OWC pre-conference Seed Ambassadors Workshop: Building an International Network to Advance Organic Seed Systems

How to increase the resilience of the agroecosystems with the use of seed diversity

6-7 September in Rennes (France) and Online

Facilitated by

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Presentation Outline

- ➔ Definition of terms: organic agriculture, agroecosystem, seed diversity
- ➔ Organic seed systems in Southern Africa: progress and perspectives
- ➔ Organic seed systems in Europe: progress and perspectives
- ➔ Organic seed systems in North America: progress and perspectives

Definition of terms

Agroecosystem

- It is an ecosystem on agricultural land. It is a spatially and functionally coherent unit of agricultural activity & it includes the living and non-living components involved in that unit as well as their interactions

Resilient Agroecosystem

- is systems adaptation based on learning, planning and reorganization for the purpose of preserving function, structure and identity

Seed Diversity

- Seed diversity **allows farmers control over their food system**, protects biodiversity and builds resilience against climate change

Organic Agriculture

- Organic agriculture (OA) is defined by the worldwide umbrella organization International Federation of Organic Agriculture Movements (IFOAM) as a production system that sustains the health of soils, ecosystems and people, by relying on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of non-organic, chemical-synthetic inputs

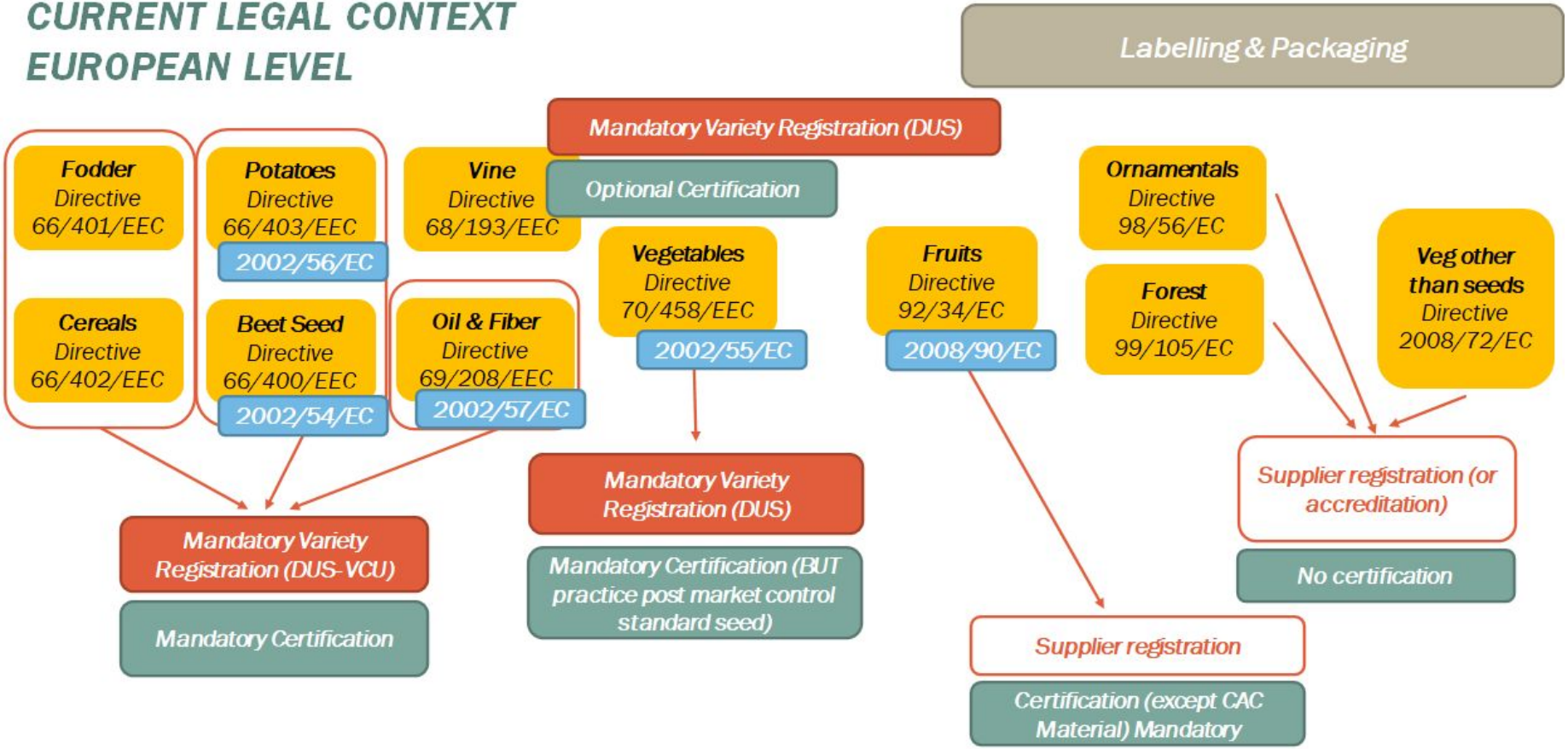
Organic seed systems in Southern Africa: progress and perspectives

- In the rural regions of countries of the Southern hemisphere, organic agriculture, by default“ is still the most wide-spread agricultural practice as many farmers lack market access to modern farming techniques like hybrid seeds, mineral fertilizers or synthetic pesticides.
- Still, organic agriculture and the interlinked certification has become a more and more important factor in developing countries, as the demand for certified organic products from the South increases in Western countries.
- Lack of organically bred crop varieties in most countries (if not all) of Southern Africa due to the absence of a solid organic seed system or framework.

Organic seed systems in Europe: progress and perspectives

- The European Farm to Fork strategy (in the frame of the European Green Deal) aims to reach **25% organic land in the EU by 2030**
- Plant Reproductive Material, plant varieties for which organic seeds are on the market need to be registered and each country should maintain an up-to-date database of all available seeds→ serves as a basis for derogations
- High rate of derogation for conventional untreated seeds, mainly for vegetables → phasing out by 2036
- Better harmonisation is needed between production and demand → national organic seed expert groups
- Lack of cultivars suitable for organic agriculture, and locally adapted cultivars. Low funding of organic breeding, complex and conventional sector centered variety registration system

CURRENT LEGAL CONTEXT
EUROPEAN LEVEL



Fulya BATUR, kybele

Organic seed systems in Europe: progress and perspectives

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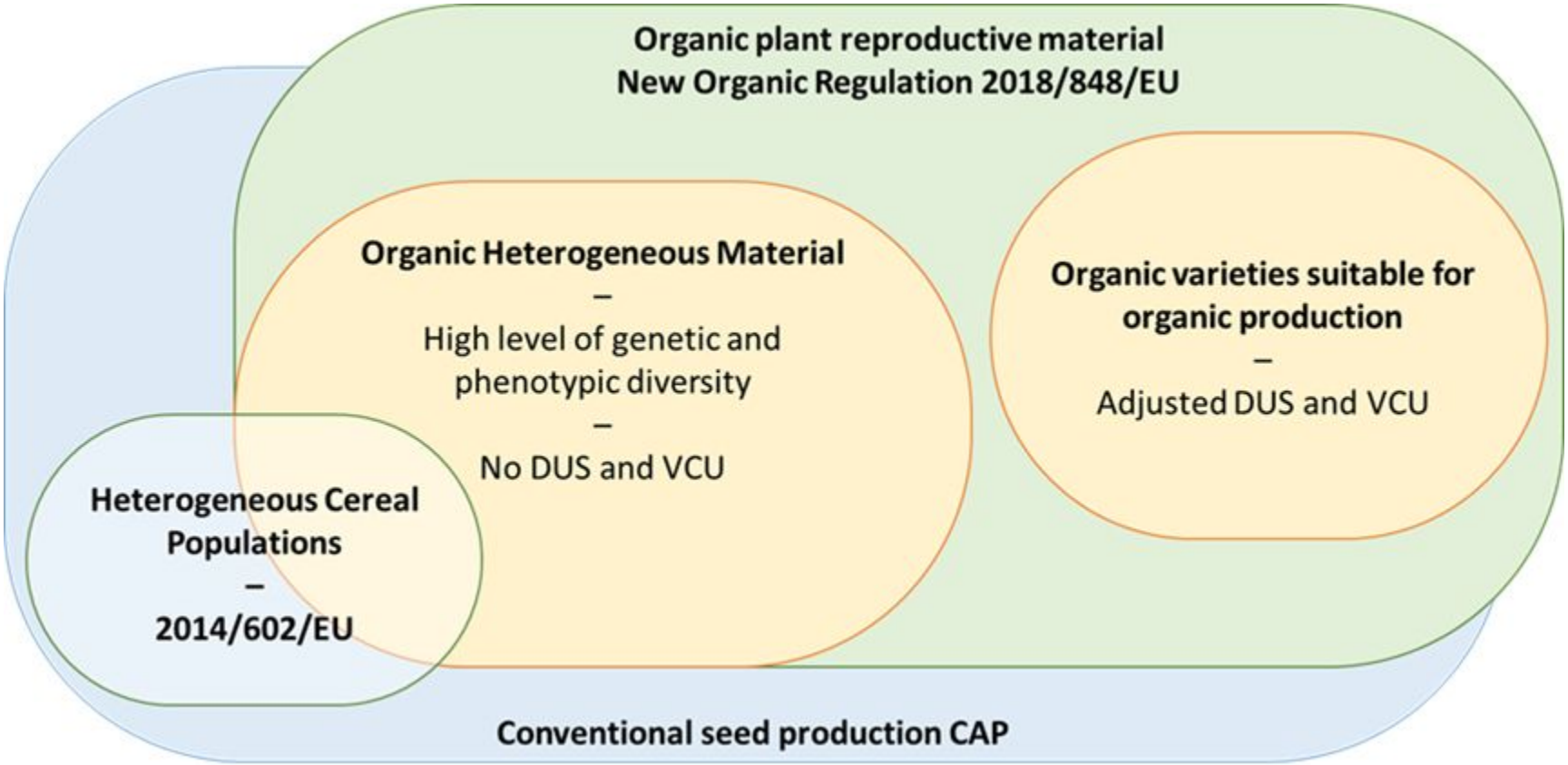
- Lack of cultivars suitable for organic agriculture, and locally adapted cultivars. Low funding of organic breeding, complex and conventional sector centered variety registration system
- Support is needed for **participatory processes** in breeding and cultivar trials
- New opportunities with the organic regulation, coming into force from January 2022

New organic regulation from January 2022



Organic seed systems in the US: progress and perspectives

- After many years of consolidation, a growing number of small seed companies serving regional markets are emerging, and many of them are breeding new varieties for organic systems
- The commercialization of these varieties is possible as there is no centralized, mandatory registration system in the US
- More organic farmers are using organic seed and the NOSB has recommended that certifiers ask farmers using conventional untreated seed to make additional efforts to find and use certified organic seed
- There is still a lack of organic adapted varieties in many crops and regions of the country
- State of Organic Seed (OSA) https://stateoforganicseed.org/

Guiding questions

-According to your experience and/or from your perspective what are the main obstacles/bottlenecks of divers organic seed marketing/use?

- What kind of seed systems should be in place in order to support organic seed diversity?

- What specific breeding objectives should be addressed to support the organic agricultural system?

Group Tasks (Break-out rooms)

Group 1

- Using a crop of your choice, discuss on the bottlenecks or limitations towards achieving sustainable yield and quality in terms of organic plant breeding, taking into consideration about organic principles.

Group 2

- Discuss on how to achieve a resilient organic breeding program (you may use an example of a crop of your choice) with a clear outline on objectives, appropriate novel techniques to use and target traits

Group 3

- Discuss on appropriate seed systems to be put in place in order to support organic seed diversity. You may use practical examples

Group Tasks (break-out rooms) continued

Group 4

- Discuss on how to improve diversity in organic seed production and the use of appropriate seed marketing techniques

Group 5

- Discuss on appropriate government policy frameworks to support and sustain the organic seed sector

Topic related terminologies

- DUS: Distinctness, uniformity, stability
- VCU: Value for cultivation and use
- Organic breeding
- Participatory breeding
- New breeding techniques
- Organic certification
- Populations (Composite cross populations, dynamic populations)
- Seed cooperatives
- Community seed banks
- Niche varieties
- Landraces, local varieties
- Seed production
- Seed marketing
- Organic principles

Schedule

- 30 min Introduction round (name, country, objective for participation) & setting some ground rules
- 15 min introductory presentation by facilitators
- 60 min Discussion (general discussion - 10 mins, Group work - 30 mins, group presentations - 20 mins)
- 15 min Conclusions