

## Accelerating the impacts of participatory research and extension: lessons from Laos

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**Introduction** The role of participatory research and extension in stimulating farmer uptake and adaptation of beneficial technologies has been demonstrated over the last two decades in both developed and developing countries. The challenge is to move beyond simply trialling new technologies with farmers on a small scale to enabling significant livelihood impacts across larger numbers of households, villages and districts. This paper presents results of a project in Lao PDR exploring ways to accelerate and spread localised impacts in complex upland farming systems.

**Methods** The project uses action research techniques with district and provincial extension staff to investigate how changes in extension processes and organisational learning can lead to effective scaling out of impacts at the farming systems level. A variety of extension methods are being trialled to demonstrate potential farming system changes to new villages and farmers at critical times. These include cross visits (taking a group of farmers from one or more villages to visit other farmers), case studies, champion farmers and farmer group development. Case studies have been developed from farmer interviews to document how and why some farmers are gaining benefits from their use of forage and livestock technologies. Organisational learning is being explored using facilitated workshops, on the job mentoring, observations, semi-structured interviews and focus group interviews with staff.

**Results** Thirty case studies have been developed to document the range of impacts emerging from farmers using forages for livestock. These impacts cover a range of environmental, economic and social benefits to upland households (eg reduction in labour, increase in livestock weight gain, lower calf mortality, less damage to crops from wandering stock, increased income, healthier livestock). An adaptive approach to case study development has been used in that district staff learn by experience and from peer review. Case studies have been found to be effective when used as an extension tool to introduce new villages to potential livestock production systems. The use of system sketches along with photos was more effective than photos or text alone in terms of gaining farmer interest and willingness to trial new forages. Cross visits and the use of champion farmers are more popular for farmer learning and problem solving than case studies. However these methods require greater time commitment and cost for the benefit of fewer farmers. On the other hand, farmer awareness of the potential impacts of adopting new forage varieties or livestock systems was greatest amongst those that went on a cross visit, resulting in less demand for technical support from district staff. Barriers to scaling out impacts such as farmer need or capacity to use forages, livelihood constraints, information pathways (eg through kinship), lack of forage material, market influences, level and quality of technical information and support, village leadership and farmer group development will be explored.

**Conclusions** Preliminary results from this research show that to accelerate and spread impacts emerging from participatory research requires a shift from simply demonstrating use of a technology, to showing achievable and significant impacts from systems changes. A mix of extension tools are required to provide farmers with the information and support they need at critical times. Case studies are an effective method for demonstrating options for system changes across a wide range of farming households and different areas. Cross visits and discussion groups are more useful for practical applications, problem solving and village planning. Moving from participatory research with individual farmers to more villages and households requires a concerted effort to build the skills and understanding of researchers, extensionists and farmers in providing learning opportunities.

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