possible). Eurostat and Statistics Netherlands have experience in looking at these commonalities;

(f) Limits of monetization/understanding the residual: not all capital stocks lend themselves to be easily monetized. In the area of natural capital, there is the issue of critical capital, and for social capital no direct methods (apart from the residual approach) exist. The World Bank is currently working on "reducing the residual", which could provide an input to a possible issue paper;

(g) Biodiversity indicators: during the meeting, the problem of measuring biodiversity was raised several times. The United Kingdom Department for Environment, Food and Rural

Affairs (DEFRA) (Mr. S. Hall) and Statistics Norway (Mr. T. Bye) indicated that there are groups working on these issues in the United Kingdom and Norway respectively. They offered to contact them and ask for their cooperation;

(h) Risk and uncertainty: a complex matter in the sustainable development debate is how to cope with risk and uncertainty. This was also stressed by Stern at the presentation of the Stiglitz commission. INSEE (Mr. L. de Gimel) offered to check whether a member of the Stiglitz Commission could perhaps contribute.

33. The Task Force agreed to have an electronic exchange of consultations at the beginning of 2010. In a later communication, the following three dates were agreed: 16 February 2010 (Issue paper on conceptual framework (Mr. J.P. Smits and Mr. R. Hoekstra), 29 March 2010 (1st round of issue papers), and 17 May 2010 (2nd round of issue papers). The issue papers will be posted on the wiki website on these dates. The other members of the Task Force will have 3 weeks to comment after which the authors will be asked to process the comments into the paper (proposed 4 weeks revision time).

34. The Task Force agreed that a second face-to-face meeting will be held at the end of 2010 in Geneva when the first draft of the final report of the Task Force will be discussed.

\* \* \* \* \*