ABSTRACTS

(Keynote/Plenary Talks)

Eighth International Conference on Agricultural Statistics

(18-21 November 2019)

Plenary Session P1: Measuring Sustainable Development Goals

P1.1

Are We Serious about achieving the SDGs? How Global Monitoring can help get us Back on Track

Pietro Gennari,
Chief Statistician, FAO, Rome, Italy

In his keynote address, Pietro Gennari will highlight how poor SDG data are leading to poor implementation of the 2030 Agenda global commitments. Whereas there are good examples of data galvanizing global action on specific issues, numerous priority areas under the SDGs still have little or no data. Reversing the old adage, we are manifestly witnessing that "what doesn't get measured, doesn't get done". Both FAO and UN-wide recent reports have already rung the alarm bell, declaring the World off-track to meeting most of the SDGs. However, the reasons that countries are not measuring the SDG indicators are not only due to low capacities, as is often thought. Ideology, politics, history, trust and a range of other factors weigh on the relationship between national statistical systems and international organizations. While there are no magical solutions, a number of pragmatic approaches can be taken to address key divides, centered on a true global partnership for SDG data.

P1.2

Official Statistics for Monitoring SDGs – the EU Experience

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Sustainable development, including sustainable agriculture has been at the heart of the European Union's (EU) policy for a long time, mainstreamed in key sectoral initiatives and projects. The UN 2030 Agenda and its 17 Sustainable Development Goals (SDGs) have given a new impetus to global efforts in achieving sustainability. The EU has fully committed itself to delivering on the 2030 Agenda through its internal and external policies and introduced, in 2017, a more detailed regular monitoring of the SDGs in the EU context, based on a reference indicators' framework.

This paper summarises the Eurostat's experience with developing the indicators framework and providing annual monitoring reports on progress towards SDGs, with a focus on sustainable agriculture and food systems in EU. It shares lessons learned and challenges ahead related to the need to modernise and adapt the official statistics, in response to the information demands generated by the 2030 Agenda. The paper also discusses the role of communication in the monitoring process and the impact the exercise has had on the overall image and trust in European statistics.

P1.3

Measurement of Sustainable Development Goals

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Sustainable development goals (SDG 2030) were adopted by all the member States of United Nations in 2015 as a universal call to banish poverty and hunger from the globe, save the planet earth and ensure that all people enjoy peace and prosperity by 2030. These are the most comprehensive set of goals set in the history of mankind and they cover most aspects of quality of life. The 17 goals encompass economic well-being, nutrition and health, environment, natural resources like land, water, air, forest, oceans, vegetation, terrestrial and aquatic ecosystems. In terms of time the SDGs cover present and future, and in terms of activities they cover both production and consumption. Similarly, the SDGs go beyond physical dimensions of need and include aspects like peace and justice.

Lest these goals remain only target their progress need to be regularly measured through appropriate quantitative indicators. This involves various stages. Knowing base level or current status. Two, measuring growth, progress or change in status. Three, assessment of approaches and means adopted to achieve SDGs and resources allocated for them. This will cover processes, output and outcome.

The most challenging aspect of SDGs is not the desire of member countries to achieve them but right kind of policies and strategies needed under different contexts. This will require designing integrated solutions based on sound understanding of policy choices, tradeoffs, across complex and competing goals. This process will involve experts in various fields to develop integrated solutions using various data sets and analytics, indices, cause and effect relationships, interactions, patterns.

UNDP has come out with guidebooks, various tools and general yardsticks to monitor, measure and reflect achievement of goals and underlying processes towards achieving SDG goals. It is also regularly updating progress of SDG in various countries using common indicators and framework for all the countries. UNDP has proposed a list of 234 indicators to track and measure progress of 17 SDGs. This is essential and necessary but this is not sufficient to assess the progress of SDG in member states let alone the achievement therein both of which require action by the member states. Second, Tracking and monitoring SDG depends on timely availability of real time data, quality of data and representativeness of data. These are not easily assured. Third, indicators developed by UNDP are common for all countries and they do not capture country specificities and situations. Fourth, the indicators by themselves do not reveal why and where. In a large country like India it is quite important to know the performance at sub national level to target improvement. Addressing such questions is the responsibility of member states.

P2.1

Data Demands and Technological Solutions for Generating Timely and Accurate Agricultural Statistics

Sanjay Agarwal
Secretary, Department of Agriculture, Cooperation & Farmers Welfare, Government of India

India has a long history of collection of agricultural statistics in the country and has a well-established and internationally recognized Agricultural Statistics System.. The system has evolved keeping in view the decentralized structure of governance and the changing requirements of the sector over the years. While a large volume of current agricultural statistics is generated as a by-product of the revenue administration at the local level, the data on slow changing characteristics of agriculture is collected through agriculture census and follow-up surveys. The State Agricultural Statistics Authorities (SASAs) playing a major role in collection and compilation of Agricultural Statistics at the State level while the Directorate of Economic and Statistics in the Ministry of Agriculture and Farmers Welfare at the Centre is the nodal agency for such compilation and dissemination at the all-India level.

In Indian perspective, agriculture sector reflects two contrasting dimensions; first is decline in the share of the sector in GDP from about 50% during 1950-51 to around 17% during 2017-18, which is a natural concomitant of the development process; and second the large dependence of the workforce on the agriculture sector for employment/ livelihood and the limited absorptive capacity of the other sectors in terms of employment. Agriculture and allied activities remain the major source of livelihood for nearly half of the Indian population. Thus, the agriculture sector is critical for food security and inclusive growth. As per Food and Agriculture Organisation (FAO), growth originating from agriculture is twice as effective in reducing poverty as growth originating from other sectors of the economy. Thus, the Agriculture, occupies the centre stage in the Indian economy and the growth in the sector will have a multiplier effect on "**eliminating poverty", which is the prime objective of the first goal of SDG**.

The critical role of agriculture in Indian economy underlines the need for major interventions with the aim of improving agricultural productivity on a sustainable basis. Given the competing demands for the limited resource envelope, it is important to ensure that interventions are more effective and outcome oriented. This necessitates continued availability of timely and accurate data required by the planners, administrators, policy makers and research scholars

Notwithstanding the present data demand being met by the Indian Agricultural Statistical system, it is important to recognize the new and more detailed data at local level. This is particularly important not only from the point of view of maintaining price stability and food security at the macro level but also for achieving the goals at micro level. **Thus, we need to improve our statistical system using latest technologies such as remote sensing and Artificial Intelligence based modeling** which would generate estimates at a much granular level and provide significant inputs for demand supply management and global price trends in a timely manner.

Government's price policy for major agricultural commodities seeks to ensure remunerative prices to the growers for their produce with a view to encouraging higher investment and production and to safeguard the interest of consumers by making available supplies at reasonable prices. The price policy also seeks to evolve a balanced and integrated price structure in the perspective of the overall needs of the economy. Towards this end, the Government announces Minimum Support Prices (MSPs) for twenty two (22) mandated crops and Fair and Remunerative Price (FRP) for Sugarcane based on the recommendations of the Commission for Agricultural Costs & Prices (CACP) after considering the views of concerned State Governments and Central Ministries/Departments. The Government also offers to procure crops through designated nodal agencies when prices fall below MSP. However, farmers are free to sell their produce to the Government procurement agencies at MSP or in the open market whichever is advantageous to them.

To meet the price policy objectives, DAC&FW provides necessary market intelligence to the Government and is involved in collection, compilation and dissemination of data / information on prices - wholesale, retail, farm harvest and international prices of important agricultural commodities. Wholesale prices of 176 selected agricultural commodities from 719 market centres spread across the country and retail prices of 46 food items from 87 market centres are collected and compiled on weekly basis.Weekly wholesale prices of 109 agricultural commodities from 237 markets centres spread across the country are provided to the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce & Industry for preparation of monthly Wholesale Prices Index (WPI).

Recently, Government of India has also embarked upon the path of doubling farmers' income by 2022. Farmers are arguably the most vulnerable segment of our society in terms of income and livelihood support despite the fact that they have a powerful asset in the form of cultivable land. If one calculates return to farmer in the same way as returns to financial assets, the picture of their relatively poor income conditions will become manifest. To overcome this, a limited Universal Basic Income specifically addressing the need to finance minimum requirements of the farmer for sustaining agriculture is underway in India in the form of the PM KISAN Scheme. However, implementation of such schemes is highly dependent on developing and maintaining a dynamic database of farmers in the country. India has already initiated steps in this direction and have started disbursing funds to farmers through Direct Bank Transfer platform which involved linking farmers database with their bank accounts and unique Aadhar numbers. I believe that the varied sessions of the Conference exclusively earmarked for this issue will deliberate more on this topic to bring the success story behind this initiative for other participating countries. I also look forward to hear from the leading experts from various national and international Organisations.

In. Conclusion, the process of change in agricultural policies depends **heavily on relevant statistics and** multi-stakeholder involvement in a coordinated fashion. **Particular focus is to be made on the monitoring and evaluation of our policies through statistics**. The process of change in agriculture as with other sectors often needs to be anchored in the specific contexts that the region and farmers therein face; and it has to be gradual, sequenced and calibrated in view of potential for conflicts of objectives or interests.

P2.3

Revising Efforts in Agriculture Data to Make Them Not Just Farm But Also Farmer Centric

Purvi Mehta
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Data is often described as the 'new oil'. Like oil, data is most valuable when it is helping the economy run smoothly, efficiently and sustainably.

Many developing countries across the world have been shifting attention towards data for development and are looking for ways and means to utilize data. Country systems are often focused on data collection but not as strong in it's utilization for evidence based policy making. In many countries, especially where agriculture systems have undergone major commodity centric revolutions eg. Green revolution- the data base are limited to a niche set of commodities (especially staple crops) and on production systems with some clear gaps in diversified commodities and data related to market linkages. There are some key data gaps in post-production data regarding market orientation, price realization etc, making agriculture data availability not equally dispersed across the value chain.

We are all familiar with examples of how ag tech is building off data platforms to provide smart farming and precision farming services to farmers. Significant advances have been made in our thinking around how to employ Big Data and connected devices to meet the goals around profitability, efficiency and cost management.

The missing piece is harnessing Big Data for shaping farmer-centric policy making, bridging the gaps and raising the bar in government policy resource allocation and implementation. Since smallholder farmers across the world comprise the segment that is most directly impacted by government policy and the public sector performance, the quality of these decisions must be significantly raised in order to ensure the most inclusive and progressive outcomes.

This talk will identify how data can serve as an important resource not just for farm related decision support but (more importantly) farmer centric policy making in developing countries, discuss some concrete examples of how this is being done, and share ideas on how best to optimize the current data systems for addressing some key challenges in agriculture.

Plenary Session P4: Information Pathways for Enhancing Farmers' Income

P4.3

What Prospect for Digital Apps to Support Farmers' Management of Climate Risk?

Peter Carberry
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The prospect that farmers will adjust their management to suit variable seasonal conditions using digital agriculture applications (apps) is being keenly pursued by Start-Ups, traditional industry and research communities. However, past reviews of agricultural Decision Support Systems (DSSs) have pointed to a lack of traction for DSSs and hence a need to reflect on past mistakes and to learn from social and management theory.

This presentation addresses the prospects for DSS apps in the context of rainfed agriculture, particularly for smallholder farmers in South Asia and Sub-Saharan Africa. This reflection draws on the aforementioned literature, on experiences in DSS development and delivery in commercial agriculture in Australia and on efforts to leverage the rapidly expanding coverage and ownership of mobile phones to deliver app advisories to Indian and African farmers.

While enthusiasm for digital apps is intuitively high, a reality is that future predictions, including forecasts of future climate, contain high irreducible uncertainty. The downside risks of the 'right' app advisory resulting in a 'wrong' outcome must be considered alongside the prospective benefits promoted by app developers. In conclusion, there are high prospects of digital apps well supporting farmers' management of climate risk but let the 'buyer beware'.