

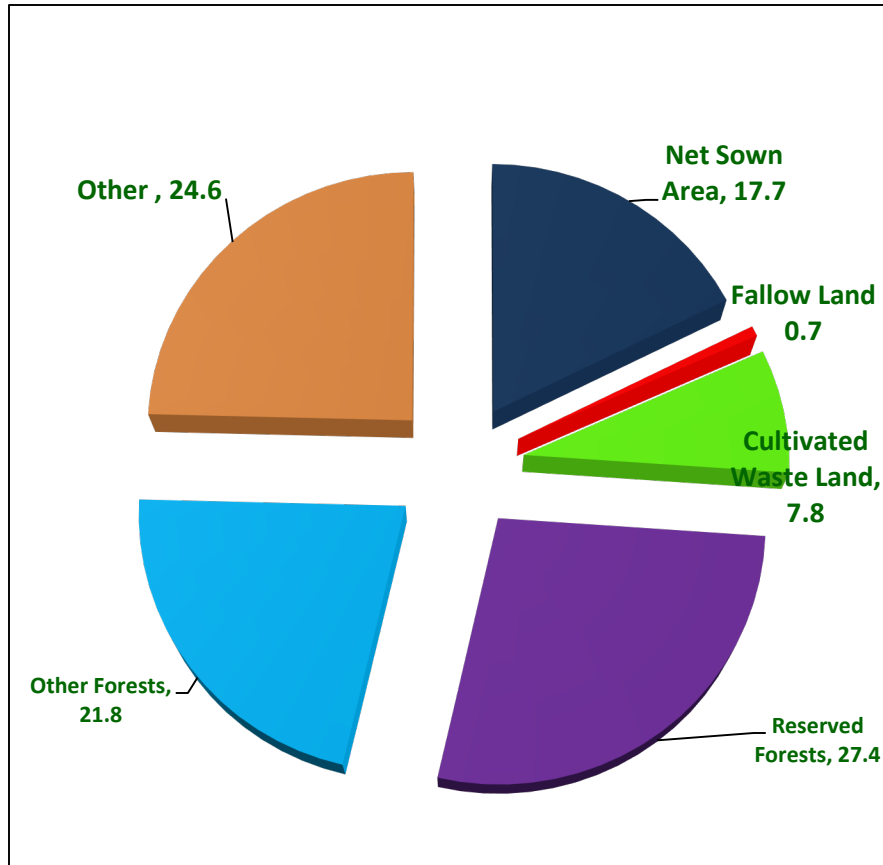
Seed sector development in Myanmar



28th November, 2019

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Ministry of Agriculture, Livestock and Irrigation
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Land Utilization in Myanmar



	Area (mil. ha)	%
Net sown area	12.01	17.7
Fallow land	0.45	0.7
Cultivated waste land	5.25	7.8
Reserved forest	18.55	27.4
Other forests	14.74	21.8
Other	16.66	24.6
Total	67.66	100.00



Major Crop Production (2017-2018)

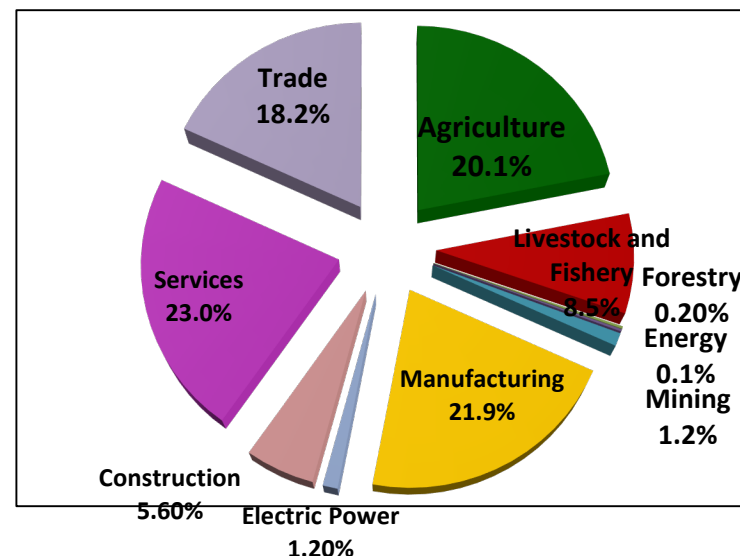
Sr.	Item	Unit	Sown Area	Harvested Area	Yield	Production
1	Paddy	bsk	17930294	16699053	74.89	1250637513
2	Corn	bsk	1246541	1237041	62.86	77760591
3	Groundnut	bsk	2556760	2554963	55.50	141805657
4	Sesames	bsk	3928407	3652715	8.68	31702943
5	Sunflower	bsk	679811	679811	26.33	17896828
6	Peas	bsk	10969489	10957356	16.21	177601717
7	Cotton	Viss	554818	554489	436.02	241766063
8	Sugarcane	Ton	728291	410800	25.60	10516906
9	Rubber	lb	1623260	769389	693.04	533187292
10	Coffee	Viss	48578	30627	173.63	5317724
11	Oil-palm	Ton	400398	139936	3.5	489776

Overview of Agriculture Sector in GDP

Agricultural Export (2017-2018)

Sr	Item	Metric Ton	Value (US \$) mil
1	Rice	3584.60	1140.39
2	Corn	1437.48	294.48
3	Pulses	1313.04	883.75
4	Sesames	120.99	146.99
5	Onion	22.89	9.47
6	Tamarind	24.03	9.73
7	Rubber	148.62	193.13
Total		6651.65	2677.94

Gross Domestic Products (2015-2016)
(Constant Price 2010-11)



- Total Population – 52.476 million
- Nearly **two-thirds** of the population works primarily in agriculture
- **20.1% of GDP, 61.2% of Labor Force,**
- **25.5 % of Total Export Earnings** 4

With the National Strategic Plans, ministry and regional governments are to propose projects for strategic developments that could be funded **not only by the government's budget but also by other different sources of funds** including but are not limited to private sector source and development assistance source

Priorities implementing with loan/grant and Government budgets by DOA for 2018-2019

- **Seed Industry Development**
- **Food Safety and Good Agricultural Practice (GAP) for quality crops production**
- **Inputs Quality Insurance and Inspection**
- **Research and Development**

Constitution of Farmer cooperative

Sr	State&Division	Township/District	No of association	No of members	
1.	NayPyiTaw	1	1	10	
2.	Kachin	8	14	130	
3.	Kaya	2	5	40	
4.	Kayin	5	19	168	
5.	Sagaing	❖Total cooperatives is 34880 ❖Total members is 3.2 mil ❖Total Loan amount is 641.49 (Bil) kyats			98
6.	Tanintharyi				52
7.	Magway				454
8.	Mandalay				802
9.	Bago				558
10.	Rakhine	3	3	65	
11.	Yangon	4	4	52	
12.	Shan	5	12	127	
13.	Ayeyarwaddy	14	31	390	
	Total	134	198	2946	

Agriculture And Rural Development Two Steps Loan

1. Current Investment (Small Agro-machinery, equipments)
2. Capital Investment (Agro-machinery, processing facilities)

Current seed production systems in Myanmar

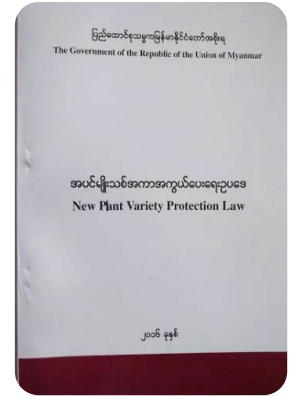
- ❖ Formal seed system (BS,FS,RS&CS)
- ❖ Informal seed system
- ❖ Intermediary seed system

Criteria	Informal Local/Farmer	Intermediary Public-Private	Private Commercial
<i>Type of crops</i>	Major food & cash crops	Major food crops	Cash crops
<i>Key Crops</i>	Rice, pulses & beans, roots & tubers, oilseeds	Rice, pulses, beans & oilseeds	Hybrid corn/rice, vegetables, potato
<i>Type of varieties</i>	Local varieties	Improved	Improved
<i>Seed Quality</i>	Farmer selected	Certified, C2	Certified (internal QA)
<i>Distribution & marketing</i>	Farmer saved & exchanged; local sales	Local sales, barter and markets	Imported, Agrodealers

Current seed production system in Myanmar (Continued)

- **Mainly, seed production has been done by the farm under the MoALI.**
- **Myanmar Investment Law allows international private agency for 100% investment in the seed production.**
- **Myanmar's encouraging Private Lead Seed Industry**
- **Creating EBA**

The Regulatory frame Works for Seed Industry Development



- **Plant Variety Protection Law for Breeder Right (Option)**
- **Seed Law for Seed Consumers'/ Seed users' Right (Compulsory)**
- **GI , Trade Marks**



Initiative Activities on Awareness of PVP system

2010-11

WG organized with 10 participants to enact PVP Law

PVP law enacted 20.1.2016 & new PVP law enacted 24.9.2019

2007

Member of EAPVP Forum

Forum Framework is to promote mutual cooperation for Members
Activities: capacity building, developed harmonized PVP system, seminar and information share

2006

Participated to conduct DUS test (INGER)

Started to go systematic approach for pvp implementation

2004

✓ Participated to the UPOV-INGER Workshop

Aware on IP rights

1994/95

Became CBD/ WTO



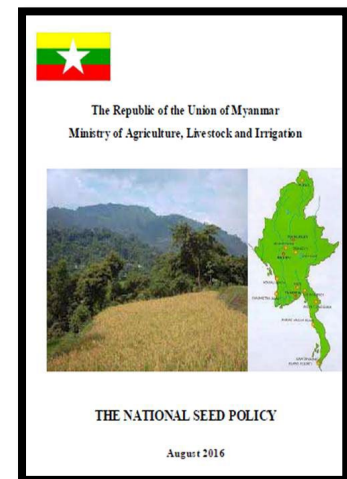
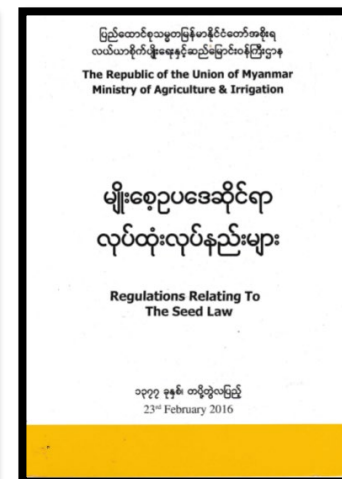
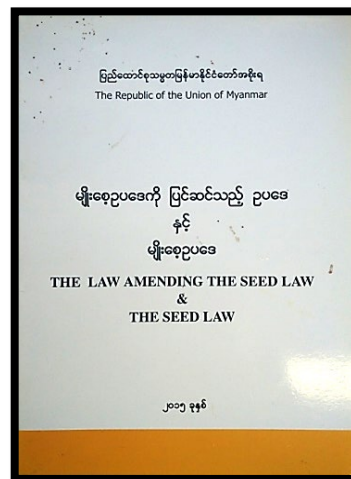
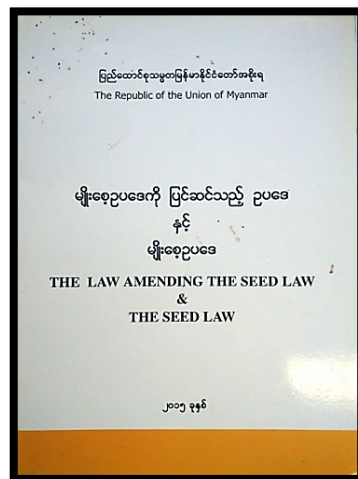
PVP Law for BR

- PVP law enacted at 20th January , 2016 by The Pyidaungsu Hluttaw Law No. 15
- PVP law enforced at 20th January , 2017
- **New PVP Law in line with UPOV 1991, enacted in Sept 24th 2019,**
- **Meet the standards & Positive Reflection, Implementation has not yet!!!**



Seed Law, Amend of Seed law, Regulations & National Seed Policy (for Seed Sector Development in Myanmar)

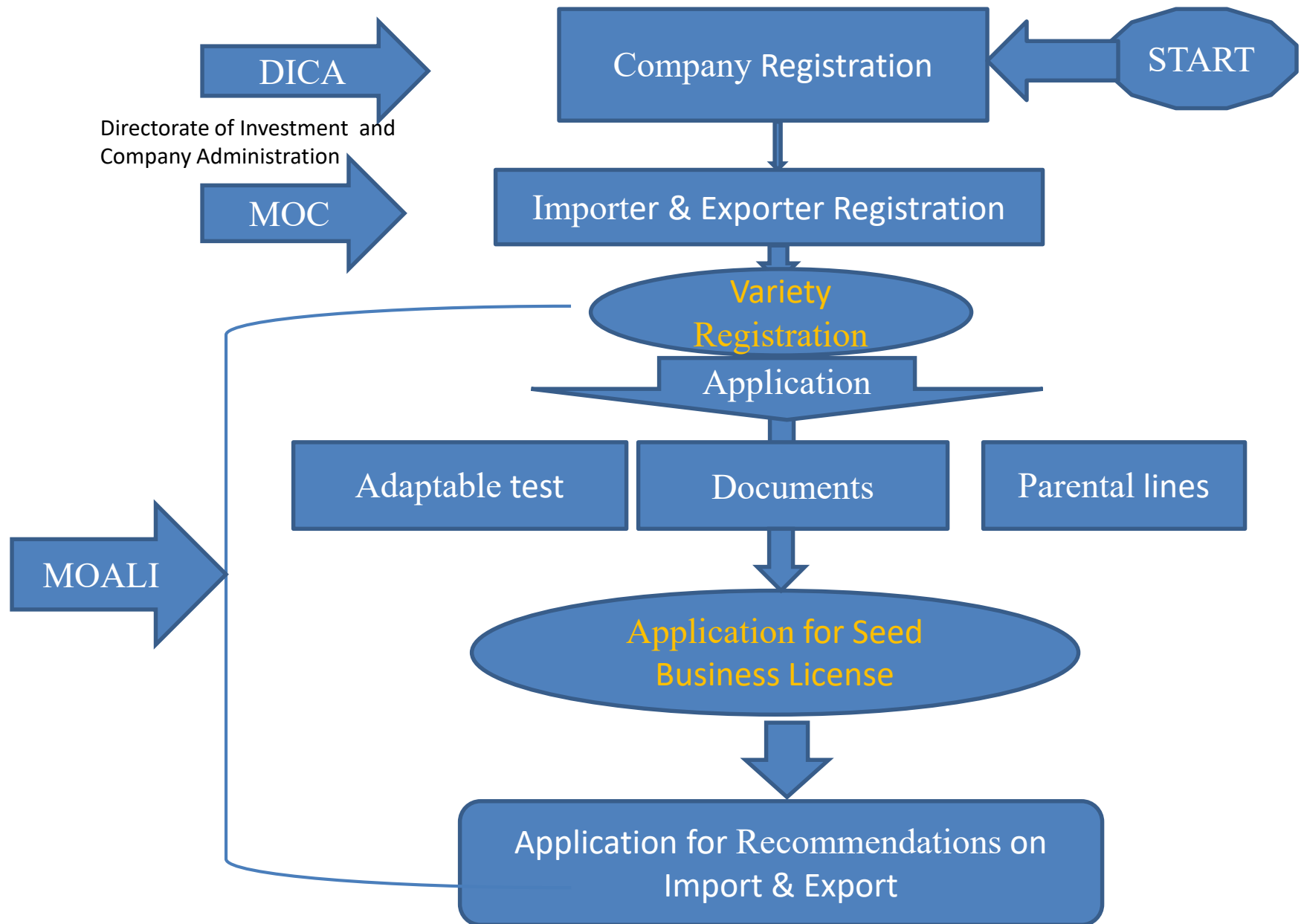
	Seed Law	Amending the Seed Law	Regulations	National Seed Policy
Enact	7 th Jan 2011	18 th Feb 2015	23 rd Feb 2016	12 th Aug 2016
Enforcement	7 th Jan 2013			



Core objective - Farmers can use truth in labeling seeds

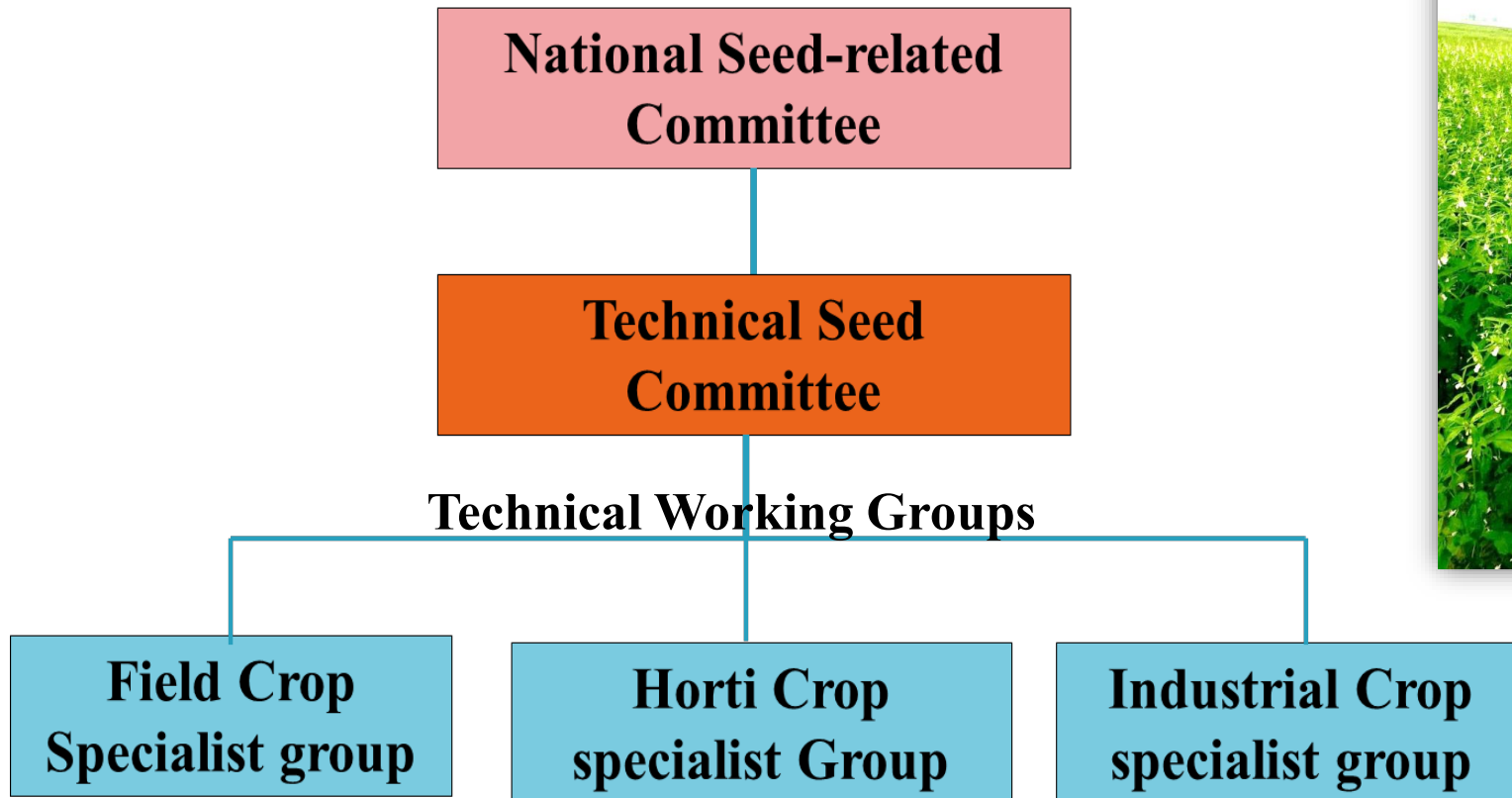
Seed Policy - GM Crops not allow for Food Crops, partially allow for non food crop (Cotton)

Procedure for Seed Business Investment in Myanmar



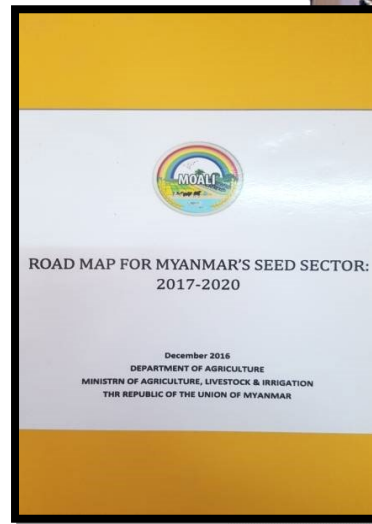
Steering Committee

- **Three** technical working groups with representation from public and private sector



Progress of Seed Sector

- Major steps taken in Myanmar's seed sector development: Seed Sector Road Map approved (2016), Seed Sector Action Agenda (2017), **(ISSD Project, WUR)**
- **Main policy directions:** enhance private sector investments with government focusing on:
 - **quality assurance**
 - **research/breeding**
 - **early generation seed production for food security crops**



Achievements 2017-2019

- **National Seed Platform** meeting was hold **biannually** with private sector to strengthen public private collaboration.
- **Reduction in priority crops** required for variety testing & release
- **Crop Group Based Licence, only 3**
- Pilots on alternative quality assurance models **like PGS**
- **Simplification** of seed import procedures
- **New PVP law** in line with UPOV 1991
- **Seed demand forecasting system** in place in the Delta



➤ Collaboration with world seed partnership



Achievements 2017-2019

EGS multiplication,

- **SD** is collaborated with **DAR** focusing on the **nine** main production crops including cereal, food legume and oil seed crop.
- To elaborate **local seed** producers and seed producing cooperation, private seed companies collaborate **with WHH** to develop seed production and training of seed production technologies to the local seed producers and seed production cooperatives.
- **GAP** Guidelines in line with ASEAN for 15 Crops & implementing process
- For Seed Trade, **PRA for 82** Crops by G to G and **ISPM-38**
- Myanmar Seed Association 2019 Nov:
(**MSA**, Private)



Achievements 2017-2019

➤ **With the aid of IFC,WBG), amending of the seed law was acted** to smothering and hastening of seed registration process and so improving the collaboration of private seed company leading the development of seed production process.

➤ **in order to give information for seed production and the semi autonomous online registration, Myanmar Seed Portal Website was set up on December, 2018.**

➤ **One-stop-shop(OSS) is fully digitized system for all seed applications: seed export/import, variety registration & seed busines license, both at Union and Regional level (March,2020).**



Other achievements of the Seed Division

- ❖ New Seed Testing Lab in NPT to be a ISTA accredited lab:
- ❖ Upgrading Regional Seed Labs.
- ❖ Rice Pure Seed & Certified Seed Production
- ❖ Rice Seed Production by contract farming
- ❖ Rice Seed Sector Development (RSSD, LIFT)
- ❖ 2018 Seed Fair & 2019 Seed Fair
- ❖ 2020 Seed Fair, under preparation
- ❖ Risk based Management study (IFC,WBG)

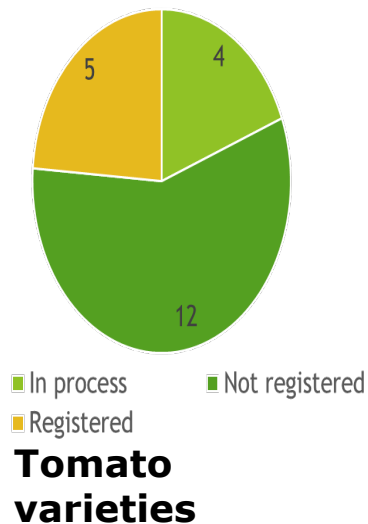


Risk Based Inspection of Seeds

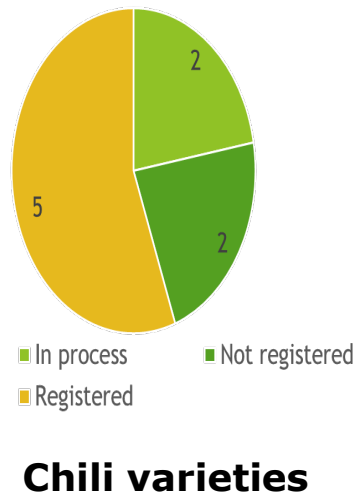
- In 2018, a study was conducted on vegetables and maize seed
 - Mu Se and Myawady (as borders)
 - Main markets: Yangon, Mandalay and Taunggyi
 - DOA inspectors at regional, district & township level

2. Major findings: Wholesalers, traders, seed shops a] **Variety registration**

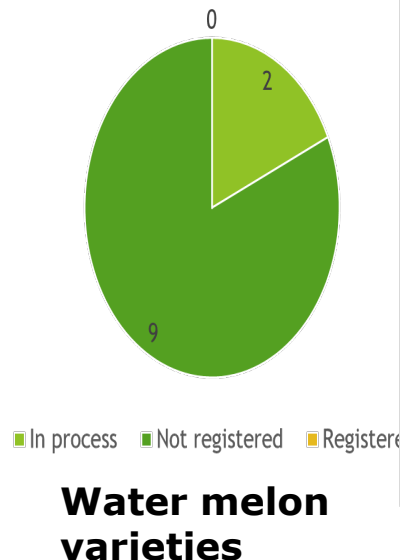
Tomato Varieties Registered (n=21)



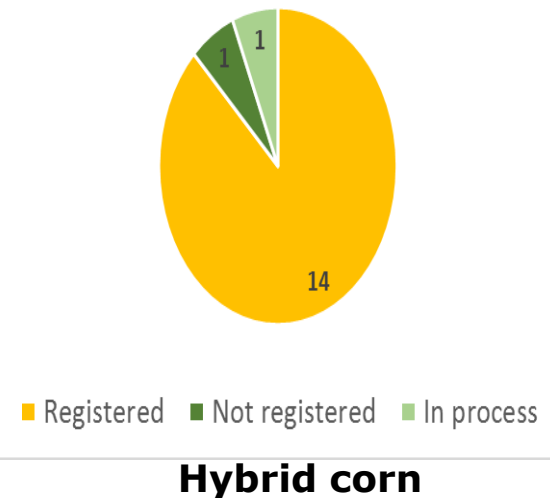
Chili Varieties Registered (n=9)



Water Melon Varieties (n=11)



Corn (n=16)



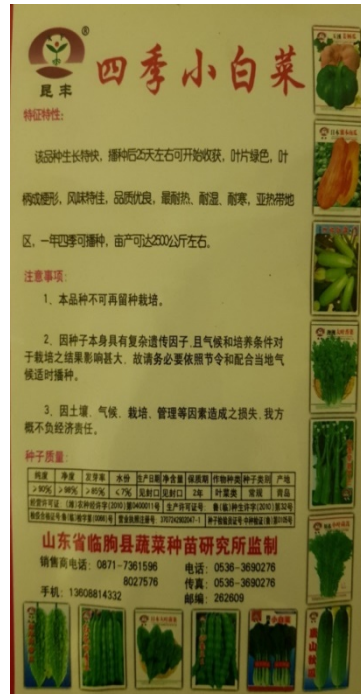
B] Labelling

Only Thai Language,
Thai Calendar Dates,
no variety name

Chinese language



Hardly any
information



Counterfeit seed



Original hybrid corn seed

Counterfeit hybrid corn seed

At the border

Difficult to control the border. At Myawady: 32 crossings in 20 miles

- Very difficult to control illegal imports at the land borders
- Current focus is mainly on phytosanitary issues and less on seed quality
- There is no Seed Division staff at the border, e.g. checking for counterfeit seed, variety registration or seed quality issues.



What are the Risks? WHERE are the risks?



What can be done?

A] Discussion with private, public and development partners took place

- National workshop in Nay Pyi Taw (11 December 2018)
- Mandalay workshop (13 December 2018)
- Yangon workshop (14 December 2018)

B] Key recommendations from the stakeholders

➤ Development and implementation of **a post-control inspection system** in Myanmar, guided by risk measures

- Inspection on variety registration, packaging/labelling and variety purity
- Inspection to control the irregularities in seed shops, wholesalers, traders and seed farms level
- Capacity building & training to the inspection service team (also at custom point)
- Development of guidelines/checklist



Participants of the Nay Pyi Taw Workshop



Participants of the Yangon meeting



Participants of the Mandalay meeting

Feedbacks from Public – Private Sectors

Presentation of Risk based Inspection of Seeds for public and private sectors

- Yangon (17 September 2019)
- Nay Pyi Taw (20 September 2019, DOA)
- Mandalay (30 September 2019)
- Shan State (2 October 2019)

Key Feedbacks from Public – Private Sectors

- 1) Post Control Test Guideline
- 2) Post Certification Analysis Guideline
- 3) Seed Shop Inspection Guideline



Participants of the Naypyitaw Meeting (DG DOA)



Participants of the Yangon meeting



Participants of the Mandalay meeting

Future: National Seed Investment Plan

(Introduced in 6th NSPlatform, 6.11.19)

- **Ambition** government to increase private sector investment and **become seed export country in next 5 years**
- **Investments needed** from public, private sector & development partners



Government wants to establish

Myanmar Seed Valley: a cluster of seed companies and seed services

➤ Cluster can consist of a location of > 400 ha with:

- Domestic and foreign seed *production* companies
- Research & development **(R&D)**
- Regulatory services: Variety testing **(VCU and DUS)**
- **Postharvest infrastructure:** seed lab & seed processing facilities



Myanmar Seed Valley

Main questions:

- **Roles and responsibility**
division between public and private? Who does what?
Criteria for involvement?
- **Which activities and services**
should the Seed Valley have?
- **Who/Which** seed production companies and development partners can co-invest in the Seed Valley?



Needs of Myanmar

- To build capacity and cooperate seed sector such as **harmonization of plant seed trade policies** among region and LMI countries
- **Systematic seed trading is still challenging.** Responsible persons, professionals and staffs in this area must be **trained** in relevant expertise and build their capacity by giving chance to study **suitable degree, post grad diploma and higher degree for effective** applying of seed trade regulation , guidelines and SOPs.



Needs of Myanmar (Continued)

- Competent knowledge, and suitable HR programs and higher learning opportunity for **VCU examiners**
- Likewise, for the seed inspection task and operating OSS system, build **capacity on field inspection, lab technicians, Post control Inspectors and database management**
- The capacity of, **DUS examiner, DUS test report analysis** must have sound skill and knowledge upon their field. They needs well knowledge about **PVP related software** application in order to assist **the preparation of National TG of main crops.**
- **More advanced in seed technology**; we strongly support to share and learn system.
- **EDV, PVP Awareness & Clarification Technique**
- We can negotiate to sign **MOU for technical cooperation**, so that, DUS test report **may purchase** through MOU, and some application or software system **may exchange** among us.





Thank You

