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**On-Farm Economic Impacts of Agricultural Business Risk Management
Programs on Incentives to Adopt Beneficial Management Practices**

Dawn Trautman, Scott Jeffrey and Jim Unterschultz

University of Alberta

Risk management and environmental stewardship are key components of Canadian agricultural policy. However, these two policy areas are not “coupled” in terms of producer participation and the policy objectives may not be compatible. Canadian research has shown that participation in public business risk management (BRM) programs (e.g., crop insurance) stabilize producer returns as well as enhance them (i.e., subsidization effects). Production practices and land uses that contribute positively to environmental stewardship (i.e., beneficial management practices or BMPs) often result in net costs for producers. BRM program participation may result in greater financial disincentives to adopt BMPs. Consequently, increased environmental program costs (i.e., economic incentives) may be necessary to achieve socially optimal levels of BMP adoption by producers.

This project aims to quantify the net economic impact of participation in Canadian BRM programs on incentives to implement land use changes that contribute to ecosystem service production on agricultural operations. Dynamic Monte Carlo simulation is used with capital budgeting techniques to estimate the impact of BRM participation on the feasibility of BMP adoption. Operations representative of commercial agriculture in Alberta form the basis for analysis; these include cropping, mixed (i.e., crop and cow-calf) and intensive livestock production operations.

Preliminary results indicate that BRM program participation reinforces the net private benefits (positive or negative) associated with BMP adoption. That is, for BMPs that contribute positively to farm wealth (e.g., crop rotation) benefits of adoption are further increased when combined with participation in BRM programs, with the opposite being true for BMPs that decrease farm wealth (e.g., buffer strips). Based on the simulation results, implications for policy development are discussed.

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