

Handling catch-22 situation between crop production and its agro-processing: Lessons from Western Kenya

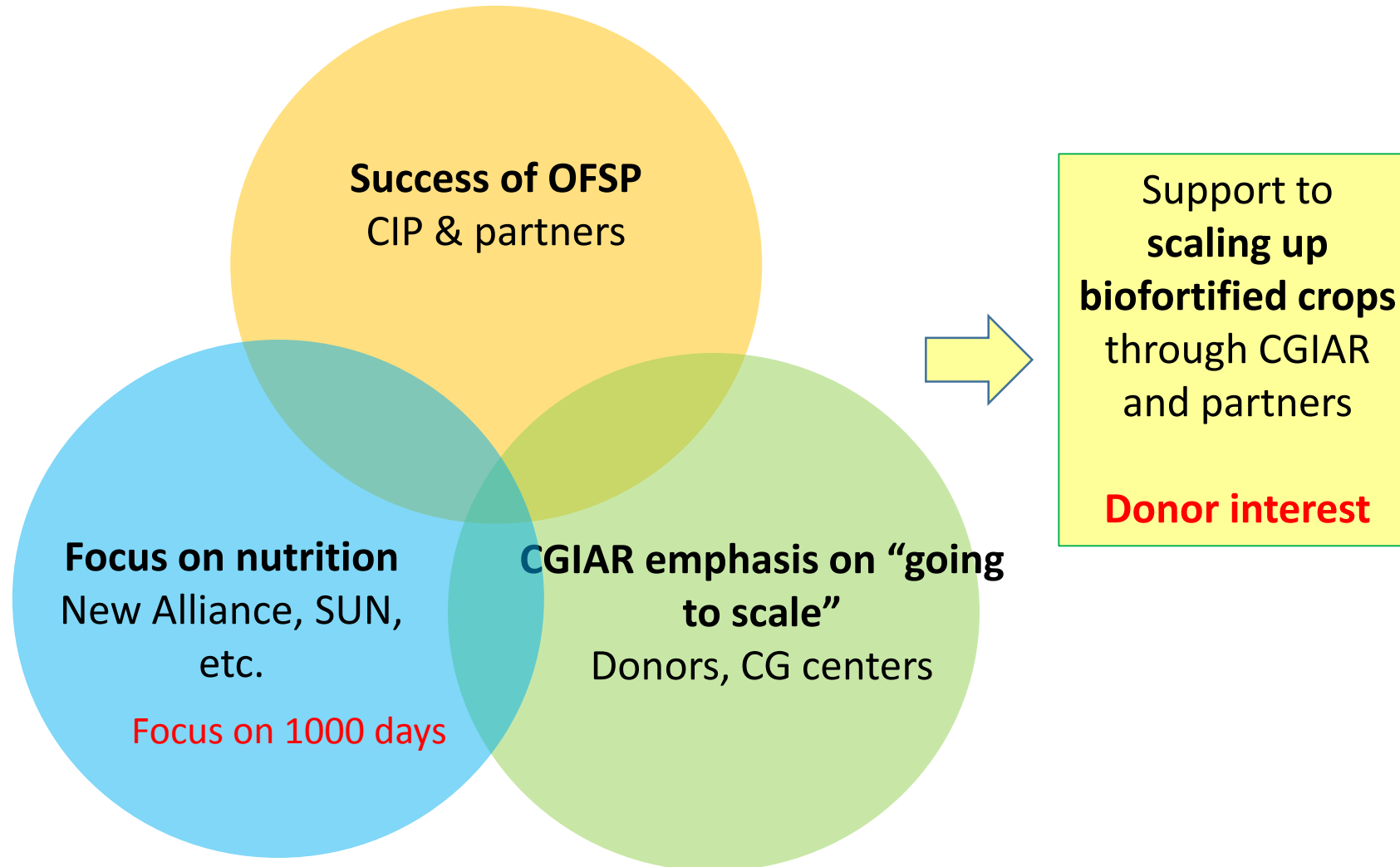
Community of practice- Markets, Utilization and Processing

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Background:

- Research for development organizations such as the International Potato Centre (CIP) have been tasked to scale up adoption of proven technologies including crop varieties as well as develop sustainable value chains.
- During 2015, CIP started an initiative to process orange fleshed sweetpotato (OFSP) puree in Homa bay County, Western Kenya through competitive selection of the processor.
- This puree is shipped to a leading supermarket (about 450kms away) for production of bakery products.
- While demand has been created for the OFSP bakery products, lessons have been learned on how actors along the production –marketing continuum are highly interdependent.

Scaling up through agriculture, nutrition and Market approach



Proven Technologies were available?



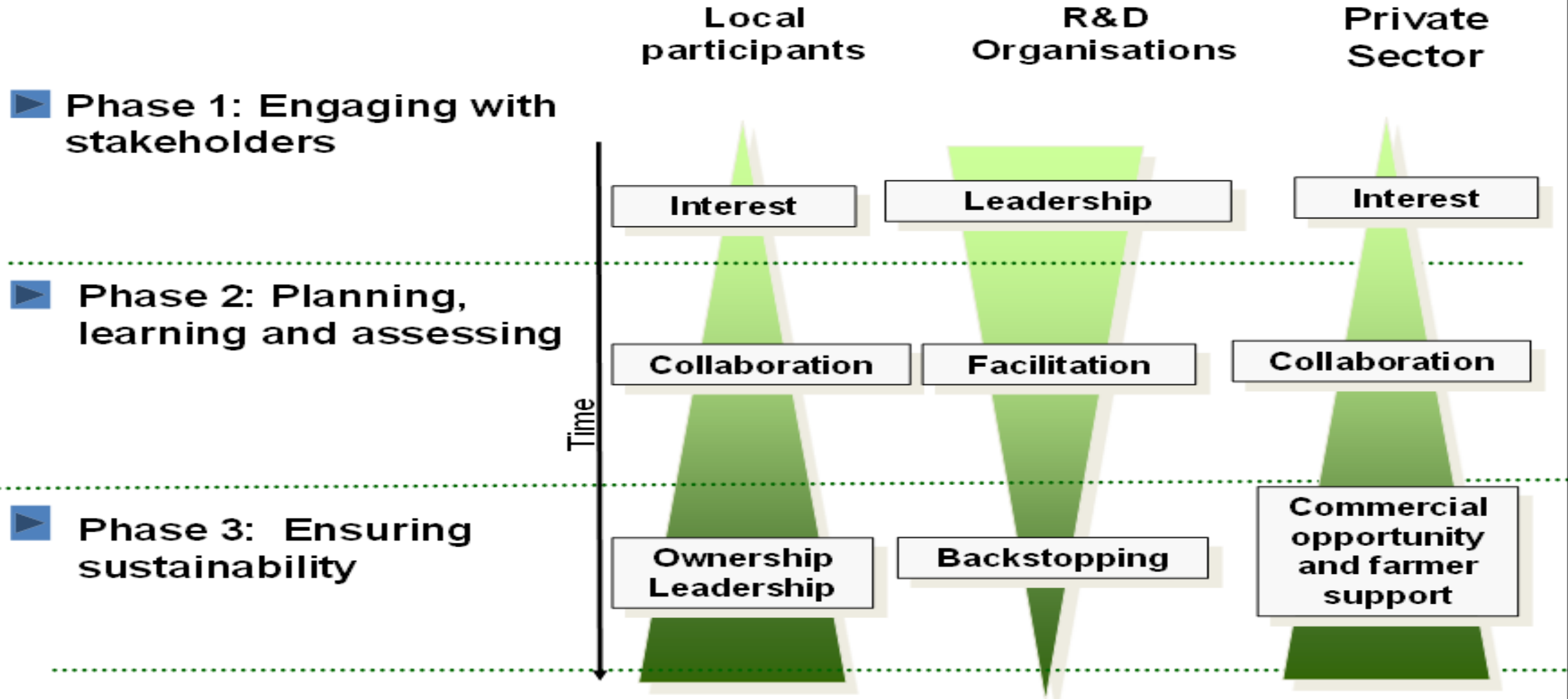
- Success in availing basic seed for clean planting materials- Net tunnel
- Vine conservation approaches such as the triple S
- Success in health-agriculture
- Beta-Carotene rich OFSP varieties
- Success in integrating OFSP in bakery products
- On going successes with research on puree preservative and root storage

What Key challenges did agro-processing start with?



- Limited availability of OFSP planting materials- a vegetative propagated crop
- Vine informally exchanged for free
- Low supply of OFSP
- Bulk nature of sweetpotato
- Perishability of the roots
- Limited diversity in end user commercial products
- Puree- Key application of OFSP not

R4D Organizations- Leading the value chain



Lessons from Western Kenya

- *While a buying contract provides commitment and assurance, a lot more is needed to execute a contract:*
- Despite having a buying contract, the puree supplier could not meet the demand for puree due to inadequate supply of roots.
- Peak season: Tusky's not prepared to expand rapidly proportionate to increased root availability.



Availability and affordability of vines can derail production of roots:

- Since OFSP is Vegetatively propagated, careful planning is required to ensure timely availability of planting material that are required for massive OFSP production.
- Prohibitive cost of vines – 80US\$-160\$ (Over 50% of the cost of production)

compared to about 20\$ spent on Maize seed

Poor –man's crop/ food

A woman's crop



Challenge in changing cultural practice:

- Willingness to pay for vines – Despite vine produced by Trained vine multipliers having costed the DVMs
- Willingness to harvest at 4 months- Need to re-use vines yet roots get ready during the dry spell



Fragile balance as various actors expand and become more effective in their roles:

- It is expected that some actors may be faster in growth than others, which may introduce a point of weakness in the value chain.
- This uncertainty needs to be managed to ensure all actors get value for their investment.



Low returns to investment by private sector at the onset of business:

- The private sector needs to remain interested in processing for the value chain to remain profitable. Often, private sector as a profit driven entity may lose patience. It is the role of R4D organization to ensure value chain actors remain interested and play their complementary roles.
- *Uncertainties in research findings to support agro-processing:* Often research comes with uncertainties yet the private sector needs concrete assurance as to when the findings can be applied.
- Again, private sector- **profit driven** may lose patience, thus breaking the value chain.



Conclusions

- New value chain approach by R4D organizations calls for us to think outside 'our comfort zone' and in a multifaceted manner.
- Both private and public lens in all activities is needed----- Need to keep Entrepreneurs (farmers as well as companies) at all levels interested while scaling up proven/RESEARCHED technologies
- Overall each actor in the value chain has to play their role satisfactorily for the 'chain to remain intact'
- This does not come without risks on the part of the R4D..... You are the initiator and commitments have been made based on your word- [A tricky balance!](#)





Post-harvest & Engineering support

'OFSP Consortium'

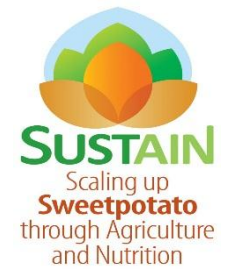


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