African Statistical Journal
Journal statistique africain

Volume 8 – May / Mai 2009
African Development Bank Group
Groupe de la Banque africaine de développement

Design/Layout by Phoenix Design Aid
Printing by Scanprint, Denmark
ISO 14001 certified and EMAS-approved

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Éditorial

L'Afrique a connu un progrès soutenu dans le développement statistique et ceci a été amplifié récemment par d'importantes initiatives. D'abord, la Charte africaine de la statistique a été adoptée par la 12ème session ordinaire de l'Assemblée des chefs d'Etat et de Gouvernement de l'Union Africaine tenue à Addis Ababa, Ethiopie, le 3 février 2009. Comme souligné par le président de la Commission de l'Union Africaine, la Charte africaine de la statistique *"servira non seulement comme instrument juridique pour réguler l'activité statistique sur le continent, mais également comme outil de plaidoyer pour le développement de la statistique en Afrique. … Il constitue un cadre déontologique et un code d'éthique professionnelle et de bonnes pratiques pour le métier du statisticien africain. … La charte appelle également les décideurs politiques africains à faire de l'observation des faits, la base de toute formulation, de tout suivi et de toute évaluation de politiques. En effet, l'information statistique doit être considérée comme un bien public indispensable dans toute prise de décision."* Le texte intégral de la charte est édité en ce volume.

En second lieu, le 25 novembre 2008, le Conseil d'administration de la Banque africaine de développement (BAD) a approuvé 37 millions de dollars pour financer la phase II du programme de la Banque visant à appuyer les activités de renforcement des capacités statistiques dans les pays africains au cours des 2 années à venir (2009-2010). Des contributions additionnelles seront fournies par d'autres partenaires au développement tels que le Département de Développement International du Royaume Uni (DFID), la Fondation Africaine de Renforcement des Capacités (ACBF) et la Banque islamique de développement. La première phase du programme de la BAD a été mise en oeuvre durant la période 2004-2007 à un coût d'environ 36 millions de dollars.

Troisièmement, en collaboration avec les autorités Angolaises, la BAD, la Commission Economique des Nations Unies pour l'Afrique (CEA), et l'Institut National de la Statistique d'Afrique du Sud ont organisé le 4ème Symposium pour le développement statistique en Afrique (SDSA) qui a eu lieu à Luanda, Angola du 9 au 13 février 2009. Ce Symposium avait pour thème : *"Traitement des données de recensement en Afrique: Cycle 2010 des Recensements de la population et de l'habitat"*. Le symposium a rassemblé les statisticiens du recensement, les directeurs des offices nationaux de la statistique de 52 pays africains, et les représentants des agences de l'ONU, la Banque mondiale, le FMI, PARIS21 et les donateurs bilatéraux pour discuter des questions de développement statistique en Afrique et pour aider les pays africains à se préparer pour le cycle 2010 des recensements de la population et de l'habitat. Le Symposium a été ouvert par Son excellence

M. Antonio Paulo Kassoma, Premier ministre de la République d'Angola. D'autres orateurs principaux incluaient: Mme Ana Dias Lourenco, Ministre de la planification de l'Angola, Mme Lalla Ben Barka, Secrétaire exécutif adjoint de la CEA et Dr. Louis Kasekende, Economiste en Chef de la BAD. Les résolutions du 4ème SDSA sont également publiées dans ce volume.

Quatrièmement, l'Organisation internationale du travail (OIT) en collaboration avec la BAD a organisé la 18ème Conférence internationale des statisticiens du travail à Genève du 24 novembre au 5 décembre 2008. L'objectif principal de la conférence était de discuter et adopter des normes internationales dans le domaine des statistiques du travail et de fournir des directives pour les travaux futurs. Des résolutions très importantes ont été faites au sujet de la mesure du temps de travail, des statistiques du travail des enfants, de la mesure de la sous-utilisation du travail, de la mesure du travail décent, des statistiques de la population économiquement active, de l'emploi, du chômage et du sous-emploi. Ces résolutions sont publiées dans ce journal.

Cinquièmement, dans le cadre de la phase II de son programme de renforcement des capacités statistiques, la BAD a organisé un atelier régional à Tunis, Tunisie du 16 au19 février 2009 pour discuter du programme d'activités du programme de comparaison internationale pour l'Afrique (PCI-Afrique) devant être réalisé en 2009 et les préparatifs pour le cycle 2011 du PCI au niveau mondial. L'atelier a rassemblé des experts en matière de statistiques des prix et de comptes nationaux de 50 pays participants.

Cinq articles ont été choisis pour ce volume. Le premier article explique l'importance des facteurs démographiques dans l'accélération de l'agenda du développement de l'Afrique. Le deuxième papier présente l'expérience de l'Ouganda dans l'intégration des dimensions qualitatives de la pauvreté dans des enquêtes auprès des ménages en combinant les approches participatives avec les principes statistiques. Le troisième papier propose une approche pour préparer un rapport stratégique sur les voies et moyens d'organiser une contribution africaine efficace dans les forums statistiques internationaux. La voix de l'Afrique est particulièrement faible dans les conférences internationales et dans les groupes de travail qui traitent du développement des méthodes et des normes statistiques. Elle devrait être maintenant entendue. Le quatrième papier discute les questions statistiques et pratiques par rapport à l'utilisation des ordinateurs portables pour la collecte de données des prix nécessaires à l'élaboration des indices des prix à la consommation (IPC). Le cinquième papier explore une méthode

qui essaye de traiter les questions ouvertes des enquêtes en utilisant des fonctions de caractère établies à l'aide d'un logiciel statistique.

Finalement, nous rappelons à nos lecteurs que l'Afrique du Sud accueillera la cinquante-septième session de l'Institut statistique international (ISI) en août 2009 et nous encourageons chacun à faire des plans pour assister à cet événement important. Nous comptons sur vous pour nous assurer que l'Afrique est représentée en grands nombres à l'ISI 2009.

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Editorial

Africa has been making steady progress in statistical development and this has been boosted by recent significant initiatives. First, the African Charter on Statistics was adopted by the 12th Ordinary Session of the Assembly of Heads of State and Government of the African Union held in Addis Ababa, Ethiopia, on 3rd February 2009. As highlighted by the African Union Commission (AUC) Chairman, *the African Charter on Statistics "will serve not only as a legal instrument to regulate statistical activity but also as a tool for advocacy and the development of statistics in Africa. … It stands as a code of professional ethics and best practices for the exercise of the profession of statistician in Africa. … The Charter also beckons African policy makers to base the formulation, monitoring and evaluation of policies on facts observed. Statistics should be considered as an essential public asset in any decision-making process."* The full text of the Charter is published in this volume.

Second, the African Development Bank (AfDB) Board of Directors on 25 November 2008 approved about US$37 million for the Bank's Phase II program aimed at supporting statistical capacity building activities in African countries over the next 2 years (2009-2010). Additional contributions will be provided by other development partners such as the U.K's Department for International Development (DFID), African Capacity Building Foundation (ACBF) and the Islamic Development Bank. The AfDB's first Phase program was implemented during 2004-2007 at a cost of about US$ 36 million.

Third, in collaboration with the Angolan authorities, the AfDB, UN Economic Commission for Africa (UNECA), and Statistics South Africa organized the 4th African Symposium for Statistical Development (ASSD-4) which was held in Luanda, Angola from 9-13 February, 2009. The theme of the Symposium was *"Processing Census Data in the Africa 2010 Round of Population and Housing Census"*. The Symposium brought together census statisticians, Directors of National Statistical Offices from 52 African countries, and representatives of UN agencies, the World Bank, IMF, PARIS21 and bilateral donors to discuss statistical development issues in Africa and to assist African countries to prepare for the 2010 Population and Housing Census round. The symposium was opened by The Right Honorable Prime Minister of the Republic of Angola Mr Antonio Paulo Kassoma. Other keynote speakers were the Angolan Minister of Planning, Ms Ana Dias Lourenco, UNECA Deputy Executive Secretary, Ms Lalla Ben Barka and the Chief Economist of the AfDB, Dr Louis Kasekende. The 4th ASSD resolutions are also published in this volume.

Fourth, the International Labor Organization (ILO) in collaboration with the AfDB organized the 18th International Conference of Labor Statisticians in Geneva from 24th November to 5th December 2008. The main objective of the conference was to discuss and adopt international standards in the field of labor statistics and provide guidelines for future work. Very important resolutions were made concerning: the measurement of working time, child labour statistics, measures of labour underutilisation, measurement of decent work, statistics of the economically active population, employment, unemployment and underemployment. These resolutions are published in this Journal.

Fifth, in the framework of the Phase II Statistical Capacity Building Program, the AfDB organized a Regional Workshop in Tunis, Tunisia from February 16-19, 2009 to discuss the program of activities of the International Comparison Program for Africa (ICP-Africa) to be conducted in 2009 and the preparations for the 2011 global ICP round. The workshop brought together price statistics and national accounts experts from 50 participating countries.

Five papers have been selected for this volume of the Journal. The first paper explains the importance of demographic factors in accelerating Africa's development agenda. The second paper presents the Ugandan experience in integrating the qualitative dimensions of poverty in household surveys by combining participatory approaches with statistical principles. The third paper proposes an approach for preparing a strategic report on ways and means to organize an effective African contribution to international statistical forums. The voice of Africa is particularly weak in the international conferences and working-groups that deal with the development of statistical methods and standards. It has now to be heard. The fourth paper discusses statistical and practical issues in relation to the use of hand-held computers for the collection of price data for the compilation of Consumer Price Indices (CPI). The fifth paper explores a method which attempts to process open-ended items using character functions built into statistical software.

Finally, we remind our readers that South Africa will host the 57th Session of the International Statistical Institute (ISI) in August 2009 and encourage everyone to make plans to attend this important event. We count on you to ensure that Africa is represented in large numbers at ISI 2009.

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Abbreviations

AfDB	African Development Bank
AIDS	Acquired Immune Deficiency Syndrome
ART	Anti-Retroviral Therapy
ASCC	African Statistical Coordination Committee
ASS	African Statistical System
ASSD	African Symposium on Statistical Development
AUC	African Union Commission
CADC	Computer Assisted Data Collection
CCSA	Committee for the Coordination of Statistical Activities
COMESA	Common Market for Eastern and Southern Africa
CPI	Consumer Price Index
CSO	Central Statistical Office
DFID	Department for International Development
DQAF	Data Quality Assessment Framework
ECOWAS	Economic Community of West African States
FAO	Food and Agriculture Organization
GDDS	General Data Dissemination System
HIV	Human Immunodeficiciency Virus
HP	Hewlett Packard
ICLS	International Conference of Labour Statisticians
ICP	International Comparison Program
ICT	Information Communications Technology
ILO	International Labour Organization
IMF	International Monetary Fund
INSEE	Institut National de la Statistisque et des Etudes Economiques
ISI	International Statistical Institute
MDGs	Millennium Development Goals
MOFPED	Ministry of Finance Planning and Economic Development
NBS	Nigerian National Bureau of Statistics
NEPAD	New Partnership for Africa's Development
NGO	Non-Government Organization
NSDS	National Strategy for the Development of Statistics
NSI	National Statistical Institute
NSO	National Statistical Office
NSS	National Statistical System
OECD	Organization for Economic Cooperation and Development
ONS	Office of National Statistics

PARIS21	Partnership in Statistics for Development in the 21st Century
PDA	Personal Data Assistants
PEAP	Poverty Eradication Action Plan
PRA	Participation rural Appraisal
PPPs	Purchasing Power Parities
RECS	Regional Economic Communities
RMCs	Regional Member Countries
RPI	Retail Price Index
RRSF	Reference Regional Statistical Framework
SADC	Southern Africa Development Community
SAS	Statistical Analysis Software
SDDS	General Data Dissemination System
SNA	System of National Accounts
STATCOM-Africa	Statistical Commission for Africa
STC	Statistical Training Centre
STI	Sexually transmitted Infections
TFR	Total Fertility Rate
UBOS	Uganda Bureau of Statistics
UK	United Kingdom
UNECA	United Nations Economic Commission for Africa
UNECE	United Nations Economic Commission for Europe
UNHS	Uganda National Household Survey
UNSD	United Nations Statistics Division
UPPAP	Uganda Participatory Poverty Assessment Process
WB	World Bank

How Demography Matters for Measuring Development Progress in Africa?

Hassan M. Yousif[1]

Summary

Measurement of progress on the development agenda is nowadays of major interest to governments and the international community. Most of the explanations so far given on Africa's progress on the development agenda revolve around economic development, especially economic growth. The social development, and particularly the evolving demographic and population changes, receives less attention in explaining Africa's progress, and in the strategies to accelerate its development in the future. This paper explains how demography is important for measuring, assessing, explaining, and identifying policies to accelerate Africa's progress on the development agenda. At the forefront, there is need to address high fertility and to improve women's education, so as to make rapid progress on infant, child and maternal mortality, and to enhance gender equality and women status. Moreover, governments and the international community need to recognize the rapidly changing population distribution, and the challenges and opportunities it presents for development in Africa. Particularly, rapid shift of people from rural to urban areas across the continent necessitates new strategies for rural and urban development.

Key Words: *Development agenda, Mortality, Fertility, Population distribution, Youth, Working age population, Gender*

Résumé

De nos jours, la mesure du progrès à l'agenda du développement connaît un regain d'intérêt pour les gouvernements et la communauté internationale. Jusqu'ici, la plupart des explications données sur le progrès de l'Afrique relatif à l'agenda du développement tournent autour du développement économique, particulièrement la croissance économique. Le développement social, et en particulier le changement démographique et l'évolution de la population, ont suscité moins d'attention dans l'explication du progrès de l'Afrique et dans les stratégies visant à accélérer son développement futur. Cet article explique comment la démographie est importante pour mesurer, évaluer, expliquer, et concevoir des politiques visant à accélérer le progrès de l'Afrique dans l'agenda du développement. Au premier rang, il y a le besoin d'adresser en priorité la fertilité élevée et d'améliorer l'éducation des femmes, afin d'accomplir le progrès rapide sur l'enfant en bas âge, l'enfant et la mortalité maternelle, et améliorer l'égalité de genre et le statut de femmes. D'ailleurs, les gouvernements et la communauté internationale doivent reconnaître la distribution de population qui évolue

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rapidement, et les défis et les occasions qu'elle présente pour le développement en Afrique. En particulier, le déplacement rapide des personnes de milieu rural aux secteurs urbains à travers le continent rend nécessaire de nouvelles stratégies pour le développement rural et urbain.

Mots clés : *Agenda du développement, Mortalité, Fertilité, Distribution de la population, Jeunesse, Population en âge de travailler, Genre.*

1. INTRODUCTION

The purpose of this paper is quite specific; to answer the title question. Though it presents a wide range of challenges and opportunities, demography has not received enough attention in understanding and measuring Africa's progress on the development agenda, including the Millennium Development Goals (MDGs). The term "demography" is used here to refer to the dynamics of population change, particularly fertility and its association with infant, child and maternal mortality, and with gender equality and the empowerment of women. Also, the paper refers to the outcomes of population change in terms of changing age structure and population distribution by place of residence (rural-urban), and their implications for development and achievement of the MDGS.

Beyond measuring levels of demographic behavior and trends in population change, demography is important for identifying target population groups for in-depth analyses, policy interventions and actions. Demographic trends indicate social changes. A decline in fertility, for example, from a high level of 6 children to only 2 is indicative of social transformation and of a wide range of social changes including changes in the value of children and in the status of women in society. Therefore, demography matters considerably for the welfare of individuals as well as the society at large.

Four decades ago the world was concerned about population explosion and the "population bomb". At that time there were 3.5 billion people in the world. Today, the world population reached 6.7 billion people, and the population and development concerns are profoundly different than in the 960s. Managing people and their demographic and social behaviors are nowadays more important than getting worried about their absolute numbers. This shift in understanding of population concern has been eloquently explained by T. A. Obaid in her statement to the second regular session of the UNDP/UNFPA Executive Board. She said: -

But while some people fear that the size of the population is the problem, the real problem is not people, but rather the poor management of demographic dynamics through economic and social polices that leave people behind. And here I am talking not only about national policies, but global and regional policies.

We need policies that are just and equitable and put people at the center. And this requires taking into account demographic trends and dynamics that include the rates of population growth, fertility and mortality, and the age and sptial distribution of the population including migration and urbanization. And basic to all this, is the right of individuals to make choices about their lives and right to reproductive health.

Analyses in this paper are based on the population estimates and medium fertility variant projections prepared by the Population Division (UN 2007) for the assessment of the progress made in achieving the MDGs. Other sources of data used in this paper will be mentioned where relevant. Focus is on years 1990-2015, which is the reference period for assessing the progress towards achievement of measurable MDGs targets.

Following this introduction, sections 2 and 3 focus on the MDGs in Africa and on the accuracy of demographic measures for the MDGs indicators. Section 4 analyses the demographic dynamics and the MDGs in the continent, with focus on fertility and its significant association with infant, child and maternal morality, and with HIV/AIDS, education gender equality and the empowerment of women. Section 5 discusses changing age structure, and section 6 analyses population distribution by place of residence (rural-urban), and studies their linkages to the MDGs in Africa. The paper concludes in section 7.

2. THE MDGs IN AFRICA

For Africa, the MDGs are too important to fail. The achievement of these goals is critical for the continent to claim the 21st Century for its people and to become an important and reasonable partner in the global economy. Africa's agenda must be made more MDGs-friendly. African Union Executive Council Seventh Ordinary Session, in July 2005, in Sirte, Libya.

This statement reflects strong political will and commitment to advance the MDGs agenda in Africa, and the ability of the countries to agree on goals, targets and indicators to measure their progress towards a better

quality of life for all people by 2015. Progress has been made to reach some of the targets (primary enrollment, gender parity in primary education, malaria deaths and representation of women in parliaments) by 2015. The great majority of countries are off-track on goals 4, 5 and 6; the so-called health/demographic goals – reducing child mortality, improving maternal health and combating infectious diseases. However, most of the explanations focus on progress on macroeconomic indicators (economic growth, per capita income, etc.) or lack thereof, and on declining conflict and improving governance.[2] The social and demographic sides received less attention in explaining the progress and in the strategies to accelerate it in the future.

Shortage of MDGs-linked demographic and social analyses and research are detrimental to identifying the relevant policy interventions that would help countries more accurately measure and assess their progress on the attainment of the targets by 2015. Such analyses are needed to match resources with the right mix of policy interventions, in which demography is the major player.

3. ACCURACY OF DEMOGRAPHIC MEASURES

The quality of demographic research and analyses is largely determined by the quality and availability of data, which are major constraints to informed decision-making and assessing of progress on the development agenda in Africa.[3] Lack of accurate, reliable and continuous data is detrimental to policy research, and to comprehensive, holistic and more accurate understanding and measuring of the development progress of countries. Governments need reliable data to identify the challenges and pinpoint areas where there is progress, to make informed decisions and to formulate and implement the right mix of policy interventions.

Assessment of progress on the development agenda in Africa has so far been based on demographic estimates derived from population and housing censuses and national sample surveys. Deficient as they are, these es-

[2] See African Union and Economic Commission for Africa. (2008). Assessing progress Towards Attaining the Millennium Development Goals in Africa 2008. Report of the Executive Council Eleventh Ordinary Session. Sharm El Sheikh, Arab Republic of Egypt.

[3] The MDG-Africa Steering Group initiative launched by the UN Secretary General to mobilize resources to support the implementation of the goals in Africa, recommend for the governments to strengthen data collection systems including comprehensive systems for civil registration and vital statistics.

timates are approximations of real vital rates; that is rates obtained from efficient and complete registration of population and vital events (births, deaths, etc.). They are subject to low coverage and a wide-range of data errors. Therefore, their accuracy is highly questionable, particularly in Africa where completeness and the quality of data are low. Censuses and sample surveys provide point measures and rough estimates of demographic rates. When used at two points in time, census-based rates and indictors do not provide accurate measurement of real change. This difference is particularly important to consider in the design of public interventions to effect changes in the desired direction, and to gauge progress towards achievement of the MDGs.

Accurate demographic measures are important for understanding the demographic dynamics and change, and unfolding of the demographic situation, which are absolutely essential for the measuring the progress of nations on the development agenda, including the MDGs.

4. DEMOGRAPHIC DYNAMICS

Noting the constraints and limitations above-mentioned, the demographic dynamics in terms of fertility and mortality are the main factors of population change in Africa. Migration is important as well, but in Africa its role is more significant in population distribution. Africa's population grew from 637 million in 1990 to 922 million in 2005, and is expected to surpass a billion persons by 2010 and approach 1.2 billion by 2015. These monotonically increasing numbers are associated with increasing incremental change at slowly decreasing annual population growth rates (See Table 1). A growth rate of 2.6% in 1990 had led to an increase of about 17.4 million persons. By 2005 the growth rate had slightly declined to 2.2% and the incremental change had increased to 20.9 million people. By 2015 the growth rate will decline to 2.0% but Africa in general will be adding about 23.8 million persons to its population. Thus, during the MDG assessment period, Africa's population will be growing at high annual increments and slightly declining growth rates.

Table 1 Population size and growth in Africa

Year	Total Population (millions)	Annual Incremental Change (millions)	Annual Growth Rate (%)
1990	637	17.4	2.61
1995	726	18.2	2.45
2000	821	19.4	2.32
2005	922	20.9	2.25
2010	1,032	22.7	2.15
2015	1,149	23.8	2.0

Sources: (1) United Nations (2007). World Population Prospects. The 2006 Revision. CD-Rom Edition Extended Dataset UNDESA New York. (2) United Nations (2005).

Rapid expansions of population size are obvious in highly populated countries, such as Nigeria, Egypt, and Ethiopia. In Nigeria, for example, the incremental change increased from 2.8 million persons in 1990 to 3.4 million in 2005, and is expected to increase to about 4 million persons in 2015.

Two exceptions are important to be noted here. First, countries hardest hit by HIV and AIDS, such as South Africa, Botswana, Lesotho, Namibia, and Swaziland, experienced rapid decline in population growth and rapid decline in the incremental change. The main factor underlying this exceptional pattern is excess mortality due to the HIV and its development into AIDS, besides some other causes of death.

Second, conflict and post conflict countries, such as Sierra Leone, Liberia, Angola, The Sudan, Rwanda and Somalia, exhibit fluctuating patterns due to population movements to neighboring countries and abroad (refugees, international migration, etc.).

4.1 Fertility Trends

Rapid increase in population size is due primarily to high fertility. The total fertility rate (TFR) was 5.7 children per woman in 1990, and 4.7 in 2005; one child decline in 15 years. It will further decline to 3.9 children in 2015. High fertility is due to low use of modern contraceptive[4] methods, low women's education, young age at marriage and at first childbearing.

[4] The average prevalence of modern contraceptive methods is 19.8% in Africa compared to a world average of 54%.

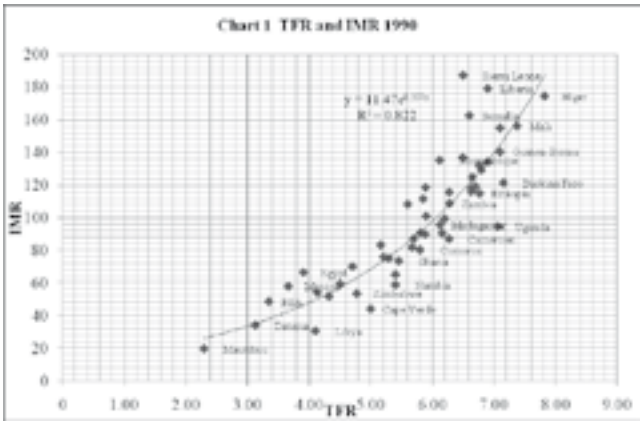
This regional fertility map masks significant differences between countries. Fertility was high (TFR 5 or more children per woman) in 1990-2005 in 24 countries. Within this group of countries fertility remained very high at more tan 6 children per woman in 13 countries. Fertility during 1990-2005 declined to 4 children per woman in 19 countries; with an average decline of 1.5 children per woman. The most rapid TFR decline was in Namibia (2.2), Djibouti (1.9), Swaziland (1.84) and Cote d'Ivoire (1.81). Fertility declined to below 3 children per woman in another group of eight low fertility countries (See Table 2). In Mauritius and Tunisia, for example, fertility reached, in 2005, below replacement level of 2 children, down from 2.3 and 3.1, respectively, in 1990.

Table 2 Fertility Patterns 1990-2005

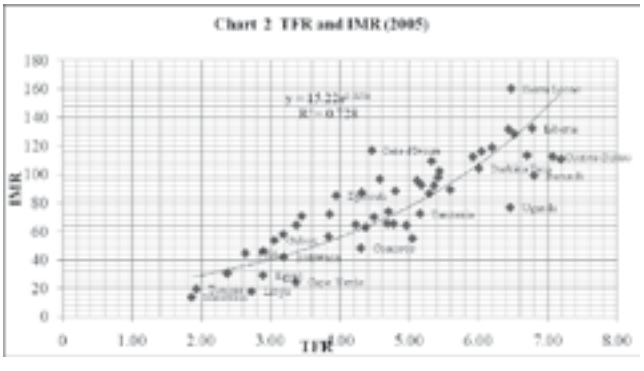
High fertility countries TFR=5+	Declining fertility countries TFR declined to 4	Low fertility countries TFR<3
Angola, Benin, Burkina Faso, Burundi, Chad, Democratic Republic of Congo, Equatorial Guinea, Eritrea, Ethiopia, Guinea, Guinea-Bissau, Kenya , Liberia Malawi Mali Mozambique Niger Nigeria Rwanda Sierra Leone Somalia Uganda Tanzania Zambia	Cameroon Cape Verde Central African Republic Comoros Congo Côte d'Ivoire Djibouti Gabon Gambia Ghana Lesotho Mauritania Namibia São Tomé and Príncipe Senegal Sudan Swaziland Togo Zimbabwe	Algeria, Botswana, Egypt, Libya, Mauritius Morocco, Republic of South Africa, Tunisia

Fertility declined fastest in the countries hardest hit by the HIV/AIDS pandemic. HIV/AIDS and fertility share some common determinants. Indeed, the major proximate determinants of HIV infection and pregnancy are virtually the same -- sexual exposure (through socially recognized unions or otherwise), contraceptive practice, breastfeeding practices – and for this reason an empirical association between the two seems almost unavoidable. On the individual level, HIV infection has a clear effect on fertility. Women living with HIV/AIDS have distinctly lower fertility than uninfected women. This is a result of a complex set of factors. For instance women living with HIV/AIDS are less fecund and more likely to be infected with other STIs, hence they have higher risk of foetal loss.

4.2 Fertility, child and maternal health

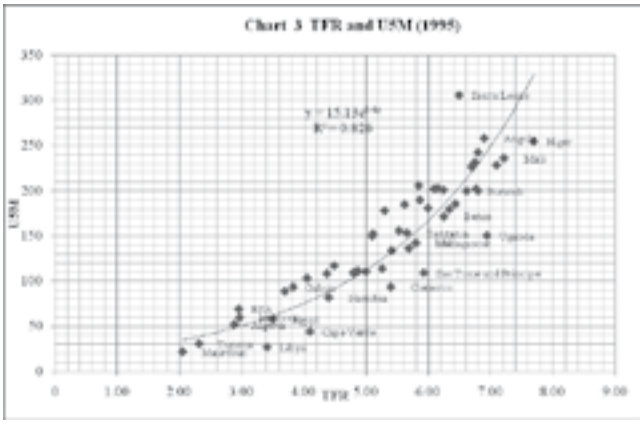


The analyses above indicate that the level of fertility in Africa is high and the pace of its decline is slow. This fertility situation does not provide an environment for rapid progress on the MDGs, particularly the health-related ones. Available knowledge indicates that fertility goes hand in hand with infant, child and maternal mortality. When fertility is high, infant, child and maternal mortality are also high. High fertility, which is the predominant pattern in the continent, reflects a higher number of desired children as well as low child survival rates. Frequent pregnancies and childbirth often are detrimental to the health of mothers and to their children, particularly in countries where maternal and child health services are poor. Undoubtedly a decline in fertility will result into improved maternal and child health, and more rapid progress on achieving the MDGs.

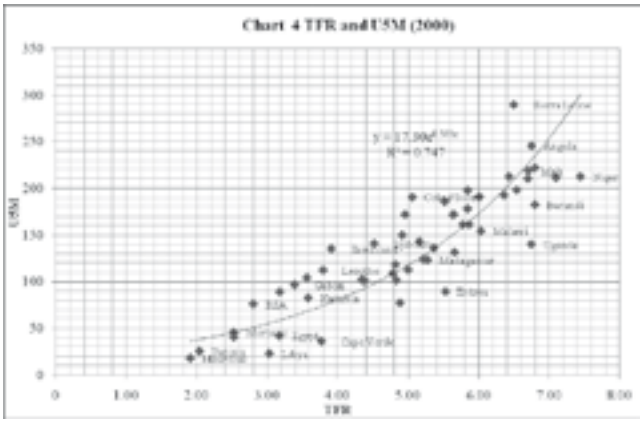


The correlation between fertility and infant and child mortality in the continent is significantly positive. Fitting an exponential function of type $Y = ae^{bx}$ give results shown in charts, 1,2 3,and 4. Where Y is infant mortality rate (IMR) or under five mortality (U5M), a is a constant intercept, e is the exponent, b is a parameter, and x is the total fertility rate (TFR).

High fertility countries, such as Sierra Leone, Niger, Mali, Burundi, Liberia, and Chad, also have high infant and under-five mortality. Fertility



in these countries is high because of low use of modern contraceptive methods and low level of women's education. The association of high fertility to high infant and child mortality is partly explained by high desired fertility and child replacement behavior; adding another birth each time a child dies. In such countries parents often raise their fertility level as an insurance against future death of some of their children.



In Mauritius, Tunisia, Libya, Egypt and Algeria, infant and child mortality are low, and the total fertility rate is also low primarily because of increasing child survival and high prevalence of modern contraceptive methods, among other factors. In the countries where infant and under-five mortality declined appreciably, fertility also dropped. For example in Egypt infant mortality declined from 67 in 1990 to 36 in 2000, under-five mortality declined from 58 in 1995 to 33 in 2005, and the total fertility rate dropped from 3.9 in 1990 to 2.9 in 2005. These associations suggest that a reduction in infant and child mortality, meaning rapid increase in child survival, will induce a reduction in the desired and actual fertility.

The impact of high fertility on maternal health in Africa is pervasive. The correlation coefficient of maternal mortality ratios and the total fertility rate is positive and high at about 75%. In countries where fertility is high maternal mortality is also high. For example, the maternal mortality ratio

in 2000 is estimated above 1500 per 100,000 live births in Tanzania, Malawi, Sierra Leone, Angola and Niger. The total fertility rate in the same countries is above 5 children per woman, and teenage fertility is high. This is in sharp contrast to Mauritius, Tunisia, Libya, Egypt, Botswana, South Africa, Egypt, Morocco and Algeria where the maternal mortality ratio is below 230 and the total fertility rate is less than 3.3 children per woman. Obviously, a decline in fertility is important for improving maternal health through reducing the risk of death associated with frequent pregnancies.

4.3 Fertility, Gender and Empowerment of Women

High fertility relates to practices that are detrimental to the empowerment of women. Women's reproductive functions associated with marriage and childbearing at an early age, frequent pregnancies and the presence of a large number of children, take up priority at the expense of their productive role, human development capacities and rights. Combined with discriminatory laws and policies, and traditional customs, these practices affect family relations and the status of women, their access to social services and acquisition of productive resources, such as land (Yousif 2006). Therefore, high fertility countries have greater gender disparities in education. There are much fewer girls than boys in primary and secondary schools in countries such as Chad, Burkina Faso, Mali, Ethiopia, Niger, Djibouti, Eritrea and Guinea, where the total fertility rates are above 5 children per woman. These are in sharp contrast to countries like Tunisia and Mauritius where fertility is low and gender disparities in education are negligible.

Obviously, there is significant association between fertility and the achievement of universal primary education. The association works through high fertility and improving child survival rates leading to rapid growth in the number of primary school-age children, hence continuing high demand for primary education services. Increasing school-age population will heighten the demand for primary education services. Therefore, with limited investment in education, progress towards the achievement of universal primary education in Africa is very slow and much lower than the average for developing countries. Net primary school enrollment ratio in Africa increased from 60% in 1998 to 67% in 2002. This ratio increased from 54.5% in 1990 to 62.8% in 2001 in SSA, in contrast to an increase from 82% to 92% in Northern Africa.

In countries like Burkina Faso, Niger and Mali, the net primary enrollment ratio is low and the total fertility rate is high; about 7 children per

woman. This is in sharp contrast to countries like Seychelles, Tunisia and Mauritius that achieved universal primary education while their fertility rates dropped to low levels. This inverse relationship imply that a decline in fertility will eventually alleviate some of the demand pressures on education and pave the way for achieving universal primary education.

5. CHANGING AGE STRUCTURE AND THE MDGs

The expansion and contraction of the age structure of the population is a long-term product of changes in fertility, and to a less extent, of improvement in mortality and age selectivity of migration. Classical optimistic and pessimistic views on population growth and poverty (Bloom *et al* 2003)[5] overlook changes in age structure and its implications for development. In Africa the age structure of the population has expanded profoundly since 1990; reflecting rapidly increasing population numbers across all age groups. This is due to high population momentum; which is the inert ability of people to continue to grow in numbers beyond the time of achieving replacement[6] fertility.

Sustained high fertility levels during the 1960s, 70s and 80s, in Africa resulted into large cohorts of children that moved upward the age scale. This process, which is reflected in broad-based age pyramid, created, and will continue to create, increasingly large numbers of youth, working age people, and older persons. There were 169 million youth aged 15-29 in Africa in 1990, increased to 262 million in 2005. They will reach about 325 million in 2015. African youth in 2015 will be almost double their number in 1990.

The working age 15-64 years old population increased from 332 million in 1990 to 509 million in 2005, and will reach 654 million in 2015. In fact youth and working age populations in Africa grow at rates more than double the annual growth rate of the general population.

These rapidly increasing numbers of youth and working age populations in the continent represent a potential for economic growth and development for achieving the MDGs – provided that appropriate social policies,

[5] For an excellent review of these views refer to Bloom , David E. Canning, D. Sevilla, J. 2003. The Demographic Dividend. A New Perspective on the Economic Consequences of Population Change. RAND, Santa Monica.

[6] Replacement fertility is often roughly measured by a total fertility rate of 2.1 children per woman.

such as job opportunities and decent work, are in place. Failure to tap this potential will convert them into challenges of growing poverty, unemployment, and instability.

The potential resets primarily with the "demographic dividend" (Bloom *et al* 2003), which is a bonus expected to accrue from the productive capacity of increasing working age population in terms of boosting the Gross Domestic Product (GDP) and economic growth through labor supply, savings and human capital (Bloom *et al* 2003). However, social development policies are needed to turn the demographic dividend into real economic gains. Failure to act and introduce appropriate policies on health, education, and job creation, will lead to unfavorable results. Therefore, social and economic development policies are needed to realize the demographic dividend and achieve the MDGs in Africa.

However, unemployment in Africa is persistently high. It remained above 10% since 1995, with a minor difference between Northern Africa and Sub-Saharan Africa. Countries in the Southern Africa sub-region have exceptionally high unemployment rates- 31.9 in South Africa, 39% in Lesotho, and 19% in Botswana. The unemployment rate among youth remained persistently high, at around 20% and above since 1995, and it reached 22.8% and 21% in Northern Africa and SSA, respectively, in 2004 (ECA 2005)[7].

Therefore in Africa there is loss of potential productive gains due primarily to rapidly increasing working age population and lack of employment opportunities to absorb rapid growth in the labor force. This is further worsened by inadequacy of economic growth policies to address poverty. Besides concentration of economic growth in the capital-intensive sectors, such as mining and extractive industries, most of the countries are failing to achieve and sustain GDP growth of 7%, which is the rate needed to halve poverty by 2015 (ECA 2005). Most of the income in Africa is generated from agriculture where economic growth and the creation of employment opportunities are both low. Moreover, employment creation in Africa is constrained by limited domestic savings and investment, and high debt burden, among other factors.

[7] The Economic Report on Africa 2005 provides detailed analyses on poverty and unemployment in Africa. Economic Commission for Africa 2005. Economic Report on Africa 2005. Meeting the Challenges of Unemployment and Poverty in Africa. Addis Ababa. Ethiopia.

6. POPULATION DISTRIBUTION

The challenges and opportunities of population distribution have as yet not received adequate attention and concern on measuring and assessing the progress on the development agenda in Africa. Drawing attention to this, the 41st session of the Commission on Population and Development, held in April 2008, called upon Governments to formulate "population distribution policies, to ensure that their objectives goals are consistent with internationally agreed development goals, including the Millennium Development Goals, all human rights and fundamental freedoms, the eradication of poverty in both urban and rural areas, the promotion of gender equality, equity and empowerment of women and environmental sustainability".

Table 3 Urban-rural Population Distribution

Year	Urban Population		Rural Population	
	Number	Growth Rate (%)	Number	Growth Rate (%)
1990	203.2	3.91	432.5	1.9
1995	247.1	3.51	475.6	1.71
2000	294.4	3.3	518.1	1.51
2005	347.2	3.22	558.8	1.39
2010	407.9	3.15	599	1.25
2015	477.6	3.05	637.8	1.05

The distribution map of the population in Africa is reflected in table 3. The continent is experiencing rapid population shifts from rural to urban areas, and greater concentration in slums, coasts and ecologically favorable zones. The shifts of people from rural to urban areas are due to internal rural to urban migration, as well as to the reclassification of some rural areas into urban towns. Cities and towns in Africa are increasingly absorbing people from rural areas. Table 3 show that the number of urban inhabitants is increasing monotonically and growing at rates three-times the rural inhabitants. High urban growth rates indicate the role of rural-urban migration in the redistribution of population. In fact the urban areas will increasingly absorb most of the population growth in the continent. Consequently, rural growth rates will continue to decline, in-spite of the fact that fertility is much higher in rural than in urban areas. These

distributional patterns embrace a wide range of implications for the MDG targets. Specifically, the increasing urbanization of poverty, confounded with rapid growth of urban slums, increases the demand for water, housing and sanitary services, food, education and health services. These demands represent immense pressures, but also provide opportunities for expanding and harnessing labor, services and products markets (Yousif 2005).

Most significant is the rapid growth of slums in Africa. The urban slum population grew from 119 million in 1990 to 181 million in 2001. These numbers provide an annual growth rate of 4.7%, which is much higher than the overall population growth and the growth rate of the urban population during the same period. At the country level, the annual growth of urban slum population between 1990 and 2001 was exceptionally high, ranging from 4.8% to 8.5%, in 26 countries[8]. The annual growth rate of the slum population ranges from 3.3% to 4.5% in 11 countries[9] and less than 2.5% in Tunisia, Egypt, South Africa, Ghana, Liberia and Morocco. Tunisia and Egypt are the only two countries with negative annual growth of urban slum population during1990-2001; -6.6% and –2% respectively. This negative growth is due to relocation of slum population and urban to rural migration, as well as to abolishment of some of the slums in and around cities.

Most of the countries that have experienced conflict during 1990-2001 have also experienced high annual growth rate of slum populations. Also, countries with the largest population size, such as Nigeria, Egypt, Ethiopia, South Africa, The Sudan, DRC and Kenya have the largest slum population in the continent. Clearly slums in urban areas absorb much of the proportion growth in Africa.

The distribution patterns of the population in Africa are often linked to the disease environment. This is reflected in rural urban differentials in the prevalence and incidence of diseases, and in differences in mortality rates. For example malaria is more widespread in rural areas. In southern and eastern African countries, HIV prevalence is initially much higher in urban areas, as the epidemic took much longer to penetrate rural communities. This has implications for population structure and urban-rural morbidity and mortality differentials. In Ethiopia, for example, where the

[8] Malawi, Burkina Faso, Senegal, Chad, Togo, Comoros, Ethiopia, Mali, Nigeria, Cameroon, Congo, Guinea-Bissau, Sudan, Angola, Equatorial Guinea, Uganda, Benin, Gambia, Mauritania, Kenya, Niger, Gabon, Côte d'Ivoire, Tanzania, Lesotho, Mozambique

[9] Burundi, Libya, Zimbabwe, Zambia, Namibia, Algeria, Central African Republic, Guinea, Rwanda, Somalia, DRC, Eritrea Botswana

HIV epidemic is still relatively immature, the overall HIV prevalence rate is estimated at 4.4 %. However, this masks a considerable urban-rural differential, as the urban HIV prevalence is estimated to be 12.6% (meaning that well over every tenth person in urban Ethiopia is HIV positive), with rural HIV prevalence estimated at 2.6%[10].

7. CONCLUSION

This paper has explained how demography is important for measuring and assessing Africa's progress on the development agenda. Unlike other continents, Africa is undergoing a unique and quite challenging development period where longevity is contracting, poverty is increasing and economic and social disparities are widening. Such a situation requires appropriate and well-informed public policies. Particularly population, health and social development policies are needed to overcome the intertwined multiple repercussions of poverty, hunger, HIV/AIDS and other diseases. The African countries need to address high fertility, and to take actions to address the policies, laws and traditions that discriminate against women. Women's education is crucial for addressing many issues. It reduces fertility, improves infant and child mortality, and promotes the status of women and their rights to access resources.

The pattern of population distribution by place of residence, and the changes that occur in these patterns are important for development and achievement of the MDGs in the continent. These patterns are important for identify population groups, for example the poor and hungry, where they live and for defining their characteristics and identifying their needs. Also, they are important for explaining why they fall in the poverty and hunger traps, for example, and to pinpoint the policies and actions needed to address them.

Finally, efficient distribution policies are needed to support and expand human opportunities to the largest number of people in the countries. Linking the spatial distribution of population growth with income and wealth distribution across ethnic and social groups is a public policy area of high importance for peace and stability in the continent.

[10] AIDS Resource Center: http://www.etharc.org/spotlight/ExecSumm5th.htm

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Integrating Qualitative Dimensions of Poverty into the third Uganda National Household Survey (UNHS III)[1]

Johnson Kagugube[2], Richard Ssewakiryanga[3], Carlos Barahona[4] and Sarah Levy[5]

Summary

Most countries conduct qualitative research on poverty separately from national household surveys which produce 'poverty lines'. This paper presents the Ugandan experience of integrating the two processes in the UNHS III Qualitative Module by combining participatory approaches with statistical principles. UBOS and the UPPAP worked together on the Qualitative Module, developing innovative research methods and poverty monitoring tools. With some further work on weighting and scaling up, key quantitative results of the Qualitative Module will be representative of the rural population of Uganda. They will constitute a baseline for measuring multi-dimensional poverty which will be of great value to national poverty monitoring efforts. They will also be comparable with the poverty line information produced by the Socio-Economic Module of the UNHS III, serving as a cross-check on the survey results.

Key Words: *Qualitative, Quantitative, Poverty monitoring, Participation, national statistics, Research methods*

Résumé

La plupart des pays ont mené une recherche qualitative sur la pauvreté en dehors des enquêtes nationales auprès des ménages qui déterminent des lignes

[1] ACKNOWLEDGEMENTS

The authors would like to thank Jill Fletcher of the UK Department for International Development for her encouragement and support, and also for her comments on the draft of the paper. We also thank all the people who contributed to the study described in the paper, in particular: the staff of UBOS and the UPPAP, who were responsible for designing and implementing the study and analysing the results; the research teams at national and district levels; the community members who took part in the focus group discussions in the sites where the study was carried out; and the district and community leaders who made it possible for the research teams to visit the communities.

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de pauvreté. Cet article présente l'expérience Ougandaise dans l'intégration des deux processus dans le module qualitatif de l'UNHS III en combinant des approches participatives avec des principes statistiques. L'UBOS et l'UPPAP ont travaillé ensemble sur le module qualitatif, en développant des méthodes de recherche innovatrices et des outils de suivi de la pauvreté. Avec un travail additionnel sur la pondération et l'augmentation de l'échelle, les résultats quantitatifs principaux du module qualitatif seront représentatifs de la population Ougandaise rurale. Ils constitueront une base de référence pour mesurer la pauvreté multidimensionnelle qui sera de grande valeur pour les efforts du suivi de la pauvreté nationale. Ils seront également comparables aux informations basées sur le seuil de pauvreté produite à partir du module socio-économique de l'UNHS III, servant de contre-vérification sur les résultats d'enquête.

Mots clés : *Qualitatif, Quantitatif, Suivi de la pauvreté, Participation, Statistiques nationales, Méthodes de recherches*

1. INTRODUCTION

Most countries conduct qualitative research processes separately from their national household surveys. Quantitative and qualitative data are seen as complementary, but it is assumed that they must be the result of different, separate data collection processes.

From 1997 to 2005, Uganda followed this model, collecting quantitative and qualitative data separately to monitor progress under the country's Poverty Eradication Action Plan (PEAP)[6]. Quantitative poverty monitoring data was gathered by the first and second Uganda National Household Surveys (UNHS I and UNHS II), conducted by the Uganda Bureau of Statistics (UBOS). They collected expenditure data and used them to construct a poverty line and to study poverty reduction trends over time[7]. Qualitative information on poverty was provided by the Participatory Poverty Assessments (PPAs), conducted by the Uganda Participatory Poverty Assessment Process (UPAPP), a partnership of governmental and non-

[6] The PEAP is revised every three years. The 2000 revision was presented as the country's Poverty Reduction Strategy Paper under the Highly Indebted Poor Countries initiative (MOFPED, 2002).

[7] Analysts establish the 'poverty line': the amount of expenditure required for households to meet their basic needs. Indicators of poverty include the percentage of households surveyed that is below the poverty line and the 'poverty gap' (UBOS 2006b). Such indicators are used to study trends in poverty over time, in order to determine whether progress has been made towards the goal of reducing poverty.

governmental organizations based at the Ministry of Finance Planning and Economic Development (MOFPED).

In an analysis of Uganda's national household survey programme up to 2004, Muwonge (2006) sums up the prevailing way of thinking on quantitative and qualitative approaches:

> "It is generally agreed in Uganda that quantitative approaches make aggregation possible, provide results whose reliability is measurable and allow simulation of different policy options. On the other hand, qualitative methods comprehensively define poverty, provide more insight into causal processes and produce more accuracy and depth of information on certain questions".

Muwonge values both quantitative and qualitative approaches, but sees them as separate research process which provide different types of information. Qualitative approaches are not seen as capable of providing measurable results based on aggregation of numerical data from different sites.

Nevertheless, some integration between quantitative and qualitative approaches took place in Uganda before 2005. For instance, the 2001/02 PPA included a mini-survey in 36 communities where participatory work had been done to collect quantitative data on some of the issues raised during the field consultations. Meanwhile, in June 2001, UBOS and the UPPAP organized an international workshop on combining participatory and survey-based approaches to poverty monitoring and analysis. However, the UNHS II, implemented by UBOS in 2002/03, remained a purely quantitative data collection exercise.

The model adopted for the UNHS III, carried out in 2005/06, constituted a breakthrough in thinking on integration of methodologies in national household surveys. For the first time in Uganda and, as far as we know, in Africa, the national statistical authorities decided to include a fully integrated Qualitative Module based on participatory research methods within the national household survey. To achieve this, they agreed a partnership with the UPPAP, which has considerable experience with participatory approaches.

Achieving integration of a module based on participatory research methods into a national household survey is by no means a straightforward exercise. UBOS and the UPPAP intended that the Qualitative Module should be more than just a qualitative add-on to the household survey: its design

would incorporate statistical principles and would measure key variables in a manner that would allow their aggregation for statistical analysis at national level. According to UBOS (2006a):

> "The Qualitative Module of the UNHS III is so-called because it focuses on the reasons behind the statistics, it attempts a deeper understanding of the issues and it uses an approach that is more common among social researchers than official statistics organizations. However, this does not mean that all the data collected was 'qualitative' in nature. Some of the tools used were designed to generate numerical data which could be analysed using statistical methods…."

The basis for believing that this could be done was an approach which was developed for the evaluation of Malawi's Starter Pack programme[8] by researchers from various Malawian institutions, with the support of consultants from the University of Reading in the UK (Barahona and Levy, 2003; Barahona, 2005). A recent paper for the journal World Development (Barahona and Levy, 2007) explains how this 'research using participatory methods' was distinct from its predecessors:

> "At first sight, the methodology that we developed in Malawi might appear to be merely a collection of approaches which have been developed elsewhere as part of the World Bank's Participatory Poverty Assessments (Norton, Bird, Brock, Kakande, & Turk, 2001; Robb, 2002), the "Consultations with the poor" studies (World Bank, 1999), the work on participatory census mapping in the 1990s in India, the Philippines, Uganda, and the Gambia (Chambers, 1997) and other studies incorporating participatory counting methods. However, there is a crucial difference: the numerical data (statistics) that we produced in Malawi using participatory methods were designed to be capable of analysis not only in the community where they were produced, but also at the national level… As far as we are aware, no previous study based on participatory methods has been capable of producing reliable national statistics".

This approach was adapted and developed by the UBOS and UPPAP teams, with technical support from Carlos Barahona of the University of Reading, to meet the goals of the UNHS III Qualitative Module, in particular for multi-dimensional poverty measurement. The innovations in methodology undertaken by the Qualitative Module teams are described

[8] Starter Pack was a large-scale agricultural and food security programme; the methods described here were developed in 1999-2002 as part of the Starter Pack evaluation.

in Section 2 of this paper. Section 3 analyses the potential for further development of the approach. Section 4 looks at some of the key findings on poverty of the Qualitative Module presented in the module report, and considers how they relate to the results of the Socio-Economic Module of UNHS III. The paper concludes, in Section 5, that the Qualitative Module has made fundamental contributions to the UNHS III process and outcome and has the potential to contribute still more.

2. METHODOLOGY

Many a times a list of steps to follow to achieve effective integration of quantitative and qualitative methodologies for the generation of statistics has been requested. In the opinion of the authors, if it were possible to construct such a list, there would be no reason for writing this paper and the integration of the two approaches would be widespread. Instead of attempting to build such list, we discuss the set of conditions that made possible the integration of quantitative and qualitative methods in this study.

We aim at providing a description of the process that took the team through the conception and design of the study. The stages described include the contextual background to the study, adaptations made to commonly used methodologies, issues about institutional collaboration, sampling considerations in the integration of qualitative and quantitative approaches, standardisation of participatory methodologies and the development of the specific tools for the study.

2.1 Starting point: the Malawi case

In order to understand the design of the Qualitative Module of UNHS III, it is important to be aware of its immediate methodological precursor. Between 1999 and 2002, teams of Malawian researchers with technical support from the University of Reading developed an approach which was able to produce national statistics using participatory methods. It did so by introducing a number of new elements into participatory studies:

1. The study designs incorporated statistical principles, in particular probability-based sampling for site selection and standardization of data collection tools and research methods.

2. Within sites, key information was collected for *all* households, i.e. there was a full census which meant that sampling error was avoided.

3. When measuring poverty within study sites, relative measurements using traditional Participatory Rural Appraisal (PRA) tools such as poverty piling were replaced by *absolute* measurements which enable comparisons between sites and aggregation of data (Levy, 2003).

Why did the teams carrying out the studies decide to do this? The main reason was that the demand for the Starter Pack evaluation came from policy makers and donors who needed answers that were reliable at national level. Some of the questions of interest were capable of being answered using household surveys, so the evaluation ran a number of surveys. However, other issues were too complex to be addressed using questionnaires; here, participatory group discussions and activities were thought more likely to produce reliable results. Nevertheless, the key stakeholders needed to be able to 'quantify' key findings, in order to assess their policy relevance. This was the main reason why methods had to be developed to produce reliable numerical data from participatory studies. A secondary motivation was that for certain issues, the participatory studies with quantifiable results could provide a crosscheck on the results of the household surveys.

2.2 Adaptation and innovation in Uganda

In Uganda, similar conditions motivated the development of the Qualitative Module. Participatory approaches were seen useful – particularly in relation to poverty monitoring – because they allow in-depth exploration of complex issues. As in Malawi, the main target audience for the research was policy makers, so the findings needed to be valid beyond the communities where the data were collected. But while in Malawi the participatory research studies were conceived only partly as a check on survey results, in the Uganda case, this aspect was seen as crucial. The Qualitative Module was integrated within, and closely linked to, the national household survey process, placing it firmly within the framework of official national statistics. This reinforced the need to generate quantitative measurements of poverty within the qualitative research framework, because without such measurements, the Qualitative Module would be unable to act as a crosscheck on the survey results.

The Qualitative Module was conducted during the second phase of the UNHS III in early 2006. According to UBOS (2006a), it would:

i. Improve the analysis and interpretation of the UNHS III findings.
ii. Collect information that could be used to explain the changes in poverty levels as measured by UNHS II and UNHS III.

iii. Link the measurement of poverty by the UNHS III with qualitative assessments of poverty.
iv. Improve the measurement of impact of policy interventions.
v. Validate, complement and explain the findings of the quantitative survey.

Thus, the Qualitative Module was seen as an integral part of the UNHS III. It would explain, interpret, complement and crosscheck the quantitative results of the Socio-Economic Module.

How were the objectives of the Qualitative module to be achieved? The team that designed the study spent much time and effort developing and testing a methodology that would produce *measurable results* as well as *in-depth qualitative answers*. UBOS (2006a) contains a full discussion of how the module approached each of the specific research questions. Here, we focus on the principal features of the methodology, in particular how the module achieved strong integration of qualitative and quantitative approaches for monitoring poverty within the context of a national household survey.

2.2.1 Institutional collaboration

The Qualitative Module brought together staff from UBOS and the UPPAP, who worked as a team throughout the research process. They met regularly, to plan the study, to design the research tools and methods, to review the methodology after it had been pilot tested, for training of field teams, to discuss the strategy for analysis after the fieldwork had been completed, to discuss and improve the draft report, and to check and approve the final version of the report. These regular meetings between UBOS and UPPAP staff, working as a team, promoted a positive exchange of views and better relations between government staff from quantitative backgrounds (UBOS) and from the more qualitative PPA tradition (UPPAP). Such institutional collaboration was essential for the success of a project which represented a radical departure within the national household survey process.

2.2.2 Sampling

Most participatory research studies use purposive sampling to select sites. Within sites, volunteers are invited to participate in group discussions. This approach does not give the researcher a 'representative sample': there is no way of demonstrating whether those included in the study represent the population of interest, e.g. the national population. Some studies attempt to include a more 'objective' element by including a questionnaire

survey in addition to the qualitative research. For instance, the LADDER project in 37 villages in Uganda, Kenya, Tanzania and Malawi[9] included a "sample survey comprising 35 households in each village" (LADDER, 2007). According to Ellis and Freeman (2004), households were selected using probability-based approaches: "Within each village, a PRA wealth-ranking exercise was conducted, resulting in the identification of three wealth groups that acted as the sampling frame for a stratified random sample". However, the villages were selected purposively. The aim was to describe a range of livelihood patterns in different socio-economic groups; the research did not "claim to represent national patterns" (Ellis and Freeman, 2004).

By contrast the sample of the Qualitative Module of the UNHS III was firmly based on statistical principles. The 36 research sites (of which 25 were rural, and 11 urban) were selected from the Enumeration Areas (EAs) sampled for the national household survey by a two-stage process. According to UBOS (2006a):

> "The first stage involved stratification of districts by region. In each of the four regions, three districts were randomly selected. At the second stage, three EAs (one urban and two rural) were randomly selected within the selected districts using the UNHS III list. In rural areas, if more than one village formed an EA, one of the villages was randomly selected for the Qualitative Module sample[10]".

UBOS (2006a) also notes that "by investigating a sub-group of sampling units of UNHS III, the Qualitative Module was able to link its results directly to those of the survey: it used different research methods, but could explore the same topics as UNHS III with the same households and communities". For instance, there would be poverty line data from the Socio-Economic Module for all sites visited by the Qualitative Module, which could be compared with the Qualitative Module's own findings on poverty.

The problem faced by many researchers using participatory methods is that even if they select sites using probability-based sampling, in the study

[9] Livelihoods and Diversification Directions Explored by Research (LADDER) was a project implemented between 2000 and 2004 by the Overseas Development Group (ODG), at the University of East Anglia, UK, and partners in Uganda, Kenya, Tanzania and Malawi, with funding from the UK Department for International Development.

[10] The Qualitative Module had planned to visit 12 urban sites (one per district), but no urban EA had been selected by the UNHS III for Kiboga district.

communities it is not possible to select a random sample. This is because a key principle of participation is that people volunteer to join the discussions (they should not be coerced or pressured into doing so), and volunteers are unlikely to be a representative sample of the community. In the Qualitative Module of the UNHS III, this problem was overcome by asking the volunteers to provide information about every household in the community, not just about their own households. This was achieved by using a technique known as 'community mapping with cards' developed in Malawi (Barahona, 2005). UBOS (2006a) observes that:

> "Community mapping with cards is an extension of the participatory technique of social mapping; it involves marking every household in the community on a map and creating a 'household card' for it. Key information about the household… can be recorded and analysed in the same way as other numerical data (such as survey data)".

This had the advantage of removing any possibility of within-site sampling error. Some problems were encountered in urban sites (see Section 2.3), but in the rural sites there was a full, participatory enumeration of households.

It should be noted that the Qualitative Module sample was not self-weighting. It was not possible to design a self-weighting sample because the sample was a sub-sample of the UNHS III sample, which in turn was not self-weighting. However, if the Qualitative Module team weighted and scaled up the sample for rural areas (see Section 3), the findings of the module would be representative of the rural population.

2.2.3 Standardization

While the absence of probability-based sampling methods is perhaps the most obvious reason why data from traditional participatory research cannot be aggregated to produce national statistics, another key reason is the lack of standardization in participatory approaches. This is deliberate. Proponents of participation believe in allowing freedom of discussion and encouraging groups to come up with their own definitions and choose which direction to go in. When successful, this generates a rich debate and useful outcomes at local level. However, the lack of standard research methods, and in particular, standard ways of collecting key data, means that results cannot be aggregated between sites and reported at a higher (e.g. national) level.

In the Qualitative Module of the UNHS III, a minimum level of standardization was required for this purpose, but care was preserve flexibility of discussions in the participatory tradition. The minimum level of standardization involved ensuring that the same procedures were followed in each site, and that key data was collected and recorded in the same way. This was achieved by:

- Careful design and testing of all PRA tools, which were described in detail in a 'Field Manual' setting out how each activity should be done.
- Thorough training "to ensure that all participants were capable of applying the research methodology and using each research tool consistently regardless of the team they belonged to or the research site they were working in" (UBOS, 2006a).
- Use of a Debriefing Document[11] (in addition to researchers' notebooks, community maps and household cards) to ensure that key information was recorded in all sites, and that it was recorded consistently.
- A strong system of quality control including: field team leaders who were responsible for ensuring that the work was conducted as planned in the Field Manual, that the Debriefing Document was completed after each activity and that all information was checked before leaving the study sites; two coordinators, one from UBOS and one from the UPPAP, who were in charge of overall supervision; and a technical adviser who provided methodological support and assessed the progress and quality of the fieldwork and carried out a full audit of the data when the fieldwork had been completed.

2.2.4 Poverty monitoring tools

The final challenge in relation to the objective of producing quantitative poverty data using participatory methods was to design PRA tools to generate numbers that could be aggregated across sites. Traditionally, practitioners of participation ask the community in each site visited to define poverty and to divide members in the community into locally-defined poverty categories. This approach to measuring poverty is known as *relative* poverty measurement because it defines poverty in relation to local points of reference which vary from place to place, making comparison between sites impossible. Levy (2003) notes that most participatory studies of poverty use this form of wealth ranking. However, for studies presenting national results: "these relative measurements of poverty within each community are not enough. They need a more *absolute* yardstick: something

[11] Copies of the Field Manual and Debriefing Document can be obtained from UBOS or the UPPAP.

that will be able to distinguish consistently the 'poor' and the 'very, very poor' in all communities…"

The Qualitative Module of the UNHS III recognized the need for absolute poverty measurements. It modified an activity called the 'Ladder of Life' which had been used before by the UPPAP and combined it with 'community mapping with cards' to produce an exercise which it called the 'Poverty Rope'. Focus group participants in rural sites[12] were invited to discuss *seven dimensions of poverty*[13]: assets for production, food security, sending children to school, access to medical services, having enough money, many dependants with few resources, and powerlessness.

For each dimension, participants were first invited to discuss the concept and give their views. Then, for each dimension, they were asked to place all the household cards for the village – which had been produced during an earlier community mapping session – along a rope which symbolized 'climbing out of poverty'. They were asked to work with standardized definitions for the top and bottom of the scale represented by the rope (see Table 1)[14].

[12] This section describes the Poverty Rope exercise as it took place in rural areas; some problems were encountered in urban areas (see Section 2.3).

[13] These seven dimensions were selected on the basis of the findings of the PPAs carried out by the UPPAP (MOFPED 2000, 2002), in which communities had been consulted about the nature of poverty. An eighth dimension – un/under-employment was included for urban areas.

[14] There has been some discussion among the co-authors about whether this is a form of 'relative' poverty measurement because comparisons between households were being made as cards were placed along the rope. For instance, it was common for group participants to compare the card of household B with that of household A which had been placed previously. While the term 'relative' can certainly be used to describe *the process* of placing the cards, this *does not mean* that the resulting *measure of poverty* was a relative one. However, it did mean that it was important to get the first few placements of cards right in relation to the (absolute) top and bottom ends of the scale, as the process of placing the remaining cards might be done in relation to the positions of the first few cards.

Table 1 Scale-end definitions for the Poverty Rope exercise

	Bottom of rope – worst position (1)	Top of rope – best position (10)
Assets for production	Do not have any productive assets at all	Have all the assets they need to produce, the capacity to replace them when needed, and the quality of the assets is the best possible
Food security	Struggles to find food all the year around and even has to beg for food for the members of the household	Always has enough food, either from their own production or from buying it. Even in times of scarcity they are able to feed everybody in the household
Sending children to school	They cannot afford to send any of the children in the household to school	All the children in the household go to school and they can give them all the materials, books and uniforms required; they can even choose the school their children go to
Access to medical services	The household cannot access medical attention of any kind for any of its members	Whenever there is an ill person in the household, they get the best medical help available
Having enough money	The household is always short of money and cannot afford the most basic necessities; they simply "do not have any money"	The household has enough money to satisfy basic needs, to invest in business, to save, and to spend on luxuries
Many dependents with few resources	The household has too many dependants in relation to its resources to be able to satisfy its needs	The household can sustain all its dependants without problems
Powerlessness	The household cannot make itself heard in the community and does not participate; they cannot meet their aspirations even when they work very hard; they are discriminated against and in general do not have any power to change their desperate situation	The household has the power to achieve what their members want; they are heard and respected in the community, and they can even help others

Source: UBOS (2006a).

Once all the household cards had been placed along the rope, the distance between the top and bottom of the rope was divided up into 10 equally spaced intervals by the researchers. Each household card was marked, in the box provided for the relevant poverty dimension (see Figure 1), with a score from 1 to 10, recording the interval where it had been placed on the rope. The 'rope scores' for each poverty dimension could be integrated across sites.

Figure 1: Household card

UNHS III household ID:				
Interviewed by survey?	Yes	( )	No	( )
Name of head of household				
Gender of head of household	M	( )	F	( )
Type of house				
Enterprise code				
Poverty dimensions				
			Rope score	
Does not have assets for production				
Not enough food				
Cannot send children to school				
No children at school	( )			
Cannot access medical services				
Does not have enough income				
Large number of dependants				
Powerlessness				
Lacks jobs (urban only)				
Child-headed household			( )	
Widow/er head of household			( )	
Disabled people in household			( )	
For Urban Areas				
Invited to FGD No.				
Attended FGD	Yes	( )	No	( )

Source: UBOS (2006a).

2.2.5 Producing reliable national statistics

The methodological features discussed here provide the basis not only for qualitative poverty assessment, but also for *measuring* the multiple dimensions of poverty. Although the research is based firmly on participatory methods, key data collected in each site can be aggregated to produce numerical results. After weighting and scaling up, the quantitative data from the participatory activities conducted by the Qualitative Module in rural sites will be able to claim to be representative of the rural population as a whole and therefore to be of national policy relevance. As in the Malawi case, the main features of the methodology which make this possible are:

- selection of the sample using probability-based sampling and a full census of households within sites;
- standardization of research methods and data collection tools; and
- use of absolute rather than relative approaches to measuring poverty within sites.

Quantitative data from the rural sites of the Qualitative Module can also claim to be comparable with the findings of the survey-based modules of the UNHS III, in particular the Socio-Economic Module (see Section 3), and can therefore be used as a means of crosschecking the survey findings.

2.3 The challenges

In general, the Qualitative Module teams were successful in implementing their innovative methodology. However, there were some challenges. It will be important to bear these in mind when planning future studies, such as Qualitative Modules which UBOS is planning to run within future national household surveys, or similar studies at region or district level.

The main challenge in relation to rural areas was that although the Qualitative Module sample was of a reasonable size in terms of number of households (we have 3,320 household cards for rural sites), it was a relatively small one in terms of the number of sites (25 rural sites). This means that when producing national level figures, we should be aware that within-cluster correlation may play an important effect in the precision of the estimates. A slightly larger sample of sites would be desirable for future studies.

In relation to urban areas, there is an even more important challenge. The ability to record key information on all households in a site is the basis for

the 'community mapping with cards' and the 'Poverty Rope' exercises. In villages, people know each other, and it is possible to convene a group of participants who can act as 'key informants', providing reliable information about all the households in the village[15]. This information is checked and corrected during the mapping process (Chambers, 1997). Even in large villages, the village can be divided into areas where people know each other, and area focus groups can provide reliable information about the households in these areas.

However, the Qualitative Module encountered problems in urban sites. During the pilot testing, the research teams found that because of the nature of urban areas, with many households living in close proximity but not knowing much about each other, it was not possible to convene focus groups whose participants could provide reliable information about their fellow residents. For the main phase of the study, it was decided to carry out the activities in relation to the households that were participating in the discussions. However, this proved to be a serious limitation because the results only 'represent' those who took part. Without a full census of each site (or a probability-based sample, which is incompatible with the principles of participation) we cannot produce national results which are representative of urban areas.

The problem of urban sites is the main methodological challenge for future studies of this kind. An appropriate methodology needs to be designed for urban areas – one which incorporates the richness of qualitative methods, but also allows reliable measurement of multiple poverty dimensions.

3. THE POTENTIAL FOR FURTHER DEVELOPMENT

Some analysis of the numerical data from the rural sites of the Qualitative Module is presented in the module report, together with the qualitative research findings. The results of the Poverty Rope exercise are presented as percentages of households with different scores for each poverty dimension; there is also a multivariate statistical analysis generating a combined poverty indicator (see Section 4.1). However, there is considerable potential for further analysis of the data. This section explores four areas of analysis which represent important opportunities for UBOS and the UPPAP to improve on the results of the Qualitative Module and to further exploit its data:

[15] This works for information of a 'public' nature, not for sensitive, private issues – but the Qualitative Module was not researching sensitive, private issues.

1. **Including measures of accuracy**. The results presented in UBOS (2006a) do not include measures of accuracy such as standard errors and confidence intervals. These should be included to allow readers to judge the precision of the estimates provided[16].

2. **Weighting and scaling up**. For rural sites, a process of weighting and scaling up would allow the Qualitative Module to present results which are representative of the rural population, not just descriptive of the sample. This would not be difficult. The only issue is that in order to generate national estimates, a set of weights needs to be derived. Weighting and scaling up is important in order to complete the process of creating a baseline for the measurement of multi-dimensional poverty.

3. **Direct comparison with survey results**. The Qualitative Module set out to measure the multiple dimensions of poverty as seen by participants in local communities. The Socio-Economic Module survey measured poverty using the traditional approach which asks questions about household consumption and expenditure to permit the estimation of an economic poverty line[17], with each household in the survey classified as 'non-poor' or 'poor' (above or below the poverty line).

   The Socio-Economic Module set out to interview 10 households per site. The sites visited by the Qualitative Module were deliberately chosen to be a sub-set of those visited by the Socio-Economic Module, so that in all Qualitative Module sites there would be consumption and expenditure data as well as data on multi-dimensional poverty from the household cards[18]. A careful numbering system was used, so

[16] It should be noted that the report of the Socio-Economic Module (2006b) is also deficient in this sense, providing measures of accuracy for only a few of the results (Appendix III).

[17] Consumption and expenditure were measured for food, beverages and tobacco with a 7-day reference period; non-durable goods and frequently purchased services with a 30-day reference period; and semi-durable goods and durable goods and infrequent services with a 365-day reference period.

[18] To increase the size of the sample for which consumption and expenditure data was available in the sites visited by the Qualitative Module, the relevant sections of the Socio-Economic Module questionnaire were administered to a random sample of 10 households in these sites. This means that in the sites visited by the Qualitative Module, there should be consumption and expenditure (and therefore poverty line) data for 20 households per site (10 questionnaires from each module).

that – at least for the rural sites, where there are household cards for all members of the community – we can match these data.

This should allow a direct comparison between the Socio-Economic Module's poverty line and the Qualitative Module's measure of the multiple dimensions of poverty as seen by local participants. Some exploratory analysis has already been carried out, but more needs to be done, as the results seem likely to raise important questions for the future measurement of poverty in Uganda – and probably elsewhere in Africa (see Section 4.2).

4. **Exploring the issues behind the numbers**. The qualitative and quantitative information collected by the Qualitative Module may help to explain some of the questions raised by the Socio-Economic Module report (UBOS 2006b), as we have in-depth information for the sites visited by the Qualitative Module including notes of discussions, Debriefing Documents, community maps and household cards. The task of 'interrogating' the Qualitative Module information sources to help interpret the Socio-Economic Module findings remains to be done.

4. FINDINGS ON POVERTY

4.1 Key results of the Qualitative Module

This section highlights a few of the most interesting findings of the Qualitative Module. It focuses on poverty in rural areas[19]. The results presented here are merely descriptive of the study sample and they do not include measures of accuracy (see Section 3). Nevertheless, they are a good starting point.

The Qualitative Module looked at seven *dimensions of poverty* in rural areas. Table 2 summarizes the qualitative and quantitative information provided by the focus group participants. UBOS (2006a) observes that:

[19] The Qualitative Module covered many other topics in addition to poverty: housing conditions, household assets, household enterprises, health, education, water and sanitation in rural areas, food consumption, vulnerable groups and external shocks. Readers interested in the findings on these topics should consult the module report (UBOS, 2006a). The report also presents findings for the urban sites.

Table 2 Main findings on dimensions of poverty, rural sites

	Qualitative (key points made by participants)	Quantitative (Poverty Rope scores, 1-10)
Assets for production	Land size and quality of soil were most important, followed by agricultural tools.	• 68% of the sample scored 3 or less • 37% scored 1
Food security	Communities valued the capacity to grow one's own food, giving those who depend on buying food lower scores.	• 59% of the sample scored 3 or less • 26% scored 1
Sending children to school	Many children still fail to attend primary school: although there are no tuition fees, parents have to buy materials and uniform and often pay disguised fees.	• 60% of the sample scored 3 or less • 26% scored 1
Access to medical services	Patients face serious obstacles including unprofessional staff behaviour and irregular attendance; understaffing; and shortage of medicines and equipment. Communications and social networks helped access.	• 60% of the sample scored 3 or less • 25% scored 1
Having enough money	Having enough money is associated with ownership of land and salaried employment. The elderly and young people tend to face cash constraints.	• 61% of the sample scored 3 or less • 30% scored 1
Many dependents with few resources	Households with strong asset bases scored well. The eastern region has the biggest problem of dependants in relation to resources.	• 61% of the sample scored 3 or less • 31% scored 1
Powerlessness	Being disabled, elderly or widowed was associated with powerlessness and exclusion, as was poverty; but some poor people were active in the community owing to their education or personal character.	• 56% of the sample scored 3 or less • 32% scored 1

Source: UBOS (2006a).

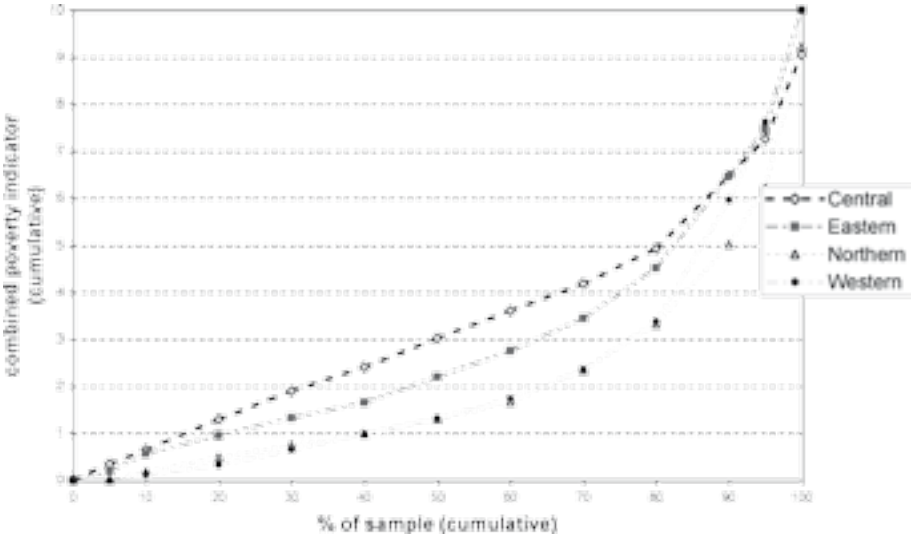
> "One of the potential uses of the data on multiple dimensions of poverty produced using the Poverty Rope is that, at least for rural areas, there is a baseline for future studies. This baseline is richer than standard quantitative poverty measures because it originates from in-depth discussions characteristic of participatory approaches".

UBOS (2006a) also presents a combined poverty indicator produced with Principal Components Analysis (PCA)[20] from the Poverty Rope data. The results enable the researchers to map the distribution of poverty/wealth in the sample in the form of 'poverty distribution charts'. In Figure 2, the cumulative percentage of the Qualitative Module sample for rural areas is shown on the horizontal axis, while the cumulative combined poverty indicator (0-10) for the households in the sample is shown on the vertical axis.

UBOS (2006a) points out that the curves show the relationship between households in the sample and the combined poverty indicator: "If the curve lies close to the bottom and right-hand sides of the chart, this indicates that a large percentage of the sample is living in poverty and a relatively small percentage is wealthy. Curves which are higher and further to the left indicate a more even distribution of poverty/wealth". Thus, Figure 2 shows that in the Qualitative Module sample for rural areas, the northern region has the worst poverty distribution, closely followed by the western region. The central region is in the best position, with fewer of its inhabitants living in poverty.

[20] PCA is a form of multivariate statistical analysis. Details of the PCA used for the Qualitative Module can be found in UBOS (2006a), Chapter 2 and Appendix 6.

Figure 2: Poverty distribution chart for rural areas by region
Source: Adapted from UBOS (2006a).



4.2 Comparing results within UNHS III

The measure of poverty developed by the Qualitative Module is not only of value in its own right, as a baseline for monitoring progress towards poverty reduction. In addition, because of its integration into the household survey process and its capacity to produce quantitative information, it has enormous value as a crosscheck on the findings of the survey-based modules. In particular, we would hope to find that its results support the findings of the Socio-Economic Module's poverty line analysis. If the results of the two modules paint a consistent picture of poverty in Uganda, policy makers can be confident that the information they are receiving about poverty is reliable. If not, the reasons for the discrepancies need to be investigated. Either outcome is valuable to the researcher, even if it is not the desired one (consistency).

Table 3 Rural poverty statistics in the UNHS III

Region	Population share (%)	Mean CPAE (USh)	P0 (%)	P1
Central	20.6	45,300	20.9	4.7
Eastern	23.2	30,000	37.5	9.5
Northern	16.9	20,500	64.2	22.3
Western	23.9	37,400	21.4	5.4

Notes: CPAE = consumption per adult equivalent. P0 = headcount (percentage of individuals estimated to be living in households with real private CPAE below the poverty line). P1 = poverty gap (sum over all individuals of the shortfall of their real private CPAE from the poverty line, divided by the poverty line).
Source: Extract from Table 6:9, UBOS (2006b).

The early indications show some major discrepancies between the findings of the two modules. Two issues have been identified so far:

1. **Regional differences (rural areas).** Both modules agree that of the four regions of Uganda (central, eastern, northern and western), poverty is worst in the northern region. However, the Qualitative Module found that poverty in the western region was almost as bad as in the north, while the Socio-Economic Module found that the western region was comparable with the central region and better off than the east (see Table 3). Moreover, there was a marked decline in poverty in western rural areas between the UNHS II (2002/03) and the UNHS III, according to the Socio-Economic Module (UBOS, 2006b).

2. **Matching poverty line and poverty dimensions data**. There appears to be very little relationship between the poverty line data of the Socio-Economic Module and the poverty dimensions data of the Qualitative Module. At the time of writing this paper, we have been unable to do a full analysis comparing the Qualitative Module's poverty measure with the poverty line analysis of the Socio-Economic Module (see Section 3). However, an exploratory analysis has been done on the basis of a data set received by the Qualitative Module team from the Socio-Economic Module. This data set provides poverty line information for 181 households[21] interviewed by the Socio-Economic Module in 21 rural sites which were visited by the Qualitative Module. The

[21] The number of households per site in this data set is highly variable, ranging from as low as 3 in one site in the northern region to as high as 16 in one site in the central region. There are only four sites and 31 households in the western region.

households are divided into 'poor' and 'non-poor'. We matched this information with the Qualitative Module poverty dimensions data for the same households. We expected to find all 'poor' households scoring 1 or 2 on the Poverty Rope, but in fact little relationship was found (see Table 4), even for the 'having enough money' dimension, which should – theoretically – be similar to the consumption and expenditure approach to measuring poverty.

Table 4 Having enough money vs. poverty line data, rural sites

Poverty Rope score for 'having enough money' dimension	Poverty line classification	
	Count of 'non-poor' households	Count of 'poor' households
1	27	26
2	17	14
3	18	6
4	5	7
5	12	4
6	7	0
7	12	5
8	5	3
9	6	2
10	2	3
Total	**111**	**70**

Source: UBOS.

What might be the implications of these two issues? Although it is hard to say until a full analysis is carried out, at this stage we can suggest some hypothetical reasons for these mismatches:

- One possible reason is simply that the two approaches measure different aspects of poverty. While poverty lines provide a useful summary of economic poverty, they are not the only way to assess the level of satisfaction of basic needs of the population. The multi-dimensional poverty measure developed by the Qualitative Module is a different way of understanding the reality of poor people.
- A related aspect is perceptions. Even though the Poverty Rope used an 'absolute' approach to measuring poverty, the outcome may have been affected by people's perceptions. For instance, people in rural areas of

the western region may perceive themselves to be poorer than those in rural areas in other parts of the country.

- However, the 'different ways of measuring poverty' and 'perceptions' explanations are not entirely satisfactory. Surely there should be a relationship between the results of the two measures of poverty? If not, this would imply that the way local people see their own poverty situation is not reflected in official (poverty line) statistics. So if Uganda makes progress towards eliminating poverty on the basis of the poverty line indicator, this may not be felt as progress by ordinary people. Such an interpretation would certainly be of concern to policy makers.
- A less worrying possibility is that either the Qualitative Module or the Socio-Economic Module is flawed in terms of methodology, implementation or analysis, and that finding the source of such errors and correcting them would solve the mismatch problem. We have tried to ensure that the Qualitative Module methodology is robust, that the field work was carried out to high standards and that the analysis was reliable. We feared that there might be some bias from clustering affecting the results for the western region (see Section 2.3), but we have checked the data for the western region sites and found no suspicious patterns. Similar checks would be advisable for the Socio-Economic Module. With regard to the Qualitative Module, a degree of humility is also prudent: it the first study of its kind, and further studies should be carried out to perfect the approach.

5. CONCLUSION

The Qualitative Module of the UNHS III represents an innovative approach to integrating qualitative and quantitative research methods. It builds on earlier work in Malawi to create new ways of measuring the multiple dimensions of poverty as seen from the perspective of ordinary people, as well as providing qualitative assessments of poverty. After weighting and scaling up, the results from the rural sites of the Qualitative Module will be representative of the rural population of Uganda, creating a baseline for measuring multi-dimensional poverty which will be of great value to national poverty monitoring efforts.

The Qualitative Module has also made fundamental contributions to the UNHS III. Its integration into the national household survey process means that comparisons can be made between the Qualitative Module's indicators of poverty and poverty line data from the Socio-Economic Mod-

ule. The Qualitative Module results have enormous value as a crosscheck on the findings of the survey-based modules. Initial analysis has identified some discrepancies between the poverty findings of the Qualitative and Socio-Economic Modules, and a full exploration of the reasons for these will help to improve the design of future UNHSs.

The UNHS III Qualitative Module represents a milestone in the integration of qualitative and quantitative methods for monitoring poverty. UBOS and the UPPAP are committed to continuing and building on this experience in the future. Its success should encourage other countries in Africa to integrate qualitative studies into their national household surveys.

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Have Africa's Statistical Voice Heard : How to Prepare Africa's Contribution to International Statistical Conferences, Meetings and Working Groups

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Abstract

Compared with the other regions, the voice of Africa is particularly weak in the international conferences and working-groups that deal with statistical methods and standards development. Making it louder will require a thorough assessment on the way a strong African technical contribution can be built, validated within the region, conveyed to the international bodies concerned and advocated by experienced African experts. This paper proposes an approach for preparing a strategic report on ways and means to organize an effective African contribution to international statistical forums. The proposition that is made builds on successive and inter-related steps that will lead to (i) identifying the priority themes and needs where to focus, (ii) inventorying the existing related technical working groups, (iii) reviewing the organization of the African statistical system, and (iv) addressing related issues such as the reinforcement of African research and exchange in statistics as well as knowledge sharing.

Key Words: *Statistical coordination, African voice, International statistical conferences, Working groups, City groups, Statistical systems, Regional and sub-regional organizations, African statistical expertise*

Résumé

Comparativement aux autres régions, la voix de l'Afrique est particulièrement faible dans les conférences internationales et les groupes de travail qui traitent du développement de méthodes et normes statistiques. La rendre plus audible nécessite une évaluation complète de la façon dont une contribution technique africaine forte peut être établie, validée dans la région, transférée aux structures internationales concernées et défendue par des experts africains expérimentés. Cet article propose une approche pour préparer un rapport stratégique sur les voies et moyens d'organiser une contribution africaine efficace aux forums statistiques internationaux. La proposition qui est faite se base sur les étapes successives et interconnectées qui conduiront à (i) l'identification des thèmes et des besoins prioritaires où se focaliser, (ii) l'inventaire des groupes de travail techniques existants y relatifs, (iii) la révision de l'organisation du système statistique

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africain, et (iv) aborder les questions y relatives telles que le renforcement de la recherche et des échanges africains dans le domaine statistique aussi bien que le partage de la connaissance.

Mots clés : *Coordination statistique, Voix africaine, Conférences statistiques internationales, Groupes de travail, City-groups, Systèmes statistiques,Organisations régionales et sous-régionales, Expertise statistique africaine*

1. BACKGROUND

Over the past decade, the demand for quality and timely statistics has tremendously increased in the African countries. This phenomenon was mainly emphasized by the launching of global or regional initiatives, such as the Millennium Development Goals, the New Partnership for Africa's development, as well as Poverty Reduction Strategies, given their sizeable data needs. The monitoring of these initiatives requires reliable and comparable statistics to be collected, processed and disseminated, yet statistics meant for national purposes are not always relevant for international monitoring and vice versa. This is a real concern in an environment of data paucity and scarcity associated with regional specificities.

The socio-economic situation in Africa is as special as its statistical development needs. There is a need to adapt international standards and norms to African specific features and circumstances to ensure that recommended statistical operations are effective and realistic: effective in terms of capturing properly African realities and realistic in relation to resource constraints. Very many examples can be cited to justify the need for more tailor-made statistical methods and tools. Some international methods recommended for price data collection for the construction of consumer price indices prove difficult to implement in market conditions where goods and services are not sold in standard quantities and where the price of the same item in the same market place can greatly fluctuate during the day for reasons which do not seem to support economic theory on consumer or seller rationality. The notion of household is another example of conceptual problem which may need to be addressed to make household surveys better capture processes and flows related to decision, production, labour, income sharing, consumption and dwelling in most African countries. These issues should be discussed and agreed at the African level and submitted to the relevant international forums with a view to reaching

global understanding and consensus on their inclusion in international systems.

However, African participation in international meetings where standards, methodologies and classifications are discussed and approved is rather weak. This absence frequently results in African specificities not being properly accommodated in international systems, which further leads to the latter being sometimes questioned within an African context. The issue here is to suggest a way of increasing the African participation and improving technical contribution to international forums (meetings, working groups, etc.)

Before going into more details, it is important to discuss some terminology that will be used in this paper:

- **"Discussion and revision process"** are those meant to support the international development of statistical norms, methods, standards. A non exhaustive list of these processes is shown in Annex.
- **"Systems"** consist in all bodies and institutions (international, regional, sub-regional, national organizations) exchanging in the framework of different types of working groups, each of them having a specific mandate. The system we are referring to here should not be mixed up with the term "Statistical System", which corresponds to the grouping of statistical actors in a given geographic area (national, sub-regional or regional).
- **"Leading body"** stands for an organization leading a process and coordinating the relevant system. Leading bodies are generally international organizations (World Bank, UN agencies, IMF, OECD…). City Groups, in their advisory capacity, can also be considered as leading bodies for specific statistical themes.

These concepts apply for any geographical level: international, regional, sub-regional and national.

As an illustration of the above, the proposed terminology applies for the ongoing "2010 World Population and Housing Census Programme" as follows: this is an international *discussion and revision process* aiming at developing methods and concepts to support the implementation of population censuses. The *leading body* is the United Nations Statistics Division (UNSD). This process is – or should be – supported by international, regional, sub-regional, national systems. Each *system* involves a wide range of actors that gather in different types of meetings (at international level:

expert group meetings, UN expert group meetings; at regional level: symposia, workshops; at sub-regional level: sub-regional workshops; etc.…). Each meeting has a specific mandate and is expected to deliver specific outcomes.

This process, supported by integrated systems at each geographical level, needs to be downstream and upstream interlinked. While it is useful to learn about the main modus operandi of the ongoing and envisaged processes, an analysis of the whole fabric thereof is an enormous work and may not be always relevant in the African context. This learning process is the first step in the implementation of mechanisms aimed at making Africa's voice louder and more effective in international debates on statistical recommendations.

The aim of this article is to initiate a discussion on these mechanisms. To achieve this goal, we suggest a three-step approach to be developed: first the drafting of a concept note (this article can serve this purpose); second the conduct of a specific study; and third the implementation of the recommendations emanating from the study.

2. PROBLEM UNDERSTANDING

A stepwise approach should be followed through closely interlinked steps. The first step consists in identifying priority statistical areas related to major development issues and to decide as whether they need to benefit from international discussion and revisions processes. The latter will be defined in terms of their composition, their functioning, their agenda and work programmes. All these elements may be different depending on the statistical issues to be addressed, the process types and the related systems.

The second step is about analyzing for each process and corresponding system:

- The downstream/upstream integration of the discussion and revision processes as well as the relationships between systems and their coordination mechanisms;
- The participation of African – national, sub-regional or regional – representatives in international meetings: method of selection, mandate, means of financing, regional or sub-regional legitimacy, how a common African position is prepared, and technical contribution.

The third step aims to ensure the sustainability of the systems supporting discussion and revision processes. It entails identifying African institutions, groups or individuals that can act as focal points for:

- Formulating national/regional specificities and views;
- Consolidating them into a common African position; and
- Relaying the common position to the appropriate international body.

Existing regional and sub-regional bodies that can play such a role must be identified and their strengths and weaknesses assessed. The same approach will be applied to already operational regional and sub-regional technical working groups. In the case of identified gaps (this is a critical issue for Africa), the study could propose the creation of new regional and sub-regional technical working groups or review the terms of reference of existing working groups; consultancy assignments, etc...

The success of this operation hinges on the identification of appropriate expertise, at the right time and within the right bodies, to prepare the African position. There are many high level statistical experts in Africa; the question is how to identify the ones needed and how to empower them in terms of granting them the required legitimacy to prepare and defend the African position. Also, there are some basic principles to be followed in the approach.

3. FUNDAMENTAL PRINCIPLES

We propose that the following basic principles should be considered in the study:

- Avoid duplication. There are already several on-going initiatives in the development of statistics in Africa and different actors are involved. It is essential to consider what exists and to avoid re-inventing the wheel. An important effort should thus be put in assessing the existing mechanisms and the strengths and weaknesses of the various partners. The existing coordination framework (the Statistical Commission for Africa – Statcom-Africa – and the African Statistical Coordination Committee -ASCC) is expected to facilitate the assessment.
- Be realistic and sustainable. It is essential to prepare proposals that build on a solid ground and that have a chance to succeed. There will be a need to mobilize high caliber African consultants who have proven experience in statistical development in the region and in

international discussion and revision processes. They will help validate the conclusions and recommendations emanating from the study,
- Articulation with the UN fundamental principles of official statistics.

4. OBJECTIVE

The objective of the study is to propose a strategic report aiming at identifying the best ways and means (existing or to be created) to organize and/or improve the African contribution to international statistical development. This should lead to greater consideration being given to Africa needs and priorities in rules, norms and methods being developed at the international level.

5. EXPECTED RESULTS

The objective of the study will be achieved through three successive and inter-related results:

- First, an inventory of the existing discussion and revision processes and related systems will be carried out and their respective functioning will be analyzed. This will be done for various statistical areas deemed critical for statistical development in Africa;
- Second, a review of the organization of the statistical system in Africa, its structure, the partners involved (at regional, sub-regional and national levels) and their respective roles. Particular emphasis will be put on its current or potential contribution to discussion and revision processes. This should heavily leverage on the RRSF material and monitoring process, as well as on the ASCC work. Also, comparisons with other regional systems will be made in order to identify operational and organizational benchmarks,
- Third, recommendations will be made for the organization of consultations, technical meetings and consultancy activities to prepare an African contribution that is relevant for international statistical conferences, meetings and working groups.

5.1. Inventory of discussion and revision processes, and related systems; analysis of their functioning in relation to selected African statistical priorities

There are many ongoing discussion and revision processes supported by many international, regional and sub-regional systems, with many actors involved in various technical working groups to discuss international methodological development in statistics. Some of them are listed in Annex. This list, once completed, together with the list of African statistical priorities, should be discussed at the African level prior to starting the inventory work of processes that are the most relevant for Africa. A clear understanding of those processes, their supporting systems, and their agenda is a prerequisite for the study. A particular attention will also be paid to assessing the upstream and downstream linkages within the systems.

5.2. Review of Africa's potential contribution to discussion and revisions processes and related systems and comparison with other regions

A specific objective of the study is to propose recommendations aimed at creating or leveraging on existing technical groups to ensure a sound and coordinated African contribution at international level. Out of the 15 main working groups established under the ASCC or StatCom-Africa, 8 are related to specific economic or social sectors. These are: the International comparison programme for Africa (ICP-Africa); Measuring and Fostering Progress of African Societies; Gender Statistics; Development Indicators; National Accounts; Measurement of the Informal Sector; Price statistics; and Financial statistics. Comprehensive terms of reference of these working groups should be prepared and submitted to the relevant oversight body (ASCC or StatCom-Africa) for approval.

Some existing effective experiences could be helpful for the design of a benchmark against which to compare and to evaluate the situation in Africa, as well as for the preparation of the terms of reference of the working groups. The benchmark will also allow assessing the global and operational relevance of the proposals that could be made through the study. The European and/or the Caribbean statistical integration processes could be analyzed and could serve as basis for the benchmark.

5.3. Recommendations to organize consultations, technical meetings and consultancy activities to prepare an African contribution that is relevant for international statistical conferences, meetings and working groups

This third result will consist in putting together realistic and sustainable proposals to improve the institutional involvement of Africa in international processes and systems, to reach a coordinated and solid African technical contribution, to mobilize the right expertise.

6. PROPOSED ACTIVITIES

The above will require the following activities.

To achieve result 1, the following activities are proposed:

1.1. Desk and research work aiming at **analyzing relevant statistics for the monitoring of global initiatives such as** *MDG, NEPAD, PRS*, etc. The statistical scope of the study should be defined by selecting statistical themes that have the highest level of priority for the region and on which the study should concentrate.
Outcome: *List of statistical priority themes*

1.2. Based on the list of priorities selected through activity 1.1., the study will identify **the relevant (ongoing or to be launched) discussion and revision processes and supporting systems, and leading bodies** at international, regional, sub-regional and, potentially, national level. Some detailed desk and research work will be carried out on the mandate and functioning of each system.
Outcome: *Mapping of the existing or to be launched discussion and revision processes and supporting systems; Description of their functioning, of their future objectives and their upstream and downstream connections.*

1.3. In the context of the study, information on the work programmes and calendars of ongoing and future methodological developments should be collected. This will include the dates/periods of future methodological meetings. Also, it is recommended to identify tools to be used to ensure that relevant information is accessible to the African region on a regular and timely basis.

Outcome: *Timetable of processes and related meetings where methodological statistical development in the African priority areas will be discussed; and outlines of a tool guaranteeing regular exchange of information*

To achieve result 2, the following activities are proposed:

2.1. For the analysis of the African context

2.1.1. The assessment should focus on sub-regional bodies that support statistics in Africa (Afristat; statistical units/divisions of sub-regional economic communities. It will also cover some African National Statistical Institutes that are especially active in regional and international discussion and revision processes and related systems. The assessment will also address the coordination mechanisms at regional and sub-regional level. **Missions to sub-regional and national statistical offices** previously identified should be organized to meet and discuss with people in charge of statistical development and coordination and professionals active in regional and international statistical forums.
Outcome: *Description of the functioning of the African Statistical System from a sub-regional perspective; Mapping and description of the African participation in the discussion and revision processes and related systems (from sub-regional and national perspectives); Description of existing sub-regional coordination mechanisms.*

2.1.2. It is also proposed to carry out **missions to regional offices** (African Center for Statistics at ECA, African Development Bank, ACBF, the African Statistical Coordination Committee, the African Union Commission…), to assess their involvement in discussion and revision processes and related systems, the existing coordination mechanisms between those regional, sub-regional and national bodies. Alternatively, the most could be made of any existing reports on these issues.
Outcome: *Description of the functioning of the African Statistical System from a regional perspective; Mapping and description of the African participation in the discussion and revision processes and related systems (from regional perspective); Description of existing regional coordination mechanisms.*

2.1.3. It is proposed to use **contacts/missions to international bodies** (UNSD, IMF, City Group secretariats, OECD) to assess, from an

international point of view, the African participation in discussion and revision processes and the potential means to improve this contribution both at institutional and technical levels.
Outcome: *Mapping and description of the African contribution in discussion and revision systems (from an international perspective)*

2.1.4 In addition to the above, another aspect to be addressed is the issue of human resources necessary to improve and sustain the African statistical systems and their contribution to international meetings and conferences. It's mainly about identifying and mobilizing African statisticians likely to contribute to the technical debates in the sub-region, the region and at the international level. This can leverage on similar work being carried out by the African Center for Statistics.
Outcome: *Terms of reference for an African expertise roster and launching of this roster.*

2.2. For the comparison with other regions

Each region is specific in itself as is (and has been) the organization and the development of its statistical system. However, even if all the good practices cannot be replicated as such, lessons can be drawn that can help design relevant and useful benchmark. It is thus proposed to analyze statistical systems in two regions: Europe and the Caribbean.

2.2.1. **Contacts with Eurostat, an "old" and a "new" Member States National Statistical Institutes** are proposed, to collect information on the lessons learnt from past and recent integration processes, and particularly the means used (i) to strengthen relations between a regional statistical office and member National Statistical Institutes and (ii) to ensure that European and international statistical developments take into account national specificities.

2.2.2. It is proposed to establish **contacts and conduct missions to other European and International organizations, such as UNSD, UNECE, OECD**, which, jointly with Eurostat, are active in statistical developments. This would allow to assess the effectiveness of the coordination mechanisms among those organizations and their respective contributions to the discussions and development of statistics at the international level. However, most desired information can be downloaded from the relevant web-sites.

2.2.3. **Desk work** will be carried out to analyze, to a lesser extent than for the European case, the more recent integration process that is going on in the Caribbean. This will be an opportunity to comfort or to reject the potential of good practices already identified from the European exercise but maybe to also identify new ones that could be interesting for the African context.

2.2.4. We further propose to use **contacts/missions to international leading bodies** (UNSD, IMF, City group secretariats) to assess, from an international point of view, the European and Caribbean contributions to international statistical development.
Outcome: *Report on the European/Caribbean experiences and good practices*

2.3 For the contrasting of the African situation with the other regions

On the basis of the analysis of the outcomes from activities 2.1 and 2.2, we recommend to assess the strengths and weaknesses; opportunities and threats of the African system in comparison with the European one and, to some extent, with the Caribbean one. It's about assessing the applicability in the African context of other good regional practices.
Outcome: *Report on the comparative lessons that can be drawn from other regions and on their relevance to the case of Africa.*

To achieve result 3, the following activities are proposed:

3.1. A preliminary version of the strategic report should be prepared on the basis of the outcomes of the previous activities. The strategic report will build on the expected results 1 and 2 (Basically inventory and review) and will also give recommendations on the following points:

a) Setting-up or strengthening African working groups with a view to promoting exchanges with already active international systems;
b) Launching additional discussion and revision processes to address African specificities and identification of relevant supporting systems;
c) Generating research activities in selected priority areas;
d) Preparing a strategy on knowledge sharing on statistical paradigms for the region. Existing tools, such as Electronic Discussion Groups used by UNSD, IMF and OECD, will be analysed to propose a solution adapted to Africa.

3.3. The preliminary version of the strategic report will need to be submitted to the ASCC and later on to the StatCom-Africa for further guidance on the preparation of the final report.
Outcome: *The strategic report*

CONCLUSION

Leading such an exercise to a successful outcome will require a lot of consultation, coordination and exchanges at all the levels of the African statistical system (national, sub-regional and regional). But they will also be needed between this specific system and the other regional ones, on the one hand, and the existing discussion and revision processes, on the other hand. For this exercise, the African technical capacities will have to be mobilized wherever they are in order to make the identification of the needs and priorities as close as possible of the reality of the African context.

The work will have to be based on clear commitments from the main actors of the African statistical system on work programmes, calendars and expected outputs at each stage of the work. The effort is the one of the continent and all the forces involved in the development of statistics should be joined for the benefit of all.

Annex: Examples of discussion and revision processes

Discussion and revision processes

- **System of National Accounts (SNA)** – Inter Secretariat Working Group on National Accounts (UNSD, IMF, World Bank, OECD, Eurostat, UN regional Commission). Target date 2008.

  For the following specific topics:

  a) Pension: work coordinated by Eurostat and the European Central Bank
  b) R&D: Deriving capital measures of Intellectual Property Products, coordinated by OECD in cooperation with Eurostat Task Force for coordination with the ESA95 revision process
  c) Set of operational guidelines for the treatment of merchanting and goods for processing in NA, coordinated by UNECE/OECD/ Eurostat Working Group on Impact of Globalization on NA
  d) Integrated measurement of informal sector within NA: a preliminary limited circulation draft chapter (SNA 93 rev.1 – Volume 2) discussed during Delhi group meeting on Informal Statistic sector
  e) High level group (to be defined and set up by UNSC in 2009) to examine long term implication of rapid changes in the global economy, user 's needs and other factors on future methodological development of SNA

- **Revision of the fifth Edition of the IMF's Balance of Payment Manual** – IMF Committee on BOP (Some national NSI and banks (namely Uganda and South Africa), OECD, UNSD, UNCTAD, Eurostat + ISWGNA for coordination).

  Supported by 4 technical expert group

  a) DITEG: Direct investment
  b) CUTEG: Monetary and economic union
  c) RESTEG: reserve assets
  d) BOPTEG: all other areas of GOP and international investment position statistics

- **Third revision of recommendations for International Merchandise Trade Statistics:** TF IMTS supported by UNSD, work started in 2007, target date 2010

- **Revision of the Manual on Statistic of International Trade in Services** (SITS) (Interagency TF on SITS – Eurostat, UNWTO, UNSD-UNCTAD, WTO, IMF, OECD). To take into consideration

  a) Revision of BPM 5 and SNA 93
  b) Work of technical sub-group on Movement of natural person – Mode 4

- **Towards revision of International recommendations for Distributive Trade Statistic:** EG – DTS coordinated by UNSD (namely experts from Ghana and South Africa)

- **Revision of international recommendations for industrial statistics** (IRIS 2008)

- **International recommendations on tourism statistics:** UNEG on tourism statistics reviewed, amended and endorsed a provisional draft of international recommendations to be approved by the UNSC 2008

- **Tourism satellite account:** Interagency Coordination group: Eurostat, UNWTO, UNSD-UNCTAD, WTO, IMF and, OECD.

  System of environment-economic accounting and System of environment-economic accounting for water (interim international statistical standard): UNSD environment-economic account sections, London Group (sub-group on water accounting SEEAW interim international statistical standard) and the UN Committee of experts on environmental economic accounting. Mandate: Steer the process of revision of SEEA 2003 and elevate SEEA and SEEAW to international statistical standards

- **Energy accounts:** UNSD, London Group (sub-group on Mineral and energy accounts), 2 moderators (Statistic Denmark + Oslo Group)

- Etc.…

Currently active City Groups

Name	Topic	African participation in the last 5 years
Canberra Group	Household statistics	-
Canberra I	Capital stock	South Africa
Canberra II	Measurement of non financial asset	-
Delhi Group	Informal sector	Ethiopia, Namibia, Nigeria, Zambia
London Group	Environment accounting	-
Ottawa Group	Price	-
Paris Group	Labour and compensation	South Africa
Rio Group	Poverty	UNECA
Roundtable	Business survey frame	-
Siena Group	Social statistics	-
Voorburg Group	Service statistics	-
Oslo Group	Energy statistics	South Africa
Washington Group	Disability statistics	Dem. Rep. Congo, Egypt, Gambia, Ghana, Ivory Coast, Kenya, Lesotho, Malawi, Mauritius, Sierra Leone, South Africa, Tanzania, Uganda, Zambia, Zimbabwe

Commission
de l'Union Africaine

CHARTE AFRICAINE DE LA STATISTIQUE

Avant-propos

Le processus d'intégration du continent entrepris depuis quelques années par les États africains recommande, pour le suivi de sa mise en œuvre en vue de l'atteinte de ses objectifs et la mesure des résultats acquis, l'usage de données statistiques harmonisées et fiables dans tous les domaines d'activités de la vie politique, socioéconomique et culturelle.

L'information statistique est devenue une ressource vitale et indispensable dans le processus d'intégration régionale et continentale.

Bien que le système statistique africain ait connu des développements significatifs au cours de ces dernières années avec l'avènement de plusieurs initiatives, il convient de noter l'existence d'un énorme fossé entre l'offre et la demande en informations statistiques à des fins de développement et de conduite du processus d'intégration africaine. En effet, les données statistiques de qualité, comparables dans le temps et dans l'espace et produites par le système statistique africain, sont quasiment inexistantes.

C'est pour remédier à ce déficit préjudiciable au processus d'intégration et de développement de l'Afrique que les organes de décision de l'Union africaine ont pris une décision historique demandant l'élaboration d'une charte africaine de la statistique, instrument juridique pour réguler l'activité statistique sur le continent, et servir d'outil de plaidoyer pour le développement de la statistique en Afrique.

Ce document consensuel, dont l'élaboration a obtenu la pleine participation de l'ensemble des membres du système statistique africain, des autorités politiques africaines et des partenaires au développement, constitue un cadre stratégique d'orientation devant permettre l'émergence des statistiques africaines de référence. Il constitue un cadre déontologique et un code d'éthique professionnelle et de bonnes pratiques pour le métier du statisticien africain. A cet égard, la charte invite tous les professionnels de la statistique en Afrique au respect des principes qui y sont énoncés et des normes, concepts et standards internationaux en vue d'assurer les comparaisons internationales. En outre, elle exhorte les fournisseurs, les producteurs et les utilisateurs de données statistiques, à une collaboration accrue et effective afin d'assurer la qualité et l'utilité de l'information statistique.

La charte appelle également les décideurs politiques africains à faire de l'observation des faits, la base de toute formulation, de tout suivi et de toute évaluation de politiques. En effet, l'information statistique doit être considérée comme un bien public indispensable dans toute prise de décision.

Etant donné que la mise en œuvre effective et efficace de la charte nécessite des ressources financières et le renforcement des capacités institutionnelles du système statistique africain, j'appelle à la responsabilité des Etats africains à garantir un financement stable et adéquat aux activités statistiques, et à renforcer l'indépendance et le statut des instituts nationaux de statistique et des services statistiques aux niveaux régional et continental. La mise en œuvre effective de la charte devra permettre de renforcer la coordination statistique et le fonctionnement effectif du système statistique africain et d'éviter les duplications dans les programmes statistiques en Afrique.

J'invite donc tous les États africains à se l'approprier et lance un vibrant appel à tous les partenaires au développement à apporter leur soutien à cette initiative d'avant-garde en faveur du développement de l'Afrique.

Jean Ping
Président de la Commission

PREAMBULE

Nous, Etats Membres de l'Union africaine,:

CONSIDERANT l'Acte constitutif de l'Union africaine adopté le 11 juillet 2000, à Lomé (Togo);

GUIDES par la vision claire et partagée par tous les Etats membres du Traité instituant la Communauté économique africaine adopté en 1991, à Abuja (Nigeria), dont le but est de promouvoir le développement économique, social, culturel et auto entretenu ainsi que l'intégration des économies africaines ;

CONVAINCUS de la nécessité d'accélérer le processus de mise en œuvre dudit Traité ;

CONSCIENTS du fait que les décisions et les nouvelles orientations des politiques de l'Union africaine en faveur de l'accélération du processus d'intégration de l'Afrique, et les engagements pour la réalisation des programmes de développement et de lutte contre la pauvreté devraient être basées sur des faits réels qui requièrent un système statistique performant, capable de fournir des informations statistiques crédibles, complètes et harmonisées sur le continent africain;

CONSIDERANT que l'information statistique est nécessaire à la prise de décision par les diverses composantes de la société, et en particulier celle des décideurs politiques, des acteurs économiques et sociaux et qu'elle est par conséquent indispensable pour l'intégration et le développement durable du continent;

CONSCIENTS du besoin de renforcement de la coordination des activités statistiques sur le continent ;

NOTANT que la confiance du public dans l'information statistique officielle repose dans une large mesure sur le respect des valeurs et des principes fondamentaux de la démocratie ;

NOTANT EGALEMENT que la qualité de l'information statistique officielle mise à la disposition des administrations publiques et des autres secteurs d'activités dépend dans une large mesure de la collaboration effective entre fournisseurs, producteurs et utilisateurs de données statistiques ;

NOTANT EN OUTRE que les responsabilités professionnelle et sociale des statisticiens africains ainsi que leur crédibilité impliquent, non seulement un savoir-faire et des capacités techniques, mais aussi le respect des principes fondamentaux de la statistique officielle, de l'éthique professionnelle et de bonnes pratiques;

RAPPELANT l'adoption du Plan d'action d'Addis-Abéba pour le développement de la statistique en Afrique, par la conférence des ministres responsables du développement économique et social en mai 1990, à Addis-Abeba (Ethiopie);

RAPPELANT EGALEMENT la Résolution sur les principes fondamentaux de la statistique officielle adoptée en avril 1994 par la Commission statistique des Nations Unies;

NOUS REFERANT au Code d'éthique professionnelle adopté par l'Institut international de la statistique (IIS) à l'occasion de sa 45ème session en août 1985 ;

RAPPELANT que l'adoption et l'application des normes, concepts et standards internationaux sont indispensables pour permettre les comparaisons entre pays et constituent donc un préalable à la production de statistiques comparables au niveau du continent ;

RAPPELANT également que la majorité des pays ont adhéré au Système général de diffusion des données (SGDD) du Fonds monétaire international (FMI) ou aux Normes spéciales de diffusion des données (NSDD) et aux normes relatives au Cadre d'évaluation de la qualité des données (CEQD) définis par le Fonds monétaire international ;

RAPPELANT EN OUTRE la Déclaration sur les bonnes pratiques dans la coopération technique en matière statistique adoptée par la Commission statistique des Nations unies au cours de sa session de mars 1999 ;

NOUS REFERANT à la Déclaration de Paris sur l'efficacité de l'aide au développement adoptée en mars 2005 ;

NOUS FELICITANT des initiatives déjà prises par diverses organisations statistiques aux niveaux national, régional et international pour le développement de la statistique, notamment le renforcement des législations nationales, l'adoption et la mise en œuvre par les Etats de l'approche stratégies nationales de développement de la statistique (SNDS) pour la conduite

des activités statistiques, le développement d'outils statistiques harmonisés par les Communautés économiques régionales (CER), l'adoption en 2007 du Cadre stratégique régional de référence pour le développement de la statistique en Afrique (CSRR) par les Ministres africains des finances, de la planification et du développement économique et l'établissement de la Commission statistique pour l'Afrique (STATCOM-Africa) en 2007 ;

NOUS FELICITANT des mesures qui ont été prises pour renforcer l'indépendance et le statut des instituts de statistique et garantir un financement stable approprié pour les activités statistiques basé sur la troisième édition du livret des organisations statistiques des Nations unies adopté en 2003 ;

RAPPELANT les résolutions du Symposium africain pour le développement de la statistique tenu respectivement en janvier 2006 à Cape Town (Afrique du Sud) et en janvier 2007 à Kigali (Rwanda);

RAPPELANT la Décision adoptée par le Conseil Exécutif de l'Union africaine en janvier 2007 à Addis Abéba (Ethiopie), relative à l'élaboration de la Charte africaine de la statistique;

RESOLUS à promouvoir les prises de décisions basées sur les informations statistiques et à renforcer les capacités statistiques sur le continent ;

RESOLUS à mettre en place un cadre juridique commun pour le développement des statistiques sur le continent africain ;

SOMMES CONVENUS DE CE QUI SUIT :

PARTIE I

Dispositions generales

CHAPITRE 1 – DÉFINITIONS

Article 1
Définitions

Aux fins de la présente Charte, on entend par :

«Charte », la Charte africaine de la statistique ;
«Commission », la Commission de l'Union africaine ;
«Conférence », la Conférence des Chefs d'Etats et de Gouvernement de l'Union africaine ;
«Conseil exécutif», le Conseil exécutif de l'Union africaine ;
«Cour », la Cour africaine de Justice et des droits de l'homme de l'Union africaine ;
«Etats Membres », les Etats Membres de l'Union africaine ;
«Etats parties », les Etats membres ayant ratifié ou adhéré la présente Charte ;
«Statistiques», les Données nécessaires à la production d'informations statistiques organisées, qu'elles soient obtenues à partir de recensements, d'enquêtes statistiques ou de l'exploitation de données administratives recueillies ;
«Information statistique», toute information quantitative et/ou qualitative organisée, obtenue à partir de données statistiques permettant notamment la connaissance des phénomènes économiques, politiques, démographiques, sociaux, environnementaux, culturels, sur le genre et sur la gouvernance etc. ;
«Méta-données», l'ensemble des informations, en général textuelles, permettant de comprendre le contexte dans lequel sont collectées, traitées et analysées les données statistiques, dans le but de créer des informations statistiques (textes légaux et réglementaires, méthodes et concepts utilisés à tous les niveaux du traitement, définitions et nomenclatures, etc.) ;
«Statistiques africaines», l'ensemble des informations statistiques nécessaires à la formulation, au suivi et à l'évaluation des politiques et programmes de développement de l'Afrique aux niveaux national, régional et continental ;

«Statistiques officielles», l'ensemble des informations statistiques produites, validées, compilées et diffusées par les autorités statistiques ;

«Autorités statistiques», les instituts nationaux de statistique et/ou autres organismes statistiques chargés de la production et de la diffusion des statistiques publiques aux niveaux national, régional et continental ;

«Système statistique africain (SSA)», le Partenariat regroupant les systèmes statistiques nationaux (fournisseurs, producteurs et utilisateurs de données, instituts de recherche et de formation statistiques et organismes de coordination statistique), les unités de statistiques des Communautés économiques régionales, les organisations régionales de statistique, les centres régionaux de formation, les unités statistiques des organisations continentales et les instances de coordination au niveau continental ;

« Organisations régionales », les Communautés économiques régionales, les organisations régionales de statistique, les centres régionaux de formation ;

«Statisticien africain», tout professionnel et chercheur en statistique contribuant à la collecte, à la production, à l'analyse ou à la publication des données statistiques au sein du système statistique africain ;

CHAPITRE 2 – OBJECTIFS

Article 2
Objectifs

La présente Charte a pour objectifs de:

1. Servir de cadre d'orientation pour le développement de la statistique africaine, notamment la production, la gestion et la diffusion des données et de l'information statistique aux niveaux national, régional et continental.

2. Servir d'instrument et d'outil de plaidoyer pour le développement de la statistique sur le continent;

3. Contribuer à l'amélioration de la qualité et à la comparabilité des données statistiques nécessaires pour le suivi du processus d'intégration économique et sociale de l'Afrique;

4. Promouvoir le respect des principes fondamentaux de la production, du stockage, de la gestion, de l'analyse, de la diffusion et de l'utilisation de l'information statistique sur le continent africain;

5. Contribuer au renforcement de la coordination des activités statistiques et des institutions statistiques en Afrique y compris la coordination des interventions des partenaires aux niveaux national, régional et continental;

6. Renforcer les capacités institutionnelles des structures statistiques aux niveaux national, régional et continental en assurant leur autonomie de fonctionnement et en veillant particulièrement à ce qu'elles disposent des ressources humaines, matérielles et financières adéquates;

7. Servir de référence pour l'exercice du métier de statisticien africain, de code d'éthique professionnelle et de bonnes pratiques ;

8. Promouvoir une culture faisant de l'observation des faits la base de la formulation, du suivi et de l'évaluation des politiques ;

9. Contribuer à l'amélioration et au fonctionnement effectif du système statistique africain ainsi qu'au partage d'expériences ; et

10. Eviter les duplications dans la mise en œuvre des programmes statistiques.

CHAPITRE 3 – PRINCIPES REGISSANT LA CHARTE

Article 3
Principes

Les organismes du Système statistique africain (SSA) et les statisticiens africains ainsi que tous ceux qui travaillent dans le domaine de la statistique aux niveaux national, régional et continental doivent respecter les principes énoncés dans la Résolution sur les principes fondamentaux de la statistique officielle adoptée par la Commission de Statistique des Nations Unies en avril 1994, et appliquer les principes de bonnes pratiques ci-après :

Principe 1 : Indépendance professionnelle

- **indépendance scientifique :** les autorités statistiques doivent pouvoir exercer leurs activités selon le principe de l'indépendance scientifique, en particulier vis-à-vis du pouvoir politique et de tout groupe d'intérêt ; cela signifie que les méthodes, concepts et nomenclatures utilisés pour l'exécution d'une opération statistique ne doivent être choisis que par les autorités statistiques sans aucune influence de quelque forme que ce soit et dans le respect des règles d'éthique et de bonne conduite.

- **impartialité :** les autorités statistiques doivent produire, analyser, diffuser et commenter les statistiques africaines dans le respect de l'indépendance scientifique et de manière objective, professionnelle et transparente.

- **responsabilité :** les autorités statistiques et les statisticiens africains doivent recourir à des modes de collecte, de traitement, d'analyse et de présentation des données statistiques claires et pertinentes. De plus, les autorités statistiques ont le droit et le devoir de faire des observations sur les interprétations erronées et les usages abusifs de l'information statistique qu'elles diffusent.

- **transparence :** pour faciliter une interprétation correcte des données, les autorités statistiques doivent fournir, en fonction de normes scientifiques, des informations sur les sources, les méthodes et les procédures qu'elles utilisent. Le droit interne régissant le fonctionnement des systèmes statistiques doit être porté à la connaissance du public.

Principe 2 : Qualité

- **pertinence :** Les statistiques africaines doivent répondre aux besoins des utilisateurs.

- **pérennité :** Les statistiques africaines doivent être conservées sous une forme aussi détaillée que possible afin d'en garantir l'utilisation par les générations futures, tout en préservant les principes de confidentialité et de protection des répondants.

- **sources de données :** Les données utilisées à des fins statistiques peuvent être tirées de diverses sources, qu´il s´agisse de recensements, d´enquêtes statistiques et/ou de fichiers administratifs. Les organismes

responsables de la statistique doivent choisir leur source en tenant compte de la qualité des données qu'elle peut fournir, de leur actualité, particulièrement, la charge qui pèse sur les répondants et les coûts sur les donateurs. L'utilisation par les autorités statistiques des fichiers administratifs à des fins statistiques doit être garantie par le droit positif sous réserve de confidentialité.

- **exactitude et fiabilité :** Les statistiques africaines doivent refléter la réalité de façon exacte et fiable.

- **continuité :** Les autorités statistiques garantissent la continuité et la comparabilité dans le temps des informations statistiques.

- **cohérence et comparabilité:** Les statistiques africaines doivent présenter une cohérence interne dans le temps et permettre la comparaison entre les régions et les pays. A cette fin, il doit être possible de combiner et d'utiliser conjointement des données connexes provenant de sources différentes. Les concepts, classifications, terminologies et méthodes établis et reconnus au niveau international, doivent être utilisés.

- **ponctualité :** Les statistiques africaines doivent être diffusées en temps utile et, dans toute la mesure du possible, selon un calendrier annoncé à l'avance.

- **actualité :** Les statistiques africaines doivent prendre en compte les événements courants et être d'actualité.

- **spécificités :** Les méthodes de production et d'analyse de l'information statistique doivent tenir compte des spécificités africaines.

- **sensibilisation :** Les Etats parties doivent sensibiliser le public, et en particulier, les fournisseurs des données statistiques sur l'importance de la statistique.

Principe 3 : Mandat pour la collecte des données et ressources

- **mandat :** Les autorités statistiques disposent d'un mandat légal clair les habilitant à collecter des données pour les besoins de la production des statistiques africaines. A la demande des autorités statistiques, les administrations publiques, les entreprises, la société civile et les ménages ainsi que le grand public peuvent être contraints par le droit

interne à permettre l'accès à des données ou à fournir des données pour l'établissement de statistiques africaines.

- **adéquation des ressources :** Dans la mesure du possible, les ressources dont disposent les autorités statistiques doivent être suffisantes et stables pour leur permettre de répondre aux besoins de statistiques exigées aux niveaux national, régional et continental. La mise à disposition de ces ressources incombe principalement aux gouvernements des Etats parties.

- **rapport coût-efficacité :** Les ressources doivent être utilisées de façon efficiente par les autorités statistiques. Cela suppose, en particulier, que les opérations doivent, dans toute la mesure du possible, être programmées de façon optimale. Dans le souci de réduire la charge qui pèse sur les répondants et d'éviter autant que possible les enquêtes directes coûteuses, tout doit être mis en œuvre pour améliorer la production et l'exploitation statistique des fichiers administratifs.

Principe 4 : Diffusion

- **accessibilité :** Les autorités statistiques garantissent l'accès aux statistiques africaines. Ce droit d'accès pour tous les utilisateurs, sans aucune restriction, doit être garanti par le droit interne. Les micro-données peuvent être mises à la disposition des utilisateurs à condition que les lois et les procédures clairement définies soient respectées et que la confidentialité soit maintenue.

- **concertation avec les utilisateurs :** des mécanismes de concertation avec l'ensemble des utilisateurs des statistiques africaines, sans discrimination aucune, doivent être mis en place pour s'assurer de l'adéquation de l'information statistique à leurs besoins.

- **clarté et compréhension :** Les statistiques africaines doivent être présentées sous une forme claire et compréhensible, diffusées d'une manière pratique et adaptée, disponibles et accessibles pour tous et accompagnées des méta-données nécessaires et de commentaires analytiques.

- **simultanéité :** Les statistiques africaines sont diffusées de manière à ce que tous les utilisateurs puissent en prendre connaissance simultanément. Si certaines autorités reçoivent des informations

préalables sous embargo afin qu'elles puissent se préparer à répondre à d'éventuelles questions, la nature des informations ainsi communiquées, l'identité des destinataires et le délai qui s'écoule avant la diffusion publique, doivent être annoncés publiquement.

- **rectification :** Les autorités statistiques doivent rectifier les résultats des publications entachés d'erreurs significatives en utilisant les pratiques standards statistiques, ou, dans les cas les plus graves, suspendre la diffusion, en portant clairement à la connaissance des utilisateurs les raisons de ces rectifications ou de ces suspensions.

Principe 5: Protection des données individuelles, des sources d'information et des répondants

- **Confidentialité :** la protection de la vie privée ou du secret des affaires des fournisseurs de données (ménages, entreprises, administrations et autres répondants), la confidentialité des informations qu'ils communiquent et l'utilisation de celles-ci à des fins strictement statistiques, doivent être absolument garantis par les autorités statistiques et les statisticiens africains ainsi que par tous ceux qui travaillent dans le domaine de la statistique en Afrique.

- **Information aux fournisseurs des données :** Les personnes physiques ou morales interrogées lors des enquêtes statistiques sont informées sur la finalité des questionnements auxquels elles sont soumises ainsi que sur les mesures adoptées en matière de protection des données qu'elles fournissent.

- **finalité :** Les données concernant les personnes physiques ou morales collectées à des fins statistiques ne peuvent en aucun cas être utilisées à des fins de répressions ou de poursuites judiciaires et d'une manière générale, à des mesures administratives relatives à ces personnes.

- **Rationalité :** Les autorités statistiques ne procéderont à des enquêtes que si des informations d'origine administrative ne sont pas disponibles ou si leur qualité n'est pas suffisante au regard des exigences de qualité de l'information statistique.

Principe 6: Coordination et coopération

- **coordination :** La coordination et la collaboration entre les différentes autorités statistiques d'un même pays sont indispensables pour assurer la cohérence, l'unicité et la qualité de l'information statistique. De même, la concertation et le dialogue entre tous les membres du Système statistique africain (SSA) sont essentiels à l'harmonisation, à la production et à l'utilisation des statistiques africaines.

- **coopération :** La coopération bilatérale et multilatérale dans le domaine de la statistique doit être encouragée pour contribuer à l´amélioration des systèmes de production des statistiques africaines.

CHAPITRE 4 – ENGAGEMENTS DES ETATS PARTIES

Article 4
Engagements des Etats Parties

Les Etats parties acceptent les objectifs et les principes énoncés dans la présente Charte pour renforcer leurs politiques et systèmes nationaux de statistiques, et s'engagent à adopter les mesures appropriées, notamment celles d'ordre législatif et administratif nécessaires pour que leurs lois et règlements respectifs soient en conformité avec la présente Charte.

CHAPITRE 5 – MECANISMES DE MISE EN ŒUVRE, DE SUIVI ET D'EVALUATION, ET DOMAINES D'APPLICATION DE LA CHARTE

Article 5
Au niveau national

Les Etats parties veillent à l'application de la présente charte dans leur pays respectif.

Article 6
Au niveau régional

Les Etats parties veillent à ce que les objectifs et principes régissant la statistique au niveau régional soient en conformité avec la présente charte. A cette fin, ils sont chargés de suivre les actions des organisations régionales.

Article 7
Au niveau continental

1. La Commission, en collaboration avec l'ensemble des membres du système statistique africain, mettra en place un mécanisme approprié de mise en œuvre, de suivi et d'évaluation de la Charte.

2. La Commission agit en tant qu'organe central de coordination pour la mise en œuvre de la présente Charte conformément aux dispositions de l'article 8 et entreprend les actions suivantes:

   a) assiste les Etats parties dans la mise en œuvre de la Charte ;
   b) coordonne l'évaluation de la mise en œuvre de la présente Charte ;
   c) fait un plaidoyer fort pour le développement de la statistique en Afrique comme une infrastructure clé pour la renaissance de l'Afrique ;
   d) veille à ce que les Etats parties mettent sur pied un fonds national pour le développement de la statistique ; et
   e) contribue à la promotion de la culture statistique en liaison avec l'ensemble des membres du système statistique africain.

Article 8
Relations entre les membres du système statistique africain

1. Le système statistique africain constitue un partenariat qui fonctionne en réseau selon le principe de subsidiarité qui consiste à mener les actions nécessaires à son fonctionnement au niveau qui leur assureront la meilleure efficacité. Ses membres veillent, chacun en ce qui le concerne, à la bonne coordination du système.

2. La mise en œuvre de la Charte doit permettre aux organisations sous-régionales, régionales et continentales de jouer pleinement leurs rôles

dans le cadre du développement de l'Afrique dans le respect du principe de subsidiarité. Elle doit également permettre de mettre des données statistiques fiables à la disposition des africains et des partenaires au développement pour un meilleur éclairage sur la situation du continent.

Article 9
Coopération du système statistique africain avec les Tierces parties

1. Le système statistique africain peut conclure des accords de coopération avec des tierces parties ;

2. Dans le cadre de la mise en œuvre de la Charte, le système statistique africain établit des relations de coopération avec le système statistique global, notamment les institutions spécialisées des Nations Unies ainsi qu'avec toute autre organisation internationale.

3. Les organes délibérants de l'Union sont informés des accords de coopération conclus avec des tierces parties.

Article 10
Domaines d'application de la Charte

La Charte s'applique à toutes les activités statistiques relatives au développement de la statistique notamment à son environnement institutionnel, aux processus de production statistique et les produits statistiques, et en particulier aux activités suivantes :

- la législation statistique ;
- le plaidoyer en faveur de la statistique ;
- l'harmonisation des méthodes de collecte, production et de diffusion statistique ;
- la mobilisation des ressources humaines et financières pour le développement des activités statistiques et le fonctionnement efficient du système statistique africain ;
- l'établissement et la mise à jour des définitions, concepts, normes et standards, nomenclatures et méthodologies ;
- la coordination des activités statistiques ;
- la collecte, le traitement, la gestion et l'archivage des données ;

- la diffusion et l'utilisation de l'information statistique ;
- l'analyse et la recherche statistique ; et
- la formation dans le domaine de la statistique et le développement des ressources humaines.

Article 11
Vulgarisation de la Charte

Les Etats parties prennent toutes les mesures nécessaires pour assurer la diffusion la plus large possible de la présente Charte, conformément aux dispositions et procédures pertinentes de leurs constitutions respectives.

PARTIE II
Dispositions finales

Article 12
Clause de sauvegarde

Les dispositions de la présente Charte n'affectent pas les principes et les valeurs contenus dans d'autres instruments pertinents de promotion du développement des statistiques en Afrique.

Article 13
Interprétation

La Cour est saisie de toute question née de l'interprétation ou de l'application de la présente Charte. Jusqu'à la mise en place de celle-ci, la question est soumise à la Conférence.

Article 14
Signature, ratification et adhésion

1. La présente Charte est ouverte à la signature, à la ratification et à l'adhésion des Etats membres, conformément à leurs procédures constitutionnelles respectives.

2. Les instruments de ratification ou d'adhésion sont déposés auprès du Président de la Commission.

Article 15
Entrée en vigueur

1. La présente Charte entre en vigueur trente (30) jours après le dépôt des instruments de ratification par quinze (15) Etats membres.

2. A l'égard de chaque Etat membre adhérant à la présente Charte après son entrée en vigueur, la Charte entre en vigueur à la date du dépôt, par ledit Etat, de son instrument d'adhésion auprès du Président de la Commission.

3. Le Président de la Commission notifie aux Etats membres l'entrée en vigueur de la présente Charte.

Article 16
Amendement et révision

1. Tout Etat partie peut soumettre des propositions d'amendement ou de révision de la présente Charte.

2. Les propositions d'amendement ou de révision sont soumises, par écrit, au Président de la Commission qui en communique copies aux Etats parties dans les trente (30) jours suivant la date de réception.

3. La Conférence, sur avis du Conseil exécutif, examine ces propositions dans un délai d'un (1) an après leur notification aux Etats parties, conformément aux dispositions du paragraphe 2 du présent Article.

4. L'amendement ou la révision est adopté par la Conférence et soumis à la ratification de tous les Etats parties, conformément à leurs procédures constitutionnelles respectives. Ils entrent en vigueur trente (30) jours après le dépôt de quinze(15) instruments de ratification.

Article 17
Dépositaire

La présente Charte, établie en quatre (4) exemplaires originaux en arabe, anglais, français, et portugais, les quatre (4) textes faisant également foi, est déposée auprès du Président de la Commission, qui en transmet une copie certifiée conforme à chaque Etat membre et leur notifie les dates de dépôt des instruments de ratification ou d 'adhésion. Le Président de la Commission enregistre la présente Charte, dès son entrée en vigueur, auprès du Secrétaire général des Nations Unies.

Adoptée par la 12ième Session Ordinaire de la Conférence des Chefs d'Etat et de Gouvernement de l'Union africaine tenue à Addis Abéba, Ethiopie, le 3 février 2009.

DECISION SUR LA CHARTE AFRICAINE DE LA STATISTIQUE

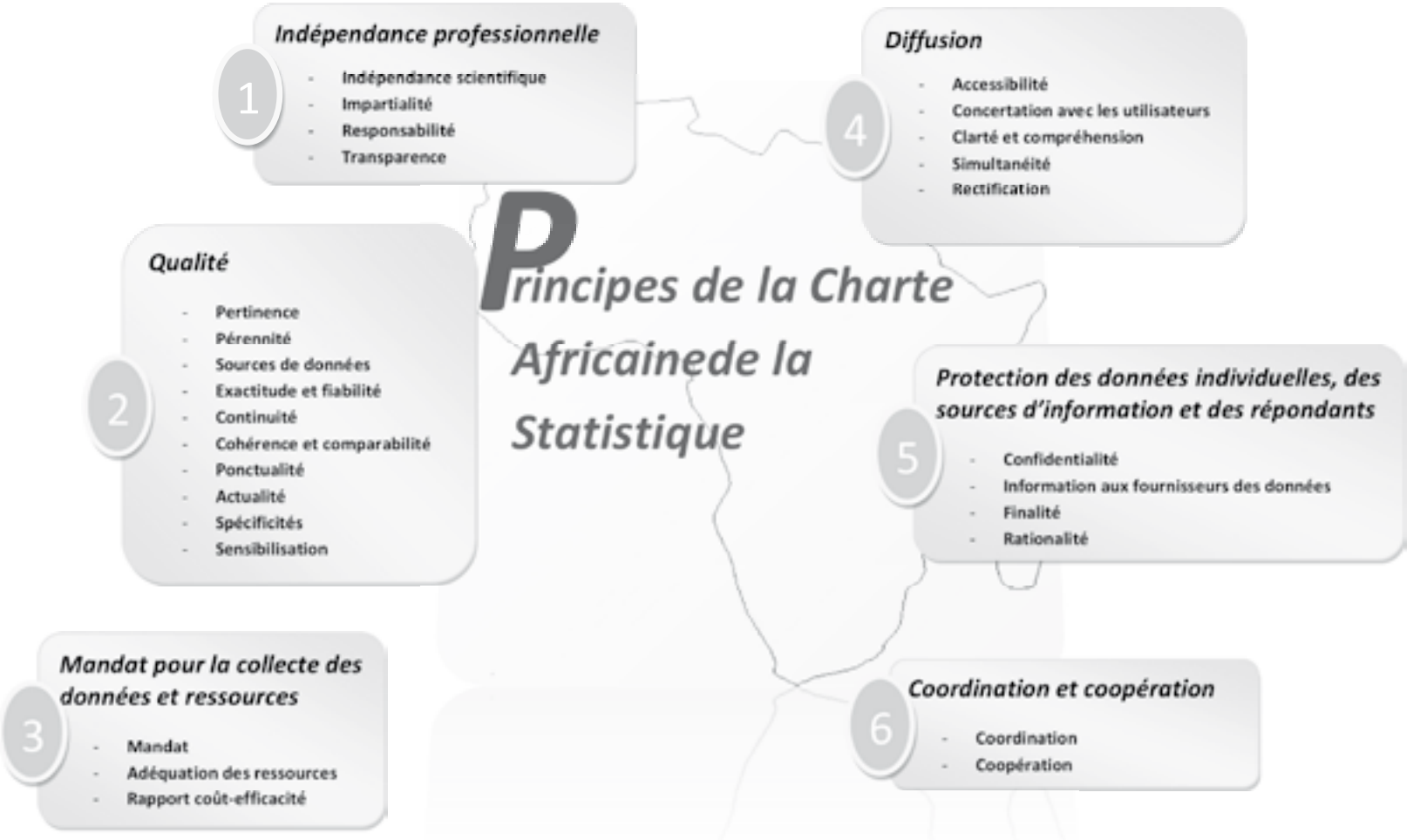
Doc. Assembly/AU/12 (XII) b

La Conférence :

1. **PREND NOTE** des recommandations du Conseil exécutif, relatives à l'examen et à l'adoption de la Charte africaine de la statistique ;

2. **ADOPTE** la Charte africaine de la statistique ;

3. **DEMANDE** aux Etats membres de signer et de ratifier aussi rapidement que possible la Charte africaine de la statistique pour permettre son entrée en vigueur et offrir, ainsi, un cadre réglementaire pour le développement des statistiques sur le continent.


Principes de la Charte Africainede la Statistique
1
Indépendance professionnelle
- Indépendance scientifique
- Impartialité
- Responsabilité
- Transparence
2
Qualité
- Pertinence
- Pérennité
- Sources de données
- Exactitude et fiabilité
- Continuité
- Cohérence et comparabilité
- Ponctualité
- Actualité
- Spécificités
- Sensibilisation
3
Mandat pour la collecte des données et ressources
- Mandat
- Adéquation des ressources
- Rapport coût-efficacité
4
Diffusion
- Accessibilité
- Concertation avec les utilisateurs
- Clarté et compréhension
- Simultanéité
- Rectification
5
Protection des données individuelles, des sources d'information et des répondants
- Confidentialité
- Information aux fournisseurs des données
- Finalité
- Rationalité
6
Coordination et coopération
- Coordination
- Coopération

African Union Commission

AFRICAN CHARTER ON STATISTICS

Foreword

The use of harmonized and reliable statistics in all fields of political, social, economic and cultural activity is recommended for the monitoring of the implementation of the ongoing integration process in the continent on which African States embarked several years back. This will make it possible for the process to achieve its objectives and for its outcomes to be assessed.

Statistical information has become a vital and indispensable tool in the regional and continental integration process.

Although there has been significant progress in Africa's statistical system over the last years with the advent of several initiatives, it should be pointed out that there is an immense gap between the supply and demand for statistical information needed for development and for the African integration process. For the moment, quality statistical data produced by the African statistical system is virtually inexistent.

It is to remedy this shortfall, which is a setback to Africa's integration and development processes, that the decision-making organs of the African Union took the historic step to call for the elaboration of an African Charter on Statistics, which will serve not only as a legal instrument to regulate statistical activity but also as a tool for advocacy and the development of statistics in Africa.

The consensual document, in whose preparation all members of the African statistical system, African political authorities and development partners fully participated, constitutes a guiding strategic framework that will enable the emergence of reference African statistics. It stands as a code of professional ethics and best practices for the exercise of the profession of statistician in Africa. In this respect, the Charter requires all professional statisticians in Africa to respect the principles laid down in it as well as international standards and concepts in order to allow international comparison. It further urges providers, producers and users of statistical data to collaborate more closely and effectively in order to enhance the quality and usefulness of statistical information.

The Charter also beckons African policy makers to base the formulation, monitoring and evaluation of policies on facts observed. Statistics should be considered as an essential public asset in any decision-making process.

Since the effective and efficient implementation of the Charter requires financial resources and institutional capacity building for the African statis-

tical system, I hereby request African States to assume their responsibility and guarantee stable and adequate financing of statistical activities. They should also strengthen the independence and status of national institutes of statistics as well as regional and continental statistics services. The effective implementation of the Charter should make it possible to enhance the coordination of statistics and the effective functioning of Africa's statistical system as well as to avoid duplication in African statistical programmes.

I therefore invite African States to take ownership of the Charter, and fervently appeal to all development partners to lend support to this pacesetting initiative aimed at fostering development in Africa.

Jean Ping
Chairperson of the Commission

PREAMBLE

We, Member States of the African Union,

CONSIDERING the Constitutive Act of the African Union (AU) adopted in Lomé, Togo, on 11 July 2000;

GUIDED by Member States' unambiguous and shared vision on the Treaty Establishing the African Economic Community adopted in Abuja, Nigeria, in 1991, with the aim of promoting economic, social, cultural and self-sustained development, as well as integration of African economies;

CONVINCED of the need to speed up the process of implementation of the aforesaid Treaty;

AWARE that the decisions and new policy guidelines of the African Union for accelerating Africa's integration process, and the commitments to implement development programmes and combat poverty should be based on clear evidence and therefore require a robust statistical data system which provides reliable, comprehensive and harmonized statistical information on the continent;

CONSIDERING that statistical information is vital for decision-making by all components of the society, particularly policy markers as well as economic and social players, and is therefore essential for the continent's integration and sustainable development;

AWARE of the need to enhance coordination of statistical activities in the continent;

NOTING that public confidence in official statistical information is premised, to a large extent, on respect for basic democratic values and principles;

NOTING ALSO that the quality of the official statistical information available to public administrations and other activity areas largely depends to a large extend on effective collaboration between statistical data providers, producers and users;

NOTING FURTHER that the professional and social responsibility as well as the credibility of African statisticians demand not only technical

skills and capacities, but also respect for the fundamental principles of official statistics, professional ethics and good practices;

RECALLING the adoption of the Addis Ababa Plan of Action for Statistical Development in Africa by the Conference of Ministers in charge of Social and Economic Development in Addis Ababa, Ethiopia, in May 1990;

RECALLING ALSO the United Nations Statistical Commission's Resolution on the Fundamental Principles of Official Statistics adopted in April 1994;

REFERRING to the professional code of ethics adopted by the International Statistics Institute (ISI) at its 45th session in August 1985;

RECALLING that adoption and the implementation of international standards, norms and concepts are essential for making comparisons between countries, and thus constitute a prerequisite for the production of comparable statistics at continental level;

RECALLING ALSO that the majority of countries have acceded to the International Monetary Fund (IMF) General Data Dissemination System (GDDS) or to the Special Data Dissemination Standard (SDDS), and the standards regarding the Data Quality Assessment Framework (DQAF) as defined by the IMF;

RECALLING FURTHER the Declaration on good practices in technical cooperation in statistical matters adopted by the United Nations Commission for Statistics during its session of March 1999;

REFERRING to the Paris Declaration on development aid effectiveness adopted in March 2005;

APPRECIATING the initiatives already undertaken by various concerned statistics organizations at national, regional and international levels for statistics development, particularly the strengthening of national legislations; adoption and implementation of National Strategies for Development of Statistics (NSDS) for the conduct of statistical activities; the development of harmonized statistical tools by the Regional Economic Communities (RECs); the adoption in 2007 of the Regional Strategic Reference Framework for Statistical Capacity Building in Africa (RRSF) by the Conference of African Ministers of Finance, Planning and Economic Development

and the establishment of the Statistical Commission for Africa (STATCOM-Africa) in 2007;

APPRECIATING ALSO the efforts undertaken to enhance the independence and status of statistics institutes and to secure appropriate stable financing for statistical activities according to the Third Edition of the United Nations Handbook of Statistics Organizations adopted in 2003;

RECALLING the resolutions of the African Symposium for Statistics Development held, respectively, in Cape Town in January 2006, and in Kigali in January 2007;

RECALLING the Decision adopted by the Executive Council of the African Union in Addis Ababa, Ethiopia, in January 2007 on elaboration of an African Charter on Statistics;

COMMITTED to promoting decision-making based on statistical information and to fostering statistical capacities on the continent;

RESOLVED to put in place a common legal framework for statistics development on the African continent.

HAVE AGREED AS FOLLOWS:

PART I
General Provisions

CHAPTER 1 – DEFINITIONS

Article 1
Definitions

For the purposes of this Charter, the following definitions will be understood:

"Assembly", the Assembly of Heads of State and Government of the African Union;
"Charter", the African Charter on Statistics;
"Commission", the African Union Commission;
"Court", the Court of Justice and Human Rights of the African Union;
"Member States", Member States of the African Union;
"State Parties", Member States, which have ratified this Charter;
"Statistics", data required for production of organized statistical information, obtained from censuses and statistical surveys or administrative records;
"Statistical Information", any organized quantitative and/or qualitative information obtained from statistical data that facilitate understanding of economic, political, demographic, social, environmental and cultural trends, and of gender and governance etc-related issues;
"Metadata", the range of information, generally textual, that fosters understanding of the context in which statistical data have been collected, processed and analyzed with the objective of creating statistical information (legal and regulatory texts, methods and concepts used at all levels of information processing, definitions and nomenclatures, etc.);
"African Statistics", all statistical information required to formulate monitor and evaluate development policies and programmes in Africa at national, regional and continental levels;
"Official Statistics", the body of statistical information produced, validated, compiled and disseminated by Statistics Authorities;
"Statistics Authorities", national statistics institutes and/or other statistics organizations in charge of official statistics production and dissemination at national, regional and continental levels;

"African Statistical System (ASS)", the partnership composed of national statistical systems (data providers, producers and users, statistics research and training institutes and statistics coordination bodies, etc.), statistics units in the Regional Economic Communities (RECs), regional statistics organizations, regional training centres, statistics units of continental organizations and coordination bodies at continental level.

"Regional Organisations", Regional Economic Communities, Regional Statistical Organisations and Regional Training Centres.

"African Statistician", any statistics professional or researcher involved in the collection, production, analysis and dissemination of statistical data within the African Statistical System.

CHAPTER 2 – OBJECTIVES

Article 2
Objectives

The objectives of this Charter are as follows:

1. To serve as policy framework for statistics development in Africa, especially the production, management and dissemination of statistical data and information at national, regional and continental levels;

2. To serve as advocacy tool and instrument for statistics development in the continent;

3. To ensure improved quality and comparability of the statistics required to monitor the economic and social integration process in the continent;

4. To promote adherence to fundamental principles of production, storage, management, dissemination and use of statistical information in the African continent;

5. To contribute to enhancing coordination of statistical activities and statistics institutions in Africa, including coordination of partners' interventions at national, regional and continental levels;

6. To build institutional capacity of Statistics authorities in Africa thus ensuring their autonomy in operations, while paying particular attention to adequacy of human, material and financial resources;

7. To serve as reference framework for the exercise of African statistician profession, professional code of ethics and best practices;

8. To promote a culture of evidence-based policy formulation, monitoring and evaluation; and

9. To contribute to improved and effective functioning of the African statistics system and experience sharing;

10. To ensure that there is no duplication in the implementation of statistics programmes.

CHAPTER 3 – CHAPTER PRINCIPLES

Article 3
Principles

The African Statistics System (ASS) organizations, African statisticians and all those operating in the field of statistics at the national, regional and continental levels shall respect the principles enshrined in the Resolution on the fundamental principles of official statistics adopted by the United Nations Commission for Statistics in April 1994. They shall also apply the best practices principles hereunder defined:

Principle 1: Professional independence

- **Scientific independence:** Statistics authorities must be able to carry out their activities according to the principle of scientific independence, particularly vis-à-vis the political authorities or any interest group; this means that the methods, concepts and nomenclatures used in statistical operation shall be selected only by the Statistics authorities without any interference whatsoever and in accordance with the rules of ethics and good practice.

- **Impartiality:** Statistics authorities shall produce, analyze, disseminate, and comment on African statistics in line with the principle of scientific independence, and in an objective, professional and transparent manner;

- **Responsibility:** Statistics authorities and African statisticians shall employ unambiguous and relevant methods in the collection, processing, analysis and presentation of statistical data. Statistical authorities shall also have the right and duty to make observations on erroneous interpretation and improper use of the statistical information that they disseminate.

- **Transparency:** To facilitate proper interpretation of data, Statistics authorities shall provide information on their sources, methods and procedures that have been used in line with scientific standards. The domestic law governing operation of the statistical systems must be made available to the public

Principle 2: Quality

- **Relevance:** African statistics shall meet the needs of users;

- **Sustainability:** African statistics shall be conserved in as detailed as possible a form to ensure their use by future generations, while preserving the principles of confidentiality and protection of respondents;

- **Data sources:** Data used for statistical purposes may be collected from diverse sources such as censuses, statistics surveys and/or administrative records. The statistics Organizations shall choose their sources in consideration of the quality of data offered by such sources and their topicality, particularly the costs incurred by the respondents and sponsors. The use by statistics authorities of administrative records for statistical purposes shall be guaranteed by domestic law, provided that confidentiality is preserved;

- **Accuracy and reliability:** African statistics shall be an accurate and reliable reflection of the reality;

- **Continuity:** Statistics authorities shall ensure continuity and comparability of statistical information over time;

- **Coherence and comparability:** African statistics shall be internally coherent over time and allow for comparison between regions and countries. To this end, these statistics shall make combined use of related data derived from different sources. It shall employ internationally recognized and accepted concepts, classifications, terminologies and methods;

- **Timeliness:** African statistics shall be disseminated in good time and, as far as possible, according to pre-determined calendar;

- **Topicality:** African statistics shall reflect current and topical events and trends;

- **Specificities:** Statistiscal data production and analytical methods shall take into account African peculiarities;

- **Awareness-building:** State Parties shall sensitize the public, particularly statistical data providers, on the importance of statistics.

Principle 3: Mandate for data collection and resources

- **Mandate:** Statistics authorities shall be endowed with a clear legal mandate empowering them to collect data for production of African statistics. At the request of statistics authorities, public administrations, business establishments, households and the general public may be compelled by domestic law to allow access to the data in their possession or provide data for the purpose of compilation of African statistics.

- **Resource Adequacy:** As far as possible, the resources available to Statistics authorities shall be adequate and stable to enable them to meet statistics needs at national, regional and continental levels. Governments of States Parties shall have the primary responsibility to provide such resources.

- **Cost-effectiveness:** Statistics authorities shall use the resources so provided effectively and efficiently. This presupposes, in particular, that operations shall as far as possible, be programmed in an optimal manner. Every effort shall be made to achieve improved production and use of the statistics derived from administrative records, to

reduce the costs incurred by respondents and, as far as possible, avoid expensive direct statistical surveys.

Principle 4: Dissemination

- **Accessibility:** African statistics shall not be made inaccessible in any way whatsoever. This concomitant right of access for all users without restriction shall be guaranteed by domestic law. Micro-data may be made available to users on condition that the pertinent laws and procedures are respected and confidentiality is maintained.

- **Dialogue with users:** Mechanisms for consultation with all African statistics users without discrimination shall be put in place with a view to ensuring that the statistical information offered are commensurate with their needs.

- **Clarity and understanding:** Statistics shall be presented in a clear and comprehensible form. They shall be disseminated in a practical and appropriate manner, be available and accessible to all and accompanied by the requisite metadata and analytical commentaries.

- **Simultaneity:** African Statistics shall be disseminated in a manner that ensures that all users are able to use them simultaneously. Where certain authorities receive advance information under embargo, to allow them time to respond to possible questions, public announcement shall be made indicating the nature of such information, the identity of the recipients and the set timeframe before its public dissemination.

- **Correction:** Statistics authorities shall correct publications containing significant errors using standard statistical practices or, for very serious cases, suspend dissemination of such statistics. In that event, the users shall be informed in clear terms of the reasons for such corrections or suspension.

Principle 5: Protection of individual data, information sources and respondents

- **Confidentiality:** National Statistics authorities, African statisticians and all those operating in the field of statistics in Africa shall absolutely guarantee the protection of the private life and business secrets of data providers (households, companies, public institutions and other

respondents), the confidentiality of the information so provided and the use of such information for strictly statistical purposes. ,.

- **Giving assurances to Data providers:** Persons or entities interviewed during statistical surveys shall be informed of the objective of such interviews and of the measures put in place to protect the data provided.

- **Objective:** Data concerning individuals or entities collected for statistical purposes shall in no circumstance be used for judicial proceedings or punitive measures or for the purpose of taking administrative decisions against such individuals or entities.

- **Rationality:** Statistics authorities shall not embark upon statistical surveys except where pertinent information is unavailable from administrative records or the quality of such information is inadequate in relation to the quality requirements of statistical information.

Principle 6: Coordination and Cooperation

- **Coordination:** Coordination and collaboration amongst Statistics authorities in a given country are essential in ensuring unicity, quality and harmonious statistical information. Similarly, coordination and dialogue amongst all Members of the African Statistical System are vital for harmonization, production and use of African statistics.

- **Co-operation:** Bilateral and multilateral statistics cooperation shall be encouraged with a view to upgrading African statistics production systems.

CHAPTER 4 – COMMITMENT OF STATES PARTIES

Article 4
Commitment of the States Parties

States Parties accept the objectives and principles enshrined in this Charter to reinforce their national statistical policies and systems and undertake to institute appropriate measures, especially legislative, regulatory and ad-

ministrative to ensure that their laws and regulations are in conformity with this Charter.

CHAPTER 5 – IMPLEMENTATION, MONITORING AND EVALUATION MECHANISMS, AND SCOPE OF THE CHARTER

Article 5
At National Level

States Parties shall ensure the implementation of this Charter in their respective countries.

Article 6
At Regional Level

States Parties shall ensure that the objectives and principles governing statistics at regional level are in conformity with this Charter. To this end, they shall monitor the activities of regional statistics organizations.

Article 7
At Continental Level

1. The Commission shall, in collaboration with all members of the African statistical system, institute an appropriate mechanism for implementation, monitoring and evaluation of this Charter.

2. The Commission shall be the central coordination organ for implementation of this Charter in conformity with Article 8 hereunder, and shall carry out the following activities:

    a) assisting States Parties in implementation of this Charter;
    b) coordinating measures geared to evaluating implementation of this Charter;
    c) undertaking robust advocacy for the development of statistics in Africa as a key infrastructure for Africa's renaissance;

d) ensuring that States Parties establish national funds for statistics development; and
e) contributing to the promotion of a culture of statistics in cooperation with the entire membership of African statistics system.

Article 8
Relation between the Members of African Statistics System

1. The African Statistics System is a partnership which functions as a network in conformity with the subsidiarity principle. This principle consists in taking the measures needed for the systems to function to such levels as would enable it achieve maximum effectiveness. Each Member, in the area that concerns it, shall ensure proper coordination of the system.

2. The Implementation of this Charter should enable sub-regional, regional and continental organizations to fully play their role in Africa's development in compliance with the principle of subsidiarity. It should also lead to provision of reliable statistical data for Africans and development partners, for better understanding of the situation in the continent.

Article 9
Cooperation between the African Statistical System, Third Parties

1. The African Statistical System may conclude cooperation agreements with third parties;

2. In the implementation of this Charter, the African Statistical System shall enter into cooperative relations with the global statistics system, particularly the Specialized Institutions of the United Nations and any other international organization.

3. Information on cooperation agreements concluded with Third Parties shall be communicated to the Policy Organs of the Union and Member States.

Article 10
Scope of Application

This Charter shall be applicable to all activities relating to statistics development, including its institutional environment, statistics production process and statistics products. It shall, in particular, apply to the following activities:

- statistical legislation;
- statistics advocacy actions;
- harmonization of statistical information gathering, production and dissemination methods;
- human and financial resource mobilization for statistics activities development and for effective operation of the African statistics system;
- establishing and updating definitions and concepts, norms and standards, nomenclatures and methodologies;
- coordination of statistical activities;
- data gathering, processing, management and archiving;
- dissemination and use of statistical information;
- statistical analysis and research; and
- statistics training and human resource development.

Article 11
Popularization of the Charter

States Parties shall take all appropriate measures to ensure the widest possible dissemination of this Charter in accordance with the relevant provisions and procedures of their respective constitutions.

PART II
Final Provisions

Article 12
Safeguard Clause

No provision in the present Charter shall be interpreted as derogating from the principles and values contained in other relevant instruments for the promotion of statistics development in Africa.

Article 13
Interpretation

The Court shall be seized with matters of interpretation arising from the application or implementation of this Charter. Pending the establishment of the Court, such matters shall be submitted to the Assembly.

Article 14
Signature, Ratification and Accession

1. This Charter shall be open for signature, ratification and accession by all Member States, in accordance with their respective constitutional procedures.

2. The instruments of ratification or accession shall be deposited with the Chairperson of the Commission.

Article 15
Entry into Force

1. This Charter shall enter into force thirty (30) days after the deposit of the instruments of ratification by fifteen (15) Member States.

2. For each Member State that accedes to this Charter after its entry into force, the Charter shall become effective on the date the State deposits its instrument of accession with the Chairperson of the Commission.

3. The Chairperson of the Commission shall notify Member States of the entry into force of this Charter.

Article 16
Amendment and Revision

1. Any State Party may submit proposals for amendment or revision of this Charter;

2. Proposals for amendment or revision shall be submitted, in writing, to the Chairperson of the Commission who shall transmit copies thereof to the State Parties within thirty (30) days following the date of receipt of such proposals;

3. The Assembly shall, on the recommendation of the Executive Council, consider such proposals within one (1) year following the notification of State Parties, in keeping with the provisions of paragraph 2 of this Article.

4. Amendments or revision shall be adopted by the Assembly and then submitted for ratification by all Member States in accordance with their respective constitutional procedures. Such amendments or revision shall become effective following the deposit of instruments of ratification by fifteen (15) States Parties.

Article 17
Depository

This Charter, drawn up in four (4) original texts in the Arabic, English, French and Portuguese languages, all four (4) texts being equally authentic, shall be deposited with the Chairperson of the Commission who shall transmit certified copies thereof to each signatory State and notify them of the dates of the deposit of the instruments of ratification or accession. The Chairperson shall, upon its entry into force, register this Charter with the Secretary General of the United Nations.

Adopted by the 12th Ordinary Session of the Assembly of Heads of State and Government of the African Union held in Addis Ababa, Ethiopia, on 3rd February 2009.

DECISION ON THE AFRICAN CHARTER ON STATISTICS

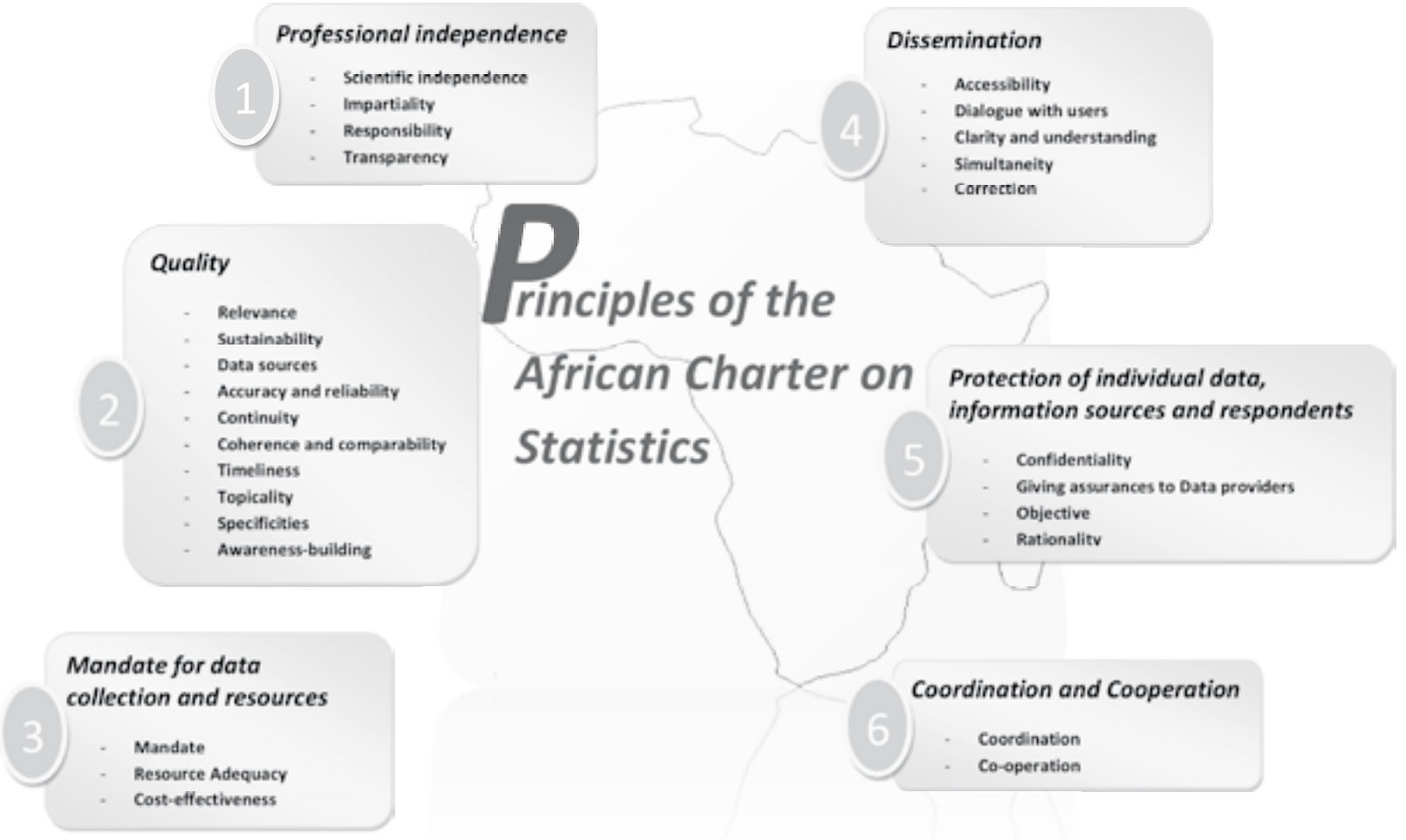
Doc. Assembly/AU/12(XII) – b

The Assembly:

1. **TAKES NOTE** of the recommendations of the Executive Council for the consideration and adoption of the African Charter on Statistics;

2. **ADOPTS** the African Charter on Statistics;

3. **CALLS ON** Member States to sign and ratify the African Charter on Statistics as expeditiously as possible so as to enable the Charter to enter into force, and thus provide a regulatory framework for statistics development in the Continent.


Principles of the African Charter on Statistics
1
Professional independence
- Scientific independence
- Impartiality
- Responsibility
- Transparency
2
Quality
- Relevance
- Sustainability
- Data sources
- Accuracy and reliability
- Continuity
- Coherence and comparability
- Timeliness
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3
Mandate for data collection and resources
- Mandate
- Resource Adequacy
- Cost-effectiveness
4
Dissemination
- Accessibility
- Dialogue with users
- Clarity and understanding
- Simultaneity
- Correction
5
Protection of individual data, information sources and respondents
- Confidentiality
- Giving assurances to Data providers
- Objective
- Rationality
6
Coordination and Cooperation
- Coordination
- Co-operation

The Use of Hand-Held Computers for the Collection CPI Price Data

David Fenwick[1] and Ben Whitestone[2] [3]

Summary

This paper discusses statistical and practical issues in relation to the use of hand-held computers, or Personal Digital Assistants (PDAs), for the collection of price data for the compilation of Consumer Price Indices (CPI). The paper aims to assess the main advantages and challenges associated with introducing a system of electronic data collection in the context of two practical pilot studies carried out by The UK Office for National Statistics (ONS) in Uganda and Nigeria, in February and July 2007. The main focus of these studies was whether or not it is currently appropriate to further consider the use of hand-held technology for CPI data collection in circumstances pertinent to Africa. Although the assessment presented here is in the context of the countries involved, it is also hoped that the study will inform other countries considering the adoption of such technology for CPI data collection.

Key Words: *Consumer Price Indices, Price Collection, Statistical Capacity Building, PDA, Hand-held Computers.*

Sommaire

Cet article discute des aspects statistiques et pratiques par rapport à l'utilisation des ordinateurs portatifs, ou les aides personnels numériques (PDA), pour la collecte de données des prix nécessaire à l'élaboration de l'indice des prix à la consommation (IPC). L'article a pour objectif d'évaluer les principaux avantages et défis liés à l'introduction d'un système électronique de collecte de données dans le contexte de deux études pratiques pilotes effectuées par l'Office Nationale de Statistique de Grande Bretagne (ONS) en Ouganda et au Nigeria, en février et juillet 2007. L'objet central de ces études était de savoir s'il est actuellement approprié de continuer à utiliser la technologie portative pour la collecte de données de l'IPC dans les circonstances spécifiques à l'Afrique. Bien que l'évaluation présentée est dans le contexte des pays considérés, on espère également que l'étude sera bénéfique à d'autres pays envisageant d'adopter une telle technologie pour la collecte de données de l'IPC.

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[3] ACKNOWLEDGEMENTS: We are grateful to the staff of the Nigerian National Bureau of Statistics and the Ugandan Bureau of Statistics for their support and more particularly for the assistance given to us during the course of the pilot studies.

Mots clés : *Indice des prix à la consommation, Collecte des prix, Renforcement des capacités statistiques, PDA, Ordinateurs portatifs.*

1. BACKGROUND

A number of National Statistical Institutes have successfully used handheld computers for local price collection in the context of the compilation of Consumer Price Indices for several years. These technologies are now available at such prices and, in some cases, the general infrastructures are now in place that developing countries can consider their use, thus taking advantage of the considerable benefits associated with adopting such technologies. Indeed some developing countries are already using handheld computers successfully to aid in the collection of survey data e.g. for the Philippines Annual Poverty Indicators Survey. Several technically advanced and well resourced Asian countries use handheld computers for Consumer Price Index (CPI) purposes.

In a European context the use of handheld computers is more common and indeed the UK Office for National Statistics (ONS) has been using handhelds for data collection of its Retail Prices Index (RPI) (and CPI) since 1995. The ONS CPI/RPI data collection has recently upgraded to use HP iPAQ 2190 PDAs running the Windows mobile operating system. Previously data collection was carried out using Psion palm-top devices.

We are not aware of any African country which uses handheld computers to collect all CPI prices data although some countries and regional organisations are considering the introduction of such technology either to enhance existing CPIs or as part of a wider agenda of regional CPI Harmonisation and possible future integration with another round of the International Comparison Programme. It is under this context that the ONS were tasked with carrying out two pilot studies into the use of Computer Assisted Data Capture (CADC) in an African context in order to provide advice about the key challenges and advantages both specifically for the countries visited but also to inform other countries considering implementing such systems.

2. THE PILOT STUDIES

Taking the advice of colleagues at the African Development Bank (AfDB) it was agreed that Uganda and Nigeria would be ideal candidates for the

ONS Pilot Studies- due to their expressed interest in introducing CADC in the near future and also that the countries differ significantly enough to provide an interesting comparison. Both the Nigerian National Bureau of Statistics (NBS) and the Ugandan Bureau of Statistics (UBOS) welcomed the pilot study and provided the significant support necessary during the missions.

The remit of the study was to consider not only the extent to which handheld computers provide additional scope for product improvement through better quality data and timeliness from interactive live-editing and electronic data transmission but also their potential to assist with other developments such as the identification of discounts, control of forced replacement of items and the provision of information relating to changes in quality.

Each pilot study was carried out by two ONS representatives in partnership with the NBS/UBOS staff and price collectors. ONS spent 5 working days in each country which included 2 days of fieldwork in the markets of Abuja and Kubwa (Nigeria) and Kampala and Jinja (Uganda) where ONS carried out a price collection using hand-held computers in parallel to the standard (paper) collection being undertaken for the Nigerian and Ugandan CPIs. Screenshots of the simple price collection program used for the Nigerian pilot study can be seen at Annex A.

The main focus of this study was whether or not it is currently appropriate to further consider the use of handheld technology for CPI data collection in circumstances pertinent to Africa. This study did not look in detail into which specific technology would be used, such specifics would be addressed at a later date if a particular country decided to implement such a system.

3. FINDINGS

The pilot studies were able to carry out a full practical assessment of CADC methods in Uganda and Nigeria, the key findings are summarised below. These findings were drawn from observations made in the field, discussions with staff at NBS and UBOS and a detailed comparative analysis of the electronic data collected during the course of the pilot study and that collected by the UBOS/NBS price collectors using standard methods (see section 4 for a summary of this analysis).

3.1. Quality

A major perceived advantage of the use of a CADC system is that it would lead to improvements in the quality of CPI data, particularly as increased quality control at the point of data entry would help identify anomalies and ensure that prices imputed are correct. Observations made in the field and analysis of the data collected using CADC versus traditional methods (which revealed some interesting price variations, see section 4) are illustrative of the usefulness of the functionality offered in the field by using handheld computers which has the potential to significantly improve the quality of the final CPI in the following ways:

i. Price History: The price collection programme available on the PDA's allowed for a more comprehensive price history to be available to the price collector, rather than the one previous price included on paper forms in Nigeria and Uganda. The availability of such data leads to less judgmental editing at the point of data collection and helps ensure the comparability of items, particularly where prices for a particular item are variable. But it is important that the machines are programmed to reveal the price history only after a price quote had been entered so that collectors are not overly influenced by price when choosing an item.
ii. Quality Checks in the field: The price collection programme available on the PDA's included several automatic validity checks which were used to identify where the price entered varied by +/- a certain percentage from the previous month's price and the average price for that item over a number of months and also flagged up where data was not entered in all required fields (price, weight, indicator code). These checks provided a useful marker when a price needed to be double-checked, in the existing system such checks are carried out in the central office after the data has been collected and therefore audits must be carried out after the collection period when prices may have changed.
iii. Transcription: There is a major risk of errors when transcribing paper forms, this is not a risk when using PDA's where data can be transferred electronically to the central office.

These quality improvements are perhaps more applicable to areas outside of the main urban areas as quality control is likely to be more difficult in the remote regions simply due to the distance from the central office.

In addition to these advantages in the field the electronic system also allows improvements in quality through operational procedures; see section 3.5, Work Control, for further detail.

3.2. Timeliness

The use of PDAs to collect prices data significantly reduces the time taken to make data available electronically at the central office and between data collection and finalization, this can be achieved through:

i. Transcription: Data collected on paper must be transcribed onto a desktop computer for computation. This process is time-consuming and resource intensive. When data is collected on handhelds the data can be directly transferred from the handheld to a desktop (see 3.3 for Transmission methods).
ii. Transmission from regions: Electronic transmission (see 3.3) will allow regions or Zonal Offices (in a Nigerian context) to directly transmit an electronic data file to the central office thus negating the need to courier or hand deliver forms.
iii. Quality checks in advance: As the functionality is available to run certain quality checks in the field that would normally be run in the office after data had been transcribed the time taken for quality checking centrally can be reduced, or alternatively further check could be carried out.

These improvements to the speed of the processing system might facilitate an earlier publication but any improvements in Nigeria or Uganda are not likely to be significant given the timeliness of the current publication schedule in both countries. In addition the relative merits of speeding up publication need to be balanced against other opportunities, e.g. to spend more time on analysis and interpretation, the production of press notices and associated briefing or the collection of more prices.

3.3. Transmission

Although the pilot studies could carry out no physical testing of the transmission of collected data to the central office we were able to make a practical assessment of the possibilities:

i. Wireless transmission: Collectors will not always have access to a PC but in both Uganda and Nigeria the mobile telephone network is good

and widely used. Data could therefore be transmitted directly from the PDA to the regional or central office.

ii. Email: Although this was not tested in the field, in both Uganda and Nigeria the data could be downloaded on to a local desktop PC and then sent to the central office via email. In Uganda two of the five regional centres have desktop PCs already. For the other three one option, other than actually purchasing PCs, would be to arrange to use PCs in other government offices. In Nigeria the zonal offices will soon have network connections directly to the central office and access to the internet, so local downloading and transmission should not be a problem in principle.

iii. Manual delivery: As a last resort supervisors could bring machines to the central office for downloading data but this would involve travel costs and possibly the purchasing of additional memory cards for local price collection when memory cards are being delivered.

The electronic transmission of data from price collectors and regional offices would significantly increase the speed of data transmission to Headquarters and reduce the cost of doing so (e.g. fewer travel and accommodation costs). In addition, headquarters would be able to look up the latest returns of price data from all regions at the same time thereby identifying early on any issues.

3.4. Interface with 'back office' systems

The project was able to successfully interface the HP iPAQ with back-office systems in Uganda. Microsoft ActiveSync® was loaded on to a UBOS computer to enable data to be transferred from the hand-held to the desktop. Data was transferred to the UBOS system and analysed. Due to time constraints it was not possible to physically test this interface in Nigeria but an assessment of the IT infrastructure suggests that this would not be a problem.

The interface between UBOS/NBS software and handheld computers was simple as the handhelds can export an Excel file of data and UBOS/NBS both use Excel to analyse CPI data deliveries. This interface might become more complex if additional functions required for the CADC system necessitated other software, which is likely to be the case if hand-helds were to be used for regular CPI data collection.

3.5. Work Control

A CADC system enables certain checks that would improve how efficiently the CPI is managed:

- Check that all prices have been collected: An electronic data collection form can easily check whether all prices have been collected and flag when they have not, this mitigates the risk of the price collector inadvertently forgetting to price a particular item.
- Check to see when prices were imputed: An electronic data collection for can easily add a date/time to the collected price which is useful for validation purposes.
- Indicator Codes: If a specific country were to adopt the use of hand-held computers for their CPI we would propose that they used the opportunity to add certain features to their data collection form. One such feature would be indicator codes, these codes (represented by a single letter) are used in the UK to show when a price collected is for an item on sale, a replacement item, a missing item, a discontinued item etc. This is a simple tool to enhance the ease of validation and the management of the item list. For example, the price of the 'Men's Belt' collected in Garki Market (Abuja, Nigeria) was 270% higher than the average for that location. This was an accurate price quote but one which suggests that the item priced was of much higher quality than previous items. In the pilot study this item was therefore flagged with an 'N' (Non-Comparable) indicator code and details of the physical characteristics of the belt were recorded in order that this change in quality would be taken into account during the compilation of the index.
- Having price histories more readily at hand could:
  - Make briefing of price collectors prior to fieldwork more effective, e.g. by a better appreciation of when an "outlier" is a legitimate price change and vice-versa.
  - Add to the quality assurance processes through assisting with analysis when the index has been compiled and briefing is being put together.

  These advantages are particularly relevant when there can be significant regional variations in price levels and trends.

3.6. Sustainability

Although the pilot studies could not directly test the sustainability of an electronic price collection system the impression from inter-acting with staff is that there is the capacity to exploit this technology.

Robustness of the technology: Over time the hand-held technology would suffer wear-and-tear, it is important to have spare handhelds and spare parts (batteries, stylus etc.) at the central office in case of a failure. The machines will also inevitably become outdated over time. If they continue to work effectively for the CPI this should not be an issue but as newer technologies are available that would further enhance CPI price collection there may be pressure to upgrade the system. It should be noted that the previous machines used for UK price collection lasted for 9 years and most were working well when replaced with more up-to-date technology.

Ability to cope with changes in the CPI: In recent years as some African countries have come to update their CPI, to bring it in line with international best-practice, it has emerged that their previously developed systems sometimes cannot be adapted to handle changes. It is also often the case that the system has been developed by an external consultant and that the staff at the NSI have little knowledge of its workings. This issue is not as significant in the context of the price collection system as it is with the index computation system, the actual collection system would not need to be significantly altered if the CPI methodology was updated. However, the collection system would need to be able to cope with changes to the basket. Electronic transmission would enable the price collector to receive updated forms with new items etc. directly from the central office with details of the new/dropped items. .

3.7. Costs

Clearly there will be a short term cost associated with the introduction and implementation of an electronic system for CPI data collection, such as:

- The purchase of handheld computers
- Upgrading 'back-office' systems to enable interaction with the handhelds (the extent to which this may be necessary is not known).
- The development of appropriate software for local price collection (costs depend on the functionality and how sophisticated the programme).
- Training of field staff and statistics office staff on using the new systems – There may be challenges associated with field staff not being used to the technology but the pilot studies suggested this is not an unsolvable problem. There may also be resistance from some field staff to the use of new technology as they may lack confidence about being able to operate the handheld, this risk may be mitigated through training and pilot collecting.

The unit cost of the iPAQ 2190, used for the pilot study and for CPI collection in the UK, is about £300 including back-up battery.

There would also be longer-term costs associated with maintenance of the system and training of new staff but we would expect that additional expenditure on the latter would be minimal as new staff must be trained in any case.

3.8. Cost Savings

It is difficult to be firm on the relative cost savings gained from an electronic system of data collection until proposals are fully developed and local familiarisation with the new technology has taken place (regular use will clearly increase expertise). However, it is clear that:

- The current paper collection in both Uganda and Nigeria involves a significant element of staff time and travel. This includes initial price collection, inputting prices into the computer, editing and repricing. The number of people months would reduce with the use of handheld computers, from eliminating the need for data transcription and some editing at Headquarters (although central editing will still be necessary) and from the need for less travelling.
- The use of handheld computers would also eliminate costs associated with the printing of questionnaires etc.

Although in the longer-term some cost savings may be gained the implementation of a CADC system should not be seen as a way to save significant sums of money as the set-up costs and ongoing maintenance costs will offset some of the efficiency savings and any net savings should be seen as an opportunity to re-invest in improved outputs e.g. more price quotes and better analysis.

3.9. Other Issues

The pilot studies uncovered a few other issues associated with electronic data collection in the field which should be taken into account if implementing such a system:

- The screens were difficult to read in the sun. There may be an accessory available to resolve this problem.

- Convenience: access and organisation of hundreds of price quotes during price collection proved much simpler using a hand-held computer as opposed to bulky paper forms.
- Power-cuts: Uganda and Nigeria experience frequent power-cuts which would impact on an electronic price collection system as the handhelds need to be charged. The iPaq's do have a long battery life (adequate for a prolonged period of price collection spanning a number of days), internal back-up batteries and come with a spare battery but there would still be a residual risk. The contingency in case of a major disruption would be to collect the prices on paper or for the central office to deliver a spare (fully charged) handheld to the affected price collector(s). In Nigeria it was noted that most price collectors have mobile telephones and therefore must be able to charge the batteries even with intermittent power.

4. DATA ANALYSIS

The Ugandan pilot study was able to carry out a comparative analysis of prices data collected through the regular methods and those collected in during the course of the mission using handheld computers, see 4.1 for a summary of the results.

For the Nigerian pilot study it was not possible to carry out the same analysis but rather an analysis was carried out on prices data collected during the *previous month* through the regular methods and those collected during the course of the mission using handheld computers. This analysis is not included here as merely served to illustrate the major challenges in maintaining the quality of the prices data, particularly in the circumstances facing a country such as Nigeria where the majority of purchases are made in open markets where the prices are negotiable and the products on offer – particularly food- can vary in quality both between market stalls and locations, and over a relatively short period of time. The analysis particularly informed the discussions on quality (3.1) and work control (3.5). What this analysis also demonstrated was that the ease of the data being available in an instant electronic format encouraged more detailed validation.

4.1 Uganda Data Analysis

The analysis was undertaken for prices collected in the Nakasero and in Baita markets of Kampala. The Nakasero analysis focussed on the differences between the data collected using the two methods whereas the Baita

analysis focussed on the functionality available for data validation in the field and how it compared to validation currently carried out at the UBOS central office.

Neither analysis indicated major issues with the quality of the prices currently collected for the CPI in Uganda but did demonstrate the possibilities and ease of validation in the field using an electronic system.

Table 1 shows a comparison of the prices collected using the hand-held computer and those collected under existing methods in the Nakasero market of Kampala. In this exercise two teams worked in parallel with the same list of items to price. But they did not accompany one another so the difference in prices will reflect all those factors influencing price including the stall from which the price quotation was obtained and the quality of the particular item, for example the freshness of "green leaves". The table gives a comparative analysis of the actual and percentage differences in unit prices collected on paper and electronically.

Table 1: Percentage difference between prices collected using traditional methods and prices collected using handheld computers in Nakasero, Uganda.

	%
No difference	59
+/- 10% or less	73
+/- 20% or less	86
+/- 30% or less	94
More than +/- 30%	6

Table 1 shows that:

- On the whole the prices collected using the hand-held and on paper are similar. Indeed out of the items collected 59% do not differ between the methods of collection, 73% differ by +/- 10% or less and 94% differ by +/- 30% or less.
- In most cases where the prices differ the variance is genuine due to either different market traders asking for different prices or offering slightly larger bundles etc for the same price.
- The analysis provided a good example of the additional facilities readily available from downloading Excel spreadsheets from the handhelds.

The ease of the data being available in an instant electronic format encouraged more detailed validation.

The Nakasero analysis shows that the prices on the whole do not significantly differ and that anomalies picked up by the existing methods of data validation are on the whole the same as those identified by the quality checks on the hand-held. It shows the strength of current data collection in Uganda and therefore, the advantage to the quality of the final CPI through adopting hand-held computers may not be significant.

Unlike the Nakasero collection, the Baita electronic price recording shadowed the paper price collection i.e. the two teams collected prices together for the identical items. The hand-held computers were used to edit in the same way as currently takes place on the data inputted into the computers at Head Office but with different validation parameters. The parameters used would not necessarily be the ones used if the system were live; rather they would need to be reviewed to take into account local circumstances including price volatility. Even so, it was instructive to compare the outliers identified by the handhelds compared with the current CPI programmes.

The exercise also demonstrated that all of the validation checks currently undertaken in Head Quarters following the price collection can be undertaken effectively in the field using automatic checks on the hand-held computers. Although the collection system on the iPAQs used for the pilot study was limited, and in the case of Uganda was only set up to compare new prices with prices previously collected in the same market, it could be adapted to compare the former with new prices collected in other markets or the average price across all markets. If further validation needs to be carried out at the central office this can be done simply if data is instantly available in an electronic format.

5. CONCLUSIONS

The pilot studies in Nigeria and Uganda proved that the introduction of handheld computers for price collection in countries confronted with similar local circumstance would be feasible and has the potential to bring a number of advantages including the delivery to headquarters of prices data which is both more timely and which has already undergone interactive editing in real time. The potential benefit in terms of data quality depends on the extent to which "quality" is observed to be an issue. Uganda, for example, have existing data validation procedures which are relatively

effective and the overall quality of their edited data is high. In other countries, where the existing infrastructure at the central office (in terms of both technology and expertise) may not be as strong, the potential gains are greater.

Initial indications from the pilot studies suggest that the use of handheld computers would facilitate enhanced control procedures to further ensure best-practice CPI data collection principles are followed. Handheld computers also have the potential to speed up the subsequent validation of prices which have been queried and their transmission to Head Office. The more timely processes would also facilitate a number of improvements, for instance the collection of a greater number of prices over the production cycle and more analysis of the consumer prices index and/or slightly earlier publication. The benefits to accrue are particularly so for remote price collection outside of the main urban centres.

The benefit of storing previous price histories, detailed item descriptions etc are universal and could increase with, for example, the introduction of a sub-regional harmonised index or greater integration between data collection for the CPI and for a permanent International Comparison Programme.

These advantages are in addition to advancing the general knowledge of a statistical office in new technology with the associated positive impact on the activities of the office overall.

There are also challenges associated with the implementation of such a system, aside from those to do with the development of the system itself, some practical challenges may include: the risk of the frequent power-cuts impacting on the ability to charge batteries; making sure the price collector does not become a target for theft; the long-term sustainability of the system (including the expertise at the local level for maintenance); and of course the set up costs (although some of these may be offset by efficiency gains in the longer-term).

In terms of hardware costs to set up a system of electronic data collection, this would not be substantial. The main costs are likely to be mainly associated with the development of suitable software, a software which is robust enough to handle the CPI and be relatively sustainable would likely involve several weeks of both business analysis and programming. Some efficiencies might be generated by a reduction in the checking and querying of data by Head Office and also in data inputting but substantial

net savings are unlikely unless there are opportunities to share hardware. Thus the main driving force behind the adoption of handheld computers is likely be a better index for users rather than the anticipation of monetary savings within the Central Statistical Office. But a country's development costs will be significantly reduced if shared with other national statistics institutes- a benefit which would accrue if electronic data collection was introduced jointly with a harmonised CPI across countries or as part of CPI integration with a future International Comparison Programme.

Any project aimed at implementing an electronic data collection system should bear in mind the longer term sustainability of the system and its resilience over time. In particular the internal staff at the NSI should have full control over the system after implementation and the skills and resources to maintain it. Again, a joint project in cooperation with other national statistics institutes could help to address this issue.

6. RECOMMENDATIONS

The pilot studies proved that there are many advantages to adopting a CADC system for CPI price data collection. African countries should consider adopting such systems particularly if investing in changes to current CPI methods with, for example, the introduction of a sub-regional harmonised index or greater integration between data collection for the CPI and for a permanent International Comparison Programme. The pilot studies in Uganda and Nigeria can be used to inform countries of the benefits and also the possible challenges which need to be overcome.

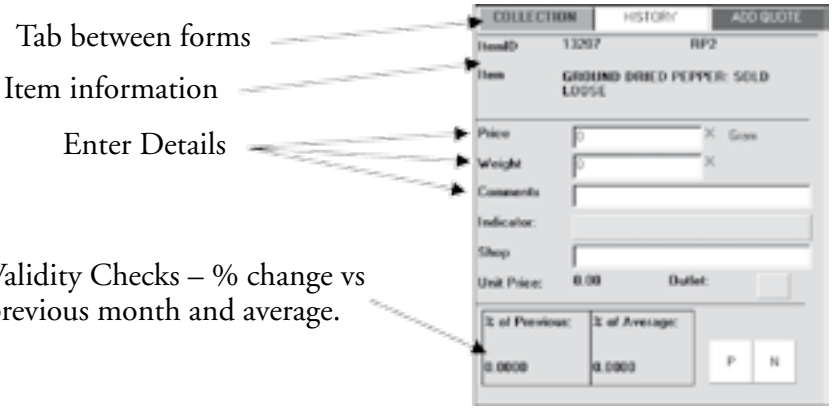
To further inform countries adopting such a system further pilot studies could be carried out. Any further pilot work should focus on countries where the existing infrastructure at the central office (in terms of both technology and expertise) and the overall quality of the CPI system may not be as strong as Nigeria and Uganda, this may prove that in these cases the potential gains are greater.

Annex A: Screenshots from the Data Collection Program used for the Nigeria Pilot Study

List View

Filter the list by Commodity Group or by 'Not Entered'

Item List – Click item to enter Price Collection Form



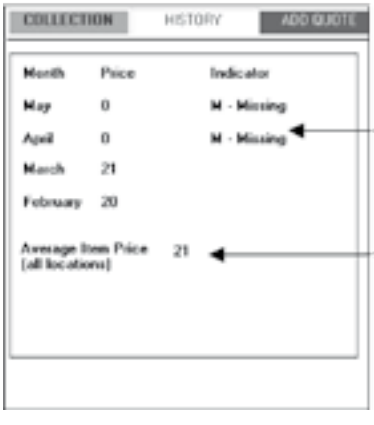
Tab between forms

Item information

Enter Details

Validity Checks – % change vs previous month and average.

Price History Form



Price History

Average Price (all locations)

Processing Open-Ended Response Items: An Application using SAS

Amos Banda[1] [2]

Summary

Frequently researchers and non-governmental organisations (NGOs) collect information through the use of questionnaires. Different types of questions are used to solicit information from respondents. Some questions require respondents to fill in blanks or select one or more responses from a number of options available, others require respondents to respond in their own words. The later, frequently referred to as open-ended questions, are common but little information exists on how to process or analyse them. This paper explores a method of selecting keywords in a response, merging them to form strings and then use character functions built into the Statistical Analysis System package to display frequencies of the strings. The method shows that it is possible to extract information from open-ended responses for possible use by researchers and organisations.

Keywords: *Open-ended responses, Merged words, Character functions, Frequency tabulation of strings.*

Résumé

Souvent les chercheurs et les organisations non gouvernementales (ONG) collectent l'information par l'utilisation des questionnaires. Différents types de questions sont posées pour solliciter l'information des répondants. Quelques questions exigent des répondants de compléter des blancs ou choisir une ou plusieurs réponses à partir d'un certain nombre d'options disponibles, d'autres exigent que les enquêtés répondent dans leurs propres mots. Cette dernière approche, fréquemment désignée sous le nom de "questions ouvertes", est courante mais peu d'information existe sur la façon de les traiter ou analyser. Cet article explore une méthode de choisir des mots-clés dans une réponse, les fusionnant pour former les chaînons et puis employer des fonctions de caractère élaborées à l'aide du logiciel d'analyse statistique pour afficher les fréquences des chaînons. La méthode montre qu'il est possible d'extraire l'information à partir des réponses ouvertes pour l'usage possible par des chercheurs et des organismes.

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[2] Acknowledgements: A few individuals and organisations made significant contributions toward the production of this paper. Gratitude goes to Family Health International who sponsored the project, RuralNet Associates for providing the data, Misozi Banda for editing, Rhoda Chiwele and others merit special mention for entering the data in Excel which was later used in SAS.

Mots-clés : *Réponses ouvertes, Mots fusionnés, Fonctions de caractère et fréquence, Tabulation des chaînons.*

1. INTRODUCTION

The role of statistics in decision making is appreciated the world over, to an extent that almost every country has an institution whose responsibility is to collect, process and disseminate data for its national needs. Decision making and policy formulation in the era of increasing demands for access to quality health-care, education and food security will necessarily require availability of quality data, especially so for developing countries. The quality of data is so vital that a number of organisations working in developing countries prefer to collect their own data even where secondary data exist but whose quality is not guaranteed.

Primary data may be collected through the use of a questionnaire which may include both closed-ended and open-ended questions. Open-ended questions being questions in which respondents provide answers in their own words. These questions are difficult to code and analyse and most data analysts ignore them in the analysis. However, these questions are thought to be ideal where little information exists regarding an issue of interest such as HIV/AIDS. Some of the benefits of open-ended questions include; the liberty a respondent has in using his or her own words to answer questions, providing a variety of responses on the same subject, and revealing unique responses. In some situations, an open-ended question may be used as a follow-up question to a closed-ended question. For example, a question to a sample of patients on antiretroviral therapy (ART) program might be phrased as:

Question:

(a) Have you received food supplements through the ART program?
1 Yes ☐
2 No ☐
(b) If you answered No in (a) please state the reasons why.

Part (a) is a closed-ended question and part (b) is an open-ended question.

Although open-ended questions have the stated benefits they are difficult to analyse because responses tend to be many and varied. The major prob-

lem is that responses are recorded in textual form, as verbatim as possible, and any post-coding to summarize presents some challenges at both the data-entry and analysis stages. The following is a typical example to be developed later. In a survey administered by an NGO to households with orphans and vulnerable children, heads of households were asked to state what members of their households had for supper the previous day. The range of responses to the question was wide because of the variations in foods people ate from one region to another. In the same survey, a separate questionnaire was prepared for orphans and vulnerable children. In one of the questions, orphans were asked to state what had changed in their lives since the death of their parents. Here too, the responses were many and varied. Even though the responses in both questions were many, a summary in some quantitative form was expected after the analysis. We revisit these questions later. Summary information of such qualitative data is often needed by various organisations that serve communities in various ways. Unfortunately, literature that deals with appropriate procedures a researcher could use to process responses to such questions is rather scanty. Many of the statistical techniques in use today assume quantitative data and statistical software abound that provide statistical analyses for quantitative data.

Quite often the approach employed in primary data collection is to convert open-ended questions into multiple-choice type of questions (closed-ended), where a respondent is given a range of possible answers to choose from. The problem with this approach is that it limits a respondent to the range of responses given and rules out unique responses. Bishop et al. (1990) have developed a rather complex method and system for data processing of open-ended responses, using what they called categorized dynamically variable coding of the open-ended responses. A method proposed in this paper is rather simple, it requires identification of issues of importance within a respondent's answer, join them together into strings, and then process the strings using string (or character) functions. String functions are functions designed to deal with data in text form, they come as standard functions with most statistical packages. Banner et al., (1997) evaluated scoring accuracy and item functioning for an open-ended response type where participants were asked to choose from possible correct answers posed as mathematical expressions which took many different surface forms. In their study, they broaden the range of responses used in typical computerised tests. Pennebaker et al., (1990) also carried out an experiment in which one hundred thirty freshmen were assigned to write either about coming to college or about superficial topics for 20 minutes for 3 days. Their goal was to determine whether there was evidence of im-

proved health in freshmen after writing about their thoughts and feelings associated with entering college. They found that open-ended responses were particularly revealing as subjects (freshmen) discussed the value of writing in insightful terms, venting terms or catharsis language. Theirs was a small sample and responses could be examined one by one or through a word count of significant terms of interest. The method proposed in this paper is rather unique as it will be illustrated later.

2. METHODS

In the method proposed, the first step involves the transferring of responses from a physical questionnaire into some computer application such as a spreadsheet. Such responses may be recorded in a variety of ways but in this paper it will be assumed that ordinary words are used to record open-ended responses, i.e., as verbatim as possible. In most statistical software textual information is often referred to as character or string information. These words are used interchangeably in the paper. A character or string variable is basically a collection of characters, such as responses to an open-ended question in textual form or numeric labels. Responses are recorded in a column as text or as numbers, if numbers are used, they serve no numeric purpose but as mere labels. A trivial example is in recording sex of a respondent, it may be recorded as male or female or as numeric labels 1 and 2 (1= male, 2 = female). Statistical software abound which have the capability to handle such textual information through character functions. These functions are particularly useful for processing open-ended questions.

Example

Presented in Table 1 is a sample of responses from twelve heads of households in response to the question posed to them to state the kind of meals they had a day before the survey was conducted. It will be demonstrated later how the method being proposed can be used to summarize such open-ended responses using the Statistical Analysis System (SAS). The responses in Table 1 are names of food items. These names have been extracted from responses given by heads of households.

Table 1 A question posed to heads of households in a questionnaire and some of their responses.

Question 1: What did you eat for your meals yesterday?
Responses:
1 bread tea nshima
2 bread tea nshima
3 nshima
4 nshima
5 nshima meat tea bread
6 porridge nshima vegetables
7 nshima vegetables
8 bread tea nshima beans
9 bread tea nshima vegetables
10 tea bread nshima chicken
11 nshima kapenta vegetables
12 nshima vegetables

A typical response, for instance, for the seventh respondent would be; 'I had nshima with vegetables.' In a spreadsheet one would enter 'nshima vegetables' leaving out the other parts of the sentence. In this example, each food item is a string of characters and the characters are the letters used.

Table 2 is similar to Table 1 and presents responses from orphans, recorded as verbatim as possible. Some of the orphans interviewed had moved into new homes in which they joined biological children. For purposes of the survey, biological children were considered to be vulnerable because of the need to share resources with the newcomers. The biological children were also interviewed on various aspects about their lives using the same questionnaire administered to orphans. The question cited in Table 2 was not applicable to biological children and the response, in that case, was coded as 77 (not applicable). In some cases orphans did not know the answer or did not respond at all, such responses were recorded as 88 (I don't know) and 99 (no response). In the method proposed, a mixture of text and numeric labels can be used to speed up data entry. The numeric labels could be replaced by their appropriate textual meanings later. The children surveyed aged between 6 and 12 years inclusive. The period in which orphans were resident in their adopted homes varied, a scenario that led to a variety of responses.

Table 2 A question posed to orphans and vulnerable children and some of their responses.

Question 2: What has changed in your life since the death of your parent(s)?
Responses:
1 I have less educational support
2 77
3 I stopped school
4 77
5 77
6 77
7 88
8 77
9 88
10 I do more household chores
11 I have less food and clothes
12 I have less food and clothes

The advantages of open-ended questions seem rather evident here, various responses offer researchers an insight into the type and nature of problems. Even though the responses are few, they bring out issues of basic needs; lack of adequate food, clothing and access to education. Multiple choice questions could be used in this situation but the risk is that some children could respond in the affirmative to some choices read out by an interviewer.

The problem these data present is finding a way of processing them into some form of a summary for end-users. The method proposed calls for a reduction of responses into strings representing issues of significance to individuals conducting the survey. In question 2 for example, the response 'I have less educational support', cites only one issue, educational support, while the response 'I have less food and clothes', cites two issues, food and clothing. The paper assumes that it is issues such as these which could be of significance to an organisation or researcher soliciting the responses. In this paper, both responses could be summarized using keywords. Responses in Table 1 are an example of how one could summarize information using keywords. In that table, only names of food items were recorded. Table 2, on the other hand, does present some challenges because responses are recorded verbatim. In this case, the approach proposed involves identifica-

tion of keywords first, such as; *less educational support, stopped school, less food* and *less clothes*, to be joined together to form strings. The joined words form strings identifying significant issues in a response. These are keywords highlighting major issues in an individual's response and represent the cardinal content in a response. The strings formed facilitate the use of string functions built into statistical software such as SAS. For instance, 'I have less educational support' could simply be recorded as *lesseducationalsupport* as one string, and 'I have less food and clothes' could be recorded as two separate strings, *lessfood lessclothes*. These strings retain much of the information in the original responses.

Most string functions if not all, are case sensitive and coding responses in either upper or lower case is advisable. Further, the strings have to be coded using the same choice of words, *lessfood* and *littlefood* mean the same thing in everyday life but are treated differently by string functions. Initially, the choice of words may differ significantly but reduces by replacing some strings with their equivalents. Variations in the use of keywords may be many if data entry is done by several individuals.

3. ANALYSIS

Analysis of open-ended items processed in the manner just described reduces to an exercise of frequency tabulation. This can possibly be done in two ways. One way is to separate strings within an individual's response into separate variables (columns if using a spreadsheet), and then produce frequency tables of the individual variables. For instance, an individual's response of '*lessfood lessclothes*' could be placed into two separate variables. Another way is to carry this step further by forming a single vector of all the strings. Once a vector of strings has been formed, a frequency table of the vector can be obtained. An illustration of the two approaches is shown in 3.1 and 3.2 for the responses to question 2 in Table 2, but using only responses from three individuals.

3.1 Separating Strings

Table 3 shows responses from a questionnaire recorded as verbatim as possible in the column headed questionnaire, the next column headed spreadsheet shows strings of significant issues, and the last three columns show strings separated into distinct strings. The last three columns were created from column two using string functions and they represent distinct issues cited by respondents.

Table 3 Merging responses and then separating them into variables representing specific issues.

Questionnaire	Spreadsheet	Variable1	Variable 2	Variable 3
I do more household chores	morehouseholdchores	morehouseholdchores		
I have less food and clothes	lessfood lessclothes		lessfood	lessclothes
I have less food and clothes	lessfood lessclothes		lessfood	lessclothes

New variables are added when new issues are encountered. Once the list of variables is exhausted, a frequency table of each variable can be obtained. For certain open-ended questions the generic variable names could be replaced by names of the items themselves. In such a case, responses could be coded as yes or no. Table 1 presents such an example and responses in that table could be coded as shown in Table 4.

Table 4 Selecting specific issues and then separating them into distinct items.

Questionnaire	Spreadsheet	bread	tea	nshima
I had nshima, bread and tea	bread tea nshima	yes	yes	yes
I had nshima, bread and tea	nshima bread tea	yes	yes	yes
I ate nshima and some relish	nshima	no	no	yes

An advantage of creating variables for distinct strings is that cross tabulation of variables is possible. Cross tabulations may be necessary for exploring associations between variables.

3.2. Combining Strings

An alternative to the approach just described is to form a single variable of strings and then obtain a frequency table of the variable. Cross tabulation is not possible with this approach. Using Table 3 as an example a single variable would appear as shown in Table 5, here assigned the name ISSUE.

Table 5 Listing responses in Table 3 into a single variable.

ISSUE
morehouseholdchores
lessfood
lessclothes
lessfood
lessclothes

Once all the responses have been exhausted, tabulation can be done. In a separate table, the strings can then be expressed in their natural way. For the three responses discussed in Table 5 the final table would appear as shown in Table 6.

Table 6 A frequency table of responses from Table 5 expressed in ordinary language.

ISSUE	Frequency	Percent
I do more household chores	1	20
I have less food	2	40
I have less clothes	2	40

Clearly, some programming code is necessary to achieve the results of either approach. However, this paper is not about programming but an introduction to a method of processing some open-ended responses. Issues of programming are left to experts but a demonstration of a simple program that worked reasonably well will be discussed later.

Care should be exercised in the interpretation of the relative frequencies or percentages obtained in the frequency tables, such as in the preceding example. A relative frequency represents the number of times that particular issue (string) has been cited relative to other strings, and not relative to the number of respondents. The total frequency represents the total number of times issues have been cited and not the total number of respondents. In Table 6, for instance, the total frequency is five because five issues have been cited, some repeatedly, but the responses are from only three individuals. However, if a respondent is requested to cite one and only one issue, then the frequency associated with a string will be relative to total number of respondents, assuming no missing data exist.

Table 7 presents a summary of the final results of using the proposed method on the responses to the question in Table 1 for all the respondents in the survey. The percentages reported represent the proportion of times issues have been cited and not the percent of respondents citing the issues. The statistical software SAS was used to produce the tables using the code in Appendix 1, what is presented here is partial output.

Table 7 Frequencies of foods households ate at supper a day before a questionnaire was administered.

Food	Frequency	Percent
beans	104	3.7
bread	238	8.4
chicken	25	0.9
fish	168	0.9
fritters	4	0.1
kapenta	135	4.8
meat	160	5.6
munkoyo	2	0.1
nshima	965	34.1
porridge	75	2.6
rice	55	1.9
tea	268	9.5
vegetables	633	22.4

The table shows different types of food households had a day before the survey was conducted. The names of the food items are in English as well as in a local language, another characteristic of open-ended responses. Responses to this particular question were easy to record because only food items were recorded in the spreadsheet and no merging of strings was necessary. It is also possible to use Microsoft Excel to produce the same table by carrying out a word count of each food item, but that approach could take longer than the method proposed.

The survey was conducted in a region where nshima is the staple food, cited 34% of the times here. There were about 1000 households interviewed, therefore, 96.5% of the households had nshima a day before the interview. Nshima is always taken together with some kind of relish which include;

beans, chicken, fish, kapenta, meat (of various types) and different types of vegetables. Vegetables are the cheapest relish, cited 22% of the time in the table. Munkoyo and tea are the only beverages mentioned. Such information could be useful in studying nutritional aspect of the community providing these data.

Table 8 A question posed to orphans and frequencies of their responses as merged strings.

What has changed in your life since the death of your parents?		
Issue	Frequency	Percent
Notapplicable	203	29.6
beingadoubleorphan	1	0.1
beingfatherless	1	0.1
committedtochurchthanbefore	1	0.1
dontknow	41	6.0
iamveryhappynow	1	0.1
lessclothes	110	16.1
lesseducationalsupport	20	2.9
lessfood	159	23.2
lessfreedom	6	0.9
lesslove	13	1.9
lessparentalcare	4	0.6
mistreatment	14	2.0
morehouseholdchores	10	1.5
nogifts	3	0.4
noresponse	15	2.2
pooraccomodation	10	1.5
poorgradesatschool	1	0.1
poorlivingcondition	30	4.4
poorlycookedfood	6	0.9
sickly	2	0.3
startedwalkingafterguardiantookhimorthopadies	1	0.1
stoppedschool	30	4.4
wasyoung	3	0.4

The question posed to orphans presents a more challenging problem in terms of processing the responses to yield a table similar to Table 7. Table 8 shows frequencies of various strings that were formed to represent significant issues. It is possible in some cases, to make out the meaning of some strings. Evidently, some strings are formed out of complete sentences. For instance, the first string, Notapplicable, is simply the words, not applicable. The second string, beingadoubleorphan, are the words, being a double orphan, i.e., having both parents dead.

Notable in the list of strings are some unique responses such as, *I am more committed to church than before (committedtochurchthanbefore).* Another is, *I am very happy now (iamveryhappynow),* a response suggesting the child had possibly recovered from the initial grief and was being looked after well in the adopted home. Evidently, most of the changes cited were negative, as would be expected. The third string from the bottom, *started walking when the guardian took him to an orthopaedist (startedwalkingafterguardiantookhimorthopadies),* presents an example of some difficulties that could arise at data entry phase. Data managers could encounter unfamiliar words such as orthopaedist, and sometimes keywords may be difficult to pick out. In this particular case, the whole sentence formed a string. A number of statistical software can handle such long strings.

To a researcher, individual responses might be of interest for a number of reasons, but for a majority of organisation focus will be on issues cited a significant number of times. In Table 9, responses with a frequency of less than three have been clustered into a category called *other reasons*. Also shown in the table are strings expressed in the ordinary language. Table 9 is derived from Table 8 which was produced using the SAS code in Appendix 1. The frequencies have been arranged in order of magnitude except for the three responses at the bottom.

Table 9 A question posed to orphans and frequencies of their responses.

What has changed in your life since the death of your parent(s)?		
Change mentioned	Frequency	Percent
I have less food	159	23.2
I have less clothes	110	16.1
I have poor living conditions	30	4.4
I stopped school	30	4.4
I have less educational support	20	2.9
Mistreatment	14	2.0
I have less love	13	1.9
I do more household chores	10	1.5
I have poor accommodation	10	1.5
Other reasons	8	1.2
I have less freedom	6	0.9
I eat poorly cooked food	6	0.9
I have less parental (guardian) care	4	0.6
I receive no gifts	3	0.4
I was young then but now am grown up	3	0.4
Not applicable	203	29.6
I don't know	41	6.0
No response	15	2.2

A variety of issues are highlighted in the table and they include; nutrition, education, sanitation, parenting and other psycho-social issues. Such information could offer a wide range of areas of possible community interventions.

3.3 The SAS Code

Appendix 1 presents a simple SAS code used to create tables similar to Tables 3, 5, 7 and 8. SAS keywords are in upper case while user's own creation are in lower case. The working data file was called *childat* and it drew its data from an external file called *chldopen*. In the *chldopen* file, only responses to the question 'What has changed in your life since the death of your parent(s)' were recorded. In the questionnaire, the question appeared as number 311 (q311) and the name is retained in the code.

Below is an explanation of the code in summary form.

1. Lines 1 to 4 is a code for retrieving and creating a new data set.
2. Lines 5 and 6 is a code for preparing columns to store individual strings.
3. Lines 7 to 11 is a code for counting the number of strings to be used in a loop.
4. Lines 12 to 17 is a code for storing the first strings in the first few columns.
5. Lines 18 to 29 is a code for checking whether strings are new or not, old strings are appended to existing columns and new ones go to new columns (example, Table 3).
6. Lines 30 to 33 is a code for creating one column of strings (example, Table 5).
7. Line 34 is a code to execute the previous lines of code.
8. Line 35 is a code for creating a frequency of the strings (example, Tables 7 and 8).

The same code was used for the responses to the question posed to heads of household with minor changes. In this particular code, the SCAN and LENGTH character functions in SAS were used. The program code can be improved by individuals familiar with the SAS software.

4. CONCLUSION

This paper has illustrated a method which attempts to process open-ended items using character functions built into the SAS statistical software. Through the use of two character functions it was demonstrated that it is possible to extract information from a variety of responses into a meaningful summary for use by end-users. The technique requires the ability to join selected words identifying issues of importance into what may be referred to as strings and then use a SAS code to extract them. The challenge was to ensure that strings formed were as informative as possible and did not deviate much from the content in the responses they represented. It was also illustrated that some open-ended questions are easier to code than others. For instance, it was easier to process responses on food items than responses on the changes faced by orphans. One advantage of the method proposed was that the same SAS code could be used, with minor changes, to process responses for different open-ended questions on strings formed in the manner prescribed.

Much of the work in this approach is done at data entry stage, consequently, data managers have to be individuals with a good grasp of the language in use. Training is essential, especially in a situation where several data managers may be required to enter data into some spreadsheet. The training should include an exercise of selecting keywords from open-ended responses and identifying similar responses. Ordinarily, data managers are trained to enter closed-ended type of responses which are often computer-ready unlike open-ended ones. Even though computers are able to merge words they are incapable, at least at the moment, of selecting keywords that retain the content of responses, this task is still a preserve of humans. Skill is required of data managers to enter responses in the manner suggested in this paper.

Many researchers include open-ended questions in their questionnaires but seldom discuss how the responses should be processed. Given the array of character functions that come with statistical software, it should be within reach to extract significant issues in responses from open-ended response for use in decision making. It is hoped that this work will provoke interest into other possible uses of string functions for processing open-ended survey items in the future.

APPENDIX 1

A simple SAS program to separate strings into separate variables and then place them in a single column.

```
1  DATA childat;
2  LENGTH q311 $55.;
3     INFILE 'D:\chldopen.txt' DELIMITER='09'x MISSOVER DSD FIRST-
   OBS=2;
4     INPUT  q311 $  ;
5  LENGTH x1-x24 y1-y24 $55.;
6  ARRAY X[*] $ x1-x24; ARRAY Y[*] $ y1-y24; RETAIN y1 – y24 z;
7  m = LENGTH(q311);c =0;
8  IF m > 0 THEN DO j = 1 to m;
9            item = scan(q311,j);
10           if item ^=' ' THEN c + LENGTH(item)/LENGTH(item);
11        END; n + c;
12 IF n = c THEN  DO t=1 TO c;
13              item = SCAN(q311, t);
14                 X[t] = item;
15                 Y[t] = item;
16              z =c;
17           END;
18        DO r = 1 TO c;
19           i = 0;
20              DO k =1 TO z;
21                 IF SCAN(q311, r) = Y[k] THEN X[k] = Y[k];
22                 ELSE IF SCAN(q311, r) ^= Y[k] THEN i = i +1;
23              END;
24           IF i = z and z<=54 THEN DO;
25                    X[z+1] = SCAN(q311,r);
26                    Y[z+1] = SCAN(q311,r);
27                 z = z+1;
28              END;
29    END;
30    DO p= 1 to 24;
```

```
31      issue = X[p];
32      IF issue ^=' ' THEN OUTPUT;
33    END;
34  RUN;
35  PROC FREQ DATA = childat; TABLE issue; RUN;
```

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Editorial Policy

The African Statistical Journal was established to promote the understanding of statistical development in the African region. It focuses on issues related to official statistics as well as the application of statistical methodologies to solve practical problems of general interest to applied statisticians. Of particular interest will be an exposition of: how statistics can help to illuminate development and public policy issues like poverty, gender, environment, energy, HIV/AIDS, etc.; development of statistical literacy; tracking national and regional development agenda; development of statistical capacities and effective national statistical systems; and the development of sectoral statistics e.g. educational statistics, health statistics, agricultural statistics, etc.

In addition to individual academic and practicing statisticians, the Journal should be of great interest to a number of institutions in the region including National Statistical Offices, Central Banks, research and training institutions, subregional economic groupings, and international development agencies.

The Journal serves as a research outlet and information sharing publication among statisticians and users of statistical information mainly in the African region. It publishes, among other things:

- Articles of an expository or review nature that demonstrate the vital role of statistics to society rather than present technical materials;
- Articles on statistical methodologies with a special emphasis on applications;
- Articles about good practices and lessons learned in statistical development in the Africa region;
- Opinions on issues of general interest to the statistical community and users of statistical information in the region;
- Notices and announcements on upcoming events, conferences, calls for papers;
- Recent statistical developments and anything that may be of interest to the statistical community in Africa.

The papers, which need not contain original material, should be of general interest to a wide section of professional statisticians in the region.

All manuscripts will be reviewed and evaluated on content, language and presentation.

Ligne éditoriale

Le Journal statistique africain a été établi pour favoriser la compréhension du développement statistique dans la région africaine. Il se concentre sur des questions liées aux statistiques officielles aussi bien que l'application des méthodologies statistiques pour résoudre des problèmes pratiques d'intérêt général pour les statisticiens de métier. L'intérêt particulier est de montrer comment les statistiques peuvent aider à mettre en exergue les problèmes de développement et de politique publique tels que la pauvreté, le genre, l'environnement, l'énergie, le VIH/ SIDA, etc.; le développement de la culture statistique; la prise en compte des questions de développement régional et national; le développement des capacités statistiques et des systèmes statistiques nationaux efficaces; et le développement des statistiques sectorielles comme les statistiques d'éducation, de santé, des statistiques agricoles, etc.

En plus des universitaires et des statisticiens de métier, le Journal devrait revêtir un grand intérêt pour les institutions de la région, notamment les offices nationaux de statistiques, les banques centrales, les instituts de recherche et les organisations économiques sous-régionaux et les agences internationales de développement.

Le Journal constitue un document de recherche et d'information entre les statisticiens et les utilisateurs de l'information statistique, principalement dans la région africaine. Il publie entre autres:

- des articles sur le plaidoyer en matière de statistique qui démontrent le rôle essentiel des statistiques dans la société plutôt que la présentation des outils techniques,
- des articles sur les méthodologies statistiques, avec un accent particulier sur les applications,
- des articles sur les meilleures pratiques et les leçons tirées de la région,
- des avis sur des questions d'intérêt général pour la communauté statistique et les utilisateurs de l'information statistique dans la région africaine,
- des informations et des annonces sur les prochains événements, les conférences, les appels à contribution pour des papiers, et
- les développements statistiques récents et tout autre aspect susceptible d'intéresser la communauté statistique dans la région.

Les articles, qui n'ont pas besoin de contenir du matériel original, devraient intéresser une grande partie des statisticiens professionnels dans la région.

Tous les manuscrits seront passés en revue et évalués sur le contenu, la langue et la présentation.

Guidelines for Manuscript Submission and Preparation

Submissions
Manuscripts in English or French should be sent by email to the Co-Chairpersons, Editorial Board at: c.lufumpa@afdb.org and BKiregyera@uneca.org with a copy to statistics@afdb.org.

Title
The title should be brief and specific. The title page should include the title, the author's name, affiliation and address. The affiliation and address should be given as a footnote on the title page. If the manuscript is co-authored, the same information should be given for the co-author(s).

Abstract, Key Words, and Acknowledgments
A short abstract of about 150 words must be included at the beginning of the manuscript, together with up to 6 key words used in the manuscript. These key words should not repeat words used in the title. Acknowledgments, if any, should be inserted at the bottom of the title page.

Sections and Numbering
Major headings in the text should be numbered (e.g. "**1. INTRODUCTION**"). Numbered subheadings (e.g. "**1.1 The establishment of the NSDS**") may be used but thereafter sub-subheadings should be unnumbered. Main body text in the form of paragraphs should not be numbered.

Formatting
Please use minimal formatting as this will facilitate harmonization of all the papers. As your default, keep to "normal" (12 pt. Times New Roman) for main text with a single line space between paragraphs. Do not apply "body text" as an inbuilt style. The levels of heading need to be easily identifiable. We recommend all capitals bold for the first level of heading in the main text (e.g. "**1. INTRODUCTION**"); thereafter bold upper and lower case for subheadings (e.g. "**1.1 The establishment of the NSDS**") and unnumbered bold italic (e.g. "***Creating a culture of cooperation***") thereafter. Please refer to the latest volume of the AJS as a guide.

House Style
The Bank's house style is US rather than British spellings (e.g. "organization" not "organisation"; "program" rather than "programme", "analyze" etc.). Use % rather than "percent" or "per cent" and double rather than

single quotation marks. Dates should be US style (e.g. December 11, 1985 not 11 December 1985).

Tables and Figures
Tables and figures should be numbered and given a title. These should be referred to in the text by number (e.g. "See Table 1"), not by page or indications such as "below" or "above".

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Any equations in the paper should be numbered. The numbers should be placed to the right of the equation.

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A list of references should be given at the end of the paper (to precede the Annexes, if included). The references should be arranged alphabetically by surname/name of organization. Where there is more than one publication listed for an author, order these chronologically (starting with the earliest). The references should give the author's name, year of publication, title of the essay/book, name of journal if applicable. Use a, b, c, etc. to separate publications of the same author in the same year. Titles of journals and books should be in italic; titles of working papers and unpublished reports should be set in double quotation marks and not italicized.

Examples:

Fantom, N. and N. Watanabe (2008), "Improving the World Bank's Database of Statistical Capacity," *African Statistical Newsletter*, vol. 2, no. 3, pp. 21-22.

Kish, L. (1988a), "Multipurpose Sample Designs," *Survey Methodology*, vol. 14, no. 3, pp. 19-32.

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Cross References

In the main body of the article, cross-references should be Harvard-style, e.g. (Kish 1988a; Herzog and Dielman 1985: 351). For cross-references to three or more authors, only the first surname should be given, followed by et al., although the names of all the authors must be provided in the References entry itself. Abbreviations ibid. and op. cit. should not be used in the text or in footnotes.

Acknowledgements

The Editorial Board would like to express its appreciation to all authors who submitted papers for publication in this issue of the African Statistical Journal and to the following people who assisted with the review and editing of the papers that are published in this volume:

Mrs. Barbara Barungi, UNDP, Regional Programme Advisor, Regional Bureau for Africa, Addis Ababa, Ethiopia

Prof. Nicholas Nsowah-Nuamah, Ghana Statistical Service, Accra, Ghana

Prof. James Ntozi, ISAE, Makerere University, Kampala, Uganda

Mr. Oladejo Ajai, Consultant, Lagos, Nigeria

Remerciements

Le comité de rédaction voudrait exprimer sa gratitude à tous les auteurs qui ont soumis des articles pour la publication dans cette édition du Journal statistique africain et aux personnes ci-après qui ont assisté pour passer en revue et éditer les articles publiés dans ce volume:

Mme Barbara Barungi, PNUD, Conseiller Regional, Bureau Regional Afrique, Addis Ababa, Ethiopie

Prof. Nicholas Nsowah-Nuamah, Ghana Statistical Service, Accra, Ghana

Prof. James Ntozi, ISAE, Université de Makerere, Kampala, Ouganda

M. Oladejo Ajai, Consultant, Lagos, Nigeria

Highlights of the 4th Quarter 2008 & 1st Quarter 2009

Faits saillants du quatrième trimestre 2008 et premier trimestre 2009

The 18th International Conference of Labour Statisticians (18 ICLS)

Geneva, Switzerland, 24th November – 5th of December 2008

The International Conference of Labour Statisticians (ICLS), a statutory Conference of the ILO, is the mechanism through which international standards in labour statistics are established. The main instruments embodying such standards are the resolutions and guidelines adopted by the ICLS. There have been 18 such conferences since the first one in 1919, covering a multitude of topics. The uniqueness of the Conference lies in the authority exercised by member States in the decision-making, which thereby ensures their ownership of the standards, and the involvement of all stakeholders in these member States through the ILO's unique tripartite structure of governments, employers' and workers' organizations.

At it's 300th session (November 2007), the Governing body of the International Labour Office authorized the International Labour Organization to convene the 18th International Conference of Labour Statisticians (18 ICLS) in Geneva from the 24th of November to the 5th of December 2008. The main objectives of the conference were to discuss and adopt international standards in the field of labour statistics and provide guidelines for future work. Other items on the agenda included general discussions on a number of topics (as well as updating the International Classification of Occupations 2008, measurement of decent work, indicators of labour underutilization, statistics on volunteer work, data compilation and dissemination by the ILO and review of the functions and organization of the ICLS. Measurement of working time and child labour statistics also featured prominently in the general discussions.

The conference was attended by 260 participants including 110 member states, 10 employer and 7 worker representatives nominated by the Governing body and by 13 representatives of international Governmental and non-Governmental organizations. In all, there were. As a co-organizer of the conference, the African Development Bank (AfDB) sponsored 16 African countries to participate in the conference.

The conference adopted six resolutions on each of the items that were placed on the agenda. The full text of the resolutions is presented below.

Labour is by far the most important factor of production. However, coming up with a single indicator for the measurement of employment and unemployment has not been very helpful to both users and producers of

statistics. The future work of the ILO in labour statistics (2009-2013) is mainly focused on methodological issues of data collection and dissemination of labour statistics.

Through its phase II statistical capacity building program (2009-2010), the AfDB will be assisting African countries in the conduct of labour force surveys and other activities related to the measurement of the labour force in order to compute reliable indicators of the labour market. This will be achieved largely through close collaboration with the Bureau of Statistics of the ILO.

RESOLUTIONS

Resolution I

Resolution concerning the measurement of working time

The 18th International Conference of Labour Statisticians,

Having reviewed the relevant texts of the resolution concerning statistics of hours of work adopted by the Tenth International Conference of Labour Statisticians (October 1962) as well as of the resolution concerning statistics of strikes, lockouts and other action due to labour disputes adopted by the 15th International Conference of Labour Statisticians (January 1993) and of the resolution concerning the measurement of employment-related income and the resolution concerning statistics of occupational injuries, both adopted by the 16th International Conference of Labour Statisticians (October 1998),

Recalling the requirements of the Labour Statistics Convention, 1985 (No. 160), and the accompanying Labour Statistics Recommendation, 1985 (No. 170), and the need for coherence with other international statistical standards, including with regard to informal employment and child labour,

Recognizing the need to revise the existing standards on statistics of hours of work in order to reflect the working time of persons in all sectors of the economy and in all forms of productive activity towards the achievement of decent work for all, and to provide measurement methodologies and guidelines on a larger number of measures than previously defined internationally, thereby enhancing the standards' usefulness as technical guidelines to States and hence the consistency and international comparability of the statistics,

Acknowledging that the relevance of the various measures of working time in a given State depends on the nature of its workforce, labour markets and user needs, and so their implementation will be determined largely by national circumstances;

Adopts this fifth day of December 2008 the following resolution in substitution for the resolution concerning statistics of hours of work (1962) and paragraphs 46 to 48 of the resolution concerning the measurement of employment-related income (1998).

Objectives

1. Each State should aim to develop a comprehensive system of statistics of working time that can adequately account for all labour inputs into productive activity by all persons of any sex, in order to provide an adequate statistical base for the various users of the statistics, taking into account national needs and circumstances.

2. In particular, such a system should:

(1) Complement the statistics of the economically active population and of the demand for labour in production, with statistics on the number of hours that persons actually worked and the number of hours usually worked on all activities.

(2) Aid the examination and monitoring of conditions of work, including health, safety and gender justice for all population groups, in formal and informal employment, with statistics on the number of hours actually worked and hours usually worked, how they are organized over time, and on the number of hours of absence from work in relation to the hours established by national legislation.

(3) Construct indicators useful for labour-management negotiations and for economic and social analyses (such as labour productivity, time rates of wages, average hourly earnings, average labour cost per time unit, rates of occupational injuries or estimates of time-related underemployment), using statistics of hours actually worked for the same reference period and by the same group of working persons as for statistics of production, earnings, labour cost, employment-related income and occupational injuries.

(4) Serve as a basis for the design, implementation, monitoring and evaluation of economic, social and labour market policies and programmes targeting labour market flexibility, social exclusion, work–life balance and the distribution of working time in families, etc., with statistics on the number of hours actually worked and the number of hours usually worked and the arrangement of these hours for all members within families and all population groups.

3. For all these purposes, States should aim at consistency between the different statistics on working time, and with other labour market

statistics as well as with the general statistical system. Statistics on working time should be developed in line with other international statistical frameworks, and so as to promote international comparability.

Scope

4. *Working time* comprises the time associated with productive activities and the arrangement of this time during a specified reference period.

5. Working time is determined in reference to productive activities within the general production boundary as defined in the System of National Accounts (SNA). Working time includes the time spent towards the production of all goods and services whether paid or unpaid. Working time does not take account of the legality of the activity, the type of contractual agreement covering it or the age of the persons performing it.

(1) Working time can relate to the activities *within the SNA production boundary* and to employment statistics, as defined in the international definition of employment. In this case working time is the standard for compilation of national production accounts. It is also used for labour market, productivity and other economic and social analysis.

(2) Working time can also relate to activities which are *beyond the SNA production boundary* such as services produced and consumed within the same household and activities of volunteer workers in households that produce services for own final use by the household. In this case the aim is to produce statistics of working time on "unpaid household service and volunteer work" necessary for the production of satellite accounts and for a broader understanding of, and approach to, labour market, economic and social policies.

6. Working time is measured for a job defined as "a set of tasks and duties performed, or meant to be performed, by one person, including for an employer or in self-employment" whether formal or informal. A job can refer to unpaid household service and volunteer work performed by one person for a household outside the SNA production boundary but within the general production boundary. Use of job as the basic observation unit for working time is consistent with the international

classifications of occupation (ISCO) and status in employment (ICSE) and with the principles of classification by industry according to the International Standard Industrial Classification of all Economic Activities (ISIC). A person may have one or several jobs.

7. Working time can be measured for short measurement units, such as minutes or hours, or for long units such as half-days, days, weeks or months. The measurement unit of "hours" is used for ease of reference.

8. Working time can be observed over a short reference period, such as one day or one week, or a long reference period, such as one month, one year or beyond, including a lifespan. For national accounts and production statistics in general, working time should be measured for a long reference period.

9. Working time does not reflect the quality, intensity or efficiency of work.

Concepts and definitions

10. (1) This resolution provides definitions for:

(a) Seven concepts of working time associated with the productive activities of a person and performed in a job, namely *hours actually worked*, the key concept of working time defined for statistical purposes applicable to all jobs and to all working persons; *hours paid for*, linked to remuneration of hours that may not all correspond to production; *normal hours of work* that refer to legally prevailing collective hours; *contractual hours of work* that individuals are expected to work according to contractual relationships as distinct from normal hours; *hours usually worked* most commonly in a job over a long observation period, *overtime hours of work* performed beyond contracts or norms; and *absence from work hours*, when working persons do not work;

(b) Two concepts of working-time arrangements that describe the characteristics of working time in a job, namely the *organization* and *scheduling* of working time, regardless of type of job, and formalized working-time arrangements, that are specific combinations of the characteristics having legal recognition.

(2) Not all working time concepts are applicable to all types of jobs. Their application is specified in each concept defined below.

Hours actually worked

11. (1) *Hours actually worked* is the time spent in a job for the performance of activities that contribute to the production of goods and/or services during a specified short or long reference period. Hours actually worked applies to all types of jobs (*within and beyond the SNA production boundary*) and is not linked to administrative or legal concepts.

(2) Hours actually worked measured *within the SNA production boundary* **includes** time spent directly on, and in relation to, productive activities; down time; and resting time.

(a) "Direct hours" is the time spent carrying out the tasks and duties of a job. This may be performed in any location (economic territory, establishment, on the street, at home) and during overtime periods or other periods not dedicated to work (such as lunch breaks or while commuting).

(b) "Related hours" is the time spent maintaining, facilitating or enhancing productive activities and should comprise activities such as:

(i) cleaning, repairing, preparing, designing, administering or maintaining tools, instruments, processes, procedures or the work location itself; changing time (to put on work clothes); decontamination or washing up time;

(ii) purchasing or transporting goods or basic materials to/from the market or source;

(iii) waiting for business, customers or patients, as part of working-time arrangements and/or that are explicitly paid for;

(iv) on-call duty, whether specified as paid or unpaid, that may occur at the work location (such as health and other essential services) or away from it (for example from home). In the latter case, it is included in hours actually worked depending on the degree to which persons' activities and movements are restricted. From the moment when called back for duty, the time spent is considered as direct hours of work;

(v) travelling between work locations, to reach field projects, fishing areas, assignments, conferences or to meet clients or customers (such as door-to-door vending and itinerant activities);
(vi) training and skills enhancement required by the job or for another job in the same economic unit, at or away from the work location. In a paid-employment job this may be given by the employer or provided by other units.

(c) "Down time", as distinct from "direct" and "related hours", is time when a person in a job cannot work due to machinery or process breakdown, accident, lack of supplies or power or Internet access, etc., but continues to be available for work. This time is unavoidable or inherent to the job and involves temporary interruptions of a technical, material or economic nature.
(d) "Resting time" is time spent in short periods of rest, relief or refreshment, including tea, coffee or prayer breaks, generally practised by custom or contract according to established norms and/or national circumstances.

(3) Hours actually worked measured *within the SNA production boundary* **excludes** time not worked during activities such as:

(a) Annual leave, public holidays, sick leave, parental leave or maternity/paternity leave, other leave for personal or family reasons or civic duty. This time not worked is part of absence from work hours (defined in paragraph 17);
(b) Commuting time between work and home when no productive activity for the job is performed; for paid employment, even when paid by the employer;
(c) Time spent in educational activities distinct from the activities covered in paragraph 11. (2) (b) (vi); for paid employment, even when authorized, paid or provided by the employer;
(d) Longer breaks distinguished from short resting time when no productive activity is performed (such as meal breaks or natural repose during long trips); for paid employment, even when paid by the employer.

(4) Hours actually worked measured *beyond the SNA production boundary* **includes** time spent directly on, and in relation to,

productive activities as defined in paragraph 5.(2); down time; and short resting time.

(a) "Direct hours" is the time spent carrying out the tasks and duties of the job, which may include: preparing meals, care for members of the household; cleaning and maintaining the house, grounds, clothes and household equipment; purchasing and transporting goods for the household, transporting household members, household accounting and management.
(b) "Related hours" is the time spent maintaining, facilitating or enhancing productive activities, and comprises activities such as travelling to meet persons, waiting for persons in one's care, or training required for the job;
(c) "Down time" is less relevant for a job *beyond the SNA boundary* because substitution of one household task for another can be more immediate.
(d) "Resting time" is time spent in short periods of rest, relief or refreshment, including tea, coffee or prayer breaks.

(5) Hours actually worked measured *beyond the SNA production boundary* **excludes** time not worked during activities such as civic duty and educational activities other than the training covered in paragraph 11. (4) (b).

Hours paid for

12. (1) *Hours paid for* applies to a paid-employment job and to a self-employment job paid on the basis of time units (*within the SNA production boundary*).

(2) For a paid-employment job, hours paid for is:

(a) The time for which persons have received payment from their employer (at normal or premium rates, in cash or in kind) during a specified short or long reference period, regardless of whether the hours were actually worked or not;
(b) This **includes** time paid but not worked such as paid annual leave, paid public holidays and certain absences such as paid sick leave.
(c) This **excludes** time worked but not paid by the employer, such as unpaid overtime, and absences that are not paid by the employer, such as unpaid educational leave or maternity

leave that may be paid through transfers by government from social security systems.

(3) For a self-employment job (formal or informal) paid on the basis of time units, hours paid for is equivalent to hours actually worked.

(4) It may be useful to separately identify hours paid for that are actually worked (as overtime or not) from other hours paid for (that are not worked).

Normal hours of work

13. (1) *Normal hours of work* are the hours fixed by or in pursuance of laws or regulations, collective agreements or arbitral awards to be performed in specified paid-employment jobs over a specified reference period, such as per day, week, month or year (*within the SNA production boundary*). Normal hours of work may also apply to a job in self-employment when the hours are in accordance with the hours fixed for all jobs in a specific industry or occupation (such as for drivers to ensure public safety).

(2) Normal hours of work may vary, between jobs for different groups of persons in paid employment, by occupation or industry, depending on their regulatory source.

(3) Normal hours of work of a self-employment job may be compared with the normal hours of a paid-employment job in the same occupation or industry.

(4) In States where normal hours of work are widely used they may serve as the reference to define full-time and part-time hours.

Contractual hours of work

14. (1) *Contractual hours of work*, is the time expected to be performed according to a contract for a paid-employment job or for the provision of services in a self-employment or volunteer job (*within and beyond the SNA production boundary*). The contract may include leave entitlements and be either explicit (written contract) or implicit (verbal agreement).

(2) The number of contractual hours of work in a job may be fixed over a short or long reference period or may vary from one period to the next depending on the organization of the job and the

length of the measurement reference period. When the reference period is long, leave entitlement periods should be excluded.

(3) The number of contractual hours of work may vary between jobs in the same occupation, industry or establishment.

(4) The number of contractual hours of work may be equivalent to or established in conformity with prevailing normal hours of work and may be above normal hours, some of which may be hours stipulated as contractual overtime hours.

Hours usually worked

15. (1) *Hours usually worked* is the typical value of hours actually worked in a job per short reference period such as one week, over a long observation period of a month, quarter, season or year that comprises the short reference measurement period used. Hours usually worked applies to all types of jobs (*within and beyond the SNA production boundary*).

(2) The typical value may be the modal value of the distribution of hours actually worked per short period over the long observation period, where meaningful.

(3) Hours usually worked provides a way to obtain regular hours worked above contractual hours.

(4) The short reference period for measuring hours usually worked should be the same as the reference period used to measure employment or household service and volunteer work.

Overtime hours of work

16. (1) *Overtime hours of work* applies to all types of jobs (*within and beyond the SNA production boundary*) and is defined as:

(a) the hours stipulated as overtime in a contract during a specified short reference period, plus hours actually worked in excess of contractual hours of work, if these exist; or
(b) the hours actually worked in excess of hours usually worked in a job where no contractual hours exist.

(2) Overtime hours of work **excludes** hours actually worked in excess of contractual hours of work as a result of rotation periods in

established work arrangements (such as flexitime or shift work) in a short or long reference period.

(3) Overtime hours of work for paid-employment jobs may be paid or unpaid. Payment may be in cash at the same rate as the other hours in the job or in cash at higher rates; or in kind and/or in the form of compensation with time off.

(4) It may be useful to distinguish between:

(a) Overtime hours that are paid and unpaid;
(b) Overtime hours and the different forms of compensation;
(c) Overtime hours defined as overtime in employment contracts from other overtime hours, where relevant;
(d) Overtime hours that are regular and other overtime hours, where regular overtime is hours usually worked in excess of contractual hours;
(e) Overtime hours in paid-employment jobs and in self-employment jobs.

(5) It may also be useful to distinguish overtime hours from hours actually worked in excess of contractual hours as a result of working arrangements.

Absence from work hours

17. (1) *Absence from work hours* applies to all jobs (*within and beyond the SNA production boundary*) and is defined as:

(a) The number of contractual hours of work not actually worked during a short reference period such as a week when contractual hours exist; these include periods of leave taken according to the employment contract where relevant, including part-time contracts;
(b) The number of hours usually worked but not actually worked during the short reference period when contractual hours do not exist.

(2) Absence from work hours **excludes** time not worked as a result of established work arrangements (such as flexitime off or shift work).

(3) Absence from work hours in a paid-employment job may be paid or unpaid and initiated by workers or by employers.

(4) It may be useful to distinguish between:

(a) Absence from work hours that are paid and unpaid; initiated by the worker and initiated by the employer;
(b) Absence from work hours that are regular and irregular, where regular absence hours is the number of contractual hours in excess of hours usually worked;
(c) Absence from work hours in paid-employment jobs and in self-employment jobs.

(5) It may also be useful to distinguish absence from work hours from all contractual hours in excess of hours actually worked as a result of working arrangements.

(6) Absence from work hours may occur as a result of annual leave (including forced annual leave), illness, injury or occupational injury, maternity, paternity and parental leave, compensation for overtime, care for others – including family members, educational leave, other personal absence (such as military conscription, civilian service, jury duty, family death), technical or economic breakdown (other than specified in paragraph 11, subparagraph 2(b)), industrial relations processes (labour–management negotiation, strike activity, suspension, etc.), bad weather, public or other holidays, or another reason.

Working-time arrangements

18. (1) *Working-time arrangements* describes measurable characteristics of a job that refer to the organization (length and timing) and scheduling (stability or flexibility) of work and non-work periods during a specified reference day, week, month or longer period and applies to all types of jobs (*within and beyond the SNA production boundary*), including in informal employment and in agricultural communities.

(a) The organization reflects the length and timing of the working time in a job:

(i) the length may be shorter or longer than a norm based on national circumstances, there may be fewer or more daily

or weekly hours, fewer or more days worked per week for a short reference period or fewer weeks (part-year) for a long reference period;

(ii) the timing may be inside or outside core hours or core days (performed at night or at weekends).

(b) The scheduling reflects the stability or flexibility of the length and timing of working time in a job from one day, week or longer period to the next, shifts that vary every day or week, different entry and exit times, etc.

(2) *Formalized working-time arrangements* relate to specific combinations of the organization and scheduling of working time that are recognized by law, collective agreement, etc. They may be stipulated in explicit or implicit employment contracts.

(a) Formalized working-time arrangements may be more relevant to States where terminology and established practice is reasonably well regulated and/or standardized, and where the number of persons covered is numerically significant;

(b) A self-employment or household service and volunteer job may practise a formalized working-time arrangement based on work requirements, personal or household preference (such as customer contracts or fixed opening hours of shops, schools, etc.);

(c) In order to document the extensive range of existing formalized working-time arrangements in States, which may be known by different names, a typology of formalized working-time arrangements is presented in the Annex to this resolution.

(3) It may be useful to distinguish further characteristics regarding working-time arrangements such as:

(a) The choice, control or influence of persons over the arrangement itself or its characteristics; the extent arrangements are agreed, imposed or chosen; the predictability of characteristics (such as advance notice given, discussion or consensus between parties); the duration of the arrangement for the specific (or main) job;

(b) The number of arrangements practised, by the nature of their stipulation (by law, contract, custom or self);

(c) The type of work location where practised (fixed, mobile, in establishments, at home) by arrangements practised.

Methods of data collection

19. (1) Statistics of working time can be collected through statistical censuses and surveys of households and establishments, and through access to administrative registers.

(2) When possible and pertinent, the use of a combination of data sources may be preferable to meet user requirements (such as coverage, scope, response rates, sample size, response burden and costs) and to evaluate the quality of statistics obtained.

(3) To ensure greater coherence for analytical purposes, working time statistics should be collected for the same reference period and for the same disaggregations or groups of jobs as the statistics collected for employment, wages and labour costs, etc.

(4) In order to achieve the most efficient use of information on working time for statistical purposes, to harmonize statistical measures and improve coverage, and to ensure appropriate recording, reporting and quality of the resulting statistics, the statistical authorities need to coordinate with the users and the providers of the information, namely administrative systems and establishments.

(5) States will need to establish the balance between the aim to obtain detailed information and the capacity of respondents to provide it. For instance, when collecting data on working time for a reference period beyond a day, the definitions of overtime hours of work and of absence from work hours may result in an underestimation of the total number of overtime or absence hours. To capture all these hours, specific collection for each concept in the reference period will be necessary, where relevant.

Household-based surveys

20. (1) Household-based surveys are well suited to collect data:

(a) On hours actually worked and hours usually worked, on formalized working-time arrangements and the characteristics

of arrangements. They may also produce statistics on hours paid for, normal or contractual hours;
(b) For all persons working and all jobs, including in informal employment and household service and volunteer work;
(c) For a short reference period such as a day or a week and when the survey is continuous; for a long reference period such as a month or a year;;
(d) For persons individually and for the economy as a whole.

(2) Household surveys are less well suited to obtain data:

(a) For concepts that have an administrative or regulatory base;
(b) Covering all jobs in the State (domestic production according to the SNA).

(3) In order to reduce errors due to problems of recall, proxy response and rounded answers it is recommended that questionnaires targeting working time be designed to:

(a) First ascertain the status in employment of respondents in order to filter paid and self-employment jobs for separate question sequences;
(b) Collect information for each job separately or, at the minimum, for the main job and other jobs;
(c) Obtain information on contractual hours or hours usually worked before information on hours actually worked, since variables that relate to employment contracts or to the typical work situation are generally easier to remember, especially for proxy interviews;

(i) for paid-employment jobs, the hours actually worked can be arrived at after prompting for hours of overtime or absence from work that may have occurred during the reference week;
(ii) for self-employment jobs, for employees in informal employment and for jobs in household service and volunteer work; to improve data quality of the hours actually worked, collecting or prompting for information for each of the days of the reference week separately rather than for the whole week is recommended; as well as prompting for all time spent on household service type activities;

(d) To improve the measurement of hours actually worked for certain jobs and groups of persons in employment, additional questions or prompts may target specific working time components such as work at home, commuting time, short breaks, overtime and absence from work;

(e) To determine hours usually worked if not obtained through a direct question, refer to the modal value of the distribution of hours actually worked per week over a long observation period. When this value is not meaningful because the hours actually worked each week are irregular, or because work schedules are defined for periods other than the week, then the value may be determined using either:

(i) the median of hours actually worked in the job over the observation period; or
(ii) the average number of hours actually worked in the job excluding periods of unemployment or inactivity within the long reference period.

(4) When based on household surveys, the best estimates of hours actually worked will come from continuous surveys that focus on the measurement of employment and cover all the weeks in the year. When the survey is not continuous, States should aim at estimating the periods not covered and spreading the frequency of survey observation periods over the year, rather than expanding the reference period.

21. Other household-based data collection exercises may be used to provide statistics on working time.

(1) Time-use surveys are able to produce good-quality statistics of hours actually worked, absence from work hours and on the length and timing of working-time arrangements. They capture particularly well the hours actually worked in self-employment jobs that are irregular, atypical, or carried out together with household service work in the home. They may face the difficulty of assigning time spent on simultaneous activities to a job, and of distinguishing paid activities outside of the household. This source can also be used to assess and compare the quality of and adjust hours actually worked measured by other survey instruments. Time-use surveys as a data source may be constrained by their

frequency (generally non-annual or irregular), small sample size, high response burden and data compilation costs.

(2) The population census is able to provide statistics on hours actually worked or hours usually worked for jobs in small geographic areas and for small population groups. Census operations may however not have the questionnaire space and interview time required to incorporate a set of questions for each concept, for each day of the reference period and for each job or activity. Where the census is the only available data source it may as a minimum incorporate a single question either on hours actually worked during a short period prior to the census reference date, or on hours usually worked, for the main job.

(3) Mixed household-enterprise surveys of the informal sector are able to provide statistics of hours actually worked or hours usually worked for an informal sector job for a short or long reference period. They use interview techniques close to household-based survey interviews of self-employed persons to capture the working time of informal employees, many of whom are working in private dwellings. These mixed surveys may be constrained by overall costs resulting in limited data quality.

(4) Surveys of agricultural employment and farm structure may collect statistics of hours usually worked in farm employment for agricultural labourers and over a long reference period such as a year.

Establishment-based surveys

22. (1) Establishment-based surveys are well suited to collect data:

(a) On hours paid for, contractual hours, paid overtime hours and absence from work hours usually recorded to monitor entitlements to leave, and on formalized working-time arrangements. They may also produce statistics on normal hours of work or hours actually worked;
(b) For all or a subset of paid-employment jobs in the establishment, or all or a subset of establishments;
(c) For a reference period, such as a week, month, year or pay period;
(d) For jobs individually, as averages for groups of jobs or for the establishment as a whole.

(2) Establishment-based surveys are less well suited to measure concepts which do not have an administrative or regulatory base. The data from establishment-based surveys relate mainly to concepts linked to payments and employment contracts and to certain types of formal working-time arrangements.

(3) In order to reduce errors due to differences in payment and administrative systems between establishments, it is recommended that the questionnaire obtain information about the:

(a) Payment practices for particular work-related activities, including lunch breaks, commuting time, preparation time (including changing time), short breaks, absence from work periods and overtime;
(b) Self-employment jobs covered.

(4) Working time statistics from this type of source, even where the coverage of jobs is not complete, may be used to indicate changes.

(5) The contractual hours may be specified in groups of hours, as a percentage of normal hours of work for full-time work, as full-time/part-time units, or as the number of hours. Information should be collected by components of non-contractual paid overtime hours, absence hours not paid, and contractual hours, that will allow the producers of statistics to perform quality checks or to calculate hours paid for or hours actually worked, if establishments do not provide these directly.

(6) If contractual hours or hours paid for are not collected specifically, other data could be used to derive them. An estimate of total contractual hours may be obtained by multiplying the number of workers distinguished by full-time and by part-time hours and adding the two products. An estimate of the total number of hours paid for may be obtained by multiplying the number of workers by their wage rates and dividing the total wage bill by this product.

Administrative registers

23. (1) Administrative registers are useful to provide information:

(a) On contractual hours, hours paid for, paid absence from work hours, and normal hours of work including leave entitlements;
(b) For jobs and persons covered;
(c) For long reference periods, such as a month, quarter or year.

(2) Data from administrative registers may come from records of social security institutions and labour inspectorates, or from collective agreement records or legislation. Depending on national circumstances, records of income or tax registers on income from paid and self-employment can also be used with other information to calculate hours paid for and certain paid absence hours.

(3) Data from administrative records are generally useful to verify and may correct, or adjust data from, establishment or household-based surveys to obtain estimates of hours actually worked and absence from work hours due to illness, maternity, occupational injuries, and strikes and lockouts.

(4) Registers of information for filled jobs usually contain more working time data than for job vacancies or jobs sought.

Derived measures

Total hours actually worked

24. (1) Total hours actually worked is the aggregate number of hours actually worked by all persons in all jobs for required groups (such as economic sector or geographical region, and *within or beyond the SNA production boundary*) during a specified reference period.

(2) Total hours actually worked is also known as the volume of work or labour input, and refers to all jobs in the State. The reference period may be short or long.

(3) Total production divided by total hours actually worked produces labour productivity indicators. Total hours actually worked should have the same coverage of jobs and use the same reference period as the measurement of production, normally defined as *within the SNA production boundary*.

(4) Total hours actually worked is useful to construct many other labour related social and economic indicators. Such indicators may require that the total hours actually worked be distributed by characteristics of jobs, establishments and persons.

25. (1) Continuous household-based surveys can produce estimates of total hours actually worked for a long reference period, based on observations for all weeks in the period. Obtaining estimates of the hours actually worked throughout the period and adjusting for days not included where relevant, produces total hours actually worked for the long reference period.

(2) In a non-continuous survey, targeting the desired reference period implies extrapolation to periods not directly covered. If the survey is not repeated with sufficient frequency and the reference week is chosen to avoid special weeks (containing public holidays, etc.), adjustments should be made to take account of possible calendar effects, working time regulations and working time information from other sources.

(3) When the household-based survey only collects hours usually worked, the measure of total hours actually worked will be the number of hours usually worked adding any irregular overtime hours and subtracting all irregular absence hours.

(4) For the purpose of estimating labour productivity for a long reference period, household survey-based estimates of hours actually worked need to be supplemented with estimates for jobs not covered in the survey (such as jobs held by persons living in collective households or in a foreign State). The hours actually worked in jobs in economic units outside the State held by persons living inside the State need to be excluded.

26. (1) Compiling total hours actually worked from establishment-based surveys will generally start from hours paid for, or from contractual hours or hours usually worked that must be transformed into hours actually worked. The computations will depend on the data elements available:

(a) Total hours actually worked is equal to hours paid for plus unpaid overtime hours minus paid absence from work hours;

(b) Total hours actually worked is equal to contractual hours plus non-contractual overtime hours minus absence from work hours.

(2) Care must be taken to cover the long reference period and the total population by repeated or continued observations or adjusting for any missing periods; and incorporating estimates of the hours actually worked of self-employment jobs or of employees in out-of-scope units, such as small establishments, agricultural or informal units, as well as for household service and volunteer work.

Average annual hours actually worked

27. (1) Average annual hours actually worked are the total hours actually worked during a year relative to a reference denominator, depending on the measurement purpose and available data sources. The numerator and denominator should be consistent, where possible. The denominator may be:

(a) The average number of persons in employment (whether at work or not at work) per week over the year;
(b) The average number of jobs over the year that corresponds to the total hours actually worked;
(c) The average population size over the year.

Tabulation of data and analysis

28. (1) Statistics on working time can be tabulated to serve a number of different descriptive and analytical purposes, and *within or beyond the SNA production boundary*, depending on national circumstances and priorities.

(2) Statistics on the hours actually worked, the hours paid for, the contractual hours of work and the hours usually worked may relate to (a) the number of jobs or persons by different hour bands, as well as to (b) the average hours per job, person or economic unit, during the reference period. The hour bands should allow presentation by specific hour thresholds stipulated in national laws or regulations. The average hours per person should cover the hours in all jobs held during the reference period.

(3) Statistics on the normal hours of work may relate to the number of jobs or persons in employment practising different levels of hours.

(4) Statistics on overtime hours may relate to:

(a) The number of jobs, persons or economic units experiencing overtime;
(b) The average overtime hours per job, person or economic unit during the reference period.

(5) Statistics on absence from work hours may relate to:

(a) The number of jobs, persons or economic units experiencing an absence from work during the reference period, by type of absence;
(b) The average duration of absence from work hours per job, person or economic unit during the reference period, by type of absence;
(c) The average elapsed duration of absence from work up until the reference period per job, person or economic unit.

(6) Statistics on working-time arrangements may relate to:

(a) The number of jobs, persons or economic units practising relevant formalized working-time arrangements, by type of arrangement;
(b) The number of jobs, persons or economic units experiencing various types of lengths, timing and scheduling of working time.

29. For the calculation of average hours actually worked per week, States that do not calculate them by dividing the annual hours actually worked by the total number of weeks in the year should specify whether they relate to average hours actually worked:

(a) Per employed person "at work" during one or more reference periods during the year;
(b) Per employed person during one or more reference periods during the year;
(c) Per job during one or more reference periods during the year;

(d) Any other calculation.

30. (1) For the computation of sectoral productivity, statistics on total hours actually worked need to be classified by industry or sector, and in a manner that is consistent with production statistics.

(2) For labour market analysis, statistics of working time should be presented at least by sex and in respect of status in employment, specified age groups and level of education. Tabulations and analysis may include other significant demographic, social and economic characteristics important for users as well as appropriate cross-classifications, such as by occupational group, institutional sector, branch of economic activity, and, where relevant, by formal/informal sector (or formal/informal employment).

(3) To bring to light gender justice and reconciliation of work and family life, including for public policy purposes, it is essential to classify working time, in addition to sex, by variables such as marital status, presence of dependent or accompanying persons (young children, the elderly and others requiring care) and the working time of other/all household members.

(4) Working time statistics of persons is the sum of the hours in all jobs in a reference period; to classify these hours in relation to a job or economic unit, the characteristics should refer to the main job. For working time statistics it is preferable to define main job as the job having the longest working time (preferably as measured through contractual hours or, when not available, the hours usually worked).

31. In order to analyse changes in hours actually worked over time and across States, it may be useful to produce indices in addition to level estimates. In this case, it is important that precise information about the statistical sources and methods of calculation used to produce these complex estimates accompany the disseminated results.

32. All statistics on working time and accompanying methodological information should be compiled, made available for all users, and produced in line with the need for confidentiality of persons and establishments, and the requirement of proper documentation. As much as possible, public-use files (anonymized, confidentialized

micro data sets) should be made available to analysts and other interested users.

International reporting

33. (1) For international reporting of working time statistics, States should endeavour to report at least (*within the SNA production boundary*):

(a) Total hours actually worked on an annual basis; and
(b) Average annual hours actually worked per person in employment (in all jobs); or
(c) Where the above are not possible, then the average hours actually worked per week.

(2) States measuring working time *beyond the SNA production boundary* should compile and report the statistics in such a way that it is possible to distinguish them from working time statistics for activities *within the SNA production boundary*.

(3) For international comparisons the derived measures should be disaggregated by sex so as to enable analyses from the gender perspective, as well as status in employment. Where possible these derived measures should also be disaggregated by age, industry or institutional sector. Other variables of interest are level of education, occupation, working-time arrangements and formal/ informal sector or employment.

34. States may also be in a position to report statistics on:

(1) The average weekly contractual hours or average weekly hours usually worked;

(2) The number of jobs or persons by bands of hours actually worked or hours usually worked per week. For statistics on the number of jobs or persons working different hour bands, data should be collected so that it may be reported according to certain hour bands. These hour bands may be of four or five hours, and in all cases should include the following:

(a) Less than 15 hours;
(b) 40 hours;

(c) Up to and including 48 hours;
(d) 60 hours or more.

(3) The number of persons experiencing an absence, and by type of absence that should distinguish at least the following groups of reasons for absence:

(a) Annual leave (with forced annual leave separately identified, if possible), holidays and compensation leave;
(b) Illness and injury (including occupational injuries separately identified, if possible);
(c) Maternity/paternity/parental and care leave;
(d) Strikes and lock-outs.
(e) Other reasons.

35. In order to enhance the transparency and comparability of all working time statistics reported internationally, States are urged to compile and disseminate the requisite information on national concepts, definitions and methodology and any departures from the recommendations of this resolution. States should, therefore, design their data collection and processing procedures to enable them to fully document:

(a) Differences between the international and national statistical definitions of working time, where relevant;
(b) Differences between the national statistical definitions compared with legal and administrative definitions in the State;
(c) Adjustments performed to arrive at estimates that correspond to the analytical and international statistical concepts and, in particular, inquiries undertaken from time to time to determine for each industry the ratio between the number of hours actually worked and the number of hours paid for (defined in paragraphs 11 and 12).

36. All reported statistics on working time and accompanying methodological information should be compiled and produced in line with the need for confidentiality of persons and establishments, and the requirement of proper documentation and availability for all users, in accordance with the United Nations Fundamental Principles of Official Statistics.

Future work

37. The ILO should provide for the timely updating of the annex to this resolution, and prepare a technical manual to present best practices in the measurement of working time.

38. Regarding the measurement of working time for jobs *within and beyond the SNA production boundary*, the ILO should conduct a review, within a decade, of national capacities to implement the scope of this Resolution and assess the implications of the findings on future work in this area.

Annex

Working-time arrangements

1. Working-time arrangement is the term to describe measurable characteristics that refer to the organization (length and timing) and scheduling (stability or flexibility) of work and non-work periods for all jobs as defined in paragraph 18 of this resolution. These characteristics also apply to ad hoc as well as unusual arrangements. Multiple characteristics (such as a part-time, flexible shift schedule) may apply as they are not mutually exclusive.

2. Specific working-time arrangements defined for different combinations of these characteristics exist in States and are referred to as formalized working-time arrangements. These are based on laws and regulations, collective agreements or arbitral awards and formalized in written employment contracts and/or practised implicitly in establishments by persons in paid-employment jobs. Certain types of formalized arrangements (such as part-time work) are also practised in self-employment jobs.

3. The elements of the typology of formalized working-time arrangements presented in this Annex may serve as a tool for consultation, in particular for purposes of comparison at the international level.

Organization (length and timing)

4. (1) *Annualized or mensualized hours arrangements*, characterized by variations in daily, weekly and monthly working time within

a weekly or monthly average or an annual total, without any requirement that the employer pay overtime rates as long as hours actually worked stay below an agreed maximum in the specified period. Under the annualized/mensualized hours contract, the distribution of the number of hours over the month or throughout the year is generally determined in advance by the employer, depending on production or service needs; but employees may be allowed to negotiate the length of their daily and weekly hours, so long as output targets can be met.

(2) *Compressed working week arrangements*, characterized by organizing the working time over fewer days than what is considered the normal or standard working week.

(3) *Fixed working arrangements*, characterized by set starting and finishing hours or core hours for individuals or groups of persons in paid employment or for persons in self-employment.

(4) *Job-sharing arrangements*, characterized by the filling of an existing full-time position by two or more persons (including transitional arrangements), each working part time, possibly with different arrangements, on an ongoing, regular basis.

(5) *Min–max arrangements*, characterized by a variable number of *hours actually worked* and paid for, depending on production or service needs, but with a guarantee of a minimum and maximum number of hours to be worked per reference period.

(6) *Part-time work arrangements*, characterized by a voluntary or involuntary reduction of hours or a job that reduces contractual hours or hours usually worked, which are less than those of comparable full-time work (in the same industry or occupation) recognized in the Part-Time Work Convention, 1994 (No. 175).

(7) *Regular overtime hours arrangements*, characterized by hours worked in addition to the contractual or hours usually worked and that are compensated by the employer for paid-employment jobs.

(8) *Staggered and block working arrangements* (also known as start and end of working day), characterized by established different starting and finishing hours around compulsory core hours, for

individuals or groups of persons in paid employment, including split shift work consisting of multiple work periods on the same day.

(9) *Time-saving account arrangements*, characterized by hours worked in addition to the contractual or hours usually worked with the understanding that the persons will be able to take, for example, early retirement.

(10) *Working time banking arrangements*, characterized by the possibility of accumulating hours, which can be taken off as extended leave in a subsequent period or used to reduce the total overall lifespan of work.

(11) *Combined extended work and leave periods*, characterized by a number of weeks on, at special work sites (remote areas, on board ships, oil platforms at sea, etc.) and a number of weeks off work.

Scheduling (stability or flexibility)

5. (1) *Flexible working-time arrangements*, characterized by possible daily and weekly working time scheduled outside core hours when presence at the place of employment is compulsory. Hours worked in addition to contractual hours of work for the week (pay period or month) may be taken as leave during subsequent weeks or months, often within a deadline and up to a maximum number of hours.

(2) *Own working schedule*, characterized by the possibility of scheduling one's daily and weekly hours and presence at the work location.

(3) *On-call work, zero hours or "as and when required" arrangements*, characterized by no fixed schedule of contractual hours, but a requirement that persons be available to work when called with a specified notice period, for as many hours as the employer requires up to legally specified or contractual limits.

(4) *Shift-work arrangements*, characterized by successive daily work periods involving teams of persons, known as shifts. Shifts enable the establishment to maximize use of equipment and ensure operations for periods longer than the working time of individuals. Shifts may be organised as morning, evening, night

or weekend shifts. Shifts may be constant, alternate with different types of shift on a weekly or fortnightly basis (including certain free days).

(5) *Shift-change work arrangements*, characterized as shift-work arrangements with the additional feature that persons may trade their shifts with other workers practising the same arrangement.

(6) *Absence-leave scheduling*, characterised by the choice, control or influence of persons over periods of absence and leave and the extent to which this scheduling is agreed, imposed or chosen, the predictability of periods (as a result of advance notice, discussion or consensus between parties) and the duration of the period over which the scheduling refers.

Resolution II

Resolution concerning statistics of child labour

The 18th International Conference of Labour Statisticians,

Having been convened at Geneva by the Governing Body of the International Labour Office and having met from 24 November to 5 December 2008,

Taking note of the discussions at the 16th and 17th International Conferences of Labour Statisticians regarding child labour statistics,

Recalling the provisions of the ILO Minimum Age Convention, 1973 (No. 138), and the Worst Forms of Child Labour Convention, 1999 (No. 182), as well as their respective supplementing Recommendations (Nos 146 and 190), which are relevant to efforts in gathering child labour statistics and would by no means be affected by the present resolution,

Keeping in view the relevance of the 1989 United Nations Convention on the Rights of the Child to the definition of children and children's rights, in particular Article 32 concerning the protection of children from economic exploitation,

Appreciating that not all children who are working may be considered to be in child labour slated for abolition,

Taking into consideration the relevant parts of the resolution concerning statistics of the economically active population, employment, unemployment and underemployment, adopted by the 13th International Conference of Labour Statisticians (1982),

Taking also into consideration the resolution concerning working-time statistics adopted by the 18th International Conference of Labour Statisticians (2008), particularly the use of the general production boundary as defined by the United Nations System of National Accounts as a framework for the measurement of working time,

Considering that child labour statistics are especially needed in countries where a significant number of children are working in contravention of agreed international labour standards and national legislation safeguarding the interests and welfare of children,

Noting the work done by the International Labour Office in promoting the development of statistics on child labour,

Acknowledging the usefulness of establishing international statistical standards for the identification and classification of children in employment, and for facilitating the comparability of child labour data over time as well as across countries and regions,

Recognizing the need to establish technical guidelines for countries on the statistical measurement of children's work activities;

Adopts this fifth day of December 2008 the following resolution:

Objectives and scope

1. This resolution aims to set standards for the collection, compilation and analysis of national child labour statistics, to guide countries in updating their existing statistical system in this field, or to establish such a system. The standards should also help to facilitate the international comparability of child labour statistics by minimizing methodological differences across countries.

2. Countries should, depending on national circumstances, develop an adequate system of child labour statistics as an integral part of their statistical programmes.

3. The principal objective of child labour statistics is to provide reliable, comprehensive and timely data to serve as a basis for determining priorities for national action for the elimination of child labour, in particular its worst forms. Statistical information on child labour should also serve as a basis for increasing public awareness of the problem, and supporting the development of regulatory frameworks, policies, and programmes on child labour.

4. To fulfil the above objectives, child labour statistics should, in principle, cover all productive activities in which children are engaged, distinguishing among those activities that are permissible and those that fall within the different categories of child labour. Child labour statistics should be developed to the fullest extent possible in harmony with other economic and social statistics.

Concepts and definitions

5. National concepts and definitions of child labour for statistical measurement should take due account of country needs and circumstances. National legislation, where available, and guidelines provided by international labour standards, international statistical standards and other international instruments should be used as the starting point for developing statistical concepts and definitions of child labour. This approach would make the resulting statistical concepts and definitions as close as possible to, and as coherent as possible with, national legislation and international labour standards.

6. International labour standards on child labour allow for exceptions to general prohibitions and provide flexibility for countries in their application. There can therefore be no uniform legal definition of child labour for universal application. Given that national statistical offices are encouraged to align statistical concepts and definitions related to child labour as closely as possible with the prevailing national laws and regulations, the data collected should be comprehensive and their compilation sufficiently detailed, to facilitate international comparability based on the concepts and definitions provided in this resolution.

7. The statistical measurement framework for child labour is structured around two main elements, namely: (i) the *age* of the child; and (ii) the *productive activities* by the child including their nature and the conditions under which these are performed, and the duration of engagement by the child in such activities. For statistical purposes, each of these elements should be defined in a broad sense, so that the framework can be used to measure different subsets for different purposes.

Age of a child

8. In accordance with the ILO's Worst Forms of Child Labour Convention, 1999 (No. 182), and the United Nations Convention on the Rights of the Child, a child should be defined as an individual under the age of 18 years.

9. The target population for measuring child labour for the purpose of the present resolution comprises all persons in the age group from 5 to 17 years, where age is measured as the number of completed years at the child's last birthday.

10. National statistical offices may, however, in consultation with the responsible government offices for education, protection and welfare of children and adolescents, set the lower age threshold below 5 years if that is considered useful in the light of national circumstances. The lower age threshold should never be higher than the official age for entry into compulsory schooling.

Children in productive activities

11. The broadest concept relating to the measurement of child labour is *children in productive activities*, that is, children engaged in any activity falling within the general production boundary as defined in the System of National Accounts (SNA) (henceforth, referred to in this resolution as the "general production boundary"). This comprises *children in employment* and *children in other productive activities*.

12. *Children in employment* are those engaged in any activity falling within the production boundary in the SNA for at least one hour during the reference period. They consist of:

    (a) those in *child labour* within the SNA production boundary (described in paragraphs 15(a) and 15(b) below);
    (b) children aged 12 to 14 years in *permissible light work* (described in paragraphs 33 to 35 below); and
    (c) adolescents in the age group 15 to 17 years engaged in work not designated as one of the worst forms of child labour.

13. *Children in other productive activities* includes children who perform *unpaid household services*, that is, the production of domestic and personal services by a household member for consumption within their own household, commonly called "household chores". In contrast, the performance of household services in a third-party household, paid or unpaid, is included within the production boundary of the SNA.

Child labour

14. The term *child labour* reflects the engagement of children in prohibited work and, more generally, in types of work to be eliminated as socially and morally undesirable as guided by national legislation, the ILO Minimum Age Convention, 1973 (No. 138), and the Worst Forms of Child Labour Convention, 1999 (No. 182), as well as their respective supplementing Recommendations (Nos 146 and 190). Child labour may be measured in terms of the engagement of children in productive activities either on the basis of the general production boundary,

or on the basis of the SNA production boundary. The underlying measurement framework should be clearly specified.

15. For the purpose of statistical measurement, children engaged in *child labour* include all persons aged 5 to 17 years who, during a specified time period, were engaged in one or more of the following categories of activities:

    (a) *worst forms of child labour*, as described in paragraphs 17–30;
    (b) *employment below the minimum age*, as described in paragraphs 32 and 33; and
    (c) *hazardous unpaid household services*, as described in paragraphs 36 and 37, applicable where the general production boundary is used as the measurement framework.

    A schematic presentation of the statistical identification procedure for child labour is provided in the Annex.

16. When child labour is measured on the basis of the general production boundary, a child may be considered to be in child labour when the total number of hours worked in employment and unpaid household services exceeds the thresholds that may be set for national statistical purposes. In order to facilitate comparison of child labour data across countries, when the general production boundary is applied for child labour measurement purposes, the estimates of child labour in terms of the SNA production boundary should also be provided.

Worst forms of child labour

17. According to Article 3 of ILO Convention No. 182, the worst forms of child labour comprise:

    (a) all forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom, as well as forced or compulsory labour, including forced or compulsory recruitment of children for use in armed conflict;
    (b) the use, procuring or offering of a child for prostitution, for the production of pornography or for pornographic performances;
    (c) the use, procuring or offering of a child for illicit activities, in particular for the production and trafficking of drugs as defined in relevant international treaties; and
    (d) work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children.

18. Based on national circumstances, countries may also wish to collect data on activities by children which are outside the general production boundary, such as begging and stealing, and which may need to be considered in the context of the worst forms of child labour.

Worst forms of child labour other than hazardous work

19. Activities covered under subparagraphs 17(a)–17(c) are referred to as the "worst forms of child labour other than hazardous work", and often also termed "unconditional worst forms of child labour". Standardized statistical concepts and definitions for these forms of child labour are not fully developed. Statistical measurement methods are at an experimental stage.

Hazardous work by children

20. Activities under subparagraph 17(d) are referred to as "hazardous work". According to ILO Recommendation No. 190, the following criteria should be taken into account when determining hazardous work conditions of children at the national level:

    (a) work which exposes children to physical, psychological or sexual abuse;
    (b) work underground, under water, at dangerous heights or in confined spaces;
    (c) work with dangerous machinery, equipment and tools, or which involves the manual handling or transport of heavy loads;
    (d) work in an unhealthy environment which may, for example, expose children to hazardous substances, agents or processes, or to temperatures, noise levels, or vibrations damaging to their health;
    (e) work under particularly difficult conditions such as work for long hours or during the night or work where the child is unreasonably confined to the premises of the employer.

21. For the purpose of the present resolution, hazardous work by children is statistically defined in terms of the engagement of children in activities of a hazardous nature (designated hazardous industries and occupations) as reflected in subparagraphs 20(a)–20(d), or as work under hazardous conditions, for example, long hours of work in tasks and duties which by themselves may or may not be of a hazardous nature for children (hazardous work conditions) as reflected in subparagraph 20(e).

22. The criteria in paragraph 20 above can be used as a base for constructing statistical variables for the measurement of hazardous work by children. Each criterion provides information that will inform the design of survey questions and response categories to be administered in child labour surveys.

23. For hazardous work reflected by subparagraphs 20(a)–20(d), such hazardous work by children may be directly identified by existing survey questions on industry and occupation, and their classification according to paragraphs 25–27 below; for others new questions would have to be designed.

24. Under hazardous work conditions described in subparagraph 20(e), long hours and night work are conditions subject to objective measurement, while other work conditions can be measured approximately by including relevant questions in child labour surveys. Hazardous work in terms of work for long hours and night work may be defined for statistical purposes as described in paragraphs 28–30 below.

Designated hazardous occupations and industries for children

25. Hazardous occupations for children shall be designated on the basis of national laws or regulations, where they exist. In addition to the list of occupations prohibited by legislation, designated hazardous occupations for children may be identified on the basis of recommendations from competent consultative bodies, or detailed analysis of the hazard content of occupations, for example, by examining the rate of occupational injuries and diseases among children below 18 years of age or by conducting specially designed surveys on the hazard content of occupations of children.

26. Designated hazardous occupations for children should be defined in a manner consistent with the national standard classification of occupations, where such a classification exists and, to the extent possible, with the latest version of the International Standard Classification of Occupations. To facilitate the identification of children engaged in designated hazardous occupations for children, occupational data should be coded to the most detailed level of the national occupational classification supported by the data.

27. Some forms of hazardous work for children may be measured in terms of designated hazardous industries for children in countries that have prohibited the engagement of children in specific designated industries,

for example, construction, and mining and quarrying. Efforts should be made to gather as much information as possible on the actual tasks performed by the child in order to determine whether or not the work is hazardous.

Long hours of work and night work

28. A child is considered to be working *long hours of work* if the number of hours actually worked at all jobs during the reference period is above a specified threshold. The threshold may be determined in terms of the maximum number of hours of work that the national law or regulation sets for children who have reached the minimum working age. In the absence of such a specific limit for children, the threshold may be decided taking account of the regulation on the adult workers' normal working time. Hours actually worked should be defined in accordance with the latest international standards on the topic.

29. *Long hours of work* may also be defined in terms of usual hours of work per week. The use of this concept would include in child labour, any children who usually work long hours but during the reference period were temporarily absent from work owing to illness, holidays or, for other reasons, worked fewer hours than usual.

30. A child is considered to be *working at night* if the work schedule includes hours of work defined as night work prohibited for children under national legislation, where it exists. In the case of children, the period of time spent commuting between work and home should be considered as part of the work schedule. Alternative statistical definitions of night work for children may be formulated on the basis of the ILO Night Work Convention No. 171 (1990), particularly Article 1(a) and (b). Where there is no legal prohibition of night work of children, national legislation and prevailing collective agreements, if any, on night work of adult workers could be used as the basis for determining night work of children.

Exceptions for children aged 16 to 17 years

31. According to Article 3(3) of ILO Convention No. 138, countries may exceptionally authorize employment or work in what may be designated as hazardous work, as from the age of 16 years, on condition that the health, safety and morals of the young persons concerned are fully protected and that the young persons have received adequate specific instruction or vocational training in the relevant branch of activity.

Employment below the minimum age

32. Employment below the minimum age includes any work that is carried out by a child who is below the *minimum age* specified for the kind of work performed. Article 2 of ILO Convention No. 138 stipulates that the minimum age for admission to employment or work should not be less than the age of completion of compulsory schooling and, in any case, not less than 15 years. Countries where the economy and educational facilities are insufficiently developed are allowed, after consultation with organizations of employers and workers concerned, where such exist, to initially specify a minimum age of 14 years. Children in the age group 15 (or the national minimum age for employment, if different) to 17 years are, in principle, allowed to work, unless they are in "any type of work which by its nature or the circumstances in which it is carried out is likely to jeopardize the health, safety or morals of young persons" (Article 3(1) of ILO Convention No. 138), or are engaged in one of the activities prohibited for children by ILO Convention No. 182 as cited in paragraph 17 above.

33. Where children in particular age groups are permitted to engage in "light work" under national legislation in accordance with Article 7 of ILO Convention No. 138, such work should be excluded from the definition of child labour. According to Article 7 of ILO Convention No. 138, national laws or regulations may permit the work of persons as from 13 years of age (or 12 years in countries that have specified the general minimum working age of 14 years) in *light work* which is: (a) not likely to be harmful to their health or development; and (b) not such as to prejudice their attendance at school, their participation in vocational orientation or training programmes approved by the competent authority, or their capacity to benefit from the instruction received. While a restriction on weekly hours of work is required for this age group, the determination of the maximum number of hours is left to the competent national authorities.

34. In determining the hours threshold for *permissible light work*, national statistical offices should take into consideration the stipulations set forth in national legislation or, in their absence, use a cut-off point of 14 hours during the reference week, below which work can be considered permissible light work.

35. In addition to the hours threshold, the definition of *permissible light work* may involve other criteria in line with the conditions for light work set under national laws or regulations. It may, for instance,

limit its scope to the industries or occupations in which light work is permitted. In any case, permissible light work should exclude all activities considered to be hazardous work for children.

Hazardous unpaid household services

36. The concept of *unpaid household services* (described in paragraph 13 above), as an element of child labour, is applicable where the general production boundary is used as the framework for measuring child labour.

37. *Hazardous unpaid household services* by children are those performed in the child's own household under conditions corresponding to those defined in paragraph 20 above, that is, unpaid household services performed (a) for long hours, (b) in an unhealthy environment, involving unsafe equipment or heavy loads, (c) in dangerous locations, and so on. The definition of long hours in unpaid household services of children, relative to their age, may differ from the one applied in respect to children in employment. The effect on a child's education should also be considered when determining what constitutes long hours.

Data collection

Data collection methods

38. Child labour data collection methods can be quantitative, qualitative or a combination of both. The choice of which method(s) to apply will depend on the objectives of the inquiry, the type and level of child labour to be investigated, the levels of accuracy and reporting details required, and the availability of time, technical and financial resources. The kind of information to be gathered (quantitative data for estimating the prevalence of child labour and its distribution by relevant characteristics, or qualitative information for understanding the nature, causes and consequences of child labour) should also be taken into consideration. Where the target population of children is sufficiently large, and the social context does not constrain reporting on children in productive activities, the principal methods for collecting reliable statistics on child labour are household-based surveys and establishment-based surveys. Baseline surveys and rapid assessment studies also provide useful quantitative and qualitative information on child labour.

Household and establishment surveys

39. With the exception of special categories of child labour (such as children who live on the street, or those in the worst forms of child labour other than hazardous work), *household-based surveys* provide an effective tool for collecting a wide range of statistics on child labour and estimating its prevalence. A household-based national child labour survey may be designed either in a stand-alone way or as a module attached to another household-based survey. With regard to the latter, a labour force survey should be preferred, since similar concepts are applied and similar topics covered. The advantage of a household-based child labour survey is that the household is the most appropriate unit for identifying children and their families, measuring their socio-economic and demographic characteristics and housing conditions, obtaining information on the child's educational and work status, including engagement in hazardous work, and assessing the determinants and consequences of children's work.

40. Two important issues in household-based surveys on child labour are the objective of the survey and the choice of respondents for interview. Child labour surveys may have either, or both, of the following two objectives: (i) measurement of the prevalence of child labour, and of variations in this prevalence by geographical location, household type and characteristics, children's school attendance status, gender, age group, and similar factors; and (ii) investigation of the circumstances, characteristics and consequences of child labour, such as the types of children engaged in work-related activities, the types of work children do, conditions at work, and the impact of work on children's education, health, and so on. To measure the prevalence of child labour, the appropriate survey structure is a child labour survey, which normally requires a simple and short questionnaire with a sample drawn from the general population. To provide measures relevant to the circumstances, characteristics and consequences of child labour, the preferred survey structure involves more intensive data collection using a sample selected mainly from the population of children in employment. Where both objectives are targeted, the two survey structures should be linked. With regard to respondents, the general practice is to address survey questions to the most knowledgeable adult member of the household (or sometimes the head of household, who is often also the parent or guardian of the working child). However, sections of the questionnaire may be addressed to the children themselves, particularly on hazards at the workplace, and the main underlying reason for working.

41. *Establishment surveys* administered at the children's workplaces (which may include home-based production units) seek to obtain data on the particulars of the production unit and the characteristics of its workforce, with a special focus on children in employment. Information is sought on children's wages, hours of work, other working conditions and employment benefits, and injuries and illnesses at work, as compared with those of adult workers. The perceptions of the employer regarding motives for hiring children, and the methods of recruitment, may also be explored.

42. In countries where child labour is a rare phenomenon or societal perceptions make it difficult to obtain reliable data, specific measurement tools are needed to identify areas and groups of children at risk. Household-based surveys that rely on the general population and establishment-based surveys may not be adequate tools in this regard. In these cases, a mix of methods and different data sources may need to be taken into consideration in order to obtain indirect estimates. This includes retrospective surveys on child labour.

Baseline survey

43. Another important data collection vehicle for child labour statistics is the *baseline survey or study* which aims to identify the characteristics and consequences of child labour in specific industries and/or areas at different points in time. It is usually linked to intervention programmes to combat child labour, and assists in the identification of project beneficiaries and in monitoring their withdrawal from work over time. A baseline survey/study generates both quantitative and qualitative data, applying a mix of sample survey and participatory approaches. If a suitable sample frame can be developed, the findings may be extrapolated to the whole industry and/or area surveyed.

Rapid assessment

44. For collecting information on children in hidden forms of child labour, *rapid assessment studies* are useful. Their output is mainly qualitative and descriptive and limited to a small geographical area. The method is not applicable if the aim is to estimate the number of children in employment. Nonetheless, it can provide relevant data on the causes, consequences and characteristics of the form of child labour being investigated, relatively quickly and inexpensively for many uses, for example, awareness creation and project formulation. Its participatory approach, based on observations, discussions and interviews with a variety of key respondents, is ideal for obtaining detailed knowledge

of the working and living conditions of children involved in activities or occupations that are otherwise difficult to identify and characterize. Rapid assessments are therefore more relevant to research institutes and organizations, and for supplementing surveys carried out by national statistical offices.

45. A special rapid assessment form relevant to child labour is a *street children survey*. Street children fall mainly into two categories, namely: (a) those who live and work on the streets and by definition do not have any other place of residence; and (b) those who work on the streets but normally reside with their parents or guardians. Statistics on the activities of the second category may be collected through a household-based survey. Different survey methods are required for the first category, for which a commonly applied approach is a street children survey in which a sample of purposively selected street children and, if possible, their employers and/or clients are interviewed.

Supplementary data sources

46. A complementary approach includes the review of data relevant to child labour contained in existing censuses and socio-economic surveys. Data analysis based on these sources is an option for countries wishing to compile basic data on children in productive activities at periodic intervals in situations where human and financial resources do not permit specific or modular child labour surveys to be conducted. An additional approach may involve the modification of existing data collection tools, for example, lowering the age threshold for collecting information on employment.

47. School attendance rates reflect the engagement of children in what should be their main activity. Absence from school does not necessarily imply that a child is working and children who attend school may also be engaged in child labour. Nevertheless, where there are no adequate child labour data collection systems, data on children out of school can provide useful information on children who may be engaged in child labour.

48. In accordance with ILO Recommendation No. 190 (Paragraph 5(3)), relevant data concerning violations of national provisions for the prohibition and elimination of the worst forms of child labour should be compiled and kept up to date. In this regard, administrative records on: violations of child labour legislation in the form of cases brought to court and other relevant official authorities, and convictions

thereof; criminal prosecution of child traffickers and those engaged in the commercial sexual exploitation of children; and child rights abuses leading to revelations of forced or bonded child labour, may serve as useful sources of information that should be compiled to supplement national child labour statistics. Labour inspection reports might also provide useful supplementary information, to the extent that they provide information on under-age workers and hazardous working conditions. In addition, administrative records about recipient households in income transfer and other social welfare programmes may contain important data on child labour.

Ethical considerations

49. Respecting ethical standards during the data collection process is essential in child labour surveys. According to Paragraph 6 of ILO Recommendation No. 190, compilation and processing of information and data on child labour should be carried out with due regard for the right to privacy. National statistical authorities wishing to measure child labour should establish a set of ethical guidelines for child labour data collection, keeping in mind Article 2, paragraph 2, and Article 13, paragraph 1, of the United Nations Convention on the Rights of the Child. As a minimum requirement, care should be taken to ensure that the children in employment, especially those who are respondents, are not harmed as a consequence of the survey. Also, as for all statistical surveys, the respondent should be assured that the confidentiality of the information provided will be respected, as well as his or her anonymity.

50. It should be ensured that survey participation by child respondents is voluntary and that enumerators do not face any risks during data collection. The field enumerators should in turn respect the cultural traditions, knowledge and customs of the respondents. In addition, when interviewing children, enumerators should be sensitive to children's ways of behaving and thinking and avoid raising unrealistic expectations. Child labour data collection should be undertaken by persons specially trained for the type of survey being conducted.

Items of data collection

51. According to ILO Recommendation No. 190 (Paragraph 5(1)), detailed information and statistical data on the nature and extent of child labour should be compiled and kept up to date to serve as a basis for determining priorities for national action for the abolition of child

labour, in particular for the prohibition and elimination of its worst forms as a matter of urgency. Moreover, according to Paragraph 5(2), as far as possible, such information and statistical data should include data disaggregated by sex, age group, occupation, branch of economic activity, status in employment, school attendance and geographical location.

52. Important items of data collection for the purposes of an informed statistics-based analysis of child labour include: (i) age and sex; (ii) geographical distribution by major administrative divisions; (iii) school attendance status; (iv) engagement in unpaid household services; (v) time spent in activities falling within the SNA production boundary; (vi) location of workplace; (vii) kind of economic activity (industry); (viii) occupation; (ix) working conditions including impact on children's health and education; and (x) socio-economic characteristics of the child's household.

53. Statistics on children in productive activities should distinguish between the categories of children in economic production, children engaged in unpaid household services, and children in other productive activities. Children who fall into two or more categories should be classified by each activity of their engagement.

54. Children who are not engaged in any market-oriented productive activity but who are actively or passively seeking such work are potentially exposed to the risk of falling into the category of child labour. Children neither in school nor in employment, referred to in some countries as "idle children", may also be at risk of falling into child labour. National statistical systems are encouraged to collect data on these children.

55. Child activity surveys have shown that unpaid household services may absorb a considerable amount of children's time. Countries are therefore encouraged to gather data on unpaid household services by children, in terms of the time spent in such activities and the major tasks performed. Such statistics should be collected irrespective of whether or not the general production boundary is applied in terms of child labour concepts and definitions.

56. For a comprehensive analysis of the national child labour situation, statistics on children's activities should be collected so as to facilitate classification of children by: (a) attending school; and (b) not

attending school groups. Each group may be further subdivided into those engaged in: (i) only activities included in the SNA production boundary; (ii) only unpaid household services; (iii) both activities included in the SNA production boundary and unpaid household services; and (iv) neither activities included in the SNA production boundary nor unpaid household services.

57. It would be useful for national policy-makers and other users to have the necessary child labour statistics in sufficient detail to allow data to be classified by urban/rural residency and, if possible, by the lower level administrative units of the country at which policy and programme interventions can be effective.

58. Child labour data collection in sufficient detail at regular intervals (as determined in the light of national data needs and resource availabilities) helps in monitoring child labour trends, and should also facilitate assessment of the effectiveness of policies and programmes implemented to combat child labour. Sustainability of child labour data collection may be achieved most easily by identifying a few key child labour variables on which data are collected with assured regularity in an appropriate national household-based survey, preferably a labour force survey.

Global estimation

59. The progressive abolition of child labour has become a major concern of the international community in its own right and as a core element of the Decent Work Agenda. The achievement of that goal should be measured not only at the national level, but also at regional and global levels. Based on its past experience in global estimation of child labour and on the present international standards, the ILO should develop a standard methodology for estimating child labour at the international level and communicate the methodology as well as respective data needs to governments and national statistical offices.

60. In line with Paragraph 7 of ILO Recommendation No. 190, which stipulates that collected data should be communicated to the International Labour Office on a regular basis, governments and national statistical offices should, in turn, collaborate with the efforts for global estimation of child labour in the world, and its major regions. The collection of national data should be sufficiently disaggregated by age, sex, activity, industry, occupation and other

important characteristics in order to allow compilation of statistics for the purposes of global reporting.

Further action

ILO manuals and questionnaires

61. To assist member countries in the task of collecting and analysing statistics on the various aspects of children in productive activities and child labour, the ILO should update its manuals and model questionnaires on child labour statistics when necessary and possible. Instructions for applying the provisions of this resolution must be clearly laid out.

Conceptual and methodological development

62. The ILO and its partners should engage in the development of appropriate statistical methodologies for generating reliable estimates of children in the worst forms of child labour other than hazardous work, and special groups such as children living independently or on the streets.
63. The ILO should: (i) give particular attention to the development of concepts and definitions for the worst forms of child labour other than hazardous work as described in paragraphs 17(a)–17(c) of this resolution; and (ii) develop guidelines on the treatment of long hours by children in unpaid household services with respect to age and hours thresholds as referred to in paragraphs 16 and 37. The ILO should report on the progress to the 19th International Conference of Labour Statisticians.

ILO technical assistance

64. The ILO should expand its technical assistance programme on child labour statistics to support implementation of this resolution by member countries. Such technical assistance should include provision for technical advice and training targeted to enhance national capacities where required, and financial support to countries for child labour data collection and analysis, to the extent possible.

Annex

Framework for statistical identification of child labour

Age group	General production boundary						
	SNA production				Non-SNA production		
	(1a) Light work[3]	(1b) Regular work[4]	Worst forms of child labour		(3a) Hazardous unpaid household services[1]	(3b) Other non-SNA production
			(2a) Hazardous work	(2b) Worst forms of child labour other than hazardous work		
Children below the minimum age specified for light work (for example, 5–11 years)[2]	Employment below the minimum age for light work	Employment below the general minimum working age	Employment in industries and occupations designated as hazardous, or work for long hours and/or at night in industries and occupations not designated as hazardous	Children trafficked for work; forced and bonded child labour; commercial sexual exploitation of children; use of children for illicit activities and armed conflict	Unpaid household services for long hours; involving unsafe equipment or heavy loads; in dangerous locations; etc.	
Children within the age range specified for light work (for example, 12–14 years)[2]						
Children at or above the general minimum working age (for example, 15–17 years)[2]						

[1] (3a) is applicable where the general production boundary is used as the measurement framework for child labour.

[2] Age-group limits may differ across countries depending upon the national circumstances.

[3] Where applicable at the national level.

[4] Children in employment other than those covered under columns (1a), (2a) and (2b).

■ Denotes child labour as defined by the resolution.

□ Denotes activities not considered child labour.

Resolution III

Resolution concerning the development of measures of labour underutilization

The 18th International Conference of Labour Statisticians,

Aware of the limitations of the unemployment rate as the main labour market indicator for many countries,

Considering that the unemployment rate may not adequately reflect the labour market situation, especially of women,

Recognizing the need to develop, at the international level and as part of the measurement of decent work, measures of labour underutilization complementary to the unemployment rate,

Having reviewed the methodological work already undertaken by the ILO in this area;

Recommends that:

(i) the ILO, in cooperation with interested countries and organizations, continue work on the development of a methodology for the measurement in particular of labour slack, low earnings and skills mismatch;
(ii) the methodology developed build on relevant existing international concepts, definitions and classifications;
(iii) efforts be undertaken by the ILO to promote understanding of these measures relative to the unemployment rate;
(iv) the topic be considered for inclusion on the agenda of the 19th International Conference of Labour Statisticians with a view to adopting an international standard.

Resolution IV

Resolution concerning further work on the measurement of decent work

The 18th International Conference of Labour Statisticians,

Recognizing the need to measure decent work and its four strategic objectives, namely productive and freely chosen employment; social protection; social dialogue; and standards and fundamental principles and rights at work,

Taking note of the 2008 ILO Declaration on Social Justice for a Fair Globalization that states that ILO member States may consider the establishment of appropriate indicators or statistics, if necessary with the assistance of the ILO, to monitor and evaluate progress made,

Having reviewed the work undertaken by the ILO and the guidance provided by the Tripartite Meeting of Experts on the Measurement of Decent Work (September 2008);

Recommends that:

(i) the Office, in cooperation with the ILO's constituents and interested national statistical offices, prepare pilot decent work country profiles based on the outcome of the Tripartite Meeting of Experts on the Measurement of Decent Work and in accordance with the guidance by the Governing Body;
(ii) the definitions of statistical decent work indicators be based, in as far as possible, on existing ICLS resolutions and guidelines and other relevant international statistical standards in order to ensure the greatest possible degree of consistency and international comparability;
(iii) the Office carry out further developmental work on statistical indicators in areas highlighted by the Tripartite Meeting of Experts on the Measurement of Decent Work and during the proceedings at this 18th International Conference of Labour Statisticians;
(iv) a full report on progress and outcomes be prepared for the 19th International Conference of Labour Statisticians, in accordance with its agenda and taking account of decisions taken by the Governing Body, to provide further guidance on the measurement and monitoring of decent work.

Resolution V

Resolution on the amendment of paragraph 5 of the resolution concerning statistics of the economically active population, employment, unemployment and underemployment adopted by the 13th International Conference of Labour Statisticians (October 1982)

The 18th International Conference of Labour Statisticians agrees to replace paragraph 5 of the Resolution concerning statistics of the economically active population, employment, unemployment and underemployment, adopted by the 13th International Conference of Labour Statisticians (October 1982), by the following text:

5. The economically active population comprises all persons of either sex who furnish the supply of labour for the production of goods or services within the production boundary, as defined by the latest version of the System of National Accounts (SNA), during a specified time-reference period. According to the SNA 2008, the relevant production of goods and services includes all production of goods, the production of market and non-market services, and the production for own final consumption of household services by employing paid domestic staff.

Resolution VI

Resolution concerning organization, frequency and duration of the ICLS

The 18th International Conference of Labour Statisticians,

Recognizing the rapidly changing circumstances in labour markets of all States and the need for national statistical systems to effectively, consistently and quickly measure such changes,

Affirming the technical standard-setting role of the International Conferences of Labour Statisticians,

Aware of the competing demands on the time commitment of senior staff of national statistical systems as well as of employers' and workers' organizations,

Sensitive to the financial challenges of participation in the International Conference of Labour Statisticians as presently organized,

Cognizant of the recommendation of the United Nations Statistical Commission at its 39th Session in March 2008 to the International Conference of Labour Statisticians to review its method of operation, in particular the frequency and duration of its sessions,

Aware of the power that the Governing Body of the International Labour Office has pursuant to article 1 of the Standing Orders for International Conferences of Labour Statisticians;

Recommends to the Governing Body that:

(i) the periodicity of the International Conferences of Labour Statisticians be every three years, starting with the 19th International Conference of Labour Statisticians that could be held in 2011;
(ii) the duration of each Conference should be five working days;
(iii) each Conference be guided by the work of tripartite meetings of experts and other expert groups of statisticians at international and regional levels in order to facilitate and increase the efficiency of its proceedings by reducing the time required to establish, revise or approve international standards in labour statistics;

(iv) the number of items on the agenda of the Conference take into consideration its reduced duration and the complexity of topics to be discussed;
(v) a stable source of financing of the Conferences be identified within the regular budget of the Organization;
(vi) the present level of interpretation and translation services be maintained;
(vii) the date of the Conference be determined, as far as possible, taking into account days of significance in member States.

Résolutions de la 18ème Conférence internationale des statisticiens du travail (18 CIST)

Genève, Suisse, 24 Novembre - 5 Décembre 2008

La conférence internationale des statisticiens du travail (CIST), une conférence statutaire de l'OIT, est le mécanisme par lequel des normes internationales dans les statistiques du travail sont établies. Les instruments principaux incarnant de telles normes sont les résolutions et les directives adoptées par le CIST. Depuis le premier CIST organisé en 1919, il y a eu 18 de telles conférences couvrant une multitude de sujets. L'originalité de la conférence se situe dans l'autorité exercée par des Etats membres dans la prise de décision, qui assure de ce fait leur appropriation des normes, et la participation de toutes les parties prenantes dans ces Etats à travers la structure tripartite unique de l'OIT composée des structures des gouvernements, d'employeurs et des travailleurs.

Lors de sa 300ème session (novembre 2007), le comité directeur du Bureau International du Travail a autorisé l'Organisation internationale du travail pour organiser la 18ème conférence internationale des statisticiens de travail (18 CIST) à Genève du 24 novembre au 5 décembre 2008. Les objectifs principaux de la conférence étaient de discuter et d'adopter des normes internationales dans le domaine des statistiques du travail et d'établir des directives pour les travaux futurs. D'autres questions à l'ordre du jour incluaient des discussions générales sur un certain nombre de sujets comme la mise à jour de la classification internationale des professions 2008, la mesure du travail décent, les indicateurs de sous-utilisation de travail, les statistiques sur le travail volontaire, la compilation et la diffusion de données par l'OIT et l'examen des fonctions et l'organisation de la CIST. La mesure du temps du travail et les statistiques du travail des enfants étaient également mises en exergue dans les discussions générales.

La conférence a été suivie par 260 participants comprenant 110 Etats membres, 10 représentants d'employeur et 7 représentants des travailleurs nommés par le comité directeur et par 13 représentants des organisations gouvernementales et non gouvernementales et internationales. En tant que co-organisateur de la conférence, la banque de développement africaine (AfDB) a commandité 16 pays africains pour participer à la conférence.

La conférence a adopté six résolutions concernant chacune des questions qui ont été inscrites à l'ordre du jour. Le texte intégral des résolutions est présenté ci-dessous.

Le travail est de loin le facteur le plus important de la production. Cependant, la proposition d'un indicateur simple de la mesure de l'emploi et du chômage n'a pas été très utile aux utilisateurs et aux producteurs des statistiques. Les travaux futurs de l'OIT dans les statistiques de travail (2009-2013) sont principalement axés sur les questions méthodologiques de la collecte de données et de la diffusion des statistiques de travail.

A travers la phase II de son programme de renforcement des capacités statistiques (2009-2010), la BAD va aider les pays africains dans la conduite des enquêtes sur les forces de travail et autres des activités liées à la mesure de la main-d'oeuvre afin de calculer les indicateurs fiables du marché du travail. Ceci sera réalisé en grande partie à travers la collaboration étroite avec le bureau des statistiques de l'OIT.

RÉSOLUTIONS

Résolution I

Résolution concernant la mesure du temps de travail

La dix-huitième Conférence internationale des statisticiens du travail,

Ayant réexaminé le texte de la résolution concernant les statistiques des heures de travail, adoptée par la dixième Conférence internationale des statisticiens du travail (octobre 1962) et de la résolution concernant les statistiques des conflits du travail: grèves, lock-out et autres actions de revendication, adoptée par la quinzième Conférence internationale des statisticiens du travail (janvier 1993) ainsi que celui de la résolution concernant la mesure du revenu lié à l'emploi, et de la résolution sur les statistiques des lésions professionnelles résultant des accidents du travail, toutes deux adoptées par la seizième Conférence internationale des statisticiens du travail (octobre 1998);

Rappelant les prescriptions de la convention (nº 160) sur les statistiques du travail, 1985, et la recommandation (nº 170) sur les statistiques du travail, 1985, qui l'accompagne, ainsi que la nécessité de les harmoniser avec les autres normes statistiques internationales, incluant celles relatives à l'emploi informel et au travail des enfants;

Reconnaissant la nécessité de réviser les normes existantes concernant les statistiques des heures de travail de façon qu'elles rendent compte de la durée du travail dans tous les secteurs de l'économie et dans toutes les formes d'activités productives afin de parvenir à un travail décent pour toutes et tous, et qu'elles proposent des méthodes de mesure et des directives sur un plus grand nombre de mesures définies au niveau international, ce qui renforcera l'utilité de ces normes comme lignes directrices techniques destinées aux Etats et, partant, la cohérence et la comparabilité internationale des statistiques;

Reconnaissant que la pertinence des diverses mesures du temps de travail dans un Etat donné dépend de la nature de la main-d'œuvre, des marchés du travail et des besoins des utilisateurs de cet Etat et que, par conséquent, la réalisation de ces mesures dépendra en grande partie des conditions nationales,

Adopte ce cinquième jour de décembre 2008, la résolution ci-après qui se substitue à la résolution concernant les statistiques des heures de travail

(1962) et aux paragraphes 46 à 48 de la résolution concernant la mesure du revenu lié à l'emploi (1998).

Objectifs

1. Chaque Etat devrait s'efforcer d'élaborer un système complet de statistiques du temps de travail qui puisse rendre compte de façon adéquate de tout le volume de travail consacré aux activités productives par toutes les personnes, quel qu'en soit le sexe, afin de fournir aux divers utilisateurs une base statistique adaptée, compte tenu de la situation et des besoins nationaux.

2. Ce système devrait en particulier:

1) Compléter les statistiques de la population active et de la demande de main-d'œuvre dans la production par des statistiques sur le nombre d'heures réellement effectuées et le nombre d'heures habituellement effectuées pour l'ensemble des activités.

2) Faciliter l'examen et le contrôle des conditions de travail, y compris dans les domaines de la santé, de la sécurité et de la justice envers les femmes, pour tous les groupes de la population et dans l'emploi formel et informel, avec des statistiques sur le nombre d'heures réellement effectuées et le nombre d'heures habituellement effectuées, ainsi que sur leur organisation dans le temps et sur le nombre d'heures d'absence du travail par rapport à la durée fixée dans la législation nationale.

3) Elaborer des indicateurs utiles pour les négociations professionnelles et pour l'analyse socio-économique (productivité du travail, taux de salaire au temps, salaire horaire moyen, coût de main-d'œuvre moyen par unité de temps, incidence des lésions professionnelles ou sous-emploi lié à la durée du travail), avec des statistiques sur les heures réellement effectuées qui portent sur la même période de référence et le même groupe de travailleurs que les statistiques de la production, des salaires, du coût du travail, du revenu de l'emploi et des lésions professionnelles.

4) Servir pour concevoir, mettre en œuvre, contrôler et évaluer des politiques et programmes économiques, sociaux et concernant le marché du travail, axés sur la flexibilité du marché du travail, l'exclusion sociale, l'équilibre entre vie professionnelle et vie privée

et la répartition du temps de travail au sein des familles, etc., avec des statistiques sur le nombre d'heures réellement effectuées et le nombre d'heures habituellement effectuées ainsi que le mode d'aménagement de ces heures pour tous les membres d'une même famille et pour tous les groupes de population.

3. Pour répondre à tous ces besoins, les Etats devraient veiller à assurer la compatibilité des différentes statistiques du temps de travail entre elles et avec d'autres statistiques du marché du travail, aussi bien qu'avec le système statistique en général. Les statistiques sur le temps de travail devraient être développées en accord avec les autres cadres statistiques internationaux de façon à promouvoir la comparabilité internationale.

Portée

4. Le *temps de travail* s'entend comme le temps consacré à des activités productives et l'aménagement de ce temps au cours d'une période de référence donnée.

5. Le temps de travail est déterminé en fonction des activités productives relevant du domaine de la production générale, au sens du Système de comptabilité nationale (SCN). Il englobe le temps consacré à la production de tous les biens et services, qu'il soit payé ou non. Le temps de travail ne tient pas compte du caractère légal de ces activités, du type d'accord contractuel qui les régit ou de l'âge des personnes qui les exécutent.

1) Le temps de travail peut se référer aux activités *à l'intérieur du domaine de la production du SCN* et aux statistiques de l'emploi, tel que celui-ci est défini au niveau international. Dans ce cas, le temps de travail est la norme utilisée pour établir les comptes de production nationale. Il est également utilisé pour réaliser des analyses du marché du travail, de la productivité ainsi que d'autres analyses socio-économiques.

2) Le temps de travail peut aussi se référer aux activités *au-delà du domaine de la production du SCN*, telles que les services produits et consommés au sein d'un même ménage et les activités des travailleurs bénévoles au sein des ménages, qui produisent des services pour l'usage final du ménage. Dans ce cas, l'objectif est de produire des statistiques sur le temps de travail dans les «services

non rémunérés au sein des ménages et le travail bénévole», statistiques nécessaires pour la production de comptes satellites et pour une compréhension et une approche plus larges des politiques économiques, sociales et du marché du travail.

6. Le temps de travail est mesuré pour un emploi défini comme désignant «un ensemble de tâches et de fonctions qui sont ou devraient être accomplies par une personne, y compris pour un employeur ou dans le cadre du travail indépendant…», qu'il soit formel ou informel. Un emploi peut aussi se rapporter aux services non rémunérés au sein des ménages ou au travail bénévole accomplis par une personne pour un ménage en dehors du domaine de production du SCN mais à l'intérieur de son domaine de la production générale. Prendre l'emploi comme unité d'observation de base du temps de travail est compatible avec la Classification internationale type des professions (CITP), la Classification internationale d'après la situation dans la profession (CISP) et les principes de la Classification internationale type, par activité économique (CITI). Une personne peut avoir un ou plusieurs emplois.

7. Le temps de travail peut être mesuré au moyen d'unités de mesure courtes comme les minutes ou les heures, ou d'unités plus longues comme les demi-journées, les jours, les semaines ou les mois. Par commodité, l'«heure» est l'unité de mesure communément utilisée.

8. Le temps de travail peut être étudié sur une période de référence courte comme une journée ou une semaine, ou longue comme un mois, une année ou plus, voire une durée de vie. Pour les comptes nationaux et les statistiques de la production en général, il convient de mesurer le temps de travail sur une période de référence longue.

9. Le temps de travail ne rend pas compte de la qualité, de l'intensité ni de l'efficacité du travail.

Concepts et définitions

10. 1) La présente résolution définit:

a) sept concepts relatifs au temps de travail consacré aux activités productives exercées par une personne dans le cadre d'un emploi, à savoir les *heures réellement effectuées*, concept clé défini aux fins de statistiques pour tous les emplois et

toutes les personnes qui travaillent; les *heures rémunérées* liées à la rémunération d'heures qui ne sont pas nécessairement toutes consacrées à la production; les *heures normales*, qui sont les heures de travail fixées par la législation; les *heures contractuelles*, qui sont les heures censées être effectuées en vertu de contrats de travail individuels et qui sont distinctes des heures normales; les *heures habituellement effectuées*, le plus souvent dans un emploi au cours d'une période d'observation longue; les *heures supplémentaires*, effectuées en sus des heures prévues par le contrat ou par les règles en vigueur; et les *heures d'absence* des personnes qui ne travaillent pas alors qu'elles sont censées travailler;

b) deux concepts relatifs à l'aménagement du temps de travail, qui décrivent les caractéristiques du temps de travail d'un emploi, à savoir l'*organisation* et la *programmation* du temps de travail, quel que soit le type d'emploi; et l'aménagement formalisé du temps de travail qui consiste en des combinaisons spécifiques de caractéristiques juridiquement reconnues.

2) Tous les concepts relatifs au temps de travail ne s'appliquent pas à tous les types d'emploi. Leur application est précisée pour chacun des concepts définis ci-après.

Heures réellement effectuées

11. 1) Les *heures réellement effectuées* représentent le temps consacré, dans le cadre d'un emploi, à des activités qui contribuent à la production de biens et/ou de services au cours d'une période de référence donnée, courte ou longue. Les heures réellement effectuées s'appliquent à tous les types d'emploi (à l'*intérieur et au-delà du domaine de la production du SCN*) et elles ne sont pas liées à des concepts administratifs ou juridiques.

2) Les heures réellement effectuées, mesurées *à l'intérieur du domaine de la production du SCN*, **incluent** le temps directement ou indirectement consacré à des activités productives, les temps morts et les courtes périodes de repos.

a) Les «heures directement consacrées» à une activité productive représentent le temps consacré aux tâches et fonctions d'un emploi. Elles peuvent être accomplies quel que soit le lieu (le territoire économique, l'établissement, la rue, le domicile) et durant des périodes d'heures supplémentaires ou d'autres

périodes où le travailleur n'est pas censé travailler (telles que pauses-déjeuner ou trajets entre le lieu de travail et le domicile).

b) Les «heures indirectement consacrées» à une activité productive représentent le temps passé à entretenir, faciliter ou développer les activités productives et comprennent des activités telles que:

   i) le nettoyage, la réparation, la préparation, la conception, la gestion ou l'entretien des outils, instruments, processus et procédures ou du lieu de travail lui-même; le changement de vêtements (pour des vêtements de travail); la décontamination ou la toilette;
   ii) l'achat ou le transport de biens ou de matières premières en direction ou en provenance du marché ou du lieu d'approvisionnement;
   iii) l'attente des commandes, de la clientèle ou des patients prévue dans l'aménagement du temps de travail et/ou explicitement rémunérée;
   iv) les périodes d'astreinte explicitement rémunérées ou non rémunérées, effectuées sur le lieu de travail (dans les services de soins de santé et autres services essentiels) ou dans un autre lieu (par exemple au domicile). Dans ce dernier cas, les périodes d'astreinte sont prises en compte dans les heures réellement effectuées en fonction du niveau de restriction de la liberté d'action et de déplacement des personnes. A partir du moment où la personne est rappelée, le temps correspondant est considéré comme directement consacré à son activité;
   v) les déplacements effectués pour se rendre d'un lieu de travail à un autre, sur le site des projets, dans des zones de pêche, en mission, à des conférences, ou pour rencontrer des clients (vente porte-à-porte et activités itinérantes);
   vi) les activités de formation et d'amélioration des compétences requises pour exercer l'emploi ou un autre emploi au sein de la même unité économique, sur le lieu de travail ou en dehors de celui-ci. Dans le cas d'un emploi salarié, ces activités de formation et d'amélioration des compétences peuvent être fournies par l'employeur ou par d'autres unités.

c) Les «temps morts», à distinguer des heures «directement» ou «indirectement consacrées» à l'activité, sont les périodes au cours desquelles la personne dans son emploi ne peut pas travailler en raison, par exemple, d'un incident technique ou d'une interruption des activités, d'un accident, d'un manque de fournitures, d'une panne d'électricité ou d'un défaut d'accès à l'Internet …, mais continue d'être disponible pour travailler. Ces périodes d'interruption temporaire du travail pour des raisons techniques, matérielles ou économiques sont inévitables ou inhérentes à la nature de l'emploi.
d) Les «périodes de repos» sont de courtes pauses pour se détendre, prendre une collation ou prier, qui sont généralement conformes à la coutume ou au contrat, selon les normes établies ou les conditions nationales.

3) Les heures réellement effectuées, mesurées *à l'intérieur du domaine de la production du SCN*, **excluent** le temps non travaillé tel que:

a) le congé annuel, les jours fériés, le congé de maladie, le congé parental ou de maternité ou de paternité, les autres absences pour raisons personnelles ou familiales ou devoir civique. Ce temps non travaillé fait partie des heures d'absence (définies au paragraphe 17);
b) la durée des trajets entre le lieu de travail et le domicile, lorsque aucune activité productive n'est réalisée pour l'emploi; et dans le cas d'un emploi salarié, même si ces heures sont rémunérées par l'employeur;
c) le temps consacré à des activités de formation générale distinctes des activités couvertes par le paragraphe 11.2 *b) vi)*; et dans le cas d'un emploi salarié, même si cette activité est autorisée, payée ou organisée par l'employeur;
d) les pauses plus longues qui se distinguent des courtes périodes de repos pendant lesquelles aucune activité productive n'est réalisée (par exemple, les pauses pour les repas ou les périodes naturelles de repos au cours des déplacements de longue durée); et dans le cas d'un emploi salarié, même lorsqu'elles sont rémunérées par l'employeur.

4) Les heures réellement effectuées, mesurées *au-delà du domaine de la production du SCN*, **incluent** le temps directement ou indirectement consacré à des activités productives, telles que

définies à l'alinéa 2 du paragraphe 5; les temps morts et les courtes périodes de repos.

a) Les «heures directement consacrées» à l'activité représentent le temps consacré aux tâches et fonctions correspondantes, qui peuvent inclure des activités telles que: la préparation des repas, les soins aux membres du ménage; le nettoyage et l'entretien de la maison, du jardin, des habits et de l'équipement du ménage; l'achat ou le transport de biens pour le ménage, le transport de membres du ménage, la comptabilité et la gestion du ménage.
b) Les «heures indirectement consacrées» à une activité productive représentent le temps passé à assurer l'entretien, faciliter ou développer les activités productives et incluent par exemple les déplacements pour rencontrer ou attendre des personnes à charge, ou encore le temps nécessaire pour acquérir la formation requise pour exercer cet emploi.
c) Les «temps morts» sont moins significatifs pour un emploi *au-delà du domaine de la production du SCN* parce que la substitution d'une tâche pour le ménage pour une autre peut se faire plus rapidement.
d) Les «périodes de repos» sont de courtes pauses pour se détendre, prendre une collation ou prier.

5) Les heures réellement effectuées *au-delà du domaine de la production du SCN* **excluent** le temps non travaillé, tel que les devoirs civiques et les activités de formation générale autres que la formation couverte dans l'alinéa 4 b) du paragraphe 11.

Heures rémunérées

12. 1) Les *heures rémunérées* s'appliquent à un emploi salarié et à un emploi non salarié payé sur la base d'unités de temps (*à l'intérieur du domaine de la production du SCN*).

2) Pour un emploi salarié, les heures rémunérées sont:

a) Le temps consacré à un emploi salarié en contrepartie d'une rémunération versée par l'employeur (au taux normal ou majoré, en espèces ou en nature) pendant une période de référence donnée, courte ou longue, que les heures aient été réellement effectuées ou non.

b) Elles **incluent** les périodes rémunérées mais non travaillées, telles que le congé annuel payé, les jours fériés payés et certaines absences comme le congé de maladie payé.
c) Elles **excluent** les périodes travaillées mais non rémunérées par l'employeur, telles que les heures supplémentaires non rémunérées, ni les absences qui ne sont pas rémunérées par l'employeur comme le congé d'éducation ou le congé de maternité qui sont rémunérés par des transferts d'une administration publique provenant du régime de sécurité sociale.

3) Pour un emploi non salarié (formel ou informel) payé sur la base d'unités de temps, les heures rémunérées équivalent aux heures réellement effectuées.

4) Il peut être utile de séparer les heures rémunérées qui sont réellement effectuées (que ce soit ou non des heures supplémentaires) des autres heures rémunérées (non travaillées).

Heures normales

13. 1) Les *heures normales* sont les heures fixées ou réglementées par la législation, par accords collectifs ou par sentences arbitrales, à effectuer dans des emplois rémunérés spécifiés au cours d'une période de référence donnée, qui peut être d'un jour, d'une semaine, d'un mois ou d'une année (*à l'intérieur du domaine de la production du SCN*). Les heures normales de travail peuvent donc s'appliquer à un emploi non salarié lorsque les horaires sont en accord avec les horaires fixés pour tous les emplois d'une branche ou d'une profession donnée (telle que celle des conducteurs assurant la sécurité des usagers).

2) Les heures normales peuvent varier, d'un emploi rémunéré à un autre, en fonction de la profession ou de la branche d'activité, selon la source qui les réglemente.

3) Les heures normales d'un emploi non salarié peuvent servir à la comparaison avec les heures normales d'un emploi salarié pour une même profession ou branche d'activité.

4) Dans les Etats où il est largement utilisé, le concept d'heures normales peut servir de critère pour définir le travail à temps plein et le travail à temps partiel.

Heures contractuelles

14. 1) Les *heures contractuelles* représentent le temps de travail à effectuer par référence à un contrat pour un emploi salarié ou une prestation de services pour un emploi non salarié ou bénévole (à l'*intérieur ou au-delà du domaine de la production du SCN*). Le contrat peut mentionner des droits à congés et être soit explicite (contrat écrit), soit implicite (accord verbal).

2) Le nombre d'heures contractuelles peut être fixé pour une période de référence courte ou longue, ou varier d'une période à l'autre en fonction de l'organisation du travail et de la durée de la période de référence retenue pour le mesurer. Si la période de référence est longue, il convient d'en exclure les périodes de congé.

3) Le nombre d'heures contractuelles peut varier d'un emploi à l'autre au sein d'une même profession, d'une même branche d'activité ou d'un même établissement.

4) Le nombre d'heures contractuelles peut être équivalent à celui des heures normales en vigueur, ou établi en conformité avec celui-ci; il peut aussi inclure en sus des heures normales, certaines heures supplémentaires stipulées dans le contrat.

Heures habituellement effectuées

15. 1) Les *heures habituellement effectuées* constituent la valeur type des heures réellement effectuées dans un emploi pendant une période de référence courte, d'une semaine par exemple, pour une période d'observation longue d'un mois, d'un trimestre, d'une saison ou d'une année comprenant la période de référence courte utilisée pour la mesure. Les heures habituellement effectuées s'appliquent à tous les types d'emploi (*à l'intérieur et au-delà du domaine de la production du SCN*).

2) La valeur type peut être la valeur modale des heures réellement effectuées réparties par période courte au cours de la période d'observation longue, lorsqu'elle est significative.

3) Les heures habituellement effectuées peuvent permettre d'estimer les heures travaillées régulièrement au-delà des heures contractuelles.

4) La période de référence courte utilisée pour mesurer les heures habituellement effectuées doit être la même que la période de référence utilisée pour mesurer l'emploi ou les services au sein des ménages et le travail bénévole.

Heures supplémentaires

16. 1) Les *heures supplémentaires* s'appliquent à tous les types d'emploi (*à l'intérieur ou au-delà du domaine de la production du SCN*) et correspondent:

a) aux heures définies comme heures supplémentaires dans le contrat de travail, durant une courte période de référence donnée, ainsi qu'aux heures réellement effectuées en plus des heures contractuelles de travail, si elles existent;
b) ou bien aux heures réellement effectuées en plus des heures habituellement effectuées dans un emploi quand il n'existe pas d'heures contractuelles.

2) Les heures supplémentaires **excluent** les heures réellement effectuées en plus des heures contractuelles, lorsqu'elles résultent de périodes de roulement prévues dans l'aménagement du travail (horaire flexible ou travail posté) pour une période de référence courte ou longue.

3) Les heures supplémentaires effectuées dans l'emploi salarié peuvent être ou non rémunérées. Le paiement peut se faire en espèces au même taux que les autres heures ou en espèces à un taux plus élevé, ou en nature et/ou sous forme de compensation en termes de repos compensatoire.

4) Il peut être utile d'établir une distinction entre:

a) les heures supplémentaires rémunérées et non rémunérées;
b) les heures supplémentaires et les différentes formes de compensation accordée dans chaque cas;
c) les heures supplémentaires définies comme heures supplémentaires dans le contrat de travail et les autres heures supplémentaires, le cas échéant;
d) les heures supplémentaires régulières et les autres heures supplémentaires, lorsque les heures supplémentaires régulières sont des heures habituellement effectuées en plus des heures contractuelles;

e) les heures supplémentaires effectuées dans les emplois salariés et dans les emplois non salariés.

5) Il peut enfin être utile d'établir une distinction entre les heures supplémentaires et les heures réellement effectuées en plus des heures contractuelles, liées à des aménagements de travail.

Heures d'absence

17. 1) Les *heures d'absence* s'appliquent à tous les emplois (*à l'intérieur et au-delà du domaine de la production du SCN*) et sont définies comme:

a) le nombre d'heures contractuelles non réellement effectuées au cours d'une période de référence courte, d'une semaine par exemple, lorsque des heures contractuelles existent; elles incluent les périodes de congé éventuellement prévues dans le contrat d'emploi, y compris le contrat de travail à temps partiel;
b) le nombre d'heures habituellement effectuées mais non réellement effectuées au cours d'une période de référence courte quand il n'existe pas d'heures contractuelles.

2) Les heures d'absence du travail **excluent** le temps non travaillé du fait des aménagements institués du temps de travail (temps libre flexible ou travail posté).

3) Les heures d'absence dans un emploi salarié peuvent être ou non rémunérées, et relever de l'initiative des travailleurs ou des employeurs.

4) Il peut être utile d'établir une distinction entre:

a) les heures d'absence rémunérées et non rémunérées; et entre celles qui relèvent de l'initiative du travailleur et celles qui relèvent de l'initiative de l'employeur;
b) les heures d'absence régulières et occasionnelles, où les heures d'absence régulières sont définies comme la différence entre le nombre d'heures contractuelles et celui des heures habituellement effectuées;
c) les heures d'absence dans les emplois salariés et non salariés;

5) Il peut enfin être utile d'établir une distinction entre les heures d'absence et la différence entre le nombre d'heures contractuelles et celui des heures réellement effectuées, liées à l'aménagement du temps de travail.

6) L'absence du travail peut être due à un congé annuel (incluant un congé annuel imposé), à une maladie, lésion ou à une lésion professionnelle, à un congé de maternité, de paternité ou parental, à la compensation d'heures supplémentaires, à la prise en charge d'autrui – incluant les membres de la famille, au congé d'éducation, à d'autres motifs d'ordre personnel (service militaire, service civil, obligations de servir dans un jury, deuil familial), à un arrêt de travail pour des raisons techniques ou économiques (autres que celles mentionnées à l'alinéa 2 c) du paragraphe 11), aux relations professionnelles (négociations professionnelles, grève, suspension d'activité, etc.), au mauvais temps, aux jours fériés publics ou autres, ou à un autre motif.

Aménagement du temps de travail

18. 1) L'*aménagement du temps de travail* décrit les caractéristiques d'un emploi ayant trait à l'organisation (durée et répartition) et à la programmation (stabilité ou flexibilité) des temps travaillés ou non travaillés au cours d'une période de référence donnée, qui peut être d'un jour, d'une semaine, d'un mois ou d'une plus longue durée, et il s'applique à tous les types d'emploi (*à l'intérieur et au-delà du domaine de production du SCN*), y compris dans l'emploi informel et dans les communautés agricoles.

a) L'organisation se rapporte à la durée et à la répartition du temps de travail:

i) la durée peut être plus courte ou plus longue que la norme fondée sur les circonstances nationales, comprendre plus ou moins d'heures quotidiennes ou hebdomadaires, plus ou moins de journées travaillées par semaine pour une période de référence courte, ou moins de semaines (sur une partie de l'année) pour une période de référence longue;

ii) le temps peut être réparti à l'intérieur ou en dehors des plages horaires fixes ou des journées fixes (travail de nuit ou en fin de semaine).

b) La programmation se rapporte à la stabilité ou à la flexibilité de la durée et de la répartition du temps de travail, d'un jour à l'autre, d'une semaine à l'autre ou d'une période plus longue à une autre: changements quotidiens ou hebdomadaires d'équipes, différentes heures d'arrivée et de départ, etc.

2) L'*aménagement formalisé du temps de travail* consiste en des combinaisons spécifiques d'organisation et de programmation du temps de travail qui sont inscrites dans une loi, une convention collective, etc. Ces combinaisons peuvent être stipulées par un contrat de travail explicite ou implicite.

a) L'aménagement formalisé du temps de travail peut être plus utile pour les Etats qui ont une terminologie et des pratiques raisonnablement bien réglementées et/ou normalisées et dans lesquels un nombre significatif de personnes relève de telles dispositions.
b) Un emploi non salarié ou dans les services au sein des ménages ou rattaché au travail bénévole peut comporter un aménagement formalisé du temps de travail dicté par les conditions de travail, les préférences personnelles ou domestiques (par exemple, le contrat conclu avec le client, ou les heures fixes d'ouverture des magasins, des écoles, etc.).
c) Afin de décrire les nombreuses formes d'aménagement formalisé du temps de travail qui existent dans les Etats, parfois sous des noms différents, une typologie de ces aménagements est proposée en annexe à la présente résolution.

3) Il peut être utile de distinguer d'autres caractéristiques concernant l'aménagement du temps de travail et l'aménagement formalisé du temps de travail, par exemple:

a) Le choix, le contrôle ou l'influence des personnes sur l'aménagement lui-même ou sur ses caractéristiques; le caractère facultatif, obligatoire ou choisi de l'aménagement; la prévisibilité des caractéristiques (notification préalable, débat ou consensus entre les parties); la durée de l'aménagement de l'emploi concerné (ou principal).
b) Le nombre d'aménagements pratiqués, selon la nature des dispositions qui les régissent (loi, contrat, usage ou décision individuelle).

c) Le type de lieu de travail où il est pratiqué (fixe, mobile, établissement, domicile), par aménagement pratiqué.

Méthodes de collecte de données

19. 1) Les statistiques du temps de travail peuvent être collectées par le biais de recensements et d'enquêtes statistiques auprès des ménages et des établissements, ainsi que des registres administratifs.

2) Lorsque cela est possible et pertinent, la combinaison de plusieurs sources de données peut être préférable pour mieux répondre aux besoins des utilisateurs (couverture, champ d'étude, taux de réponse, taille de l'échantillon, effort des personnes interrogées et coûts) et de mieux évaluer la qualité des statistiques obtenues.

3) Pour assurer une plus grande cohérence à l'analyse, il convient de collecter les statistiques du temps de travail en utilisant une période de référence et des désagrégations ou catégories d'emplois identiques à ceux utilisés pour la collecte des statistiques de l'emploi, des salaires et du coût de la main-d'œuvre, etc.

4) Pour l'utilisation statistique la plus efficiente possible des informations sur le temps de travail, pour une harmonisation des mesures statistiques et une amélioration de la couverture, ainsi que pour un enregistrement, une présentation et une qualité correctes des statistiques, il faut que les autorités chargées des statistiques travaillent de concert avec les utilisateurs et les fournisseurs d'informations, à savoir les systèmes administratifs et les établissements.

5) Les Etats devront arbitrer entre l'objectif d'obtenir des informations détaillées et la contrainte liée à la possibilité pour les personnes interrogées de fournir ces informations. Par exemple, lorsqu'on collecte des données sur le temps de travail pour une période de référence dépassant un jour, les définitions des heures supplémentaires et des heures d'absence peuvent entraîner une sous-estimation du nombre total de ces heures. Pour les saisir dans leur totalité, une collecte particulière pour chaque concept sur la période de référence pourra être nécessaire, si c'est approprié.

Enquêtes auprès des ménages

20. 1) Les enquêtes auprès des ménages sont bien adaptées à la collecte de données:

a) sur les heures réellement effectuées et les heures habituellement effectuées, sur l'aménagement formalisé du temps de travail et les caractéristiques de l'aménagement. Elles peuvent aussi produire des statistiques sur les heures rémunérées, normales ou contractuelles;
b) concernant toutes les personnes qui travaillent et tous les emplois, y compris dans l'emploi informel et les services au sein des ménages et le travail bénévole;
c) sur une période de référence courte comme le jour ou la semaine et lorsque l'enquête est en continu; sur une période de référence longue comme le mois ou l'année;
d) sur les individus et sur l'économie dans son ensemble.

2) Les enquêtes auprès des ménages sont moins bien adaptées à la collecte d'informations:

a) pour des concepts qui sont d'ordre administratif ou réglementaire;
b) couvrant tous les emplois dans l'Etat (production domestique selon le SCN).

3) Pour limiter les erreurs de mémoire et celles qui sont dues aux réponses indirectes et à l'imprécision des renseignements donnés, il est recommandé que les questionnaires sur le temps de travail soient conçus de manière à:

a) déterminer dans un premier temps la situation dans l'emploi des personnes interrogées pour séparer les salariés et les indépendants en vue de poser à chacune de ces deux catégories des questions correspondant à sa situation;
b) obtenir des informations sur chaque emploi séparément ou au moins sur l'emploi principal et les autres emplois pris ensemble;
c) obtenir des informations d'abord sur les heures contractuelles ou les heures habituellement effectuées et ensuite sur les heures réellement effectuées, car les variables relatives aux contrats d'emploi ou à la situation de travail habituelle sont

généralement plus faciles à mémoriser, surtout dans les entretiens indirects;

i) pour les emplois salariés, les heures réellement effectuées peuvent être calculées après avoir obtenu des réponses sur les éventuelles heures supplémentaires ou heures d'absence de la semaine de référence;
ii) pour les emplois non salariés, pour les salariés dans l'emploi informel ainsi que pour les emplois dans les services au sein des ménages et le travail bénévole, afin d'améliorer la qualité des données sur les heures réellement effectuées, il est recommandé de recueillir des informations ou d'inciter les personnes interrogées sur chaque jour de la semaine de référence et non, en bloc, durant toute la semaine, ainsi que d'indiquer le temps consacré à tous les différents types de services au sein des ménages;

d) afin d'améliorer la mesure des heures réellement effectuées pour certains emplois et pour certaines catégories de personnes en emploi, des questions additionnelles ou des interrogations supplémentaires pourront être posées sur des composantes précises du temps de travail, telles que le travail à domicile, la durée des trajets entre le lieu de travail et le domicile, les pauses de courte durée, les heures supplémentaires et les heures d'absence;

e) pour déterminer les heures habituellement effectuées, lorsque celles-ci ne sont pas collectées directement, il faut se référer à la valeur modale des heures réellement effectuées par semaine, réparties sur une longue période d'observation. Si cette valeur n'est pas significative à cause du caractère irrégulier des heures réellement effectuées chaque semaine, ou de la répartition du travail sur une base autre qu'hebdomadaire, on pourra utiliser:

i) soit le nombre médian d'heures réellement effectuées au cours de la période d'observation;
ii) soit le nombre moyen d'heures réellement effectuées, compte non tenu des périodes de chômage ou d'inactivité de la période de référence longue.

4) Lorsqu'elles sont fondées sur des enquêtes auprès des ménages, les meilleures estimations des heures réellement effectuées seront tirées des enquêtes en continu qui sont axées sur la mesure de l'emploi et qui couvrent toutes les semaines de l'année. A défaut d'enquêtes en continu, les Etats devraient estimer les périodes non couvertes et étaler les périodes d'observation sur toute l'année plutôt que d'allonger la période de référence.

21. D'autres méthodes de collecte de données auprès des ménages peuvent être utilisées pour produire des statistiques du temps de travail:

1) Les enquêtes-emploi du temps peuvent produire des statistiques de bonne qualité sur les heures réellement effectuées, sur les heures d'absence ainsi que sur la durée et la répartition des aménagements du temps de travail. Elles captent particulièrement bien les heures réellement effectuées dans l'emploi non salarié irrégulier, atypique, ou exercé simultanément avec une activité de services au sein des ménages. Toutefois, elles sont moins aptes à déterminer le temps consacré au sein d'un emploi à des activités simultanées et à en isoler les activités rémunérées en dehors du ménage. Ces enquêtes peuvent être utilisées pour évaluer et comparer la qualité des heures réellement effectuées, mesurées au moyen d'autres instruments d'enquête, puis procéder à des ajustements. L'utilité des enquêtes-emploi du temps en tant que source de collecte de données peut être réduite, compte tenu de leur fréquence (irrégulière et rarement annuelle), de la petite taille des échantillons, de la charge que représente la réponse aux enquêtes et du coût de la compilation des données.

2) Les recensements de population permettent d'obtenir des statistiques des heures réellement effectuées pour des emplois concernant des zones géographiques et des groupes de population de dimension réduite. Toutefois, il n'est pas toujours possible d'incorporer dans le questionnaire ni dans le temps d'entretien une série de questions pour chaque concept, pour chaque jour de la période de référence et pour chaque emploi ou activité. Lorsque le recensement est la seule source de données disponible, il devrait comporter au moins une question soit sur les heures réellement effectuées pendant une période courte précédant la date de référence du recensement, soit sur les heures habituellement effectuées, pour l'emploi principal.

3) Les enquêtes mixtes auprès des ménages et auprès des entreprises sur le secteur informel sont une source de statistiques sur les heures réellement effectuées ou les heures habituellement effectuées pour un emploi de ce type au cours d'une période de référence courte ou longue. Les techniques d'entretien utilisées pour mesurer le temps de travail des travailleurs du secteur informel, dont la plupart travaillent dans des logements privés, sont proches de celles utilisées dans les enquêtes auprès des ménages pour interroger les personnes ayant un emploi non salarié. Il peut être difficile d'utiliser ces enquêtes mixtes en raison de leur coût, dont se ressent la qualité des données.

4) Les enquêtes sur l'emploi agricole et la structure des exploitations agricoles peuvent permettre de collecter des statistiques sur les heures habituellement effectuées par les ouvriers agricoles sur une période de référence longue telle que l'année.

Enquêtes auprès des établissements

22. 1) Les enquêtes auprès des établissements sont bien adaptées pour obtenir des données:

a) sur les heures rémunérées, les heures contractuelles, les heures supplémentaires rémunérées et les droits aux congés, généralement enregistrés à des fins de contrôle, ainsi que sur l'aménagement formalisé du temps de travail. Elles peuvent aussi produire des statistiques sur les heures normales ou les heures réellement effectuées;
b) pour l'ensemble ou un sous-ensemble des emplois salariés de l'établissement ou de l'ensemble ou d'un sous-ensemble des établissements;
c) pour une période de référence longue, d'une semaine, d'un mois, d'une année ou de la période correspondant à la paie, par exemple;
d) pour des emplois pris individuellement, comme moyennes pour des catégories d'emplois ou pour l'établissement dans son ensemble.

2) Les enquêtes auprès des établissements sont moins adaptées à la mesure de concepts qui ne sont ni d'ordre administratif ni d'ordre réglementaire. Les données provenant de telles enquêtes se rapportent principalement à des concepts liés à la rémunération

et au contrat d'emploi ainsi qu'à certains types d'aménagement formalisé du temps de travail.

3) Pour diminuer les erreurs dues aux différences de rémunération et de systèmes administratifs entre les établissements, il est recommandé d'inclure dans le questionnaire des questions sur:

   a) les pratiques en matière de rémunération d'activités particulières telles que les pauses-déjeuner, les trajets entre le domicile et le lieu de travail, le temps de préparation au travail (changement de vêtements compris), les pauses de courte durée, les périodes d'absence et les heures supplémentaires;
   b) les emplois non salariés couverts.

4) Les statistiques sur le temps de travail tirées de ce type de source, même lorsque la couverture des emplois est incomplète, peuvent être utilisées pour signaler des changements.

5) Les heures contractuelles peuvent être comptabilisées en groupes d'heures, en pourcentage des heures normales pour un emploi à plein temps, en unités de plein temps/temps partiel, ou en nombre d'heures. Les informations doivent être collectées en fonction des composantes des heures supplémentaires rémunérées non contractuelles, des heures d'absence non rémunérées, et des heures contractuelles, ce qui permettra aux producteurs de statistiques d'effectuer des contrôles de qualité ou de calculer les heures rémunérées ou les heures réellement effectuées, si celles-ci ne sont pas fournies directement par l'établissement.

6) Si les heures contractuelles ou les heures rémunérées ne sont pas recueillies en tant que telles, elles peuvent être induites d'autres données. On pourra obtenir une estimation du nombre total d'heures contractuelles en multipliant le nombre des travailleurs à temps plein par le nombre des heures de travail à temps plein et le nombre des travailleurs à temps partiel par le nombre des heures de travail à temps partiel – et en additionnant les deux résultats. On peut obtenir une estimation du nombre total des heures rémunérées en multipliant le nombre des travailleurs par leurs taux de salaire et en divisant la masse salariale par le résultat de cette multiplication.

Registres administratifs

23. 1) Les registres administratifs sont utiles pour obtenir des informations:

a) sur les heures contractuelles, les heures rémunérées, les heures d'absence rémunérées, et les heures normales, y compris les congés;
b) pour les emplois et les personnes couverts;
c) pour des périodes de référence longues, d'un mois, d'un trimestre ou d'une année, par exemple.

2) Les données fournies par cette source peuvent provenir des enregistrements des organismes de sécurité sociale, des services d'inspection du travail et des enregistrements spécifiés dans les conventions collectives ou de la législation. Selon les circonstances nationales, les informations sur les revenus ou les registres fiscaux concernant les revenus tirés de l'emploi salarié et de l'emploi indépendant peuvent, combinés à d'autres renseignements, permettre de calculer les heures rémunérées ainsi que certaines heures d'absence rémunérées.

3) Les données tirées des registres administratifs sont généralement utiles pour vérifier et peuvent corriger ou ajuster les données des enquêtes auprès des établissements ou auprès des ménages et permettre ainsi d'obtenir des estimations des heures réellement effectuées ainsi que des heures d'absence dues à la maladie, la maternité, aux lésions professionnelles, grèves et lock-out.

4) Les registres des emplois pourvus renseignent généralement davantage sur le temps de travail que ceux des postes à pourvoir et des demandes d'emplois.

Estimations dérivées

Total des heures réellement effectuées

24. 1) Le total des heures réellement effectuées est la somme des heures réellement effectuées par toutes les personnes dans tous les emplois pour les catégories étudiées (comme par exemple le secteur économique ou la région et à l'*intérieur ou au-delà du domaine de la production du SCN*) au cours d'une période de référence donnée.

2) Le total des heures réellement effectuées est aussi appelé volume de travail ou facteur travail; il englobe tous les emplois d'un Etat. La période de référence peut être courte ou longue.

3) La production totale divisée par le nombre total des heures réellement effectuées fournit des indicateurs de productivité du travail. Le total des heures réellement effectuées doit être calculé sur le même champ d'emplois et en utilisant la même période de référence que pour l'estimation de la production, définie généralement *à l'intérieur du domaine de la production du SCN.*

4) Le total des heures réellement effectuées sert aussi pour construire nombre d'autres indicateurs socio-économiques sur le travail. De tels indicateurs peuvent nécessiter de disposer du total des heures réellement effectuées ventilé selon les caractéristiques des emplois, des établissements et des personnes.

25. 1) Les enquêtes en continu auprès des ménages peuvent fournir des estimations du total des heures réellement effectuées pour une période de référence longue, sur la base d'observations pour toutes les semaines comprises dans la période. Les estimations des heures réellement effectuées tout au long de la période, ajustées en fonction des journées éventuellement non comprises dans cette période, donnent le total des heures réellement effectuées pour la période de référence longue.

2) Lorsque l'enquête n'est pas continue, cibler la période de référence souhaitée suppose une extrapolation pour les périodes qui ne sont pas directement couvertes. Si l'enquête n'est pas effectuée de manière suffisamment fréquente et si la semaine de référence est choisie de manière à éviter les semaines spéciales (contenant par exemple des jours fériés), des ajustements doivent être effectués pour tenir compte d'éventuels effets liés au calendrier, de la réglementation du temps de travail et des informations sur le temps de travail provenant d'autres sources.

3) Lorsque l'enquête auprès des ménages ne collecte que les heures habituellement effectuées, pour mesurer le nombre total d'heures réellement effectuées, on prendra le nombre d'heures habituellement effectuées, majoré de toutes les heures supplémentaires occasionnelles et minoré de toutes les heures d'absence occasionnelles.

4) Pour calculer la productivité de la main-d'œuvre sur une période de référence longue, les estimations des heures réellement effectuées tirées des enquêtes auprès des ménages doivent être complétées par des estimations pour les emplois non couverts par l'enquête (par exemple, les emplois de personnes vivant dans des ménages collectifs ou résidant dans un Etat étranger). Sont à exclure les heures réellement effectuées correspondant à des emplois situés dans des unités économiques en dehors de l'Etat mais tenus par des personnes résidant à l'intérieur de l'Etat.

26. 1) Le nombre total d'heures réellement effectuées tiré des enquêtes auprès des établissements sera généralement calculé à partir des heures rémunérées ou des heures contractuelles ou habituellement effectuées, qu'il faut transformer en heures réellement effectuées. Les calculs dépendront des données disponibles:

a) le nombre total d'heures réellement effectuées est égal aux heures rémunérées plus les heures supplémentaires non rémunérées moins les heures d'absence rémunérées;
b) le nombre total d'heures réellement effectuées est égal aux heures contractuelles plus les heures supplémentaires non contractuelles moins les heures d'absence.

2) Il faut prendre soin de couvrir la période de référence longue et la totalité de la population par des observations répétées ou continues ou des ajustements pour toutes les périodes manquantes; et il faut aussi incorporer les estimations des heures réellement effectuées par les non-salariés ou par les salariés des unités non représentées, notamment les petits établissements, les unités agricoles ou informelles ainsi que les heures correspondant aux services au sein des ménages et au travail bénévole.

Moyennes des heures annuelles réellement effectuées

27. 1) La moyenne des heures annuelles réellement effectuées est obtenue en divisant le total des heures réellement effectuées durant un an par un nombre de personnes, dépendant de ce que l'on veut mesurer et des sources disponibles. Numérateur et dénominateur doivent si possible être homogènes. Le dénominateur peut être:

a) le nombre moyen de personnes en emploi (qu'elles soient ou non au travail) par semaine au cours de l'année;

b) le nombre moyen des emplois au cours de l'année, qui correspond au total des heures réellement effectuées;
c) la taille moyenne de la population au cours de l'année.

Tabulation et analyse des données

28. 1) Les statistiques sur le temps de travail peuvent être tabulées à de multiples fins, descriptions ou analyses à l'*intérieur ou au-delà du domaine de la production du SCN*, en fonction des circonstances et des priorités nationales.

2) Les statistiques sur les heures réellement effectuées, les heures rémunérées, les heures contractuelles et les heures habituellement effectuées peuvent se rapporter: a) au nombre d'emplois ou de personnes, en fonction de différentes tranches d'heures, mais aussi b) à la moyenne des heures par emploi, personne ou unité économique, au cours de la période de référence. Les tranches d'heures doivent permettre une présentation suivant les seuils spécifiques stipulés dans la législation nationale. La moyenne des heures par personne doit couvrir les heures correspondant à tous les emplois occupés au cours de la période de référence.

3) Les statistiques des heures normales peuvent se rapporter au nombre d'emplois ou de personnes en emploi pratiquant différentes durées du travail.

4) Les statistiques des heures supplémentaires peuvent se rapporter:

a) au nombre d'emplois, de personnes ou d'unités économiques concernés par des heures supplémentaires;
b) à la moyenne des heures supplémentaires par emploi, personne ou unité économique au cours de la période de référence.

5) Les statistiques des heures d'absence du travail peuvent se rapporter:

a) au nombre d'emplois, personnes ou unités économiques ayant enregistré une absence du travail au cours de la période de référence, par type d'absence;
b) à la durée moyenne des heures d'absence par emploi, personne ou unité économique au cours de la période de référence, par type d'absence;

c) à la durée moyenne de l'absence du travail enregistrée jusqu'à la période de référence par emploi, personne ou unité économique.

6) Les statistiques de l'aménagement du temps de travail peuvent se rapporter:

a) au nombre d'emplois, personnes ou unités économiques pratiquant un aménagement formalisé du temps de travail, par type d'aménagement;
b) au nombre d'emplois, personnes ou unités économiques qui ont divers types de durées, programmations et répartitions du temps de travail.

29. 1) Si pour calculer la moyenne des heures hebdomadaires réellement effectuées, les Etas ne divisent pas les heures annuelles réellement effectuées par le nombre total de semaines dans l'année, ils doivent préciser si les heures se rapportent à la moyenne des heures réellement effectuées:

a) par personne en emploi «au travail» au cours d'une ou de plusieurs périodes de référence durant l'année;
b) par personne en emploi au cours d'une ou de plusieurs périodes de référence durant l'année;
c) par emploi au cours d'une ou de plusieurs périodes de référence durant l'année;
d) ou tout autre mode de calcul.

30. 1) Pour calculer la productivité sectorielle, il convient de classer les statistiques du nombre total des heures réellement effectuées par branche ou secteur d'activité et de façon à ce que cela corresponde aux statistiques de la production.

2) Pour analyser le marché du travail, il convient de présenter les statistiques du temps de travail ventilées au moins par sexe, ainsi que par statut dans l'emploi et pour des groupes d'âge et des niveaux d'instruction spécifiés. La tabulation et l'analyse peuvent prendre en compte d'autres caractéristiques démographiques, économiques et sociales importantes pour les utilisateurs, de même que des classifications à entrées multiples telles que la catégorie professionnelle, le secteur institutionnel, la branche d'activité

économique et, le cas échéant, le secteur formel/informel (ou emploi formel/informel).

3) Pour rendre compte de la justice de genre et des aspects liés à l'équilibre entre vie professionnelle et vie personnelle, y compris à des fins d'élaboration des politiques publiques, il est indispensable de ventiler les données concernant le temps de travail non seulement par sexe, mais aussi selon des variables telles que la situation matrimoniale, la présence de personnes à charge ou non (jeunes enfants, parents âgés, autres personnes ayant besoin d'assistance) et le temps de travail d'autres/de tous les membres du ménage.

4) Les statistiques sur le temps de travail des personnes correspondent à la somme des heures pour tous les emplois au cours d'une période de référence; pour les classifications de leur temps de travail relatives à l'emploi ou l'unité économique, les caractéristiques doivent se référer à l'emploi principal. Pour les statistiques sur le temps de travail, il est préférable de définir cet emploi principal comme celui ayant la plus longue durée (menée de préférence par les heures contractuelles, ou à défaut par les heures habituelles).

31. Afin d'analyser les évolutions dans le temps et entre Etats des heures réellement effectuées, il peut s'avérer utile d'élaborer des indices en plus des estimations en niveau. Il est dans ce cas particulièrement important de diffuser les résultats en les accompagnant d'informations précises sur les sources statistiques et les méthodes de calcul utilisées pour élaborer ces indices complexes.

32. Toutes les statistiques sur le temps de travail et les informations méthodologiques qui les accompagnent doivent être rassemblées, rendues accessibles à tous les utilisateurs et reproduites en respectant la confidentialité des données vis-à-vis des personnes et des établissements et en veillant à fournir une documentation appropriée. Autant que possible, des fichiers de microdonnées publics (ensembles rendus anonymes et confidentiels) devraient être mis à la disposition des analystes et d'autres utilisateurs intéressés.

Transmission des données au niveau international

33. 1) Pour la présentation de rapports au niveau international sur les statistiques du temps de travail, *à l'intérieur du domaine de la production du SCN*, les Etats devraient viser à fournir au moins:

a) le total des heures réellement effectuées sur une base annuelle;
b) la moyenne annuelle des heures réellement effectuées par personne en emploi (pour tous les emplois); ou,
c) lorsque aucune des deux statistiques ne peut être estimée, alors la moyenne des heures hebdomadaires réellement effectuées;

2) Les Etats qui mesurent le temps de travail *au-delà du domaine de la production du SCN* doivent collecter et présenter leurs statistiques de manière à ce qu'elles puissent être distinguées des statistiques du temps de travail consacré aux activités *à l'intérieur du domaine de la production du SCN.*

3) Pour des comparaisons internationales, les estimations dérivées doivent être désagrégées par sexe afin de permettre les analyses de perspective du genre, ainsi que par situation dans l'emploi. Si possible, ces estimations dérivées devraient aussi être désagrégées par âge, branche d'activité ou secteur institutionnel. D'autres variables peuvent se prêter à une désagrégation utile, comme le niveau d'instruction, la profession, les aménagements du temps de travail, et le secteur ou l'emploi formel et informel.

34. Les Etats pourraient aussi présenter des statistiques sur:

1) la moyenne des heures contractuelles hebdomadaires ou la moyenne des heures hebdomadaires habituellement effectuées;

2) le nombre d'emplois ou de personnes par tranches d'heures réellement effectuées ou d'heures habituellement effectuées par semaine pour les statistiques sur le nombre d'emplois ou de personnes qui effectuent des tranches d'heures différentes, les données devraient être collectées de façon qu'elles puissent être présentées en fonction de tranches d'heures qui peuvent être de quatre ou cinq heures, et doivent dans tous les cas inclure celles de:

a) moins de 15 heures;
b) 40 heures;
c) jusqu'à 48 heures incluses;
d) 60 heures ou plus;

3) le nombre de personnes qui ont été absentes, et par motif d'absence qui doit être ventilé au moins en fonction des grands motifs d'absence suivants:

a) congé annuel (avec le congé annuel forcé identifié séparément, si possible), jours fériés et congé compensateur;
b) maladie et lésion (incluant les lésions professionnelles identifiées séparément, si possible);
c) congé de maternité/paternité/parental et d'assistance;
d) grèves et lock-out;
e) d'autres raisons.

35. Afin d'améliorer la transparence et la comparabilité de toutes les statistiques du temps de travail publiées au niveau international, les Etats sont exhortés à rassembler et diffuser les informations requises sur leurs définitions, méthodologies et concepts nationaux ainsi que sur tout écart par rapport aux recommandations formulées dans la présente résolution. Les Etats devraient par conséquent concevoir des procédures de traitement et de collecte des données qui leur permettent de rendre compte pleinement:

a) des différences entre les définitions statistiques nationales et internationales du temps de travail, le cas échéant;
b) des différences entre leurs propres définitions statistiques et leurs propres définitions administratives et juridiques;
c) des ajustements réalisés pour aboutir à des estimations qui correspondent aux concepts statistiques analytiques et internationaux, et en particulier des enquêtes menées de temps à autre dans le but de déterminer pour chaque branche d'activité le rapport entre le nombre d'heures réellement effectuées et le nombre d'heures rémunérées (définies aux paragraphes 11 et 12).

36. Toutes les statistiques transmises sur le temps de travail et les informations méthodologiques qui les accompagnent doivent être élaborées et présentées en tenant compte de la nécessité d'assurer la confidentialité à l'égard des personnes et des établissement

interrogés, et de fournir une documentation appropriée et accessible à tous les utilisateurs, conformément aux Principes fondamentaux de la statistique officielle des Nations Unies.

Travaux futurs

37. Le BIT devrait prévoir la mise à jour de l'annexe à la résolution et préparer un guide technique qui présenterait les meilleures pratiques destinées à mesurer le temps de travail.

38. Par rapport à la mesure du temps de travail pour les emplois à l'*intérieur et au-delà du domaine de la production du SCN*, le BIT devrait procéder dans la décennie à venir à une revue des capacités nationales à mettre en œuvre la portée de cette résolution et évaluer les implications de ses observations sur le travail futur dans ce domaine.

Annexe

Aménagement du temps de travail

1. L'*aménagement du temps de travail* désigne des caractéristiques mesurables de l'organisation (durée et répartition) et de la programmation (stabilité ou flexibilité) des périodes de travail et des périodes de non-travail pour tous les emplois, telles que définies au paragraphe 18 de la présente résolution. Ces caractéristiques s'appliquent aussi à des dispositions ad hoc et non habituelles. Elles peuvent être multiples (temps partiel, horaires flexibles du travail en équipe) car elles ne s'excluent pas mutuellement.

2. Certains Etats ont adopté différentes combinaisons de ces caractéristiques, qui forment ce qu'il est convenu d'appeler des aménagements formalisés du temps de travail. Ces aménagements se fondent sur la législation, des accords collectifs ou des sentences arbitrales et sont formalisés par le contrat de travail écrit ou la pratique des salariés d'un établissement. Certaines formes d'aménagement formalisé (comme le travail à temps partiel) existent également dans l'emploi indépendant.

3. Les éléments de la typologie de l'*aménagement formalisé du temps de travail*, présentée ici, pourront utilement être consultés afin d'établir des comparaisons au niveau international.

Organisation (durée et répartition)

4. 1) L'*annualisation ou la mensualisation des heures de travail* sont caractérisées par des variations de la durée journalière, hebdomadaire et mensuelle du travail dans une moyenne hebdomadaire, mensuelle ou un total annuel, sans que l'employeur soit tenu de payer des heures supplémentaires dans la mesure où le nombre d'heures annuelles réellement effectuées reste en deçà d'un maximum convenu dans la période spécifiée. Dans le cadre d'un contrat d'annualisation ou de mensualisation, la répartition du nombre d'heures de travail au cours du mois ou tout au long de l'année est généralement fixée par avance par l'employeur, en fonction des besoins du service ou de la production; toutefois, les salariés peuvent être autorisés à négocier la durée journalière ou hebdomadaire de leur travail, dans la mesure où les objectifs de production peuvent être atteints.

2) L'*horaire hebdomadaire comprimé* consiste en la répartition du temps de travail sur un nombre de jours inférieur à ce qui est considéré comme une semaine type ou normale; ainsi, la personne qui travaille en fin de semaine, effectuera moins d'heures pendant la semaine.

3) L'*aménagement de travail fixe* se caractérise par des heures fixes de début et de fin du travail ou des plages horaires fixes pour des salariés ou des catégories de salariés ou pour des personnes à leur compte.

4) Le *partage des emplois* se caractérise par le fait que deux ou plusieurs personnes se partagent (y compris des arrangements de transition) un poste existant à temps plein, chaque personne travaillant à temps partiel, de manière régulière et permanente, parfois selon des modalités différentes.

5) L'*horaire variable* se caractérise par la variabilité du nombre d'*heures réellement effectuées* et rémunérées, en fonction des besoins de la production ou du service, mais avec la garantie d'un nombre minimum et d'un nombre maximum d'heures à travailler au cours de la période de référence.

6) Le *travail à temps partiel* se caractérise par une réduction volontaire ou involontaire de ses horaires ou par un emploi dont les heures contractuelles ou habituelles sont inférieures aux heures effectuées dans des emplois comparables à temps complet (d'une même branche d'activité ou profession), conformément à la convention (no 175) sur le travail à temps partiel, 1994.

7) Les *heures supplémentaires* régulières sont des heures effectuées en sus du nombre d'heures contractuelles ou habituellement effectuées qui, dans l'emploi salarié, donnent lieu à une compensation de l'employeur.

8) L'*horaire fractionné* se caractérise par des heures d'arrivée et de départ établies de façon différente pour chaque personne ou groupe de salariés, autour d'une plage fixe obligatoire, modalité pouvant comporter plusieurs périodes de travail le même jour.

9) Le *compte épargne-temps* se caractérise par la possibilité pour le travailleur d'effectuer un nombre d'heures supérieur aux heures contractuelles ou habituellement effectuées afin de pouvoir, par exemple, prendre une retraite anticipée.

10) Le *cumul d'heures de travail* se caractérise par la possibilité d'accumuler des heures qui peuvent être ultérieurement compensées sous forme de congé prolongé ou utilisées pour abréger la durée totale de la vie active.

11) Les *combinaisons de périodes prolongées de travail et de congé* se caractérisent par un nombre important de semaines de présence sur des sites de travail particuliers (zones éloignées, compagnes en mer, plates-formes de pétrole en mer, etc.) et un nombre de semaines de repos compensatoire.

Programmation (stabilité ou flexibilité)

5. 1) L'*aménagement souple du temps de travail* se caractérise par la possibilité de planifier les heures de travail journalières et hebdomadaires en dehors des plages fixes au cours desquelles la présence est obligatoire sur le lieu de travail. Le temps travaillé en plus des heures contractuelles au cours de la semaine (ou de la période de paiement ou du mois) peut être pris sous forme de congés au cours des semaines ou mois suivants, souvent dans un délai déterminé et jusqu'à un nombre d'heures maximum.

2) L'*horaire individualisé* permet à chaque salarié de planifier lui-même ses heures de travail journalières et hebdomadaires ainsi que sa présence sur le lieu du travail.

3) Le *système de piquet* ne comporte pas de nombre fixe d'heures contractuelles, les personnes devant être disponibles pour travailler sur appel avec un temps de préavis spécifié, pour le nombre d'heures requis par l'employeur dans les limites fixées par la loi ou le contrat.

4) Le *travail posté* désigne la succession au cours d'une même journée de plusieurs périodes de travail en équipe, dénommées «postes». Ce système permet à l'entreprise de rentabiliser au maximum et d'assurer le fonctionnement des équipements au-delà du temps de travail des individus. Les «postes» peuvent ainsi être organisés en équipes du matin, du soir, de la nuit ou de la fin de semaine. Ces postes peuvent être réguliers, alterner avec d'autres types de postes sur une base hebdomadaire ou bihebdomadaire (avec des journées libres le cas échéant) ou consister en périodes de travail multiples le même jour, formule dite des «postes fractionnés».

5) Le *système du changement d'équipe* présente les mêmes caractéristiques que le travail posté mais, dans ce cas, les travailleurs peuvent de surcroît échanger leurs «postes» avec des travailleurs qui travaillent eux aussi en équipe.

6) L'*aménagement des absences-congés* se caractérise par la capacité pour chacun de choisir, contrôler ou influencer la programmation de ces périodes d'absence et de congé, ainsi que la possibilité de prévoir à l'avance ces périodes (par notification, discussion ou consensus entre les parties) et la durée de la période d'aménagement concernée.

Résolution II

Résolution concernant les statistiques sur le travail des enfants

La dix-huitième Conférence internationale des statisticiens du travail,

Convoquée à Genève par le Conseil d'administration du Bureau international du Travail, et s'y étant réunie du 24 novembre au 5 décembre 2008;

Prenant note des discussions qui ont eu lieu lors de la seizième et de la dix-septième Conférence internationale des statisticiens du travail concernant les statistiques sur le travail des enfants;

Rappelant les dispositions de la convention de l'OIT (no 138) sur l'âge minimum, 1973, de la convention (no 182) sur les pires formes de travail des enfants, 1999, et les recommandations (nos 146 et 190), qui les complètent, lesquelles sont pertinentes dans tous les efforts entrepris pour recueillir des statistiques sur le travail des enfants et ne pourraient en aucun cas être affectées par la présente résolution;

Tenant compte de la pertinence de la Convention des Nations Unies de 1989 relative aux droits de l'enfant quant à la définition qu'elle propose des enfants et des droits de l'enfant; notamment l'article 32 sur la protection des enfants contre l'exploitation économique;

Estimant que tous les enfants qui travaillent ne peuvent être considérés comme des enfants qui se trouvent dans le travail des enfants à abolir;

Tenant compte des parties pertinentes de la résolution concernant les statistiques de la population économiquement active, de l'emploi, du chômage et du sous-emploi adoptée à la treizième Conférence internationale des statisticiens du travail (1982);

Tenant également compte de la résolution portant sur le temps de travail adoptée par la 18e Conférence internationale des statisticiens du travail (2008), en particulier l'adoption du domaine de production générale tel que défini par le système de comptabilité des Nations Unies pour la mesure du temps de travail;

Considérant que les statistiques sur le travail des enfants sont particulièrement nécessaires dans les pays où un nombre considérable d'enfants travaillent en violation des normes internationales du travail et des législations nationales visant à sauvegarder leurs intérêts et leur bien-être;

Prenant note du travail accompli par le Bureau international du Travail pour promouvoir le développement de statistiques sur le travail des enfants;

Reconnaissant l'utilité d'établir des normes statistiques internationales afin de procéder à une identification et une classification des enfants occupés économiquement et de faciliter la comparaison des données sur le travail des enfants dans le temps et entre les pays et les régions;

Reconnaissant la nécessité d'établir des directives techniques à l'intention des pays pour la mesure statistique des activités de travail des enfants,

Adopte ce cinquième jour de décembre 2008, la résolution ci-après:

Objectifs et portée

1. La présente résolution vise à fixer des normes concernant la collecte, la compilation et l'analyse des statistiques nationales sur le travail des enfants, afin d'aider les pays à mettre à jour leur système de données statistiques dans ce domaine, ou à établir un tel système. Ces normes devraient aussi contribuer à faciliter la comparaison internationale des statistiques sur le travail des enfants en minimisant les différences entre les méthodes utilisées d'un pays à l'autre.

2. Selon les circonstances nationales, les pays devraient se doter d'un système adéquat de statistiques sur le travail des enfants et l'intégrer dans leurs programmes de statistiques.

3. Les statistiques sur le travail des enfants ont pour principal objectif de fournir en temps voulu des données fiables et exhaustives sur le travail des enfants qui serviront à déterminer les priorités de l'action nationale en vue d'éliminer le travail des enfants, en particulier les pires formes de ce travail. Ces statistiques appuieraient aussi l'action de sensibilisation du grand public sur le problème ainsi que le soutien à l'élaboration de cadres réglementaires, de politiques et de programmes sur le travail des enfants.

4. Aux fins des objectifs énoncés ci-dessus, les statistiques du travail des enfants devraient en principe couvrir toutes les activités productives exercées par les enfants, en établissant une distinction entre celles qui sont autorisées et celles qui font partie des différentes catégories du travail des enfants. Les statistiques du travail des enfants devraient, dans toute la mesure du possible, s'appuyer sur les autres statistiques économiques et sociales.

Concepts et définitions

5. Les définitions et concepts nationaux concernant le travail des enfants aux fins de la mesure statistique devraient tenir dûment compte des circonstances et besoins des pays. La législation nationale, lorsqu'elle existe, et les directives données par les normes internationales du travail, les normes internationales sur les statistiques et les autres instruments internationaux peuvent servir de point de départ à l'élaboration de concepts et définitions statistiques concernant le travail des enfants. Cette approche permettrait de rendre le plus proche possible les concepts et définitions statistiques de la législation nationale et des normes internationales du travail, et aussi cohérents que possible avec elles.

6. Les normes internationales du travail relatives au travail des enfants prévoient des dérogations aux interdictions générales et laissent une marge de manœuvre souple aux pays quant à leur application. Cela étant, il ne peut y avoir de définition juridique uniforme du concept de travail des enfants qui soit universellement applicable. Par conséquent, tandis que les bureaux nationaux de statistiques sont encouragés à aligner autant que possible les définitions et concepts statistiques concernant le travail des enfants sur les lois et réglementations nationales en vigueur, les données collectées devraient être suffisamment détaillées pour faciliter la comparaison internationale sur la base des concepts et définitions figurant dans la présente résolution.

7. Le cadre de mesure du travail des enfants est structuré autour de deux principaux éléments: i) l'âge de l'enfant; et ii) les activités productives exercées par l'enfant incluant leur nature et les conditions dans lesquelles elles sont menées, et la durée de l'engagement de l'enfant dans de telles activités. Pour des objectifs statistiques, chacun de ces éléments devrait être défini au sens large afin que le cadre puisse être utilisé pour mesurer les différentes sous-catégories en fonction des besoins.

Age de l'enfant

8. Dans le droit fil de la convention (no 182) sur les pires formes de travail des enfants, 1999, et de la Convention des Nations Unies relative aux droits de l'enfant, un enfant s'entend de toute personne âgée de moins de 18 ans.

9. Aux fins de la présente résolution, la population ciblée par la mesure du travail des enfants comprend toutes les personnes du groupe d'âge de 5 à 17 ans, l'âge pris en compte étant le nombre d'années révolues au dernier anniversaire.

10. Les bureaux nationaux de statistiques peuvent cependant, en consultation avec les organismes publics chargés de l'éducation, de la protection et du bien-être des enfants et des adolescents, fixer un seuil inférieur à 5 ans dès lors qu'ils le jugent utile compte tenu des circonstances nationales. Ce seuil ne devrait jamais être supérieur à l'âge officiel d'accès à la scolarité obligatoire.

Enfants dans les activités productives

11. Le concept le plus étendu utilisé dans la mesure du travail des enfants est celui des enfants dans les *activités productives*, à savoir les enfants qui se livrent à toute activité relevant du domaine de la production générale du Système de comptabilité nationale (ci-après dénommé, dans la présente résolution, «domaine de la production générale»). Il comprend les *enfants occupés économiquement* et *ceux dans les autres activités productives.*

12. Les *enfants occupés économiquement* – c'est-à-dire salariés, indépendants et travailleurs familiaux collaborant à l'entreprise familiale – sont ceux qui s'engagent dans toute activité dans le domaine de la production du Système de comptabilité nationale (SCN), ne serait-ce qu'une heure au cours de la période de référence. Il s'agit:

    a) de ceux qui sont concernés par le travail des enfants (décrit dans les paragraphes 15 a) et 15 b) ci-dessous);
    b) des enfants âgés de 12 à 14 ans exerçant un travail léger autorisé (décrit dans les paragraphes 33 à 35 ci-dessous); et
    c) des adolescents du groupe d'âge des 15 à 17 ans effectuant un travail non qualifié de pires formes de travail des enfants.

13. Les *enfants dans les autres activités productives* incluent ceux qui effectuent des services non rémunérés aux ménages, à savoir la

production de services domestiques et personnels par un membre du ménage, destinés à la consommation au sein de ce ménage (aussi communément appelés «tâches ménagères»). Par contre, l'exécution de services aux ménages dans un autre ménage, rémunérés ou non rémunérés, est incluse dans le domaine de la production du SCN.

Travail des enfants

14. L'expression travail des enfants s'entend de l'exercice par un enfant de travaux interdits, et plus généralement, de types de travail qu'il convient d'éliminer car jugés non souhaitables tant socialement que moralement selon la législation nationale, les conventions de l'OIT (no 138) sur l'âge minimum, 1973, et (no 182) sur les pires formes de travail des enfants, 1999, ainsi que les recommandations (nos 146 et 190), qui les complètent. Le travail des enfants peut être mesuré en termes de l'engagement des enfants dans les activités productives soit sur la base du domaine de la production générale, soit dans le cadre du domaine de la production du SCN. Le cadre de mesure sous-jacent devrait être spécifié.

15. Pour des objectifs de mesure statistique, le travail des enfants concerne toute personne âgée de 5 à 17 ans qui au cours d'une période de temps donnée a exercé une ou plusieurs des activités suivantes:

    a) *pires formes de travail des enfants*, telles que décrites aux paragraphes 17 à 30;
    b) *activité économique avant l'âge minimum d'admission à l'emploi*, décrite aux paragraphes 32 et 33; et
    c) *services dangereux non rémunérés aux ménages*, tels que décrits aux paragraphes 36 et 37, applicables si le domaine de la production générale est utilisé comme le cadre de mesure du travail des enfants.

    Une présentation schématique de la procédure d'identification statistique du travail des enfants est fournie en annexe 1.

16. Lorsque le travail des enfants est mesuré sur la base du domaine de la production générale, un enfant peut être considéré comme étant dans le travail des enfants si le nombre total d'heures de travail dans l'activité économique et les services non rémunérés aux ménages est supérieur aux seuils fixés dans le cadre des statistiques nationales. Dans ce cas où le domaine de la production générale est appliqué pour la mesure du travail des enfants, pour faciliter la comparaison des données sur le

travail des enfants d'un pays à l'autre, il convient d'indiquer également les estimations du travail des enfants dans le sens du domaine de la production du SCN.

Pires formes de travail des enfants

17. Conformément à l'article 3 de la convention no 182, les pires formes de travail des enfants comprennent:

    a) toutes les formes d'esclavage ou pratiques analogues, telles que la vente et la traite des enfants, la servitude pour dettes et le servage ainsi que le travail forcé ou obligatoire, y compris le recrutement forcé ou obligatoire des enfants en vue de leur utilisation dans des conflits armés;
    b) l'utilisation, le recrutement ou l'offre d'un enfant à des fins de prostitution, de production de matériel pornographique ou de spectacles pornographiques;
    c) l'utilisation, le recrutement ou l'offre d'un enfant aux fins d'activités illicites, notamment pour la production et le trafic de stupéfiants, tels que les définissent les conventions internationales pertinentes; et
    d) les travaux qui, par leur nature ou les conditions dans lesquelles ils s'exercent, sont susceptibles de nuire à la santé, à la sécurité ou à la moralité de l'enfant.

18. Du fait des circonstances nationales, les pays peuvent aussi souhaiter collecter les données sur des activités des enfants qui ne font pas partie du domaine de la production générale, telles que la mendicité et le vol, lesquels sont susceptibles d'être considérés dans le contexte des pires formes de travail des enfants.

Pires formes de travail des enfants autres que les travaux dangereux

19. Les activités couvertes aux alinéas a) à c) du paragraphe 17 s'entendent des «pires formes de travail des enfants autres que les travaux dangereux», et sont souvent aussi appelées les «pires formes intrinsèques de travail des enfants». Les concepts et définitions statistiques standardisés de ces formes de travail des enfants ne sont pas suffisamment développés. Les méthodes statistiques de mesure sont encore au stade d'expérimentation.

Travaux dangereux effectués par les enfants

20. Les activités énoncées à l'alinéa d) du paragraphe 17 sont désignées comme des «travaux dangereux». D'après la recommandation no 190

de l'OIT, il faudrait tenir compte des critères suivants au moment de déterminer au niveau national les conditions de travail dangereuses pour les enfants:

a) travaux qui exposent les enfants à des sévices physiques, psychologiques ou sexuels;
b) travaux qui s'effectuent sous terre, sous l'eau, à des hauteurs dangereuses ou dans des espaces confinés;
c) travaux qui s'effectuent avec des machines, du matériel ou des outils dangereux, ou qui impliquent de manipuler ou porter de lourdes charges;
d) travaux qui s'effectuent dans un milieu malsain pouvant, par exemple, exposer des enfants à des substances, des agents ou des procédés dangereux, ou à des conditions de température, de bruit ou de vibrations préjudiciables à leur santé; et
e) travaux qui s'effectuent dans des conditions particulièrement difficiles, par exemple pendant de longues heures, ou la nuit, ou pour lesquels l'enfant est retenu de manière injustifiée dans les locaux de l'employeur.

21. Aux fins de la présente résolution, les travaux dangereux effectués par des enfants sont définis statistiquement en termes de leur engagement dans des activités de nature dangereuse (secteurs d'activité et professions qualifiés de dangereux) comme indiqué aux alinéas a) à d) du paragraphe 20, ou dans des activités les exposant à des conditions dangereuses, par exemple effectuer pendant de longues heures des tâches et des fonctions qui en elles-mêmes peuvent être ou non de nature dangereuse pour des enfants (conditions de travail dangereuses) en référence à l'alinéa e) du paragraphe 20.

22. Les critères énoncés au paragraphe 20 ci-dessus pourront servir à construire des variables statistiques en vue de mesurer les travaux dangereux effectués par les enfants. Chacun de ces critères fournit des informations qui modèleront les questions posées dans les enquêtes de même que les catégories de réponse qui seront traitées dans les enquêtes sur le travail des enfants.

23. Pour les travaux dangereux indiqués aux alinéas a) à d) du paragraphe 20, de tels travaux dangereux peuvent être directement induits des questions d'enquêtes existantes sur la branche d'activité et la profession, et leur classification selon les paragraphes 25 à 27 ci-dessous; pour d'autres, il faudrait élaborer de nouvelles questions.

24. Parmi les conditions de travail dangereux décrites à l'alinéa e) du paragraphe 20, les longues heures de travail et le travail de nuit sont des situations sujettes à des mesures objectives, alors que les autres conditions peuvent être mesurées approximativement en incluant des questions pertinentes dans les enquêtes sur le travail des enfants. Les travaux dangereux en termes de longues heures de travail et le travail de nuit peuvent être définis, à des fins statistiques, de la façon décrite aux paragraphes 28 à 30 ci-après.

Professions et secteurs d'activité qualifiés de dangereux pour les enfants

25. Les professions dangereuses pour les enfants doivent être identifiées en tant que telles dans les lois ou réglementations nationales, lorsqu'elles existent. En plus de la liste des professions interdites par la loi, on peut déterminer les professions qualifiées de dangereuses pour les enfants à partir des recommandations émanant d'organismes consultatifs compétents, ou d'analyses détaillées sur la dangerosité des professions, par exemple en examinant le taux d'accidents du travail et de maladies professionnelles chez les enfants âgés de moins de 18 ans ou en conduisant des enquêtes spécialement conçues pour déterminer la dangerosité des activités exercées par des enfants.

26. Les professions qualifiées de dangereuses pour les enfants devraient être définies conformément à la Classification nationale type des professions, lorsqu'elle existe, et, dans la mesure du possible, à la version la plus récente de la Classification internationale type des professions. Pour faciliter l'identification des enfants exerçant des professions qualifiées de dangereuses pour eux, les données concernant les professions devraient être codées au niveau le plus détaillé de la classification nationale des professions fondées sur ces données.

27. Un certain nombre de formes de travail dangereuses pour les enfants peuvent être mesurées au regard des secteurs d'activité qualifiés de dangereux pour les enfants dans les pays qui ont interdit l'emploi des enfants dans des secteurs spécifiquement répertoriés, par exemple la construction, les mines et carrières. Il convient de s'efforcer de recueillir autant d'informations que possible sur les tâches véritablement effectuées par les enfants en vue de déterminer si le travail est dangereux ou non.

Longues heures de travail et travail de nuit

28. Un enfant est réputé *travailler de longues heures* dès lors que le nombre d'heures de travail réellement effectuées dans tous les emplois au

cours de la période de référence dépasse un seuil donné. Ce seuil peut être déterminé en fonction du nombre maximum d'heures de travail fixé par la législation ou la réglementation nationale pour les enfants ayant atteint l'âge minimum d'admission à l'emploi. A défaut d'une telle limite spécifique pour les enfants, le seuil peut être fixé en tenant compte de la réglementation sur la durée de travail normale des travailleurs adultes. Les heures réellement effectuées devraient être définies conformément aux normes internationales les plus récentes sur le sujet.

29. Les *longues heures de travail* peuvent aussi être définies au sens de la durée de travail habituelle hebdomadaire. L'application de ce concept prendrait en compte comme travail des enfants le travail de tout enfant effectuant habituellement de longues heures de travail mais qui, au cours de la période de référence, se trouvait temporairement absent du travail pour cause de maladie, de congés ou pour toutes autres raisons, travaillait moins longtemps qu'à l'accoutumée.

30. Est réputé *travailler de nuit* tout enfant dont l'horaire de travail comprend des heures de travail correspondant à un travail de nuit interdit aux enfants selon la définition nationale, lorsqu'une telle définition existe. Dans le cas des enfants, le temps passé dans les trajets entre le travail et le domicile devrait être considéré comme faisant partie de l'horaire de travail. D'autres définitions statistiques du travail de nuit des enfants, également possibles, pourront se fonder sur la convention (no 171) de l'OIT sur le travail de nuit, 1990, en particulier sur les alinéas a) et b) de l'article 1. Lorsque le travail de nuit des enfants n'est pas interdit par la loi, on pourrait déterminer le travail de nuit des enfants à partir de la législation et des conventions collectives en vigueur dans le pays, s'il en existe, concernant le travail de nuit des travailleurs adultes.

Exceptions pour les enfants de 16 à 17 ans

31. D'après l'article 3, paragraphe 3, de la convention no 138, les pays peuvent exceptionnellement autoriser l'emploi ou le travail d'adolescents dans ce qui peut être répertorié comme un travail dangereux, dès l'âge de 16 ans, à condition que leur santé, leur sécurité et leur moralité soient pleinement garanties et qu'ils aient reçu, dans la branche d'activité correspondante, une instruction spécifique et adéquate ou une formation professionnelle.

Emploi en dessous de l'âge minimum

32. L'emploi en dessous de l'âge minimum inclut tout type de travail exercé par un enfant en dessous de l'*âge minimum* spécifié pour ce type de travail. L'article 2 de la convention no 138 de l'OIT énonce que l'âge minimum d'admission à l'emploi ou au travail ne doit pas être inférieur à l'âge auquel cesse la scolarité obligatoire ni en tout cas à 15 ans. Les pays ne disposant pas de structures économiques et éducatives suffisamment développées sont autorisés, après consultation des organisations d'employeurs et de travailleurs intéressées, s'il en existe, à fixer initialement à 14 ans l'âge minimum d'admission à l'emploi. Les enfants appartenant au groupe d'âge compris entre 15 (ou, à défaut, ayant l'âge minimum d'admission à l'emploi) et 17 ans sont, en principe, autorisés à travailler, pour autant que le travail ne relève pas de «tout type […] de travail qui, par sa nature ou les conditions dans lesquelles il s'exerce, est susceptible de compromettre la santé, la sécurité ou la moralité des adolescents» (article 3, paragraphe 1, de la convention no 138 de l'OIT), ou que les enfants n'exercent pas une des activités interdites pour les enfants par la convention no 182 (voir paragraphe 17 ci-dessus).

33. Lorsque des enfants de groupes d'âge particuliers sont autorisés à effectuer des «travaux légers» dans le cadre de la législation nationale conformément à l'article 7 de la convention no 138, de tels travaux devraient être exclus de la définition du travail des enfants. Conformément à l'article 7 de la convention no 138, la législation ou la réglementation nationales peuvent autoriser l'emploi des personnes à partir de l'âge de 13 ans (ou de 12 ans dans les pays qui ont fixé à 14 ans l'âge minimum général d'admission à l'emploi) à des *travaux légers*, à condition que ceux-ci: a) ne soient pas susceptibles de porter préjudice à leur santé ou à leur développement; et b) ne soient pas de nature à porter préjudice à leur assiduité scolaire, à leur participation à des programmes d'orientation ou de formation professionnelle approuvés par l'autorité compétente ou à leur aptitude à bénéficier de l'instruction reçue. Bien qu'il faille restreindre la durée hebdomadaire de travail pour ce groupe d'âge, il est laissé aux autorités nationales compétentes le soin de déterminer le nombre maximum d'heures.

34. En déterminant le seuil des heures passées à des *travaux légers autorisés*, les bureaux nationaux de statistiques devraient tenir compte des prescriptions énoncées dans la législation nationale ou, en leur absence, se fixer une limite, telle que les quatorze heures au cours de la semaine

de référence, en dessous duquel le travail peut être considéré comme faisant partie des travaux légers autorisés.

35. En plus du seuil des heures, la définition des travaux légers autorisés peut comporter d'autres critères conformes aux conditions posées aux travaux légers par la législation ou la réglementation nationales. Par exemple, elle peut limiter sa portée aux secteurs d'activité ou aux activités dans lesquelles les travaux légers sont autorisés. Dans tous les cas, les travaux légers autorisés devraient exclure toutes les activités considérées comme dangereuses pour les enfants.

Services dangereux non rémunérés aux ménages

36. Le concept des *services non rémunérés aux ménages* (décrit au paragraphe 13 ci-dessus), un élément constitutif du travail des enfants, est applicable lorsque le domaine de la production générale est utilisé comme cadre de mesure du travail des enfants.

37. Les *services dangereux non rémunérés aux ménages* effectués par les enfants sont les services fournis au propre ménage de l'enfant dans des conditions correspondant à celles définies au paragraphe 20 ci-dessus, soit des services non rémunérés aux ménages exécutés de longues heures durant, dans un environnement malsain, impliquant des équipements dangereux ou de lourdes charges, dans des endroits dangereux, etc. La définition de longues heures de travail dans les services non rémunérés aux ménages peut différer de celle appliquée aux enfants dans les activités économiques en fonction de l'âge des enfants. Les effets sur l'éducation de l'enfant devraient être considérés également lorsque l'on détermine ce que constituent les longues heures.

Collecte de données

Méthodes de collecte de données

38. Les méthodes de collecte de données sur le travail des enfants peuvent être quantitatives, qualitatives, ou être une combinaison des deux. Le choix de la méthode, ou des méthodes, à appliquer dépendra des objectifs de l'enquête, du type de travail des enfants sur lequel porte l'enquête, du niveau de précision et de détail requis, et de la disponibilité en matière de temps et de ressources techniques et financières. Il faudra aussi tenir compte du type d'information devant être rassemblé (données quantitatives destinées à estimer l'ampleur du travail des enfants et sa répartition suivant des caractéristiques pertinentes, ou informations qualitatives afin de comprendre la nature, les causes et

les conséquences du travail des enfants). Lorsque la population cible des enfants est suffisamment nombreuse et que le contexte social n'est pas contraignant en matière de rapport sur les enfants dans les activités productives, les enquêtes effectuées auprès des ménages et des établissements constituent les principales méthodes de collecte de données de statistiques fiables sur le travail des enfants. Les enquêtes de base et l'évaluation rapide fournissent aussi des informations utiles, quantitatives et qualitatives, sur le travail des enfants.

Enquêtes auprès des ménages et des établissements

39. A l'exception de certaines catégories de travail des enfants (notamment les enfants qui vivent dans la rue et ceux qui sont soumis aux pires formes de travail des enfants autres que les travaux dangereux), les enquêtes réalisées auprès des ménages fournissent un outil efficace de collecte d'un large éventail de données sur le travail des enfants et d'évaluation de son ampleur. Une enquête nationale auprès des ménages sur le travail des enfants peut être appliquée soit de façon indépendante, soit sous forme de module rattaché à une autre enquête auprès des ménages. Dans ce dernier cas, il serait préférable de choisir une enquête sur la main-d'œuvre, vu que les concepts et les sujets utilisés sont similaires. Effectuer une enquête auprès des ménages sur le travail des enfants a l'avantage de cibler les ménages, qui représentent l'unité la plus appropriée pour identifier les enfants et leurs familles, mesurer leurs caractéristiques socio-économiques et démographiques et leurs conditions de logement, obtenir des informations sur la scolarité et le statut du travail de l'enfant, notamment s'il accomplit des travaux dangereux, et évaluer les facteurs et conséquences du travail de l'enfant.

40. Deux éléments sont importants dans l'enquête auprès des ménages sur le travail des enfants, l'objectif de l'enquête et le choix des personnes à interroger. Les enquêtes sur le travail des enfants auront l'un des deux objectifs suivants, ou les deux: i) mesurer l'ampleur du travail des enfants, et des variations de cette ampleur par lieu géographique, type et caractéristiques du ménage, degré d'assiduité scolaire des enfants, sexe, groupe d'âge, et facteurs analogues; et ii) enquêter sur les circonstances, caractéristiques et conséquences du travail des enfants, par exemple, types d'enfants engagés dans des activités apparentées à un travail, types de travaux effectués par les enfants, conditions de travail, et impact du travail sur l'éducation, la santé de l'enfant, etc. La structure appropriée de l'enquête en vue de mesurer l'ampleur du travail des enfants est l'enquête sur le travail des enfants,

parce que celle-ci nécessite un questionnaire simple et court, qui porte néanmoins sur un échantillon de la population générale. La structure d'enquête privilégiée, pour obtenir des mesures adaptées aux circonstances, aux caractéristiques et aux conséquences du travail des enfants, est l'enquête sur les enfants astreints au travail qui suppose une collecte de données plus approfondie à partir d'un échantillon de personnes sélectionnées principalement dans la population des enfants dans les activités productives. Dans le cas où l'on vise les deux objectifs, les structures des deux enquêtes devraient être liées. En ce qui concerne les répondants, en général les enquêteurs posent les questions contenues dans le questionnaire à l'adulte le mieux informé au sein du ménage (soit parfois le chef de ménage, qui souvent est le parent ou le tuteur de l'enfant travailleur). Cependant, les questions de certaines sections du questionnaire peuvent être posées aux enfants eux-mêmes, particulièrement concernant les dangers sur leur lieu de travail, et la raison principale pour laquelle ils travaillent.

41. Les *enquêtes auprès des établissements* effectuées sur le lieu de travail de l'enfant (qui peut se trouver être une unité de production familiale) s'efforceront de recueillir des données sur les particularités de l'unité de production et les caractéristiques de la main-d'œuvre qu'elle emploie, en mettant plus spécialement l'accent sur les enfants dans les activités productives. Les salaires des enfants, la durée de leur travail, les autres conditions de travail et avantages liés au travail, et les blessures et maladies au travail sont les informations recherchées, par rapport aux données concernant les travailleurs adultes. Des informations concernant la perception qu'a l'employeur des motifs de recruter une main-d'œuvre enfantine et les méthodes de recrutement utilisées peuvent également être recherchées.

42. Dans les pays où le travail des enfants est un phénomène rare ou les perceptions sociales rendent difficiles la collecte de données fiables, il est nécessaire d'utiliser des instruments de mesure spécifiques pour identifier les zones ou groupes d'enfants à risque. De ce fait, les enquêtes auprès des ménages reposant sur la population générale et les enquêtes auprès des établissements peuvent ne pas être des instruments appropriés. Dans ce contexte, une combinaison de méthodes et différentes sources de données pourraient être nécessaires pour obtenir des estimations indirectes. Ceci inclut les enquêtes rétrospectives sur le travail des enfants.

Enquête de base

43. Les *enquêtes ou études de base* sont également d'importants instruments de collecte de données sur le travail des enfants. Leur objectif est de déterminer les caractéristiques et les conséquences du travail des enfants dans des secteurs d'activité ou des zones spécifiques et à divers moments. Elles sont habituellement conduites en liaison avec les programmes d'intervention destinés à lutter contre le travail des enfants, et contribuent à identifier les bénéficiaires des projets et à vérifier que ces enfants ont vraiment cessé le travail à terme. Les enquêtes et études de base produisent des données quantitatives et qualitatives, en appliquant une combinaison d'enquêtes par sondage et d'approches participatives. Dès lors qu'un échantillonnage adéquat a pu être élaboré, les conclusions peuvent être extrapolées à l'ensemble du secteur ou de la zone ayant fait l'objet de l'enquête.

Evaluation rapide

44. L'*évaluation rapide* est utile pour collecter des informations sur les formes dissimulées du travail des enfants. Elle fournit des renseignements principalement d'ordre qualitatif et descriptif, limités à une zone géographique de petite dimension. Elle ne peut être appliquée dès lors que l'objectif poursuivi est d'estimer le nombre d'enfants dans les activités productives. En revanche, elle permet de fournir assez rapidement et à moindre coût des informations pertinentes sur les causes, conséquences et caractéristiques de la forme de travail des enfants faisant l'objet de l'enquête, qui pourront être utilisées à plusieurs titres, par exemple, dans les activités de sensibilisation et la conception de projets. Participative dans son approche, qui privilégie les observations, les discussions et les entretiens avec une variété de répondants clés, elle est idéale pour se faire une idée détaillée des conditions de travail et de vie des enfants exerçant des activités ou des professions qu'il serait, sinon difficile, d'identifier et de caractériser. Ainsi, les évaluations rapides sont plus pertinentes pour les instituts et organismes de recherche et en complément des enquêtes menées par les bureaux nationaux de statistiques.

45. L'*enquête auprès des enfants des rues* constitue une forme spéciale d'évaluation rapide. Les enfants des rues se répartissent principalement en deux catégories, à savoir: a) ceux qui vivent et travaillent dans la rue et n'ont pas, par définition, de domicile; et b) ceux qui travaillent dans la rue, mais habitent normalement avec leurs parents ou tuteurs. Les données concernant les activités de la deuxième catégorie peuvent être collectées par le biais d'une enquête auprès des ménages. La première

catégorie oblige à utiliser différentes méthodes d'enquête, dont une est communément employée et consiste à interroger un échantillon d'enfants des rues sélectionnés à cet effet, et si possible leurs employeurs et/ou leurs clients.

Sources supplémentaires de données

46. L'examen des données pertinentes en matière de travail des enfants contenues dans les recensements et les études socio-économiques existants constitue une approche complémentaire. Dans la mesure où les enfants concernés par cette catégorie de travail constituent une population relativement restreinte, l'analyse de données tirées de ces sources est une des possibilités dont disposent les pays pour compiler des données de base sur les enfants dans les activités productives à intervalles réguliers, lorsque les ressources humaines et financières ne permettent pas de lancer des enquêtes spécifiques ou modulaires sur le travail des enfants. Une approche supplémentaire peut impliquer la modification des instruments de collecte de données existants, par exemple en abaissant le seuil d'âge à partir duquel les informations sur l'emploi sont collectées.

47. Le taux de fréquentation scolaire reflète la participation des enfants à ce qui devrait être leur activité principale. Toute absence de l'école n'implique pas nécessairement que l'enfant travaille et, parmi les enfants qui vont à l'école, certains peuvent exercer également des activités économiques. Néanmoins, à défaut de disposer d'un système adéquat de collecte des données sur le travail des enfants, les données sur les enfants non scolarisés peuvent fournir des informations utiles sur ceux qui sont susceptibles d'être engagés dans le travail des enfants.

48. Conformément au paragraphe 5, sous-paragraphe 3, de la recommandation no 190 de l'OIT, des données pertinentes devraient être compilées et tenues à jour en ce qui concerne les violations des dispositions nationales visant l'interdiction et l'élimination des pires formes de travail des enfants. A cet égard, les dossiers administratifs concernant des violations de la législation sur le travail des enfants sous forme d'actions intentées devant les tribunaux ou d'autres autorités officielles compétentes et les actes de condamnation qui en découlent, les poursuites pénales engagées contre les personnes coupables de traite et d'exploitation sexuelle des enfants à des fins commerciales, de violations des droits de l'enfant conduisant à des révélations de situations de travail forcé ou d'esclavage sont des sources d'information utiles, qui devraient être compilées pour compléter les

statistiques nationales sur le travail des enfants. Les rapports rédigés par l'inspection du travail peuvent aussi fournir des informations supplémentaires, dans la mesure où ils permettent de répertorier les travailleurs qui n'ont pas atteint l'âge d'admission à l'emploi et de juger de la dangerosité des conditions de travail. En outre, les documents administratifs sur les ménages d'accueil dans les transferts de revenus et les autres programmes de bien-être social peuvent contenir des informations importantes sur le travail des enfants.

Considérations éthiques

49. Il est essentiel de respecter des normes éthiques au cours du processus de collecte des données durant l'enquête sur le travail des enfants. Conformément au paragraphe 6 de la recommandation no 190 de l'OIT, la compilation et le traitement des informations et des données relatives au travail des enfants devraient être effectués, en tenant dûment compte du droit à la protection de la vie privée. Les autorités nationales chargées des statistiques qui souhaitent évaluer le travail des enfants devraient mettre en place un ensemble de règles éthiques pour la collecte des données relatives au travail des enfants, en gardant à l'esprit l'article 2, paragraphe 2, et l'article 13, paragraphe 1, de la Convention des Nations Unies relative aux droits de l'enfant. Il convient, au minimum, de veiller à ce que les enfants dans les activités productives, et surtout ceux qui sont interrogés, ne soient pas mis en danger à cause de l'enquête. Comme il est de règle dans toutes les enquêtes statistiques, les personnes répondant à ces enquêtes devront être assurées que les informations communiquées resteront confidentielles et que leur anonymat sera préservé.

50. Il convient de veiller à ce que la participation des enfants qui répondent à l'enquête soit volontaire, et que les enquêteurs ne courent aucun danger au cours de la collecte des données. Les personnes chargées de l'enquête sur le terrain devraient, à leur tour, respecter les traditions culturelles, les connaissances et les coutumes de ceux qui répondent aux enquêtes. De surcroît, lorsqu'ils interrogent des enfants, les enquêteurs devraient être attentifs à la façon dont l'enfant se comporte et raisonne, et éviter de susciter des espérances peu réalistes. La collecte de données sur le travail des enfants devrait être réalisée par des personnes spécialement formées pour le type d'enquête à réaliser.

Données collectées

51. D'après le paragraphe 5, sous-paragraphe 1, de la recommandation no 190, des informations détaillées et des données statistiques sur la nature et l'étendue du travail des enfants devraient être compilées et tenues à jour en vue d'établir les priorités de l'action nationale visant à abolir le travail des enfants et, en particulier, à interdire et éliminer ses pires formes, et ce de toute urgence. Par ailleurs, le sous-paragraphe 2 dispose que, dans la mesure du possible, ces informations et données statistiques devraient comprendre des données ventilées par sexe, groupe d'âge, profession, branche d'activité économique, situation dans la profession, fréquentation scolaire et localisation géographique.

52. Les données importantes à collecter afin de dresser des analyses documentées du travail des enfants sont: i) l'âge et le sexe; ii) la répartition géographique par grandes divisions administratives; iii) la fréquentation scolaire; iv) l'exercice de services non rémunérés aux ménages; v) le temps consacré à des activités figurant dans le domaine de la production du SCN; vi) le lieu d'activité; vii) le type d'activité (secteur) économique; viii) la profession; ix) les conditions de travail, notamment l'impact sur la santé et l'éducation des enfants; et x) les caractéristiques socio-économiques du ménage auquel appartient l'enfant.

53. Les statistiques sur les enfants dans les activités productives devraient faire une distinction entre les catégories d'enfants dans la production économique, les enfants engagés dans les services non rémunérés aux ménages et ceux dans les autres activités productives. Les enfants faisant partie à la fois de deux catégories ou plus devraient être classés selon chacune des activités.

54. Les enfants qui ne sont pas engagés dans une activité productive marchande et qui cherchent activement ou passivement un tel travail sont potentiellement exposés au risque de travail des enfants. Les enfants ni scolarisés ni en emploi, appelés «enfants inactifs» dans certains pays, sont susceptibles également d'être concernés par le travail des enfants. Les bureaux nationaux de statistique sont encouragés à collecter des informations sur ces enfants.

55. Les enquêtes menées sur l'activité des enfants indiquent que les services non rémunérés aux ménages peuvent absorber une partie considérable du temps des enfants. Les pays sont dès lors encouragés à collecter des

données sur les services non rémunérés aux ménages fournis par des enfants en termes de temps consacré à ces activités et sur les principales tâches effectuées. De telles statistiques sont à recueillir, sans tenir compte du fait que le domaine de production générale est appliqué aux concepts et définitions du travail des enfants.

56. Afin d'offrir une analyse complète de la situation en matière de travail des enfants dans le pays, les statistiques sur les activités des enfants devraient être collectées de manière à faciliter une classification des enfants en: a) ceux qui vont à l'école; et b) ceux qui ne vont pas à l'école. Chaque groupe peut être de nouveau subdivisé entre ceux qui exercent: i) uniquement des activités comprises dans le domaine de la production du SCN; ii) uniquement des services non rémunérés aux ménages; iii) à la fois des activités comprises dans le domaine de la production du SCN et des services non rémunérés aux ménages; et iv) ni les activités comprises dans le domaine de la production du SCN ni dans les services non rémunérés aux ménages.

57. Il serait utile que les décideurs politiques et d'autres utilisateurs disposent de données statistiques suffisamment détaillées sur le travail des enfants, de manière à classer les données par lieu de résidence – zone urbaine ou rurale – et, si possible, selon la plus petite unité administrative du pays au niveau de laquelle les politiques publiques et les programmes d'intervention peuvent s'avérer efficaces.

58. La collecte à intervalles réguliers (fixés en fonction des besoins nationaux et des ressources disponibles) de données suffisamment détaillées sur le travail des enfants aide à suivre l'évolution du travail des enfants, et devrait aussi faciliter l'évaluation de l'efficacité des politiques et programmes mis en œuvre pour lutter contre le travail des enfants. Le plus facile, pour assurer la pérennité de la collecte de données sur le travail des enfants, consiste à faire en sorte que quelques variables clés de celui-ci soient collectées régulièrement dans une enquête nationale auprès des ménages, de préférence une enquête sur la main-d'œuvre.

Estimation au niveau mondial

59. L'abolition progressive du travail des enfants est devenue une préoccupation majeure de la communauté internationale naturellement et de ce fait constitue un élément clé de l'Agenda du travail décent, les progrès sur cette voie doivent être mesurés à la fois aux niveaux national, régional et international. Sur la base de son expérience

dans les estimations globales du travail des enfants et des normes internationales actuelles, le BIT devrait développer une méthodologie standard pour estimer le travail des enfants à l'échelle internationale et la communiquer aux gouvernements et aux bureaux nationaux de statistique selon leurs besoins respectifs.

60. Conformément au paragraphe 7 de la recommandation no 190, qui stipule que les informations compilées devraient être régulièrement communiquées au Bureau international du Travail, les gouvernements et les services nationaux chargés des statistiques devraient collaborer aux efforts déployés pour estimer globalement le travail des enfants dans le monde et dans les grandes régions du monde. Il est indispensable de collecter des données nationales suffisamment désagrégées par âge, sexe, activité, profession et autres caractéristiques importantes pour permettre la compilation de statistiques en vue de la rédaction d'un rapport global.

Actions à entreprendre

Manuels et questionnaires du BIT

61. Afin d'aider les Etats Membres dans leurs tâches de collecte et d'analyse de statistiques portant sur les divers aspects des enfants dans les activités productives et le travail des enfants, le BIT devrait actualiser ses manuels et ses modèles de questionnaires sur le travail des enfants, chaque fois que nécessaire et possible. Il est impératif d'énoncer clairement les modalités d'application des dispositions de la présente résolution.

Développement des concepts et méthodologies

62. Le BIT et ses partenaires devraient chercher à élaborer des méthodes de mesure statistique appropriées propres à produire des estimations fiables concernant les enfants astreints aux pires formes de travail des enfants autres que les travaux dangereux, et des catégories spéciales telles que les enfants vivant de manière indépendante ou dans la rue.

63. Le BIT devrait: i) accorder une attention particulière au développement des concepts et définitions des pires formes de travail des enfants autres que les travaux dangereux comme indiqué aux alinéas a) à c) du paragraphe 17 de cette résolution; et ii) développer des directives sur le traitement de longues heures effectuées par les enfants dans les services non rémunérés aux ménages relativement à l'âge et aux seuils

d'heures. Il devrait présenter un rapport sur les progrès réalisés dans ce domaine à la 19e Conférence des statisticiens du travail.

Assistance technique du BIT

64. Le BIT devrait élargir son programme d'assistance technique en matière de statistiques sur le travail des enfants, afin d'appuyer la mise en œuvre de la présente résolution par les Etats Membres. Dans la mesure du possible, cette assistance technique devrait prévoir la fourniture de conseils techniques et d'activités de formation, afin de renforcer les capacités nationales, lorsque cela est nécessaire, et d'apporter un soutien financier aux pays pour la collecte et l'analyse de données sur le travail des enfants.

Annexe

Cadre de détermination statistique du travail des enfants

Groupe d'âge	Domaine de la production générale						
	Production du SCN					Production hors du SCN	
	(1a) Travaux légers[3]	(1b) Travail régulier[4]	Pires formes de travail des enfants (2a) Travaux dangereux	(2b) Pires formes de travail des enfants autres que les travaux dangereux		(3a) Services dangereux non rémunérés aux ménages[1]	(3b) Autre production hors du SCN
Enfants en dessous de l'âge minimum spécifié pour les travaux légers (par exemple 5-11 ans)[2]	Activité économique en dessous de l'âge pour les travaux légers	Activité économique en dessous de l'âge minimum d'admission à l'emploi		Traite des enfants, servitude ou travail forcé des enfants, exploitation sexuelle commerciale des enfants, utilisation des enfants dans les activités illicites et les conflits armés		Services non rémunérés aux ménages durant de longues heures, impliquant des équipements dangereux ou de lourdes charges, dans des endroits dangereux, etc.	
Enfants du groupe d'âge spécifié pour les travaux légers (par exemple 12-14 ans)[2]							
Enfants ayant ou au-dessus de l'âge d'admission à l'emploi (par exemple 15-17 ans)[2]							

[1] (3a) est applicable lorsque le domaine de la production générale est utilisé comme cadre de mesure du travail des enfants.

[2] Les limites de groupes d'âge peuvent différer entre les pays en fonction des circonstances nationales.

[3] Lorsqu'il s'applique au niveau national.

[4] Les enfants occupés économiquement autres que ceux couverts par les colonnes (1a), (2a) et (2b).

■ Considéré comme travail des enfants dans la résolution

□ Activités non considérées comme travail des enfants

Résolution III

Résolution concernant le développement de mesures de la sous-utilisation de la main-d'œuvre

La dix-huitième Conférence internationale des statisticiens du travail,

Consciente des limites du taux de chômage comme le principal indicateur du marché du travail pour de nombreux pays;

Considérant que le taux de chômage peut ne pas refléter correctement la situation du marché du travail, et particulièrement celle des femmes;

Reconnaissant la nécessité d'élaborer, au niveau international et dans le cadre de la mesure du travail décent, des mesures de la sous-utilisation de la main-d'œuvre complémentaires au taux de chômage;

Ayant examiné le travail méthodologique déjà entrepris par l'OIT dans ce domaine,

Recommande que:

i) l'OIT, en coopération avec les pays et les organisations intéressés, continue les travaux de développement d'une méthodologie pour la mesure en particulier du déficit de l'offre de travail, des gains faibles et de l'utilisation inadéquate des compétences;
ii) la méthodologie développée soit basée sur les concepts, définitions et classifications pertinentes qui existent déjà;
iii) des efforts soient entrepris par l'OIT pour promouvoir la compréhension de ces mesures en relation avec le taux de chômage;
iv) la question soit considérée pour être incluse à l'ordre du jour de la dix-neuvième Conférence internationale des statisticiens du travail en vue de l'adoption d'une norme internationale.

Résolution IV

Résolution concernant les activités futures relatives à la mesure du travail décent

La dix-huitième Conférence internationale des statisticiens du travail,

Reconnaissant la nécessité de mesurer le travail décent et ses quatre objectifs stratégiques, à savoir l'emploi productif et librement choisi; la protection sociale; le dialogue social; et les normes et les principes et droits fondamentaux au travail;

Ayant à l'esprit la Déclaration de l'OIT sur la justice sociale pour une mondialisation équitable (2008), qui énonce que les Etats Membres de l'OIT pourront envisager d'établir, si nécessaire avec l'aide du BIT, des indicateurs ou statistiques appropriés permettant de suivre et d'évaluer les progrès réalisés;

Ayant examiné les travaux menés par l'OIT et les orientations fournies par la Réunion tripartite d'experts sur la mesure du travail décent (septembre 2008),

Recommande que:

i) le Bureau, en coopération avec les mandants de l'OIT et les bureaux de statistiques nationaux concernés, élabore des profils de pays concernant le travail décent basés sur les résultats des travaux de la Réunion tripartite d'experts sur la mesure du travail décent, et conformément aux orientations fournies par le Conseil d'administration;
ii) les définitions des indicateurs statistiques du travail décent se fondent, dans la mesure du possible, sur les résolutions et directives des CIST existantes et sur d'autres normes statistiques internationales pertinentes afin de garantir le plus haut niveau possible de cohérence et de comparabilité internationale;
iii) le Bureau poursuive ses travaux de développement d'indicateurs statistiques dans des domaines mis en évidence par la Réunion tripartite d'experts sur la mesure du travail décent et dans les délibérations de la dix-huitième Conférence internationale des statisticiens du travail;
iv) un rapport complet sur les progrès réalisés et les résultats obtenus soit préparé pour la dix-neuvième Conférence internationale des statisticiens du travail, conformément à son ordre du jour et compte tenu des décisions prises par le Conseil d'administration, en vue de fournir des orientations supplémentaires sur la mesure et le suivi du travail décent.

Résolution V

Résolution sur la modification du paragraphe 5 de la Résolution concernant les statistiques de la population active, de l'emploi, du chômage et du sous-emploi, adoptée par la treizième Conférence internationale des statisticiens du travail (octobre 1982)

La dix-huitième Conférence internationale des statisticiens du travail s'engage à remplacer le paragraphe 5 de la Résolution concernant les statistiques de la population active, de l'emploi, du chômage et du sous-emploi, adoptée par la treizième Conférence internationale des statisticiens du travail (octobre 1982), par le texte suivant:

5. La population active comprend toutes les personnes des deux sexes qui fournissent, durant une période de référence spécifiée, la main-d'œuvre disponible pour la production de biens et services qui font partie du domaine de la production, comme défini par le Système de comptabilité nationale (SCN). Selon le SCN de 2008, la production de biens et services comprend toute production de biens, la production de tous services marchands et non marchands et la production pour l'autoconsommation de services aux ménages résultant de l'emploi de personnel domestique rémunéré.

Résolution VI

Résolution concernant l'organisation, la fréquence et la durée de la CIST

La dix-huitième Conférence internationale des statisticiens du travail,

Reconnaissant l'évolution rapide de la situation des marchés du travail de tous les pays, ainsi que la nécessité pour les systèmes statistiques nationaux, de mesurer ces changements de manière efficace, cohérente et rapide;

Affirmant le rôle des conférences internationales des statisticiens du travail en matière d'action normative technique;

Consciente de la pression accrue exercée en termes de temps sur le personnel de direction des systèmes statistiques nationaux et des ministères du travail, ainsi que sur les organisations d'employeurs et de travailleurs;

Attentive aux enjeux financiers que représentent la participation à la Conférence internationale des statisticiens du travail dans son organisation actuelle;

Ayant pris connaissance de la recommandation de la Commission de statistique des Nations Unies, adoptée à sa 39e session en mars 2008 à la Conférence internationale des statisticiens du travail de réexaminer son mode de fonctionnement, eu égard notamment à la fréquence et à la durée de ses sessions;

Consciente des prérogatives du Conseil d'administration du Bureau international du Travail qui lui sont conférées en vertu de l'article 1 du Règlement des conférences internationales des statisticiens du travail,

Recommande au Conseil d'administration du BIT que:

i) les conférences internationales des statisticiens du travail soient organisées tous les trois ans, à compter de la dix-neuvième Conférence, qui pourrait se tenir en 2011;
ii) la durée de chaque Conférence soit de cinq jours ouvrables;
iii) chaque Conférence soit guidée par les travaux des réunions tripartites d'experts et autres groupes d'experts en statistiques aux niveaux international et régional, en vue de favoriser et de renforcer l'efficacité de ses travaux en réduisant le temps nécessaire pour établir, réviser

ou approuver les normes internationales en matière de statistiques du travail;

iv) le nombre de points inscrits à l'ordre du jour de la Conférence tienne compte de sa durée réduite et de la complexité des sujets soumis à discussion;

v) une source de financement stable des conférences soit établie dans le budget ordinaire de l'Organisation;

vi) l'actuel niveau des services d'interprétation et de traduction soit maintenu;

vii) la date de la Conférence soit fixée, dans la mesure du possible, en tenant compte des jours importants dans les Etats Membres.

4ème symposium africain pour le developpement de la statistique

Luanda, Angola 9-13 février 2009

La Banque Africaine de Développement (BAD), la Commission Economique des Nations Unies pour l'Afrique (CEA) et l'Office Nationale de Statistique d'Afrique du Sud, ont organisé le 4ème symposium africain pour le développement de la statistique (SADS-4) qui s'est déroulé à Luanda, Angola du 9 au13 février 2009. Le symposium a rassemblé les statisticiens du recensement, les directeurs des instituts nationaux de statistique de 53 PMR, les représentants des agences de l'ONU, de la Banque mondiale, du FMI, de l'OCDE, de Paris21 et des donateurs bilatéraux pour discuter des problèmes liés au développement de la statistique en Afrique et pour aider les pays africains à mieux se préparer au cycle 2010 des recensements de la population et de l'habitat. Le thème du symposium de cette année était "Traitement des données durant le cycle 2010 des recensements de la population et de l'habitat".

Le symposium a été ouvert par l'Honorable Antonio Paulo Kassoma, Premier ministre de la République d'Angola. D'autres orateurs de la cérémonie d'ouverture étaient Mme. Ana Dias Lourenco Ministre de la planification économique de l'Angola, Mme. Lalla Ben Barka, Secrétaire exécutive adjointe de la CEA et M. Louis Kasekende, Economiste en Chef de la BAD. En outre au cours de la cérémonie d'ouverture étaient présents d'autres ministres, parlementaires, membres des corps diplomatiques et représentants des organismes donateurs.

Dans son discours, M. Kasekende a souligné l'importance des statistiques pour la gestion et le suivi de la mise en oeuvre des politiques de développe-

ment et a invité les donateurs ainsi que les pays à accroître leur appui à la réalisation des activités statistiques. Il a assuré les participants que la BAD restera un partenaire digne de confiance en soutenant les pays africains dans leurs efforts de renforcer leurs systèmes statistiques et stimuler la prise de décision basée sur les faits.

RESOLUTIONS

Nous, Offices Nationaux de la Statistique des pays africains, soutenus par la Commission Economique des Nations Unies pour l'Afrique (CEA), la Banque Africaine de Développement (BAD), la Division des Statistiques des Nations Unies (DSNU), le Fonds des Nations Unies pour les Activités de Population (FNUAP), le Gouvernement de l'Afrique du SUD et les partenaires au développement, réunis à Luanda du 9 au 13 Février 2009 durant le 4ème Symposium Africain pour le Développement de la Statistique (SADS) sous le thème « **Traitement informatique des données et utilisation des données du recensement** » ;

Conscients des défis auxquels continuent de faire face les Offices Nationaux de la Statistique et les gouvernements nationaux, défis liés au développement de la statistique dans le continent africain et ailleurs dans le monde ;

Constatant la présence du nouvellement désigné Représentant Résident du FNUAP en Angola et celle de collègues des Offices Nationaux de Statistique d'Afghanistan et du Cambodge, en tant que pays ayant vécu des conflits et ayant utilisé le développement statistique, particulièrement l'organisation du recensement, en tant que catalyseur des initiatives de paix ;

Constatant, en outre, que les pays lusophones ont conquis leur indépendance relativement tard par rapport à la série des indépendances africaines acquises à la fin des années 50 et que, en conséquence, devront avoir besoin d'une attention spéciale pour laquelle nous apprécions la présence du Portugal parmi nous pour partager avec nous ses expériences ;

Rappelant les résolutions du 1er SADS à Cape Town, Afrique du Sud en 2006 où nous nous sommes engagés pour le cycle 2010 des Recensements de la Population et de l'Habitat sous le leadership de la CEA, en renforcant les capacités dans le continent africain et aussi encourageant des réformes institutionnelles ;

Rappelant la déclaration de Luanda de décembre 2006 qui engage davantage les Offices Nationaux de Statistique pour les résolutions du 1er SADS à Cape Town ;

Réaffiramant une décision des Ministres Africains des Finances, de la Planification et du Développement Economique prise durant leur réunion du mois de mai 2006 à Ouagadougou, Burkina Faso, relative au soutien à apporter aux pays en conflit ou sortant de conflits ;

Félicitant la BAD pour l'approbation par son Conseil d'Administration de novembre 2008 de la phase II de son programme de renforcement des capacités statistiques pour les 2 prochaines années (2009-2010).

Reconnaissant l'invitation à accueillir le 4ème SADS en Angola par le Ministre de la Planification, Mme Ana Afonso Dias Lourenço, qui est en charge de l'Office National de la Statistque (Instituto Nacional de Estatistico) d'Angola et qui continue de défendre la cause du développement statistique ;

Constatant les expériences partagées par les pays, particulièrement les difficultés que le Lesotho a rencontrées dans le traitement informatique de

ses données et les progrès considérables qu'il a réalisés en vue de surmonter ces difficultés ;

Constatant, en plus, avec plaisir que la publication des résultats finaux et détaillés du recensement du pays le plus peuplé de l'Afrique, le Nigeria, est imminente ;

Encouragé par les progrés que sont entrain de réaliser les pays sortant des conflits en vue de leur participation au cycle 2010 des Recensements de la Population et de l'Habitat, notant particulièrement le 5ème Recensement de la Population et de l'Habitat du Soudan et les progrès dans la conception des travaux cartographiques que l'Angola a enregistrés en préparant son recensement ;

Constatant les limitations que la langue place au développement de la statistique dans le continent ;

Nous décidons/déclarons que :

Un recensement de la population et de l'habitat réussi demeure une pierre angulaire du système statistique national et une base indispensable pour une politique efficace et une prise de décision. C'est pourquoi, aucun effort ne doit être épargné pour s'assurer qu'un recensement soit organisé et que ses données soit disséminées à temps ;

Tous les pays en conflit ou sortant des conflits devraient ètre soutenus pour réaliser ou préparer leurs recensements durant le cycle 2010 des Recensements de la Population et de l'Habitat et prendre des leçons d'autres pays y compris les plus récents tels que le soudan ;

L'Angola, dont les préparations cartographiques conceptuelles sont déjà à un stade avancé, devrait spécifiquement être soutenu activement en accomplissant des étapes concrètes en vue de l'organisation de son recensement mais aussi des réformes institutionnelles statistiques en conformité avec le Cadre Régional de Référence Statistique pour le Renforcement des Capacités Statistiques en Afrique, les Stratégies Nationales de Développement de la Statistique (SNDS) et la Charte Africaine de la Statistique ;

Le Lesotho et le Nigeria, parmi plusieurs autres pays, devraient être encouragés à publier leurs recensements sans délai en conformité avec le SGDD, le SSDD et les Principes Fondamentaux de la Statistique Publique ;

Sur la langue comme infrastructure de développement, les statisticiens africains devraient s'efforcer à être des multilingues confirmés avec les langues adoptées par la BAD, la CUA et la CEA.

La CEA devrait jouer le rôle de leadership conjointement avec la BAD et prendre les actions concrètes suivantes :

- La CEA, avec le soutien de l'Afrique du Sud, de la DSNU et d'autres partenaires, DEVRAIT accélérer le développement d'un manuel de traitement des données censitaires qui donnera une orientation aux pays africains sur les technologies de traitement des données et présentera les expériences africaines dans le traitement informatique des données censitaires, un guide qui devrait être publié officiellement au 5ème SADS à Dakar, Sénégal.
- La CEA devrait diriger une mission conjointe à Luanda pour évaluer l'état des programmes du pays pour l'organisation du recensement, la SNDS et d'autres processus statistiques clé. La mission devrait inclure la BAD, la CUA, le FNUAP et les autres agences onusiennes basées en Angola, au Mozambqiue ainsi qu'en Afrique du Sud ;
- La CEA et la BAD devraient continuer à assister les pays à développer un plaidoyer en faveur de l'intégration de la statistique dans le développement national et le processus de budgétisation ainsi qu'à articuler l'autonomie des offices statistiques et l'indépendance des opérations statistiques pour, à la fois, accélérer la publication des données et préserver leur impartialité et leur crédibilité.
- La CEA, la BAD, l'Afrique du Sud et les autres partenaires devraient mettre en place d'importants méchanismes pairs de soutien aux pays sortant des conflits.

Les questions émergentes devraient attirer l'attention, particulièrement, celles qui suivent : plaidoyer efficace pour le recensement au niveau politique et parmi la société, besoin de bien préparer toutes les phases du recensement, mieux tester toutes les phases du recensement, publication à temps des résultats du recensment, exploiter les Technologies de l'Information (TI) pour le recensement y compris les plus récentes technologies telles que le scanning, besoin de toutes les possibilités si la technologie du scannage est adoptée, prudence dans le choix des TI, mieux former dans l'utilisation des TI, sous-traiter et apprendre des expériences d'autres pays dans la région ainsi que le mécanisme pair de soutien au recensement en Afrique.

CONCLUSION

En conclusion, nous remercions la CEA, la BAD, la DSNU et Statistics South Africa pour avoir organisé avec succès le 4ème SADS. Nous sommes reconnaissants au Premier Ministre d'Angola, l'Honorable Mr. Antonio Paulo Kassoma, et le Ministre de la Planfication, l'Honorable Mme Ana Afonso Dias Lourenço, pour avoir honoré le 4ème SADS. Nous voudrions aussi remercier nos collègues de l'Instituto Nacional de Estatistico et le peuple angolais pour leur générosité et la chaleureuse hospitalité dont nous avons été l'objet durant notre séjour à Luanda.

4th Africa Symposium on Statistical Development

Luanda, Angola 9-13 February 2009

The African Development Bank (AfDB), the UN Economic Commission for Africa (ECA) and Statistics South Africa, have organized the 4th African Symposium for Statistical Development (ASSD-4) in Luanda, Angola from 9-13 February, 2009. The Symposium has brought together census statisticians, Directors of National Statistical Offices from 53 RMCs, representatives of UN Agencies, the World Bank, IMF, OECD, Paris21 and bilateral donors to discuss statistical development issues in Africa and assist African countries to prepare for the 2010 Population and Housing Census round. The theme of this year's Symposium was "Processing Census Data in the Africa 2010 Round of Population and Housing Census".

The symposium was opened by Honorable Antonio Paulo Kassoma, Prime Minister of the Republic of Angola. Other keynote speakers at the opening ceremony were Mrs. Ana Dias Lourenco Angola's Minister of Planning, Mrs. Lalla Ben Barka, ECA Deputy Executive Secretary and Mr. Louis Kasekende, Chief Economist of the AfDB. Also in attendance at the opening ceremony were other ministers, parliamentarians, members of the Diplomatic Corps and representatives of Donor organizations.

In his statement, Mr. Kasekende emphasized the importance of statistics for development policy management and urged donors and countries alike to scale up their support for statistical activities. He assured participants that the AfDB will remain a reliable partner in supporting African countries in their efforts to strengthen their statistical systems and foster evidence-based decision making.

RESOLUTIONS

We, the National Statistical Offices of African countries, supported by the UN Economic Commission for Africa (ECA), the African Development Bank (AfDB), the UN Statistics Division (UNSD), the UN Fund for Population Activities (UNFPA), the South African Government and development partners, gathered in Luanda on 09-13 February 2009 during the 4th African Symposium on Statistical Development (ASSD) under the theme **"Data Processing and Use of Census Data":**

Aware of the challenges that National Statistical Offices and national governments continue to face in the development of statistics on the African continent and elsewhere in the world;

Noting the presence of the newly appointed Resident Representative of the UNFPA to Angola; and also noting the presence of colleagues from National Statistical Offices of Afghanistan and Cambodia, as countries that have experienced conflict and have employed statistical development, especially census-taking, as a catalyst for peace initiatives;

Further noting that the Lusophone countries attained their independence relatively late in the scheme of African independences that swept from the late 50s and that, consequently, will need special attention for which we appreciate Portugal's presence in our midst to share with us her experiences;

Recalling the resolutions of the 1st ASSD in Cape Town, south Africa in 2006 where we committed to the 2010 Round of Population and Housing Censuses under the leadership of the ECA, building capacity on the African continent as well as encouraging institutional reforms;

Recalling the Luanda Declaration of December 2006 that further committed National Statistical Offices to the resolutions of the 1st ASSD of Cape Town;

Reaffirming a decision by African Ministers of Finance, Planning and Economic Development resolved during their May 2006 meeting in Ouagadougou, Burkina Faso, to provide support to in-conflict and post-conflict countries;

Commending the AfDB for its Board of Directors approval in November 2008 of the Phase II of its statistical capacity building program in Africa over the next 2 years (2009-2010).

Recognising the invitation to host the 4th ASSD in Angola by the Minister of Planning, Ms Ana Afonso Dias Lourenço, who is responsible for the National Statistical Office (*Instituto Nacional de Estatistico*) of Angola and who continues to champion the cause for statistical development;

Noting the experiences that were shared by countries, especially the difficulties Lesotho encountered in processing their data and notable progress they have made towards overcoming these difficulties;

Further noting and pleased that the release of final and detailed census results for Africa's most populous country Nigeria is imminent;

Encouraged by the progress that countries emerging out of conflict are making towards participating in the 2010 Round of Population and Housing Census, especially noting the 5th Population and Housing Census of Sudan and the progress made on conceptual work in cartography Angola has registered in preparing for her census;

Noting the limitations that language places on the development of statistics on the continent;

We resolve that:

Successful population and housing census remains a cornerstone of the national statistical system and an indispensible basis for effective policy and decision-making. Therefore no effort should be spared in ensuring that a census is undertaken and that data are disseminated in a timely manner;

All countries experiencing conflict and emerging out of conflict should be supported to conduct or actively prepare for their censuses in the 2010 Round of Population and Housing Censuses and pick lessons from others, including the recent ones such as Sudan;

Angola, whose conceptual cartographic preparations are already in an advanced state, should specifically be actively supported with achieving concrete steps towards conducting her census as well as with statistical institutional reforms in line with the Reference Regional Strategic Framework for Statistical Capacity Building in Africa, National Strategies for the Development of Statistics (NSDS) and the African Charter on Statistics ;

Lesotho and Nigeria among many other countries, should be encouraged and to release their census results without delay in compliance with the GDDS, SDDS and the Fundamental Principles for Official Statistics;

On language as a development infrastructure, African statisticians should strive to be multilingual consistent with the official languages adopted by the AfDB, AUC and ECA.

The ECA should exercise leadership jointly with AfDB and take the following concrete steps:

- ECA with the support of South Africa, UNSD and other partners SHOULD speed up the development of a Manual on Census Data Processing that will provide guidance to African countries on technologies for data processing and present African experiences in census data processing, a guide which should be launched officially at the 5th ASSD in Dakar, Senegal.
- ECA should lead a joint mission to Luanda to assess the state of the country's plans for conducting the census, the NSDS and other key statistical processes. The mission should be made up of AfDB, AUC, UNFPA and other UN agencies based in Angola, Mozambique as well as South Africa.
- ECA and AfDB should continue to assist countries to advocate for mainstreaming statistics in national development and budget processes as well as to articulate autonomy of statistical offices and independence of statistical operations to both speed up data release to the public and to preserve their impartiality and credibility.
- ECA, AfDB, South Africa and other partners should put in place relevant peer support mechanisms for countries emerging out of conflict.

Emerging issues should be given attention, especially the following: Effective advocacy for the census at political level and in society, need for good preparation for all phases of the census, better testing of all census phases, timely release of census results, harnessing IT for the census including latest technologies such as scanning technology, need for total solution if scanning technology is adopted, care in choice of IT, better training in the use of IT, outsourcing, learning from experiences of other countries in region as well as Africa Census Support Peer Mechanism.

CONCLUSION

In conclusion, we thank ECA, AfDB, UNSD and Statistics South Africa for successfully convening the 4th ASSD. We are grateful to the Prime Minister of Angola, The Honourable Mr Antonio Paulo Kassoma, and the Minster of Planning, The Honourable Ms Ana Afonso Dias Lourenço, for gracing the 4th ASSD. We wish also to thank our colleagues at the Instituto Nacional de Estatistico and the people of Angola for their generosity and warm hospitality accorded us during our stay in Luanda.

Upcoming Events / Evénements en vue

Date	Venue / Lieu	Title / Titre	Organisers / Organisateurs
MAY 2009			
25-27	Cairo, Egypt	Fourth Forum on Statistical Capacity Building for the Arab States	PARIS21
JUNE 2009			
TDB (3days)	Alger, Algeria	Conférence sur le renforcement de la coordination et la coopération statistique au Maghreb	Algeria & AfDB
AUGUST 2009			
12-15	Durban, South Africa	CPI compilation	AfDB & ONS
12-15	Durban, South Africa	Data Quality, validation and processing in the context of the International Comparison Program for Africa	AfDB
12-15	Durban, South Africa	New developments in the measurement of economic characteristics using Population censuses	AfDB & ILO
12-15	Durban, South Africa	National Accounts: Implementing the SNA-2008 in Africa: Conceptual and practical challenges and Issues related to ICP requirements	AfDB
13-14	Maputo, Mozambique	Satellite meeting on Agriculture and Rural statistics	AfDB & FAO
16-22	Durban, South Africa	International Statistical Institute, 57th Biennal Session	Stat SA / ISI
31/08 – 2/09	Bamako, Mali	Séminaire atelier en planification stratégique et gestion axée sur les résultats	AFRISTAT
SEPTEMBER 2009			
9 – 11	Bangkok, Thailand	Committee for the Coordination of Statistical Activities (CCSA)	UNSD
21 – 25	Bamako, Mali	Séminaire sur les comptes nationaux	AFRISTAT
OCTOBER 2009			
TBD	Arusha, Tanzania	21st Session of the African Commission on Agricultural Statistics (AFCAS)	FAO
27-30	Busan, Korea	3rd OECD World Forum on Statistics, Knowledge and Policy	OECD

Date	Venue / Lieu	Title / Titre	Organisers / Organisateurs
NOVEMBER 2009			
16-18	Dakar, Senegal	PARIS21 Consortium Meeting	PARIS21
19-21	Dakar, Senegal	5th African Symposium on Statistical Development (ASSD)	AfDB / ECA / ASSD Secretariat
24-26	Yaoundé, Cameroon	Système d'état civil en Afrique: enjeux, état des lieux et défis	IFORD / UEPA

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