

Ministry of Agriculture



Welcome to the Presentation on

Agriculture, Food Security and Climate Change



BANGLADESH DEVELOPMENT FORUM 2015
Bangabandhu International Conference Center (BICC)
15-16 November 2015, Dhaka

International Achievement in Agriculture Sector

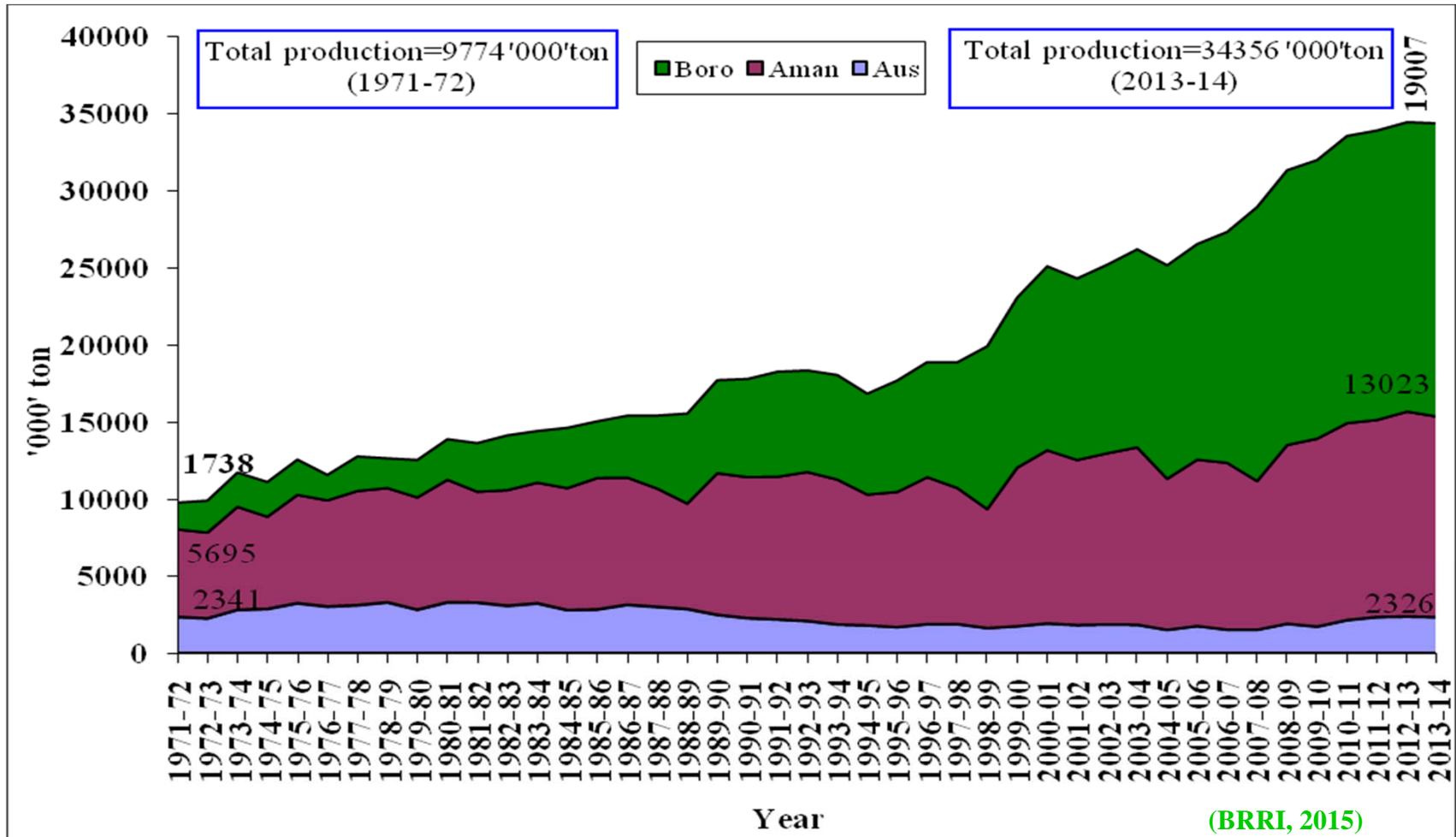


Bangladesh Agriculture - at a glance

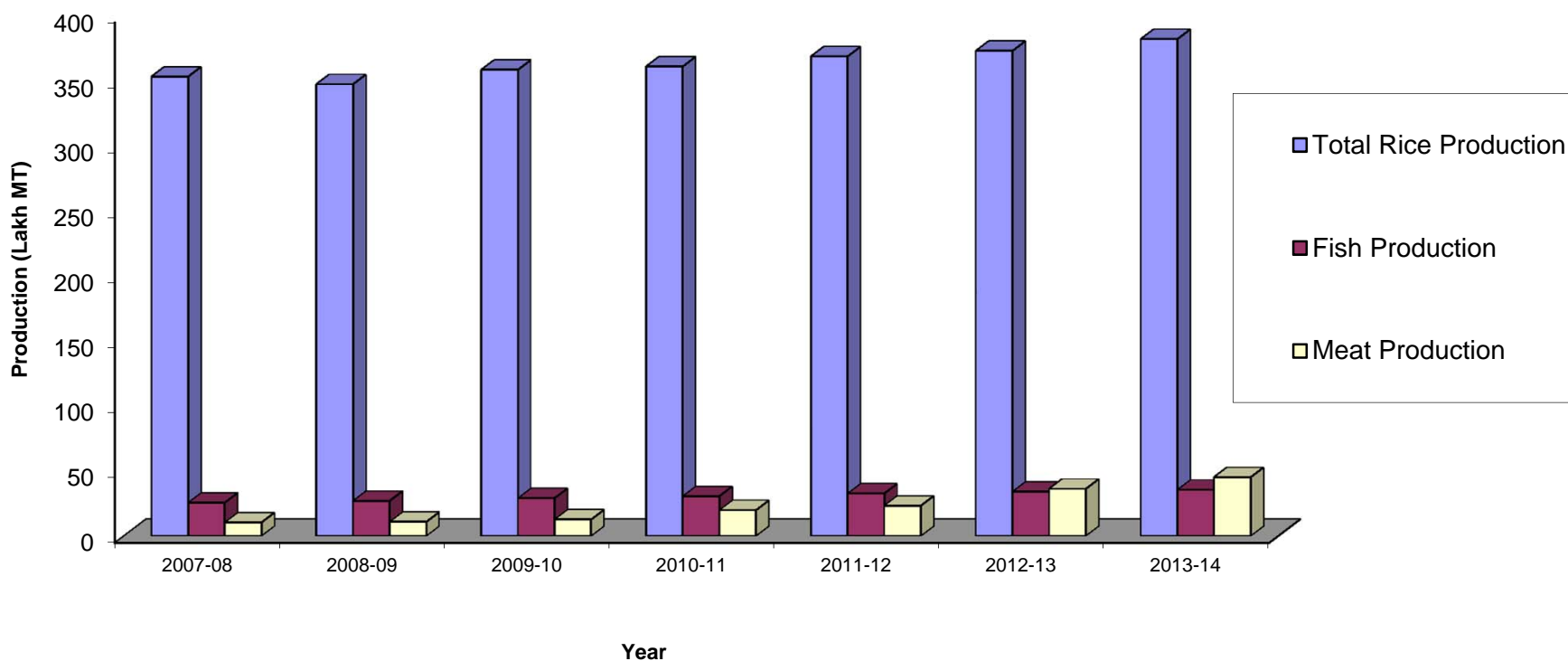


- **Total farm holding: 1,47,16,000**
- **Cultivable land: 8.50 million hectares**
- **Cropping intensity 190%**
- **Annual Food Production (2013-14) :**
 - **Rice : 34.35 m MT**
 - **Wheat : 1.30m MT**
 - **Maize : 2.51 m MT**
 - **Potato : 8.95 m MT**
- **Annual Fish production : 3.555 m MT**
- **Annual Meat Production : 45.20 Lakh tones**
- **Agriculture Sector Contribution to GDP: 16.33%**
 - **Crop Sector Contribution to GDP: 12.65%**
- **Engagement of Labor Force in Agriculture 47.30%**

Trend of rice production (aus, aman and boro) from 1971-72 to 2013-14



Trends of Production in Agriculture sector(FY 2007/08- 2013/14)



Source: Economic Review 2014



Achievements in Agriculture (2009-2014)

- **Increased in Food production**
- **Reduced poverty and food insecurity (MDG 1)**
- **Improved nutritional Status.**
- **Programmes to tackle climate change vulnerability**
- **Improved Input management.**
- **Support in Mechanization.**
- **Increased vegetable and potato production**
- **Develop Stress (flood, drought, submergence, salinity, heat, cold..) tolerance varieties.**

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Achievements in Agriculture (2009-2014)



- **Introduction of Farmer's input card**
- **Opening Farmer's bank account for Tk 10 .**
- **Fisherman card.**
- **Extension of IPM activities and reduced use of pesticide**
- **Adaptation of New molecular science**
- **e-Agriculture.**
- **Expansion of Minor irrigation.**
- **Achievements recognized in a series of awards.**



Challenges in Agriculture

- **Declining agricultural land**
- **Population growth**
- **Climate change**
- **Rapid urbanization (labour, land)**
- **Agricultural research and education**
- **Technology generation (expertise, time and money)**
- **Technology dissemination (expertise, time, logistics)**
- **Alternate livelihoods/rehabilitation program**
- **Inadequate post harvest technology**
- **Inadequate value addition /food processing and marketing**
- **Increased area and intensity of salinity in the southern belt.**

Targets for Food Security in 7th Five Year Plan



- **Attain, and maintain, self sufficiency in food production**
- **Meet the nutritional requirement of the population through supply of an adequate and diverse range of foods**
- **Diversify production and consumption with high value crops including vegetables, fruits and sea weeds.**

Strategies for Ensuring Food Security in the 7th Five Year Plan



- **Research and Development**
- **Mechanization in agriculture and Promoting Science-led Agricultural Technology Systems**
- **Promoting Research-Extension-Farmers Linkage**
- **Promoting agricultural diversification**
- **Use of Bio-technology in agriculture**
- **Crop zoning and land use planning**
- **Use of surface water to economize/minimize use of ground water**
- **Post harvest management and value chain development**
- **Seaweeds and aquatic plants as Food**

Food security is not only about production



- **Food availability (production)**
+
- **Food access (in market, do people have money to buy) – need for social safety nets**
+
- **Food utilization (is food used effectively) – focus on nutrition**

Climate Change and Food Security



- **Agriculture largely depends on natural rainfall, weather & climate, water level, soil condition etc.**
- **Uncontrolled farming environment**
- **Rice based agriculture greatly depends availability of fresh surface and ground water**
- **Seasonal farming**
- **Biotic and abiotic stresses**
- **Livestock and Poultry diseases**
- **Detritions of soil condition (soil fertility, soil physical aspects, soil biological health, salinity build up, soil pollution)**
- **Changing behavior of insect/pests**



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- **Rising average temperature affects crop, livestock and poultry production**
- **Less predictable rainfall favours more stress-tolerant crops; need for irrigation**
- **Extreme weather events can affect standing crop at or near harvest time**
- **Sea level rise requires infrastructure, a move to water-based livelihoods, improved urban and land use planning**



<https://www.google.com.bd>

Combating Climate Change



- **Climate resilience technologies (Southern and Barind Area)**
- **Innovative and integrated farming practices**
- **Short duration crops**
- **Crop diversification and cropping intensity**
- **Changing/shifting cropping pattern**
- **Efficient water management**
- **Mechanization**
- **Management of hill agriculture**



Existing Plans and Sources of Funding

- **Bangladesh Climate Change Strategy and Action Plan (BCCSAP 2009) and investment/action plans set direction for adaptation in Bangladesh.**
- **Sources of funds:**
 - **Government of Bangladesh (GoB)**
 - **Bangladesh Climate Change Trust Fund**
 - **Fund from International Financial Institutions and development partners**
 - **Green Climate Fund**

Priorities for the next Food Security Country Investment Plan



- **Address climate change and preserve natural resources**
- **Need for cross-cutting programmes, to tackle challenges such as nutrition**
- **Integrated land use Plan**
- **Implementation of Southern Master Plan**



Risk and Hurdles in Designing and Implementing next Food Security CIP

- **Better inter-ministerial collaboration on CIP Design**
- **Commercialization**
- **Investment in Private Sector**
- **Emphasis on Food Access and Utilization –along with Availability of quality food.**

Actions by GoB and DPs, together



- **Programmes for Integrate Climate Change and Food Security**
- **Investment in R&D**
- **Human Resources Development**
- **Technical assistant for design, support efforts for Monitoring Implementation and scale up**
- **Investment in post harvest technology**
- **Investment in Value chain**
- **Investment in ICT agriculture**
- **Invest in coastal aquaculture and marine fisheries**
- **Capacity development of the research institutions**
- **Investment in dairy and cattle development**
- **Encourage Private sector participation.**



Thank you