

STATISTICS IN TRANSITION-new series, October 2011
Vol. 12, No. 2, pp. 415—423

**The ISI Satellite Conference on Improving Statistical Systems
Worldwide - Building Capacity**
Krakow, Poland, 18-19 August 2011

The ISI Satellite Conference on Improving Statistical Systems Worldwide - Building Capacity was held in Krakow, Poland from 18 to 19 August 2011, as a satellite of the 58th ISI Congress held in Dublin, Ireland, from 21 to 26 August 2011. The conference was held in the Collegium Magnum of the Jagelonian University. It brought together over 100 participants from countries of all continents and fourteen international institutions – statisticians, researchers and related experts – to share their experience and focus on the recent changes of policy regarding the work on improving statistics in developing countries.

The satellite conference was organized by the Polish Statistical Office in cooperation with the World Bank, African Development Bank, Paris 21 and the International Statistical Institute. It was financed by the World Bank, Polish Statistical Office and ISI.

Polish Statistical Office and the World Bank co-chaired the Organizing committee and the program committee. The Polish Statistical Office in Krakow chaired the local organizing committee.

The conference was opened by the President of the Polish Statistical Office Janusz Witkowski. The deputy mayor of Krakow Elżbieta Łęcznarowicz and the ISI representative Frederick Vogel spoke at the opening ceremony.

The first session of the conference was started by the World Bank representative Misha Belkindas who, in his key note address spoke about the role of statistics in the implementation of actions such as Millennium Development Goals, Marrakech Action Plan for Statistics and Dakar Declaration, which were undertaken for the economic and social development of countries. He discussed the current activities aimed at supporting developing countries in preparing their national strategies for the development of statistics that will improve the coordination and management of statistical systems. He stressed that now it is necessary to accede to implement strategic development plans and actions to ensure stability of statistical systems. This should result in better statistics and more efficient use of statistics. The role of statistics, apart from providing information, is also supporting decision making at various levels, which implies that statistical systems should not only respond quickly to changes, but also anticipate them.

During next presentations, representatives of Paris21 consortium, Afghanistan and India shared their experience in the development and implementation of statistical strategies and national development plans. Eric Bensele from Paris21 stressed that the gathering of statistical data for informing, monitoring and evaluation of national development plans, requires strategic planning in the form of the creation of the National Strategy for the Development of Statistics (NSDS). Experience shows that what determines the success of the strategy is the design stage, which includes the involvement of all participants (producers, users and funders), the integration of needs of the sector statistics, the inclusion of training and human resource development, as well as synchronization with the development processes of the country. Only a well-developed strategy will ensure its effective implementation. Abdul Rahman Ghafoori from Afghanistan pointed out, however, that a comprehensive cooperation, which takes into account the needs of all users in developing countries, is often impossible. In Afghanistan, after 30 years of war, a major achievement was the development of the 2010 Afghanistan National Statistical Plan, to provide an integrated system for collection and possession of reliable statistics by the Central Statistical Organization. A pragmatic approach "learning by doing" was introduced, with the focus on the implementation of several key actions. Coordination of financing is necessary but it still remains a challenge for the future. As for the statistical system in India, properly trained statistical staff is a challenge. Kuldeep K. Lamba elaborated on training of staff in his country (also with the assistance of the World Bank), starting with intensive training of new employees, through continuous training in methodology and statistical research and new technologies in National Academy of Statistical Administration, which was established specially for this purpose. There are also promotional activities and traineeship for students carried out to interest them in taking up employment in the statistics. Particular attention is focused on statistical capacity building at local level.

The subject of the next session (chaired by Włodzimierz Okrasa) was the issue of partnership in the national statistical systems. Grace Bediako from Ghana emphasized that the major challenge for the national statistical system is decentralization of production and distribution of harmonized statistics. National Statistical Offices as coordinators in the field of statistics often have limited opportunities to ensure that the data made available by different companies are compatible with the required standards for dissemination. Strengthening the position of national statistical offices can be achieved, among others, by providing a competent, professional staff. Offices possessing highly qualified staff will be more reliable for data users than other data producers. To strengthen the national statistical system one can employ appropriately designed training and also, e.g. Virtual Statistical System (VSS). Grace Bediako also stated that in order to improve the effectiveness of the entire statistical system, in addition to changes in legislation, a fundamental change in governing independency of companies that collect statistical information is needed. A good opportunity to improve the coherence of national statistics is to develop national statistics development

strategies (NSDS) and national statistical systems (NSS). The adoption of the United Nations Fundamental Principles of Official Statistics also greatly increases the chances of achieving greater consistency and improve data quality.

The problem of building a partnership for the development of statistics in developing countries was also touched by Graham Eele from the World Bank. He recalled that in accordance with the Marrakech Action Plan, the effective development of statistical systems in low-income countries requires that the countries themselves determine the priorities and define their own path of development. Since 2004 significant progress has been observed in supporting countries and their preparation of strategies for the development of statistics. The challenge now is to find ways to implement these strategies into effect in a way that causes lasting improvement in productivity and utilization of statistics. An important part of this process is to build a national partnership. Strong and effective national partnership is part of a comprehensive sectoral approach and has been used successfully for many years in promoting development in areas such as health, education and agriculture. The World Bank funds, together with other partners, such an approach to the development of statistical systems in developing countries.

Technical assistance to developing countries such as training and staff is directed according to the needs or to individual countries or groups of countries. Coordination of statistical training in Africa was discussed during the next session by Dimitri Sanga of UNECE (United Nations Economic Commission for Africa). One of the major challenges facing the quality and timeliness of statistics to serve the development of African countries is inadequate and poorly educated human resources. In response to huge demand of these countries in the area of statistical training, many initiatives and actions aimed at improving the situation in this regard are undertaken. In order to coordinate activities, the interested parties agreed to combine statistical training initiatives in Africa. The created Group which is subject to the Statistical Commission for Africa, is the supreme body of statistics and statistical development in Africa. Since the recognition of the Group by the Statistical Commission for Africa in January 2010 it has contributed to effectively conduct many statistical training directed to African countries. The Group created the necessary conditions for the supply and demand for statistical training, as well as provided technical and financial support for partners through the exchange of information and best practices. The basis of the group's work is the preparation and implementation of the Statistical Training Programme for Africa under the Reference Regional Strategic Framework for Statistical Capacity Building in Africa.

The next speaker, Oliver Chinganya from AfDB (African Development Bank) presented the activities undertaken to build a sustainable statistics in Africa. Statistical systems of African countries are not able to meet the increasing demand for statistical data necessary for the implementation of many initiatives such as poverty reduction strategies or Millennium Development Goals. While there has been overall progress in the development of statistics in many countries,

there is still a deficit in the capability to provide users with high-quality statistical data. The difficulties relate to such key areas as the use of data, management, statistical and technical infrastructure, human and financial resources. The initiatives of international organizations related to the development of statistical capacity of African countries are focused more on management of development performance consisting in stepping up the efficiency of the use of data, increasing involvement of governments in the development of statistics, as well as development and increase of financial aid. In addition, in Africa currently a number of initiatives is being undertaken aimed at strengthening the role of national and regional statistical institutions by developing strategies, creating committees, organizing symposia, conferences, etc.

The idea of the Virtual Statistical System (<https://www.virtualstatisticalsystem.org/>) as a tool for teaching online, which is used to support institutions of developing countries in creating sustainable statistics was presented by Ronald Luttikhuis from the World Bank. This system via the website provides employees with permanent access to a wide range of training materials. It enables training both at work and at home which ensures that it is durable and sustainable. The training with the use of VSS consists of ten training modules containing about 200 lessons in three levels. Participants of all levels of training who complete the course successfully will receive a certificate. The cost of VSS training with adequate number of participants may be less than 10% of the cost of traditional training.

The knowledge and experience gained by developing countries can be shared and learned among themselves. Such cooperation, the so-called south-south cooperation, also applies to countries that have undergone transformation from a centrally managed economy to a market economy. Different models of cooperation in the field of statistics among developing countries have been presented by Pieter Everaers from Eurostat. He stressed that presently functioning models are based on cooperation in different areas (management, training, IT, statistics, sets of indicators) and different forms of cooperation (support / partnership / full cooperation).

Supporting the effective implementation of national strategies for statistical development in developing countries is not possible without the financial support of international and national organizations. The problem of efficiency and sustainability of such funding was raised by Frances Harper from the UK's Department for International Development. She stressed that in order for financial assistance to be effective, a close cooperation between all involved partners (funding organizations, governments, users of the data) is necessary. Pieter Dorst from the Netherlands also emphasized the role of effective cooperation, pointing to the special role and needs of the countries concerned, but also to the need to increase the responsibility of the benefiting countries. Financing the development of statistics in developing countries is necessary to achieve Millennium Development Goals, and the starting point for programming and financing development of statistics at the national level should be the formulation of national development plans.

In the session on cooperation of public statistics between countries that have undergone or are in transition (chaired by Marek Cierpiał-Wolan) representatives from Poland (Józef Oleński), Russia (Peter Dolgoplov) and Ukraine (Vadym Pischeiko) delivered their speeches. Józef Oleński elaborated on the synergistic effect of official statistics cooperation between developed countries, after the transformation, or those who are in transition. He stressed that cooperation based on mutual learning between partners gives the best results in building a developed statistical systems, and listed, as examples of good practice using the mutual experience of countries, the Polish cooperation in the field of cross-border statistics on the external border of the EU, social statistics and the use of information technology in employing administrative records.

Peter Dolgoplov spoke about the development of Russian official statistics and the role of international cooperation in the period of transition. Programs funded by the World Bank and the European Union allowed the Russian statistics to take advantage of international experience, conducting intensive training and projects, including regional ones, among the countries of the CIS. Through close cooperation with international organizations and foreign statistical offices the Russian statistics now meets international standards and begins to play a more active role in sharing and transferring knowledge and experience with other nations.

Vadym Pisheyko presented the actions taken by the Ukrainian statistics after gaining independence, which are related to its adaptation to international standards. Most of the works was funded by the World Bank under the project "Development of the state statistics for monitoring socio-economic transformation", but the Ukrainian statistics also cooperates with other international organizations. Apart from collecting, processing and sharing of data, as well as strengthening the statistical infrastructure and dividing responsibilities between central, regional and local offices, these actions have resulted in developed principles of statistics, technical modernization, dissemination of European standards in regional statistics.

The last session of the conference concerned the problems of development of agricultural statistics in relation to the growing needs for high-quality data in this field. Bjorn Wold of the Statistical Office of Norway raised the issue of new challenges and opportunities facing the agricultural statistics in Africa. He pointed out that in the face of the observed rapid development of African agriculture statistical data from previous surveys are no longer sufficient. He stressed that the statistics are not kept pace with current information needs from a variety of reasons, including lack of marketing activities on the role of statistics, research being carried out not by the official statistics but by ministries not interested in incorporating their findings into the statistical system, and new technologies not being used to conduct research. Possible solutions to these problems can be found in close collaboration between the statisticians and the institutions conducting agricultural research, establishing research priorities, strengthening the leading role of official statistics, implementing in statistics the generally recommended sectoral approach, providing statistics that allow for linking the results of research in agriculture with the economic conditions of the country (data from the national

accounts, consumption prices, etc.). It is necessary, of course, to implement new research techniques also to reduce research costs.

The FAO representative Naman Keita described the development of Agricultural Statistics in the context of the Global Strategy to Improve Agricultural and Rural Statistics. The Global Strategy to Improve Agricultural and Rural Statistics has been developed in response to the downward trend in the quantity and quality of data, as well as the lack of adequate statistics on agriculture in many countries. These data are necessary both at national and international level to take action on food security, sustainable agriculture development and climate change.

The key reasons for this were not enough human resources and the lack of technical and organizational capabilities for the collection, compilation, analysis and dissemination of agricultural statistics. The aim is to provide general principles and methodologies that will lead to a significant improvement of national and international statistics on food and agriculture needed to conduct analysis and decision making in this area. Implementation of the strategy will enable the provision of a minimum set of basic data using a methodology that will ensure the integration of agricultural statistics with the national statistical system. A key condition for effective implementation of global strategy is to specify in each country specific actions at national, regional and international levels to identify priority areas and ensure the information needs at different levels. Therefore, global and regional strategy implementation plans containing components for the methodological aspects of training and technical support are prepared simultaneously.

The conference ended with a panel discussion on future activities towards the development of statistics. Participants in the discussion emphasized the effects of implementing the Marrakesh Action Plan for Statistics. Most developing countries have already developed and implemented to varying degrees the National Statistics Development Strategies. Financing of development of statistics has increased substantially, national statistics to monitor Millennium Development Goals are more widely available and the development of statistics plays an increasingly important role in national development plans. However, further action within the next proposed action plan for statistics – Busan Action Plan – is necessary. What was stressed, with reference to the priorities of this plan, was the need for further funding to implement effective national statistics development strategies and to increase the role of statistics in decision making through promotion, dissemination, as well as exchange of knowledge and experience between countries.

This conference is one of the series of conferences on statistical capacity development organized in many parts of the World. The participants not only had a chance to exchange views and benefit from broad experience of the audience but also had an opportunity to meet with Polish statisticians many of whom participated in the conference. The participants, thanks to the organizers had an opportunity to tour Krakow and the famous salt mines in Wieliczka.

7th Conference Survey Sampling in Economic and Social Research in 60th anniversary of foundation of the Department of Statistics at the University of Economics in Katowice

The conference took place 18-20 September 2011 in Katowice and was organized by the Department of Statistics of the University of Economics in Katowice with the cooperation of the Department of Statistical Methods of the University of Łódź and Polish Statistical Association.

Forty-two persons from 9 countries, representing universities, statistical agencies and other institutions participated in the conference. Traditionally, due to the large number of foreign participants, the conference language was English. This year almost a half of the talks was presented by participants from Czech Republic, France, Great Britain, Greece, Lithuania, Netherland, Spain and USA. The invited papers were presented by:

Prof. Malay Ghosh (University of Florida, USA) Estimation of median incomes for small areas : A bayesian semiparametric approach,

Prof. Jean-Claude Deville (Ecole Nationale de la Statistique et de l'Analyse de l'Information, Laboratoire de Statistique d'Enquete, France) Uses of calibration and balanced sampling for the correction of non-response in surveys,

Prof. Parthasarathi Lahiri (University of Maryland, USA) Robust small area estimation,

Prof. Nicholas T. Longford (Universitat Pompeu Fabra, Spain) Policy-related small-area estimation.

Titles of contributed talks are presented in the appendix. It should be noticed that majority of Polish specialists in survey sampling participated in the conference including Professor Czesław Domański – The Chair of Polish Statistical Association and Professor Jan Kordos. The first session was opened by the Dean of the Faculty of Management Professor Krystyna Jędralska. Professor Andrzej St. Barczak the Chairman of the Presidium of the Committee of Statistics and Econometrics of Polish Academy of Science and chairmen of departments of different quantitative disciplines at the University of Economics in Katowice participated in the first session dedicated to the 60th anniversary of the Department of Statistics

The purpose of this conference was to stimulate research both in theoretical and methodological developments in survey sampling and related fields, and practical applications of the methods, including their potential usage in various research areas. Topics discussed during the conference included: estimation of population parameters based on complex samples, statistical inference based on incomplete data, small area estimation, sample size and cost optimization in survey sampling, sampling designs, statistical inference using auxiliary information, model-based

estimation, longitudinal surveys, practical implementations of sampling methods, sampling in statistical quality control, and sampling in auditing.

Program Committee of the conference consisted of: Professor Andrzej St. Barczak, Professor Czesław Bracha, Professor Czesław Domański, Professor Malay Ghosh, Professor Nicholas T. Longford, Professor Zdzisław Hellwig, Professor Jan Kordos (Chair), Professor Walenty Ostasiewicz, Professor Jan Paradysz, Professor Jan Steczkowski, Professor Jacek Wesołowski, Professor Janusz Wywiał. Members of Local Organizing Committee were: Professor Janusz Wywiał (Chair), Professor Józef Kolonko, Dr. Wojciech Gamrot and Dr. Tomasz Żądło (secretary).

Details including abstracts of all of the talks are available at the conference website <http://web.ue.katowice.pl/metoda>.

The Organizing Committee would like to thank sponsors of the conference: University of Economics in Katowice, Katowice City Hall and SPSS Poland.

Appendix - contributed talks:

1. Y. Berger *Variance estimation of hot-deck imputed estimator of change over time from repeated surveys*
2. Cz. Domański *The first Polish association of statisticians*
3. N. Farmakis *Sampling and Coefficient of Variation: Approximating Exponential Distributions*
4. W. Gamrot *Estimators for the Horvitz-Thompson statistic based on its posterior distribution*
5. A. Imiołek *Practical, statistical and economic aspects of using survey studies for identification of the key plant cultivation technology factors*
6. A. Jędrzejczak, J. Kubacki *The comparison of generalized variance function with other methods of precision estimation for Polish Household Budget Survey*
7. T. Klimanek *Estimation of unemployment in Wielkopolska region via spatial model with information about commutes*
8. R. Konarski *Application of Latent Class Analysis to Estimate Full Population Structure from Incomplete Data*
9. J. Kordos *Review of application of rotation methods in sample surveys in Poland. Theory and practice*
10. B. Kowalczyk *Estimation of net changes in the context of multipurpose rotating surveys*
11. A. Kozłowski *Usefulness of past data in sampling design for exit poll surveys*
12. D. Krapavickaitė *Successive sampling design in practice*
13. S. Krieg *Improvement of estimates for the Dutch Structural Business Survey by small area estimation*

14. Ch. Marc *Additional samples with balancing or overlapping conditions and given inclusion probabilities : theoretical approach and examples in the framework of PISA surveys*
15. O. Vilikus *Optimization of sample size and number of tasks per respondent in conjoint studies using simulated datasets*
16. J. Wesołowski *Rotation schemes and Chebyshev polynomials*
17. J. L. Wywiał *On distribution of Horvitz-Thompson statistic under the rejective sample*
18. T. Żądło *On accuracy of two predictors for spatially correlated longitudinal data*

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