Barriers and incentives for farmers to adopt beneficial management practices in Manitoba by Bijal Patel¹, Jun Zhao², Marina Puzyreva³, and Geoffrey Gunn³

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Background

The Living Labs Initiative of Agriculture and Agri-Food Canada (AAFC) is a new approach to agricultural innovation in Canada that brings together farmers, scientists, and other collaborators to co-develop and test beneficial management practices (BMPs) to address agri-environmental issues. In order to improve BMP adoption, it is important to first understand the barriers and incentives for farmers to adopt BMPs.

Objectives

The objective of this research, which is a part of the socio-economic research component for the Living Lab – Eastern Prairies (LLEP) project, is to identify:

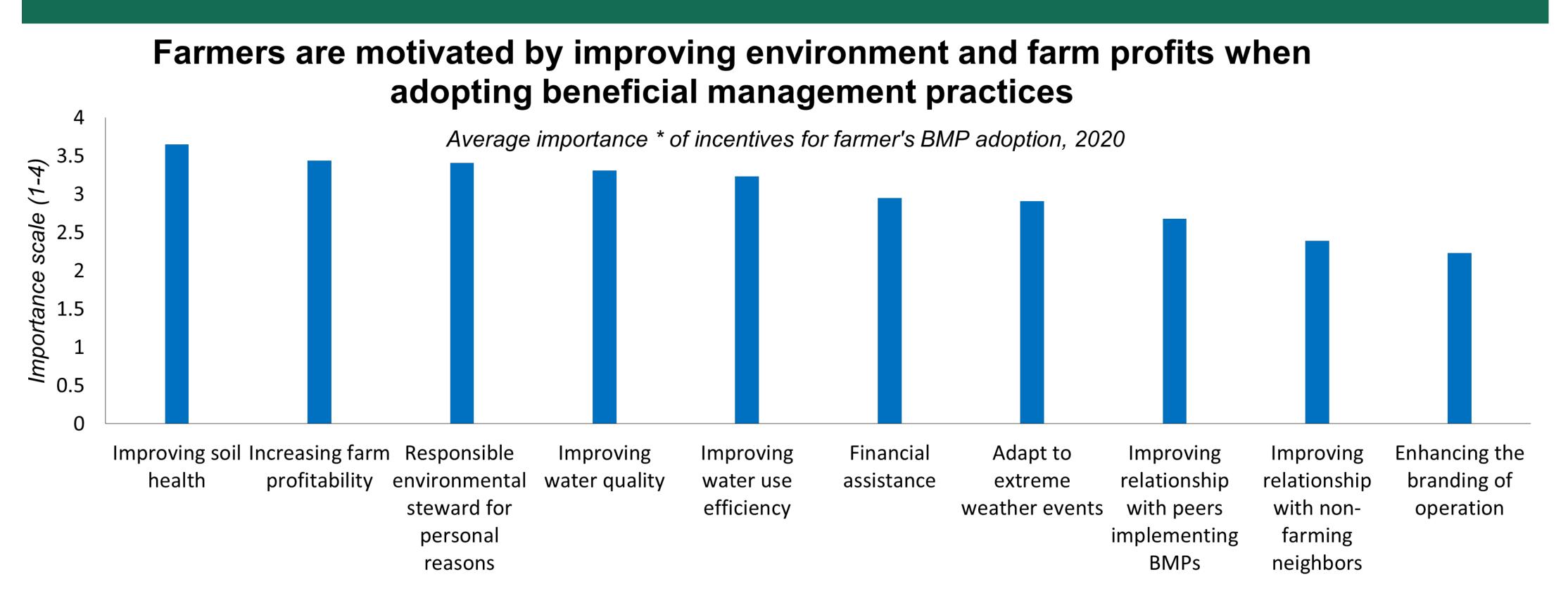
- the barriers and incentives for farmers to adopt BMPs in southern Manitoba
- farmers' trusted sources for agrienvironmental information
- the impacts of Living Lab participation

Method and data source

- Data used in this poster comes from a survey collaboratively developed by International Institute for Sustainable Development (IISD) and AAFC in 2020 as part of the LLEP project.
- 70 producers responded to the survey.
- 4-point scale approach was applied to analyze importance or significance of barriers and incentives for farmers to adopt BMPs. Statistical analysis methods (e.g., Wilcoxon test) were used in examining significance of differences in barriers and incentives among different producer groups.

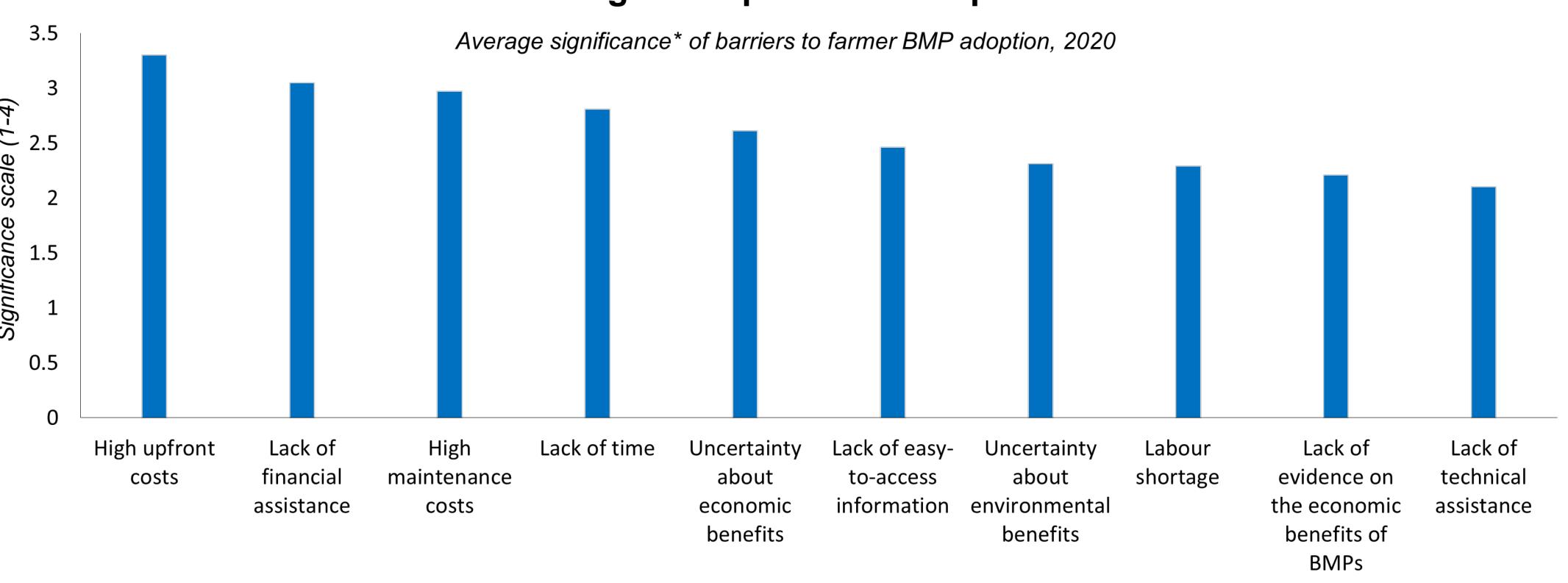
For more information about the research, please contact Bijal Patel (bijal.patel@hec.ca).

Results



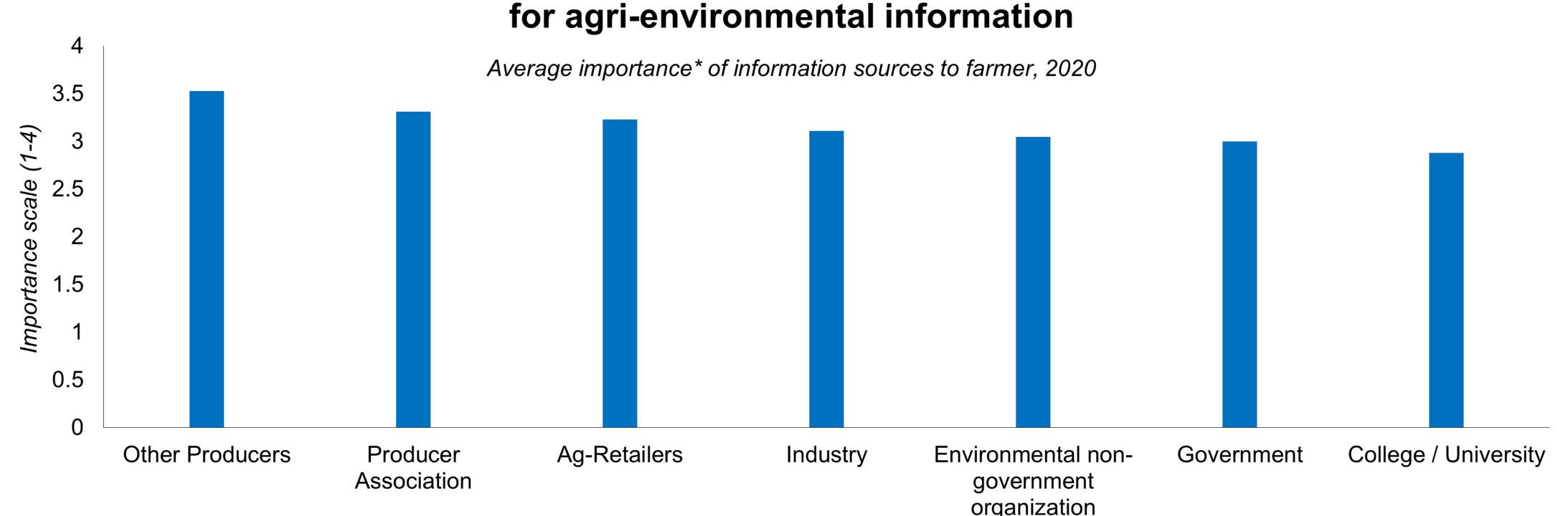
*Point scale: 1-Not important, 2-Somewhat important, 3-Important, and 4-Very important.

Farmers are concerned with economic and financial barriers to beneficial management practices adoption



*Point scale: 1-Insignificant, 2-Somewhat significant, 3-Significant, and 4-Very significant.

Other producers and producer associations are the most trusted sources for agri-environmental information



*Point scale: 1-Not important, 2-Somewhat important, 3-Important, and 4-Very important.

Conclusion

Our analytical results show that:

- The top incentives to BMP adoption were improving soil health, increasing farm profitability and being a responsible environmental steward.
- The top barriers to BMP adoption were high upfront costs, lack of financial assistance and high maintenance costs.
- Along with other producers and producer associations, government was also a trusted source of information.
- Many farmers prefer to receive information about BMPs by attending tours and field trips, group discussions, and by accessing print publications.
- Producers' participation in Living Labs had positive impacts on their future BMP adoption and their social networks, such as their relationships with other producers and with representatives from governments and organizations.

Policy implications

- The results will provide policy makers and program officials with a better understanding of the practical farm level considerations that influence farmers' BMP adoption, and inform BMP-related policies and programs.
- Survey results can be used to inform policy makers about potential variations in barriers and incentives among different groups of producers, thereby allowing for tailoring of messaging.
- Enabling peer-to-peer communication encourages BMP adoption, and providing on-farm tours to interested farmers where the early adopters can share their experiences appears to be a good strategy to increase awareness about BMPs.