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Performance and locus of control of small farmers in Yunnan province

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Introduction Because of different experiences, learning and knowledge, farmers will differ in their perceptions of which elements of the farming system they can influence. Differences in perceived control will lead to different objectives, and therefore the strategies employed (Kaine et al., 1994). Locus of control, either internal or external (Rotter, 1966), is a measure of an individual's perception of their ability to change a situation. It refers to their beliefs about success and failure. Individuals with an external locus of control believe that outcomes are largely the product of forces beyond their control regardless of their own skills and efforts. Where a person believes they can influence an outcome, they are expressing an internal locus. Farmers expressing an internal locus of control with respect to production efficiency, cost of production, and innovation tend to achieve higher performance compared with those farmers expressing an external locus of control (Kaine et al., 1994; Tanewski et al., 2000).

Materials and methods A survey was completed in 2000 with small farmers running pastoral livestock at two sites in China's Yunnan Province (Bei Da Ying Village and the Xun Dian Sheep Breeding Farm) while the author was a UN Volunteer. Farmer perceptions of control were sought for a range of tactical issues, such as having sufficient pasture to feed livestock, animal performance targets, crop rotations, animal health, and pest control; and strategic issues such as financial planning, enterprise mix, and lambing date. The questionnaire included 25 pairs of statements reflecting either internal or external control. Lambing percentage was deemed to be the most reliable and easily measured performance indicator. Economic farm performance measures were considered unreliable because of reporting and recording bias.

Results and discussion Farmers had greater consensus on operational and tactical aspects of farm management with respect to an internal locus of control. Those questions for which 80% or more of respondents returned the same answers were eliminated from further analysis. This left 10 questions relating to feed planning, business planning, expansion, pest management and marketing. The responses to these questions for which no consensus was formed were aggregated to create an index "Internal Control Response Percentage" (see Figure 1). The positive relationship supports the findings of earlier studies that higher performance is associated with an internal perception of locus of control.

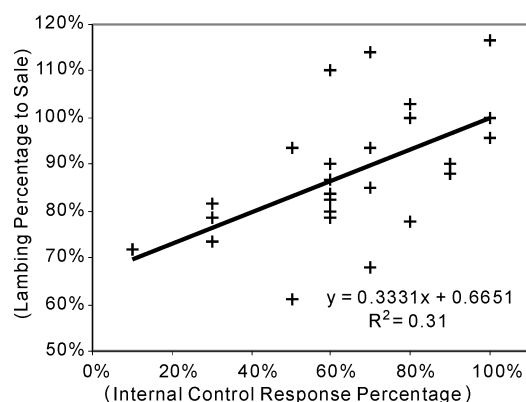


Figure 1 Relationship between internal locus of control and farm performance ($n = 25$, $p = 0.004$).

Conclusions Those farmers expressing a stronger internal locus of control tended to achieve higher performance than those with an external locus of control. This suggests that farmers can, in fact, manage most of the aspects examined. To enhance farmers' performance, extension agents should focus on assisting farmers to learn which aspects they can control themselves, and to develop the capacity as to how to control those aspects.

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