



# PVP AND DUS SYSTEM IN VIETNAM

Pham Thai Ha

PVPO

Department of Crop Production, MARD

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# PVP SYSTEM IN VIETNAM



# BACKGROUND OF PVP

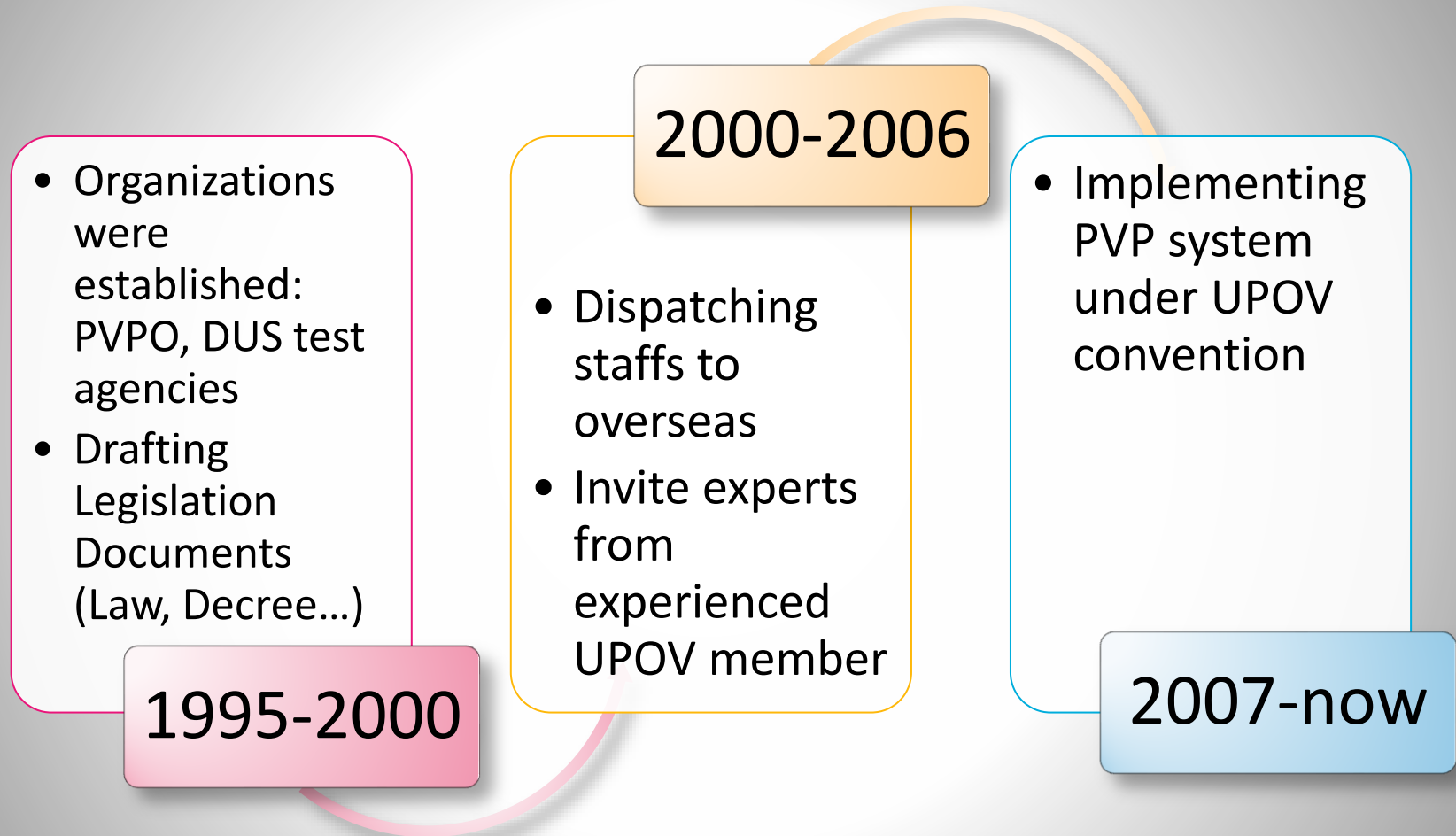
## Basic information of PVP

- Vietnam is a agricultural country, population is about 93 millions (70% of population are agricultural workers). So plant variety is extremely important.
- Vietnam became 63rd member of UPOV on December 24th 2006 → protect all species up to now → opportunities and challenges
- We have a total of 1849 applications by the end of 2020, 838 of which are certificated

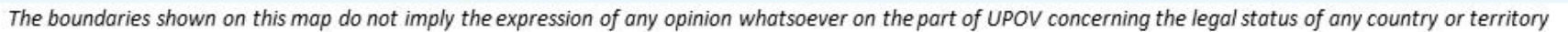




# HISTORY OF PVP







- Fully UPOV member since 24<sup>th</sup> December 2016
- Protect all species and genera → opportunities and challenges



## MARD

Department of  
Crop Production

DCP



Institute,  
Center,  
Breeder

# APPLICANT

## Applications

## Materials

Plant  
Variety  
Protection  
Office

# PVPO

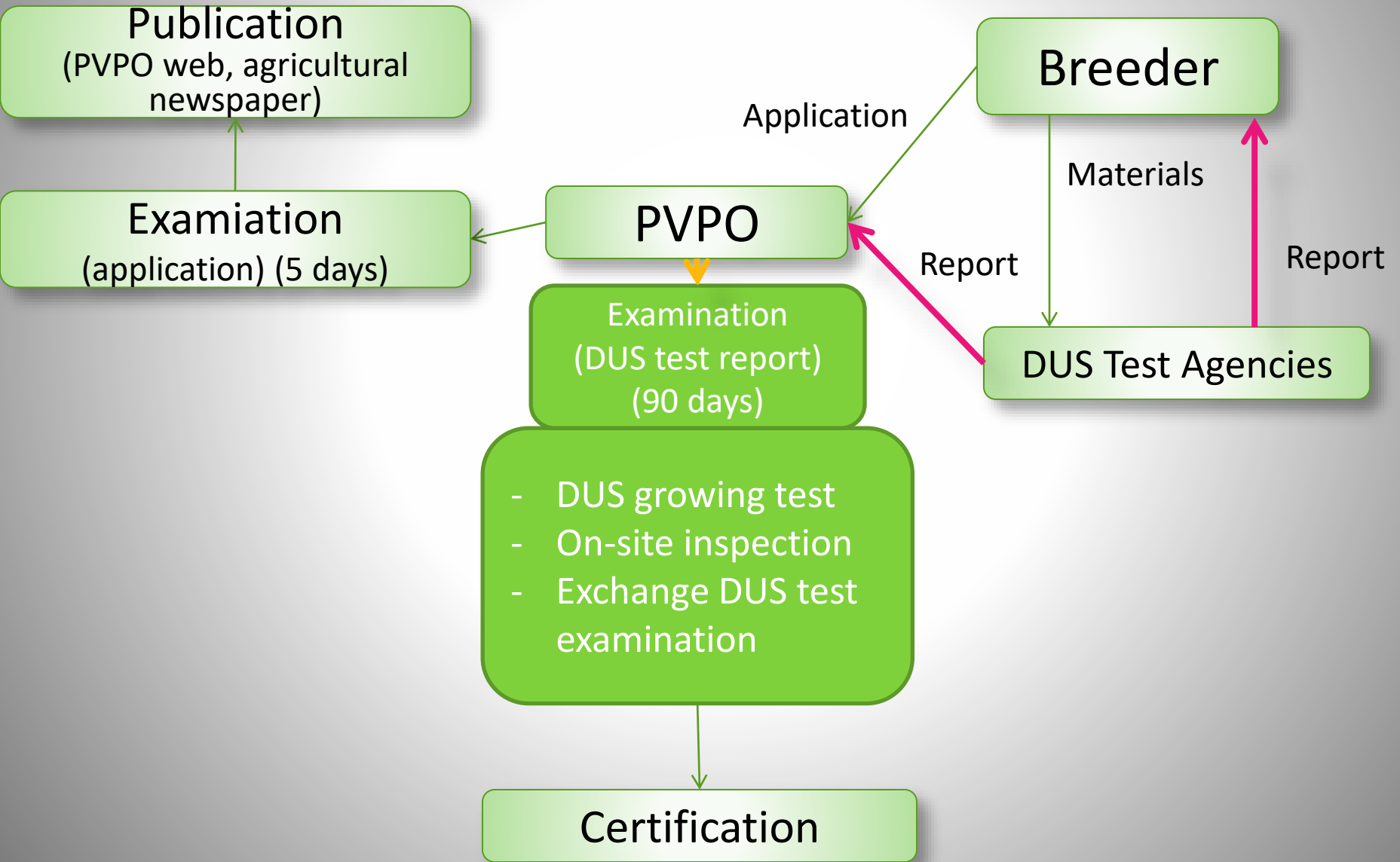
## DUS test Agency

- Examining the validity of applications
- Denomination of the varieties and DUS test reports

- Receiving materials
- Conducting DUS test
- Submitting DUS test report (60 days)



# Procedure of Application for PVP

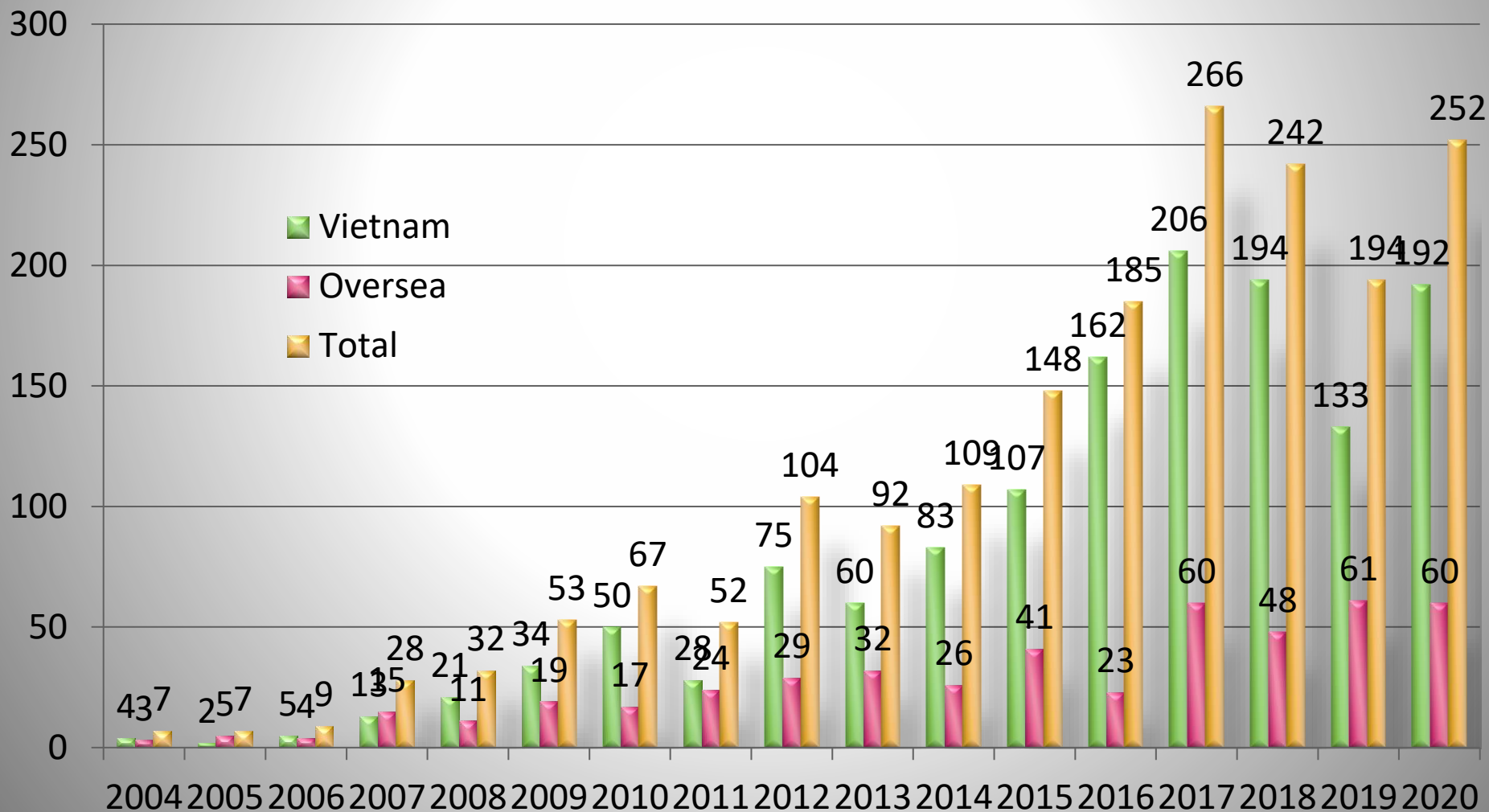




# BACKGROUND OF PVP



## Applications from 2004 to 2020





# PVP Fees

No	Title	Unit	Fee (vnd)
1	Application form appraisal	01 time	2,000,000 (89\$)
2	Re - Application form appraisal	01 time	1,000,000 (45\$)
3	Maintainance		
	- From 1 to 3 <sup>th</sup> (year)	01 var/01 year	3,000,000 (133\$)
	- From 3 to 6 <sup>th</sup> (year)	01 var/01 year	5,000,000 (222\$)
	- From 7 to 9 <sup>th</sup> (year)	01 var/01 year	7,000,000 (311\$)
	- From 10 to 15 <sup>th</sup> (year)	01 var/01 year	10,000,000 (444\$)
	- From 16to the end (year)	01 var/01 year	20,000,000 (888\$)
4	Reinstatement of the effectiveness of plant variety protection certificate	Time	1,200,000 (53\$)
5	DUS test for seasonal crops	01 variety	8,300,000 (369\$)
6	DUS test for yearly crops	01 variety	11,000,000 (489\$)
7	DUS test for perennial crops	01 variety	24,000,000 (1066\$)
8	Breeder conduct DUS test		50% fee



# **INTERNATIONAL COOPERATION**



## Donors and activities

Country/ Organization	Activities	Time
UPOV, USA, EU, Japan, France	Training in abroad, Workshop (VN and oversea)	2000 - 2005
Denmark, Japan, France	Equipments, training, workshop/seminars	2004 - 2008
EAPVP, the Netherlands Australia	Training (Oversea and Viet Nam), equipment, Seminar/workshop	2008 - 2011
Japan (JICA), GNIS (France)	Training (Oversea and Viet Nam), equipment, Seminar/workshop	2010 - 2014
UPOV, Japan (EAPVP)	Training (Oversea and Viet Nam), Seminar/Workshop	2014 - now



## COOPERATION ON DUS EXAMINATION

Country	Time	Photos
Japan	August, 2007 April, 2016 (free of charge)	
France	January 2011	
The Netherlands	March, 2011	
EU	May 2011	
Singapore	2016 VN provide DUS Testing service	<ul style="list-style-type: none"> <li>✓ Negotiation: Email</li> <li>✓ Signing by each side then exchange through Post mail.</li> </ul>
Korea	April, 2017	

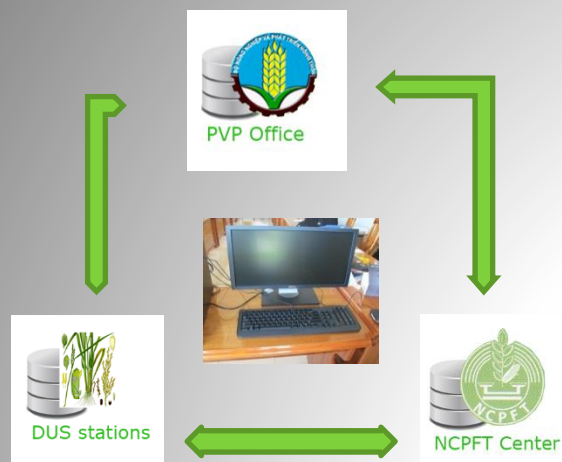


## JICA Project (7.2010 – 7.2014)

Out put	Activities
<ul style="list-style-type: none"><li>✓ Administrative procedures for examination of applied plant varieties are improved</li><li>✓ Strengthen the capacity of DUS examiners all over the country</li><li>✓ The awareness of breeders, seed companies and extension staffs on PVP is improved</li></ul>	<ul style="list-style-type: none"><li>✓ Training courses in Viet Nam, Japan and the Netherlands</li><li>✓ Support implementation of DUS Test in DUS test Agencies</li><li>✓ Revise and develop TGs</li><li>✓ Suggest better administrative procedure</li><li>✓ Hold seminars and workshops for all stakeholders</li><li>✓ Develop brochure</li></ul>



# JICA Project (7.2010 – 7.2014)



Database Management System  
(software)

Manual for DUS test for rice

	Equipment	Beneficiary
1	Net-house	Tu Liem; Baria Vungtau
2	Tractor and other tool for soil preparation	Tu Liem; Van Lam; Baria Vungtau
3	Equipment for DUS: Camera, RHS color chart, Ruler, Color printer, Computer ...	PVPO; NCPFT, Tu Liem Station, Van Lam Station, Baria-Vungtau Station
4	Cold storage	Tu Liem Van Lam Baria – Vungtau
5	Car (Prado)	Department of Crop Production (DCP)

## HUMAN RESOURCE

- 39 persons trained in Thai Land, Korea and Japan
- All DUS Testers in National Center attended the training from Basic – Intensive – Oversea
- DUS Testers are equipped basic skills of DUS Test.
- Approximate 350 persons understood basic conception of PVP in generally.



# DUS SYSTEM IN VIETNAM





DUS Test???

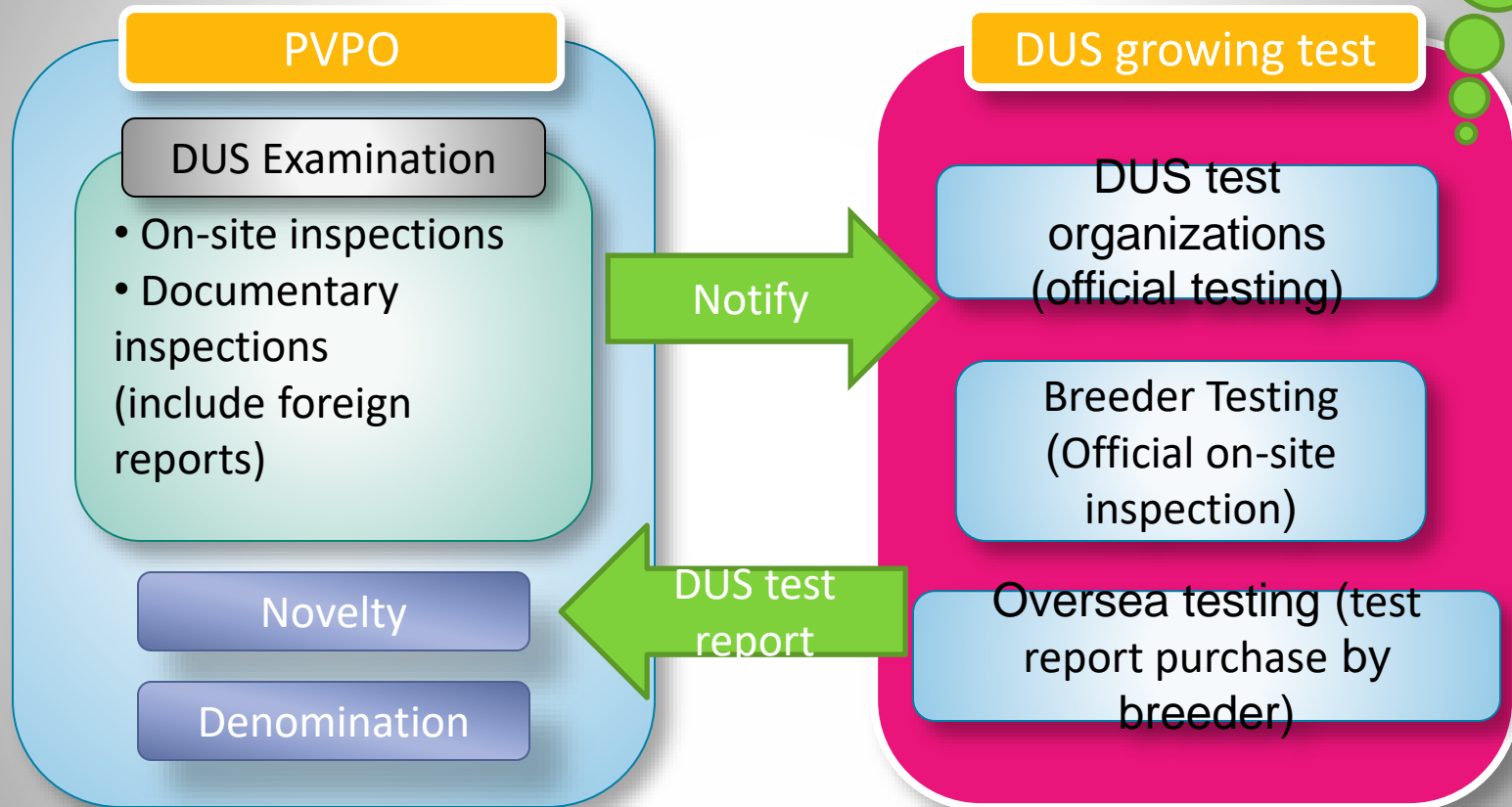


- ❖ **Distinctness:** The candidate variety must be clearly distinguishable from any other varieties in common knowledge (nation list).
- ❖ **Uniformity:** All of the plants of the variety in the same propagation stage must be sufficiently similar in all of their characteristics (There are acceptable number of off-types within the growing test field).
- ❖ **Stability:** The features of the variety will inherit through generations
- ❖ **Novelty**
- ❖ **Denomination**



# OVERVIEW

Who  
can  
carry  
out DUS  
test?





# DUS Test Organizations

**PVPO**

**National Center for  
Plant Testing (Headquater)**

**Tu Liem  
Station**

**Van Lam  
Station**

**Quang  
Ngai  
Station**

**Vung Tau  
Station**

**Plant  
Resources  
Center  
(PRC)**

**Fruit  
and  
Vegetable  
Research  
Institute**

**NOMAFSI**

**Nha Ho  
Cotton and  
Agricultural  
Development  
Institute**

**Western  
Highlands  
Agri-  
Forestry  
Science  
Institute**

**Potato,  
vegetable  
and  
Flower  
Research  
Center**

**Southern  
Fruit  
Research  
Institute**



Northern Mountain  
Agricultural and forestry  
Science Institute (tea)

NCPT (National Center  
For Plant Testing)

Van Lam Station

Center for Plant Testing  
In the Middle

The Western Highland  
Agricultural & Forestry  
Science Institute

Southern Fruit Resarch  
Institute

Fruit,vegetable  
Research Ins.

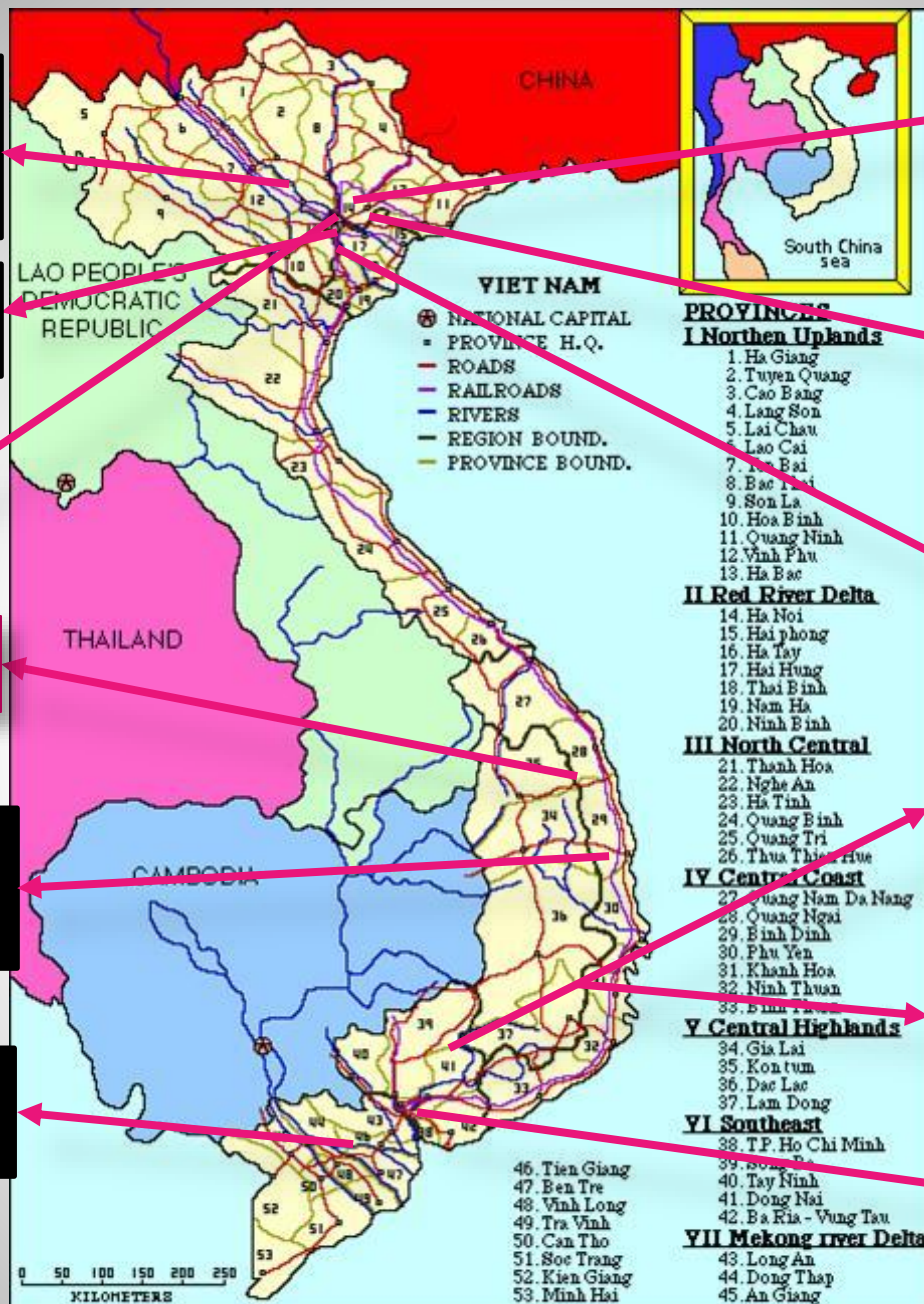
Plant resources  
center

Tu Liem Station

Da Lat Research Center for  
Potato, Vegetable and flower

Nha Ho Cotton and Agricultural  
Development Institute

Center for Plant Testing  
In the South



Source : World Bank, Viet Nam Assessment and Strategy, 1995



# How to carry out DUS testing (in National Center For Plant Testing – NCPT)

DUS testing technical supports

DUS testing procedure

DUS evaluation



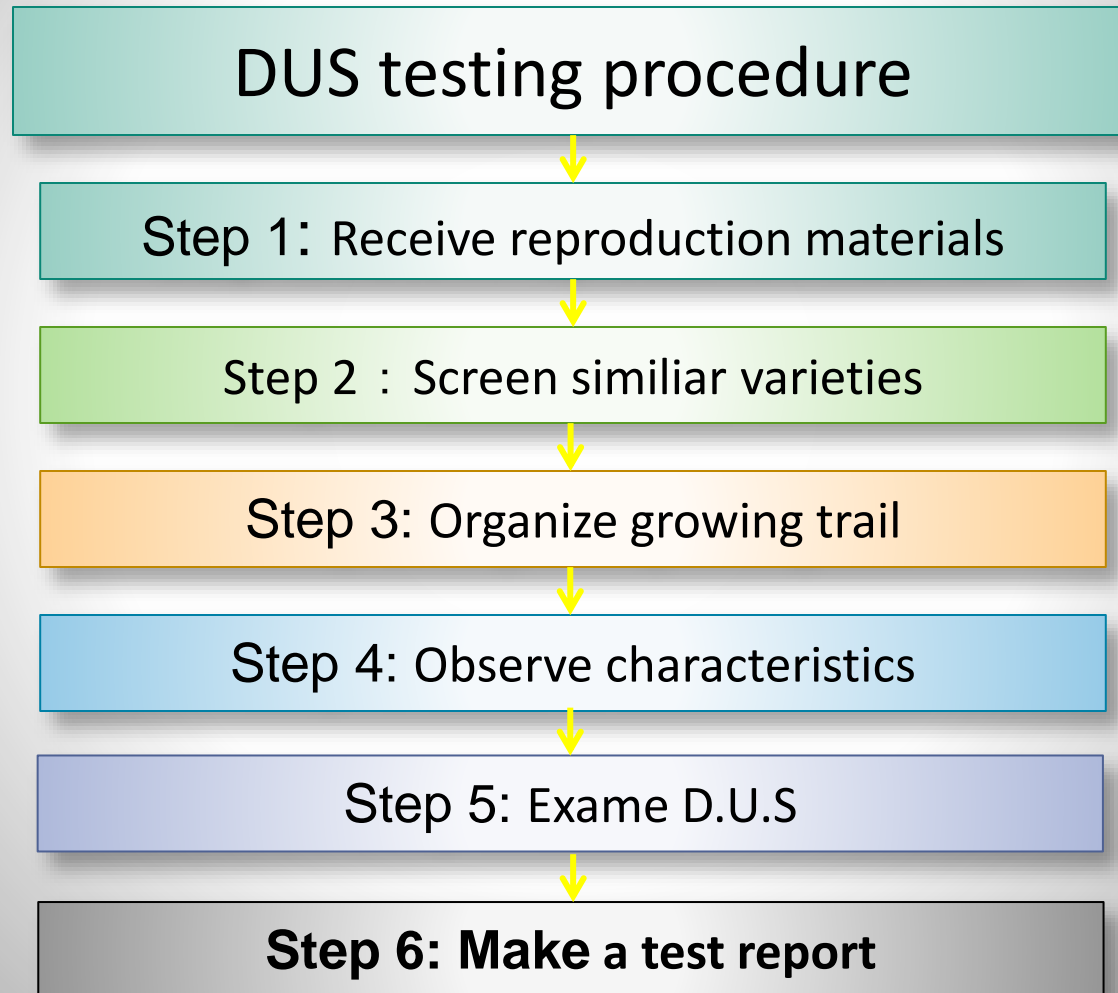
# How to carry out DUS testing (in National Center For Plant Testing – NCPT)

## DUS testing technical supports

- ☐ UPOV documents.
- ☐ UPOV TGs
- ☐ UPOV member TGs
- ☐ Official TG for new species  
(drafted by PVPO and NCPT)



# How to carry out DUS testing (in National Center For Plant Testing – NCPT)







INTERNATIONAL COOPERATION



## International cooperation

- Assistance Technical Cooperation by Member countries:
  - Japan (JICA, MAFF, EAPVP...)
  - Denmark (DANIDA)
  - The Netherlands
  - Australia
  - USA
- Technical assistance from experienced Members: training in Vietnam and in oversea; Experts dispatching
- Funding equipment for examination of application (Japan – JICA project and IP Australia, the Netherlands...)



## International cooperation

- Under EAPVP Forum
  - ✓ Seminar in Myanmar (2012) and Lao PDR (2013) funded by UPOV and Japan
  - ✓ Rice DUS Training for ASEAN countries in Hanoi (2014)
  - ✓ Subcommittee Meeting on harmonization of descriptive orchids morphology and terminology (2014)
  - ✓ Training course for DUS of Tomato for ASEAN countries in Hanoi (2015)
  - ✓ IP Program with Lao PDR (2011-2013) (Bilateral Cooperation)
- Sharing information on IP including PVP
  - Exchanging experience on establishment of PVP System
  - Workshop/Seminar in Hanoi and Vientiane
  - Study-tour/training in Vietnam
  - Establishment of filing PVP application system in Lao



PICTURES OF DUS TEST IN VIETNAM



# Van Lam Station

## Rice

## Cabbage





# Van Lam Station

## Cucumber



## Kohlrabi





# Tu Liem Station

## Corn



## Soybean





# Tu Liem Station

groundnut

tomato





# Tu Liem Station

## chrysanthemum

Small



Big



Diameter of disc.

Medium





# Center for plant testing of central region

## Watermelon





# Center for plant testing of central region

## Sugar cane





# Southen East Station

## Rice





# Southern East Station

## Long bean





# Southern East Station

## Chilli





# Nha Ho Cotton and Agricultural Develop Science Institute

## Cotton



## Grape





# Fruit, Vegetable Research Institute

## Gerbera

Char.12- Flower: type



Single



Semi  
Double



Double

## Mango





# Nothern moutain Agricultural Forestry Science Institute

## Tea





# Potato, Vegetable and Flower Research Institute

## Potato



## Rose





# Plant Resources Center

cucurbita and ginger





# Southern Fruit research Institute

**Mandarin**



**Orange**

