

DOING THINGS BETTER IN MARGINALISED RURAL LOCALITIES

In almost all low-income countries 'rurality' is associated with geographic regions trapped in backwardness, poverty and underdevelopment. Rural areas are hardly seen as territories for producing new ideas and modern knowledge, unless they host a world-class university or research facility. *Hlokoma Mangqalaza* and *Peter Jacobs* document how new ideas to do things better can improve the quality of life in rural areas.

arlow Agricultural High School, located in rural Eastern Cape, represents one example of new ways to improve educational programmes and share this across local municipal boundaries. Founded in 1931, Marlow is one of a small number of schools that specialises in providing learners – recruited mainly from surrounding rural settlements – with agricultural schooling in preparation for tertiary education or post-school farming careers.

Its rural location on the outskirts of Cradock, where there is enough farmland, has a unique advantage for Marlow's innovation activities. An experimental farm is attached to the school. The school's forward-looking leadership is constantly searching for new ideas and practices to enhance the curriculum and its pertinence in addressing developmental challenges.

Marlow's agricultural science courses include a practiceoriented stream on wool shearing, classing and artificial insemination of animals. Training also covers the mechanics of agricultural machinery, how to use various state-of-theart farming technologies and efficient farm management skills.

Innovation activities at this school rely on inputs from a variety of outside role-players – a feature of durable innovation networks. The actors that support Marlow naturally share a common interest in agriculture. Experts from the National Wool Growers Association and Mohair SA, among other private farming organisations, periodically

visit the school to help teach key courses in sheep farming.

The school is well resourced and takes learners to career expos hosted by universities with prominent agricultural science faculties, like the University of Fort Hare and University of Free State, thus facilitating their learning about shifts in post-school career options, especially in highly skilled agricultural jobs. The government supports Marlow's innovative educational programme through the district department of agriculture, regularly inviting the school to information fairs for farmers and periodically recruiting learners for short-term internships with the department.

Marlow interacts with a similar school, Phandulwazi Agricultural High School located outside Alice, roughly 200 kilometres away from Cradock. Even though agricultural science has been the mainstay of both schools, before 2003 neither school had any user-friendly agricultural practice textbook. Marlow and Phandulwazi jointly developed training materials and guidelines to close this resource gap to deliver a core subject.

Since the introduction of the National Curriculum Statement by the Department of Education, both schools have received their needed education and training materials. However, according to one senior educator, the number of visits for an external review of the quality of learner assessments has been reduced from twice a year to only once a year. In the past, the visits enabled a wider range of interactive learning activities.

Resource inequalities across the two schools explain why their innovative capabilities and performance differ.

Phandulwazi is a no-fee school without its own transportation and limited funds to afford frequent trips for face-to-face interactions with learners and teachers at Marlow. The school also lacks sufficient qualified educators, especially those who are able to conduct useful practical experiments at the school's experimental farm.

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How do forms of proximity affect innovation?

Geographic remoteness and low population density are defining features of rurality. Prolific scholarly debate centres on the meanings and forms of proximity and its significance for innovation. It implies that physical closeness is one form of spatial proximity. New ways of doing things better also depend on how close or far apart actors in the innovation space are in terms of experience, organisational culture and other less tangible forms of connectedness. Recent studies on territorial innovation systems reveal that nonspatial factors can stimulate innovative activities, even in marginalised rural contexts.

Information sharing and interactive learning form the bedrock of innovation. This process in turn rests on shared values, habits and legal rules, collectively known as a community's rules of the game. These are all elements of the institutional framework with overlapping informal (cultural norms) and formal (laws) dimensions.

Institutions are not static, but evolve over time. Strong institutional proximity means that stable conditions exist for interactive learning and the discovery of new things. However, when the 'rules of the game' are too tight, as in highly formalised institutional systems, it can impede exploration of new ideas and stifle innovation. Neatly balancing closeness and distance is an inherent difficulty in all forms of non-spatial proximity: institutional, cognitive, organisational and social.

Non-spatial factors can stimulate innovative activities, even in marginalised rural contexts.

When will innovations promote rural development?

Traditionally, African migrants used conventional banking or wire-service intermediaries for remittance transfers to their families in remote rural villages. When the rural family wanted to claim the cash, they incurred additional travel costs to the nearest town where a branch of the financial intermediary was typically located. But now modern mobile telecommunications have become platforms for innovative financial services to rural communities in Africa.

Without investment in leading-edge ICT infrastructure, the broader societal benefits of this innovation might not materialise. Knowledge of how to use cellphones for banking transactions is fundamental to fully tapping all the benefits of this service, which is similar to interactive text messaging or social media messaging.

Rural communities also benefit from various sustainable development innovations. A case in point is the need for moving away from the dependency on wood burning for indoor cooking and heating. This harmful source of energy supply is positively associated with deforestation and respiratory illnesses. Although the introduction of fuel-efficient and environmentally-friendly stoves in poor rural communities makes sense from a sustainability viewpoint, communities often reject such innovations.

Cost might be a factor, but is far from the only reason why poor rural communities have not adopted fuel-efficient stoves supposedly aimed at improving their quality of life. In India, for example, expensive water purification technologies simply made clean water unaffordable. For sustainability-enhancing innovations to gain traction in poor rural communities, direct participation of targeted adopters and users of innovations in the design and implementation of innovation is required.

Innovations (must) start from the developmental needs and aspirations of rural communities.

In summary, this brief evidence review shows that innovation activities in rural areas cut across many sectors and involve multiple actors. Rural realities require a wider analytical lens that reaches beyond the restrictive boundaries of traditional farm-based innovations. Innovations that enhance quality of life are more likely to produce the desired improvements if innovations start from the developmental needs and aspirations of rural communities. A territorially-bounded view of rural innovation activities yields a comprehensive and rich picture of how innovation might be harnessed to spur broad-based rural development. It contains fundamental lessons for new area-based planning policies and coordinated developmental interventions.

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