

Innovation processes in Agriculture

Agricultural Mechanization in Bangladesh - The Future

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Bangladesh's Context

- Per capita investment in agriculture is only \$16, whereas it is \$43.5 in Thailand, \$34.4 in India, and \$26.6 in Myanmar.
- Per capita value addition in agriculture is only \$ 1,037 in Bangladesh, whereas the average investment is \$ 1,820 in South Asia, \$1,840 in Myanmar, \$1,992 in India, and \$2,408 in the lower middle-income countries.
- Bangladesh's average paddy production is 4.73 tons per hectare, whereas it is 7.05 tons in China and 6.68 tons in Japan.



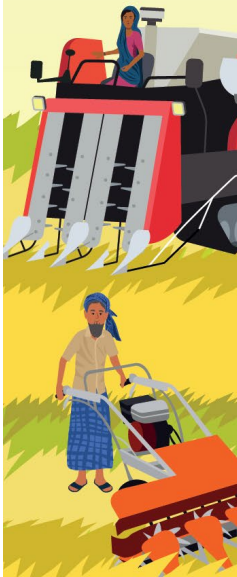
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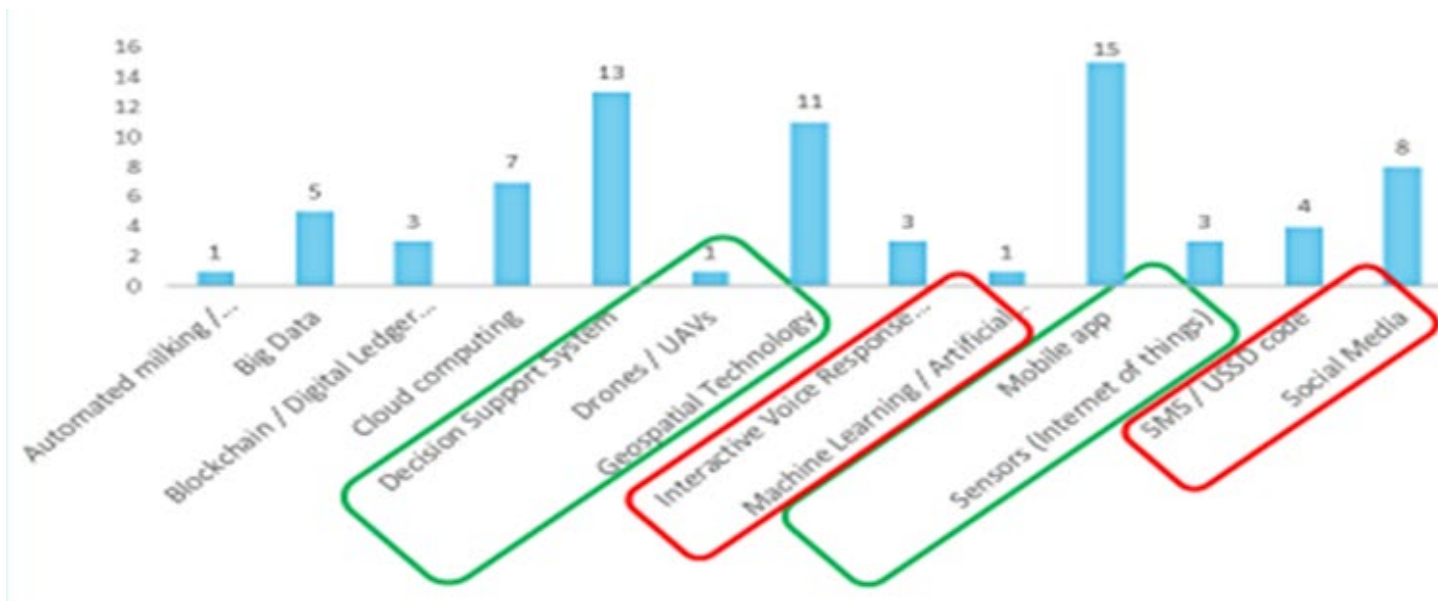
What is happening ?

- Is there no innovation???
- Does the innovation not reach, where required???
- Are the users not able to apply innovation???





IFAD ICT INNOVATIONS



INCLUSIVE access and participation

(capacity, last mile delivery, collaboration with PO, two way feedback and inclusive governance, infrastructure etc.)

Bundling climate advisory & decision making solutions



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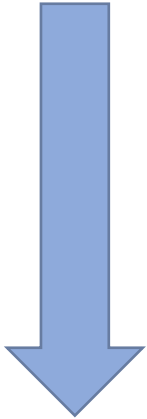
Contextual Changes

- From Food Security to
- Globalization
- Climate change
- Formalization of the food sector
- Public opinion

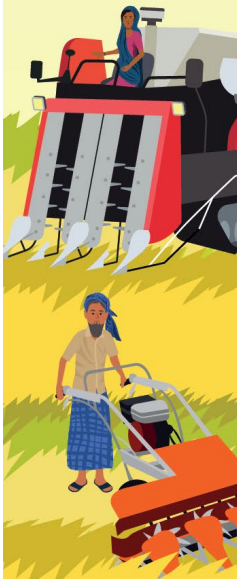


The world is changing its innovation models

From a linear model



To systemic model



Current structure of the innovation model

- Public institutions
 - Project-based
 - Within different institutions, competing and duplicating
 - Working towards something demand-driven
- International institutions
- Universities
 - 1% for research
 - Link with the field
 - Modernization
- NGO and Foundations



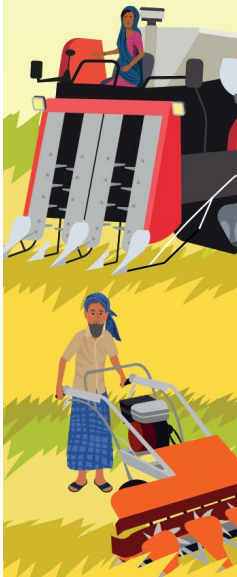
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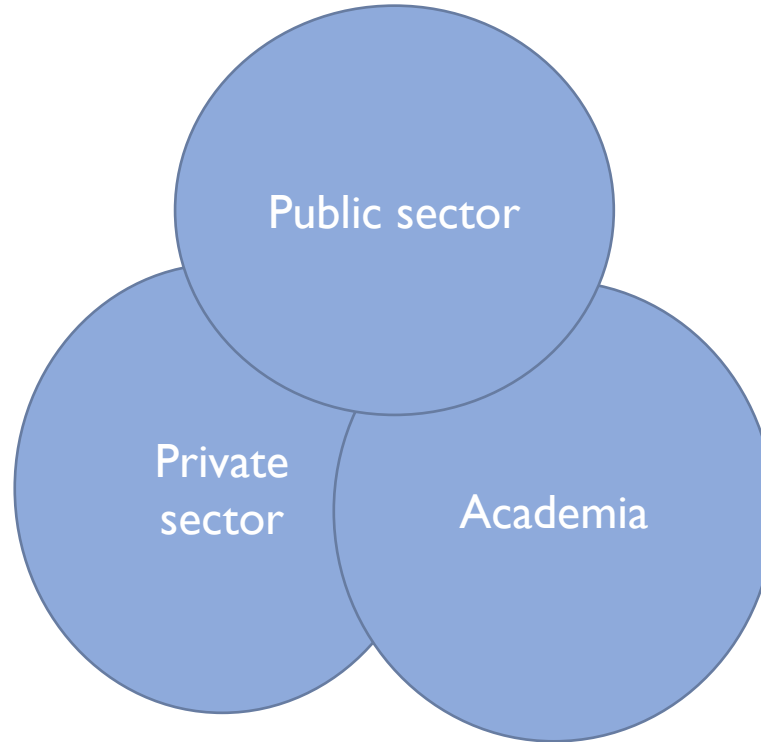


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The Triple Helix, Etzkowitz y otros (2000)



Characteristics

- Systemic
- Based on collective learning
- Lots of different actors
- A social and collective process
- Learning while doing
- Based on the mobilization and complementation of existing knowledge



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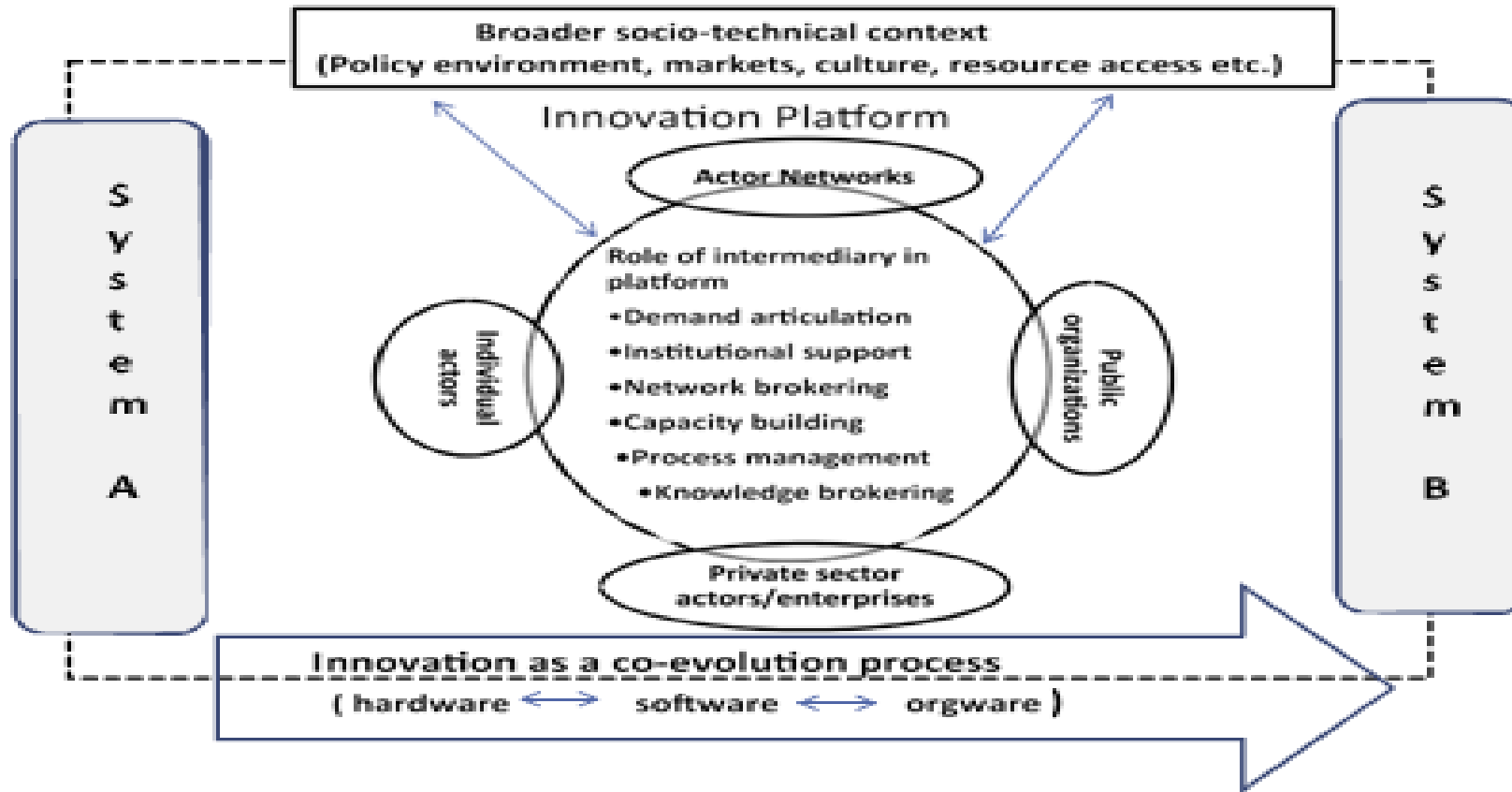
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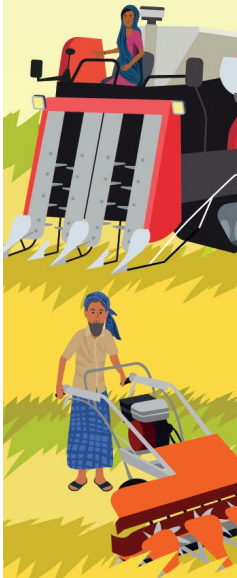
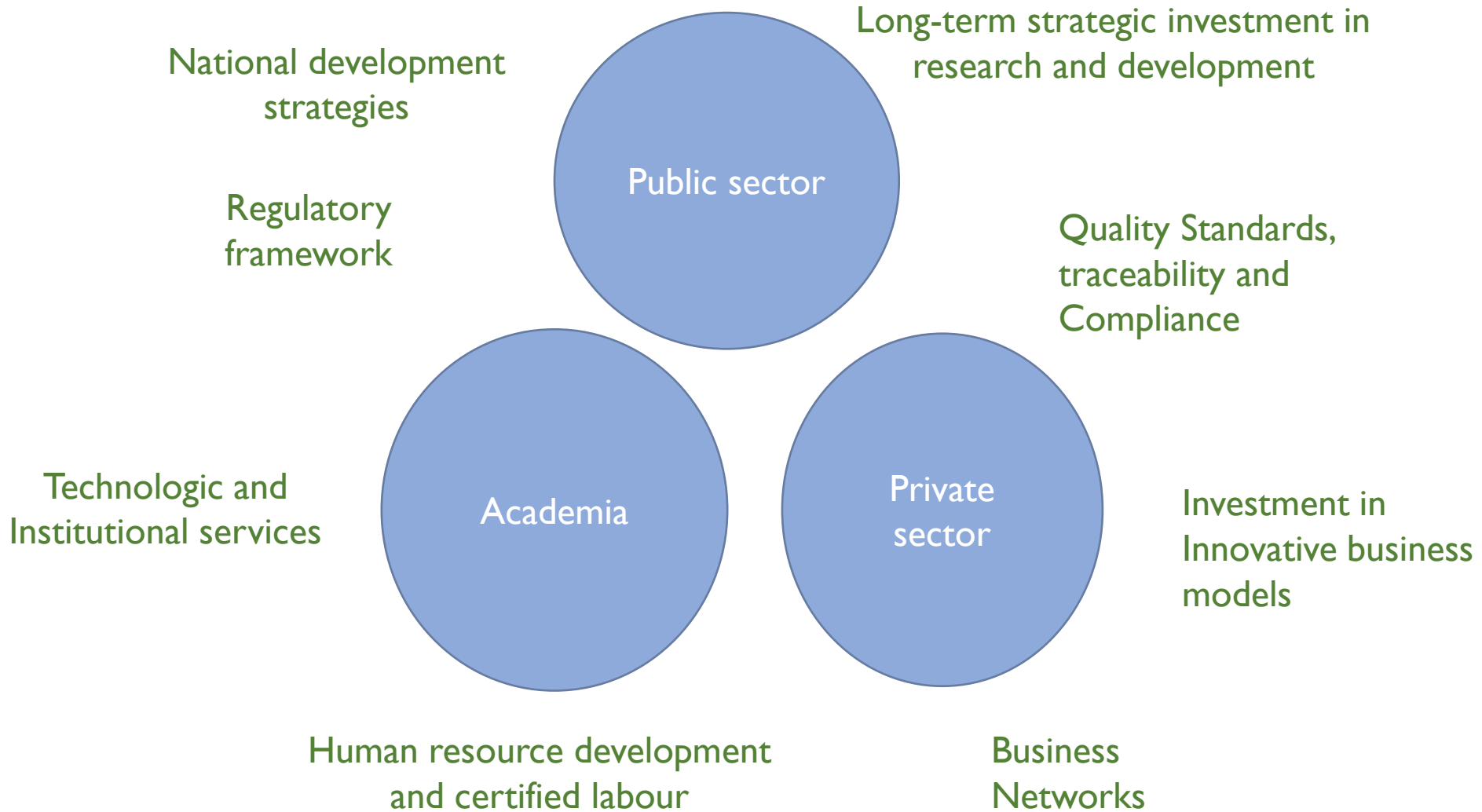
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Innovation platforms





Advantages

- Many eyes, many brains
- Combines research with extension
- Accessible for everybody
- Less duplication
- More adaptation to reality
- Generates knowledge and coordination between actors
- Cheaper



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Potential problem areas

- It is new
- High dependency on confidence between actors
- Difficult to plan and manage
- Difficult to generate intermediate indicators
- High dependence on context



How do you know it is working

- Existence of analysis and reflection between actors
- Development and formation of markets
- Experimentation of business models (risk)
- Resources are mobilized
- Recognized by others (society)



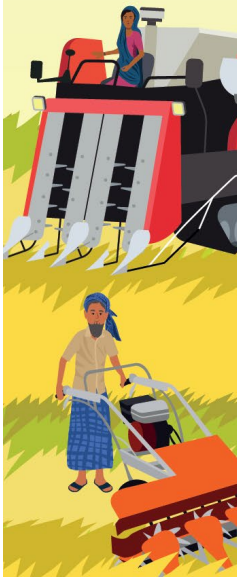
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Why do things get stuck

- Lack of broad participation
- Lacking definition of platforms
- Resources mobilised at an inopportune moment
- Human resources
- Personal agendas



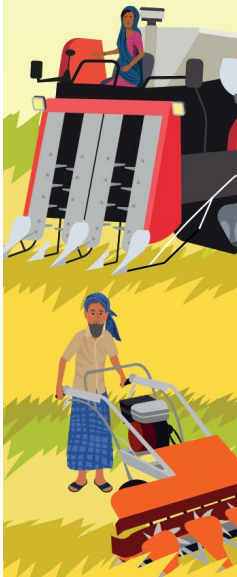
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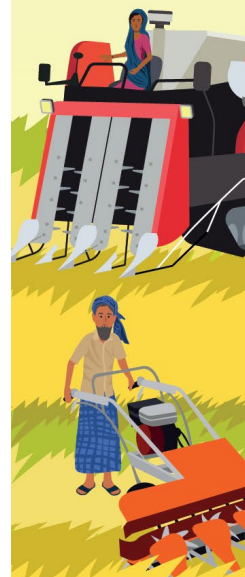
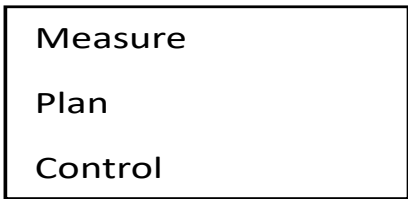
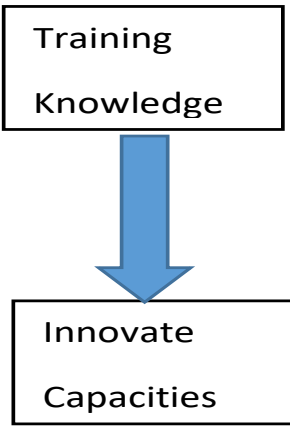


Change of Chip

Confort



Chaos



Confucius, 450 Years BC

- They told me and I forgot
- I saw it and I remember
- I did it and know how to do it



What to do now ???

- Institutionalize the new innovation process
- Train people with specific and relevant skills
- Start generating examples at the local level
- Generate success stories
- Advocate among authorities
- Generate an adapted M&E system



THANK YOU

