Agricultural Statistics 2000: Opening Remarks

Fred Vogel, Program Chair
National Agricultural Statistics Service, U.S. Department of Agriculture

Good morning, ladies and gentlemen. On behalf of the National Agricultural Statistics Service, it is my pleasure and honor to welcome you to the *Agricultural Statistics 2000* Conference.

This is an historic event for several reasons. It is the first time the International Statistical Institute has sponsored an international conference specifically on the subject of agricultural statistics. This is probably the greatest gathering ever held where the subject at hand was agricultural statistics. I am pleased to report that 50 countries are represented here, a fact that speaks volumes about the importance of agricultural statistics around the world. The participation of so many countries will make this a truly meaningful conference. The roster of participants reads like a list of "Who's Who" in the field of agricultural statistics.

We are proud to host this conference in the beautiful city of Washington, D.C. with its many wonderful monuments. Let me tell you a bit about some of the people remembered by those monuments.

The Washington Monument is in honor of George Washington, the first president of the United States of America. George Washington was also a farmer, and history shows he conducted one of the first surveys to gather information about crop production in the new nation.

The Lincoln Memorial honors one of our greatest presidents, Abraham Lincoln. It was Abraham Lincoln who founded the U.S. Department of Agriculture. The organic legislation for the Department of Agriculture stated that one of its purposes was to collect and disseminate information about the nation's agriculture. The recognized need for agricultural statistics is as old as our country itself.

We have a rich program with an outstanding array of speakers. The purpose of this conference is to prepare ourselves for the next century and the changes it will bring.

We will begin with a session on "Requirements and Uses for Agricultural Statistics." That will be followed by two sessions on "Sources of Agricultural Statistics", which will highlight different methods used around the world. We may be from different countries with vastly different kinds of agriculture, but we have one thing in common. In order to produce statistics about agriculture, we must collect data at the individual farm level. The session this afternoon and tomorrow morning will cover issues ranging from census and survey methods to the use of administrative data to the use of crop cutting methods.

Tomorrow afternoon, we will hear about "Advancements in Survey Methodology and Analysis" with topics ranging from the use of document imaging technology to new methods of editing and the use of partial overlapping samples. Friday morning, we will hear about how "Remote Sensing and Geographic Information Systems for Agricultural Statistics" are used in different parts of the world. The meeting will then close with a session on "Future Perspectives for Agricultural Statistics".

I would like to acknowledge the Program Committee who helped arrange the outstanding presentations we will hear during the next few days. They are David Binder of Statistics Canada, Isidoro David of the Asian Development Bank, David Heath of Eurostat, Zoltan Kenessey of the ISI, Odell Larson of

FAO, Andreas Lindner of the OECD, and myself. Likewise, the Organizing Committee did a wonderful job with the conference arrangements.

I want to say a special word about Dr. Zoltan Kenessey who is not able to be here because of a serious illness. It was Dr. Kenessey who suggested we form the "Gregor-Johann Mendel Committee on Agricultural Statistics" to promote agricultural statistics in the ISI. This led to a more active role of agricultural statisticians in the ISI. The idea to have a conference on agricultural statistics was also initially his idea. I wish he could be here to see the end result of his idea.

Finally, I want to recognize and thank the organizations that provided financial support for this conference: the International Statistical Institute (ISI), the National Agricultural Statistics Service (NASS) of the U.S. Department of Agriculture, the Food and Agriculture Organization of the United Nations (FAO) and the Statistical Office of the European Communities (Eurostat). We truly thank you for making this possible.

Marcel P.R. Van den Broecke
Director, International Statistical Institute

As perhaps the only participant in this meeting who is not a professional statistician versed in agricultural statistics, I may be in a good position to address the question: Why do we have this meeting?

The history of agricultural statistics goes back a long way. Cave paintings show the first agricultural activities of mankind in quantitative as well as qualitative terms. In the bible we see that Joseph advised the Pharaoh in Egypt on quantitative aspects of the Nile Delta crops.

More recently, in 1992 to be precise, the International Statistical Institute took an initiative reflecting the importance of agricultural statistics by founding the Gregor-Johann Mendel Committee on Agricultural Statistics. It had its first formal meeting in 1993 in Florence. Allow me to quote its mission statement:

> *The health and wealth of a nation and its potential to develop and grow, depends on its ability to feed its people. Accurate and timely statistics about the source and availability of basic agricultural supplies are essential. As nations develop and their economies grow, the science of genetics as initiated by the ideas of Gregor-Johann Mendel improves the productivity of agriculture manifold. A global economy and the need for immediate information will place increased emphasis on agricultural statistics. The rapidly growing world population will require increased productivity which will be enhanced by the use of statistical analysis resulting from the studies of agricultural genetics. Therefore, the mission of the Gregor-Johann Mendel Committee on Agricultural Statistics is to provide a forum to foster a spirit of cooperation in the sharing of ideas and statistical methodology among the nations of the world to provide continual improvement in the accuracy, timeliness and relevance of agricultural statistics.*

So far the mission statement. Specific problems the Mendel Committee identified — and I am sure they will come back in the days ahead of us — concern timeliness, forecasts versus estimates of agricultural

produce, biological cycles versus calendar years, advances in satellite imagery, development of sample frames, spoilage, home consumption and revision policies concerning estimates.

But I would like to return to the question I started with: Why do we need to develop, refine, expand and determine future requirements concerning agricultural statistics? The answer is simple: to help ensure that food will remain available to those that have access to it, and will become available for those who need it and don't obtain enough of it. To put it in the current jargon: to create and maintain food security. For social and political stability, food security is an absolute prerequisite. As the German author Bertold Brecht once put it in the thirties, "Erst kommt das Fressen, dann die Moral", which amounts to something like "First food, then morality".

It is an interesting coincidence in this context that the population division of the Department of Economic and Social Affairs of the United Nations Secretariat in New York for the first time ever made world population projections which did not have the customary time span of 1950 to 2050, but this time of 1950 to 2150, thus looking ahead 150 years or about 5 generations.

The most likely scenario predicts a stabilisation of the world population around 2150 at a figure of about 10.8 billion people, almost double the size of the present world population. These people need to be fed. Present figures show that the percentage of people in the developing world who are undernourished is declining, but the absolute number is still increasing. Statistics are needed not only to assess situations as this one, but also to provide information to help develop measures and policies to start curbing this absolute number of needy people. First indications are that we may reach this stage around 2010. Improvement of agricultural yields as well as the reversal of environmental degradation seem to be key factors.

It has often been observed that the world can adequately feed its inhabitants, that it is just the logistics and the purchasing power of the hungry that fail. Thus, feeding the world is not just a matter of growing adequate amounts of food, but also a matter of getting it where it is needed, but first of all a matter of fighting poverty and ensuring that people have the economic resources to buy the food they need. In this perspective, a Cutting Edge Conference organised by ISI in Voorburg highlighted statistical aspects of poverty last November.

These are some of the basic challenges that policy makers are faced with. They cannot deal with these challenges without adequate statistics. The ideal statistical system must illuminate these issues, not just monitor them, and must evolve according to changing needs and priorities. The system must also have a high level of public credibility, and as part of that credibility, it must be free from undue political interference. The information needed at policy level includes not only relevant statistical data, but also the interpretation of such data for policy and program analysis, and for planning and decision-making. Statistical offices and agencies are situated between the data and their users, and have to form a bridge between the two.

The present conference was originally intended to be a Cutting Edge Conference, such as ISI organises several times a year. Usually some 40 to 50 people participate in these meetings. But due to the exertions of the Program Committee, this meeting met with such overwhelming interest from many sides that it grew to a size of over 200 participants as we see here today. I would like to congratulate the Program Committee, but particularly the program chair, Fred Vogel, whose enthusiasm and expertise has been indispensable in the preparation of what promises to be an outstanding conference.

Special thanks are also due to the U.S. Department of Agriculture, and in particular to Mr. Donald Bay of the National Agricultural Statistics Service, for their overwhelming support of this meeting, and to the USDA Graduate School for their organisational expertise and help. We are also grateful to the FAO and Eurostat for their financial contributions to this meeting.

ISI will try to help the organisers in putting together Proceedings of this meeting, and in achieving a wide distribution of them so as to make the results optimally accessible in the interest of all of us.

Donald M. Bay
Administrator, National Agricultural Statistics Service, U.S. Department of Agriculture

I am very excited about this conference. I am very thankful for Dr. Kenessey's and Fred Vogel's vision — that it is time for all of us who are involved in agricultural statistics to come together and share our experiences. Based on the tremendous response, which far exceeded anyone's expectations, we can certainly say to Zoltan and Fred, "You were right!" Fred Vogel certainly deserves credit for making this conference happen, and he was very astute to have Terry Holland help him with the multitude of details during the past year.

After reviewing the program for the next three days, all I can say is, "Wow!" The Program Committee did an outstanding job of putting together a program that covers all of the important issues we are dealing with in agricultural statistics today.

During the past 26 years, I have had the opportunity to work in 13 countries, many of which are represented here today. Even though we come from different cultures and speak different languages, the common goal of providing agricultural statistics brings us together like family. The close relationships we have with each other are strengthened by the common problems we face.

I have the honor to introduce our distinguished keynote speaker, Dr. Keith Collins. Dr. Collins is the Chief Economist at the U.S. Department of Agriculture. Today, he is best known as an economist, but I want you to know his Ph.D. from North Carolina State University was in economics *and* statistics. As Chief Economist, Keith advises the Secretary of Agriculture, and on occasion the President of the United States, on all agricultural economic matters. He is the "number one" user of agricultural statistics in the United States. I present to you Dr. Keith Collins.