

IN THE MIDST OF CHANGE  
CHALLENGES AHEAD FOR THE CANADIAN AGRI-FOOD SECTOR  
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À LA CROISÉE DES CHEMINS:  
LES DÉFIS À VENIR POUR LE SECTEUR AGROALIMENTAIRE CANADIEN

ABSTRACT I

**Cost-Benefit Analysis of Alberta's Irrigation Rehabilitation Program**

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The provincial government in Alberta, with the 13 irrigation districts in southern Alberta have set an objective to increase irrigated cropped land by 10 per cent in the future. This is to be done by investing in rehabilitation of irrigation conveyances and improvement in on-farm irrigation systems that are proven to conserve water. The provincial government covers 75 % of the capital costs for the rehabilitation, with the remaining 25 % being paid by irrigation producers. The 75-25% cost sharing formula dates back to the 1990s and may not represent the current distribution of irrigation rehabilitation benefits.

The objective of this study is to assess the magnitude and distribution of economic benefits from Alberta's irrigation rehabilitation program (IRP) on the regional economy of southern Alberta and for the provincial economy as a whole. Cost-benefit and input-output analyses are used to address three questions:

- (1) Should investment in irrigation agriculture be expanded?
- (2) Who benefits from irrigation rehabilitation?
- (3) Is the current 75%-25% cost sharing arrangement still appropriate?

Initial results reveal that with the province's contribution of 75 % to the IRP, investment for expansion of irrigated crop land would be economically viable for producers at a discount rate of 10%. However, without this effective government subsidy, the investment would be unattractive for discount rates of 3 % or higher. This has important policy implications for the role of government's financial support to secure both water use efficiency and economic efficiency in the irrigation sector in Alberta.