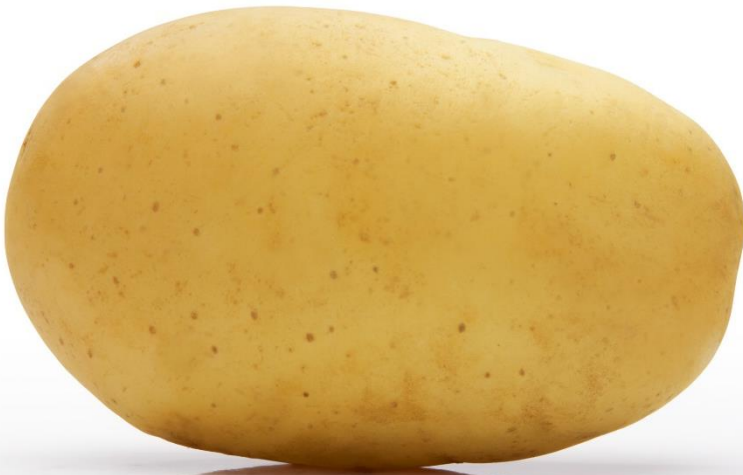


Say potato,
say **Agrico.**



Variety development @ Agrico

The importance of a UPOV based PVP system for breeders.

H. Iwema, manager IP & global licensing



Say potato,
say **Agrico.**



Content of presentation

1. What is Agrico? Breeding, seed-production & -trade
2. World potato production
3. International trade in (seed) potatoes
4. Seed production in Holland
5. Export markets
6. Multiplication under license
7. The licensing mission

All pictures in this presentation are taken by me, or taken off the internet. Sources of graphs and video are mentioned.

1 What is Agrico

- Agrico Cooperative, for breeding, production & trade.
- Agrico is a cooperative society with around 700 members / growers in Holland.
- About 14.000 Hectares seed multiplication produces about 450.000 ton certified seed potatoes.
- Over 80% is exported to Europe & the world.
- Dedicated breeding program secures a collection of varieties for each climate and end-use.











<https://vimeo.com/314591307>

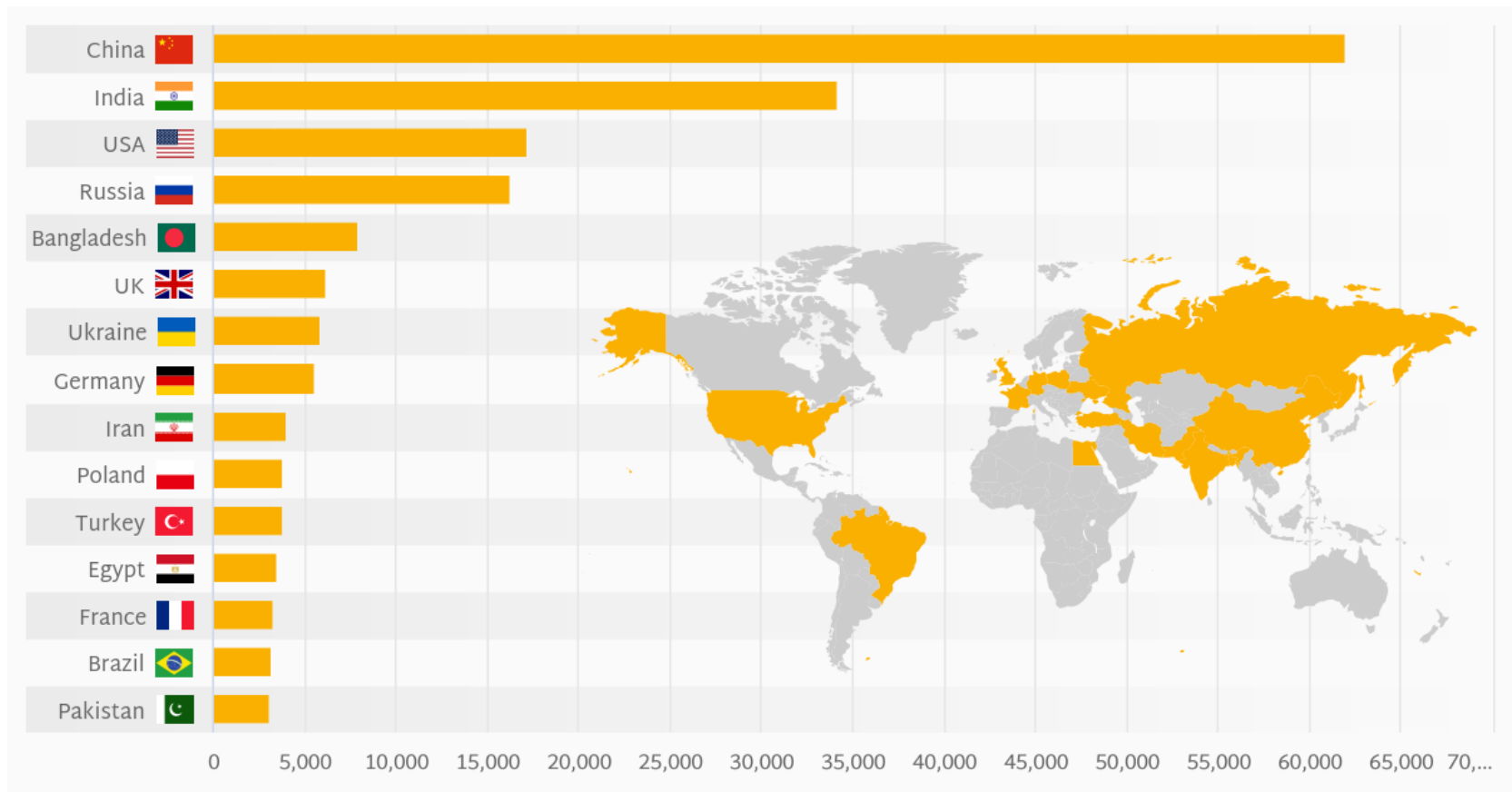
2 World potato production

Potato as an increasingly important staple, vegetable and snack

- FAO statistics show that world potato production increased from around 300 million ton per year in 1995 to almost 400 million ton in 2020.
- Biggest growth was achieved in Asia, Africa and South America.
- For different climates and end-use, specific varieties come to the market, thanks to systematic breeding and variety development.
- Not only yield, but also disease resistance as breeding target.

Production per year in 1000 Metric tonnes of the top 15 producing countries.

[Source Helgi Library]



https://youtu.be/Vf1_cUyIQic

3

International trade in seedpotatoes

Holland & Europe as
source of certified
seeds

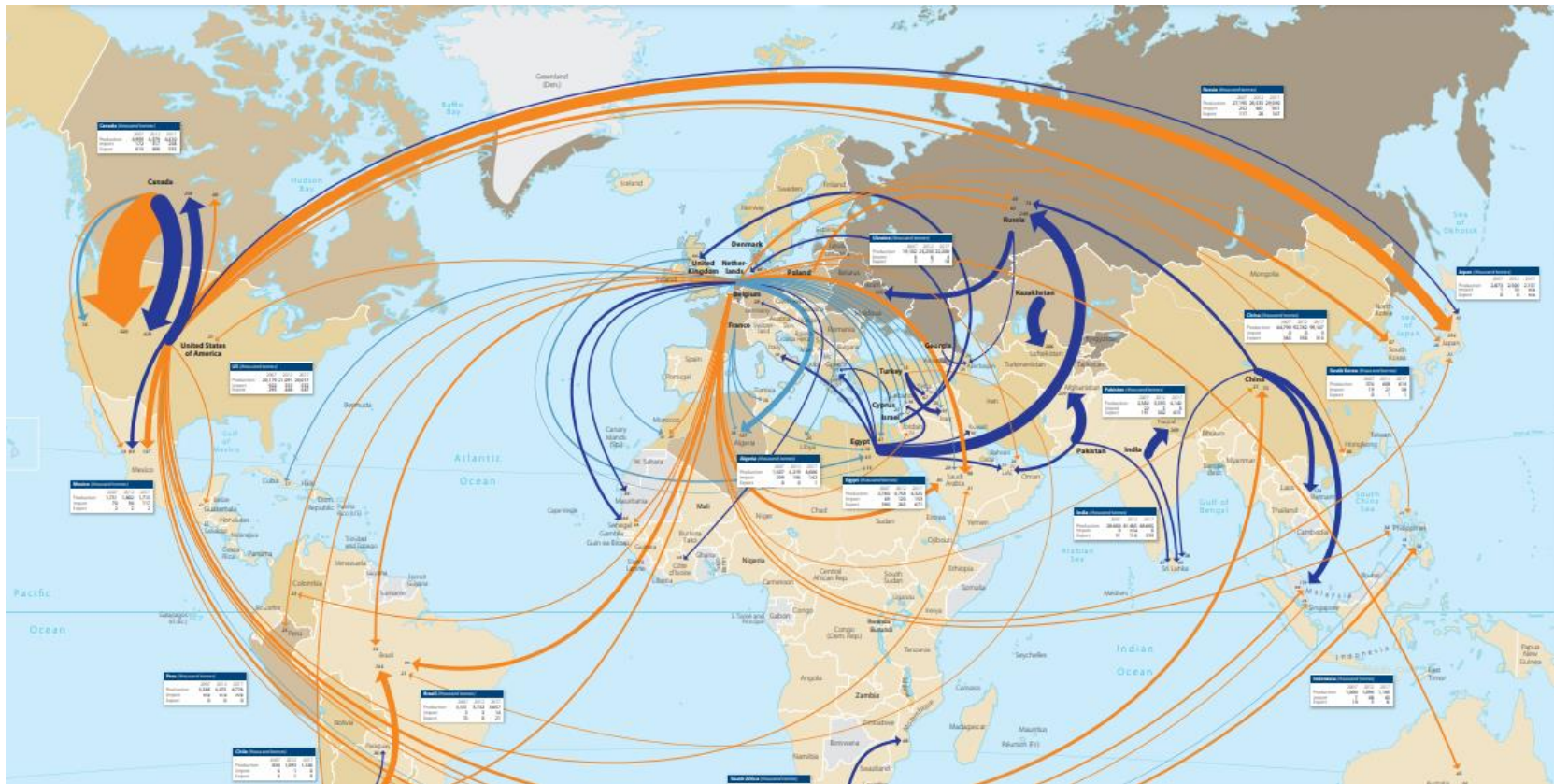
- Northern Europe has ideal climate for seed multiplication.
- Seed exported to rest of Europe, North Africa, Asia and Central America.
- Holland is supplier of over 50% of world cross border trade in certified seed potatoes.
- Based on imported seeds, in many countries local multiplication was developed.
- Many countries production also based on heirloom varieties.

https://research.rabobank.com/far/en/sectors/regional-food-agri/world_potato_map_2019.html

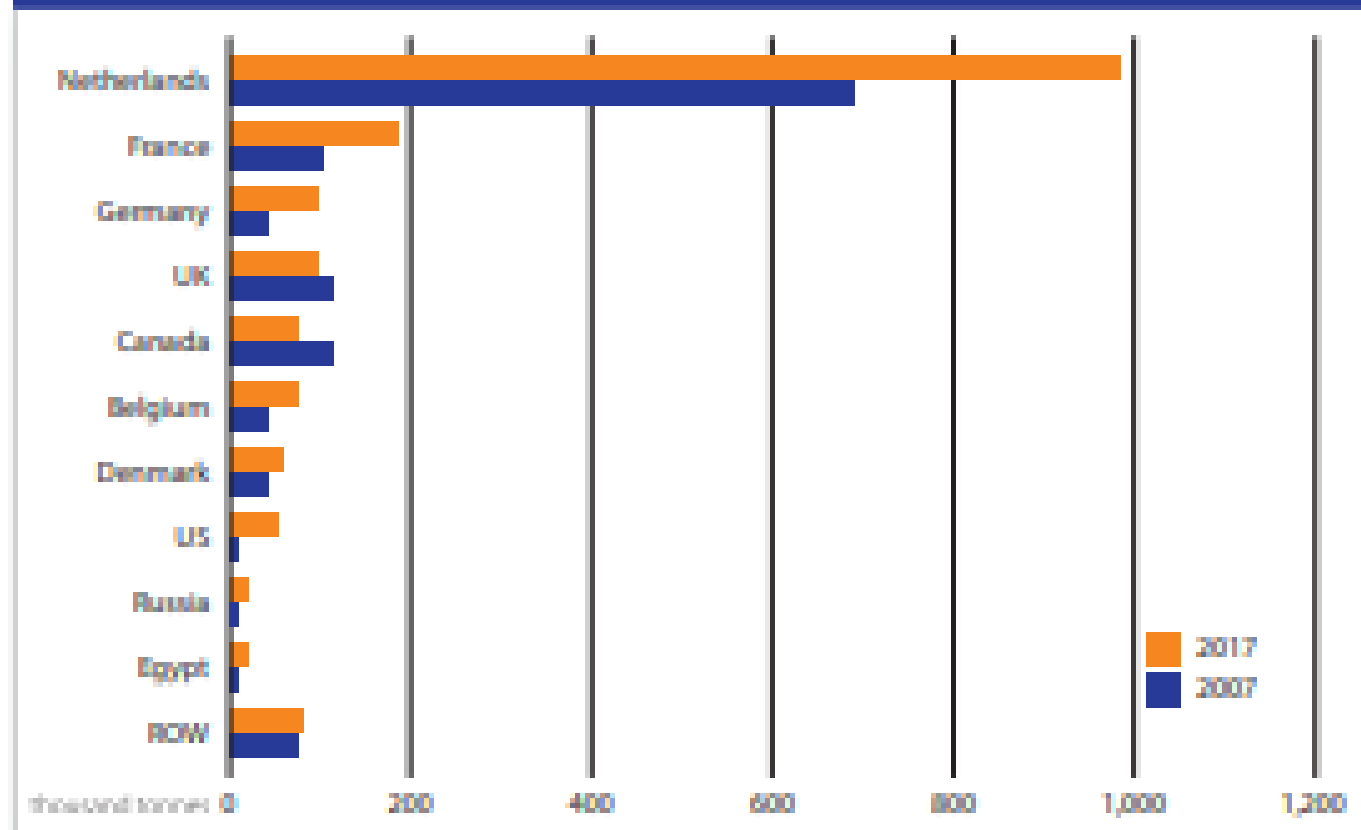
fresh

seed

frozen



Top 10 seed potato exporters, 2007 vs. 2017



4 Seed production in Holland

- Private growers and traders, government quality assurance

- Production farms are private / family owned.
- Quality assurance, certification and phytosanitary inspection in hands of authorities.
- Public / private cooperation providing a stable environment for development & growth.
- Private variety development supports growth.
- National & European breeders law secures variety protection.









5 Export markets

- Agrico partner and local authorities

- Agrico partner in each export market secures distribution to end-users.
- Seed quality must meet national standards of export market (bi-lateral government agreements).
- If local multiplication is possible, a license agreement can be made.
- Reliable PVP system is required to secure the breeder interest and continue farmer access to latest released varieties.



























Say potato,
say Agrico.



Say potato,
say **Agrico.**



6 Multiplication under license

Agrico licensing team

- Multiplication under license can start with supply of basic seeds.
- If supply of basic seed is impossible, in-vitro plants can be delivered.
- The license agreement provides a legal basis to make latest varieties available for testing and production.
- Under Agrico CSR policy also attention to people, climate and an inclusive value chain, supporting developing countries.
- A UPOV based PVP system is providing best standardised system for variety protection













7

The licensing mission...

- Licensing Team, Agrico Group and international partners

- **Information** on topic must be shared with all involved, to 'speak the same language'.
- **Reporting** of sale & use of the varieties and result of multiplication is key for breeder to get the big picture.
- **Check** on consistency in collected data can reveal 'wrong doing'.
- **Enforcement** of PVP rights needs to be a coordinated effort, across the value chain. Small farmer exemption. Cooperate with local authorities.

