Draft proposal to develop guidelines for linking sectoral information systems within national statistical systems

Background

The results agenda, including the design and implementation of Poverty Monitoring Strategies at the country level and the Millennium Development Goals internationally, has substantially increased the demand for good development data. This in turn has placed pressure on national statistical systems to improve their performance through greater efficiency, better coordination and capacity building; and on the international system to support them. The 2004 Joint Marrakech Memorandum recognized the importance of better statistics for better development results and as part of the 'Action Plan On Managing For Development Results' encouraged developing countries to prepare and implement national strategies for the improvement of their statistical systems.

In fulfillment of this objective, PARIS21 is encouraging and facilitating all low-income countries to design National Strategies for the Development of Statistics (NSDS) by 2006. By strengthening statistical capacity across the entire national statistical system, PARIS21 intends that the NSDS process will:

- Promote greater coordination and cooperation in statistics, thus reducing duplication of effort, increasing efficiency and addressing cross-sectoral demands,
- Bring the supply of statistics more in line with demand. For example, by embracing PRS and MDG indicators, the NSDS could improve data coverage, frequency, timeliness and other measures of quality across agencies, and
- Build a constituency of interest in statistics by including the main data sets of interest to users, and by facilitating sectoral line ministries to work more closely with national statistical agencies.

The PARIS21 Secretariat has produced a number of NSDS documents and has made an NSDS knowledge base available on its web-site[1]. As part of the process PARIS21 has also set up the Intersect Task Team whose goal is to contribute to greater poverty reduction by increasing the availability and relevance of development data to underpin better policy-making and monitoring of progress across sectors.

In December 2004 the PARIS21 Secretariat hosted an informal meeting of heads of statistics in the UN Specialised Agencies (FAO, ILO, UNESCO, and WHO) to discuss each agency's strategy for statistical capacity building, how to develop the NSDS guidelines to reflect sectoral strategies and to consider cross-sectoral issues. Since then the Health Metrics Network has developed a Framework and Situation Analysis Tool; terms of reference have been prepared by FAO and ILO for studies to integrate labor and agricultural statistics into NSDSs; data quality assessment frameworks have been developed for education and labor market statistics by UNESCO Institute of Statistics and ILO respectively; and the task team is aware of proposals for AFRISTAT to host a meeting on sectoral statistics for francophone African countries. The importance of incorporating the needs of sectoral statistics into the NSDS process was

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[1] www.paris21.org

reiterated at the recent Forum on African Statistical Development (FASDEV) in Ethiopia in February 2006. This proposal draws on all of these initiatives and on preliminary discussions with colleagues in Africa and in international agencies.

The Problem

Analysts and users of statistics need a wide range of data from a wide range of sources to support the development effort: to design appropriate policies and programmes; and to monitor and evaluate their effects and impacts. In just about every country a number of different agencies are involved in the collection, compilation, dissemination and use of these data. While most countries have set up specialist statistical agencies to carry out large scale surveys and censuses and to compile and disseminate official statistics, a considerable amount of the data used to monitor development progress and poverty alleviation is generated by other agencies, especially statistical units in line ministries. Much of the data needed to monitor the MDGs on health and education, for example, is derived from management information systems operated by, and used by, ministries. Typically, this type of statistical information is compiled and disseminated by statistical units in these ministries. Other examples include statistics on food and agriculture and the operation of labor markets.

While the difficult situation faced by many national statistical agencies in developing countries, including the lack of capacity and inadequate resources, has been widely recognized, the status of these sectoral statistical units and their analytical counterparts has tended to receive less attention. Statisticians from line ministries are rarely directly involved in discussions on capacity building and many statistical projects and programs only focus on central needs. The importance of better sectoral statistics, however and the gaps in coverage for many PRSP and MDG indicators has placed new emphasis on the need to build capacity and to improve data quality. NSDSs provide an important opportunity to develop an integrated approach to improving the coverage and quality of official statistics, based on agreed national priorities. If they are to be effective, however, it is important that the strategies include both an assessment of the capacity of sectoral ministries to compile and use statistics; and proposals to address weaknesses and constraints.

Objective

The objective of this proposal, therefore, is for PARIS21 to develop resource material, in the form of guidelines, case studies and reference documents to help countries incorporate sectoral statistical concerns within their statistical development strategies. The guidelines will complement existing PARIS21 NSDS documentation and will be based on first-hand experience of African countries that are developing national statistical strategies to accommodate the cross-sectoral demands of poverty reduction strategies and the achievement of the Millennium Development Goals. The guidelines, case studies and reference material will show how sectoral issues can be addressed at the various stages of NSDS design: from assessment through to planning implementation. They will be disseminated by the PARIS21 Secretariat and updated as more material and experience becomes available.

Approach and timing

The work will be conducted in six phases as follow:

First phase: Collation of sectoral information - April to May 2006

In this first phase, an international consultant will work with statistical agencies in the four UN Specialized Agencies responsible for health, education, labor and food and agriculture – to draw together a basic set of information in generic format. This work will be based on and take into account recent developments in the sectors, including FAO's CountryStat initiative; the work of the Health Metrics Network, and the data quality assessment frameworks for education and labor markets statistics developed by UNESCO Institute of Statistics and ILO respectively.

Sarah Macfarlane (the Intersect Task Team coordinator) has drawn up a framework with which to gather the required information across the four sectors (an illustration is given at Annex B, which draws on information prepared by the Health Metrics Network). This will be further revised in consultation with representatives of the statistical agencies in the four UN Specialized Agencies responsible for health, education, labor and food and agriculture; and with Vitalis Muba (East Africa Statistical Training Centre), Ben Kiregyera (PARIS21 and African Development Bank consultant), Graham Eele (World Bank) and Tony Williams (PARIS21 Secretariat) in order to finalize the terms of reference for the consultant.

Once the TORs are finalized, an international consultant will be employed initially for 20 days in April to May to complete the following tasks:

1) Work closely with the PARIS21 Secretariat and sectoral contacts (or their nominees) to finalize the information requirements as outlined in Annex B through desk reviews and correspondence with the four agencies (four days including one day in Paris)

2)   Visit each of the four agencies (WHO and ILO in Geneva, UNESCO in Montreal, and FAO in Rome - for four days each) to complete the information gathering, including drawing on any parallel and related activities

Second phase: Collation of case study materials – May to June 2006

3)   Regional consultants will be engaged to prepare up to five case studies covering how sectoral statistics have been integrated into national statistical systems and NSDSs and specific sectoral issues identified in consultation with the UN Specialized Agencies (up to 10 days each)

Third phase: Review of sectoral information and case studies – June to July 2006

The findings of the first two parts of the study will be reviewed and revised at a one day meeting in Paris, scheduled tentatively for June or early July. The international consultant will prepare for and attend this meeting, with terms of reference (12 days) to:

4)   Summarize and present the information gathered for each of the four sectors in identical formats, and make some suggestions for its synthesis (see Table 1) (four days)

5)   Structure and edit the case study materials prepared by regional consultants, (four days)

6)   Attend the meeting in Paris in June or early July 2006 and discuss follow-up with PARIS21 Secretariat (four days)

Fourth phase: Synthesis of sectoral information and case studies – July to September 2006

The international consultant will continue to work with the PARIS21 Secretariat and the Intersect Task Team coordinator to synthesize the material gathered and to use it to draft the guidelines. The terms of reference for this final part of the consultancy will be reviewed at the meeting and later finalized by the PARIS21 Secretariat with the consultant. Provisionally, the tasks to be accomplished over 18 days between July and September are:

7)   Work closely with the PARIS21 Secretariat to prepare a synthesis of the four sectoral summaries using a similar format and cross-sectoral issues, incorporating the case study materials (eight days), and

8)   Offer suggestions about headings under which greater efficiencies and consistencies could be achieved between the sectoral information systems (two days), and

9)   Present this information in the form of a draft document (four days), and

10)   Participate in a consultative meeting in Tanzania in September 2006 (fifth phase) and make revisions to the document based on discussions at that meeting (four days).

Fifth phase: September 2006

During this phase the material will be reviewed and revised at an international consultative meeting to be hosted in Tanzania. The Tanzanian National Bureau of Statistics (NBS), East African Training Centre (EASTC) and PARIS21 will host the meeting in Dar es Salaam. The meeting will be attended by the participants of the April meeting plus nominated participants from Tanzania (NBS, EASTC, President's office, PORALG, relevant line ministries, and international agencies), and ten representatives from statistical offices, finance and line ministries and training institutions from other African countries. It is expected that the authors of the case studies will also attend.

Following the workshop the material will be finalized by the PARIS21 Secretariat taking account of discussions at that meeting.

Sixth phase: October to December, 2006

The final phase will involve active dissemination of the material and its use. It will also involve some editing and updating as more experience is gained in countries. Over time the material will be extended to draw in case studies from other regions and other sectors. So far, this proposal and the budget only provide for activities in the first five phases. Detailed plans for this final phase will be developed at the international meeting. As far as possible, these plans will be coordinated with the roll-out of the Accelerated Data Program (ADP), another MAPS initiative, which is being managed by PARIS21.

Outputs

The main output will be a guide to linking sectoral information systems to national statistical systems and NSDSs. The guide will include material on information systems and linkages related to each of the four sectors; including the data and information systems needed for sub-national use. The material will be made available by PARIS21 on its web-site and in the form of CDs.

The guide will not include detailed technical information on statistical development and concerns in each of the sectors, although it will provide links to specialist material prepared by the specialized agencies. **Rather it will provide a more general guide to integrating sector statistics and the needs of sectoral agencies to national statistical capacity building programs.** The main text will draw heavily from the case studies and these will also be reproduced as annexes to the main document. It is also anticipated that there will be a cross-cutting chapter on local government information systems and linkages with national and sectoral systems

Management of the work

The PARIS21 Secretariat will employ the consultant and be responsible for the day-to-day management of the consultant's work. A reference group comprising Sarah Macfarlane (Intersect), Tony Williams (PARIS21), Ben Kiregyera (PARIS21 and African Development Bank consultant) and Graham Eele (World Bank) will oversee the work.

Carla Abouzahr (WHO), Doug Drew (UNESCO), Sylvester Young (ILO), and Haluk Kasnakoglu (FAO) or their nominees will work with the consultant and ensure that the final product reflects the information interests of their sector. Ben Kiregyera will ensure representation of the interests of national statistical offices in the work.

PARIS21 will be responsible for disseminating and piloting the materials when completed.

PARIS21 Secretariat
30 March 2006

Linking sectoral statistics with NSSs: revised TOR and proposal

Annex A: Estimated budget in US dollars - phases 1-5

Item	No of people	No. Of days	Daily Fees	Total Fees	Travel cost	Per diem rate per night	Total Estimated per diem	Sub Total	Grand Total
Phase 1: Collation of sectoral information									
International consultant, travel to agencies	1	20	600	12,000				12,000	
Rome (4 days)					550	265	1,060	1,610	
Montreal (4 days)					4,800	280	1,120	5,920	
Geneva (8 days)					500	246	1,968	2,468	
Paris (1 day)					650	275	275	925	22,923
Phase 2: Collation of case study materials									
Regional consultants	5	10	500	25,000				25,000	25,000
Phase 3: Review of sectoral information and case study materials									
International consultant	1	12	600	7,200				7,200	
Paris (4 days)					650	275	1,100	1,750	8,950
Phase 4: Synthesis of sectoral information and case study materials									
International consultant	1	18	600	10,800				10,800	
Tanzania (4 days)					4,200	154	616	4,816	
Paris (4 days)					650	275	1,100	1,750	17,366
Phase 5: Meeting hosted by Tanzania NBS, EASTC and PARIS21 (36 people):									
10 participants from Tanzania	10	2		0		154	3,080	3,080	
5 regional consultants	5	5		0	2,500	154	3,850	6,350	
10 participants from other African countrie	10	2		0	5,000	154	3,080	8,080	
Other administrative costs								5,000	22,510
Contingency 5%								4837.5	
Grand total phases 1-5 in USD									96,749
Grand total including 5% contingency									101,586

Annex B: Cross-sectoral framework (for illustration only, based on information prepared by the Health Metrics Network)

Categories	Items in each category	Explanations from health (HMN)	Detail required for each sector	Description of overall information/statistical systems across sectors	Opportunities for achieving more consistency and efficiency across sectors
Resources	Policies, Financial resources, Human resources, Communication infrastructure, Coordination and leadership	**Policies:** Legislation providing the framework for integrated collection, processing and use of health data, development planning, and HIS infrastructure development e.g. access to information, e-governance, electronic exchange of data, and electronic security measures. **Financial resources:** No detail **Human resources:** Distribution of staff at different levels and facilities, capacity building activities, skills levels, guidelines, turnover, **Communication infrastructure:** internet usage and availability, distribution of hardware and software **Coordination and leadership:** HIS strategic plan, national HIS committee, Coordinating mechanisms with NSO	**Policies:** Classification and lists of major policies and their purpose, **Financial resources:** available, sources, costs of components of the IS, common shortages **Human Resources:** Types of HR with skills required, desired allocation and gaps **Communication infrastructure:** Internet, email, computers, telephones **Coordination and leadership:** strategic plan, committees, organograms (at different levels	**Policies:** The Statistical Master plan, **Financial resources:** Table of budgets and sources of funding **Human Resources:** Synthesis of types of staff used, their distribution and training **Communication infrastructure:** Comparison of equipment and methods used **Coordination and leadership:** Organogram connecting NSO and all ministries,	**Policies:** Are there policies that can be harmonized? **Human Resources:** Training and allocation of staff Sharing of field staff and IT infrastructure **Communication infrastructure:** Are there ways of harmonizing hardware, software and internet access? **Coordination and leadership:** Communities of practice Potential for sharing equipment
Indicators	Minimum set of indicators, and related targets for each of the main information domains required by this sector	Domains used Determinants: socio-economic and demographic, environmental and behavioral risk factors Health system: Inputs (policy, financing, human resources, organization), Outputs (information, service availability and quality), Outcomes: (Service coverage, utilization) Health status: Mortality, morbidity, well-being	Definition of domains, List of Indicators, List of associated targets	Synthesis of domains, indicators and targets	Which sets of indicators are in common? Are they standardized?

Categories	Items in each category	Explanations from health (HMN)	Detail required for each sector	Description of overall information/statistical systems across sectors	Opportunities for achieving more consistency and efficiency across sectors
Data sources	Types of data sources, Standards and strategies to achieve the standard for each data source	**Population-based:** census, vital registration, population-based surveys, **Health-services-based:** administrative records system, service record system, health status record system	Classification of data sources, Standards Strategies for reaching standards	Synthesis of data sources	Are there economies there can be achieved by sharing data sources e.g. synchronizing surveys?
Data management	Data definition and association with data sources (dictionary) Data flow, Data quality, Data storage and linkage	Metadata dictionary, Data warehouse, Timeliness, periodicity, consistency and transparency of revisions, Representativeness, Disaggregation, confidentiality	Description of metadata dictionary, Description of data warehouse, Requirements for timeliness, periodicity, consistency and transparency of revisions, representativeness, disaggregation, confidentiality	Synthesis of methods used	Are there ways in which data dictionaries and warehouses can be shared or linked? Are there efficiencies that can be achieved by improving data flow? Is there consistency in data quality
Information products	Users, User requirements, Data analysis, Data presentation	Few details, more philosophical	Lists of users Domains of user requirements Analytical methods used Presentation methods used	Synthesis of users and requirements in relation to cross-sectional sources of data Comparison of different analytical methods used and specialized software fro analysis and presentation	Is it possible to synchronize reports to the same users? Often they want cross-sectoral data? Are there opportunities for cross-sectoral data analysis and presentation
Cross-sectoral products	User requirements	(Not from HMN), MDGs, PRSPs, local governments, requirements by this sector from other sectors and vice versa	Decisions in this sector made that require data from other sectors, which sectors and what information, what type of products/analysis Data/information that are/ or need to be shared with other sectors. Which data, from which sectors and in what form?	Mapping of data and information flow between sectors and with NSO	How do these intersectoral requirements for data affect the organization of the NSS (in each of the other categories)

Categories	Items in each category	Explanations from health (HMN)	Detail required for each sector	Description of overall information/statistical systems across sectors	Opportunities for achieving more consistency and efficiency across sectors
Dissemination and use	Infrastructure for information use and demand, Information synthesis, Packaging and communication of information	Integrated HIS summary reports with distribution lists Advocacy strategies, Evaluation of HIS,	List of minimum reports and their distribution, Feedback mechanisms, Advocacy strategies, Means of evaluation of HIS	Synthesis of reports and distribution lists, advocacy strategies. Plan for coordinated evaluation of NSS.	Is it possible to synchronize reports to the same users? How can advocacy for statistics be made with one voice? Plan for coordinated evaluation of NSS.