

#### November 19

08:00 Registration

#### SESSION 1: Introduction: The challenge of going beyond GDP

09:00 Opening by the chair

Chair: Anders Wijkman (Member of the European Parliament)

#### **SESSION 2: Technical and policy challenges**

09:20 The session offers an overview of recent history and current developments, with a focus on European initiatives. Participants will discuss:

- the evolving needs of decision makers and the general public and how to best meet them.
- the specific methodologies that go beyond GDP, including composite indicators, indicators sets, and extending traditional accounts through integrated accounting;
- the key successes, obstacles and opportunities for improving and making better use of the different approaches that complement GDP.

Format: two overview presentations and general discussion

#### Speakers:

- Marco Mira d'Ercole (OECD): Introduction.
- Oliver Zwirner (European Commission, DG Environment): Assessing EU progress.

Panelists: Jacqueline McGlade (European Environment Agency);

Laurs Norlund (European Commission, Eurostat);

Branislav Mikulic (European Foundation for the Improvement of Living and Working Conditions).

10:30 Coffee break

#### SESSION 3: Breakout session: Key needs and ways forward

10:50 Split into three groups to identify where energies should be invested to improve the methodologies and increase their adoption. What are the key opportunities for going beyond GDP? What is feasible in the short to medium term and how can implementation be improved? How to engage policymakers, key institutions, business, media and the broader public?

Format: chaired breakout sessions with panelists and general discussion (three groups, each with a chair and three panelists).

- Panel 1: Chair: Jeff Mason (Reuters).

**Panelists:** Thais Corral (*REDEH, Brasil*); Carlos Figueiredo (*Environment Ministry, Portugal*); Peter van de Ven (*Statistics Netherlands*).

Rapporteur: Fulai Sheng (UNEP).

- Panel 2: Chair: Aldo Ravazzi (Ministry of Environment, Italy).

Panelists: Isabelle Cassiers (Université Catholique de Louvain);

Jean Gadrey (University of Lille); Paul Hofheinz (Lisbon Council).

Rapporteur: Anil Markandya (University of Bath).

- Panel 3: Chair: Ivo Havinga (United Nations Statistics Division).

Panelists: Stuart Bond (WWF, UK); Teresa Fogelberg (Global Reporting Initiative);

Andrea Saltelli (European Commission, Joint Research Centre).

Rapporteur: Marcel Canoy (European Commission, Bureau of European Policy Advisers).

#### **SESSION 4: Collaboration opportunities**

# 12:10 Collaboration opportunities: improving the metrics and integrating them into policy making

Participants and panel members will discuss how to collaborate in taking forward the beyond GDP agenda. The conference should lead to the launch of an interdisciplinary European effort to improve our measures of progress, true wealth, and well-being. The workshop results will be fed into the main conference.

Chair: Pieter Everaers (European Commission, Eurostat)

Reports from breakout sessions 3: Fulai Sheng (UNEP),

Anil Markandya (University of Bath), Marcel Canoy (European Commission, Bureau of European Policy Advisers).

**Panelists:** Willy de Backer (3E Intelligence); Johannes Blokland (Member of the European Parliament); Bedrich Moldan (Charles University).

#### **SESSION 5: Workshop conclusions**

#### 13:20 Chair's summary of the workshop

Anders Wijkman (Member of the European Parliament)

#### 13:30 Lunch for all workshop participants



# Session 1 Introduction The challenge of going beyond GDP



# Anders Wijkman

Member of the European Parliament



# Opening by the Chair: The challenge of going beyond GDP

Let me welcome you all here to this two-day Conference on "Beyond GDP". The theme we are about to discuss is of extreme importance and I very much hope we shall make some real progress. The expert workshop precedes the Conference and the purpose is to allow for some in-depth discussion between experts before we meet in the much larger context after lunch.

Why a conference on "Beyond GDP"? The answer is very simple. The economy as presently organised overlooks some very important aspects of production and consumption. Market prices do not reflect the true costs of production and consumption. Moreover, the way we measure progress is very narrow, meaning that we send the wrong signals to society. Most people seem to think that everything is fine as long as consumption increases. That may have been a reasonable way of measuring progress when living conditions were poor and economic activity was limited and nature was plentiful. But this is no longer the case.

The conference today is not the first of its kind in the European Parliament. In 1995 the European Commission, European Parliament, WWF and the Club of Rome organised a similar conference, the theme being "Taking Nature into Account". The fact that the OECD is also now one of the hosts today represents a step forward.

This conference has been in preparation for quite a number of months by now, and we are very happy indeed to be able to welcome later on today representatives from more than 50 nations, from all the continents except Antarctica, with more than 750 people registered.

The aim of this expert workshop is to address the various challenges in improving our measurements of progress. Precise suggestions and recommendations that can later on be fed into the conference are more than welcome.

My own background is one of having worked for many years on issues related to the environment and development. It strikes me that there has been – and still is - a very strong perception among a majority of citizens that a growing GDP will eventually help us solve all kinds of problems in society, and address a series of noble objectives in terms of equity, in terms of development, and in terms of environment sustainability. For many economists this is still something of a dogma. But I also feel that more and more people today realise that all kinds of externalities are beginning to overwhelm us and that certain types of growth create more problems than they solve.

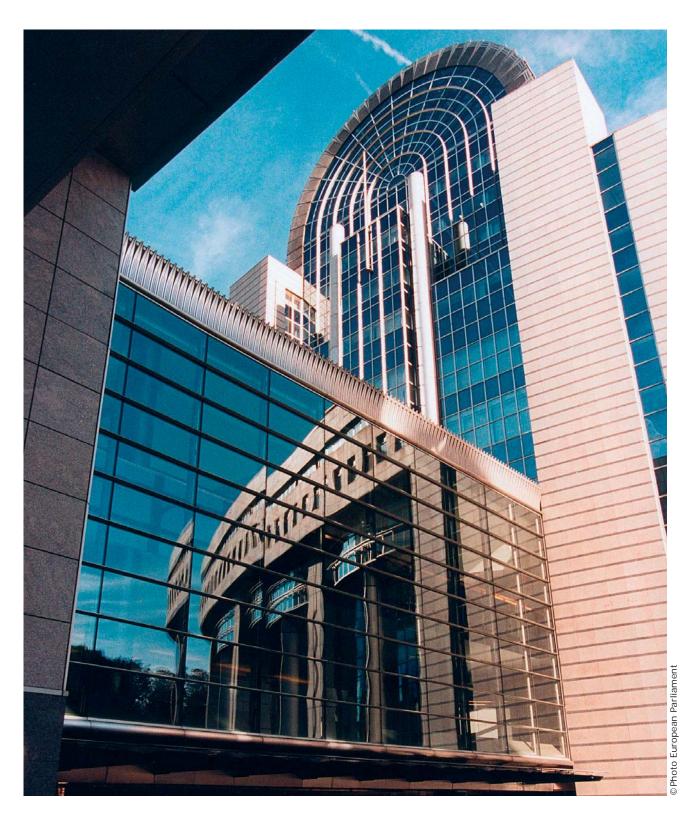
Being a politician, I can tell you how difficult it is for us as a body, whether we talk about the European Parliament, the US Congress, the Swedish Parliament or whatever, to integrate and to act on all those externalities. The assumption seems to be that the externalities will be factored in and dealt with at political level, but in this globalized world where competitiveness is everybody's concern, this is becoming increasingly difficult.

The history of GDP as a concept goes back to the 1930s. We all know that there was a strong need felt by governments at the time to be able to measure the activity in the economy. Before that, there was very little understanding about what was going on. Simon Kuznets was asked by the US Senate to develop a measurement of national production or income and this later on became the prototype for what we call GDP.

I would submit that ever since that time, GDP growth has been one of the pillars in terms of policy-making and objectives. Listen to any election debate, anywhere in the world, and everybody - whether from the 'right' or the 'left' - calls for increased growth in conventional terms. This is quite natural because with growing GDP jobs have been created, wages have been raised and taxes and profits have increased - so more or less everybody is happy.

There are undeniably strong correlations between GDP levels and many components of welfare such as literacy, nutrition, healthcare, life expectancy and so on, but there are, as we are increasingly aware, other components of welfare where correlations are not so obvious.

The whole informal economy, i. e. volunteer work and work within families, is not accounted for. Leisure contributes to people's welfare; however, seen from the perspective of GDP growth, leisure is most often seen as a negative thing. With regard to technology, GDP reflects only the volume of the end products; it doesn't



really capture changes in technology and/or the dynamics of capital accumulation.

Human capital and investment in education is most often underestimated by GDP. The same goes, of course, for pollution and resource depletion. Probably the single most important un-priced dimension of GDP are the effects of production and consumption on natural capital. Some people say that Planet Earth is run like a company without a real balance sheet.

Equity and distribution is another issue that is absent from GDP. Social breakdown and other forms of social problems if anything add to GDP rather than the opposite.

Criticism of the GDP concept is not new. Kuznets himself early on said and I quote, "Distinctions must be kept in mind between quantity and quality of growth, between costs and returns, between the short and long run. Goals for more growth should specify more growth of what and for what." I am old enough to recall a lecture that Jan Tinbergen gave in Stockholm in the early 1970s. He made more or less the same points as Kuznets had previously done.

I have already referred to the 1995 conference in this Parliament. It was quite a successful conference – a lot of good recommendations – but somehow they were not picked up. Maybe we were too early?

Instead we have seen developments over the last ten to fifteen years where the conventional growth concept has become even more important. In the EU it's a pillar of the growth and stability pact and it's a very important component when it comes to distributing the social and regional funds.

We are gathered here today to try to come up with some intelligent responses to the limitations of GDP as a measure of welfare. So the question is: "What to do? Should we adjust GDP?" That was very much the objective in the debates during the 1970s, 80s and early 90s – that is to say, the effort was to try to incorporate social and environment factors and concerns.

Another way of responding would be to replace GDP by some other indicator, whether it is the human development index, the 'happy planet' index or whatever. A third alternative would be to complement GDP by a set of new indicators.

The task of this expert workshop is to elaborate on these various options and try to come up with some precise suggestions. So a number of questions arise.

Why do we need new measurements? I think it is pretty obvious, but we could maybe spell it out even clearer.

What real progress has there been over the years? We know that the OECD, the World Bank, the European Commission, etc. have been working on these issues for quite some time now. How do we deal with this problem in a globalized economy, where national accounts still dominate but where increasingly we have to take into account exports and imports – not only of goods and services but of pollution too, including embedded emissions. Do we have the data required to come up with new measurements and indicators and do we have the skills in the various statistical departments, and the willingness to embark on this?

Last night at the pre-conference dinner I was made aware of the fact that not everywhere in statistical offices are the issues we are going to discuss dealt with comfortably. How do local communities become involved? Unless people at the ground level understand these issues correctly can we really hope for real change?

What about our systems of taxation? They are very much based on the assumption that the economy will grow in the conventional way. And how about business models? There are very few exceptions in the business world that deviate from the norm that to earn more revenue you have to sell more volume.

We have some urgent problems out there - climate change is one, the ecosystem crisis is another. How can we speed up this process so that we end up by providing society with better signals for what's going on in society?

I would submit that there are many other things we have to do as well, with regard to the economic policy framework, but the theme for this conference is first and foremost to come up with more appropriate measurements for progress in society. I am very much looking forward to this expert workshop and the Conference later on.





# Marco Mira d'Ercole

OECD Social Policy Division



Honoured to introduce this workshop. Honoured to do it on behalf of the OECD. The E in OECD stands for Economic, which is often taken to imply a narrow approach to well-being, where economic considerations trump other factors. But it is also an organisation with a broad range of competences, hence well placed to bring together some of the themes that come together under the heading of "progress", "wealth" and "well-being".

I offer these introductory remarks with a lot of modesty. The themes of this conference have been the subject of research for many years and they span a very wide field of interest. In the early 1970s, the social indicator movement first brought in the public sphere some of the critical dimensions of well-being that are missed by conventional economic measures, at the same time as the report by the Club of Rome, "Limits to Growth", enlarged what we now understand as the "capital base" that sustain well-being. Since that time there has been much progress but also setbacks relative to the early optimism. What brings us here today is the view that the agenda of measuring "true progress" need new impetus and that this requires the commitment of all partners active in this field.

The OECD has organised over the past two years a range of activities on how to measure well-being, which have culminated in the Istanbul World Forum and declaration. We have also undertaken a stocktaking assessment of alternative ways of measuring well-being, whose main elements are summarised in the background document for this conference. I will refer to these activities and what we have learned from them when responding to some of the questions posed by the Chair in his introductory remarks.

What has been driving the OECD interest in this area? In a nutshell, it is the realisation of a large and growing gap between what official statistics tell us about "progress" and the feeling of ordinary people. People are worried about the state of the environment, poverty, lower purchasing power, crime and insecurity, quality of public services – all areas where official statistics have a hard time

in accounting for these growing anxieties. The OECD Global Project on "Measuring the Progress of Society" is one step in filling that gap.

Let me start by spelling out how the well-being agenda relates to conventional economic measure. Are we arguing that GDP is irrelevant for the assessment of progress? The answer is NO, for reasons that are well explained in the background papers for this workshop. We have simply reminded ourselves of something that well known to National Accountants but whose implications are often put on one side in policy discussions: that GDP is a measure of production and (very imperfectly) of how much a country can afford to consume. It is of limited value for assessing welfare because:

- First, it does not reflect differences of experiences within a country; and
- Second, because it omits many of the items that matter the most for well-being of each individual, even if they are affected by economic processes.

Developing better measures of well-being requires addressing both of these limits. How can we make progress in these respects?

With respect to the first limit, let me be more explicit. SNA aggregates are based on the aggregation of income flows among unattached individuals, with the total then divided among all persons in a country. We may call these "household measures" when they are drawn from the household appropriation account but this is a misnomer.

- First, because each person is treated an "island" disconnected from other household members: in this way we neglect the pooling and sharing of resources that occurs within families, and the social costs of family disruptions and lower family size.
- Second, because individuals are all assumed to be identical, and each country is effectively treated as one person.

I stress these aspects as they relate to a guestion posed by the BEPA paper on: "how to deal with distributive questions when discussing well-being". My own answer to this question lies in better integrating SNA and household survey data. This was one of the recommendations made by Tony Atkinson as he chaired a workshop organised by the OECD and the Joint Research Centre of the EU in July 2006 in Milan. He recommended "to do for welfare what the SNA has done for economic production", i.e. develop accounts for the household sector that give visibility to the experiences of homogeneous groups of people (by age, socioeconomic status, or income groupings). We should start doing this for money income as conventionally measured. But we should then extend these accounts to other domains such as public services to households. I think that the UK discussion on measuring government output is critical from the perspective of measuring the well-being, inter alia because it highlights a tension – present since the early days of the SNA - between a perspective focused on production and one focused on welfare. The type of household accounts mentioned above would allow bringing in information on the quality of these activities and how and they contribute to the well-being of individuals.

With respect to the second limit, the challenge is to move beyond income to identify those items that matter the most from the perspective of measuring the well-being of individuals and the true progress of society. This requires expanding the traditional boundaries of the SNA with respect to both "asset stocks" and "production flows".

With respect to assets, it most critical extension is to develop tools suited to track the health of the natural environment. The natural environment matters for well-being, beyond the services it provides today, because it is critical for sustaining well-being overt time. While we all recognise today the scale of the environmental challenges we face, progress on the measurement of these environmental threats fails to convey the urgency of action. Some progress is however occurring in two main directions:

The first is represented by the publication in 2003 of manual on a "system of economic and environmental accounting", to which the OECD has contributed in important ways. Wesselink et al. rightly describe this as a "landmark achievement" and this is not an oversell. Today, the creation of the UN Committee of Experts on Environmental Accounting is an important step to mainstream environmental accounting, to elevate the SEEA to an international standard, and to advance its implementation at the national and local level.

- The second is represented by the construction of several composite indices aimed to measure both the impact of human activities on the environment as a whole (e.g. the "ecological footprint") and the state of some specific aspects of the environment's health (e.g. the WWF Living Planet Index with respect to biodiversity). While the first set of measures mainly serve a communication function, those in the second can also be used at the policy level to monitor the results of different strategies.

Expanding the "asset boundary" is not limited to the environment but brings us to the broader agenda of sustainable development. The measurement agenda on sustainable development is tightly connected to that on measuring wellbeing, but there are also differences. As noted by David Pearce: "the problems with the concept of sustainable development are perhaps not so much with the word 'sustainable' but rather with the term 'development'". For some purposes it makes sense to separate the two rather than subsume one into the other – not obviously to forget the agenda of measuring "development" but for the sake of making progress one step at a time. Some important work in this area is being pursued by the UNECE/OECD/Eurostat Working Group on Sustainable Development statistics. The discussion in the WG is still ongoing, and others closer to this process are better placed to inform this workshop about the state of its deliberations. But the option considered by the draft report is to focus on the "requirements for sustainability", i.e. on maintaining a constant level of total assets per capita, as measured through a narrow set of (13) indicators covering the real per capita values of produced, human, natural and social capita, as well as physical indicators covering a small number of critical environmental threats (climate, air, water, landscapes, biodiversity and soil) as well as education and health (8). The agenda of measuring assets is important not just for the environment but also on the social side, we are still far from having developed suitable tools to track in a comprehensive manner the state of human and social capital.

Expanding the "asset boundary" of economic accounts is important from the perspective of assessing "progress" but this is not enough. Also important is to go beyond the "production boundaries" of the SNA to identify those flows that contribute to well-being. The most critical in my view refers to the different uses of time, and here I would like to stress two points.

- First, is that time in paid work contributed to people's well-being via the income it generates, the role-models that it provides, and the socialisation that it offers. But unpaid work and leisure time also contribute to well-being, either directly (in the case of leisure) or indirectly (through the value of what is produced through household production and voluntary work). Much of what families do contributes to the welfare of its members through the care they (mainly women) provide – and a narrow focus on paid work in policy discussion may undermine those immeasurably more valuable functions that parents do for society.
- Second, is that a focus on the diverse uses of people's time is also important because an increase in income achieved through more hours of paid work – i.e. less leisure – has different welfare implications of an increase in income due to higher wages: by conflating the two aspects into the same income measure we cannot have an adequate understanding of people's welfare.

Better measures in this field depend on the availability of suitable surveys. Some OECD countries (e.g. the United States) have done the necessary investment setting in place continuous time-use surveys, which lead a panel of the US National Academy of Sciences to argue in 2005 that "time is ripe for developing better measure on this front". Other countries (including Europe) are however lagging.

All issues I raised above have to do with "objective" measures of well-being. But "subjective" measures of happiness and life-satisfaction have also driven a large part of the interest on well-being. The OECD, the JRC and the University of Tor Vergata jointly organised a workshop on subjective measures of life satisfaction in Rome last Spring that gathered researchers on "happiness" and people coming from a more policy-oriented background. It has been a fruitful discussion as, beyond these differences in background of various participants, the workshop also highlighted some elements of consensus.

- First, subjective measures have probably a limited leeway to compare countries at a point in

time but could be more useful when used in difference form.

- Second, the use of these measures is much more interesting at the individual level, as they highlight the role of both "adaptation" to life-events and of "comparisons" with other people living in the same community for people well-being.
- Third, statistical offices need to look at this area more than in the past, integrating questions on satisfaction with life as a whole and in specific domains in their surveys.
- A final conclusion is that policy attention to these subjective measures is likely to increase in the near future. The BEPA background paper identifies as one limit of these measures that "it is not clear how to use them for policy making". This is a fair comment if it refers to the state of current research. But, let me also add, that (by and large) these measures have not yet been tested this type of use. Survey questions about "work satisfaction" surly tells us something important about the constraints facing working parents, and on the effects of various policies to reconcile work and family life.

Let me conclude by trying to respond explicitly to the questions posed by the organiser:

- How have recent measurement efforts gone beyond mainstream economic indicators? It is an open ended question, with many possible answers. But the element that I would like to stress as probably the most important is the development of large set of physical data pertaining to dimensions that matter for well-being: health, education, social, environmental, governance indicators. We have today a rich menu of statistical data to feed our assessment of well-being and how it is changing. This richer set of data reflects the initiatives not just of statistical offices but also of NGOs, business associations, trade unions, and academic researchers.
- What initiatives are underway to further improve our ability to measure progress, true wealth and well-being? These initiatives are well described by Wesselink: single number indicators, often started from an environmental side, such as "ecological footprints", "genuine progress", "genuine savings"; indicators sets (such as the structural and SD indicators used in the EU); and elements on an accounting frameworks (such as the one proposed by the SEE manual). Hence not a single contender, but a variety of approaches suited

for different purposes. We should accept this diversity because, as noted by Wesselink et al., different indicators serve different needs within the broad "policy process".

What are the key technical challenges to implementing new measures? In this respect, the twin challenges that I would like to stress are to achieve parsimony and avoid double counting. There is a trade-off between the two, and the right balance will depend on the use of the indicators. Single indicators achieve parsimony at the risk of counting twice the same element. Accounting framework are better in avoiding double counting but leave open the question of how to get to a synthetic representation. I would argue that single indicators accounting for all dimensions of well-being are not well suited for our (OECD) type of policy audience. But we should strive for parsimony within specific domains, though either general indicators (such as healthy life-expectancy, which is a synthetic description of both mortality and morbidity, or physical measures of biodiversity and GHG emissions).

These is a personal perspective to the question posed. Participants will have different answers to the questions posed by the chair, depending on their backgrounds and comparative advantages. But, beyond these differences, I want to stress the points of agreement – which I would hope would be shared by all participants to this workshop:

- Agreement that GDP needs to be complemented by other measures if we want to get

- a better view of progress, true wealth and well-being.
- Agreement that GDP is only a measure of economic activity rather than well-being.
- Agreement that measuring progress requires environmental, social and governance indicators.
- Agreement that priority is to build consensus among those active in this area: we are not here to engage in a beauty contest among different approaches but to identify priority areas and assess the "comparative advantage" of various partners to move this agenda forward.

One final word. Improving our measures of progress is a necessary condition for re-orientating policies – but not a sufficient one. First, we need need not just to measure, but to get the measures used; this require a closer dialogue between users and producers of the indicators as well as novel ways to present and disseminate results, and is an important part of our Global Project. Second, we need to identify policies that are effective in improving the various items that matter for well-being, and assess their costs, both the costs of policy actions and that of policy inactions (as dome by the Stern report with respect to climate change). Closer interaction with the policy community is critical for progress and the OECD can play an important role in this respect.



# Oliver Zwirner

European Commission, DG Environment

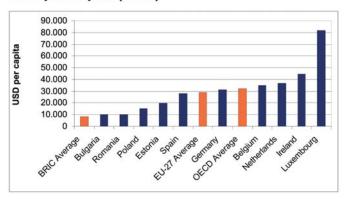


# Assessing EU progress by "existing beyond GDP" indicators

It is an honour and a pleasure for me to address this expert workshop. We heard from Marco Mira d`Ercole what was developed in the past and what will come in the very near future. In my presentation I will illustrate what we already have in terms of 'Beyond GDP' indicators and what kind of stories and insights the existing indicators can give us.

Let us start with the traditional measure of Gross Domestic Product (GDP) *per capita*.

#### GDP per capita (2006)

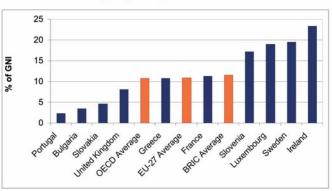


Leaving aside the exceptional case of Luxemburg we then have Belgium, Netherlands and Ireland with roughly US \$40,000 per capita and year as the EU Member States with the highest figures. If you compare with the BRIC countries, we see that Europe has a high income, but let us keep in mind that this is only what is produced and sold on the formal and legal markets.

My next question would be: How does this national income translate into national wealth by savings. In economic terms, saving or investing is the way to increase wealth. The question is: Do we get richer when we get more income, does our wealth actually increase? I took note of the traditional measure of investment in man-made physical assets but I chose to present here the genuine savings concept of the World Bank as it includes

investment in education and deducts depletion of natural resources and deterioration of the environment. This concept measures better the increase of the "true wealth" of a nation – a term quoted in the sub-title of the conference.

#### Genuine Savings (2004)

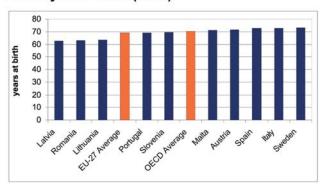


And what we see here, for example, is that Ireland manages to translate its high GDP into high savings while Portugal, although mid-range in terms of GDP, is less able to translate it into increasing wealth (see also Figueiredo, page 166). A newcomer to the top ranks is Slovenia, which has an exceptionally high genuine savings rate compared to its income. It is also notable that the BRIC countries – Brazil, Russia, India and China – save more – at least in terms of this indicator – than the OECD or EU countries.

My next question is: How does this wealth, this income, translate into quality of life? One aspect of quality of life is a healthy life. A long and healthy life is certainly an important aspect of quality of life.

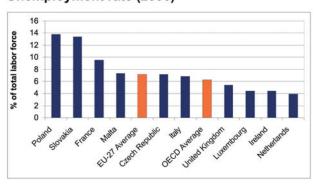
Here we have some interesting newcomers in the top range: Spain, Italy and France – although more mid-range in terms of income – translate this midrange income into a long and healthy life, which is quite encouraging I would say.

#### Healthy Life Years (2002)



Let us now look a bit more into the causes and costs of these developments. I will start with a key social aspect: (un-)employment. Although the unemployment rate is a bit of an 'in-between' indicator because it's a 'means' for income (how many people work?), it is also an end in itself because work is something valuable from a social and human perspective.

#### **Unemployment rate (2006)**

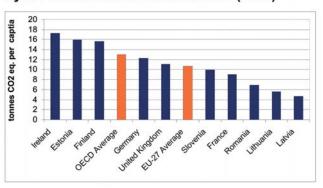


Here we see that some countries with high income like Luxembourg, Netherlands and Ireland also translate this into a high employment rate or at least a low unemployment rate. Meanwhile, for example, France is not able to turn high income into low unemployment. However, this might also be a social or political choice, to tolerate relatively high unemployment. And let us keep in mind that France realises long and healthy lives.

Let me now pass on to another important perspective, namely at what cost and at what expense to the environment this performance is achieved. How well do we perform on environmental issues? For a first step I have chosen the greenhouse gas emissions.

We see here new top runners to the right: we see Romania, Lithuania and Latvia with very low Kyoto gas emissions *per capita*, and we see that

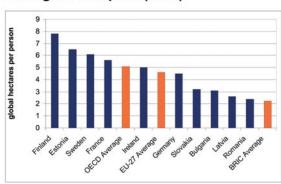
#### Kyoto Greenhouse Gas Emissions (2004)



emissions *per capita* vary quite widely within the EU; it is more than three times this amount which is emitted in Ireland, Estonia and Finland. And we also have a very wide range in terms of carbon intensity, which means how much carbon is emitted for each euro of GDP.

Climate change is of course the political focus of the moment – very much so – but we also have wider measures of pressure on the environment, one being the ecological footprint.

#### **Ecological Footprint (2003)**

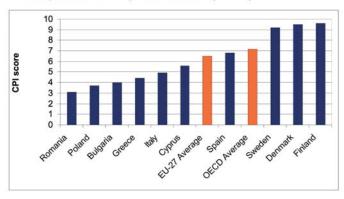


Here we see that the average of the BRIC countries is still lower than the lowest footprint of any EU country. What we see here is that we normally have a quite high correlation between GDP and footprint, but there are also exceptions. For example, Finland which has the largest footprint in the Union is more mid-range in terms of GDP.

But not only does the environment matter, good governance is also important.

Here we see the corruption perception index, which is produced by Transparency International. This is on the one hand a means to produce high income, to preserve the environment and to secure social protection and social inclusion, but on the other hand it is also an end in itself to

#### **Corruption Perception Index (2006)**



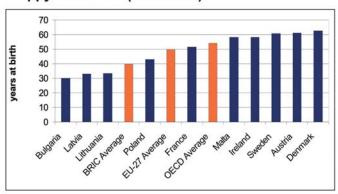
have an honest society. Here again we see that the Northern European countries are top ranking and we see for example that Greece, which is normally quite wealthy in the mid-range, here has a lower ranking with the other indicators.

Let me move on to indexes that cover perception and are subjective. Let me continue with something which is a final end, and that is the wellbeing that we perceive.

Although Europe is quite small on this world map, we see that the divergence is quite high from dark red which is 'quite happy' to some yellow which is 'below average happiness.' It would be of course very interesting now to compare in detail these ratings with the previous ones, but my time is running out.

Let me finish with an indicator that tries to capture what perhaps most of us consider as a final end, which is a long and happy life. This indicator combines subjective "happiness" data with the statistical life expectancy.

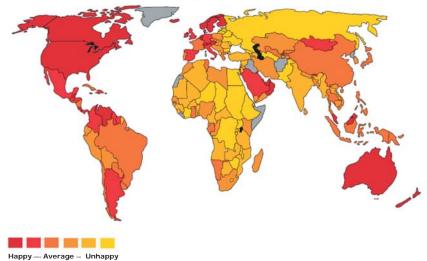
#### Happy Life Years (1995-2005)



We see that some countries translate their income, wealth, social and environmental protection into a happy life while others, although quite wealthy, perform less. For example, Malta is quite a newcomer here in the top range, quite close to the top score of Denmark.

My conclusion on this is that already with the existing "Beyond–GDP"-indicators one can gain interesting and politically relevant insights.

#### Subjective well-being (2006)



Map created by Adrian White. University of Leicester.



# Jacqueline McGlade

Executive Director, European Environment Agency

# Accounting fully for ecosystem services and human well-being

"Because National Accounts are based on financial transactions, they account for nothing Nature, to which we don't owe anything in terms of payments but to which we owe everything in terms of livelihood."

Bertrand de Jouvenel 1968

#### Introduction

Ecosystems sustain biodiversity, the basis for all life on earth. Ecosystem services are the benefits people obtain from ecosystems. They include *provisioning services* such as food, water and timber; *regulating services* that effect climate, water, soil, waste and disease; *cultural services* that provide recreational and spiritual benefits.

# Ecological truth & market prices in accounting for ecosystem services

Ignored benefits: The actual value for people's well being from ecosystem services is accounted only when these services are incorporated into the price of products. When their market price is zero, however, as in many cases, they simply don't exist, whatever their importance. They can be accordingly appropriated for production or simply degraded without any recording. These free ecosystem services should be measured, valued and added to the GDP for computing a more inclusive aggregate, called Inclusive Domestic Product (IDP).

I gnored costs: The negative impacts on ecosystem services of, for example, over-harvesting, waste disposal, fragmentation by dams, and sealing of soil for development have no direct counterpart in GDP. This means that the full cost of producing and consuming domestic goods and services are not covered in many cases by their market price. This is also the case for the price of imported goods and serv-

ices generated from ecosystems that are not maintained: their price doesn't reflect their full cost for the exporting country.

Allowances should be made for these ignored costs and added to the current production output and imports of countries, sectors and companies for computing the full cost of domestic and imported goods and services, called the Full Cost of Goods and Services (FCGS).

#### IDP and FCGS for policy decisions

Once computed, these two aggregates can provide added-value to policy makers in terms of better informing decisions on the costs of action versus the costs of inaction, on the internalisation of environmental externalities and as a result of these, where to target actions around Ecological Tax Reform. The aggregates aim at **supplementing GDP**, not at replacing or adjusting it.

The two aggregates are based on environmental accounting for ecosystems. These ecosystem accounts can be established in both physical and monetary terms. **Physical accounts of the natural capital**, stocks, material/energy flows, resilience, services can be benchmarked according to stated policy objectives. This is possible for example in reference to European environmental regulations and directives and international conventions. IDP and FCGS can be derived by applying monetary valuations to the results of physical ecosystem accounts.

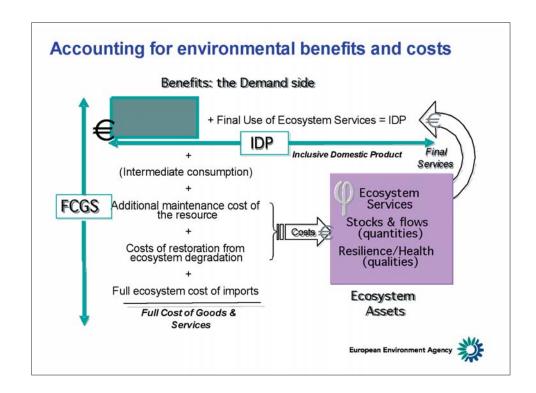
#### **Implementation**

Environmental accounting is a joint activity between Eurostat, EEA, OECD, the UN and many EU Member States in the context of the European Strategy on Environmental Accounting and the revision of the UN-SEEA2003. Subjects covered at EEA include land, ecosystems, water, and production and consumption (based on material flows accounts and NAMEA). Physical accounts for land and elements of NAMEA have already been published. First water accounts will follow in the next year.

Ecosystem accounts will be delivered through to 2012 under the European Ecosystem Assessment

of Europe – Eureca! which will assess what the ecosystem accounts mean for policy, today and in the future. Intermediate accounts will be published for wetlands and forests ecosystem services and biofuels by 2010.

The Shared European Environmental Information System (SEIS) is the umbrella under which physical accounts are being developed. SEIS provides the basis for a harmonised geographical data infrastructure for producing a range of indicators such as: Landscape Ecological Potential, Ecological Footprint, HANPP and other indicators derived from Material Flow Accounts.





# Branislav Mikulic

European Foundation for the Improvement of Living and Working Conditions, Dublin

## Quality of Life in Europe

I would draw your attention to the quality of life, which has already been mentioned in a number of previous discussions, and to the concept of quality of life – and measuring it – which has been developed and applied by the European Foundation in Dublin.

GDP is a single indicator of economic output. In Dublin, when we were thinking about measuring and developing a concept of quality of life, we couldn't use it for our analyses as a key indicator or key analytical variable. We had to develop a concept of quality of life and to operationalise this concept in order to measure it.

What is the concept of quality of life for the European Foundation? It has three major features:

- 1. One of the features is that it uses microperspective. This means that it focuses on individual conditions and circumstances but also looks at their perceptions, attitudes, expectations, goals and objectives.
- 2. Another important characteristic of the concept of quality of life is that quality of life focuses on a number of measurements of people's lives. So it goes beyond the concept of income and living conditions. It broadens it. What was also very important for us in the beginning was that we wanted not only to look at and to describe the number of measurements of people's lives but also to analyze inter-relationships between different measurements of the quality of life.
- 3. Finally, the third feature of our concept of quality of life is that we used both objective and subjective indicators of quality of life. So we went beyond income, we went beyond assets, and we looked at the subjective indicators: indicators of people's perceptions, of people's attitudes, but also of people's satisfaction or their happiness.

Further, we tried to measure a concept and we developed and designed a survey which is a quality of life survey, which focused on all these need concepts. It focuses on individual situations. It uses a multi-dimensional approach. It measures a number of dimensions. It uses subjective and objective indicators.

People who are thinking of going beyond GDP, or complementing GDP, or making some composite indicators can use our survey and our database. Why? Because it is unique, not as to the sample size or some other characteristic. It is unique because it covers all of the 27 European Union Member States plus three candidate countries. We have the possibility to examine a number of non-monetary indicators, to compare them between countries, and to examine how they behave in these comparisons, but also to compare them over time. Our survey already has two rounds. We can compare the period of 2007 with the situation in 2003. These are advantages for all those who think about going beyond GDP or complementing GDP or adjusting GDP by some other indicators. This is what the European Foundation offers and what we will develop in the future.

Of course we will do our own research and we will inform the scientific community and policy-makers about all findings. Not only about these indicators, but also about constructive indicators, aggregate indicators, which we are going to develop in the coming months or year. In the second round of the quality of life survey, we extended it to cover a number of dimensions of the quality of life, asking some additional questions in order to gauge the weights of some of the subjective indicators. We hope that we will be able to produce one composite indicator of subjective well-being. It might be one of the additions to GDP.

19 \$ 20 November 2007



European Foundation for the Improvement of Living and Working Conditions

#### **QUALITY OF LIFE IN EUROPE**

Concept, measurement and findings from the first pan-European survey on quality of life (EQLS)

Dr. Branislav Mikulic, European Foundation - Dublin

Brusslels 19-11-2007

1/00/09



European Foundation for the Improvement of Living and Working Conditions

#### Foundation's concept of quality of life: main features

QoL and QoW are high on the UE social policy agenda

Departure point is policy objective of enabling people, as far as possible, to achieve their own goals in the society they are living in

Features of the concept

- Quality of life refers to individuals' life situation (micro perspective)
- 2. Quality of life is a multi-dimensional concept
- Quality of life is measured by objective as well as subjective indicators
- European Quality of Life Survey (EQLS): a unique source of data for monitoring quality of life in an international perspective



European Foundation for the Improvement of Living and Working Conditions

### **Domains of Quality of Life**

#### (Core domains)

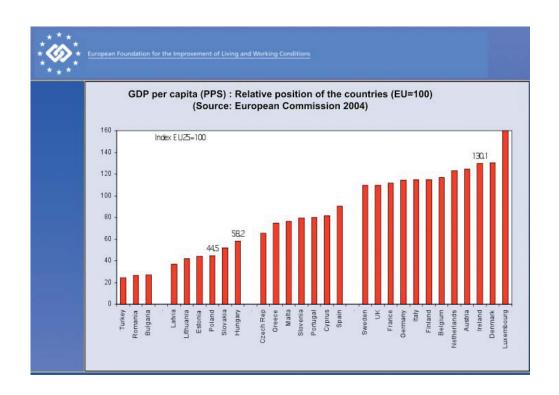
- 1. Economic resources
- 2. Health and health care
- 3. Employment and working conditions
- 4. Families and households
- 5. Work-life balance
- 6. Community life and social participation
- 7. Knowledge, education and training
- 8. Subjective well being (happiness, life satisfaction, domain satisfaction)
- 9. Housing and local environment
- 10. Public safety and crime
- 11. Recreation and leisure activities
- 12. Culture and identity, political resources and human rights, including the European dimension



European Foundation for the Improvement of Living and Working Conditions

#### Foundation's concept of quality of life: main features

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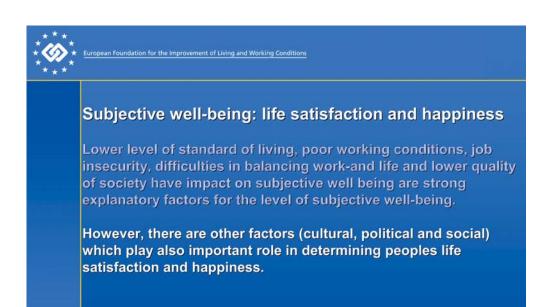


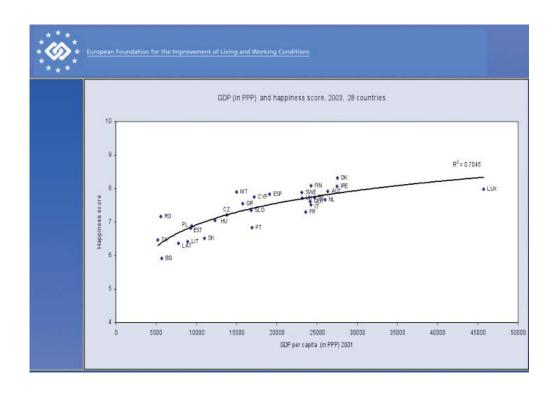
#### Subjective well-being: life satisfaction and happiness

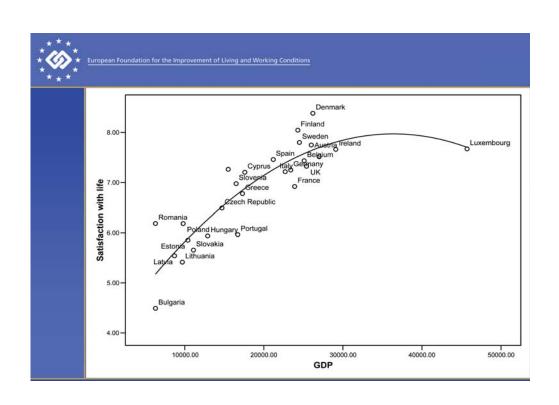
Economic resources and standard of living have strong impact on subjective well being.

However, there are other factors such as cultural, political and social ones pay also important role in determining peoples life satisfaction and happiness.











#### Future EF work on well-being indicators

- Subjective QOL index (composite index based on the domains' satisfaction figures)
- Weights for the index components (importance of domains)
- Sensitivity analysis of the QOL index (the index vs. income and nonmonetary indicators)
- Measuring capabilities and opportunities for achieving personal goals and objectives (developing additional subjective indicators plus objective indicators)

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# Laurs Norlund

Director, European Commission, Eurostat, National and European Accounts



I want to start to say that I'm extremely optimistic. On the one hand, we are in a situation where the complexity of modern society is clearly more pronounced than ever before. We have decision-makers and politicians who are presented with more and more dilemmas and more and more sophisticated trade-offs that they have to have a view on.

Why am I optimistic when that is the case? Because I think that at the same time we have never had access, never ever in the history of our species, to so much timely, relevant, well-developed, high quality information as we have today. In fact, I do believe that to a large extent, a lot of this information is being presented in a very clear and understandable way to decision-makers. I think the post-war era has been absolutely astounding in that respect.

What are the elements of this information system? We have a wealth of information coming from the primary domains of official statistics and other information providers. It is information which is available about almost any conceivable variable that you can imagine about our society – at all levels of society, at regional level, at national level, and of course we are also interested in the super-national level, the EU level and the global level.

The variety of statistics is extreme. It's extremely well developed. It is methodically mature in many domains. It allows for a large variety of both intertemporal and interspatial analyses and comparisons. There is no reason at all to believe that the availability and quality of primary statistics should not develop further in the future in line with technological development, which has to a large extent been a carrier of the development of statistical measurement. This assumes that we continue to accept that we, as a society, need to invest also in this kind of infrastructure which is the provision of information. That's the first point.

The second point is based largely on these primary statistics, but also on a number of other information sets. We now have at our disposal an increasing number of valuable sets of relevant indicator sets like the EU sustainable development indicator set, and other indicator sets. Many here in this – room have their own indicator set, but there are many – I would almost say – competing indicator sets.

The added value of these sets compared to primary statistics is that they present indicators in a logical analytical framework. The one I know best is of course the EU sustainable development indicator set. They are intuitively understandable, which makes them valuable for policy-making and for communication purposes. They provide very valuable insights into how our societies work and therefore hopefully allow for better decisions. There is one way into the - future with these sets - in which I hope we will invest more in the coming years - and that is to build up our understanding of the inter-linkages between different indicators in the indicator sets. Because these are often very complex linkages, our understanding of them is not as good as it should be. It is also, I admit, methodologically very complex but we should invest more.

Thirdly, and now we come in a way, to the title of the conference. We have something that I work on, a very advanced system available for a variety of types of economic analysis based on the national accounts system. It's not only one of the balancing items, the GDP. It is a long range of variables and balancing items in different sectors of the system at different levels of aggregation. They are used for a variety of types of economic analysis. It is certainly not a perfect system and that is clear when you look at the system and see where the gaps are. But it is a system that is under development and where the methodology is being improved to fill in some of the gaps. It is obviously not a well-being measurement system, but it is a system which provides a very rigorous framework to conduct analysis in a variety of situations.

The fourth point then is closely linked to the national accounts and is what Jacqueline McGlade spent some time on. It is the development of other systems or integrated systems which would also use the accounting framework but would allow us to analyse a number of other phenomena in

society, like the pressures on use of scarce physical materials or in principle any other kind of social phenomena. The advantage is – because you use the very strict rules of the accounting framework - that you are able to analyse these phenomena within a rule-based system. This is of course not something new. The only regret we have is that we are not very advanced in this system. Look at one of the fathers of modern national accounts, Richard Stone. He made a very good acceptance speech for the Nobel Prize in 1989 – that speech was called the 'Accounts of Society', it was not called Economic Accounts, or National Accounts, it was called the 'Accounts of Society'. Towards the end of the speech, which reflected very much of course the development of the science at that point, he made it very clear that for him, the accounts of society consist of economic accounts, environmental accounts and social accounts. This kind of analysis, which cannot stand alone but has to be a complement to the analysis of other direct observable phenomena, is extremely useful. We should invest a lot in them. I am very happy that the Agency, Eurostat, the OECD and others are heavily involved in that work.

I have two small warnings, if you allow, Chairman. I cannot just agree with everyone on everything.

If we have well working complex analytical systems, we should be very wary of trying to amend them by introducing elements into them which would make them less a reflection of observable statistical reality and more the results of imputations of weakly based assumptions of thinly argued conventions. It is very important that we don't throw the baby out with the bathwater. Therefore we should work on accepting parallel approaches and be very careful when we start changing the fundamentals of some of these analytical systems. That's my first challenge.

The second point is, it would be a mistake if we tried to pretend that we could reduce the information we provide to policy-makers as a basis for serious policy decisions to very simple indicators. I don't think that's possible. It would do policy-makers a disservice. The reality is that life is complicated. The reality is that we need an extremely complex set of connections and we need very good people to explain, interpret and understand these complex connections. So we should not dream of having one indicator to solve the dilemmas or the trade-offs that the policy-maker has to be faced with anyway.

#### OPENING AND DISCUSSION OF WORKSHOP

#### Anders Wijkman

Member of the European Parliament, Chairman of the Workshop Session 2

As you can see from the programme of this first session, – we will lead off with Mr Marco Mira d'Ercole who is a senior economist, Head of the Social Policy Division and responsible for the development of social indicators at OECD.

After that we will have my colleague, Oliver Zwirner from the European Commission's DG Environment who has been working 120% of his time on this conference since we met in January.

Then we will have a discussion with panellists:

- Jacqueline McGlade whom most of you know, who is the Executive Director of the European Environment Agency in Copenhagen. She is a very distinguished professor and an outstanding personality when it comes to a system's perspective on sustainability;
- We also have Laurs Norlund from Eurostat who is Director and responsible for National Accounts on my right here;
- And last but not least Branislav Mikulic from the European Foundation for the Improvement of Living and Working Conditions.

Hopefully, they will be stimulating as broad a discussion as possible of the challenges ahead. So without further ado, I give the floor to Mr Mira d'Ercole. Once again, very, very welcome!

For the speech of Marco Mira d'Ercole, see page 142. For the speech of Oliver Zwirner, see page 148. For the speech of Jacqueline McGlade, see page 149.

#### Anders Wijkman

Chairman

Thank you for some very good points. May I ask a question? When I prepared myself for this session, it struck me that all the countries in the world that are towards the top of the ladder in terms of the human development index, are also the ones with the largest ecological footprint. We can debate whether ecological footprint is the most perfect measurement, but it's a good way of describing how much, on the planet, we need to source materials and to manage our waste materials. What is your comment on that, in particular, as a European and as head of the European Environment Agency?

#### Jacqueline McGlade

**European Environment Agency** 

I think we need to separate this into two discussions:

- an ethical discussion on, the redistribution of wealth across the world and,
- the wasteful use of resources at global and regional level.

What I'm suggesting is that we haven't got nearly close enough to that second category to understand the wasteful use of resources. The same time we need to be aware of the larger picture of how we are moving resources around the world.

Now I'm not saying that globalization is either good or bad, but what I am saying is that perhaps we could use our resources better. Take water, for example - whatever concept you want to use. How many litres of water does it takes to make a car? Maybe people should know that. But on the other hand, I think it is up to agencies like ours and others around the world to show for ourselves just how policies can distort and disrupt the use of resources in an inefficient way.

For the speech of Branislav Mikulic, see page 151.

#### Anders Wijkman

Chairman

Laurs Norlund, before I give you the floor, I would like to say that this is really the first time that I experience this sort of dual approach to looking both at objective and subjective indicators. That was not really what we discussed 12 years ago here. Representing Eurostat, how is your response to that particular sort of dimension?

#### Laurs Norlund

European Commission, Eurostat

The immediate reply is probably to find a way out for official statistics, because official statistics are probably not the best ones to deal with subjective measurement indicators. At least, we don't have the same tradition of doing it as other people have, which is why one of the first remarks I wanted to make was to link up with what Marco Mira d'Ercole said in the beginning that one of the keys to having a useful outcome from this discussion is to accept that there is a variety of approaches and there is a variety of actors and they have different strengths and weaknesses.

For the speech of Laurs Norlund, see page 158.

#### Anders Wijkman

Chairman

Well, we've had five very interesting perspectives presented. We're now going to break up into three groups, but I would like to pose three questions to the five of you. Given what you've said, first of all, what I sense is that at least from the Eurostat point of view and also OECD's point of view, you feel that we already have high quality indicators in many fields.

The question is then, when we look at resource constraints:

- Why don't policy-makers act in the right way?
   Look at fisheries in Europe. We've had very good evidence from scientists for I don't know how long, and yet it still doesn't work.
- GDP, with I do understand that we shouldn't throw the baby out with the bathwater, but what can we do, or what can you do, repre-

senting these agencies that provide us with data, to make sure that most policy-makers and society in general don't continue to focus on what they've always focused on? Maybe it's a question of maturity? Maybe it takes time, but we don't have much time. How could you be more effective in conveying all the various data in a more coherent way, where the interlinkages are clear, etc.?

- And last, but not least, we heard that we need to understand better what's happening at household level. In your remarks, Mr Mira d'Ercole, you said that one challenge was to understand better how people's incomes are being complemented by services from the public sector, and that we have so far limited information about that. It would be very interesting to hear you elaborate a bit on that.

I realize these are not three easy questions, but maybe if you just try to give a spontaneous reaction.

#### Jacqueline McGlade

European Environment Agency

I think on the first one, it's very clear that the interlinkages have been missing. If you take out one piece of the system, it has consequences for the others: unintended consequences. The statistics were never set up to establish unintended consequences. That's the real problem. What inconsistent accounting does is that it begins to tell you what the unintended consequences are of one policy area on another. So, if you do something in transport, you will affect air quality. You do something here, you will affect land accounts, etc. So e need to look not just at double accounting but also at unintended accounting.

Just on fish, I know for a fact that when Europe negotiated its bilateral fishing relationships with Morocco, Mauritania, and in particular with Senegal, that the Senegalese sold the fish and then the Mauritanians, and then the Moroccans. And it was definitely the same fish. So they managed to sell the fish three times and we were stupid enough to buy it three times. It works in both directions.

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#### OPENING AND DISCUSSION OF WORKSHOP

And just on the very last bit. Public services and the work done in the UK is actually very interesting and it would be good to see that accountability and effectiveness in delivery. But for me it is a matter of making these data more spatially disaggregated. The key is: get as much spatial information as possible because it's about the local environment; 'in your neighbourhood' should be the byword of how we do resource accounting.

#### Marco Mira d'Ercole

**OECD** 

We are all in the business of policy-making, not just producing indicators but trying to influence the policy process in some way. We should not be too naive in thinking that developing better measures will be sufficient by itself to change the policy process.

A big challenge that we will all be facing in the future is not just to identify and measure the items that matter most from the perspective of wellbeing, but to articulate a sensible discourse about how different policy levers can influence them. We are still very far away from having achieved that goal. In a sense, the social indicator movements of the '70s had this ambition. Just having better measures of incarceration, poverty, and family breakdown is not enough to change the policy discourse. You need to be able to say which specific policies are capable of changing these outcomes, and to articulate a vision about the costs of policy actions and inactions. That is why continuous dialoque with policy users will be very important for progress in the measurement agenda.

On household measures, some steps have already been taken to incorporate the value of the services provided by the public sector to households individually into aggregate income statistics for the household sector. For example, OECD national accounts include measurements of actual consumption and actual disposable income, which retain the SNA conventions but provide a better proxy of well-being. The big challenge that lies ahead is to go beyond a perspective which is just focused on production costs and most often on labour costs, apply it to individual cases: to say how much the health and educational services that are provided in each country are benefiting people that are at different points in the income distribution. We have done some exercises in the OECD. The challenge now is to build up statistical information at national level that allows to regularly monitor this information.

The last point that I wanted to make refers to your question: 'How can we be more effective in the future?' There are no easy answers. Of course these types of event occur regularly at ten-year' intervals. Some of you will remember where we stood ten years ago and where we are now. A positive contribution to your question would be that we should collectively articulate a vision of where we want to be in ten years' time. Many policies today involve setting objectives and then assessing performance in terms of how far we are from the target. Each of the partners in this conference should articulate a vision of where he wants to be in ten years' time. For example, to develop accounts for the household sector that better incorporate the assessment of leisure time or public services. Other agencies may say they want to develop accounts for 15 European countries about eco-systems services. Let's articulate a vision and let's be ready in the future to assess the steps we have taken to get there.

#### Anders Wijkman

Chairman

Maybe that's a question to ponder on in the working groups. So, Mr Norlund, what do you say? You sounded so optimistic.

#### Laurs Norlund

European Commission, Eurostat

I'm afraid the reply is that there is not much we can do in terms of taking the right political decisions. That's not our job. But it's clear, and that is what I tried to say and what has generally been said here, that what our aim and objective should be is to present reality in as clear a way as possible the choices clear.

I'm sure that even if we understood perfectly how the world functions — considering every detail, every household, every individual, — there would still be wrong political decisions taken even then. But that is another discussion in my view. What we should do, and that's where I'm optimistic, I think we can deliver on that. We are delivering to a large extent. There are a number of issues where we can do much more and that is of course what is expected of us.

I do have to say that if you look at the political debate globally, and some of the key issues we have today, there is no doubt in the politician's mind about the linkage on some big issues. We all know

that economic activity exacts a price in terms of the strains on the environment. Our objectives should not be to do it differently but to do it better. That's what we are trying to do now.

#### Branislav Mikulic

European Foundation for the Improvement of Living and Working Conditions

As to development of future indicators which can better measure progress than GDP, the role of European statistical systems and the United Nations statistical systems is very important. Indicators developed within national statistical institutes or some research institute will never be widely accepted and promoted in the same way as the indicators which have been produced by the OECD, Eurostat, United Nations statistical office. They play a particularly important role in developing and disseminating those indicators.

#### Oliver Zwirner

European Commission, DG Environment

I will focus only on one aspect and that's timeliness and time lag.

This is a problem we have at least in environmental statistics. They are normally two years old while GDP data are at least quarterly and we can read about the newest 'nowcast' and forecast of GDP nearly every week. The Dow Jones is available daily, hourly, every minute. We have a huge time lag on the slow-burning issues although we need very urgent action and we probably need indicators that show us whether we are reversing trends; whether we are indeed changing, our energy system to a low carbon energy system, for example. Maybe we need information on planned rather then existing power plants to indicate whether we are actually changing in the right direction.

For example, the European Environment Agency has near real time information on ground level ozone. This is meaningful to households because then you can decide whether to go jogging or not. It's like a weather forecast every day. It is meaningful to people. Maybe we can manage to translate pollution data into meaningful information for renting flats or buying property. Make it relevant for daily action. The information needs to be more timely and closer to action by businesses, households, and politicians.

#### Anders Wijkman

Chairman

Let me add one comment after listening to you all, in particular the comment about the interlinkages. I somehow feel that we, the political system, probably have to rethink the way we are organized. We are vertically organized, or sectorised. It seems to be almost impossible to deal with things that cross sectors or which are more systemic in nature.

The temporary committee on climate change that we have just established is an attempt to try to look at the horizontal consequences. We'll see whether we come up with a good report. If that happens maybe we can start dealing with some of the horizontal issues in a better way and not see sustainability only as an environmental issue that is discussed once or twice every year. Maybe that is a recommendation that we could come up with.



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