GEVES 50th Anniversary: Peter Button, UPOV Vice Secretary-General

I am Peter Button, Vice Secretary-General of the International Union for the Protection of New Varieties of Plants, since 2010.

UPOV's mission is to provide and promote an effective system of plant variety protection, with the aim of encouraging the development of new varieties of plants, for the benefit of society.

The UPOV system offers protection to new varieties of plants for any species in the plant kingdom. Globally, there are more than 4,000 plant genera and species for which applications have been made for new plant varieties.

More than 300,000 titles of protection have been granted to new plant varieties around the world. This diversity of plant breeding and large number of varieties means that cooperation in the examination of the Distinctness, Uniformity and Stability ("DUS") is crucial for an efficient, international system that is accessible and affordable for all types of breeders.

In UPOV, this cooperation is based on the input of UPOV members such as France. In particular, experts from UPOV members develop Test Guidelines and share their practical experience with particular plant genera and species, in UPOV's GENIE database. Experts from GEVES have made a major contribution to that work.

GEVES has developed expertise in the DUS examination of more than 500 crops and species and offers to conduct DUS examination on behalf of other UPOV members for more than 250 of those crops and species.

The contribution in the development of UPOV Test Guidelines is even more impressive; experts from GEVES have been Leading Experts for 66 Test Guidelines – that is almost 1 in 5 of all UPOV Test Guidelines. Those Test Guidelines cover agricultural crops, vegetables, fruit and ornamentals.

The contribution of GEVES extends more widely than sharing its practical DUS experience. The experts at GEVES have developed software that has been made available for use by UPOV members around the world. For example, the GAIA software for DUS trial design and data analysis is being used by Brazil and Uruguay. Other important software applications that have been developed by GEVES and made available to UPOV members are SIRIUS, for hand-held data capture, and AIM, for image processing.

UPOV's technical guidance is developed through the work of the Technical Working Parties and Technical Committee and here again, experts from GEVES have played a pivotal role in steering that work by acting as Chairpersons of each of the TWPs at various times in UPOV's history. France has provided three Technical Committee chairpersons and it is perhaps fitting that the late Mr. Joel Guiard, who was such an important and globally respected figure in UPOV's history, has been unique in holding that position on two separate occasions. I would also like to mention the uniquely valuable contribution of the late Francois Boulineau to the work of the Technical Working Party for Vegetables, both as an expert and as a Chairperson.

The guidance that UPOV develops is of great importance but also relies on the willingness of experts to share their knowledge at a human level. The willingness of GEVES experts to engage with their peers and openly share knowledge is clearly demonstrated in the enthusiasm of GEVES to host experts from around the world. GEVES has hosted all UPOV Technical Working Parties on multiple occasions over the years and has provided invaluable opportunities for an insight into a center of excellence in DUS testing.

UPOV members are constantly considering how to improve the efficiency of DUS testing and the potential for molecular markers to increase efficiency has been a key point of discussion in recent years.

GEVES pioneered a new method for combining phenotypic and molecular distances in the management of variety collections, which has significantly reduced the size of DUS growing trials in maize in France. This model is now used by other UPOV members, such as in Argentina where the size of soybean trials has been reduced by more than 50%.

The support of other UPOV members is an important benefit for new UPOV members. The African Intellectual Property Organization (OAPI) joined UPOV in 2015 and has benefitted from such support in

establishing of its regional system. GEVES has been a key partner in the development and implementation of the OAPI project « Promotion et la Protection des Obtentions Végétales ».

o The key words that I would use to summarise 50 years of GEVES history are the following:

- Excellence
- Knowledge
- Expertise
- Innovation
- Sharing

To respond to the challenges of climate change, it is more important than ever for farmers to have access to new plant varieties. For a strong and rapid flow of new varieties to farmers, plant breeders will need an ever more efficient system of DUS examination. This will require institutes such as GEVES to embrace technology, to share their knowledge and to develop more and stronger partnerships with their counterparts in UPOV members around the world.

As far as farmers and plant breeders are concerned, we live in a global village. Farmers need access to the best varieties developed by breeders around the world and we need partnerships that enable information to be shared between UPOV members to avoid unnecessary delays in the examination of new plant varieties. To illustrate this, French breeders rank 4th in the world in terms of the number of applications for plant breeders' rights – making almost 1,000 applications in 2020. However, almost 2 out of 5 of those applications were made outside France or the CPVO system. It would be sensible that these same French varieties do not need to be tested multiple times in different UPOV members and vice-versa for varieties developed in other countries which are valuable for French farmers.

Many congratulations and thanks to GEVES for all it has contributed to UPOV over the last 50 years. The future holds many challenges for agriculture, so I wish GEVES even greater success for its next 50 years.