

SESSION VII: SUSTAINABLE AGRICULTURAL PRACTICES

EFFECT OF URBANIZATION ON THE ADOPTION OF AGRI-ENVIRONMENTAL PRACTICES BY CROP AND LIVESTOCK FARMS IN CANADA

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This paper investigates the extent to which agri-environmental practices (AEPs) adopted by Canadian crop livestock farms were adjusted to the presence of urbanization. Seven AEPs: (1) water management; (2) wildlife conservation; (3) pesticide management; (4) fertilizer management; (5) manure management; (6) nutrient management; (7) grazing management, were considered.

It was hypothesized that farmers close to urbanized areas are more likely to adopt AEPs to minimize any conflict with their non-farm neighbors. The key explanatory variables included in the seven empirical models, which comprised of level of adoption of an AEP as the dependant variable, to explain the degree of urbanization were: (the distance (km) “as the crow flies” from the geographical centre of each Census Sub-Division to that of the nearest Census Metropolitan Area in Canada, and (2) population density (number of persons/km²) in the locale of each farming operation. In addition, a number of other standard control variables influencing the adoption of AEPs (e.g. type and size of farm, age of operator, ownership, income etc.) were also included.

The data from the Statistics in Canada collected through the “Farm Environmental Management Survey – 2001” (n=16053) were used. The results based on Logit Regression analysis imply that there are significant differences with respect to the adoption of AEPs in crop and livestock farms located in low versus high population density regions. The results imply in turn that farmers in urbanized areas face greater social and economic constraints, and thus likely higher costs, than their counterparts in more rural areas.