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Background paper

STATISTICAL CAPACITY TO MONITOR MDG IN EASTERN EUROPE AND CIS COUNTRIES

ECE submitted contribution to the UNDP Regional MDG Report

1. Introduction

Global monitoring on MDG indicators is based on data collections held by International Organizations or Agencies. These statistical collections are in general based on data reported by national authorities but there may be differences between national and international statistics for the following reasons:

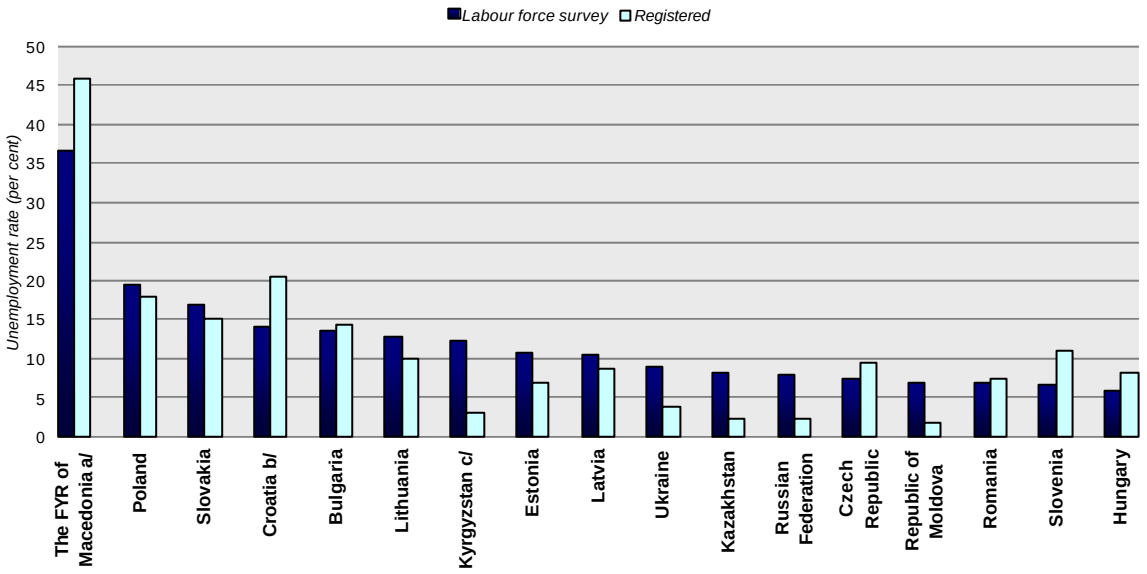
- International organizations adjust national statistics to make them more comparable at international level
- International organizations use estimation techniques that are different from the techniques used at national level
- International organizations make their own estimates of data that are not available at national level
- International organizations base their data on internationally developed survey programmes (such as the World Bank-sponsored Living Standard Measurement Surveys or the UNICEF-sponsored Multi-Cluster Indicator Surveys) while national statistics are based on national sources (for example administrative records)

If at global level, it is useful to have MDG monitoring based on data from international organizations to assure comparability across countries and overtime, it is also true that national MDG reporting should look into the national statistical system considering first the quality and availability of national statistics. One of the main objectives of national monitoring activities is to nationalize the MDG process in country institutions and policy debate. Thus, the development of appropriate national statistical capacity to monitor and analyze MDG-related issues is a priority of the whole MDG process.

Statistical Capacity in CIS and East European Countries

The CIS and East European countries have inherited a very rich system of administrative records able to produce a large number of statistics. However, the transition from the centrally planned economy to the market economy has affected not only the efficiency of these administrative records but also their relevance. The type of information needed in both the economic and social area is very different from the past. The system of administrative records established in the past still produces a large amount of numbers (statistics). However, many of the statistics produced are not always relevant to the new social and economic environment and surveys have become increasing important in the statistical production together with censuses. Many of the important issues that became relevant after transition can be adequately measured only through population-based data collection activities (sample surveys or censuses). Issues such as poverty or unemployment if measured through a registration system show very different patterns than if measured through surveys or censuses. Box 1 reports for selected countries unemployment figures measured through LFS and registration and discusses some of the issues related to the different unemployment concepts used.

Box 1: Measurement of unemployment



Graphic 1: Unemployment rates measured through labour force surveys and Registration

In Labour Force Surveys unemployment is measured according to ILO Recommendations, which prescribe that a person is considered as unemployed if, in the reference period, he/she satisfies all the following conditions: was without work, was actively seeking work, and was available for work. This definition intends to count as unemployed only those who do not work but are ready and willing to start working, irrespective of the formal activity status of the person. On the contrary, unemployment figures supplied by official employment services are affected by employment regulation and the existence of incentives to register. Moreover, changes in such regulations have heavy implications on data that are a by-product of an administrative activity.

Source: ECE Economic Survey 2004, No1

a April.

b Average for the first half of the year.

Since the mid 90s all Eastern Europe and CIS countries have moved, at different speeds, from a statistical system almost exclusively based on administrative registrations to a more complete one, where sample surveys are also used. Some countries have already a permanent survey programme with regular labour force and income and expenditure surveys, but some countries still carry out surveys on an ad-hoc basis and only with the support of the donor community.

Data required to adequately monitor MDG are quite demanding since data on a variety of topics need to be collected on a regular basis in order to have time series and assess the trend toward the achievement of the Gaols. Not all countries are able to produce high quality data on all the areas covered by the MDG on a regular basis. Household surveys have gradually spread in many countries, thus providing analytical and trustworthy data on issues like employment and income/expenditure. On the other hand, the quality of administrative data has in many cases deteriorated because of falling coverage and inaccurate reporting. The population census has been held in most countries of the region, but international standards and definitions are not as widely used as needed and, moreover, financial and/or political problems brought to the cancellation/postponement of the census in a few countries.

In few countries in the region there is the concern that both population censuses and household surveys do not cover the entire territory because certain parts of the countries are not under the control of the government. Examples are: Transnistria for Moldova, and Abchasia and South Ossetia for Georgia. Kosovo has also been left out for the time being concerning the monitoring of MDG.

2. The Measurement of MDG

2.1 Income-Poverty

The indicator on the percentage of poor people is based on income and expenditure surveys where after the calculation of a poverty line it is possible to count the number of households whose total income or consumption is below the poverty line. Accurate data on poverty are available not before 1995-1996 when some of the countries started to conduct household budget surveys based on international standards. From the year 2000 there are few countries that can provide poverty data on an annual basis, but there are still countries that do not have more than two points in time in the last decade. Where it is possible to have enough data to analyze trends, it can be seen that there was an increase in poverty between the mid 90s and 2000 and that after 2000 there is a decreasing pattern in almost all countries. The availability of data in only two points in time can give an estimate of the direction of poverty but it makes it difficult to provide an accurate estimate of the trend toward 2015, which is the targeted year for Goal 1.

<u>Definition of poverty lines</u>

In the global monitoring of the MDG the poverty line adopted is the standard PPP $1 a day. For South Eastern Countries (SEE) and CIS countries this threshold is not relevant. The cold weather require more resources for heating, clothes and food and PPP$1 a day does not measure an adequate level of subsistence as it may do in other regions. The World Bank advises to use in the region indicators based on PPP$2-2.5 for international comparability but for national purposes and in MDG national reports countries developed their own definition of poverty (often with the technical assistance of the World Bank). Extreme poverty lines are in general established at the level of consumption sufficient only to provide for the minimum level of dietary energy consumption (as approved by the government). There are also general poverty lines that represent

the minimum level of consumption taking into account expenditures for both foodstuff and non-food goods and services. These thresholds seem to be more relevant since they consider not only food but also other expenditures that are crucial to survive in a cold weather. Some CIS and SEE countries particularly in Europe measure poverty using a relative concept (as the EU countries do) setting the poverty level to a defined percentage (from 60 to 75%) of the median cumulative spending per adult.

2.2 Malnutrition

Although malnutrition and food supply is not a major concern in all CIS and SEE region there are few countries such as Armenia, Tajikistan, Kyrgyzstan that are affected by this problem and require relevant data to monitor it. Food supply can be assessed through imports, exports, production and stock of food, and non-food uses , however the number of undernourished people can accurately be assessed only through household surveys. Nutrition surveys are not very frequent in the region, but more frequent surveys are undertaken where the malnutrition of children can be measured. Demographic and Health Surveys (DHS) or Multi-Indicator Cluster Surveys (MICS) provide data for at least on point in time for all countries where children malnutrition is a concern.

2.3 Education

Data to monitor goals related to education are based on enrolment ratios that are based on administrative records and are regularly provided in all countries of the region. The lack of reliable data on population size has affected the quality of these indicators in countries where a recent census was not carried out. National official statistics are based on registered enrolment, however, school attendance is also becoming a concern but national official statistics are very scarce[1] on this issue.
In many countries, administrative sources do not provide data for the proportion of pupils starting grade 1 who reach grade 5 due to lack of data on repeaters by grade (data on repeaters may be available, but not by grade). DHS and MICS-type surveys provide data for this indicator but only in relation to the year when the survey was carried out and not on an annual basis. Data for this indicator are relevant to assess the internal efficiency of the educational system. The main issues highlighted in countries in measuring MDG is on quality of education and drop-outs, but unfortunately the great majority of countries are unable to provide data on these issues.

2.4 Gender equality

The monitoring of gender equality in CIS and SEE countries goes beyond the assessment of the participation of women and men in the labour market and education. Traditionally, countries under the influence of the Soviet Union used to adopt quota systems to assure equal level of employment, and they still enjoy relatively equal levels of educational enrolment and employment rates. However, looking at gender equality only through education and employment rates does not provide an accurate view of gender disparities. Areas of major concern are the unequal participation of women and men in decision making leading positions. From an assessment carried out by UNECE and the UNDP Regional Centre in Bratislava on the

[1] In Kyrgyzstan for example, data from the National Statistical Committee show that 95% of 7-16 years old children receive basic secondary education, but studies conducted by UNICEF and UNESCO indicated that a significant number of children do not attend school and that the number of children not attending school is 7-10 times higher than the number of children officially registered as not been enrolled (*Source: Millennium Development Goals Progress Report of the Kyrgyz Republic, 2003*).

availability and quality of gender statistics in the region, it emerged that the major areas of concern where sex-disaggregated data and gender-sensitive information are lacking are the following:

- Participation in decision making
- Participation in elections
- Entrepreneurship
- Domestic violence
- Poverty
- Informal employment
- Time-use
- Gender attitudes
- School attendance

The main problems are related to the lack of resources to undertake data collection in certain areas (time-use, gender attitudes, informal employment), the low capacity to mainstream gender in the on-going data collection activities (entrepreneurship, participation in election), and the underutilization of existing data (poverty).

2.5 Health and Mortality

Most of the data collected for mortality and health are based on administrative sources and are regularly available on an annual basis. However, the quality of the information provided is difficult to assess. In many countries there are incentives to register births and deaths, but it is still difficult to measure for example the coverage of **infant deaths**. Studies carried out in some countries[2] showed an unequal distribution of births by weight suggesting an underreporting of live births for low weighted babies. In measuring infant mortality it is also important to notice that in some CIS countries only births of 1000 gr. or more are still reported instead of 500 gr. or more as it is internationally recommended. Estimates of infant and child mortality from DHS and MICS surveys show higher (sometime double) rates of child and infant mortality if compared with the rates calculated on the basis of registration systems. This suggests that the quality of certain registration systems in CIS countries may have deteriorated and in danger of underestimating infant and child mortality. This also explains the different figures that in many CIS countries are reported by international organizations (such as UNICEF) and national agencies.

The problems related to the reliability of registration systems in CIS and SEE countries is relevant also for the quality of the information reported by countries on health-related MDG such as HIV and tuberculosis. In many countries there are not reliable surveillance systems to detect the spread of these infections and data reported by official statistics reflect only the reported cases and particularly for HIV they are able to describe only the surface of the problem. With the exception of Ukraine and Russia, the number of cases of HIV officially reported is very low (not higher then 500). There is in all countries an increasing trend, but the number of officially detected cases underestimates the spread of infection in many countries[3].

[2] Reference to the MDG assessment of Moldova

[3] In Kyrgyzstan for example there were only 402 HIV cases registered in 2003. But according to assessments conducted according to the UNAIDS recommendations, the actual number of HIV infected were 3620 (*Source: Millennium Development Goals Progress Report of the Kyrgyz Republic, 2003*).

3. Main national sources to monitor MDG

In many cases, different sources, or combination of them, can be used to estimate MDG indicators. National contexts and capacities have to be taken into account to identify the best possible solutions to provide good data for MDG indicators.

3.1 Population Census

In most countries the population and housing census represents the overarching source of information for social and demographic data. It provides data on geographic and demographic structure of the population, which are important *per se* but also because they are often used as denominator to build other indicators. The census also covers social aspects such as living conditions, employment and education, thus providing comprehensive and analytical data especially in those countries where a system of statistical surveys is not sufficiently developed. Finally, the census is often a pre-requisite of good sample survey data since it provides the sampling frame of household surveys, as for example the Labour Force Survey.

In the 2000 population and housing census round almost all countries of Eastern Europe and the CIS carried out a population census, the only exceptions being Bosnia and Herzegovina and Uzbekistan. The Republic of Moldova had the census in late 2004 while in Turkmenistan the last census was carried out in 1995. If the census is a well-established practice in the countries of the region, some important issues remain in relation with the overall quality of data (objective assessment of census coverage is not a common practice yet) and the adoption of international definitions and classifications, especially in areas like employment, education and migration. A specific concern is posed by census funding: in the 2000 round, various countries could have the census thanks to important contributions from donors and similar arrangements may be necessary also in the future.

3.2 Household surveys

For many of the MDGs, good and comprehensive data can be supplied only through household sample surveys. Among them, the two main survey typologies providing data for MDG are the Household Budget Survey (HBS) and the Labour Force Survey (LFS). The former is mainly used for the measurement of poverty and of household consumption of goods and services (including food expeditures); the latter is intended to provide data on employment and unemployment, but can also be used to collect data on education.

The HBS has usually a long tradition in the countries of this region, in many cases was the only sample survey held on a regular basis, however, its adherence to international standards in terms of concepts, classifications, and sampling rules was questionable. Thanks also to the efforts of international organizations, the countries in the region have made great improvements in meeting the international standards and HBS are now carried out with more reliable methodologies. However, countries with limited statistical resources still face problems in sample size (sometimes not adequately updated or too small to provide data at the first sub-national level) and on the content of the surveys.

LFSs have been introduced in the mid 90s and for a long time estimates based on official registrations were used to measure employment and unemployment. Especially in some countries of Central Asia and the Caucasus, the LFS is still not a common practice and employment data

lack the necessary regularity and quality, also taking into account the size of informal sector in this region.

In addition to sample surveys carried out by National Statistical Offices (NSOs), there are some important international surveys sometimes carried out in collaboration with national statistical offices, but not always incorporated in the official data production of countries. The three major international programs of household surveys that have also included countries of the region are:

- Living Standards Measurement Study: initiated by World Bank to monitor progress in raising levels of living, can provide data on poverty, education, housing and employment;
- Multiple Indicator Cluster Survey: sponsored by UNICEF, is in principle focussed on children's condition and can supply data on education, employment, child and maternal mortality, nutrition, contraception and housing;
- Demographic and Health Survey: financed by USAid, the US Agency for International Development, can produce data on education, nutrition, child and maternal mortality, contraception and housing.

These programs are mainly active in developing countries but, especially during the 1990s, were also carried out in countries of Eastern Europe and the CIS. In many cases these surveys have ensured the collection and publication of important data to track social progress or setback. On the other hand, from the point of view of building sustainable statistical capacities in the countries, not always these programs were able to trigger the necessary institutional, human and financial upgrades necessary to put these statistical activities on a firmer ground.

Table 1. LSMS, MICS, DHS, national LFS and HBS (household budget survey) carried out in Eastern European and CIS countries

Survey	LSMS	MICS (last carried out)	DHS	LFS	HBS
Albania	1996, 2002	2000		2002	since 2000 (2-yearly)
Armenia	1996			1997	since 1998 (annually)
Azerbaijan	1995	2000		2003	since 2001 (continuously)
Belarus				n.a.	since 1995 (quarterly)
Bosnia and Herzegovina	2001	2000			-
Bulgaria	1995,1997,2001			since 1993 (quarterly)	since 1951 (continuously)
Croatia		1995		since1996 (semi-annual)	since 1998 (continuously)
Czech Republic				since 1992 (quarterly)	since 1956 (5-yearly)
Estonia				since 1995 (quarterly)	since 1996 (continuously)
Georgia		1999		since 1998 (quarterly)[4]	n.a.
Hungary				since 1992 (quarterly)	since 1949 (continuously)
Kazakhstan	1996		1999	since 2001 (quarterly)	Sine 1997 (quarterly)
Kyrgyzstan	1993,1996,1997,1998	1995	1997	Since 2002 (quarterly)	n.a.

[4] The results of the survey are not published regularly due to financial constrains.

Latvia				since 1995 (quarterly)	since 1926 (continuously)
Lithuania				since 1994 (quarterly)	since 1952 (continuously)
Poland				since 1992 (quarterly)	since 1957 (continuously)
Moldova, Republic of		2000		since 1998 (quarterly)	since 1954 (continuously)
Romania	1995			since 1996 (quarterly)	since 1952 (continuously)
Russian Federation	1992			since 1992 (quarterly)	since 1952 (continuously)
Serbia and Montenegro		2000		Since 1994 (annually)	Since 1947 (annually)
Slovakia				since 1993 (quarterly)	since 1957 (continuously)
Slovenia				since 1993 (quarterly)	n.a.
Tajikistan	1999, 2003	2000		2004	n.a.
The fYR of Macedonia				1996, since 1999 (annually)	since 1963 (continuously)
Turkmenistan		1995	2000		since 1991 (continuously)
Ukraine		2000		since 1996 (quarterly)	n.a.
Uzbekistan		2000	1996	n.a.	n.a.

Source: The World Bank, UNICEF, MacroInternational, ILO, the ECE Economic Survey, 2004 No. 1.

3.3 Administrative data

A vital registration system and other administrative records provide information on infant, child and maternal mortality, morbidity (TB, HIV), immunizations, education (enrolment) and employment. In general, it's very difficult to have an objective assessment of coverage and quality of the registration systems related to school enrolment, morbidity, mortality and births. Some indirect evaluations can be made comparing administrative-based estimates with survey or census data. For example, UNICEF reported that important discrepancies of child mortality were recorded between official data and estimates resulting from MICS surveys.

In general, administrative-based data collections, as for example the morbidity reporting system, would require a great amount of resources and a sufficient adherence with international definitions and classifications. However, it can be noted that administrative data production has often problems of insufficient personnel training and motivation, obsolete data processing and a strong legislative framework that regulates the different steps in a too bureaucratic way. In these conditions underreporting or misreporting can easily become an issue. Moreover, registration systems by nature are slow to adapt to changes and in some cases are still based on old definitions that are not in line with international standards.

If administrative records are in many cases the only data source available and have therefore to be fully used, users should be aware of the shortcomings of these statistics, since data of insufficient quality should be interpreted with special care.
