What can brokers offer for RAS and Agricultural Innovation?

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Conditions for AIS functioning

- Adequate infrastructure: roads, communications, R&D, funding, etc.
- Well-trained human resource base
- Well-established and effective linkages between heterogeneous actors
- Conducive institutional framework (rules, regulations, norms, values)



Some well-known innovation system failures

- Infrastructural failures
- Capacity failures
- Network failures:
 - Weak NF: Fragmentation of AIS limited linkage formation
 - Strong NF: dominant incumbent players lock-in
- Institutional failures:
 - Hard IF: non-conducive laws, regulations, procedures
 - Soft IF: conflicting values, norms, habits of actors
- Rationale for investment: Intermediaries help counteract innovation system and knowledge market failures



Innovation intermediary

- Howells (2006): "an organisation or body that acts as an agent or broker in any aspect of the innovation process between two or more parties [...] helping to provide information about potential collaborators; brokering a transaction between two or more parties; acting as a mediator, or go-between, bodies or organisations that are already collaborating; and helping find advice, funding and support for the innovation outcomes of such collaborations"
- From intermediary in bilateral relationship to systemic intermediary



Specialized innovation system facilitators: innovation brokers

Winch & Courtney (2007): "an organisation acting as a member of a network of actors [..] that is focused neither on the organisation nor the implementation of innovations, but on enabling other organisations to innovate"



Innovation broker functions

- Connecting demand and supply in knowledge infrastructure (or seekers and solvers) and forging linkages in broader innovation system
- Main tasks: visioning and demand/supply articulation, network formation, innovation process management (i.e. network facilitation)
- At different system aggregation levels: national, regional, sectoral, topical scope
- Often publicly-privately funded different modalities





Several types of innovation brokers observed in Holland

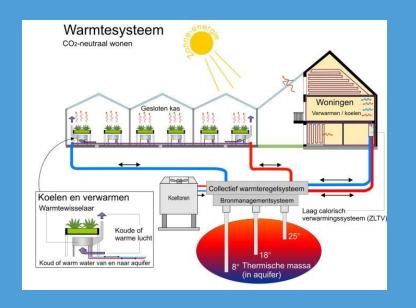


- experience =
- **Bio**connect

- 1. Innovation consultants aimed at individuals
- 2. Innovation consultants aimed at collectives
- 3. Peer network brokers
- 4. Systemic instruments (foresight/backcasting/niche-experiments)
- 5. Internet-based portals
- 6. Research funders with 'innovation agency'
- 7. Broker arrangements at the practice-education interface



Greenhouse as energy source





- Creating future visions
- Organizing design competition
- Constructing prototypes





Reflections beyond the Dutch case

- Innovation broker role has been observed elsewhere (also in developing/emerging countries)
- Dutch model is suited to specific natural, social, cultural, political, economic conditions – context specificity needed













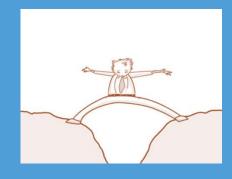


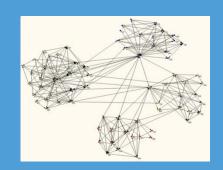
Key successes

- Help to break out 'strong ties' and exploit 'weak ties'
- Innovation brokers mediate between different 'worlds', increasing mutual understanding and broadening perspectives



- Stimulate overall AIS interaction
- Innovation placed high on agenda: innovation capacity building
- Help induce shift towards demand driven research and advisory services







Tensions

- Balancing demands from different parties different accountabilities (may threaten neutrality/impartiality)
- Possible function ambiguity with researchers and advisors or others
- Maintaining neutrality in innovation process and -system in light of 'creative destruction' can be hard
- Brokerage function is quite intangible, so low willingness-to-pay and attribution problems in evaluation threaten continuity





Recommendations

- Improve the recognition and evidence that innovation brokering is useful
- Improve the understanding of how to implement innovation brokering effectively as a tool for development
- Improve human capacity to play the role of innovation broker – e.g. in the form of extension-plus
- Ensure a legitimate mandate and credibility in the eyes of system stakeholders
- Ensure both technical and methodological know-how and a clear role division



Lessons for other countries

- Some form of continuous public support for innovation brokering appears necessary
- Mandate should be well defined (what is public, what is private?)
- Who will take up the role: existing/new organization, additional role/specialized function?
- Making explicit the expectations and desired returns on investment is needed
- Adequate 'soft' evaluation criteria are needed



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