

The challenge of organic seed systems, a farmers view



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Widely or specifically adapted genotypes?

(Ceccarelli, 1994; Ceccarelli et al., 1992)



water
fertilizer
pesticides

→ Uniform the environments

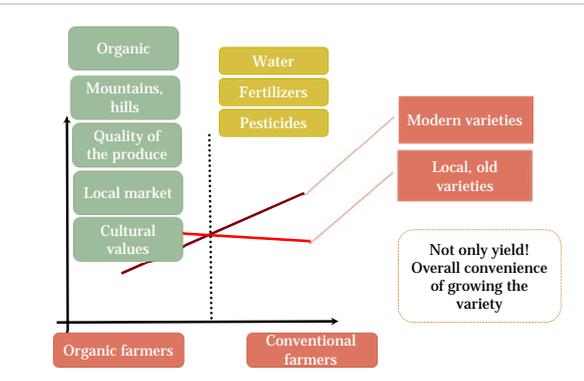
Modern varieties bred by conventional plant breeding

Organic agriculture

→ Different environments

Locally Adapted varieties

Because of the great diversity among organic farms, a small number of varieties that are universally adapted may not be a realistic goal. (Grube, 2007)



Who are organic farmers??

The problem of today regulation:

Organic farmers have less choice and possibilities than conventional ones

Is market the only solution?



A new approach is needed



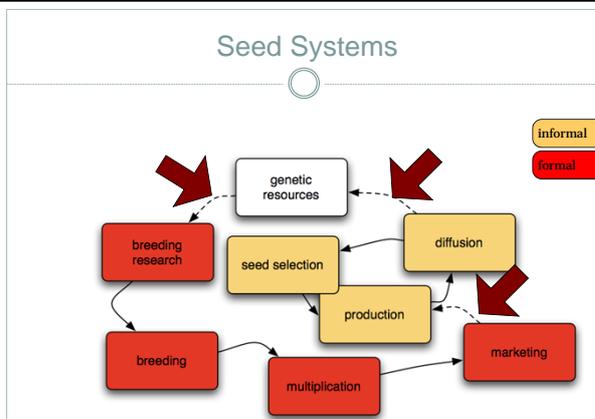
market exchange

cultivation on-farm research

sustainable use of PGRFA

seed systems

Seed Systems



Why informal seed systems?

Informal seed systems are particularly important in the case (i) farmers prefer varieties with specific adaptation to local conditions or tasting/cooking quality that cannot be obtained from the formal sector; (ii) formal seed systems are inefficient or expensive; (iii) an acceptable seed quality could be easily produced (Louwaars, 2007); (iv) it is difficult to having access to improved seed (Lipper et al., 2010)..

The keywords of the new seed systems

- decentralized
- Farmer-oriented

A new role for farmer in breeding and innovation

Participatory plant breeding

Sustainable use of PGRFA

Questions to be addressed

- How to finance PPB in a trend of decreasing of public investment in agricultural research?
- How to promote an informal organic seed system with good quality, without opening the room to unfair competition amongst seed industries?
- How to deal with VCU systems for varieties for alternative farming systems? (voluntary??)

Certification Registration

Marketing

Quality of seeds

How to guarantee quality ?

IPRs Registration

Royalties

Financing research and innovation

How to finance PPB or evolutionary plant breeding?

Thanks for your attention!