

ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC

Committee on Statistics

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Bangkok

Measuring the progress of societies: the Australian experience

Corrigendum

The dates of the session *should read* as above.

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15-17 December 2008
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Measuring the progress of societies: the Australian experience¹

Introduction

1. ABS published the first edition of *Measuring Australia's Progress* in 2002. This product was subsequently renamed *Measures of Australia's Progress* (MAP), to highlight the point that while the ABS was providing statistical measures of progress, it was up to individual Australians to assess whether or not life was getting better in Australia based on the overall story told by those measures. The ABS has now reported on measures of Australia's progress for seven years.

Lessons learned

2. The MAP experience suggests that:
- wide-spread consultation on the framework used and the selection of indicators is crucial;
 - the number of indicators in each broad domain, social, economic and environmental, matters. While the ABS based decisions about how many indicators to present on statistical grounds, some people saw the number of indicators in each as reflecting some judgement from the ABS about the relative importance of the domains.

¹ This document was contributed by Ms. Linda Fardell, Mr. Andrew Webster and Mr. Brian Pink, Australian Bureau of Statistics (ABS). It has been reproduced without formal editing. The views expressed are those of the authors and do not necessarily reflect the views of the United Nations.

Challenges

3. Seven years on, there are a number of challenges in providing measures of Australia's progress, including:

- maintaining an ongoing role for MAP;
- finding the right indicators for some key dimensions of progress in the face of either lack of data or lack of agreement about a suitable indicator;
- developing indicators at finer geographic levels and for subpopulations;
- the role of subjective indicators.

MAP in the international context

4. Internationally, there is work underway to try to reach consensus on a core set of statistics for measuring sustainable development. Our focus in developing MAP was progress but we recognised that measurement of progress is underpinned by four types of capital (economic, social, human and natural). As part of the ongoing development of MAP, we intend to articulate its capital-based framework more explicitly.

The way ahead for MAP

5. We released major editions of MAP in 2002, 2004 and 2006 which attracted wide-spread interest. We have also produced annual summary reports for MAP, with the latest update in August 2008. These annual publications have not attracted the same level of interest as the major reports. We are currently considering ways to increase the profile of MAP, including enhancing the annual product, making use of web technology to increase access and use and working with others in government and the community to ensure MAP's continued relevance.

The impetus for MAP

6. For 100 years the ABS has been a cornerstone of democracy in Australia through its role of reporting on the social, economic and, more recently, environmental circumstances of the nation. The ABS is responsible for a wide range of statistics covering, for example, population, labour force, family and community, health and disability, education, labour market, income and expenditure, housing, crime, culture and recreation, business activity, innovation, water resources, energy use and household environmental actions.

7. In 2000, the ABS embarked on a project to distil from this vast array of statistics some key indicators to help answer a question of growing public interest: *Is life in Australia getting better?* The questions we considered included:

- Was GDP a sufficient answer to the question or did we need some other approach?
- What concept should we measure? Progress, wellbeing, sustainability or something else?
- How was economic growth associated with improvements in, say, health and education?
- What was the state of the environment?

8. *Measuring Australia's Progress*, developed after extensive consultation with Australian stakeholders, was the outcome of this project. The first report was released in April 2002. Subsequent major reports were released in 2004 and 2006, and since then a summary set of indicators has been updated each year on the ABS web site. The most recent updates were in August this year.

9. The first issue of MAP was well received and attracted intensive media interest. It sparked public debate, not only about national progress, but also about the role of the national statistical office in measuring progress. There were some who argued that the role of the ABS was to present statistics without evaluation. They felt that judgement about progress or regress should be left to the Australian community.

10. As the national statistical office, we have always seen our role as providing statistics to inform decision making. We are not the decision makers, but believe that others will have the capacity to make better decisions if they are provided with high quality statistical information. Accordingly, to make our position clear, we decided to rename the report *Measures of Australia's progress*, highlighting the point that we were providing a set of statistical measures about progress and that it was up to the Australian community to judge whether those measures in totality indicated progress or otherwise.

Setting up and managing the MAP project

11. The success of the MAP project is due in large part to its thorough development between 2000 and 2002 and subsequent review, especially the major evaluation of the first report. In many ways, the time was opportune, both in Australian society and within the ABS, for MAP. In particular,

the project had guidance from the then Australian Statistician Dennis Trewin and was well managed by the project leader Jon Hall, both of whom have a continuing commitment to this area of national statistics.

12. The development of MAP was guided both by expertise within the ABS and input from government and the community. ABS expertise included our well established statistical activity in economic statistics, our work with social surveys and social indicators, and an emerging program of environmental statistics. At the same time as we were developing MAP, we were also developing a wellbeing framework to underpin our activity in the field of social statistics. The wellbeing framework built on work undertaken by the OECD in the early 1970s to systematise social statistics and social indicators. The ABS publication *Measuring Wellbeing: Frameworks for Australian Social Statistics* presents the framework in detail. The wellbeing framework was used by the UN expert group on social statistics at their meeting in New York in September 2008 to foster framework development internationally. Associated with the wellbeing framework, the ABS releases an annual publication called *Australian Social Trends*, which since 1994 has reported on current and emerging social issues. This report is structured to cover the broad spectrum of areas of social concern and for each area includes a set of statistical indicators.

13. As part of the development of MAP, we sought input from government and the academic community. We undertook an extensive program of structured consultation across Australia, asking individuals and agencies for their initial input and then a response to our emerging framework and indicators. Reflecting widespread enthusiasm for the project, we convened an expert group of leading government bureaucrats and academics in fields such as social research, economics and the environment to guide the project. After the first report was released, a smaller group of experts evaluated the project, giving us ideas about how to refine the MAP model.

Approaches to measuring progress

14. We considered three options for measuring progress:

- (a) First, the 'one number' approach that combines information about progress across a number of fronts (such as health, wealth and the environment) into a single composite indicator. At the time we developed MAP, there were already a number of composite measures, such as the Human Development Index and the Genuine Progress Indicator. While we recognised that the idea of one number to sum up progress was very appealing, we decided not to adopt this approach for a number of reasons, including:

- a lack of consensus about this approach to measuring progress;
 - the difficulties of combining components which have different units of measurement e.g. life expectancy (years), income (dollars), air quality (particles per volume). Any composite indicator is necessarily based on some judgement about the relative weights of the components.
- (b) Second, we could measure progress using a set of integrated accounts that present social, economic and environmental data in one unified system of accounts, measured in various units. While this would potentially be a powerful tool for analysing progress, it would result in a complex set of outputs and we did not have sufficient data inputs at the time to produce a set of integrated accounts;
- (c) The third approach considered, and the path adopted by the ABS, was to measure progress using a suite of indicators that set out key aspects of progress side by side and discuss the links between them, leaving readers to make their own evaluations of whether the indicators together imply that Australia is progressing and at what rate.

The MAP framework and indicators

15. We structured MAP using three broad domains of progress: social, economic and environmental. Over time we separated the social domain into two components: individuals and living together.

16. Within this broad framework we chose 14 dimensions that were fundamental to the quality of life in Australia and for each of these we sought a headline indicator that would summarise progress. The dimensions incorporated the basic areas of social concern articulated in the wellbeing framework, together with agreed measures of economic progress and environmental quality. Some dimensions, such as health and education, national income and wealth, greenhouse gas emissions and biodiversity, would probably be included in progress measures by many nations. Others, such as the extent of dryland salinity, were more focussed on the Australian situation. Ongoing work is needed to continue to ensure that MAP adequately reflects the vision of what constitutes progress in Australia.

The framework used in Measures of Australia's Progress

<i>Domain</i>	<i>Headline dimensions</i>	<i>Examples of indicators (headline indicators and other indicators) used in MAP</i>	
Individuals	Health	<ul style="list-style-type: none"> • life expectancy at birth 	
	Education and training	<ul style="list-style-type: none"> • infant mortality rate 	
	Work	<ul style="list-style-type: none"> • burden of disease • people aged 25–64 with a non-school qualification • year 7/8 to year 12 apparent retention rate • human capital stock • unemployment rate, labour force underutilisation rate • employment to population ratios 	
Living together	Family, community and social cohesion	<ul style="list-style-type: none"> • family type • voluntary work 	
	Crime	<ul style="list-style-type: none"> • victims of personal and household crimes 	
	Democracy, governance and citizenship	<ul style="list-style-type: none"> • citizenship rates • proportion of Federal parliamentarians who are women 	
The economy and economic resources	National income	<ul style="list-style-type: none"> • real net national disposable income per capita 	
	Economic hardship	<ul style="list-style-type: none"> • average real equivalised weekly disposable income - low income households 	
	National wealth	<ul style="list-style-type: none"> • real national net worth per capita 	
	Housing	<ul style="list-style-type: none"> • households in dwellings requiring an extra bedroom 	
	Productivity	<ul style="list-style-type: none"> • multifactor productivity 	
The environment	The natural landscape	<ul style="list-style-type: none"> • threatened birds and mammals 	
	The air and atmosphere	<ul style="list-style-type: none"> • annual area of land cleared 	
	Oceans and estuaries		<ul style="list-style-type: none"> • salinity • level of development of water management areas • fine particle concentrations, days health standards exceeded • net greenhouse gas emissions • estuarine condition index

Criteria for selecting indicators

17. Some of the criteria we used for the MAP project are commonly used for selecting any good statistical indicator, availability of timely data in a time-series being one example. Other criteria, such as the requirement that the indicator could be unambiguously associated with progress, were designed especially for MAP. We felt that the headline indicators needed to:

- be relevant to the particular dimension of progress;
- where possible, focus on outcomes for the dimension of progress (rather than on, say, the inputs or processes used to produce outcomes);
- show an unambiguous 'good' direction of movement (signalling progress) and 'bad' direction (signalling regress) - at least when the indicator is considered alone, with all other dimensions of progress kept equal;
- be supported by timely data of good quality;
- be available as a time series;
- be sensitive to changes in the underlying phenomena captured by the dimension of progress;
- be summary in nature;
- preferably be capable of disaggregation by, say, geography or population group; and
- be easy to understand.

18. The headline indicators selected were outcome measures, such as life expectancy or educational attainment, rather than inputs such as the prevalence of health risk behaviours or government spending on education. However, we could not find suitable headline indicators for every dimension and to date there remain gaps in our reporting. This is discussed briefly on page 6.

19. One lesson learned after the release of the first MAP publication was that the number of indicators in each broad domain, social, economic and environmental, mattered. It was our aim to present the minimum number of indicators to adequately report on progress. For example, we initially thought that the economic domain could be adequately covered by national net income (rather than GDP) and national net worth. Some commentators, however, who saw a greater number of indicators in the social and environmental domains, assumed that we had given less priority to the economy. While this was never our intention, we subsequently added more economic indicators, including a measure of income distribution or economic hardship and one of productivity, so that the number of dimensions/indicators was more evenly spread across the three domains. We also used the commentary in MAP to emphasise that no inference should be drawn about an ABS view of the relative importance of the different aspects of Australian life from the number of aspects discussed under the various headings.

20. While we consider the three domains separately to provide a way to organise the indicators presented in MAP, we recognise that in reality the environment, economy and society are interlinked. The three domains comprise one system. Housing is an area of social concern because of the importance of adequate shelter and the associations among housing, health and other aspects of socioeconomic wellbeing. Nevertheless, we have included housing within the set of economic indicators because of its importance within the economy, a judgement that is being reinforced by the current economic crisis. Likewise, the level of greenhouse gas emissions is related to economic activity, education levels indicate human capital available for production, and crime affects economic as well as social wellbeing.

MAP and the international context

21. There has been ongoing international interest in measuring progress in recent years. Other countries have produced sets of indicators on either progress (e.g. the Central Statistics Office in Ireland) or sustainability (e.g. New Zealand's 2002 report on *Monitoring Progress towards a Sustainable New Zealand*, which is currently being updated).

22. The OECD is convening a series of World Forums as part of its Global Project to measure the progress of societies and the ABS has been actively involved in this process from the outset in 2004. The second world forum was held in Istanbul in 2007 and this meeting provided impetus to expand the role of the OECD in stimulating and coordinating the development of progress indicators around the world. The OECD is currently considering conducting a course in Australia during 2009 on why – and how – to measure progress, which the ABS is likely to host. In addition, the joint UNECE/OECD/Eurostat Working Group on Statistics for Sustainable Development recently produced its final report, with more work planned by others to build on this work.

Millennium Development Goals

23. Some of the indicators used in MAP help shed light on Australia's performance against the Millennium Development Goals, at times overlapping with the indicators identified to monitor those goals (see the table on page 9).

24. In some cases the Australian experience has led to slightly different goals and different indicators. For example, the MAP equivalent for MDG 1 is the economic hardship dimension (monitored by movements in average real equivalised household income for the low income group over time) and there are no shared indicators for MDG 2 (achieving universal primary education). While MAP includes a focus on education and training, there is less of a focus on primary education and more of a focus on retention to year 12 and qualifications such as degrees and diplomas. Other MDGs, such as goal 5 (improving maternal health) are not represented in MAP but are reported in other ABS products such as *Australian Social Trends*.

25. MAP includes indicators for certain population subgroups, for example Indigenous people. At present, data for the MDGs for Australia is presented at the national level. The inclusion of Indigenous-specific data for Australia would provide a more complete picture.

Goal 8, developing a global partnership for development, is important and while not covered in MAP (which focuses on indicators of national citizenship rather than global citizenship) the ABS is providing support in the Pacific region through AusAID funded programs to enhance corporate governance in national statistical offices. ABS also has a bilateral program to assist government statisticians in Vanuatu and Indonesia and supports other agencies in the Asia Pacific region by accepting ad hoc study visits.

Indicators in common: MAP and the Millennium Development Goals

<i>Millennium Development Goal</i>	<i>Indicators in common - MDG indicators and MAP</i>
Goal 1 - eradicate extreme poverty and hunger	<ul style="list-style-type: none"> • employment to population ratios
Goal 2 - achieve universal primary education	none
Goal 3 - promote gender equity and empower women	<ul style="list-style-type: none"> • proportion of seats held by women in national parliament
Goal 4 - reduce child mortality	<ul style="list-style-type: none"> • infant mortality rate
Goal 5 - improve maternal health	none
Goal 6 - combat HIV/malaria & other diseases	No overlapping indicators since the incidence of HIV and TB in Australia is low, and Australia is free of malaria, but the incidence of other diseases (e.g. cancer) are monitored in MAP, as are the burden of disease and avoidable deaths.
Goal 7 - ensure environmental sustainability	<ul style="list-style-type: none"> • native forest area • annual area of land cleared • CO₂ equivalent emissions (net, per capita and per \$ GDP) • level of development of water sources • threatened bird and mammal species.
Goal 8 – develop a global partnership for development	

Sustainable development

26. A related and complementary line of development both in Australia and overseas has been the development of sustainable development indicators. There is international work auspiced through Eurostat, the Conference of European Statisticians and the OECD, to reach consensus, at least among

European countries, on a set of statistics for measuring sustainable development. These indicators combine elements of the progress measures with additional ecological indicators and proposed measurement of capital stocks.

27. While there are considerable challenges in measuring capital stocks there are continuing developments in these statistics. The expansion of environmental statistics should result in more complete national measures of stocks of natural resources and their depletion. Conceptual work to measure human capital is being progressed internationally, and the work of Hui Wei from ABS is at the forefront of these developments.

28. The UNECE/OECD/Eurostat Working Group on Statistics for Sustainable Development identified commonalities both in terms of the themes in national indicator sets and specifically in terms of indicators. Based on analysis of 15 countries (for which comprehensive analysis was possible) and the EU set, there are eleven broad themes that are most commonly used as a basis for the indicator sets, most of which are covered in MAP. These eleven broad themes are:

- i. Management of natural resources;
- ii. Sustainable consumption and production;
- iii. Climate change and energy;
- iv. Transport;
- v. Social inclusion;
- vi. Education;
- vii. Research & Development, Innovation;
- viii. Socio-economic development;
- ix. Public health;
- x. Good governance;
- xi. Global dimension.

29. From the beginning of the MAP project, we have been concerned with the link between progress and sustainability. The concept we were measuring was progress, but we recognised that progress was underpinned by four capital stocks:

- natural capital – i.e., natural resources;
- economic or produced capital;
- human capital - the skills of individuals that can be used for production; and
- social capital - that is, networks together with shared norms, values and understandings which facilitate cooperation within or among groups.

As part of the ongoing development of MAP, we intend to articulate the capital-based framework of MAP more explicitly.

MAP into the future: role and challenges

30. The ABS has now reported on measures of Australia's progress for seven years. We will continue to improve our indicators through regular reporting, conceptual and data development and consultation. Since we released the first edition of MAP in 2002, developments in public priorities and thinking have included:

- Immediate economic priorities - finance, credit, employment;
- A focus on climate change and water resources;
- A focus on social inclusion policy - building community;
- Impact of national security issues.

31. In Australia, there is great interest in indicator development flowing from the 2020 Summit. In addition, there are initiatives of the Council of Australian Governments to improve the measurement of government performance as an element of evidence based policy.

Challenges

Challenge 1. Which indicators?

32. There are a number of dimensions of progress for which we do not as yet have a “headline” indicator, although we have a number of other indicators in these areas to help provide a picture of progress. While the strength of MAP was its articulation of these dimensions irrespective of data availability at the time, the ongoing reporting process draws attention to these data gaps. The dimensions currently without a headline indicator are:

- Housing;
- oceans and estuaries;
- family, community and social cohesion;
- democracy, governance and citizenship.

33. It may be surprising to see housing in this list, since we have a wealth of information about housing, including: housing tenure, stock, house prices, mortgage repayments, housing costs as a proportion of income, overcrowding. The challenge is to find the statistic that would clearly indicate progress or regress. The current measures are either ambiguous or not informative about progress. For example, while we might acknowledge the Australian dream of home ownership, change in

ownership rates may reflect a change in attitudes and choices rather than failure to realise this dream. We are currently considering whether a housing costs to income ratio for low income households (split by renters and owners with a mortgage) may be an appropriate headline indicator.

34. The issue for oceans and estuaries is that there are very few nationwide time series data suitable for assessing the progress of Australia's marine environment.

35. For the two remaining dimensions (family, community and social cohesion and democracy, governance and citizenship), the issue was with finding a single indicator that could adequately capture the variety of aspects which are important. It could be argued that for these two dimensions, it may be appropriate to have a variety of indicators rather than singling out one for headline status, since putting too much weight on one or two measures may fail to represent what is often a more complex and nuanced picture.

Challenge 2. Developing indicators at finer geographic levels and for subpopulations.

36. We can examine headline indicators at state/territory and community levels to show how progress is distributed. There is strong interest in Australia in community indicators (both in terms of indicators about the functioning of communities, and indicators presented at a finer geographic or 'community' level). In response to this interest, the ABS included state and territory level data for the headline indicators presented in MAP (where available) in spreadsheets on our web site as part of the 2008 annual MAP release.

37. The next step might be to try to provide data at finer geographic level, or to develop sets of indicators to function as progress indicators at this level (as opposed to helping users to understand the relative contribution of each state/territory to the national headline indicator). ABS already produces a range of regional information and releases it in a number of products including the National Regional Profile.

38. Outside the ABS, a number of state governments have worked closely with their communities to develop indicator frameworks that reflect the priorities and goals of their citizens in terms of building a better society.

Challenge 3. Awareness of non-materialist values and non-economic elements of wellbeing including subjective measures, e.g. life satisfaction

39. During MAP's development, there was discussion about whether the publication should include some subjective indicators, most notably a measure of happiness. In MAP, as in the wellbeing framework for social statistics, we have given primacy to objective over subjective measures of wellbeing. However, there is continuing community interest in measuring concepts such as quality of life and happiness. We addressed this in a feature article: 'Life satisfaction and measures of progress' in the 2006 edition of MAP, but in the most recent review of MAP, following the release of the 2006 edition, users again raised the need to include both objective and subjective measures.

Challenge 4. Maintaining the momentum

40. At the time we released the major MAP reports in 2002, 2004 and 2006 there was intense media interest that generated public discussion about progress in Australia. To date the annual release of updated indicators has not attracted the same level of interest or coverage. We are looking at ways of maintaining community interest in this work and ensuring that MAP is used by government as part of the evidence base for setting broad policy directions. To this end, we are investigating possibilities for enhancing the annual product, using web technology to increase access and use. We are also developing stronger partnerships with external stakeholders in government and the community to ensure the relevance of MAP.

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