Training Course for Distinctness, Uniformity and Stability Test of Tomato

November 30 to December 03, 2015
Hanoi, Vietnam

Mr. Uch Moeurn
Chief of Kbal Koh Vegetable Research Station
Department of Horticulture and subsidiary crop
General Directorate of Agriculture
Ministry of Agriculture, Forestry and Fisheries, Cambodia
Uchmoeurn.kk@gmail.com
CONTENTS

1. Agricultural Situation
2. Organization for Seed industry
3. Status of Seed Industry
4. Regulation for Seed and Variety
5. R&D in Public/Private Sector
6. Status of PVP
7. Others
Agricultural Situation

Country Profile

- Land: 181,035 km²
- Population: 14,701,717 (2011)
- Population Density: 74 persons/km²
- Rural Population: 85%
- Khmer origin: 90%, Ethnic, Chinese; Vietnam; Islamic ...10%.
- Season: Dry and rainy (dry started from November to April and rainy started from May to October)
Environment condition

- Location: Tropical Zone
- Clear season distinctness:
  - Wet season started from May. to Oct.
  - Dry season started from Nov. to Apr.
- Climate status (average):
  - Tem. 24-35 °C
  - Rainfall 1 200-5 200mm
  - Humidity 73-94%
Main crop statistic

- Rice : 2,795,892ha
- Maize : 213,622ha
- Cassava : 206,226ha
- Sweet potato : 11,452ha
- Vegetable : 52,732
- Fruit : 190,000ha
- Mungbean : 69,206ha
- Peanut : 20,041ha
Main crop statistic (Cont.)

- Soybean : 103,198ha
- Sesame : 48,299ha
- Sugarcane : 17,207ha
- Jute : 594ha
- Tobacco : 10,062ha
- Rubber : 181,430ha
Agriculture GDP shared by section (2012)

Share (%) of Agriculture Sector in GDP 2012
- Service Sector: 41.4%
- Agriculture Sector: 27.5%
- Industry Sector: 31.1%

Composition of Sub-Sector in Agriculture, 2012
- Crop Production: 54.8%
- Fishery: 25.4%
- Livestock: 14.1%
- Forestry: 5.7%
Growth Rate (%) for Agriculture Sector

Growth for Agriculture (%), 1999-2012

Growth: 2.2%, -0.4%, 3.6%, -2.5%, 10.5%, -0.9%, 15.7%, 5.5%, 5.0%, 5.7%, 5.4%, 4.0%, 3.3%, 4.3%
Status of Seed Industry

• Sector responsibilities for crop, based on considerations (i) Genetic structure of crop varieties (ii) Seed volume to value ratio and (iii) Technical requirements for quality seed production.

• Rice seed supply
• Vegetable crop seeds
• Industrial crops
• Finance for the seed industry
Organization for Seed industry

I. For public sector, Under MAFF, there are 3 organizations involved directly:

1. Rice crop
2. Horticulture crop
3. Industrial crop

Additionally, 3 other organizations may have activities related to seeds (i) SPS, (ii) NAL and (iii) DAL

II. For private sector or Combination of both sectors will be considered
• Seed and PVP law enacted in 2008 and National PVP law mostly complied with UPOV convention 1991 act.
• Bio-safety law enacted in 2006.
• Phyto-sanitary under drafting.
• Rice is main products for export (recently, this year 2014, we exported around 380 000kg of rice.)
R&D in Public/Private Sectors

1. Public Sectors in MAFF
- General Directorate of Agriculture (GDA), there are 15 stations/Farms/centers in whole country and main funds was supported by Government.
- Cambodia Agricultural Research and Development Institute (CARDI), it is a institute cooperated with IRRI project since 1988.

2. Private Sector
Most activities concerned the rice seed multiplication to sale
Status of PVP

- Translated UPOV Convention and Guidelines on UPOV Convention as a basis for raising and understanding among national concerned stakeholders

- English version of the Law on See Management and Plant Breeder’s Right to be used as an official working paper for further consultation with UPOV (mostly comply with UPOV convention 1991 act).
Status of PVP (Cont.)

- Administrative issue under DIP-MIME
- Technical issue under GDA-MAFF
- Developing Infrastructure Chart
- Making some regulations under law by MIH and MAFF
Others

• **DNA Marker Usage**

  Human DNA laboratory is working and under management of Ministry of Health (only private sector is working - Private Clinic).

• **LMO (GMO)**

  - A laboratory for Biotech in GDA/MAFF, but it is not operation.
  - A laboratory for assessment under Ministry of Environment
Conclusions

• Recently Cambodia tries its efforts to establish the PVP system to promote new breeding varieties as one of the observers states of UPOV;

• Widening the cooperation with EAPVP Forum and UPOV in exchanging information experiences for the development of Plant Breeder’s Right System in Cambodia;

• The DUS TG is new for Cambodia, needed capacity building on specific DUS technical training for Cambodian officers.

• Generally, seed certificate and PVP system are not implemented yet and organization chart still not clear for operation of both issues.

• Main inspection of public sector is Seed quality control
Thank you for your attention!