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Food and Agriculture
Organization of the
United Nations

International Seminar on

Approaches and Methodologies for Crop Monitoring and Production Forecasting

25 – 26 May 2016, Dhaka

Provisional Timetable

Wednesday, 25 May 2016 (Day 1):

Venue: Ball Room, Pan Pacific Sonargaon Hotel, Dhaka

08.30-09.30 hrs.	Registration
09.30-09.45 hrs.	Welcome Session
	<p>Recitation from the Holy Quran</p> <p>Address by Mr. Mohammad Abdul Wazed, Director General, BBS Address by Mr. Mike Robson, FAO Representative</p>

Technical Session I: Global initiatives in crop monitoring and forecasting

The analysis and use of data received from remote sensing and meteorological data for improving the advance and near real time assessment of crop condition and production forecasting has received sufficient recognition in recent times. Such methods are gradually being mainstreaming in the agricultural statistics systems for food security monitoring and early decision making. This session, besides being a curtain raiser for the workshop, will provide an overview of Global Initiatives and methodologies on this theme.

09.45-11.00 hrs.	<p>Chair: Prof. Dr. Md. Ali Akbar, Vice Chancellor, Bangladesh Agricultural University</p> <p>Co-Chair: Dr. J. S. Parihar, Eminent Scientist, India</p>
.	<ol style="list-style-type: none"> 1. The MARS, GLOBCAST and GEOGLAM Crop Yield monitoring and forecasting systems and their potential application in Bangladesh, <i>Jacques Delincé, Statistics Division, FAO</i> 2. Preparation of the USDA World Agricultural Supply and Demand Estimates (WASDE) Report, <i>Mark R. Miller, International Programs Office, National Agricultural Statistics Service, USDA, USA (Recorded Replay)</i> 3. Crop Assessments methodology used for preparing crop outlooks, in less than ideal conditions of data systems: The CFSAM Approach, <i>Felix Baquedano, Global Information and Early Warning System (GIEWS), Trade and Markets Division, FAO</i>
	Discussion
11.00-11.15 hrs.	Coffee Break

Technical Session II: Remote Sensing application in crop monitoring

Countries in the Asia-Pacific region and elsewhere have realized the potential of remote sensing for improving their crop forecasting and monitoring systems, and for improving the reliability of crop production estimates obtained through conventional methods. The session will focus on sharing country experiences on choice of technology, methodology, institutional arrangements and limitations and scope of further improvement in methodologies.

11.15-13.15 hrs.	<p>Chair: Mr. Mohammad Abdul Wazed, Director General, Bangladesh Bureau of Statistics</p> <p>Co-Chair: David Stephens, Senior Research Scientist, Australian Export Grains Innovation Centre (AEGIC), Australia</p> <ol style="list-style-type: none">1. Application of remote sensing technology in Bangladesh: challenges and prospects, <i>Hafizur Rahman, SPARSO, Bangladesh</i>2. Satellite based rice area monitoring and yield forecasting, <i>Nasreen Islam Khan, IRRI, Philippines</i>3. Crop production forecasting using remote sensing data - experience of China's Crop Watch system, <i>Zhang Miao, Division for Digital Agriculture Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, China</i>4. Testing Point Area Sampling Frame as candidate for Master Frame in Nepal, <i>Jacques Delincé, Statistics Division, FAO</i>5. Crop Assessment using Space, Agro-Meteorology & Land based observations : Indian Experience, <i>Shibendu S. Ray, Director, Mahalanobis National Crop Forecasting Centre, India</i>6. Application of remote sensing technologies for mapping of cropping pattern and area estimations for major summer and winter crops across spatial and temporal scales: Lessons learnt in Australia, <i>Andries Potgieter, Senior Research Fellow, Queensland Alliance for Agriculture and Food Innovation (QAAFI), University of Queensland, Australia</i> <p>Discussion</p>
13.15-14.15 hrs.	Lunch Break

Technical Session III: Agro-meteorology based crop monitoring

This session will focus on use of agro-meteorological data (rainfall, temperature, humidity and water balance in the soil) for predicting crop yields. Such data when combined with historical statistical series and/or remote sensing data can enhance the accuracy of forecasts. Complex econometric modelling based on these weather parameters has the potential to simulate crop growth and related production forecasts almost on real time basis. This session will review global and country experiences on this theme with a view to explore their potential applicability in Bangladesh.

14.15-15.30 hrs.	<p>Chair: Prof. Dr. Shamsul Alam, Member, General Economics Division, Planning Commission</p> <p>Co-Chair: Kbd. Md. Hamidur Rahman, Director General, Department of Agricultural Extension</p> <ol style="list-style-type: none">1. Availability of agro-meteorological data for crop monitoring in Bangladesh, <i>BMD, Bangladesh</i>
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	<p>2. Agrometeorological approaches to crop yield forecasting, <i>Hideki Kanamaru, Climate, Energy and Tenure Division (NRC), FAO</i></p>
	<p>3. Improved wheat yield and production forecasting with a moisture stress index, AVHRR and MODIS data, <i>David Stephens, Senior Research Scientist, Australian Export Grains Innovation Centre (AEGIC), Australia</i></p>
	<p>4. AGROMET model based yield prediction in India, <i>KK Singh, Director, India Meteorological Department, India</i></p>
	<p>Discussion</p>
15.30-16.00 hrs	<p>Coffee Break</p>
16.00-17.00 hrs	<p>Inaugural session</p> <p>.</p> <p>Chair: Mr. K M Mozammel Hoq, Secretary, Statistics and Informatics Division, Ministry of Planning</p> <p>Recitation from the Holy Quran</p> <p>Welcome Address: Mr. Mohammad Abdul Wazed, Director General, BBS</p> <p>Recent initiatives of Bangladesh to improve agriculture and rural statistics, <i>Bidhan Baral, BBS</i></p> <p>Remarks by <i>Mukesh Srivastava, Senior Statistician, FAO, Bangkok</i></p> <p>Crop forecasting: Its importance, current approaches, ongoing evolution and organizational aspect, <i>Yakob Seid, Statistician, AMIS FAO, Rome</i></p>
	<p>Address by Special Guests</p> <p>Mr. Mike Robson, FAO Representative</p> <p>Mr. Mohammad Moinuddin Abdullah, Secretary, Ministry of Agriculture</p> <p>Mr. Muhammad Abdul Mannan, MP, Honourable State Minister, Ministry of Planning and Ministry of Finance</p> <p>Address by the Chief Guest</p> <p>Mr. A H M Mustafa Kamal, MP, Honourable Minister, Ministry of Planning</p> <p>Address by Chair</p> <p>Mr. K M Mozammel Hoq, Secretary, Statistics and Informatics Division, Ministry of Planning</p> <p>Vote of thanks by <i>Salima Sultana, Director, Agriculture Wing, BBS</i></p>
17.00-17.15 hrs.	<p>Photo Session and Refreshment</p>
19.00 hrs.	<p>Welcome Dinner</p>

Thursday, 26 May 2016 (Day 2)

Venue: Windy Town, Bangabandhu International Convention Centre (BICC), Dhaka

Technical Session IV: Crop monitoring and production estimation using survey and administrative data

Established crop monitoring systems in many countries are based on administrative reporting by agricultural extension staff. Official estimates of production are prepared based on scientifically designed statistical surveys which often yield more accurate estimates but with due time lags. These

methods also need to be periodically reviewed to take into account to the change in land use, agrarian structure, spatial characteristics and emerging crops. There are initiatives of integrating upfront technologies of spatial data and analysis to complement and supplement the systems of crop estimation and enhance synergy with the requirement of crop forecasting and crop monitoring. The session will be a platform to share some country experiences on this theme.

09.00-10.30 hrs.	<p>Chair: Dr. Atik Rahman, Executive Director, Bangladesh Centre for Advanced Studies</p> <p>Co-Chair: Mr. Mukesh Srivastava, Senior Statistician, FAO</p>
	<ol style="list-style-type: none"> 1. Crop Monitoring System in Bangladesh: Main Challenges and Recent Initiatives, <i>DAE, Bangladesh</i> 2. The Crop Production Survey & Estimate of China, <i>Song Yongjun, National Bureau of Statistics, China</i> 3. Survey based crop forecasting and updating in the Philippines, <i>Reynante Santos and Mario Padriao, Philippine Statistics Authority, Philippines</i> 4. Improving Reliability of the Administrative Crop Reporting Systems, <i>Mohammad Amirul Islam, FAO, Bangladesh</i> 5. Current system of crop forecasting, monitoring and production estimation in Viet Nam: Lessons Learnt, <i>Nguyen Quynh Huong, Department of Agriculture, Forestry and Fishery, GSO, Vietnam</i> 6. U.S. Crop Production Forecasting and Estimation Methodology, <i>Sarah Hoffman, International Programs Office, National Agricultural Statistics Service, USDA, Washington, DC, USA (Recorded Replay)</i>
	Discussion
10.30-10.45	Coffee Break

Technical Session V: Crop simulation and modelling based on diverse set of data: Integrated approaches

Modeling based on statistical time series to forecast crop production has been a prominent practice in countries where application of remote sensing and agro-meteorology based forecasting have not been established. Also statistical modeling has increased scope with the availability of big and diverse data sets and has the potential to supplement all other high-tech practices. The session will provide an opportunity to share the country experiences of the modeling based crop forecasting. Method mix in crop monitoring and forecasting is a practice that has been initiated in many developed countries. Potential use of all available data and methodologies, commonly known as integrated approach, has been incorporated to improve forecasting and monitoring tools for crops under surveillance. This session will share successful practices in this domain.

10.45-13.30 hrs.	<p>Chair: Mr. Mike Robson, FAO Representative</p> <p>Co-Chair: Mr. Baitul Amin Bhuiyan, Deputy Director General, Bangladesh Bureau of Statistics (BBS)</p>
	<ol style="list-style-type: none"> 1. Forecasting Rice Production in Bangladesh using Statistical Model, <i>Bidhan Baral, BBS, Bangladesh</i> 2. Method of rice planting area monitoring and forecasting production to support food self-sufficiency in Indonesia, <i>Budi Wariyanto, Center for Agricultural Data and Information, Ministry of Agriculture, Indonesia</i>

	<p>3. Early season crop forecasting with econometric modelling: FASAL in India, <i>Neelabja Ghosh, Delhi School of Economics, India</i></p>
	<p>4. Forecasting and estimation of rice production in Japan, <i>Masahiro Hosaka and Daisuke Setoguchi, MAFF, Japan</i></p>
	<p>5. System of Finalization of All India Level Estimates of Agricultural Crops in India using Multiple Sources of Data, <i>Rajiv Lochan, Advisor, MoAFW, India</i></p>
	<p>6. Natural Hazard Damage Assessment of Rice Yield in part of Gilan province, Iran, <i>Mehrdad Nematzadeh, Ministry of Agriculture, Iran</i></p>

Discussion

13.30-15.00 hrs.

Lunch Break

Session VI: Wrap-up: Panel Discussion and Closing Session

The objective of this session is to draw the conclusions for deciding the next steps for Bangladesh in terms of choice of suitable methodologies. The session will have a presentation on “key messages” from previous session followed by a discussion by panellists. The session will conclude by concluding remarks from session chairs.

15.00-16.30 hrs.

Chief Guest: Mr. K M. Mozammel Hoq, Secretary, Statistics and Informatics Division

Co-Chairs: Mr. Mohammad Abdul Wazed, Director General, Bangladesh Bureau of Statistics and Mr. Mike Robson, FAO Representative

Wrap-up of Technical Sessions, *Bidhan Baral, BBS*

Remarks of Panellists

David Stephens, Senior Research Scientist, Australian Export Grains Innovation Centre (AEGIC), Australia

Jacques Delincé, Statistics Division, FAO

Jai Singh Parihar, Eminent Scientist, India

Hideki Kanamaru, Climate, Energy and Tenure Division (NRC), FAO

Masahiro Hosaka, MAFF, Japan

Dr. Atik Rahman, Executive Director, BCAS

Mukesh Srivastava, Senior Statistician, FAO

Discussion from Floor

Concluding Remarks by Co-Chairs

Closing Remarks by Chief Guest