

PPPs-solutions and the way forward

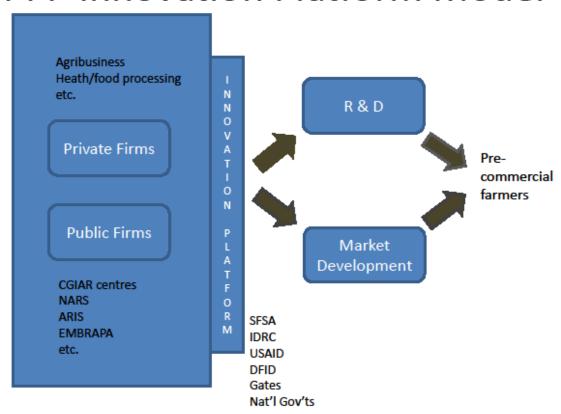
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Outline

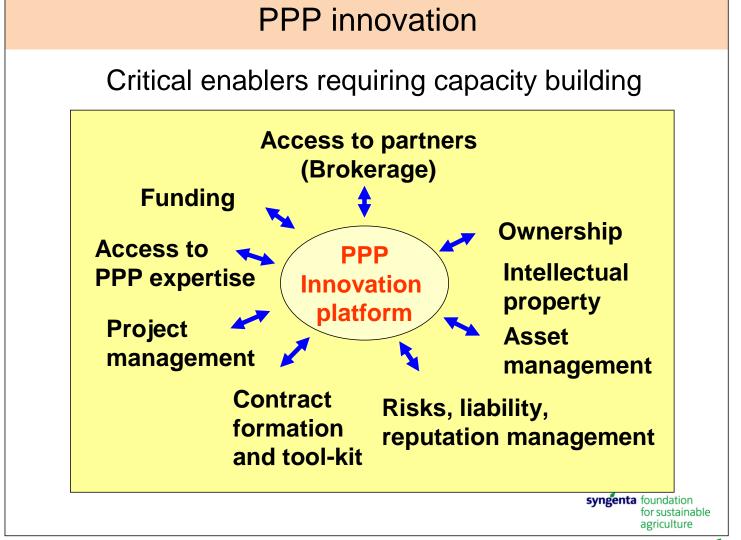
- Funding models for a PPP innovation fund
 - Existing funding mechanisms
 - Funding models
 - Advanced market commitments
- Parallels from pharmaceutical sector
- The way forward

PPP facility concept

PPP Innovation Platform Model



PPP facility activities



PPP facility options

Innovation platform – operational models

Spectrum of options

Small and virtual

- International network
- Responsive advice only
- No structural location
- Co-ordination/ secretariat
- Minimal fund (<\$1m per year)

Virtual → actual

Intermediate options

Substantive and actual

- Global network
- Proactive leadership and brokerage service
- Patent commons administration
- HQ location
- Dedicated resident experts providing advice
- Training and capacity building workshops
- Significant fund (>\$25m per year)

Selected current PPP funding models

- AECF/ RIB: private sector led: responsive mode and competitive with two step procedure; does not support R&D- primary aim is to incentivize private sector to seek out existing research products and put them to use; co-funds new business ideas with grants between 250,000 and 1.5 million USD; company must invest 50% or more.
- USAID GDA: minimum of one private and one public partner plus USAID; USAID will
 not provide more than 50% of alliance resources and usually seeks a leverage ratio
 of 1 to 3; private contribution must be at least 25% including cash and in kind.
- EU Craft: Designed for European SMEs (less than 500 employees) who wish to outsource their R&D needs often to public partners. Up to 50% public support.
- UK LINK: Govt. support up to 50% total project costs: matching funding in cash or in kind, requires both public and private partners; feasibility mode of 75% govt. support and development mode of 25% govt. support designed to precede or follow a 50/50 LINK project.

All above schemes do not normally envisage any net financing of private partners

Delivery of genetic improvement in wheat- The role of UK science

Genetics

Genetic analysis
Positional Cloning
Mutants

Germplasm

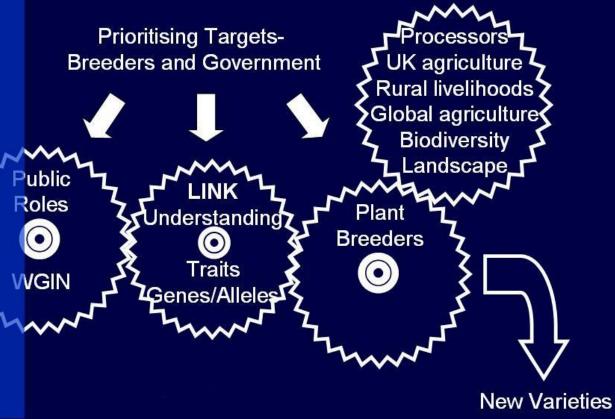
Collections
Mapping populations
Mutant populations

Genomics

Bioinformatics
Markers
Transcripts
Targeted
mutagenesis

Mechanisms

How do genes change phenotype?

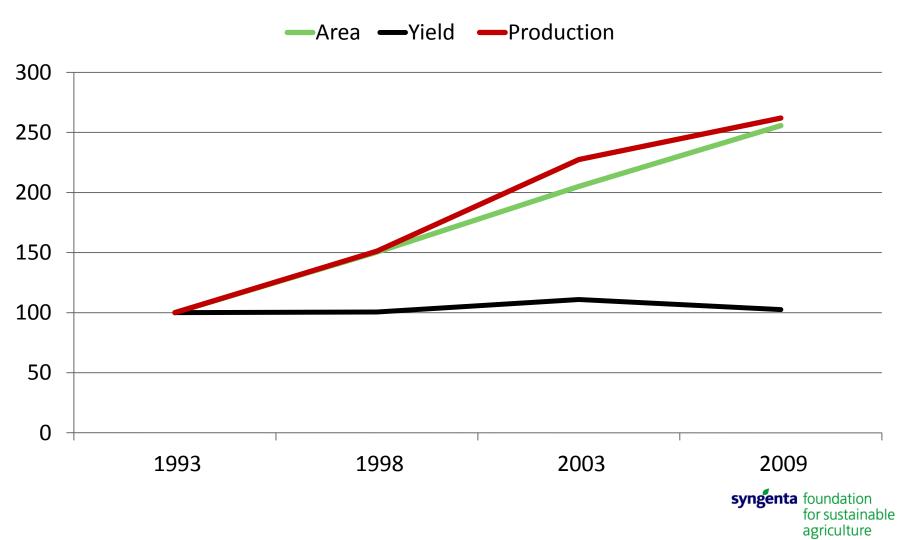


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Funding models: UK LINK program - wheat genetics Improvement network

- LINK is essentially a responsive-mode approach to grant-aiding private sector-led research, but one that depends largely on what the consortia of the private sector and academic researchers submit. Each LINK programme has a designated Co-ordinator either from within or from outside one of the sponsoring public agencies. The role of the LINK Co-ordinator is to bring together the two parties in the LINK programme, i.e. the private sector partners and research contractors, as a consortium for each project, and to facilitate the development of their project plans so that they are aligned with Government sponsors' objectives. The focus of LINK is on the delivery, uptake, and impact of research, so projects with a clear and effective route to market are favoured.
- All of the UK wheat breeders (RAGT Seeds, Advanta Seeds, CPB Twyford Ltd,
 Nickersons UK Ltd, SW Seeds Ltd, Elsoms Seeds Ltd, Biogemma Ltd.) were included
 in LK0975. These breeders are all members of the industry organisation British Wheat
 Breeders (BWB). The main tools resulting from this project will be identification of the
 genes governing HFN, including their location in the genome and genetic markers. The
 plant breeders will use their own germplasm resources for the gene mapping and
 marker validation work, and so will begin using the new mapping tools before the
 project ends. Public sector partners make up the Wheat Genetic Improvement
 Network (WGIN).

Potato production in SSA



New technology, public sector support and private sector investment were key to success in Kenya.





Aeroponics technology.

- Technology reduced cost of production of minitubers from 10 cents to 4 cents and increased multiplication rates from 5:1 to 50:1.
- Private sector invested more than \$250K cash to establish technology in Kenya.

Large commercial farms can be successfully linked to smallholder enterprises.



High grade seed production, Timau, Kenya.

- Large commercial highland wheat farms (total of 5) served as specialist high grade potato seed multipliers.
- Capacity to produce 2000t p.a. within 36 months.

Small entrepreneurial seed multipliers can earn significant income and act as ambassadors at community level.





Secondary seed producer, Transmara, Kenya.

- Trained 60 secondary seed multipliers, in 23 districts, in 2008.
- Act as additional points of extension advice.
- Many trains others (women) in the community.

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Seed as an investment: small-holder farmers should be thought of as businesses too.







Smallholder ware growers, Kiambu West, Kenya.

- Bought 2 x 5Kg small bags of certified seed for KSh 300 and harvested 200Kg.
- Intends to sell half (worth KSh 2000) and retain other half to multiply seed to sell to neighbors (worth KSh 30,000).
- Quality seed has a natural multiplier effect on livelihoods.

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Linking farmers to commercial value chains leverages additional technical support.



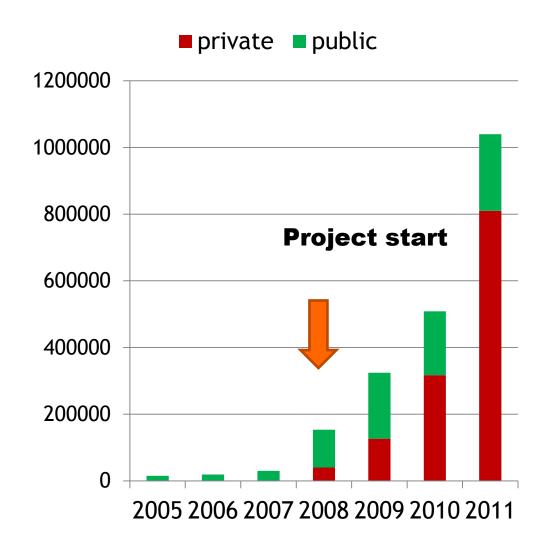


Processing Industry extension officer, Bomet, Kenya.

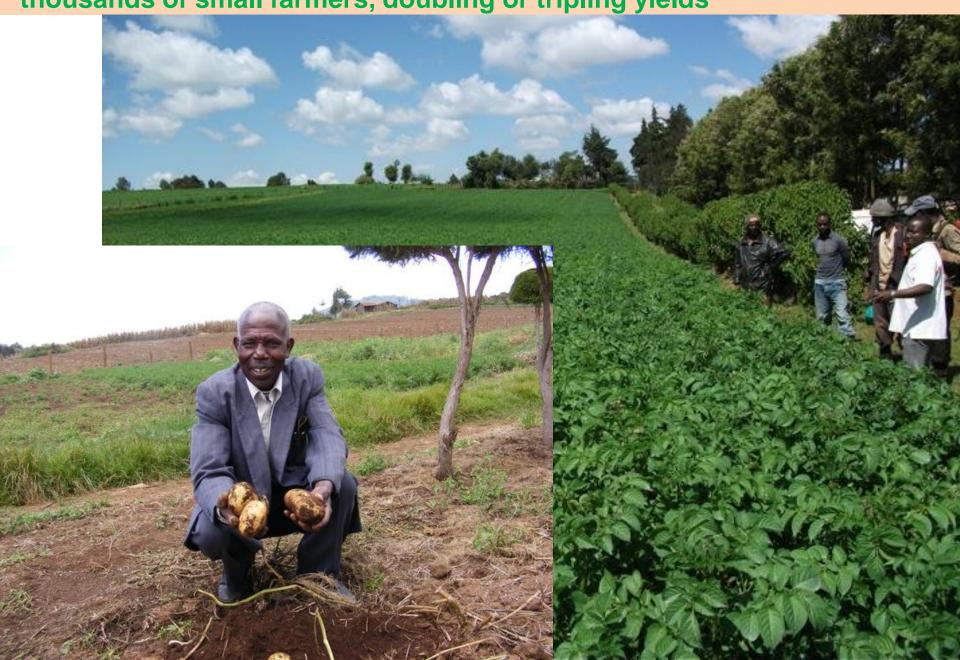
- Ware growers linked to Nairobi processing companies via contract farming.
- Generates demand for quality seed and inputs
- Company developed extension service to improve quality of supplied product.

Private sector led increase in capacity for basic potato seed in Kenya (numbers of minitubers)





Private sector led increase in capacity for basic potato seed benefitted thousands of small farmers, doubling or tripling yields



Advanced market commitment (AMC) as a pull model for Agricultural innovation

- AMC donors pay only innovation that are adopted and only to degree that they succeed in the market place.
- 2009- pilot AMC for pneumococcal vaccine. Six donors put up 1.5 billion USD to cover top up price on certain number of doses delivered. Global Alliance for vaccines and Immunization (GAVI Alliance) committed 1.3 billion to help poorer developing countries pay their share of vaccine cost.
- 2010- long term supply agreements of locally adapted vaccines issued to two firms. Could save 7 million lives by 2030.
- AMC for supply of quality seed of market required improved varieties or supply of quality products from small-holder output value chains, via PPPs, could be good candidates for a market led agricultural value chain innovation, where there are current market failures.

Pharma model: IPPPH example

- In the health sector, the Initiative on Public-Private Partnerships for Health (IPPPH)
 represents a key informational resource on collaborations on neglected health
 problems in high disease-burden countries.
 - Through events, publications and its internet portal, IPPPH
 - provides news, analysis and data on public-private partnerships.
 - includes a database that serves as a central source for updated and strategic information on partnerships.
 - profiles <u>90 public-private partnerships</u>, and includes information on disease/condition, approach, product/service, location, stakeholders, legal status and date established.



Global Ag PPP facility: way forward

- Identify priority areas of commonality across value chain
- Wish to map any new capacity onto existing structures or organizations
- Recognize value of multiplicity of local partnerships, as well between trans-nationals and public sector
- Focus on partnerships following go-to-market strategies with clear business plans
- Need to map existing initiatives
- Need to identify missing actors are require help in indentifying key individuals and organizations (three people you would invite).
- Need to synthesize concrete offers and proposals and test with wider group before proceeding.

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