



Gained high yield by introduction of new varieties and spreading good quality varieties derived from PVP

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Plant Variety Protection Office,

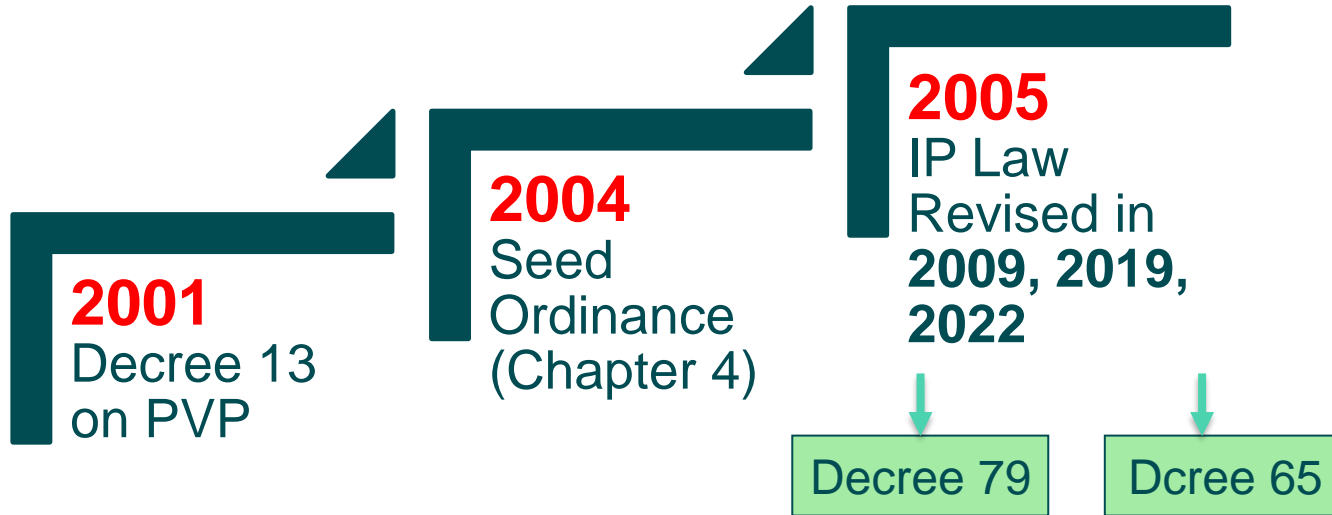
Department of Crop Production, MARD

Phnom Penh, August 28th 2024



PVP IN VIET NAM

Legal Documents

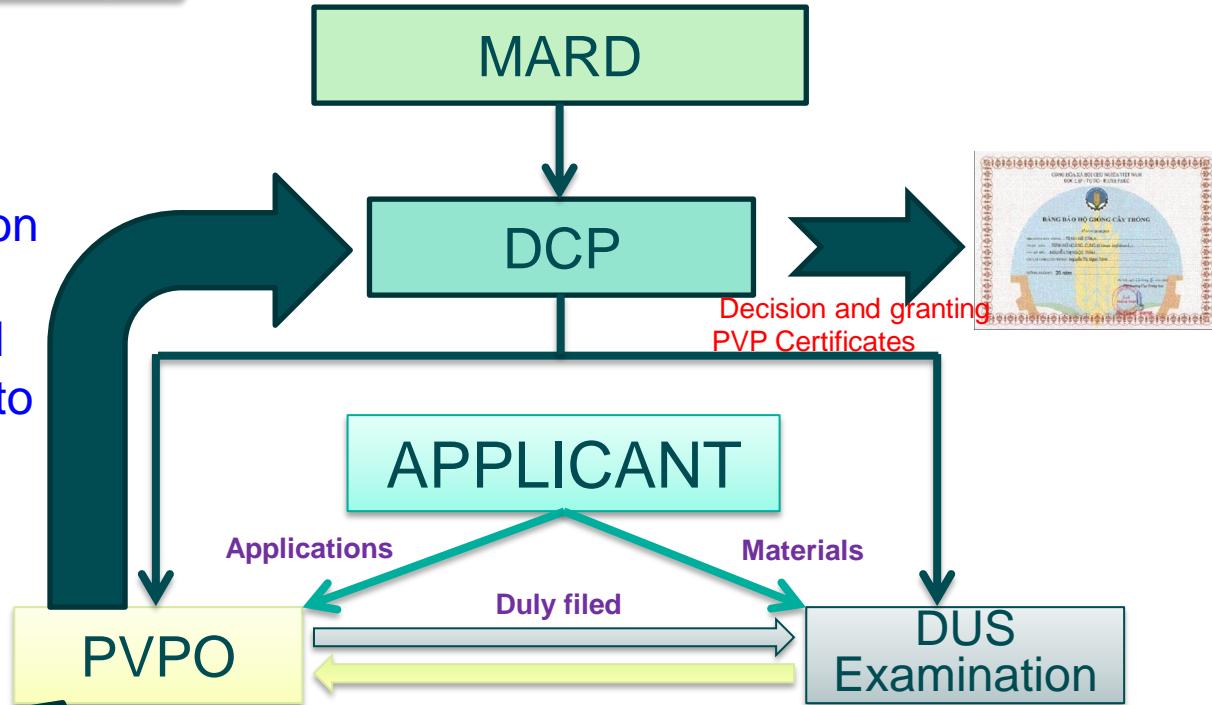


PVP law in Vietnam is completely compatible with the UPOV convention

ORGANIZATION

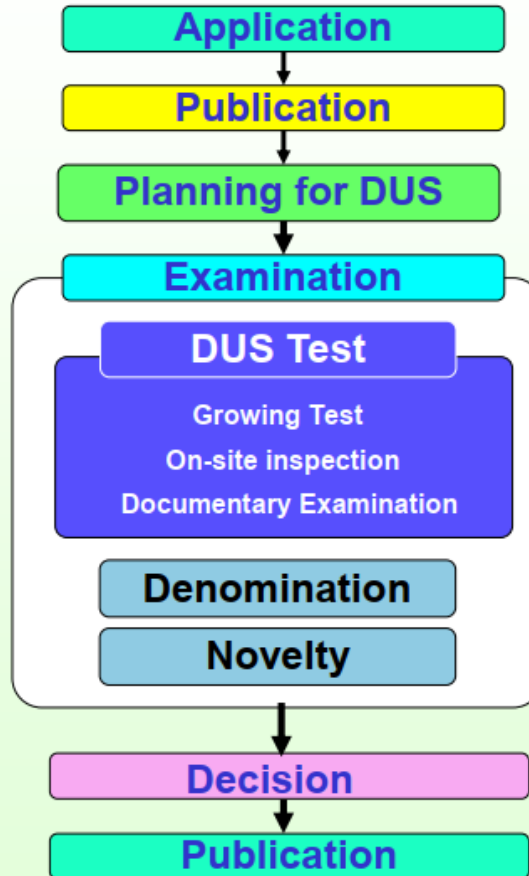


Publication
and
proposed
decision to
grant

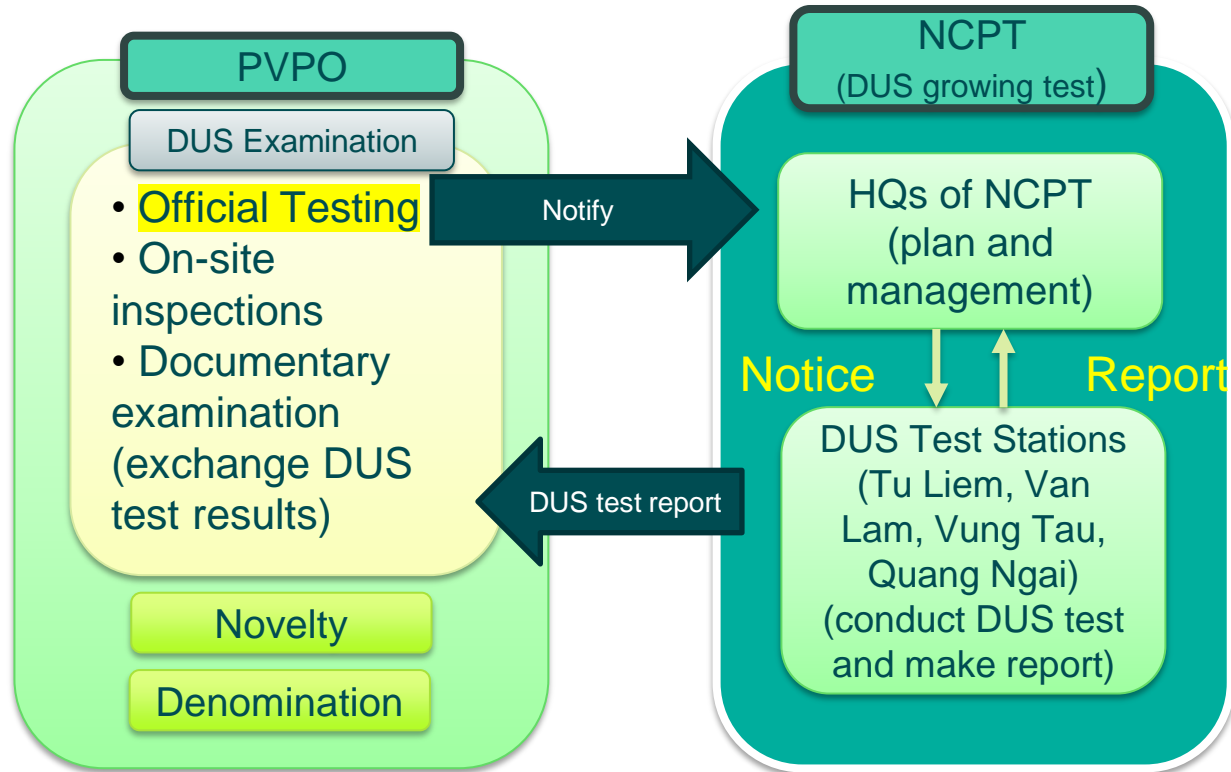


- 1) Filling and granting rights
- 2) Examination (On-site inspection)
- 3) Development National Test Guidelines
- 4) International harmonization on technical matters
- 5) Policy
- 6) International Affair

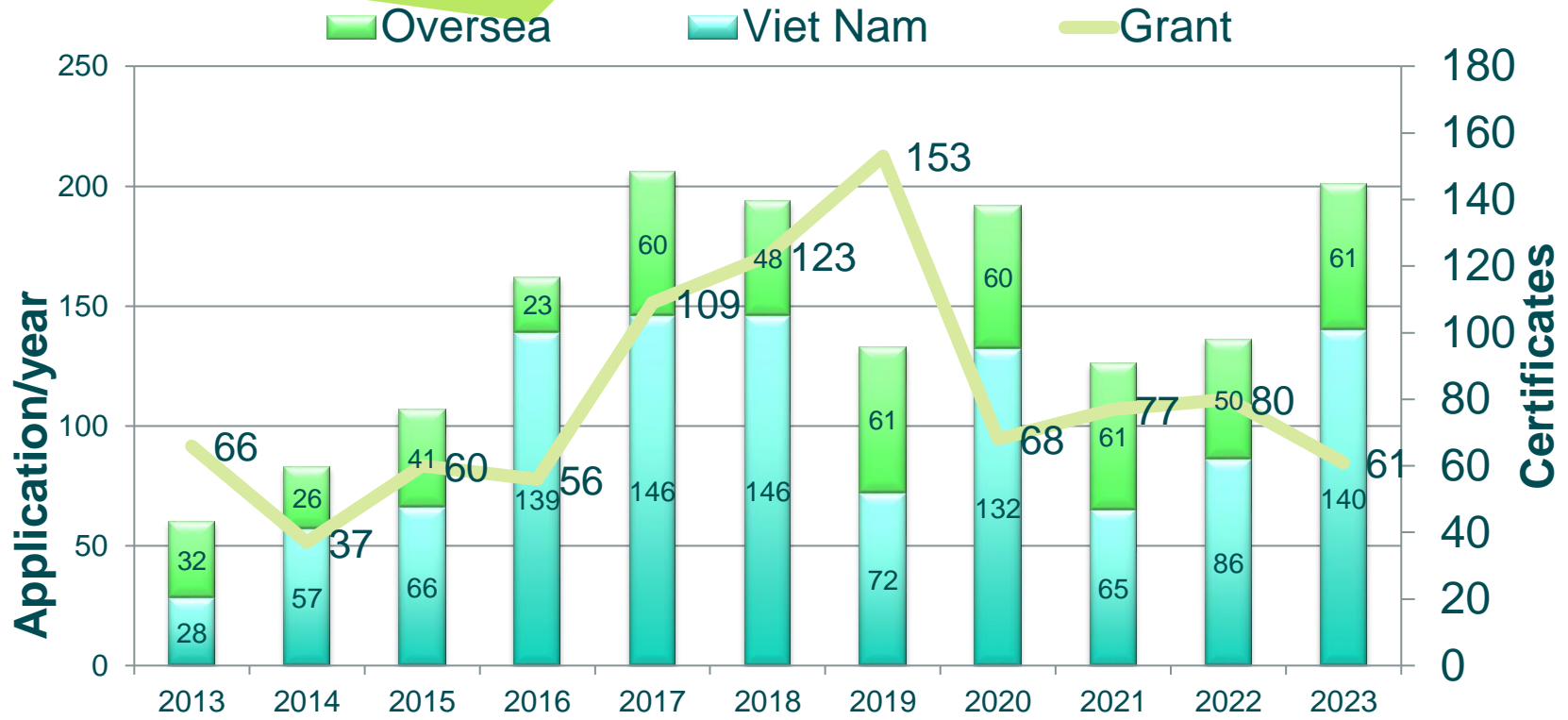
Procedure of PVP in Vietnam



DUS EXAMINATION



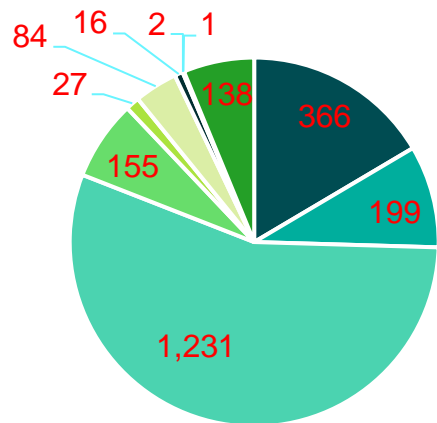
Applications by year from 2013 to 2023



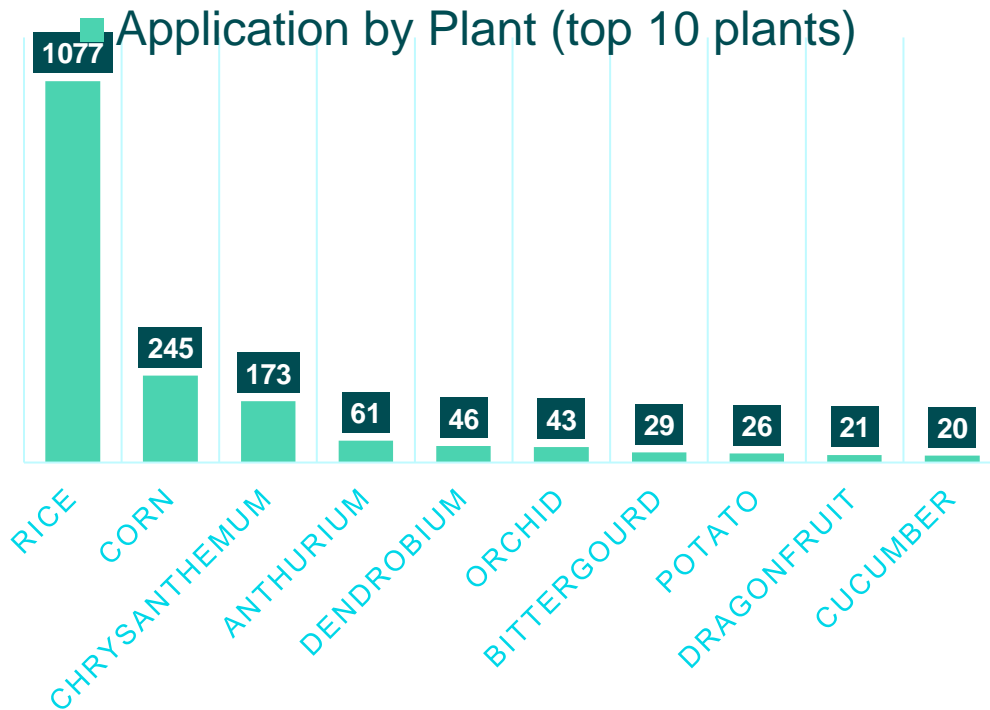
Statistics for species applied to PVP system



Application by plant category

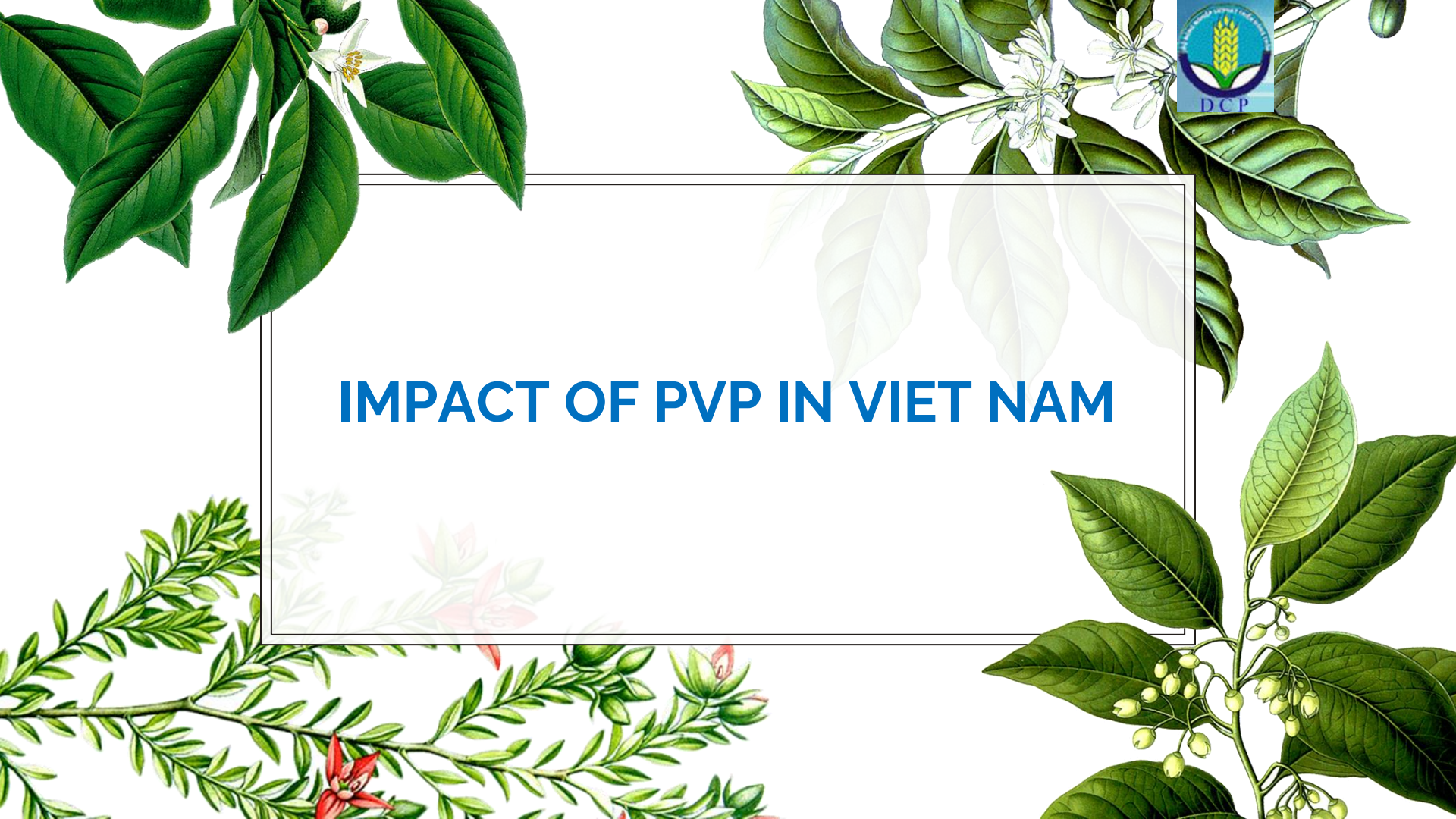


- Ornaments
- Vegetables
- Cereals
- Fruit tree
- Forestry plants
- Industrial plants
- Mushrooms
- Forage plants
- Aquatic plants
- Medicinal plants



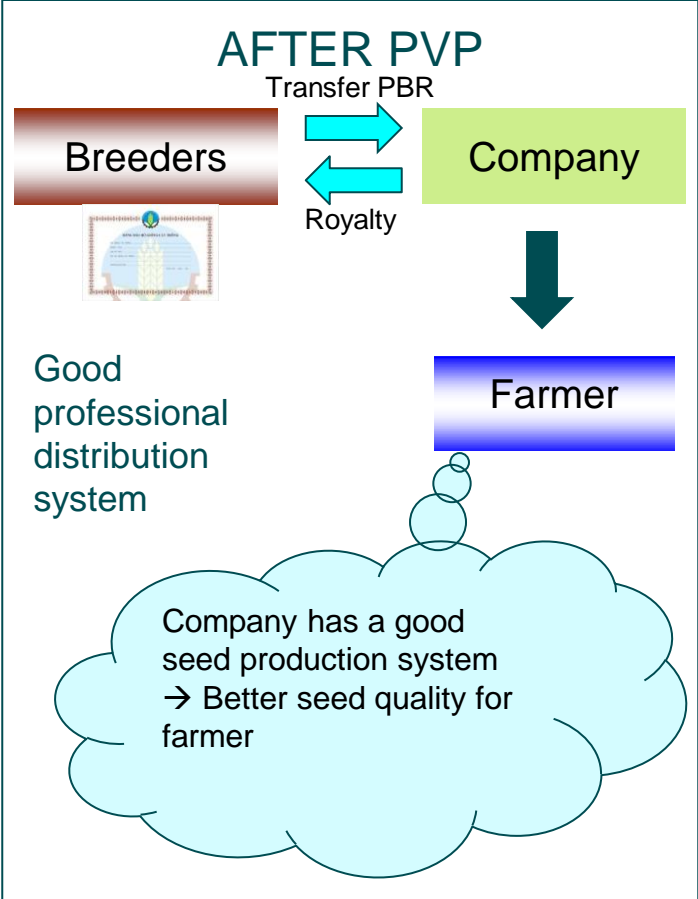
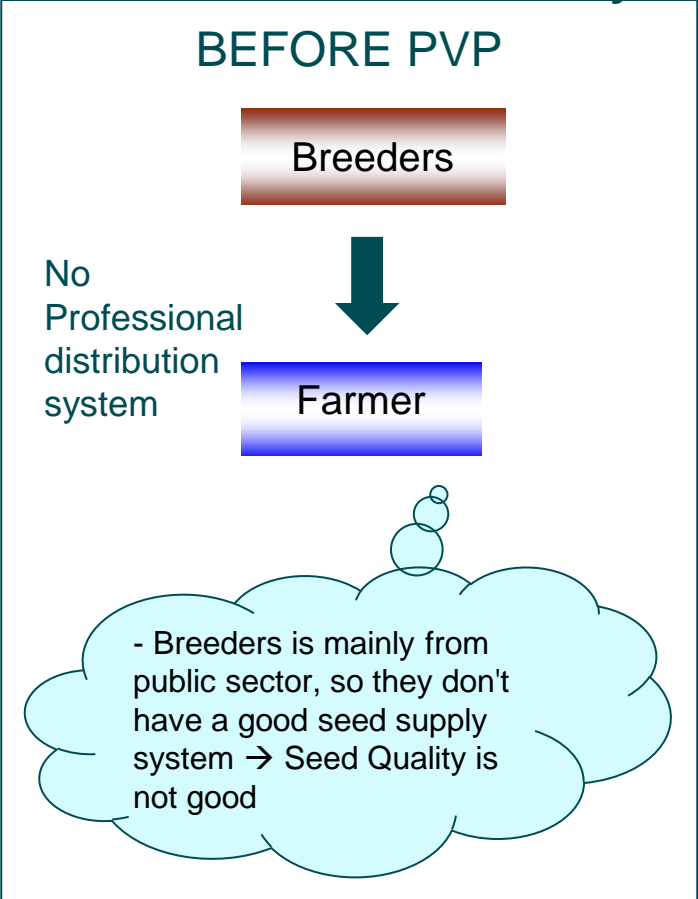


IMPACT OF PVP IN VIET NAM



Change the mechanism of agriculture production

The Seed distribution system of new Var.



Change the mechanism of agriculture production (based on license agreement)



License agreement with breeders (PVP title holders)



Fruit - Breeders/farmers/exporter (Longan in Dong Thap)

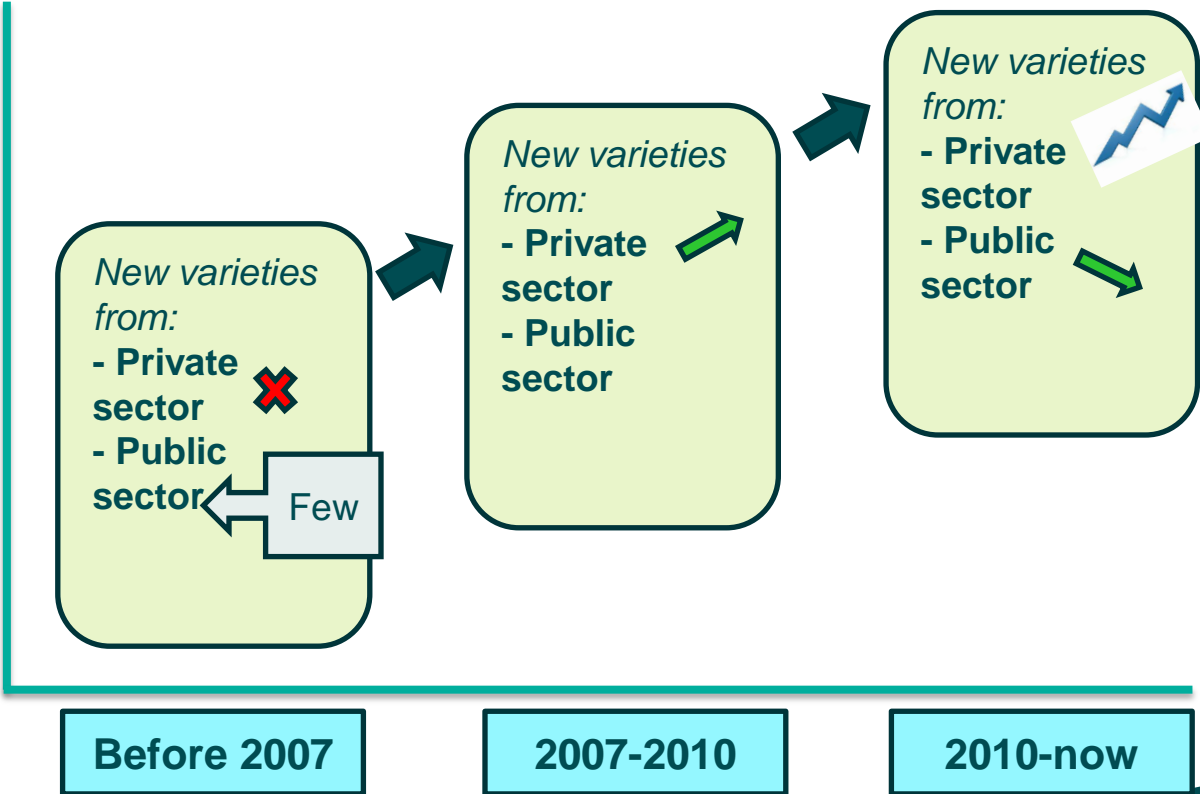
Flower – Breeders/Seed company/ farmers (Dalat)



Rice – Breeder/Seed company/ (Thai Binh)



Encouraging of investment from private sector



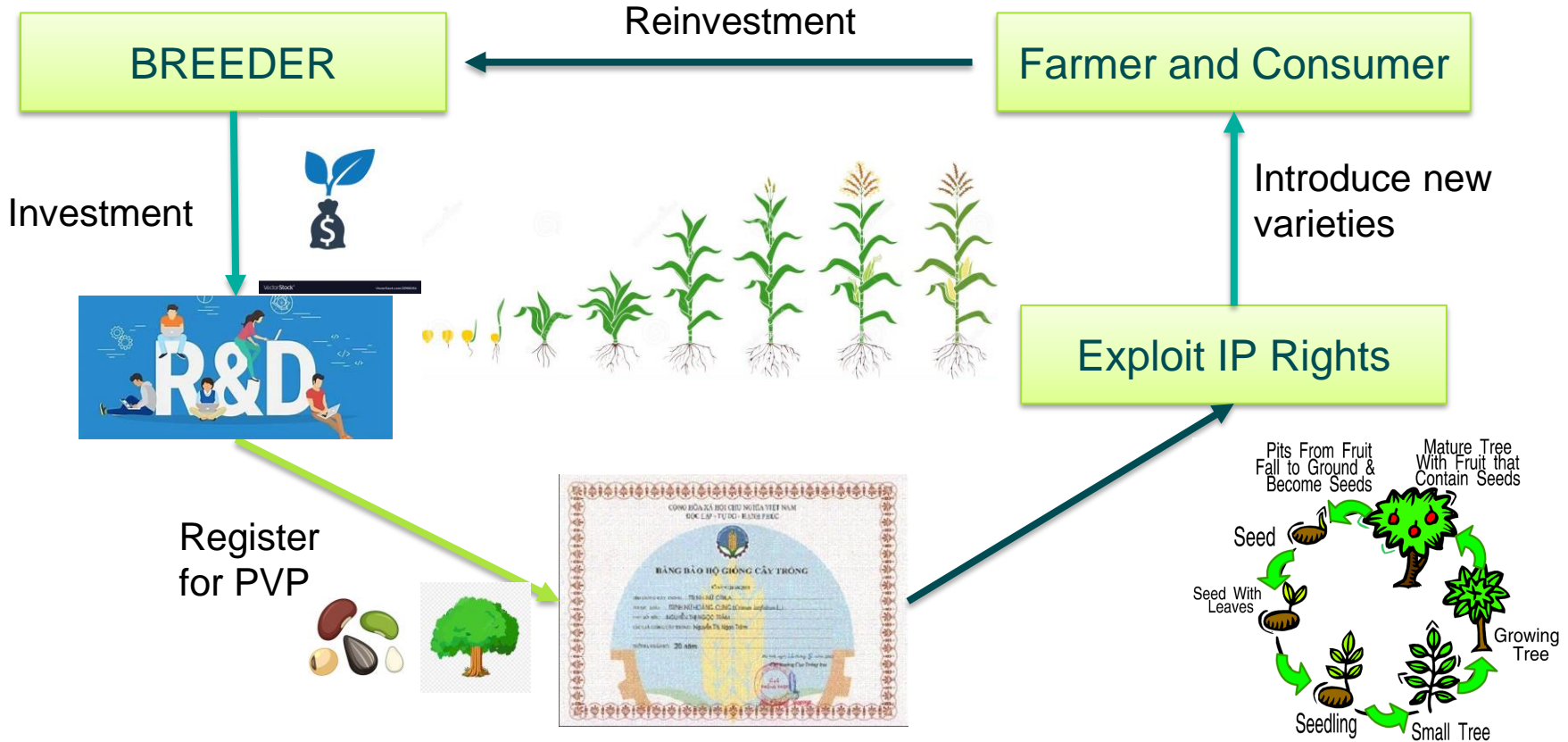
Encouraging of investment from private sector



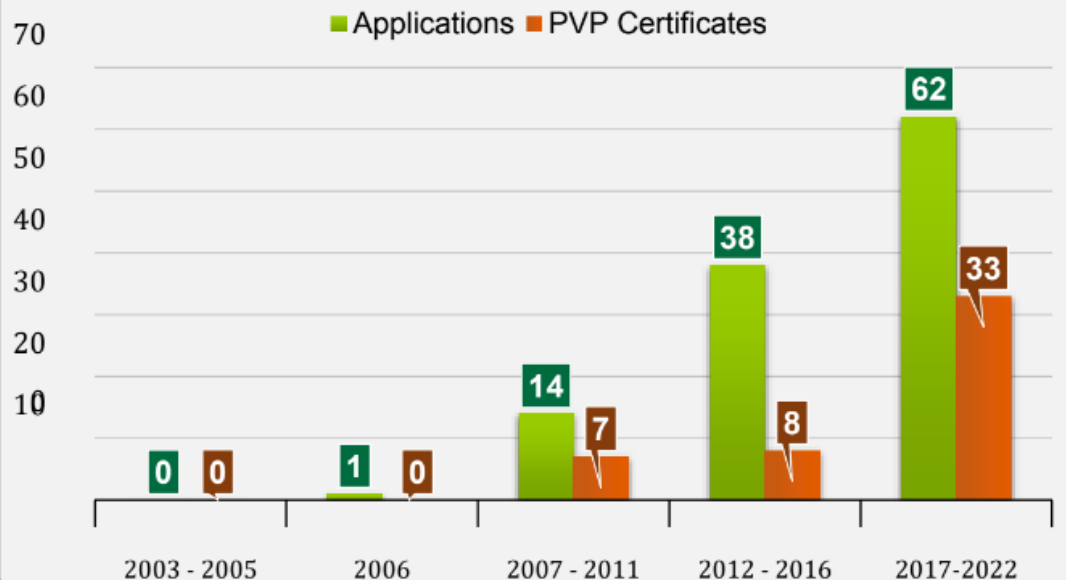
- Before PVP: They mainly focus on commercial activities, not interest in R&D
- When PVP system is established:
 - ✓ 2004-2010: they were transferred PBR from public sector holder
 - ✓ 2010-now: They invested in R&D of new plant varieties
- Now, many of them have their own breeding facilities.
- Some became big companies with very good breeding facilities.



PVP Cycle



APPLICATIONS AND PVP CERTIFICATES FROM VINASEED GROUP



No. of PVP certificates of Vinaseed have increased dramatically from 0 to **48**

115 Applications in total

48 Certificates in total (including transferred seeds)

04 In TOP 10 Popular Crop seed in Vietnam

02 Rice varieties for Rice export

TOTAL INVEST FOR R&D ACTIVITES AND FACILITIES

18.5 Mill. USD (2006 - Current)

Vietnam join UPOV

RESEARCH ORIENTAITON

Focus on researching varieties which match the market's demands and adapt to climate change: salt tolerance, drought tolerance, pest resistance...



01

R
I
C
E

S
E
E
D

- Select and generate quality seeds for rice export.
- Select high yield rice varieties with high amylose content for processing



02

C
O
R
N

S
E
E
D

- Select and create biomass corn varieties for dairy farming
- Select and breed corn seeds for human feed (glutinous corn, sweet corn)



02

V
E
G
E
T
A
B
L
E

S
E
E
D

- Select and create hybrid tropical vegetable seeds (pepper, tomato, cucumber,...)

RESEARCH METHOD

Using traditional hybrid method combined with biotechnology, especially new technology (gene editing).

Annual value added:

- ◆ Arable farming
\$2.3 billion
- ◆ Horticulture
\$1.0 billion
- ◆ Floriculture
\$ 0.2 billion

- ◆ GDP added
upstream/downstream (value
chains)
\$1.5 billion

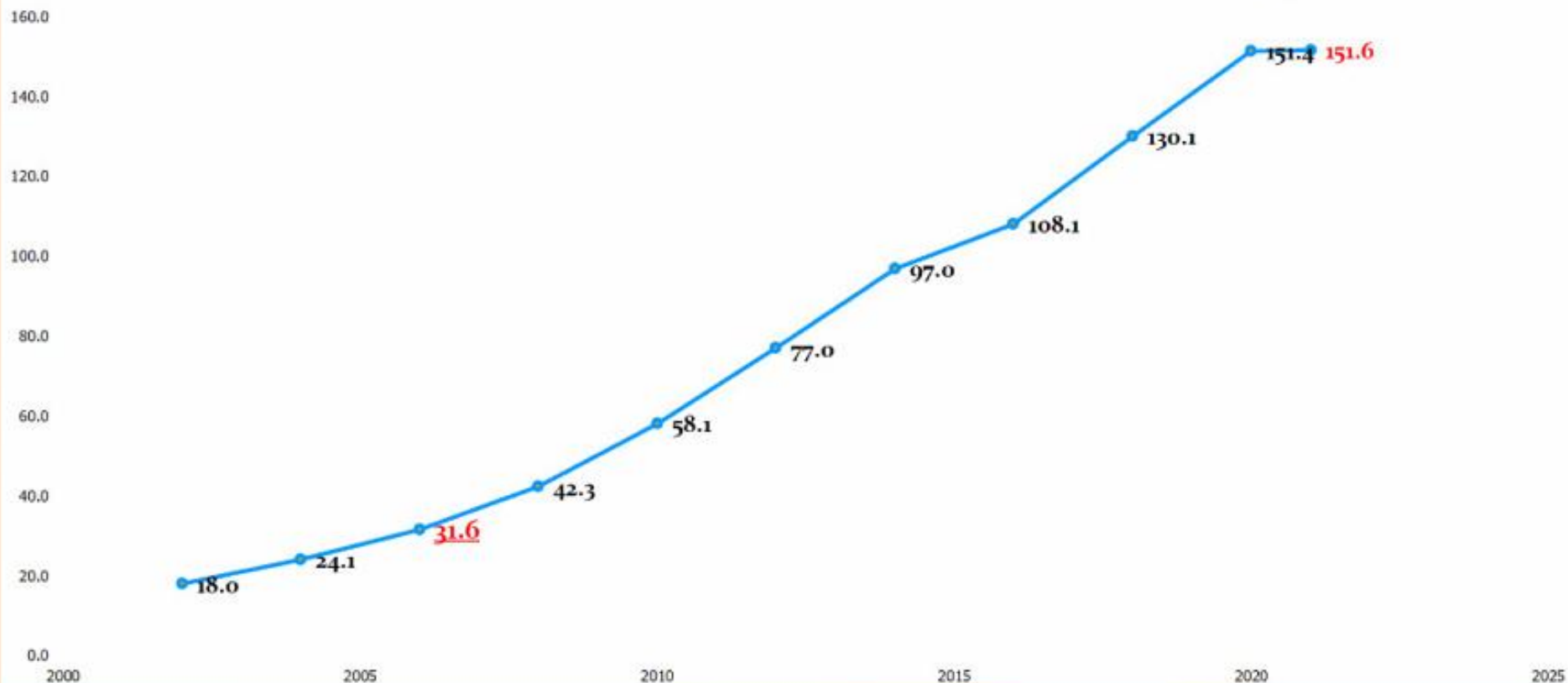
TOTAL ADDED: \$5 billion
(> 2.5% GDP)



Income of farmer increased: Big contribution from IP



Income/head in Rural area from 2002 - 2021 (USD/month), GSO

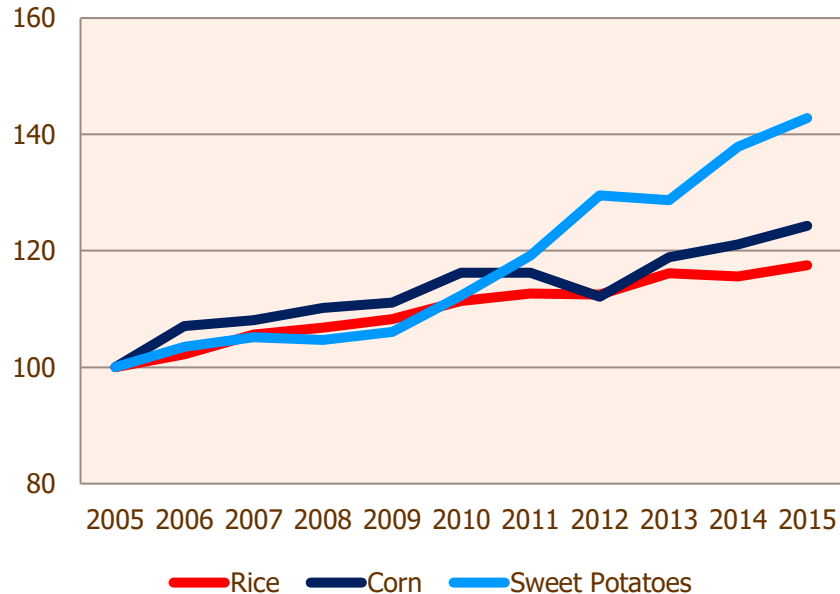


Increasing agriculture productivity



Plant breeding in Viet Nam: Yield vs. overall productivity developments

Vietnamese yield developments over time: major arable crops (index, 2005=100%)



→ Per annum since 2005:

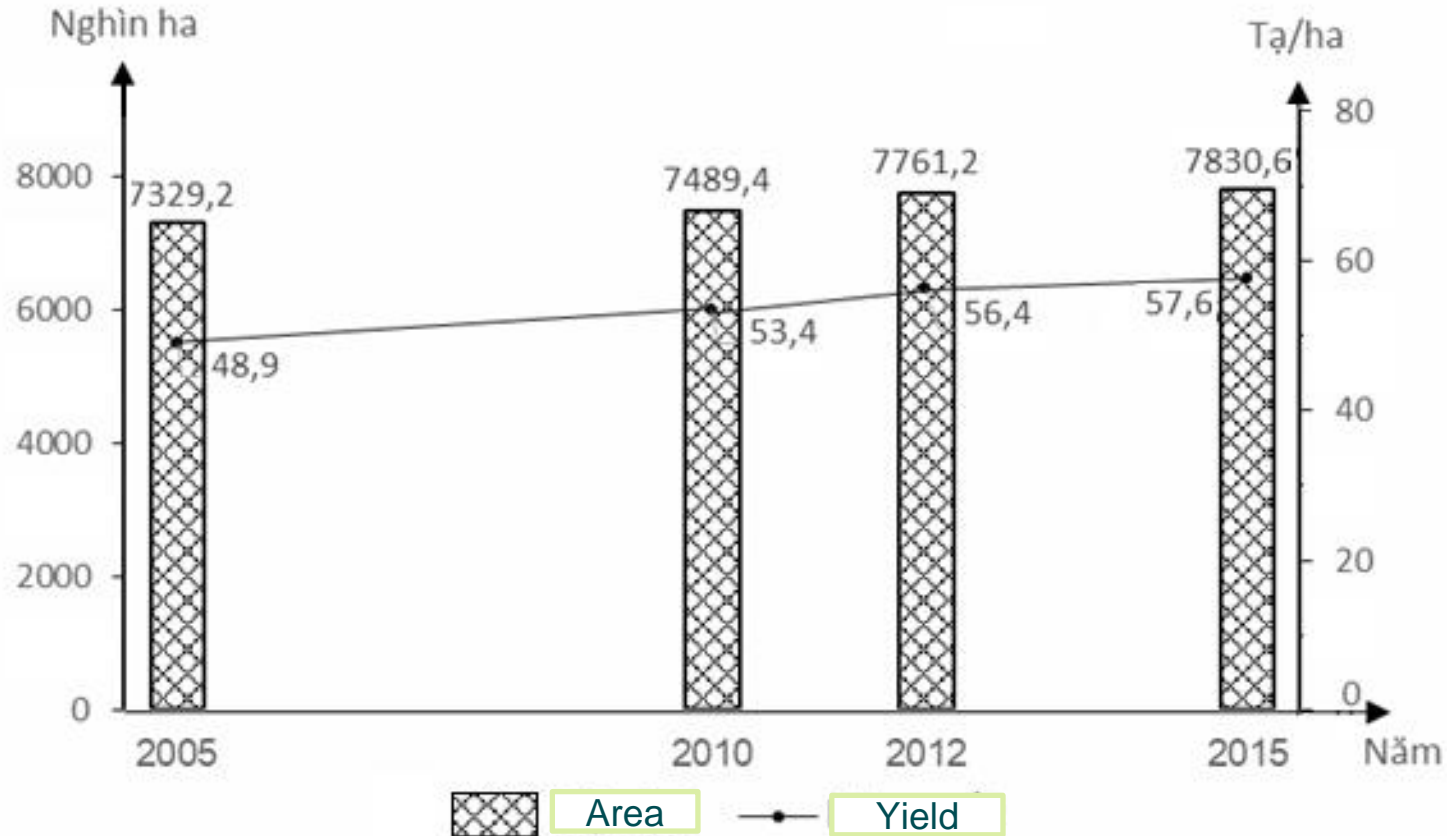
- rice: + 1.6 %,
- corn: + 1.8 %,
- sw. potatoes: + 3.6 %.

→ To compare, global yield increases are in the range of:

- rice: + 1.3 %,
- corn: + 1.1 %,
- sw. potatoes: – 0.3 %.

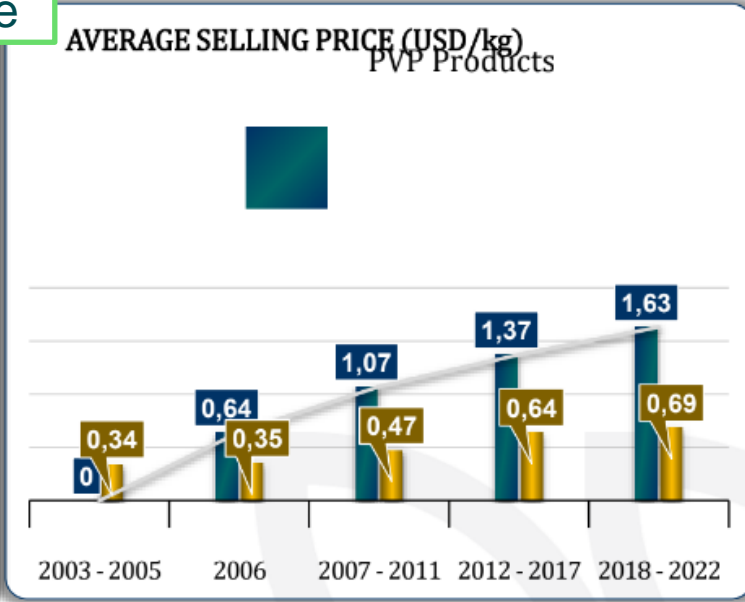
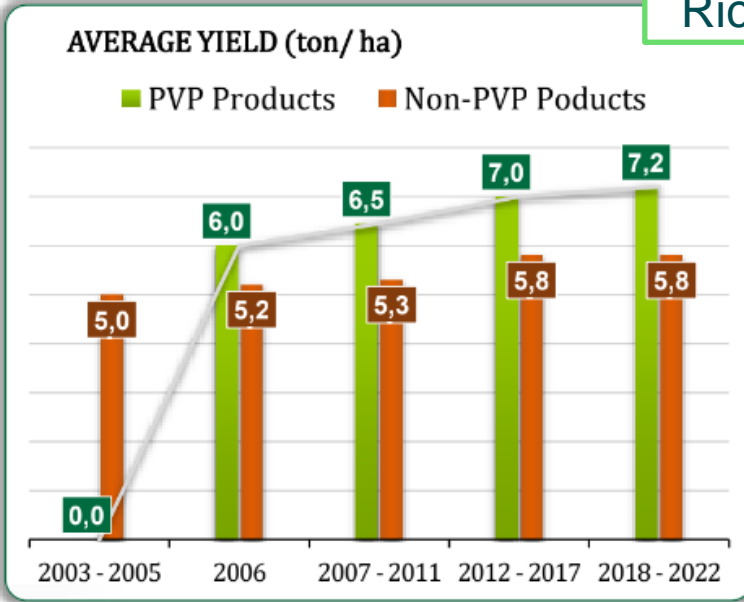
→ Can Viet Nam already be considered an out-performer?

Total rice area and yield



High yield and value by using high quality seeds

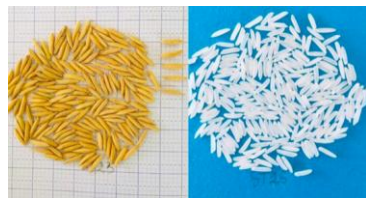
Rice



- Increasing investment on R&D, Vinaseed Group achieves economic and productive effects: From 2006 to 2022, the revenue of PVP products increased significantly from **25,700 USD** to **63.8 Million USD** which was accounted for **80%** of total revenue in 2022
- The average selling price of PVP products have gone up by **136%** compared to the public one. In addition, the PVP products have an increase in average yield by **21%**. These are strong evidences to prove positive impacts of UPOV in Vietnam seed industry.

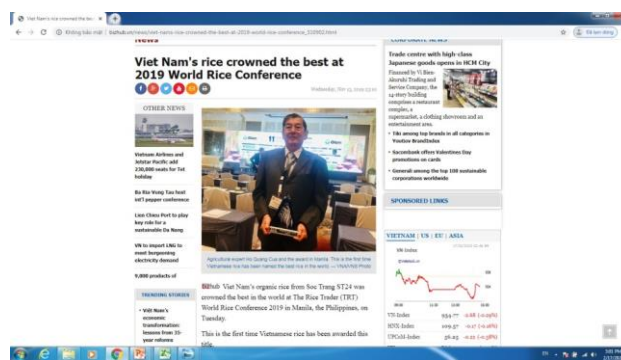
Source: Vinaseed

High Quality (HQ) Rice



ST25 – World's Best Rice in 2019

- After 2010, there are some achievement:
 - ✓ 2017: ST24 – Top 3 of the world
 - ✓ 2018: ST24 – Second in the World
 - ✓ 2019: ST25 – Best Quality in the World
- PVP under UPOV Convention is the most important for the achievement mentioned above





THANK YOU FOR
YOUR ATTENTION

