







About Myanmar

- *676,577 square kilometer; 17.9% was cultivated
- ❖ Total population 51.41 million in 2014 avg. growth rate=1.29 %; economy is chiefly agro - based and 60 % of the total labor force

Agriculture Sector (Objectives)

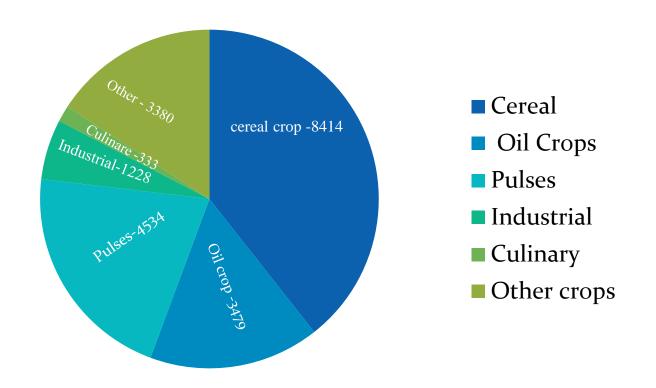
- Priority to fulfill the needs of local consumption;
- **Export** the surplus of agricultural products to earn foreign exchange;
- Assistance to rural development through agricultural development

MOAI Vision

Achieving "Per Capita Income" and "Standards of Living" of rural populace relying on agriculture higher than the neighboring countries and keep abreast with developed nations.

- 1. Food security and nutrition
- 2. Increasing per capita Income

Sown Area of Crops in Myanmar ('000ha)



Introduction



- Myanmar is an agricultural country
- Agriculture sector is the back bone of its economy
- Export earning 20%
- GDP 23%
- Total labor utilization 61.2%
- Rice is main staple food crop in Myanmar
- Grown extensively in different agro-ecological condition throughout the country





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DAR Vision

Food security and Nutritious food for our people.



Organization





- Rice Section
- 2. Other Cereal Crops, Oil Seed Crops and Food Legumes Division
 - Other Cereal Crops Section
 - Oil Seed Crops Section
 - Food Legumes Section
- 3. Industrial Crops and Horticulture Division
 - Industrial Crops Section
 - Horticulture Section
- 4. Soil, Water Utilization and Agricultural Engineering Division
 - Soil Science Section
 - Water Utilization Research Section
 - Agricultural Engineering Section
- 5. Agronomy, Agricultural Economics and Statistics Division
 - Agronomy Section
 - Agricultural Economics Section
 - Statistics Section
- 6. Biotechnology, Plant Genetic Resources and Plant Protection Division
 - Biotechnology Section
 - Plant Genetic Resources Section
 - Entomology Section
 - Plant Pathology Section







Rice Growing Area of Different Agroecological Zone in Myanmar

Rainfed lowland - 48 %
Irrigated lowland - 20 %
Upland - 3 %
Salt affected - 3 %
Drought prone - 12 %
Flood prone - 14 %



Achievements

Varietal Improvement:

Rice varieties released:

are varieties released.		
Agro-ecosystem	No. of var.	
Irrigated rice	36	
Rain-fed lowland rice	36	
Upland rice	4	
Drought tolerance rice	8	
Aerobic rice	3	
Deep water rice	8	
Submergence tolerant rice	2	
Salinity tolerant rice	5	
Quality rice	5	
Other varieties released		
Maize and Other Cereals	32	
Oil seed crops	19	
Food legumes	37	
Industrial crops	20	
Horticultural crops	4	



Current Status of ex situ Conservation in Seed Bank

Crops	Short term (10°C)	Medium term (-5°C)
Rice	6897	6845
Wild rice	184	184
Cereal crops	2079	1945
Food legumes	1283	1282
Oil seed crops	663	631
Industrial crops	42	42
Horticulture	149	_
Total	11297	10929

Adoption of PVP System in Myanmar

Current Status of PVP System in MYANMAR

- Member of the East Asia PVP forum
- Not yet UPOV Membership
- Preparation Period of New Plant Variety Protection Law (draft)

- **→** Member of CBD (1994)
- → Member of WTO (1995)
 - bound to TRIPs Agreement

HRD for PVP Establishment in Myanmar

(International training / seminar/workshop)

	No. of participants	
Department	Training	Seminar/ Workshop
DAR	7	17
DOA	6	3
DICD	1	2
YAU		1
Total	14	23

Activities of PVP TWG



Preparation
PVP Law (draft),
rules and
regulations



Practice on plant variety characterization for investigation of reference varieties

New Plant Variety Protection Law in Myanmar

New Plant Variety Protection Law



Chapter – 10 Chapters



Atricles – 44 Articles

Objectives

- To protect the rights of breeders of new plant varieties
- To improve the development of breeding activities of new plant varieties
- To encourage investments in and development of the breeding of new plant varieties in public organizations and private sectors
- To support the development of Agriculture sector through the breeding new plant varieties

Practice on plant variety characterization for investigation of reference varieties







Molecular characterization of Mini-core collected varieties to investigate the similar varieties for future DUS test trial

Future Needs

Outline of PVP Members' Functions



- Preparation for systematic PVP Rules and Regulations
- Collection of Reference varieties of main crops
- Grow-out test of known varieties for reference varieties for data base.
- Trainings for station staff on plant variety characterization
- Trainings for the methods in making the DUS test guidelines
- Continuous orientation of the staff on the use of UPOV CD-ROM
- Draw the drafting TG for main crops based on 10 yrs data from DAR
- Specify of the technical skills of PVP TWG under MOAI for DUS testing & PVP Administrative knowledge

Requirements

- → The establishment of Plant Varietal Protection System in Myanmar requires to get suggestions from experts of international organizations like UPOV and trainings for national staff.
- → The assistance of international organizations, government's support, and also participation of private sectors will be urgently needed to the expansion and promotion of seed industry in Myanmar.

