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Financing Organic Plant Breeding Activities

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Why Organic Plant Breeding must be strongly promoted?

- Today there is high dependency on cultivars bred for high input conditions by multi-national companies (> 90%)
- Until now only few organic breeding initiatives covering a small number of crops driven by pioneers investing own resources
- Breeding is long term approach needs 10 to 20 years before first cultivars can be released, thus it needs long term engagement
- Special demand of organic sector needs higher and more diverse breeding efforts
- Capacity building and career development of young breeders is urgently needed
- Divergence in breeding goals and techniques will cause severe shortage of cultivars and contamination problems in near future
- → loss of consumer trust









Donations

Donors: Seed Fund, Software AG Foundation, Mercator Foundation Switzerland, etc.

- In DE and CH most important resource for most organic breeders
- Minimal administrative effort at non-profit status
- Purpose-oriented but limited in total volume
- Limitations:
 - donation stays at "charity" level no real value chain partnership

Licenses, seed reproduction fees, variety development contributions & sale of seeds / vegetative plant material

Donors: farmers, gardeners

- Generate a certain amount of money backflow that can be invested in breeding
- Limitations:
 - contribution is usually low and does not work if we strive for many cultivars and many different varieties and animal breeds









Public funding

Donors: in DE and CH mainly: BLE, EU, BMBF, EiP, BLW etc.

- Several public funds available
- Limitations:
 - Only for breeding research not for practical breeding work
 - Long-term breeding activities difficult to finance through public funds
 - High administrative effort for applications and reporting
 - Often tied to a high proportion of own funds that are not available

Public funding at EU-level

- Limitations:
 - large consortia with small budgets for breeding activities
 - High administrative level
 - Long and difficult proposal process









Incentive charges for derogation on conventionally untreated seed

Donors: farmers, gardeners

- Price difference between organic/conventional seed is collected to support organic breeding
- Limitations:
 - So far only works in Switzerland (coordinated by Bio Suisse)
 - Legal regulation is not allowed as it will cause distortion of competition
 - Danger of conventional suppliers increasing the price
 - Will be obsolete as soon as 100% organic seed is reached









Crowd funding

Donors: consumers, citizen, broad public

- Non-profit status (Open Source Seed)
- Limitations:
 - High administrative expenditure









Participation of the value chain

Donors: Organic associations, processors, specialized trader, retailer, consumer

- Fair Breeding 0.3% of net sales of fruit and vegetables
- High Oleic Organic Sunflowers: I2 companies join forces to invest for 7 years
- Organic Cotton accelerator: Participation of the major textile labels in a joint pool financing of OCA, an organization that coordinates pool funds and promotes organic cotton breeding: Seeding the Green Future.
- Limitations:
 - donors difficult to be convinced and benefits need to be communicated
 - Value chain partnerships need "care and attention"
 - Pressure to be successful in breeding donors want to see results/outputs (varieties)









Different financing channels of organic breeding

source of funds

use of funds

Investment in the future - the entire value chain

Licenses &
Variety development
contributions
farmers, multipliers

Non-profit financial resources

Seed funds, animal breeding funds, FairBreeding© etc.

Public subsidies LEAD, EU, BMBF, DLR, BLW Demand-oriented organic breeding as R&D for the processing sector, quality Taste

variety development Yield & suitability for cultivation

Non-profit breeding
Biodiversity, sustainable
nutrition, cultural heritage

Breeding research, prebreeding, conservation Biodiversity, health, methodology

organic breeding



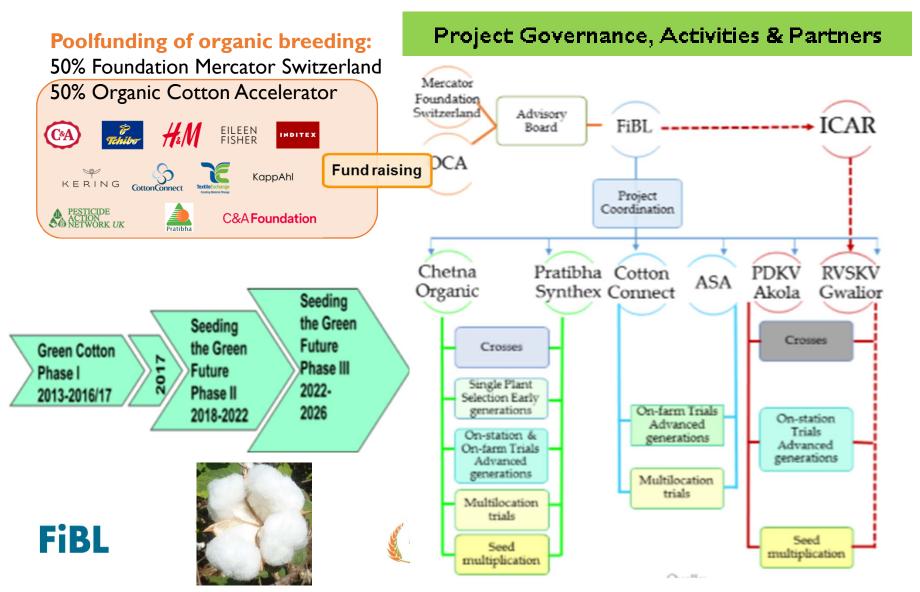






Example for cross-sector promotion of organic cotton breeding





Engagement.BioBreeding

Through cross-sector engagement in organic breeding, it is possible to

- Maintain the integrity of the organic sector (consumer demand)
- Maintain the integrity of the genome (required by the IFOAM guidelines)
- Breed plant cultivars of many crops that are adapted to organic agriculture
- Integrate fragmented financing into a long-term approach that meets the needs of the organic sector
- enlarge financial resources (from 3 Mio € to 10-20 Mio €) allowing new breeding initiatives to emerge and promotion of young breeders

www.engagement.biozuechtung.org









What distinguishes a Value Chain Partnership

- Joint provision of sustainably produced food for the mutual benefit of all stakeholders. Sharing of risks and benefits.
- Functioning value chains and close cooperation between the actors based on partnership.
- Orientation towards added value for customers.

Why breeding needs to be included in the Value Chain Partnership

- Organic breeding forms the basis for our organic foods of tomorrow and is therefore part of the value chain: organic right from the start.
- Organic breeding aims at the future: what is bred today will be on our plates in 10-15 years. That is why we must take responsibility today.



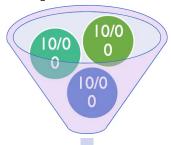






Pool financing for sustainable organic breeding

Players in the value chain



Committing at the point of sale e.g. 0.1-0.2% of organic turnover as engagement of as many market partners in the organic sector as possible

Cross-sector pool funding

Bio right from the start Breeding Investment Fund

Engagement.BioBreeding

Monitoring by independent body

Strategic control

Trade, processors, producers, associations, BÖLW, breeding funds

Operational control

Lean administration

Advisory body

Organic breeders, endorsers, researchers

• Identifying the needs of the industry

• Prioritisation & tendering

 Review of offers according to transparent criteria

 Investment in breeding programmes (personnel, infrastructure, training)

Review of milestones











