



Sharing of Key Updates/Priorities for Country Rice Sector Development

20th Annual Meeting of the Council for Partnerships on Rice Research in Asia

25-26 October 2016

Central Park Hotel Songdo Seoul, South Korea

By Dr. Amitha P. Bentota (Director, RRD, Batalagoda) and Mr. R. M. Nanadasiri (Additional DG- Development) DOA, Sri Lanka

Rice Research and Development Priorities (2017-2020)

- **National Level R&D Priorities**
 - Increase yield potential through Breeding (above 13t/ha)
 - Improve the quality of rice to cater for consumer demand (Eating, Cooking, Nutrition and Health concern properties of rice for local and export market)
 - In cooperate Major pests (BPH, GM) and Diseases (BLB/ Blast) resistance
 - Identification of genetic resources and improve of rice varieties for new immerging pests (sheath mites/ Stem borer)
 - Technology improvement to overcome climate change influences
 - Sustainable management of input (Fertilizer, agro chemicals, land and water)

Rice Research and Development Priorities (2017-2020)

- **Farm Level R&D Priorities**
 - Reduce Yield gap
 - Increase profitability in rice farming/ living standard
 - Introduce appropriate machineries through out value chain
 - Minimize use of agro chemicals
 - Develop suitable drying processing and storage methods
 - Testing new cropping systems, and new technologies
 - Effective technology dissemination methods
 - Efficient information management System (Link)

Rice Research and Development Challenges

Institutional level:

- **Lack of research facilities to conduct new innovative research**
- **No or few post graduate level qualified researchers for all the disciplines in rice research and development**
- **Poor collaboration with IRRI or other international institution**
- **Low private sector investments in agricultural research and development**

Rice Research and Development Challenges

Farm level:

- Stagnation in potential yield about 13t/ha
- Small farm size prevents adoption of mechanization
- High labor wages and scarcity of labor availability
- Production costs are very high
- Reduced water holding capacity of major and especially minor irrigation reservoirs
- Highly variable inception time of monsoon rain fall

Cont.....

- **Buildup of salinity conditions in major irrigation schemes**
- **Insufficient drying and storage facilities**
- **The guaranteed paddy prices prevailed up to now is not receiving to farmers.**

Priorities for Collaboration with IRRI and/or other partners

- **Human Resources Development**

Post graduate level (PHD/ MPhil):

- Plant Breeding and Biotechnology
- post harvest and grain quality
- Plant protection
- Marketing and value addition
- Agronomy and physiology
- Socio Economics and Extension

Short term:

- one or 2 months training in all disciplines

- **Facilities Development**

-Support from experts for laboratory development
(Biotechnology, grain quality and microbiology etc.)

Priorities for Collaboration with IRRI and/or other partners

● **Research:**

- Germplasm exchange for known biotic (BLB, Blast, BPH, Sheath mites) and abiotic stresses
- Gene sequencing and mapping of traditional and improved local accessions) for important traits (Yield/ Grain quality/ biotic and abiotic stresses)
- Climate change (influence for Drought/Floods/ High and Low Temperature with high Humidity) modeling
- Rice grain quality, nutritional and functional properties
- Soil health/ Soil microbiology
- Productivity improvement

● **Extension and Training** :RCM and other ICT based facilities.

Thank you