

**Technical Working Party for Fruit Crops****TWF/49/2****Forty-Ninth Session****Santiago de Chile, Chile, November 19 to 23, 2018****Original:** English**Date:** November 14, 2018

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**REPORT ON DEVELOPMENTS WITHIN UPOV***Document prepared by the Office of the Union**Disclaimer: this document does not represent UPOV policies or guidance*

The annex to this document contains a copy of a presentation on “Reports on Developments within UPOV” to be made by the Office of the Union at the forty-ninth session of the Technical Working Party for Fruit Crops (TWF).

[Annex follows]

**Technical Working Party for Fruit Crops  
Forty-Ninth Session**

**REPORT ON DEVELOPMENTS IN UPOV**

including relevant matters discussed in the last sessions of the  
Administrative and Legal Committee,  
the Consultative Committee and the Council

Office of the Union

*Santiago de Chile, Chile, November 19*

**UPOV**  
International Union for the Protection of New Varieties of Plants

**Preview**

- Membership & statistics
- Topics for discussion in CAJ (October 2018)
  - EDV
  - Propagating material
  - Provisional protection
  - Minimum distance
- Communicating the benefits of UPOV

**UPOV**

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**MEMBERSHIP OF UPOV**

**75 members**

New member

**Bosnia and Herzegovina**      **October 10, 2017\***

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\* Bosnia and Herzegovina will become bound to the 1991 Act on November 10, 2017.

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**UPOV Membership**

**1991 Act: 57 members – Other Acts: 18 members**

The boundaries shown on this map do not imply the expression of any opinion whatsoever on the part of UPOV concerning the legal status of any country or territory

**UPOV**

**SITUATION in UPOV**

**Examination of Laws**

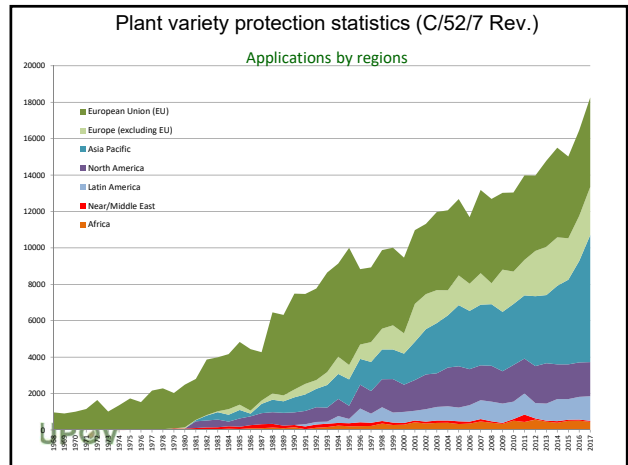
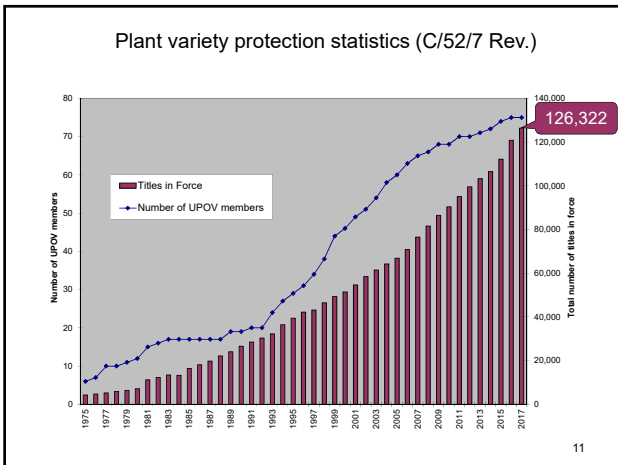
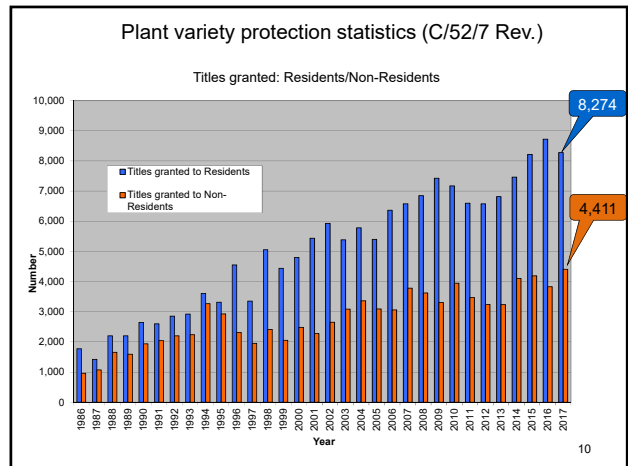
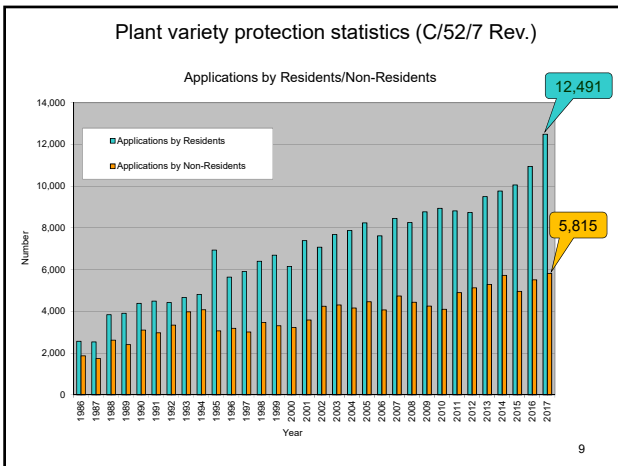
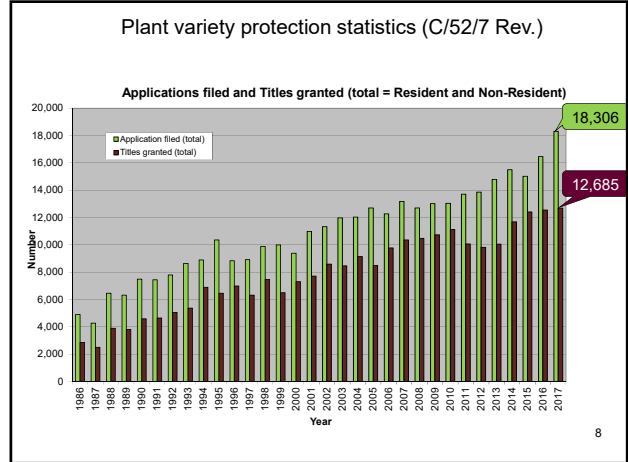
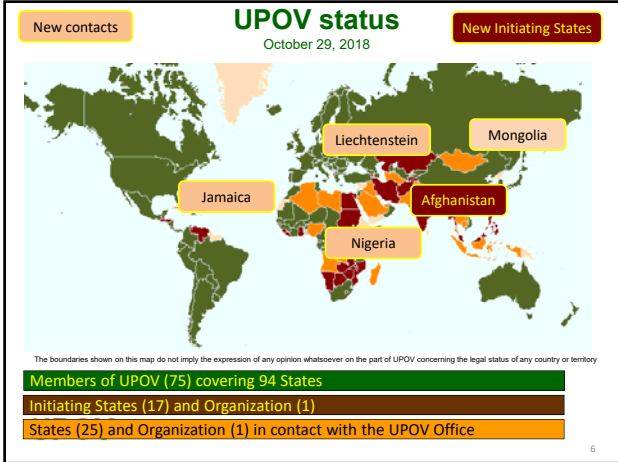
	<u>Council session</u>	<u>Advice</u>
Brunei Darussalam	October 26, 2017	Positive
Guatemala	October 26, 2017	Positive
Myanmar	October 26, 2017	Positive

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**UPOV**

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Top 10: UPOV members by number of applications

Rank	2007		2016		2017	
	Member	Number of applications	Member	Number of applications	Member	Number of applications
1	European Union	2,968	European Union	3,299	China	↑1 4,465
2	United States of America	1,485	China	↑3 2,923	European Union	↓1 3,422
3	Japan	1,406	United States of America	↓1 1,604	United States of America	1,557
4	Russian Federation	885	Ukraine	↑3 1,274	Ukraine	1,345
5	China	877	Japan	↓2 977	Japan	1,019
6	Netherlands	846	Republic of Korea	↑2 966	Russian Federation	↑2 807
7	Ukraine	560	Netherlands	↓1 804	Netherlands	763
8	Republic of Korea	527	Russian Federation	↓4 772	Republic of Korea	↓2 748
9	Canada	430	Australia	↑1 387	Australia	343
10	Australia	336	Brazil	↑2 326	Brazil	339

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Top 10: UPOV members by number of titles issued

Rank	2007		2016		2017	
	Member	Number of titles issued	Member	Number of titles issued	Member	Number of titles issued
1	European Union	2,616	European Union	2,980	European Union	2,865
2	United States of America	1,374	China	↑2 2,132	China	1,646
3	Japan	1,338	United States of America	↓1 1,703	United States of America	1,604
4	China	596	Japan	↓1 914	Ukraine	887
5	Ukraine	555	Republic of Korea	↑3 834	Japan	↓1 812
6	Canada	442	Russian Federation	↑1 592	Netherlands	↑1 672
7	Russian Federation	431	Netherlands	↑2 588	Russian Federation	↓1 641
8	Republic of Korea	424	Brazil	↑5 301	Republic of Korea	↓3 541
9	Netherlands	366	South Africa	↑1 247	Brazil	↓1 327
10	South Africa	225	France	↑13 200	Australia	↑3 244

Note: In 2016, Ukraine did not report number of titles issued.

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Top 20: Country of residence of applicants (2017)

Rank	Country of residence of breeder	Applications filed as:				
		Resident			Non-resident	Total
		Resident	CPVO (EU member States)	Total		
1	China	4,004	0	4,004	37	4,041
2	Netherlands	638	1,349	1,987	1,333	3,320
3	United States of America	822	0	822	1,262	2,084
4	France	146	449	595	473	1,068
5	Germany	32	328	360	505	865
6	Japan	611	0	611	254	865
7	Republic of Korea	628	0	628	15	643
8	Russian Federation	597	0	597	4	601
9	Ukraine	534	0	534	4	538
10	Switzerland	12	0	12	311	323
11	Australia	147	0	147	154	301
12	Argentina	234	0	234	55	289
13	Italy	5	106	111	132	243
14	United Kingdom	41	63	104	132	236
15	Brazil	200	0	200	25	225
16	Denmark	5	139	144	75	219
17	Viet Nam	212	0	212	0	212
18	Spain	0	116	116	90	206
19	Israel	18	0	18	145	163
20	Belgium	3	121	124	35	159
Sum of top 20		8,889	2,671	11,560	5,041	16,601
Others		839	93	932	653	1,585
Total		9,728	2,764	12,492	5,694	18,186

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Top 20: Country of residence of applicants

Rank	2007		2016		2017	
	Residence	App. #	Residence	App. #	Residence	App. #
1	Netherlands	2,600	Netherlands	3,129	China	↑1 4,041
2	United States of America	1,764	China	↑3 2,720	Netherlands	↓1 3,320
3	Germany	1,336	United States of America	↓1 2,035	United States of America	↓1 2,084
4	Japan	1,283	France	↑3 1,050	France	1,068
5	China	818	Germany	↓2 934	Germany	865
6	Russian Federation	777	Republic of Korea	↑2 886	Japan	↑1 865
7	France	621	Japan	↓3 761	Republic of Korea	↓1 643
8	Republic of Korea	388	Russian Federation	↓2 614	Russian Federation	601
9	Ukraine	318	Ukraine	364	Ukraine	538
10	Australia	314	Australia	316	Switzerland	↑1 323
11	United Kingdom	253	Switzerland	↑5 312	Australia	↓1 301
12	Argentina	243	Brazil	↑8 271	Argentina	↑2 289
13	Denmark	225	Denmark	254	Italy	↑4 243
14	Italy	193	Argentina	↓2 233	United Kingdom	↑1 236
15	Spain	181	United Kingdom	↓4 220	Brazil	↓3 225
16	Switzerland	178	Spain	↓1 199	Denmark	↓3 219
17	New Zealand	176	Italy	↓3 199	Viet Nam	↑3 212
18	Israel	174	Israel	186	Spain	↓2 206
19	South Africa	144	Czech Republic	↑3 144	Israel	↓1 163
20	Brazil	121	Viet Nam	↑22 162	Belgium	↑8 159

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## Preview

- Membership & statistics
- Topics for discussion in CAJ (October 2018)
  - EDV
  - Propagating material
  - Provisional protection
  - Minimum distance
- Communicating the benefits of UPOV

Reference	Explanatory Notes on:	Timetable
UPOV/EXN/EDV/2 (revision)	Essentially Derived Varieties	Adopted by Council in April 2017

**Administrative and Legal Committee (CAJ): October 31, 2018**  
members and observers to share their perspectives on :

**Essentially Derived Varieties**

- essential characteristics
- predominantly derived
- indirect derivation, including in relation to parent lines and hybrids
- assessment of essentially derived varieties

## Administrative and Legal Committee (CAJ): Seventy-fifth session - October 31, 2018

Document CAJ/75/14 "Report"

### Presentations on essentially derived varieties

14. The CAJ considered document CAJ/75/3 and the presentations made by the United States of America, the International Community of Breeders of Asexually Reproduced Ornamental and Fruit Varieties (CIOFORA), the European Seed Association (ESA) and the International Seed Federation (ISF) on essentially derived varieties.

15. The CAJ agreed to propose to the Council to organize a "Seminar on the impact of policy on essentially derived varieties (EDVs) on breeding strategy", to be held on the morning of October 30, 2019.

16. The CAJ agreed that the seminar should include presentations by breeders, judges, academics and UPOV member authorities to provide a range of perspectives on the subject. The Office of the Union would invite members and observers to submit questions and issues which they would wish to be addressed in the seminar. The Office of the Union, in consultation with the Chair of the CAJ, would then prepare a draft program for comment by the CAJ by correspondence. On the basis of comments received, the Chair of the CAJ in conjunction with the Office of the Union would finalize the program. The CAJ agreed that the seminar should be open to the public, with the recording of the seminar being made available on the UPOV website after a suitable broadcast delay.

17. The CAJ agreed that the consideration of the revision of the Explanatory Notes would be included in the agenda for the seventy-sixth session of the CAJ, and the outcome of the seminar would be a basis to that consideration.

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Reference	Explanatory Notes on:	Timetable
UPOV/EXN/PPM/1	Propagating Material	Adopted by Council in April 2017

### Administrative and Legal Committee (CAJ): October 31, 2018

members and observers to share their perspectives on :

- (b) Conditions and Limitations Concerning the Breeder's Authorization in Respect of **Propagating Material**  
- suitable examples of conditions and limitations

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## Administrative and Legal Committee (CAJ): Seventy-fifth session - October 31, 2018

Document CAJ/75/14 "Report"

### Presentations on conditions and limitations concerning the breeder's authorization in respect of propagating material

18. The CAJ considered document CAJ/75/4 and the presentations made by ESA and ISF on conditions and limitations concerning the breeder's authorization in respect of propagating material.

19. The CAJ agreed that it was not necessary to revise the current guidance on the conditions and limitations concerning the breeder's authorization in respect of propagating material for the time being.

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Reference	Explanatory Notes on:	Timetable
UPOV/EXN/PRP/2 (revision)	Provisional Protection	Adopted by Council in October 2015

### Administrative and Legal Committee (CAJ): October 31, 2018

members and observers to share their perspectives on :

- (c) **Scope of Provisional Protection**

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## Administrative and Legal Committee (CAJ): Seventy-fifth session - October 31, 2018

Document CAJ/75/14 "Report"

### Presentations on provisional protection

20. The CAJ considered document CAJ/75/5 and the presentations made by ESA and ISF on provisional protection.

21. The CAJ agreed that it was not necessary to revise the current guidance on provisional protection for the time being.

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**TECHNICAL COMMITTEE**  
October 29 and 30, 2018, Geneva

**Discussion on: minimum distance between varieties**

**Administrative and Legal Committee (CAJ): October 31, 2018**  
Program

In response to a suggestion by CIOPORA and AIPH for the CAJ to consider the matter of minimum distance, the CAJ agreed to invite **CIOPORA and AIPH to make a joint presentation on minimum distance** at its seventy-fifth session. The CAJ noted that the matter was under consideration by the TC and that a report on the conclusions of the TC would be provided under agenda item 3 “Report on developments in the Technical Committee” at the seventy-fifth session of the CAJ.

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**Technical Working Party for Agricultural Crops (TWA)**  
May 21 to 25, 2018, Naivasha, Kenya  
**Minimum distance between varieties**  
(document by the European Union)

**Technical Working Party for Vegetables (TWV)**  
September 17 to 21, 2018, Beijing, China  
No discussion on minimum distance

**Technical Working Party for Fruit Crops (TWF)**  
November 19 to 23, 2018, Santiago de Chile, Chile  
No discussion on minimum distance

**Technical Working Party for Ornamental Plants and Forest Trees (TWO)**  
February 18 to 22, 2019, Christchurch, New Zealand  
**Minimum distances between vegetatively reproduced ornamental and fruit varieties**  
(documents invited)

**Technical Committee**  
**Fifty-fourth session - October 29 and 30, 2018**

Document TC/54/31 “Report”

Minimum distance between varieties

200. The TC considered discussions on minimum distances between varieties at the TWPs, at their sessions in 2017 and 2018, as set out in paragraphs 26 to 41 of document TC/54/3.

201. The TC noted that a follow-up project based on field trials was being considered with the participation of breeders of protected varieties and **agreed to include an agenda item for its fifty-fifth session for a report on developments.**

**TECHNICAL COMMITTEE**  
**Program for the fifty-fifth session**

<ol style="list-style-type: none"> <li>1. Opening of the session</li> <li>2. Adoption of the agenda</li> <li>3. Report on developments in UPOV including relevant matters discussed in the last sessions of the Administrative and Legal Committee, the Consultative Committee and the Council</li> <li>4. Progress reports on the work of the Technical Working Parties, including the Working Group on Biotechnical and Molecular Techniques, and DNA Profiling in Particular (BMT)</li> <li>5. Matters arising from the Technical Working Parties</li> <li>6. <b>TWP documents</b></li> <li>7. Information and databases             <ul style="list-style-type: none"> <li>(a) UPOV information databases</li> <li>(b) UPOV PRISMA</li> <li>(c) Exchange and use of software and equipment</li> <li>(d) Variety description databases</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>8. Molecular techniques</li> <li>9. Variety denominations</li> <li>10. Preparatory workshops</li> <li>11. <b>International cooperation in examination</b></li> <li>12. <b>Matters concerning variety descriptions</b></li> <li>13. Differences in notes for the assessment of distinctness</li> <li>14. <b>Discussion on: Minimum distances between varieties</b> (presentations invited)</li> <li>15. List of genera and species for which authorities have practical experience in the examination of distinctness, uniformity and stability</li> <li>16. Test Guidelines</li> <li>17. Program for the fifty-sixth session</li> <li>18. Adoption of the report (if time permits)</li> <li>19. Closing of the session</li> </ol>
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**Administrative and Legal Committee (CAJ):**  
**Seventy-fifth session - October 31, 2018**

Document CAJ/75/14 “Report”

Joint presentation by CIOPORA and AIPH on minimum distance

22. The CAJ considered documents CAJ/75/12 and CAJ/75/13 and the joint presentation made by the CIOPORA and the International Association of Horticultural Producers (AIPH) on minimum distance.

23. The CAJ requested the TC to report to the CAJ its considerations concerning the discussions on **minimum distances between varieties and the follow-up project based on field trials with the participation of breeders of protected varieties.**

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**Preview**

- Membership & statistics
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ABOUT UPOV

HOME • ABOUT UPOV •

Benefit

VIDEOS

Using the UPOV... Argentina

variety prot...

PVP in Japan (As...

**Currently being translated in different languages!**

HFFA Research Paper 03/2017

Socio-economic benefits of UPOV membership in Viet Nam: An ex-post assessment on wheat production and... UPOV: Focus on the impact of Plant Variety Protection UPOV Today Publication

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### STUDY in VIET NAM\*

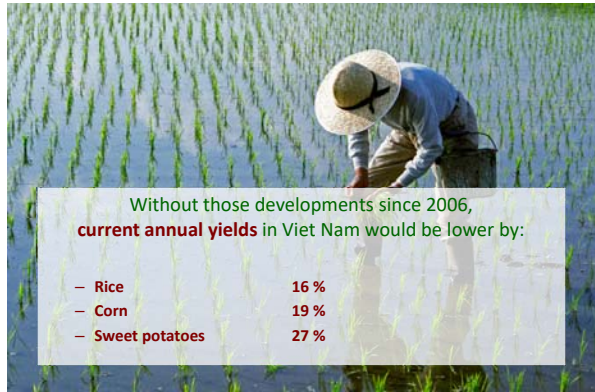
Annual land productivity developments since Viet Nam joined UPOV in 2006 in  
Rice, Corn (maize) and Sweet Potatoes

- **1995-2005:** increase in yield mainly through increased level of inputs – no detectable increase due to plant breeding
- **2006-2016:** annual land productivity increase due to plant breeding
  - Rice 1.7 %
  - Corn 2.1 %
  - Sweet potatoes 3.1 %

\* "The socio-economic benefits of UPOV membership in Viet Nam; An ex post assessment on plant breeding and agricultural productivity after 10 years" (Corresponding author: Steffen Noleppa) by HFFA Research GmbH

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### STUDY in VIET NAM



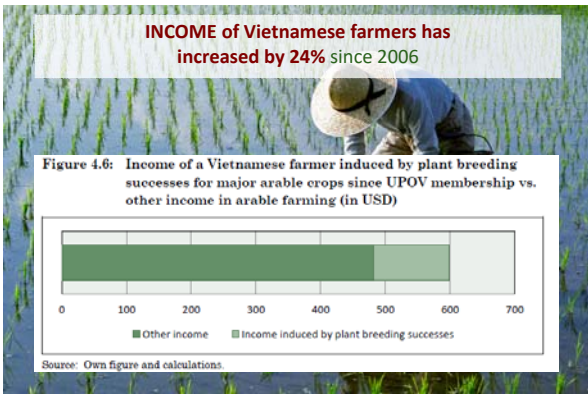
Without those developments since 2006, **current annual yields** in Viet Nam would be lower by:

- Rice 16 %
- Corn 19 %
- Sweet potatoes 27 %

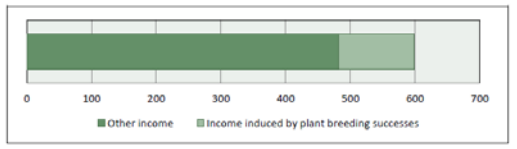
32

### STUDY in VIET NAM

**INCOME of Vietnamese farmers has increased by 24% since 2006**



**Figure 4.6: Income of a Vietnamese farmer induced by plant breeding successes for major arable crops since UPOV membership vs. other income in arable farming (in USD)**



Source: Own figure and calculations.

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### STUDY in VIET NAM

**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)**

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### ABOUT UPOV

- Mission Statement
- Overview
- Organigram
- Office of UPOV
- Officers
- UPOV Convention
- Benefits of UPOV System**
- Key Issues
- FAQs
- Publications


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## Benefits of the UPOV System

VIDEOS



Using the UPOV system to benefit custodians of native wild germplasm in Argentina




The role of PVP in the development of a new blackberry variety that improves farmers' working conditions.

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## UPOV Videos

VIDEOS



Canadian cherry growers benefit from government policy

See how the Government of Canada uses PVP to improve the livelihood of Canadian cherry growers

Languages available:  
EN audio  
Subtitles: FR, ES

**Nick Ibuki, Business Development Manager, Summerland Varieties Corp.**


*One of the biggest competitive challenges in the past, before plant breeders' right was that new varieties would be developed here in British Columbia and they would go all over the world and they would actually be used to compete against our BC growers. So our growers would be competing against varieties that they paid to develop here [...]*

**Sean Beirnes, General Manager, Summerland Varieties Corp.**

*When it comes to licencing, we provide Canadian growers and marketers with priority access. By strategically allocating production and marketing territories, we ensure that Canadian growers and marketers, who represent a very small portion of the international fruit market, have an even playing field on which to compete. We would not be able to do this without plant breeders' rights.*

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## UPOV Videos



**UPOV (Japan) Ts Tsuyahime Rice**  
THE SECRET OF ITS SUCCESS

Tsuyahime

A new rice variety bringing increased income for farmers in Japan

Languages available:  
EN audio  
Subtitles: FR, ES (ZH, TH)

This new rice variety is enjoying a **30% premium**

Tsuyahime was developed by Yamagata prefecture, which has created a breeding station because they consider new rice varieties to be one of the most **effective means of providing benefits to farmers.**

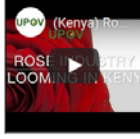
They are willing to **invest time and resources** into the breeding process because they are able to **develop and protect varieties** that benefit their farmers.

**Atsushi Suginaka, Director, Intellectual Property Division, MAFF, Japan.**  
For Japanese rice variety Tsuyahime, the breeder's right holder utilizes the breeder's right to allow Tsuyahime production only to the farmers who can make environmentally friendly and high quality rice production.

This is a good example that internationally harmonized PVP system can contribute to the development of local agriculture.

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## UPOV Videos



**UPOV (Kenya) Rose Loom**  
ROSE LOOM

Rose industry blooming in Kenya

Discover how the UPOV system enabled Kenya to develop a \$500 million cut-flower industry that employs 500,000 Kenyans

Languages available:  
EN audio  
Subtitles: FR, ES

Esther Kimani, Managing Director, Kenya Plant Health Inspectorate Service (KEPHIS).  
The benefit of plant variety protection in Kenya is that it has **really promoted agricultural trade**... Kenya is a leading exporter in cut flowers, especially roses because the breeders of roses feel confident to have their variety being exploited in Kenya

**George Mwangi, Propagation Manager, Suera Flowers Ltd, Nyahuru**  
Most of the managers available now are **indigenous Kenyans**, these are well-educated people. Now **local universities are offering training completely oriented towards floriculture and horticulture**, there are horticultural courses that are being developed and we are getting a more enlightened workforce in the farms...In the next ten years, we'll start getting or seeing a lot of roses grown in Kenya that are **completely bred in Kenya**.

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## UPOV Member videos

Using the UPOV System to benefit custodians of native wild germplasm in Argentina



Argentina

Using the UPOV system to benefit custodians of native wild germplasm in Argentina

Languages available:  
ES audio  
Subtitles: EN



"The royalties derived from commercialization of the variety are shared between the breeder and the provinces that contributed the native plant genetic resource."

"A large part of the profits, basically, **50 per cent**, that are generated from the commercialization **return to those provinces.**"

**UPOV**

## UPOV Member videos

Using the UPOV System to benefit custodians of native wild germplasm in Argentina



Argentina

Using the UPOV system to benefit custodians of native wild germplasm in Argentina



"the erosion/loss from their natural habitat is reduced and this is therefore our own contribution, working together with INTA, for the conservation of our native natural resources."

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## UPOV Member videos

UPOV system bringing benefits for agriculture in Colombia



UPOV system bringing benefits for agriculture in Colombia

See how the UPOV system is supporting agriculture and promoting rural development through new improved varieties, with examples of larger land and crop yields

Languages available:  
ES audio  
Subtitles: EN, FR

"...after we started the process of protecting these varieties, we were able to receive financial compensation. The aim is not to make a profit, but to reinvest in the development of improved varieties"

**Jorge Victoria, Scientific Advisor, Cenicafé**

"That is why we have also registered our varieties in countries..."

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## UPOV Member videos

UPOV system bringing benefits for agriculture in Colombia



UPOV system bringing benefits for agriculture in Colombia

See how the UPOV system is supporting agriculture and promoting rural development through new improved varieties, with examples of larger land and crop yields

"Plant variety protection in Colombia, through the UPOV system, has greatly boosted various productive industries, including floriculture. The floriculture industry benefited from the arrival in the country of new businesses..."

"...which introduced new ornamental plant varieties"

"... these new varieties have helped to achieve greater efficiency in the cultivation and production of an end product which meets market needs."

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## Videos in the pipeline



WHEAT – Agroscope, Changins, Switzerland



TOMATO – based on the presentation made at the TC meeting in April 2017 on the increased diversity of cultivated tomatoes

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[End of Annex and of document]