NORWEGIAN COMMUNITY SEED BANK
SECURING ACCESS TO CONSERVED SEEDS – SECURING SUSTAINABLE USE

SEMINAR COPENHAGEN : 2016-05-25

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DIRECT USE – REINTRODUCTION OF PGR
WHAT EXISTS IN NORWAY?

Cereal users genebank:
- Cereals – conservation varieties
- Maintenance breeding & multiplication of seed from landraces and heritage varieties
- From 250 hyperdried, frozen kernels to seed amounts that will work in your seeder
- Eliminating de-facto bottleneck for use

Heritage varieties of vegetables:
- «Re-maintain» Norwegian seed stocks of heritgage varieties of vegetables
- Developing seed business for heritage seeds
- Access to seeds
VARIETY LISTING SYSTEM IN NORWAY

National list
- UPOV 1978 act
- DUS testing, national + buying abroad – plant variety rights
- VCU testing main agricultural crops, 3 years
- Plant breeding, new and improved (Norwegian) varieties – main market
- Farm saved seeds ~ 60-70%

Conservation varieties
- EU directive aimed at landraces, old cultivation history
- Coord. effort: Seed crops – NordGen / Veg. prop. crops – NGRC
  - ”Reduced DUS” ~ description - No IPR
- Limited market
- Joint Nordic system proposed

”Tradition” varieties / heirloom varieties....
- ”Amateur varieties”, not old conservation history
- Vegetables, limited market, limited testing, no commercial value
Community seed banks

- How to get from 250 hyperdried, frozen kernes to a seed amount, that can be handled in agriculture...

- Solving the bottleneck problem for using landraces and older varieties:
  - 3-5 years of multiplication of seeds before trials can be carries out to evaluate varieties
  - Toxic for projects, toxic for investments, public or private
Community seed banks - background

- Why is early multiplication important
  - Requires time
  - Requires hands-on work
  - Requires knowledge similar to maintenance breeding of crops
  - Requires dedication

- Community seed banks
  - Provide and important *infrastructure* for sustainable use
  - Function = integrated part of the conservation system
Community seed banks - challenges

- Previous funding
  - Short term 1-3 years project based
  - Consecutive projects
  - Funding in the former grant scheme, but challenged under the new administration rules
  - Unsuitable for long term activities

- Need is not "temporary"
  - Need for access to seed-amounts that can be handled in agricultural machinery
  - Need for more crops and more varieties
Community seed banks - future ideas?

- Following is discussed in different fora in Norway, and may provide a vision for how to continue to develop the Norwegian conservation system and at the same time conserve all the good work done previously.

- We have a new setting with transfer of funding to be channeled through the Directorate of Agriculture; more restrictions to fit the rules demanded of and to the Directorate; granting decisions will not be taken by the Genetic Resource Council; and future PGR activities must fit into future strategies and workprograms of the Norwegian genetic resource centre.
Community seed banks - future ideas? 1

- ”Merging” community-seed-bank-part of ongoing projects – commercial part remains with the current (and future) project holders

- Continue to carry out initial multiplication and restoration of seed stocks

- Opening up to work with all seed crops

- Oblige to also provide seeds for research, breeding & training (~ plant treaty purposes)

- Better and more consistent use of existing listing system – conservation and "tradition" varieties as well as Norwegian "Plantearven”-denomination
Community seed banks - future ideas? 2

- Remain being based on same competences and facilities (Solhatt, Swaerd), and more can be added, depending on requirements, needs and interests

- Must be linked to actual demands and preferably eventually to commercial interests

- "Norwegian community seed bank" to become a "virtual umbrella" for the activities

- Aiming at long term funding, comparable to clonal archives (10 year contracts)

- Integrated part of Norwegian conservation system and strategies for sustainable use
THANK YOU TO
- Johan Swaerd & Silja Valand
- Tom Boersma & Jasper Kroon
- Åsmund Asdal
- Jette Nydam

- **AND especially to**
  - Pia Borg, who received this in the very last second!!
THANK YOU FOR YOUR ATTENTION