

A Social Statistics System for the Millennium Development Goals?

Abstract

During the first decades after World War II, the global statistical community under the leadership of the UN Statistical Commission developed and agreed upon a comprehensive economic statistical system, but failed to agree upon a system for social statistics. SAM models, social indicators and living condition surveys are established as viable but separate traditions. The recent agreement on Millennium Development Goals and Poverty Reduction Strategies has now created a demand, a challenge and an opportunity for the global statistical community to develop, first, an integrated approach for MDG and PRS monitoring, and, second, a social statistical system. During 2004 the international organisations declared their commitment to the first of these steps. However, long-term commitment and implementation are needed as a convincing response to the Millennium Development Declaration of 2000.

Keywords: poverty reduction, social statistics, statistical system, Millennium Development Goals, impact monitoring, policy analysis

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1. Introduction

While there is theoretical and political disagreement as to whether globalisation ensures poverty reduction and development across the world, there is growing policy consensus on the promotion of the Millennium Development Goals (MDGs), encompassing the International Monetary Fund (IMF) and the World Bank, other

Note of acknowledgement. This article was inspired by my interaction with two sets of colleagues. First, colleagues in national statistical offices in developing countries who struggle to build capacity for producing high-quality social statistics in a consistent manner, responding to the needs of national policy-makers by negotiating with various donor representatives each with their own agenda. Second, colleagues in international and a few national donor agencies who strive to provide coherent and consistent social statistics for the policy-makers in their institutions. The article was motivated by the work of Michael Ward (2004) in the UN Intellectual History Project series. It was improved by the input and advice from two anonymous referees.

multilateral and bilateral donors, and civil society organisations. This policy agreement extends to a demand for monitoring and evaluation of development goals and targets by means of agreed indicators. But will the global statistical community manage to respond to the opportunities and challenges arising from the focus agreed on by policy-makers and politicians?

There are obviously some similarities with the history of how the demand for a new economic policy after World War II was followed by a system of national accounts, which served Keynesian economic policy; but there is also a major difference. Keynes' General Theory and General Equilibrium Models have no parallel in social science or social policy. The challenge is rather to agree upon a more harmonised structure of data collection, compilation, standardised sources and systematic dissemination.

The objective of this article is to contribute to an understanding of ways in which earlier demands and opportunities for a global social statistical system have or have not facilitated harmonised social statistics. This review will be followed by an attempt to show how the leading agencies in the UN system (the UN Statistical Commission, the UN Statistical Division, the UN Development Program – UNDP – and UN sector agencies), the Bretton Woods institutions (the World Bank and IMF) and others (such as the Organisation for Economic Cooperation and Development/ Development Assistance Committee – OECD/DAC) combine support for the general MDG approach with promotion of their own interests. The article shows how recent developments support a global harmonised approach and discusses some of the methodological and institutional requirements of such a system.

It should be added this article approaches social statistics from a welfare perspective. Its main focus is on social statistics addressing social status across domains and sectors, but it argues the need to follow these issues towards impact and causes, such as poverty impact, resources and available services. Within the existing system for demography and population statistics, these issues are not addressed.

2. The Successful Response to the Challenge and Demand for a System of Economic Statistics

This article aims to contribute to this central discussion by starting with a historical review showing how the global statistical community has responded to similar challenges during the last several dec-

ades. Michael Ward (2004) helps us to understand the challenge for the first decade of the 21st century by presenting a summary of how the UN Statistical Commission managed to respond to the great challenge of planning for rebuilding after World War II. In one of 14 volumes presenting UN history, he reviews how the UN Statistical Commission and the UN Statistical Office have managed (or not managed) to initiate, inspire and coordinate the development of a coherent system of international economic statistics with a focus on basic economic statistics and statistical infrastructure feeding into a system of national accounts. In Ward's presentation the British economist Richard Stone is seen as the main actor of the development that took place in the first two decades after World War II. Had a Scandinavian or continental European perspective prevailed, the economists Frisch and Tinbergen would have been the leaders on the development path, a path that started well before the war and included healthy competition between the two camps, one led by Stone and the other by Frisch/Tinbergen, with the latter two arguing for a clearer separation of financial and real flows in the economy (Bjerkholt, 2000: 255–270). But the disagreements were settled and the theoretical statistical system developed jointly with the large macroeconomic models during the first decades of UN history. The Soviet bloc developed its own Material Product System (MPS). While the Western System of National Accounts (SNA) included measures in both quantities and value, the MPS focused on volumes, but there were still similarities between the two systems and some cooperation was possible.

This economic statistical system was developed according to the needs and resources in industrialised countries. The theoretical design moved ahead of the empirical implementation. The system, which was agreed upon in the UN Statistical Commission, needed several phases of development both for the SNA and for basic economic statistics in order to ensure that the theoretical ideas could be followed through. Today it serves the industrialised countries well and while it might still be too sophisticated for a global statistical system, many developing countries have started to implement the latest version, despite some shortcomings from their perspective. The informal urban sector, where the majority of the urban population make their living, is still to be integrated in the system. It is either added on an ad hoc basis or based upon summary assumptions. This is in fact also the case for smallholder agricultural production for own consumption and small-scale sale. Despite some recent developments, the focus of the UN sector organisations – the In-

ternational Labour Organization (ILO) and the Food and Agriculture Organization (FAO) – has remained the formal and large-scale sub-sectors.

3. The Lack of Successful Development of a System of Social Statistics

The work on national accounts in an early phase included models of distribution between the various economic actors and types of intermediate and end users, including the so-called social-accounting matrixes. Several years later Stone took this approach further and presented a paper, 'Towards a System for Social and Demographic Statistics' (Stone, 1974; UN, 1975), which was in fact accepted at a meeting of the UN Statistical Commission but not pursued.

Instead, as Ward documents, the interest in English-speaking countries was along two lines. One line continued to advocate developing national accounts and macroeconomic models, with a focus on distribution by Social Account Matrixes or SAM models promoted by economists such as Graham Pyatt (1985). This approach is well designed to serve policy-makers aiming at using economic policy for redistribution across sectors and/or socio-economic groups for economic and social purposes such as better utilisation of labour or a more equitable distribution of secondary education. A second line settled for development of social indicators (HMSO, 1970) for what today is called outcome and impact. This approach is well suited to a main focus on sector policy.

Another approach was developed on the basis of the UN report 'International Definition and Measurement of Standards and Levels of Living' (UN, 1954). The later head of Statistics Sweden, Sten Johansson (1970), headed a team that in 1968 conducted a living condition survey based on these standards. This approach measured welfare in objective terms across a range of sectors and domains and aggregated domain welfare up to a general measure of levels of living. This approach is well suited to guide policy-makers in an equitable distribution of achieved welfare, but easily ends up focusing on sector policy. Issues of resource distribution remained an economic statistics task and there was no link to social statistics and measurement of levels of living.

The demands for economic versus social statistics were quite different. Just after World War II, the focus was on re-industrialisation of the developed countries and economic statistics were

needed as an instrument for optimal resource allocation. By the end of the 1960s, times had changed and the same countries started to turn their attention towards social development, but there was no common agreement on the need to replace economic development goals with social ones and there was even less agreement on a set of social development goals.

The social statistical system response – separate theoretical schools

This has very much remained the situation during the 40 years that have passed since the Stone proposal was presented, accepted, but put aside by the UN Statistical Commission. The social indicator school and the levels of living schools, already presented, have survived and served well for many purposes, but no agreement on a systematic approach has emerged. Macroeconomic models are disaggregated to allow for distributional analysis and explicit SAM models are produced in a number of countries. The International Monetary Fund (IMF), which has the international responsibility for coordination of government finance statistics, has recommended functional breakdowns such as government resources for primary schools per district from government budgets and accounts, but the majority of countries still publish budget line accounts or do no breakdowns at all. Hence in 1991 the IMF stopped publishing the detailed breakdowns (IMF, 1991, 1992).

The social indicator school continued their work, launching several initiatives over the years (Menozzi, 2003). In the 1990s a number of social and environmental sector groups worked to agree upon a set of indicators. The Siena Group¹ and others, usually named after the location of the inaugural meeting, have agreed on extensive lists of indicators. The Director of the UN Statistical Division was initially opposed to establishing the city groups. They started their work on the sidelines on a self-financing basis, but are now accepted by the UN system; broader participation is ensured and since the proposals are to be endorsed by the UN Statistical Commission, they will reflect a broader set of interests. The indicator lists reflect, however, that it is easier to include what might be useful in some cases than to agree on a priority list of what is always needed. From these extensive lists, a core Minimum National Social Data Set (MNSDS) was agreed upon by an expert UN and Siena Group

1 <http://unstats.un.org/unsd/methods/citygroup/sienna.htm> [Jan 2005].

meeting in 1996 (UN, 1996) with just 15 indicators,² but supplemented with additional lists for each sector. These indicators were designed to monitor goals and targets agreed on at the summits in the 1990s and still serve both industrialised and developing countries, but were also adapted to the indicators that were or might be available from a broad range of countries. The number of countries that have been publishing social trends has continued to increase, but the indicators are not linked, either down, to resource inputs, or up, to social goals.

Even the living conditions school continued to expand. Living condition surveys are now done regularly by many countries on their own initiative or promoted through outside push and assistance. These types of integrated surveys focusing on welfare, income³ and non-income poverty have been promoted in Europe by Eurostat (2003) and in developing countries by various agencies such as the World Bank (see, for example, Glewwe, 1990) and the Norwegian Institute for Applied International Studies (Fafo) (see, for example, Aasland and Cesnuiyte, 1997). These surveys not only provide statistical information on welfare, income and non-income poverty and other poverty dimensions but include a wide range of data and allow for causal analysis of poverty. Most publications seem to focus on the distribution of outcome and impact variables, but some of the later surveys are followed by poverty assessments from the World Bank (for example, World Bank, 1993) giving examples of how these surveys might be used to explain why people are poor, by means of *ex ante* analysis. It should be added that the step from *ex post* to *ex ante* analysis might be small. A Poverty and Social Impact Analysis (PSIA) in Malawi (World Bank, 2003) includes an *ex post* analysis of what happened to farmers who lived in the vicinity of public rural markets that were closed down, but also an *ex ante* analysis of the impact of access to roads and public rural markets to farmers in general. A series of Poverty Briefs (PMS, 2000) combined *ex post* analysis of the situation for poor versus better-off households in Malawi with elements of *ex ante* analysis of how the ministries may change resource allocation and implement other policies in order to ensure that a larger share of poor children enrol in school.

2 Several indicators are to be presented for sub-groups, hence the total number might be around 40.

3 Income poverty is measured by an income proxy, i.e. total household consumption (purchases, own production and barter) below a poverty line. Hence common labels are money-metric poverty and a-dollar-a-day poverty.

Two recent initiatives

The need for an integrated system of social statistical data has, however, not been totally forgotten, at least not among policy analysts and policy decision-makers. Two recent initiatives to create comprehensive social statistical systems have been especially innovative, one within the health sector and one related to poverty reduction.

In 1997 a new head of World Health Organization (WHO) was appointed and she embarked on a large programme to revitalise WHO, including two initiatives responding to the lack of data on outcome in the health sector. One initiative addressed the need to produce statistics that tracked resource allocation and inputs to the health sector all the way through to outputs, outcome and impact (Murray and Evans, 2003). The task was made even more demanding by including a measurement of performance of the health sector system. The ambitions turned out to be larger than time allowed for. Since the objective was to have the system up and running within the appointment period, WHO project staff took too many short cuts. The launching of this comprehensive but insufficiently solidly based health statistics system created quite a turmoil in the statistical world community and had a short life. The other initiative was to hire a team led by Jeffrey Sachs (2003) to present a plan for how to reach the health sector goals, including a rough budget estimate. Sachs and his team chose to budget for these activities through the 'island of excellence' approach (calculating costs on the basis of upgrading just the parts of the health service necessary to achieve the goals and allow the rest to remain at the old level), and then managed to present a budget for how to ensure a proper health service for given goals. Despite its shortcomings this initiative had a sounder basis and, although within a limited perspective, the report gave some *ex ante* answers to what kind of resources are needed in order to achieve certain outcomes. While neither of these initiatives were able to establish a statistical system linking *de facto* inputs to *de facto* outputs and *de facto* outcomes, they pushed the need for a health statistical system further and were instrumental in creating the health metrics system,⁴ a network promoting a standardised system in the health sector.

The Poverty Reduction Strategy (PRS) initiative promoted by the World Bank under the so-called Heavily Indebted Poor Countries (HIPC) initiative might be equally ambitious. Despite focusing

⁴ <http://www.who.int/healthmetrics/about/en/> [January 2005].

on poverty, it does cover a broad range of sectors. This initiative could allow some more time for development of an approach starting with interim versions. The ambitions are large even for the statistical area: establishing a statistical system that is able to follow resource inputs to material outputs and, further, to outcome and (poverty) impact (Klugman, 2004: 108 ff.). However, it may take some time for these ambitions to be fulfilled. A few years down the road – that is, in 2005 – the country Poverty Reduction Strategy Papers (PRSPs), presenting some monitoring information on the Web (see Klugman, 2004 for website) have split the statistical task into two separate pieces, with no link between them: a Management Information System for PRS activities, and a monitoring system for overall outcome/status of achievements and impact/poverty levels. The Pakistan PRSP (PRSP Secretariat, 2003) is, however, aiming at monitoring the complete inputs-outputs-outcomes-impact chain, and others may follow.

The PRS activities have also facilitated a renewed interest in functional reviews of government budgets. So-called Public Expenditure Reviews (PERs) supported by the World Bank (see, for example, World Bank, 2002) build both upon previous individual PERs and other initiatives such as the Women's Budget Handbooks (Budlender, 1999; Elson, 1999), and are providing information on the link between inputs through government budgets and the outputs from a functional point of view. Such exercises are said to have moved expenditures from administration to service provision activities on the ground, as in Uganda where the education sector has reallocated quite substantial resources from central administration to the local school level. By going public on the budget allocated to each school, parents are now in a position to follow up on how resources are spent.

In summary, the development of social statistics tells us that important elements have been developed over the years since the Stone proposal was accepted, but put to one side. So is it just a matter of continuing along these lines and over time a system of social statistics will be developed? Unfortunately, that is not likely. A statistical system can only develop in response to demand, and from a dialogue with users. And users only demand what they see as possible.

As outlined, the economic statistical system feeding into national accounts and macroeconomic models was developed as a result of user demand and in close collaboration with macroeconomic planners and macroeconomic academic staff. For economic rehabilita-

tion in Europe after World War II it was essential to ensure optimal resource allocation. Prosperity and general economic growth should be ensured by the proper use not only of primary resources (raw material) but first and foremost of available manpower. A proper national accounts system was a must.

A similar demand for social statistics was raised in the 1970s. Social goals, welfare, living conditions and quality of life rose to the top of the political agenda. But as discussed above, the statistical community managed to supply only partial answers, such as living condition surveys and social indicators.

A new challenge, this time for developing countries and more technical than theoretical

Around the turn of the century the challenge was raised again, this time by users, and for developing countries. Moreover, the desire was primarily to ensure technical consistency and comparability, rather than to create theoretical systems. UN summits in the late 1990s set goals for development in 'their' sectors, just as previous summits had often done. However, this time, some of them went further and included measurable goals based on outcomes for individuals, in such areas as sustainable environment, gender and social services, while food and agricultural goals remained at the aggregated level. Hence the situation in 1998/99, when the World Bank for the second time focused its annual report on poverty (World Bank, 2000), they faced a new situation.

The first time the World Development Report focused on poverty (World Bank, 1990), it was produced after strong criticism from civil society and also from within the UN system, articulated by the United Nations Children's Fund (UNICEF) (Cornia *et al.*, 1987). After publishing its 1990 report the World Bank undertook a programme of measurement and analysis of poverty in an attempt to analyse how better off versus poor people were affected by adjustment policies either by creating hardship or rather by creating new opportunities for groups in different situations. Their main focus was, however, still on the one-dimensional income poverty measure.

During the 1990s, policy-makers and statisticians in the UN, the World Bank and civil society embarked on extensive advocacy in relation to development goals and ways of monitoring and presenting these. But the antagonisms between qualitative empowerment dimensions and quantitative poverty dimensions remained, and even among stakeholders concerned with a quantitative approach, no

common set of indicators emerged. The World Bank promoted income-poverty reduction and economic growth, telling the world that economic growth would ensure poverty reduction. The UN system continued to promote the Human Development Index and related indices, telling the world that income poverty was just one among many development goals. Civil society organisations focused on participatory methods and advocated empowerment as the route to multi-dimensional poverty reduction.

OECD/DAC: new development goals

The vicious circle of defending turf was broken by an initiative undertaken by various institutions, headed by the Organisation of Economic Cooperation and Development/ Development Assistance Committee (OECD/DAC), which launched the so-called International Development Goals⁵ towards the end of the last century, invited the global policy camps, i.e. the UN system and the Bretton Woods institutions (the World Bank and the International Monetary Fund) to cooperate on promoting these goals and indicators.

That turned out to be the right initiative (one overall system) by the right institution (neither UN nor Bretton Woods) at the right time (goals and indicators were ready to be picked off the shelves). Both the UN system and the Bretton Woods institutions realised they could not afford to remain on the sidelines, even if the International Development Goals did not fully correspond to 'their' goals. Through collaborative work the IDGs were turned into the Millennium Development Goals. The environmental dimension was expanded under the concept of sustainable development and a development assistance dimension was added. In some sectors, such as health, quite detailed goals were agreed on; but because the FAO and the ILO remained reluctant participants, food security, smallholder agriculture and the informal sector were included in the goals, but not in the same comprehensive manner as other sectors.

By this stage both the UN system and the Bretton Woods institutions had realised, not only that they could not afford to remain on the sidelines, but that they should aim to be at the forefront. And that is what happened. While advocating the need to measure both income poverty and other poverty dimensions the World Bank and

5 IDGs are now replaced by MDGs and only available on a few websites, including <http://www.paris21.org/betterworld/goals.htm> [January 2005]. They are documented in many reports (e.g. Wold *et al.*, 2004b).

the IMF had long focused solely on measuring and analysing income poverty reduction and providing support to single surveys which could provide information on income, expenditures and consumption. They continued this approach but declared their support for the monitoring of all MDGs. The UN system has gone further by taking the lead in MDG monitoring. The UNDP has established itself as the main caretaker of MDG monitoring, ensuring that all countries and especially all developing countries are producing annual MDG reports. The first MDG reports were prepared by UNDP staff and international consultants; national consultants were engaged for the next round and the plan is that countries should produce their own reports. The UNDP headquarters has used its Human Development Report for global reporting on the MDGs and this was the overarching issue in the 2003 report (UNDP, 2003b).

Jeffrey Sachs was again hired to develop and present a plan for how to achieve development goals, this time the MDGs. The team followed a similar approach as for the health sector. 'A Practical Plan to Achieve the MDGs' focuses on the possibility of achieving the MDGs through an increase in aid and the granting of free trade concessions by industrialised countries. From a statistical point of view the first recommendation is equally essential:

Developing country governments should adopt development strategies bold enough to meet the Millennium Development Goal (MDG) targets for 2015. We term them MDG-based poverty reduction strategies. To meet the 2015 deadline, we recommend that all countries have these strategies in place by 2006. Where Poverty Reduction Strategy Papers (PRSPs) already exist, those should be aligned with the MDGs (Millennium Project, 2005: xiv).

Not only is the Millennium Project stressing the need for a strategy plan, but the targets and hence their indicators are seen as instrumental for development. At the same time they highlight the need to coordinate an MDG strategy with the PRSP strategy. It is difficult to envisage a stronger demand for poverty and social statistics in developing countries. Whereas the system of national accounts was built upon a theoretical model, the challenge now is rather more pragmatic. The demand is for a consistent set of measures and indicators with metadata⁶ ensuring global consistency and comparability rather than for a theoretical basis for a system of social

⁶ Metadata refers to documented statistical standards and methods.

statistics. Thus it is a challenge for the global statistical community rather than for theoretical economists and other social scientists.

4. How Does the Global Statistical Community Respond to This Challenge?

It is still too early to give a clear answer, but the important question is whether the statistical community as a whole is heading for the same destination or whether each school is going its own way.

The common goal set is a systematic social statistical system with the capacity to:

- ▼ allow for monitoring of the PRS/MDGs and the policy factors that contribute towards, or are barriers against, achieving the PRS and MDG targets;
- ▼ include metadata to ensure global consistency and comparability across countries and over time;
- ▼ allow for ex post evaluation and ex ante analysis of policy decisions working towards or against reaching these targets; and
- ▼ ensure proper dissemination of this statistical information.

Such a system needs to be designed both at the national and international level.

Luckily enough, the global development community may be ready to take the most difficult and important step; that is, the main stakeholders – the Bretton Woods institutions under the leadership of the World Bank and the UN system under the leadership of the UNDP – may be prepared jointly to support ‘MDG-based poverty reduction strategies’. It should then be easier for the global statistical community to take the same step, jointly supporting MDG-based poverty monitoring strategies and evaluation masterplans. One would expect these masterplans to include the following:

- ▼ a system of regular collection of statistical information from censuses, surveys and/or administrative and statistical registers for MDG and PRS indicators;
- ▼ a system of regular collection of statistical information for the input-output-outcome process as presented in the PRS methodology;
- ▼ statistical metadata with standards and methods for compilation, storage and presentation of this information;
- ▼ the capacity for regular ex ante and ex post analysis of policy aiming to contribute towards reaching MDG and PRS targets; and

- ▼ a system of regular dissemination of trend data for monitoring and policy analysis.

One would also expect the global statistical community to agree upon a strategy for how to work towards such a system both at global and national levels.

Masterplans

Some answers to this demand for a global statistical system have already been developed over the last years. The International Development Goals initiative by OECD/DAC, which led to the MDGs, included hosting an Expert Group meeting in Paris at the end of 1999, with the aim of trying not only to improve global cooperation on statistics, but also to build an alliance between policy-makers and statisticians. The meeting agreed to form PARIS21⁷ (PARTnership In Statistics for the 21st century), which has as its overall objective ‘to develop a culture of transparent, evidence-based policymaking and implementation which serves to improve government accountability and effectiveness in reducing poverty and achieving the MDGs’; participants further stated that ‘the essence of building national statistical capacity in developing countries lies in statisticians and policymakers combining to establish national statistical development plans (NSDPs) and including them in their development and poverty reduction policies’.⁸ It should be added that PARIS21 collaborates closely with the UN Statistical Commission and may report on agreed issues at the annual meetings of the Commission.

PARIS21 has strived for and managed to improve cooperation within the global statistical community and is well placed to support the development of national statistical development plans (NSDPs) with support from both the UN and the Bretton Woods institutions. They have now made support to the development of NSDPs a main priority for the period 2004–2006.

They had already in 2003 embarked upon the task of promoting coordinated monitoring of the MDGs and PRS targets, for example by setting up a Task Team to prepare a plan for ‘Improved Statistical Support for Monitoring Development Goals’ as a country case study for Malawi in November 2003 (PARIS21, 2003). The team

⁷ <http://www.paris21.org>[January 2005].

⁸ <http://www.paris21.org/pages/designing-nsds/presentation-events/>[January 2005].

included among others a national consultant and consultants from both the World Bank and the UNDP and addressed monitoring of both the MDGs and the Malawi PRSP.

It should, however, be added that another team drafted a Malawi PRSP Monitoring and Evaluation Masterplan in January 2004 (MEPD, 2004) without proper reference to either the above-mentioned document or the MDGs. This latter document was approved by the government at the end of 2004. With such a lack of coordination, building national ownership and coordinating international initiatives will take a long time.

Household surveys, methodological issues and coordination

In order to establish a statistical system for the MDG indicators, household surveys will have to provide much of the information. While household survey methods have improved and been made more standard during the 30 years since the controversial discussion on growth and poverty in the 1970s (Deaton, 2005), there is still quite some work needed to ensure fully representative and consistent measurement of income-poverty and other statistics. There are at least two sets of challenges. First, there is a need to standardise income-poverty measures based on household surveys and, second, there is a need to standardise household survey methods as such and ensure consistency with administrative statistics. As Deaton has pointed out, there may be a correlation between the level of economic development in a country and the discrepancy between national accounts based consumption estimates and household survey based estimates in the same country. His analysis indicates that the national accounts based estimates are upward biased and the consumption based estimates are downward biased, hence both trends are contributing to an increasing discrepancy in poverty estimates when we move from high-income countries to low-income countries.

The second challenge is obvious even at a country level. Household surveys tend to be implemented on an ad hoc basis and to lack coordination as the various donors support 'their' survey, which may hardly be adapted to the country's needs or respond to a coherent set of national metadata standards. Hence a given country may get internationally standardised health data, household budget data and poverty data, demographic data, labour force data, etc., from time to time, but no regular national data. When countries are dependent on funding from various international agencies, they will have

to adapt to different international metadata rather than national data. In rural areas, income is obviously likely to be higher, and hunger and child undernutrition to be less prevalent in the affluent period just after harvest than in the hunger months before harvest, and waterborne diseases are likely to be more prevalent in rainy seasons. Still there is no tradition for seasonal adjustment. Variations are likewise usually lower with panel data or with detailed stratification. But time series are presented with no meta-data on panels and often even without details on stratification. Administrative data usually show higher school attendance and lower crime rates than survey data. Again systematic adjustment seems to be missing. Either the international agencies should support methodological capacity building or adapt to national standards and adjust only when making international comparisons. The very first step is to support publishing statistical trends so that the problem can be exposed and meta-data agreed on at the national level.

One of the initiatives from the Roundtable discussions in Marrakech in February 2004,⁹ was the establishment of an International Household Survey Network. This has clear goals: to 'improve availability, accessibility and quality of survey data and avoid duplication, reduce costs and alleviate the burden on national statistical systems'. In its first year of work, the network 'recognised the need for international organisations engaged in household surveys to better coordinate their activities and emphasised the importance of collaboration with country partners to ensure that national statistical needs are met' and agreed upon a programme.

Whether this may lead to an integrated system remains to be seen, but the methodological option is there. The World Bank has developed a short questionnaire, Core Welfare Indicator Questionnaire (CWIQ),¹⁰ based on scanning technology, which allows survey data to be presented three months after completion of fieldwork. Some countries have conducted or are conducting trials with a view to making this a core questionnaire, which could be included in any international survey and allow for annual national presentation of MDG and PRS data (Wold *et al.*, 2004a).

9 The Second International Roundtable on Managing for Development Results, February 2004, Marrakech, Morocco. <http://www.mfdr.org/2ndRoundtable.html> [January 2005].

10 (World Bank, 1999) <http://www4.worldbank.org/afr/stats/cwiq.cfm> [January 2005].

Development of methods for input-output-outcome-impact monitoring

As mentioned, the PRSP approach promoted by the World Bank in the written recommendations includes a proper monitoring system based on the idea of monitoring inputs-outputs-outcomes impact (Klugman, 2004: 108ff.). However, the first national PRSPs split the monitoring process into two. A management information system (MIS) is proposed for monitoring dedicated poverty reduction activities and another system for monitoring the outcome and impact of special activities, particular resource allocations or other policy decisions. The monitoring system plan for Pakistan presented in 2003 is, however, designed to integrate statistics across all four steps (PRSP Secretariat, 2003).

Statistics Norway has taken the same step further and implemented what the PRSP proposal recommends, namely monitoring of the whole process (Wold *et al.*, 2004b). The approach is to follow overall resource allocation to a sector, ideally both private and public resources, but at least the government budget allocation. This is combined with monitoring of a few indicators of outputs and use, such as access to school. Since overall outputs, such as child vaccinations, are monitored, it makes sense to monitor overall outcomes such as reduction in child mortality. The impact may either be an overall indicator such as poverty, or a sector impact such as a comprehensive set of mortality rates. A national monitoring system might present both national data and disaggregated data at district level. An international monitoring system would focus on national level data.

Statistical standards and methods for compilation, storage and presentation

Several organisations support establishment of data and metadata standards and methods for compilation, storage and presentation. The Demographic and Health Surveys (DHSs) sponsored by the US Agency for International Development (USAID) have for many years stored microdata sets, which may be downloaded from the Web.¹¹ The World Bank has established a similar system for Living Standard Measurement Study (LSMS) surveys and integrated surveys¹² and another for a broader set of surveys from Africa.¹³

11 <http://www.measuredhs.com/> [January 2005].

12 <http://www.worldbank.org/lsmis/> [January 2005] .

13 <http://www4.worldbank.org/afr/poverty/databank/default.cfm> [January 2005].

These data banks include microdata with metadata and while advance approval by a national agency is required in some cases, surveys can then be freely downloaded from the Web. A number of international organisations have made aggregated data available for downloading, often by a traditional data bank approach where the user may combine variables, time periods and geographical areas. While there might be free access to core data, access to the full database would unfortunately require subscription. UNICEF and the UNDP have embarked on an initiative called ChildInfo and DevInfo¹⁴ to support development of similar databases on CD-Roms in Africa and plan to make these datasets available through the Web in 2005.

The next step is to build nationally coordinated core databases, which contain all published statistical tables and tabulation cells. Such a databank would then feed into databanks for intermediate and end-users. Hence in this area the different initiatives should be easy to coordinate from a technical point of view.

In industrialised countries, the survey approach has changed over the last decade. Traditional personal surveys have been replaced by mail surveys, telephone surveys, Web surveys, direct collection systems and direct measurement of activities. In developing countries a similar development has been slow. There are, however, both some new forms of technology (such as palm computers, Geographical Satellite Positioning (GPS) and scanning) and some new statistical methods. An important methodological development is the use of a statistical model to combine Census data and survey data to produce poverty maps with data on areas of around 1000 households – usually sub-districts (Elbers *et al.*, 2002). Similar methods are under development for models to estimate poverty based on short surveys, and initial tests show a high degree of accuracy (Mathiassen, 2005).

Capacity for ex ante and ex post analysis of MDG and PRS policy

The requirements for coordination and capacity building are different for statistics versus policy analysis. Due to the large investments needed for data collection, it is essential from a resource perspective to coordinate data collection and make data available for analysis. Donor-led data collection might jeopardise national data collection both by stretching limited resources and by making it difficult to advocate for a similar survey the next year. If a formal

14 <http://www.devinfo.org/>[January 2005].

labour force survey is conducted in one year, it is really difficult to get support for a combined survey the following year of both the formal and the informal sector labour force.

A sophisticated policy analysis funded by a large donor one year does not stop another one from being conducted in the same area the following year. Hence for policy analysis, the important issue is to build national capacity. At a certain stage a country would even be open to several competing studies.

Increasing national capacity, whether for PRS work, PSIA analysis¹⁵ or other policy analysis in general through a national policy analysis research organisation¹⁶ will be an important contribution to the development of an overall social statistical system. Dedicated demand and support for statistics from the policy analysis side is equally essential as proper statistics are for the possibility of undertaking analysis.

A system of regular dissemination of trend data and policy analysis

At the national level

Policy-makers usually have two core statistical information needs: regular statistics on an annual basis and ad hoc analysis for particular policy decisions.

Regular statistics would be the main contribution from a working social statistical system. Regular data may provide both for monitoring of resource inputs and outputs, and policy outcome and impact, and for analysis of outcome and end goals such as PRS and MDG targets.

Regular dissemination requires both regular data collection/compilation and proper storage. As mentioned, several systems such as ChildInfo and DevInfo¹⁷ are being made for dissemination of intermediate data, and there are national versions such as the Malawi Social and Economic Data Base (MASEDA),¹⁸ but these are mainly for intermediate users. Policy designers and decision-makers need

15 As promoted by the Poverty Monitoring and Analysis Unit in Uganda (Wold *et al.*, forthcoming).

16 Such as the Economic and Social Research Fund in Tanzania and the Economic Policy Research Centre in Uganda.

17 <http://www.devinfo.org/>[January 2005].

18 http://www.nso.malawi.net/data_on_line/general/MASEDA/MASEDA.html[January 2005].

regular presentation of trend data with interpretation and policy analysis. The former is clearly the responsibility of the global statistical community but has not traditionally been given enough emphasis.

Another initiative is linked to the PRS process, promoting PRS monitoring and evaluation. A few countries, such as Uganda, have done several rounds of poverty measurement and Uganda has now published data on poverty headcounts for more than a decade. As presented below, the example of Uganda shows, however, the difficulties of designing a proper monitoring system – or rather, one of the pitfalls of not designing a proper monitoring system.

Partly due to panel data, the variation from one survey to the next was kept low during the first surveys and the poverty/headcount ratio was reduced monotonically over all the surveys except the final two. In the second to last, the poverty ratio dropped to a lower level than anticipated and in the last measurement, it grew again. Nobody managed to communicate the need to include a statistical measure of inaccuracy (confidence interval) around the figure to policy-makers in the second to last round in order to show the impact of sample inaccuracy. Hence there was no opening for presenting the trends of both the estimate itself and the level of inaccuracy (the confidence interval-band) after the last measurement either. Poverty/headcount ratio may have dropped and increased again, but one should not reject the possibility that there is still a downward trend. Obviously in this case there is a need for a more solid plan for dissemination of trend data.

A third initiative is the UNDP responsibility for MDG monitoring (UNDP, 2003b). This initiative has yielded a dedicated focus on dissemination, and both the international reporting on the MDGs and the national reporting on MDG-related indicators show how this can be done (see, for example, UNDP, 2003a).¹⁹ It is reasonable to imagine that in the next few years UNDP will support the development of national monitoring of changes of the MDG indicators. But at this stage the MDG monitoring is a donor task.

Statistics Norway (Wold *et al.*, 2004b) has on a modest basis taken an initiative to present trend data for a larger set of indicators. Statistics Norway has focused on the MDGs but added input variables, being resource allocation. They promote measurement of total resources – that is, government budget, private institutions and household contributions – but real data are limited to govern-

19 <http://www.undp.org/mdg/MozambiqueMDGreport.pdf>

ment finance statistics presenting government accounts data. By focusing on a few input variables, output variables, outcome variables and poverty impact variables, it is possible to demonstrate how these variables follow or do not follow each other.

At the international level

The UN Economic and Social Council approved the detailed proposal for the MDGs, and the UN Statistical Commission – with the UN Statistical Division as secretariat – was given the role of coordinating the detailed work on definitions and standards for the MDGs,²⁰ while the UNDP has led the annual reporting (UNDP, 2003b). The various UN sector agencies have contributed within their sectors, while the World Bank has continued to take the lead for measurement of income poverty.

As secretariat the UN Statistical Division has coordinated the various UN agencies, which have done considerable work to reach agreed and measurable definitions, and established an Inter-Agency and Expert Group on MDG indicators. Most of the indicators are general ones, which will remain central indicators for the next few decades, while others are more temporary, measuring single initiatives such as the use of treated bed-nets as protection against malaria. Some indicators are designed using statistical models, such as for fertility and other demographic variables. For some reason the method for calculating a central indicator such as hunger is not presented, and the annual calculation is left to the FAO.²¹ Hunger is a central variable in periods of food shortage and may be measured from the volume information recorded in a standard household consumption and expenditure survey. By excluding national statistical offices from sharing the method, this variable might arouse less interest at the national level and in any case it is hard to understand why and how an international coordinating statistical body does not promote building capacity within national statistical offices in 'their' sector and for 'their' indicators. Only in 2004 did the need and pressure for coordination lead to some concerted activity. A subgroup on poverty and hunger, which was formed to address these

20 http://unstats.un.org/unsd/mi/mi_highlights.asp

21 Indicator 5. Proportion of population below minimum level of dietary energy consumption (FAO); Series name and code: Nutrition, undernourished as percentage of total population (FAO estimates) [code 3690] http://unstats.un.org/unsd/mi/mi_series_xrxx.asp?row_id=566

concerns, agreed in September 2004 to give priority to analysis of data on poverty and hunger and to preparing guidelines on how to collect this information through surveys.

All these UN agencies have also embarked on the collecting of MDG indicators within their existing statistical data collection and provide information on 'their' indicators for the annual publication by the UNDP. The various UN agencies have different approaches for quality control of data. Some agencies such as the UN Population Division use a model approach to be sure that any new piece of demographic information is made consistent with existing data. The trade-off for this data consistency is that UN agencies might present figures different from the official national figures. Some institutions such as UNESCO Statistical Institute work actively to give countries feedback, asking for a second look at country data in order to promote both consistency and a common national/international data set.²² But even they end up with differences. Other agencies might have the same system of quality control, but finally accept the statistical information received from the national statistical offices, such as the UN Statistical Division.²³ The World Bank and the IMF use their own staff for collection of national data, adjusting these if necessary.²⁴

Maybe with the exception of hunger, this comprehensive work allows each country to establish a monitoring system. Unfortunately, few UN agencies take upon themselves the responsibility to build capacity for MDG monitoring within their sector. Hence this task is left to statistical capacity-building programmes and a few sector support programmes with statistical components. The World Bank is the large donor in this area, but the UNDP and the IMF also contribute. On the bilateral side, the EU, Norway, Sweden and the UK are large contributors.

4. Conclusion

There can be no doubt that the global statistical community is aware of the need for an integrated social statistical system for the developing countries. There is growing awareness of the demand, pressure and challenge created by the global consensus on the Millennium

22 Personal discussion with UIS director Denise Lievesley, 2002.

23 Personal discussion with UNSD deputy director Willem de Vries, 2002.

24 Personal discussion with the director of the World Bank Data Development Group, Shaida Badiee, 2003.

Development Goals. This challenge is highlighted by the request for a common means of MDG and PRS monitoring, and the pressure on UN agencies and Bretton Woods institutions for coordination is larger than ever before. There is a clear demand for both conceptual and methodological cooperation. During last year, these organisations declared their willingness to cooperate, but a lasting commitment is needed in order for a coordinated system approach to materialise.

With the current global focus on monitoring and statistics, the global statistical community may be realising this might be a win-win situation for all institutions. If they are, coordinated MDG, PRS and sector monitoring and evaluation might be within reach. A new challenge will follow before moving towards a coordinated system for social statistics. Will the global statistical community be able to develop and establish a system of social statistics linking information on resources and policy decisions to outcome and impact statistics? Information on resources might initially come from government finance statistics, national accounts and household budget surveys, but eventually from disaggregated macroeconomic supply-and-use based models, being SAM models or other disaggregated models. Information on outputs, outcome and impact would usually come from surveys. An approach similar to the one presented by the World Bank (Klugman, 2004:108ff.) or the one implemented by Statistics Norway (Wold *et al.*, 2004b), based on indicators for input-output-outcome-impact monitoring, might serve to speed up the first step.

A demonstration of long-term commitment and implementation is still needed before it is possible to declare that the global statistical community has managed to respond in a mature way to the challenge created by 147 heads of state and other representatives of the 189 member states of the United Nations when they signed the Millennium Development Declaration in September 2000.

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