

An actor oriented analysis of innovation systems: A case study from the charlands of Bangladesh

The 'actor oriented' approaches we are developing are based on the premise that an effective innovation system, (which we define as 'all the actors involved in the development of knowledge and its diffusion'), is dependent on strong and effective information flows and coalitions between key actors in that system e.g strong research/extension linkages and strong farmer/researcher linkages.

Most people would agree with this statement. However, it is unfortunate that many organisations involved in natural resource based innovation systems do not place emphasis on this aspect of their work. Many projects or programmes, though well resourced and effective in developing new technologies or practices, fail to bring any benefits to their client group because they have failed to build partnerships with other key actors. A possible reason for this is that current project planning, monitoring and evaluation (P,M&E) tools do not sufficiently address linkage and coalition formation. In our research we are piloting the use of a number of 'actor oriented tools' which can help to draw attention to the role of linkages and coalitions in innovation systems and to incorporate them in P,M&E (see Box 1). The tools are used to identify key actors, map linkages between them, identify areas for interventions and monitor and evaluate progress.

The tools we are exploring are not new. They have been used by anthropologists and systems analysts for many years. But their use by NR development actors is still not common. Through our research we are testing and adapting these tools to find ones which are user friendly and which will provide a useful complement to existing P,M&E tools.

Our project is an 'action research' activity, our aim being to develop actor oriented approaches while using them practically. The lead organisation is a Bangladeshi NGO, Development Wheel (DEW), which works on the 'chars' (river islands) in the Jamuna river in Bangladesh. Chars are islands formed by river

deposition. Due to annual soil deposits, crop production is extremely productive and there is enormous potential to develop NR based enterprises. However, because of their particular geographical and environmental situation char dwellers require technical and marketing options which are tailored to their own quite unique opportunities and constraints. Currently links with formal innovation support systems (research, extension, NGOs) are weak. As the chars are often temporary there is little permanent infrastructure (government offices, roads, electricity etc.), and mainlanders (including development actors) find it tedious and time consuming to travel to the chars.

In our research we are mapping linkages and coalitions particular to char dwellers as well as those in wider innovation systems for a number of focus commodities. Our aim is to identify linkages or coalitions which could be used or developed by development actors (NGOs, research and extension) to strengthen effective participation by char dwellers in innovation systems.

The research is funded by DFID's crop post harvest programme. The core research team is itself a coalition and consists of members of DEW, a Business Advisory Centre (BASC), anthropologists from Jahangir Nagar University, Dhaka and a freelance research coordinator with a background in social anthropology and NR based research and extension systems. Focus activities (selected in consultation with char dwellers) are chilli, aniseed and livestock fattening. In implementing the research we work closely with other key actors in these innovation systems (from char communities, government, NGO and private sector). We have found that many of these key actors are interested in this approach and in using the tools in their own work. For example, the local extension office has formed an 'actor linkage committee' which brings in other key local actors to consider how to improve linkages.

We plan to complete the research by holding a series of events similar to mini trade fairs which will bring key actors together on the chars. We hope that, through the research, linkages will be built, coalitions formed and that we will equip our research partners with tools they can continue to use to plan and monitor critical partnerships.

We would be interested to hear from other AgREN members involved in similar work or who would like to learn more about what we are doing. Please visit our website at www.developmentwheel.com

Box 1 Tools being developed in our research

Actor linkage map

Here key actors are placed in boxes on a piece of paper and links drawn between them with arrows. This simple technique is a useful starting point for discussing relationships and flows of information in an innovation system.

Actor Linkage Matrix

This matrix, which can be easily set up on Microsoft Excel, can be used to summarise and store information on linkages in a system (when the map gets too complex). By highlighting particular cells or linkages in the matrix, development actors can prioritise areas for intervention and monitor change.

Determinants Diagram

This is a 'thinking tool' similar to the PRA problem tree. It can be used as a group discussion (or individual thinking) tool to analyse the nature of a particular linkage: its strengths, weakness and possible interventions.

Further Information

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