

Pathways of Seed System Development and the politics of knowledge

(Why PPB is not mainstream)

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Outline

- Development of 'Seed Systems' : what is the problem?
And why is that important?
- The case(s) of root, tuber and banana crops - developing countries
- Implication, food for thought...

Status of seed system development

- Current status – different crops/parts of the world
 - Developed countries: social and economic sustainability issues
 - Developing countries: food , security and poverty
 - History: Development of 'Formal Seed Systems' as indicators of progress, to increase productivity
 - Feeding the world in the future/poverty alleviation: the concern about adoption of improved varieties/variety turn over
 - Mixed success

What is the problem...

- The situation:
 - Seed system structure:
 - Small formal sector for most/many crops
 - Large informal sector
 - New varieties coming (mostly) from formal breeding initiatives, but adoption too low (40% ceiling)
 - Quality/Clean seed coming (mostly) from formal seed sources, but is expensive/not available

- **The problem is the problem!** Different interpretations....lead to different challenges, and different proposed solutions



What is the problem...

Framing 1 of the challenge

- These varieties and seeds have to reach/be used by farmers to i) increase food production, ii) alleviate poverty, i.e. to end hunger!
- But: we only need to get the supply right....and farmers better informed
 - Neo-liberal

■ Framing 2 of the challenge

- We need to better understand farmers conditions.....it is not so simple.
 - Pluriform

■ Framing 3 of the challenge

- We need to use farmers knowledge, empower them by giving the major role in breeding and seed production
 - Seed sovereignty; agro-ecology movement

What is the problem...

- Debates not only about how you see/understand the problem:
- The larger interests:
 - funding of projects and research
 - Enabling policies

Money=research=knowledge

- How to invest – as governments, donors?

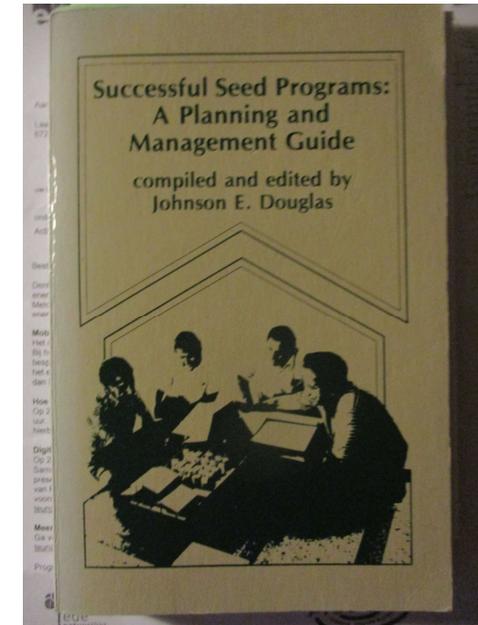
The case(s): seed systems of Roots, Tubers and Bananas

- Vegetatively propagated crops: “easy” to multiply, perishable, bulky.....
 - Picking up diseases: degeneration
 - Transport, storage
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 - Implications for seed production models
 - Specialisation in seed production only profitable under specific conditions
- large informal seed sector, small formal sector
- challenges for introduction new varieties and for quality seed used by farmers

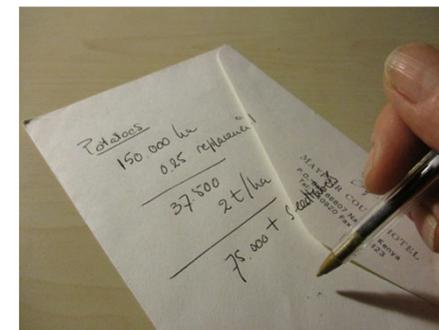
Improving seed systems of RTB crops

- Mainstream thinking

- Farmers buying their seed
- Predictable, profitable seed production
- Quality seed → higher production



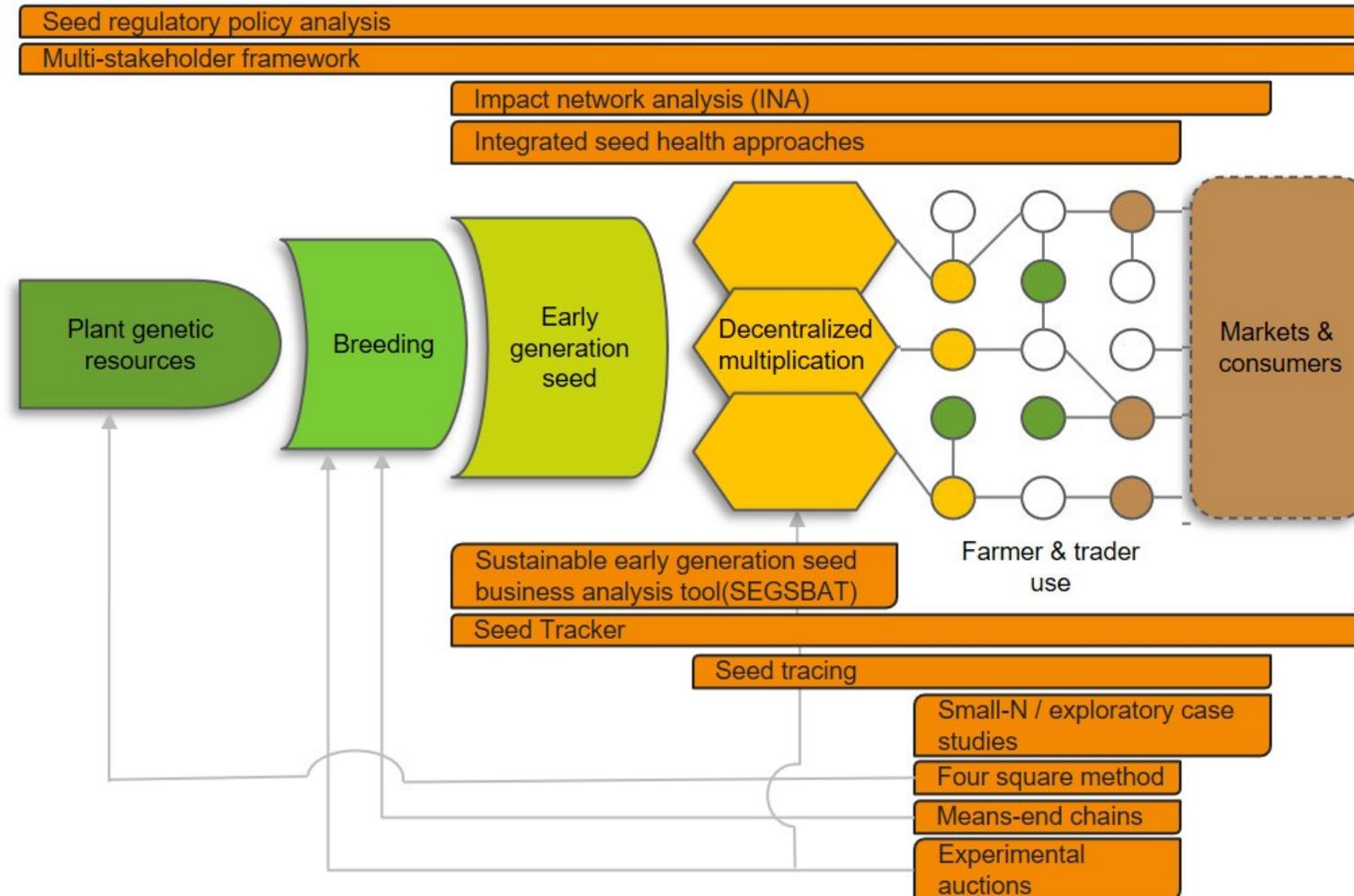
- But, what if.....?



RTB Seed System Toolbox

For each tool:

- Research paper
- User guide and description sheet
- Communication materials



What if.....

- Farmers ranking particular varieties as best doesn't mean they will like to grow them themselves..
- Farmers saying they are willing to pay (in research settings), does not mean they will...
- 100 % adoption of a variety is most unrealistic given diversity of agro-economic and socio-economic conditions, type of farmers and their ambitions...



Implications....

- Question earlier findings, because of the research methods
- but does that give the answer on where to go with these breeding and seed systems
 - Conventional PB has its successes (Green Rev...)
 - PPB everywhere: how to scale?
- Important to keep in mind:
 - Enormous diversity of farmers
 - Not all farmers have same objectives, aspirations
 - Not all farmers have the same economies
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Implications for your work

- Reflect on what your work stands for, what paradigm, what are underlying assumptions?
- Are you in or out of the main stream?
- What does that mean for sustainability of your initiative, strategy, arguments to use to mobilise funding, have impact and bring about change?

Vanloqueren, Gaëtan and Philippe V. Baret, 2009. How agricultural research systems shape a technological regime that develops genetic engineering but locks out agroecological innovations, *Research Policy* 38: 971–983.



Take home messages....

- Think about the history – context may be different (now)
- Adapting the farmer to the variety?
- How and what you study matters.....
- ...

