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CONFERENCE OF EUROPEAN STATISTICIANS**

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Items 2-7 of the Provisional Agenda

**COMMENTS ON THE DRAFT REPORT
OF THE JOINT UNECE/OECD/EUROSTAT WORKING GROUP ON
STATISTICS FOR SUSTAINABLE DEVELOPMENT**

Prepared by the UNECE secretariat

AUSTRIA

Ingeborg Fiala, Statistics Austria

Some chapters are in my view very informative, others need further development, some are in my view too long.

The explanation of the “holistic view” in comparison to the “long-term view” (**para 19-23, 28-32**) were irritating me. On the one hand it is expressed in **para 34** that also the holistic view fits in any way to the capital approach, on the other hand the following explanations on the capital approach, the theory behind and the indicators derived from it miss an explanation on how.

The statement that the indicator sets following the “holistic view” are not based on a theory based model is not true. The Austrian set of SDIs is based on a systematic approach. Please read the report “Monitoring Sustainable Development in Austria – Indicators of Sustainable Development” <http://www.umwelt.net.at/filemanager/download/18341/>. In the focus of this model are the interactions between the socioeconomic sphere and the environmental sphere. The long-term dimension comes into play as the objectives for the state of these spheres are considered.

Para 87 states that only few countries have developed indicator sets based around the concept of capital. The reasons therefore should be considered and stated in the report.

Last meeting I asked you to take the work of the Winner of the Nobel Prize for Economy Mc Fadden into account who proved that finding a utility function and deriving a price

for some goods such as environment is impossible. I think this would change some of the explanation in the draft.

Haven't we agreed that the expression "ecological integrity" needs explanation?

Table 5.1, the pros and cons of the capital approach and other existing approaches is incomplete and rather unbalanced. Some of the features of the one or other approach can be seen as a pro or a con depending on the view point.

Ad **table 5.3**: What is the argument for recommending indicators almost none of the countries is using? In my view only indicators being in the basket of the greatest common denominator should be recommended.

The explanations on the physical indicators need thorough improvement.

Several times, in **para 286** at the latest it is stated that only statistical institutions should prepare SDIs. I agree that indicators including SDIs should fulfill specific quality criteria. Only this can be recommended. Organisation of work including competencies should not be prejudiced by international bodies.

GERMANY

Joachim Thomas, Destatis

Additional remarks to specific points:

***Para 35.** While imprecise, the definition agrees with the intuition that, since the term sustainable means "never-ending" or "lasting", sustainable development is development that lasts In other words, the challenge of the concept of "sustainable development" is perhaps not so much with the word "sustainable", but rather with the term "development" (cf. Pearce and Warford, 1993, p. 42).*

I would argue that the challenge or vision of the concept SD is the combination of the two terms, because this combination forces the integration of dimensions which are treated in practical policy very often only in succession. Therefore it is always problematic (or even unacceptable) when the dichotomy or tension in the connexion is disintegrated by focusing on one part.

The focus on "development" expressed in **point 35** leads in effect to the relatively awkward or light definition of development under 1.2.1 (**points 36-38**). The qualification of "development" as "positive" reintroduces a certain qualification of development which is not better than "sustainable" and also problematic.

Referring to conclusions:

***Para 282.** Finally, by focusing on the resource base of our societies and its management, a framework is created that is a natural extension of the well-established framework for measuring economic activity; namely the national accounts (in particular the capital accounts). Traditional economic development theories have always focused on capital, investments and savings. Thus, extending the focus of the national accountants to non-marketed resources and new categories of capital, a well-founded basis for*

understanding and measuring sustainable development is given. The extension is natural also from a theoretical point of view.

I don't see why it's necessary to qualify the "remaining" resources not (yet) covered by capital accounts as part of national accounts as resources which should be covered by "extension". The point is that the other systems of society apart from the economic system have in general different exchange media (respect, acceptance,...) . The position that the remaining capitals can be integrated by "extensions" suggests that in future there can be a monetary assessment of these exchange media.

Para 270. Physical indicator of social capital (jobless households, jobless persons, trust, participation in social networks.

There is still irritation about the differentiation between social and human level!

ISRAEL

Amit Yagur-Kroll, Central Bureau of Statistics

Views and opinions on the draft report

General impression

One of the most important things that the capital approach does to the definition of sustainable development is the attempt to construct clear borders which help us understand what is included and what is not included in sustainable development. In my opinion this is the most important contribution to sustainable development and to the continuous efforts to measure sustainable development. Defining clear boundaries for sustainable development and for its measurement is naturally of major importance for enabling reliable comparisons between countries and regions. Another major contribution of the capital approach to sustainable development is that it is attempting to introduce the importance of natural, human and social resources into the existing economic views of what is considered to be growth and well-being. Considering these resources as part of the economic system and not alongside "pure" economic considerations brings the discourse on sustainable development into the centre of the stage and helps principles of sustainable development to become a part of policy decisions in the complete range of policy issues.

As stated in the draft report, it seems that the major challenges, at this stage, in measuring sustainable development, based on the capital approach focuses on the ability to define sustainable development within all the elements of capital that need to be measured.

- *Implementing policies based on capital approach indicators*
Clear and transparent definitions would help capital based indicators in becoming significant policy tools. Yet it seems that there is not enough reference in the draft report to the translation of an accounting value of a certain capital asset in to a policy. Although policy based indicators have many disadvantages, as mentioned in the report, they make it possible to monitor directly the achievements of specific goals that are outlined by a national strategy for sustainable development. If capital based indicators are to become useful tools for decision makers in implementing strategies for sustainable development they need to be constructed

in such a manner that it is possible to break down their elements so that they could indicate progress towards achieving a specific target.

Another point that needs to be clarified with regard to the relation between capital-based indicators and monitoring and implementation of a national strategy for sustainable development is whether it is possible to have differences between countries in the physical indicators and in the components they use for the different types of capital. On the one hand, the use of capital based indicators is meant to help in the standardization and harmonization of sustainable development indicators and by doing so to enable more reliable international comparisons, but on the other hand each country has its own unique development needs and environmental concerns that need to be addressed in an indicator set. The question is, what is the degree of flexibility within the capital based indicators if it is at all necessary.

- *A framework for natural capital*

In the draft report it is suggested that the system of environmental and economic accounting (SEEA) can be used as a measurement framework for natural capital. It also suggests that the adjustments made for valuation of non market flow can be applied to the GDP to create a green GDP. In light of this, was consideration given to other indicators that are regarded today as alternative indicators to the GDP such as the Genuine Progress Indicator (GPI) or the Index of Sustainable Economic Welfare (ISEW).

- *Accounting value of natural, human and social capital*

With regard to the calculation of the accounting value of natural, human and social capital there is a need, in my opinion, for further elaboration on how these calculations would be done. Specifically, how are the calculations expected to cope with the problem of underestimation of the "real" accounting value of a specific natural or human asset?

- *A framework for social capital*

The draft report offers the use of the network approach as the best way for including measurement of social capital in the capital based approach. It also emphasizes that the important areas to be considered are the ability of a society to work together and a stable political, legal and cultural framework. Based on this approach **table 4.3** suggests a set of physical indicators for social capital, yet the list does not contain indicators referring to the level of involvement and participation of the public or NGO's in the policy process. In my personal opinion, such indicators are central for measuring the ability of a society to work together as well as for measuring a stable political and cultural framework.

Background on the Israeli work on sustainable development indicators

The Israeli Central Bureau of Statistics (ICBS) has been working for the past 3 years on developing a set of national indicators for sustainable development. This work is part of the implementation of the Israeli government decision from 14/05/2003 to base Israeli policy on principles of sustainable development in light of agenda 21 and the decisions taken in the world summit in Johannesburg in 2002.

The ICBS has been working since, along side the Israeli ministry of environmental protection, to develop a set of national indicators as well as indicators at the local level.

The ICBS is also collecting and reporting data for sustainable development indicators in the framework of the follow up of the Mediterranean strategy on sustainable development which was ratified by all the contracting parties of the Barcelona convention.

All the indicators, national and regional, are what the draft report refers to as "policy based indicators". The national indicators are aimed at monitoring the implementation of the national strategy for sustainable development and the regional indicators are aimed at monitoring the implementation of the Mediterranean strategy on sustainable development.

The list of indicators used in Israel is very much similar to the list of common indicators listed in **table 2.3** of the report with the addition of indicators with specific relevance to Israel such as issues of water scarcity, quality of ground water, pressures on the coastline and more.

The fifth meeting of the joint UNECE/OECD/Eurostat working group on statistics for sustainable development will be the first meeting that Israel will be attending. Therefore we are not familiar with the capital approach presented in the draft report and we have no experience as of today in developing indicators based on this approach. Therefore, the majority of the comments are aimed at achieving a better understanding of the capital approach presented and its benefits.

FINLAND

Leo Koltola, Statistics Finland

Chapter 1 could be shortened. There is repetition with later chapters. Maybe part of the text could be moved to **chapter 3**.

Table 5.1 is interesting and should be better reflected in Conclusions.

ITALY

Roberta Pignatelli, APAT (Italian Agency for Environment Protection and Technical Services)

Following the comments sent to you last November, I am happy that most of them have been included in the draft report.

One of the most important institutional tasks of Italian Agency for Environment Protection and Technical Services (APAT) is that of coordinating the collection and dissemination of environmental information. The APAT "Environmental Data Yearbook", now at its sixth edition, is the largest collection of environmental data currently published in Italy. It can authoritatively disseminate environmental data among a broad range of users, on the one hand, and feed environmental data into the National Statistical System, on the other hand. The coordination of the design, implementation and statistical analysis phases of the Yearbook has been carried out by the APAT's Office for Institutional Relations together with Eurostat.

In the coordination of the Transport chapter of the Yearbook, that is my task in the Yearbook, we chose to work in a shared framework instead of creating a new one. We have gained much more advantages following a reporting system already in existence (the TERM one, by the European Environment Agency) and partly adapting it to the Italian situation, rather than identifying a new set of indicators valid for our country only; and when we have new ideas about these indicators, we usually share it with colleagues abroad, thus contributing to the improvement of the general process.

In that way we can also save time in the designing phase of the work and focus more on data needed for the calculation of the indicators. Data available at national level, in fact, sometimes differ from data available at European level, as well as regional/local data and trends sometimes differ from the national ones. It is therefore very interesting to analyse these differences, in order to discover whether they coincide with real facts and trends or depend upon different statistical collection procedures. It is also useful to discuss what data could be more suitable for computing the indicators.

NEW ZEALAND

Rachael Milicich, Statistics New Zealand

Overall, the report is a good reflection of our work, and it reads well. I congratulate Knut in particular on his efforts. I have the following substantive comments, which are hopefully material and useful.

Section 4.1.1 Economic wealth (EW)

Paragraph 178 gives the impression that taking the present value of consumption (with suitable choice of path for future consumption and discount rate) is a relatively straightforward matter.

The selection of an appropriate discount rate even for natural assets can be difficult and our investigation into an appropriate rate for fishing stocks revealed a wide range of discount rates being used. The final analysis is also sensitive to the choice of discount rate and requires judgment in the final selection. Similarly, identifying a suitable choice path for future consumption isn't a trivial matter.

I don't disagree that taking the present value of an income or consumption stream is a valid method for determining the value of an asset and as a mathematical calculation is simple to perform. However, the judgment required for the discount rate and future consumption path needs to be acknowledged as this has implications for the size of any residual and its interpretation. Some reference to this problem is alluded to in **Section 6.4, Paragraph 292, bullet point 4**.

Paragraph 179 only suggests issues in coverage not and doesn't acknowledge the challenges in applying net present value to value different assets, particularly natural capital assets.

Section 4.1.2 Additional indicators to EW

Paragraph 192 suggests that among economists, social capital is viewed as an ill-defined concept. I don't know whether this comment is completely true.

I think that social capital is a difficult concept to define but ill-defined could be construed as a comment about those who have defined it rather than the concept itself. It suggests that economists are the final arbiter, which is unhelpful if we want to build multidisciplinary collaboration. I also think that this statement conflicts with our attempts in the previous *section 3.2.4* to bring some clarity and build on the latest literature. Has there been some suggestion or feedback that *section 3.2.4* is ill-defined?

Paragraph 193 and 194 are a little inconsistent with the paragraphs we have for social capital although could be reworked to link better with the measurement part assuming that there aren't significant changes to it.

Paragraph 195 also refers to the concept of social capital being too ill-defined at the moment for practical indicator suggestions to be made. This is inconsistent with the measurement section for social capital where we do suggest some indicator from our approach. I agree that coming up with one physical social capital indicator is probably too difficult at the present, but I disagree that practical indicator suggestions can't be made as we have managed to do this in *Section 4.3.3*. This discussion doesn't have the same interpretation as *Section 6.3.3*.

Section 4.3.2 A framework for human capital

It would be good to look at the latest paper from the ABS which I have circulated to see whether it can contribute to this section.

Section 4.3.3 A framework for social capital

Replacing the current **table 4.3** with the following, after further peer review:

Bridging	Suggested Physical Indicators
Physical - Size of society	Resident population and sub-populations
Physical – Diversity of society	Level of acceptance of diversity across society
Physical - Diversity of knowledge networks	Number of partnerships among government, academia and business involved in research and development
Quality – Inclusiveness of society	Proportion of people actively involved in clubs, organisations or associations
Quality – Trust	Level of generalised trust
Linking	
• Government and society	
Quality – Efficacy	Level of government effectiveness ¹
Quality – Trust	Level of institution trust
Negative flows/ Threats	
Bonding	Level of victimisation Level of participation in clubs, organisations and associations
Bridging	Level of unemployment Level of organised crime
Linking	Level of corruption Number of human rights violations

¹Possible data source, <http://info.worldbank.org/governance/wgi2007/>

There was a suggestion that the Size of society could be considered a contextual indicator, but I have left it in at this stage.

Section 5.2 A proposed small set of indicators

Paragraph 252 suggest overseas development assistance as a supplementary indicator. I am uncomfortable about this indicator for the following reasons. The indicator only recognizes financial assistance and doesn't acknowledge all other forms of non-monetary assistance, e.g. personnel. New Zealand provides assistance in the Pacific which is not recognized as ODA.

Whether this form of financial assistance actually contributes to making developing countries sustainable isn't clear to me and there has been criticism of ODA in particular, whether it benefits the donor more than the recipient as payments can be tied and the priorities are often set by the donor country.

Some of this is acknowledged in the **paragraphs 272 and 273**, so I don't think it is a good proxy.

Section 5.2.10 A physical indicator of social capital

I think the comments here need to be consistent with the other sections on social capital. The indicator needs to align more closely with the stock of social capital, like trust or government effectiveness. Unemployment/employment are more akin to flows in relation to social capital.

NORWAY

Thorvald Moe, Norwegian Ministry of Finance

We think the draft of 19.12.07 is a good base for finishing the work quickly. The essence is found in **Sections 1.2 and 1.3 of chapter 1, chapter 3, chapter 4 and chapter 6**. The essence of the essence is found on **page 46, paragraphs 186 - 192** and in **table 4.1**, which really sums up what analytically based and policy oriented Statistics for Sustainable Development (SDS) is all about. Thus, the final report could be considerably shorter, but that requires more editing work which takes time, and this already long and drawn out process should not drag on further. The only thing we lack is a short description on technological change or developments. From economic development theory, technological change plays an important role as a driver of development, and new technologies must also be a significant part of moving us towards sustainability, e.g. regarding climate change. Knut has worked on this, and we suggest he adds something - however brief - in the final draft.

Our general recommendations regarding adjusting/changing the draft of 19.12.07 are:

1. Use **page 46, paragraphs 186 - 192** and **table 4.1** for a sharpening up of The Executive Summary.
2. Write a new introduction to **chapter 2** which as it stands is somewhat misleading. Thus, start this chapter with the following text: "There are two strands of work which in

turn has led to different approaches and results regarding the interpretation of sustainable development and its measurement:

- The first one, elaborated upon in this report as the analytical or capital approach, is based on longer term growth- and development theory going back to classical economics and then introducing human capital in the 1960s and natural capital in the 1970s. In the 1980s and the 1990s measurement was developed based not only on national accounting, but also human capital estimates and natural resource accounting, see SEEA (2003);
- The other approach is more recent and with an analytical base limiting itself largely to a notion that economic, social and environmental factors matter, but with little explicit exposition of how these factors interrelate. This approach is elaborated upon in this chapter below.

A main difference between this approach and the analytical development approach, is that it does not recognize, at least not explicitly, the importance of savings and investments for development and its sustainability. As elaborated upon in **chapter 3**, savings and investment are the crux of the matter in modern or mainstream development theory, and avoiding negative savings in a broad sense is a key to sustainable development".

3. Strike out the title in **section 2.2** "Policy-based Indicators - The Predominant Approach" because it is misleading:

- Both approaches aim to guide policies, and we would argue that some of the indicators in the "Measurement without Theory" approach, like e.g GDP per capita, is directly misleading and should only be used for short term economic policies, but explicitly not for longer term SD policies;
- The predominant international core set of SDIs is The World Bank genuine savings indicators published for some 140 countries yearly and used in many developing countries. Norway has a capital based core set of SDS, and e.g. Sweden is much closer to this than large sets used in publications in other countries (but not much for policies because they are largely not integrated in core policy making).

4. Tone down the difficulties of constructing SDIs using the analytical approach. The difficulties in using national accounts for computing stocks of financial-, real- and human capital are basically the same as in national accounting, and the market based stocks of natural capital can be computed from natural resource accounts using e.g. the guidelines of Eurostat (2003). Physical SDIs for the non-market part of natural capital and social capital may need additional statistics, like "The Measurement without Theory Approach", but the capital framework at least guides this search.

In any event, we must present a final rapport that "gets it right" regarding the accounting and statistical bases, and not mystify the capital approach as "very difficult and complicated". For people knowing elementary economics and accounting it is not.

Some more specific proposals for drafting changes are:

- **Paragraph 26, page 10, fourth sentence:** Strike out the present sentence and replace it with the following: "Furthermore, to be relevant for longer term policies, one needs a theoretical or analytical framework - lacking in the holistic view - to understand and analyse the causes of development and the corresponding threats to its sustainability".
- **Paragraph 29, page 11, the fourth sentence** should be expanded thus: "It may be inconsistent to attempt to simultaneously maximize welfare both in the short and longer term. Unless one argues that present short term trends if continued unchanged leads to longer term sustainable development, some welfare in the short term has to be given up if one wants to buy insurance against future risks. For example, to combat climate change, one has to accept costs in the short term in the form of somewhat reduced growth of GDP in order to secure future benefits in the form of reduced emissions of GHGs".
- **Paragraph 34, page 12,** insert the following new sentences after the seventh sentence: "The main reason for this, as mentioned, is clarity and analytical consistency. But also to sharpen focus for policy purposes".
- **Paragraph 52, page 15,** note: Solows article is from 1986. His seminal book on growth theory was published in 1988.
- **Paragraph 76, page 20, fourth sentence** should read: "For this reason it makes sense to measure if nations or (homogeneous) local regions are behaving in manner ..."Strike out EU. Reason: If France, UK and Germany are on sustainable paths, but the other 24 member countries are not, which EU indicator(s) tell you whether EU as a whole is on a sustainable path?
- **Paragraph 109, page 29, second sentence** should read: "While traditionally restricted to economic markets and productive assets, it has more recently been extended and broadened in such a way that it is made relevant for the question of how to secure sustainable development. From the 1960s through the work on human capital, and during the 1970s on natural capital so that it accords with the SEEA definition quoted above, see e.g. John Hartwick (1977):"Intergenerational Equity and the Investing of Rents from Exhaustible Resources", American Economic Review, 67:972-4."
- **Paragraph 112, page 30, next to last sentence** should read: "In other words, if we use too much capital for current consumption, e.g negative savings in a broad sense, we may seriously diminish the foundation for or level of future well-being".
- **Paragraph 117, page 31, the three last sentences of this paragraph** should read: "Thus, a lot of information of importance for longer term development and its sustainability is conveyed through markets and existing information- or accounting systems in national- and resource accounts. For financial-, real-, human- and marked based human capital, we have prices that is routinely used for evaluation, and the stocks of these types of capital are constructed from information and statistics in national- and resource accounts, and on information

on educational status, the labour force and wages (human capital) in these accounts. As elaborated upon in this report, this gives us four basic SDIs in money terms, and in addition one needs some SDIs in physical terms on the most important - or critical for sustainable development - non-market elements of natural capital and for social capital in a core set of SDIs. For more detailed analysis of one particular SD policy area, e.g. like climate change, one then would want to supplement with more detailed statistics, use of analytical models etc"

- **Paragraph 119, page 31**, add the following reference in the parenthesis containing references: The Norwegian Sustainable Indicator Commission, Norwegian Official Reports 2005:5.
- **Paragraph 121, page 31**, the last sentence should read: "This provides for a stable, theoretical foundation for the approach and thus a sound base for longer term policies".
- **Page 37**, add the following paragraph after the existing **paragraph 154**, **paragraph 154** bis thus: "In the analytical literature, e.g see OECD Employment Outlook (Paris 2006), governance and well functioning institutions are found to be significantly correlated with development performance. And without good governance and institutions, as experienced in some developing nations, development is not sustained".
- **Paragraph 159, page 39**, add the following at the end of the paragraph: "As already alluded to, the estimation of national stocks of real- and financial capital is standard procedure in national accounting (SNA). Estimation of market based natural capital is regularly done, e.g using guidelines from Eurostat (2003), and the stock of human capital can be estimated indirectly or directly by using well known methods and information on educational status, the labour force and wages in the national accounts, see Greker (2007)".
- **Paragraph 169 on page 41** should be deleted as it, at best, is misleading and ill placed. Why set out theoretical conditions for perfect markets here? The assumptions used for constructing SDIs are basically the same as those used in national accounting.
- **Paragraph 171, page 43**, add the following sentences at the end of the paragraph: "However, and as already alluded to, these challenges are basically the same as in traditional national accounting and market based natural capital bought and sold in markets. And as mentioned, there are well known methods to compute the stock of human capital".
- For the reasons I have already stressed drop/delete **paragraphs 172 and 173** and moderate **paragraphs 174, 175 and 176**. I suggest instead a Box where concretely and pragmatically, based on e.g. standard procedures as used by Statistics Norway, one explains in simple terms how this is actually done. I will in a separate note suggest text/Box.
- Delete **paragraph 180**. No one suggests using National Wealth in real terms per capita as the only SDI.

- **Paragraph 197, page 48, subpoint b, the second sentence** should read: "This is of special importance in natural resource dependent countries, but the focus on savings in a broad sense (maintaining real, human, natural and social capital for future generations) is a key to development more generally and to longer term sustainability".
- **Paragraph, page 49, the first sentence** should read: "The analytical or capital approach, rooted as it is in well-established development theory provides a clear, coherent and understandable argument for".
- **Paragraph 202, page 49**, add the following sentences at the end of the paragraph: "An important example is the use of Gross Domestic Product (GDP) in a number of present national SDI sets. GDP, or value added from market- and nonmarket (like the government) activities in an economy can be boosted in the short run by drawing down rapidly on that nations non-renewable resources. Since, according to present SNA conventions, the use of these resources are not deducted when estimating GDP, one could deplete ones non-renewable natural resource stock in the process. Estimated GDP is growing rapidly in the short term, while actual policies are non-sustainable in the longer term (which has actually happened, at least in some developing countries). Thus suggesting GDP as an SDI to policy makers is quite misleading and an example of the pitfalls when one has no analytical framework, but rather proceeds with "Measurement without Theory"".
- Drop the attempted comparisons in **Chapter 5**. E.g. **table 5.1** is fairly hopeless. It states e.g. that with the Capital approach "one may miss important aspects of policy". This is at best a misunderstanding. Core SDIs based on this approach are meant to focus on the main challenges for SD, and if climate policies are the problem, one of course uses more detailed statistics, analytical models etc. A real problem, and a main reason while SD unfortunately still is too much on the backburner in actual practice, emerges when one tries to argue that "everything that is important to human welfare, both now and in the future, should get a separate SDI". Focus and policy priorities become entirely blurred in such an approach, and it becomes useless for practical policies. Thus to call such SDI sets "policy oriented" is misleading.

So my final recommendation is, for both diplomatic and substantial reason, tone down or drop entirely **chapter 5**.

POLAND

Katarzyna Pecikiewicz, Central Statistical Office of Poland

The CSO of Poland is currently beginning work in the scope of Sustainable Development Indicators. We are very impressed by the Draft Report concerning Sustainable Development Indicators.

The CSO of Poland is appreciating the effort that has been made to produce the Draft Report concerning Sustainable Development Indicators. The work that has been done is enormous. While reading the report one can learn a lot about the joint

UNECE/OECD/Eurostat Working Group, about basic concepts of sustainable development, the approaches to measuring sustainable development, etc. The CSO of Poland finds the description of indicators very detailed and clear.

SPAIN

Pedro J. Herrera Giménez, Statistics Spain

Jorge Saralegui, Statistics Spain

The inclusion of the Total Wealth Theory is essential in the study of Sustainable Development. In this regard, we believe that the effort that has been carried out has been really valuable. We see it as an important contribution to build a framework for the statistical measurement of SD. The progress made on the issue has been remarkable and it will permit to launch further developments. It is always important to bear in mind that it is hard to succeed in the very first round.

It is extremely important for us to update **table 2.1** with the number of SDIs, which are present in the Spanish Sustainable Development Strategy (SSDS). The Spanish SDS was developed in the framework of the renewed EU-SDS by the Interministerial Group for the Spanish SDS under the coordination of the Economic Department of the Prime Minister's Office with the participation of affected ministries, and it underwent a consultation process during the first part of year 2007. The Spanish SDS explicitly state a set of 74 indicators for its monitoring. See website: <http://www.la-moncloa.es/varios/EEDS/default.htm>

From our point of view is not adequate to label the capital approach with the concept of 'long-term' as it were an exclusive feature of it. This feature is also present in policy-based sets of indicators since the majority of them contain flow variables of implicit or explicit dynamics, which are able to manifest aspects on the future.

Regarding the 'proposed small set of sustainable development indicators' (**Table 5.3**):

- At this stage it would be more adequate to use the term 'types of sustainable development indicators' (according to the capital approach) since there is no yet a concrete selection of indicators for every single category. Maybe, this will be a task that will have to be addressed in the near future.
- Explanations on the types of sustainable indicators should be more balanced: there are types with missing explanation.
- It would be very positive in terms of communication to illustrate the examples with indicators that allow both construction and presentation of graphs containing information on several countries. **Table 5.2** shows that it is possible.
- It would be useful to indicate too:
 - a) Characteristics of each type of indicator.
 - b) Guidelines in selecting specific indicator for each particular category.

We insist that it is very important to be more accurate and even careful when using the terms welfare (closely linked to the utility concept) and well-being (quality of life). Translation of both concepts to other languages is not trivial and should be clarified.

Despite these concepts are not the main topic of the report its distinction is key in development economics to understand the concept of development. This distinction is clearly explained by Amartya Sen in 'Quality of life' (introduction, quote n.1 page 22). So, we encourage the revision of the report in this regard.

With regard to well-being, it would be necessary to include some text on the statistical background for its measurement, in the context of the so-called Social Indicators Movement, internationally spread during 70's and 80's. Much of the discussion present in the report already took place in such context at that time, and therefore, much of the lessons learnt in these days are likely to be valid for the today's theoretical development (in fact, most of the indicators set up at that time also included the environmental component).

The use of concepts or combination of then not introduced before or not fully accepted by pre-existing theory should be avoided: expressions as 'well-being per capita', 'well-being out of the market' and others used in the draft report cannot be spontaneously accepted.

Generally speaking, some uniformity in the style of writing should be aimed at.

Avoid excessive reiteration of the same concept (i.e. limits to growth theory) in separate paragraphs.

Balance technical illustration of estimation procedures for different capital components. Illustration of practical estimation procedures for, i.e., Economic Wealth (EW), and its connexion with SEEA, is certainly needed and surely to be very appreciated by report users. Nevertheless, not much on the subject can be found in the report. On the contrary, estimation of human capital, for which abundant literature exists, is too extensively explained, in our view.

EUROSTAT

Pascal Wolff

In general the text is very much improved, nevertheless a native English speaker should revise it. Some repetitions could be avoided.

We should be consistent in the report in the labels given to the two approaches, described in **section 1** as 'holistic' vs. 'long-term'. In **section 5**, the wording 'capital approach' and 'existing approaches' are used. We propose to use the terminology of **section 1** which is more neutral.

The process of selection of indicators stemming from the long-term approach is nowhere described. It is not transparent and appears as arbitrary, i.e. subject to criticism. Therefore the proposed list of indicators is far from being satisfactory and does not have in our opinion the potential to become 'the core of an international list of indicators'. In particular, a poverty indicator is missing. Poverty affects both our short- and long-term wellbeing as we explained in several occasions. Life expectancy is not an indicator describing the health status but a demographic indicator.

The addition of Norwegian data to describe indicators does not really add value. If we want to show anyway data (which is not our opinion for such a report), why not to select any other country, or the EU or the OECD?

Some of the criticisms to existing approaches (cf. in particular **Table 5.1**) should be attenuated as demonstrated by the report itself. I mean in particular:

- The instability of the set: to take the UK example as an example of instability is unfair because the UK is one of the very few world's pioneer in this matter, and all other countries (as well as the European Union) benefited afterwards of their experience. The changes in the set are not implemented only because of policy changes, but also and perhaps mainly because our understanding and our capacity of better measuring what is important is progressing. This is for instance recognized in the report in **para. 277-278**. I would also add that, although having based its national SDI set on the K approach, I was recently informed that Norway has just substantially changed its set although the previous one was adopted two years ago. I would just like to illustrate with this example that the use of the K approach is not a guarantee against changes in the set, because many of them are linked as expressed in **para. 277** to statistical improvements.
- The number of indicators: again I think that it is a wrong trial which is made to the existing approaches. Everybody recognizes that when we talk about 12 or 150 indicators, we are not talking about the same kind of information system. 12 is likely not sufficient for a detailed assessment and 150 is not appropriate for a proper communication. Actually much of these differences are linked to the way of communicating about indicators. This is acknowledged somewhere in the report, but could not find it again.
- The differences between existing approaches should not be exaggerated. This is the story of half-empty or half-full bottle. We should certainly be more precise but **table 2.2** refers to 16 European countries having developed a 'true' SDI set. Figures above 12 shows in my opinion a very high degree of convergence. We could improve the comparability with **Table 2.3** which refers to 16 countries + AUS + LUX + UN.

The **section 6.3** on challenges is in our opinion quite important (see below). A more logical way to introduce them would be to start with conceptual, then methodological and then data issues. This is in our opinion the order in which issues should be dealt with.

We miss a paragraph or two on thresholds which will be necessary to assess various changes. We all know that it is a difficult topic but without them some indicators are much less meaningful.

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