

TRANSITIONING TO ORGANIC FARMING: BY WHOM AND HOW?

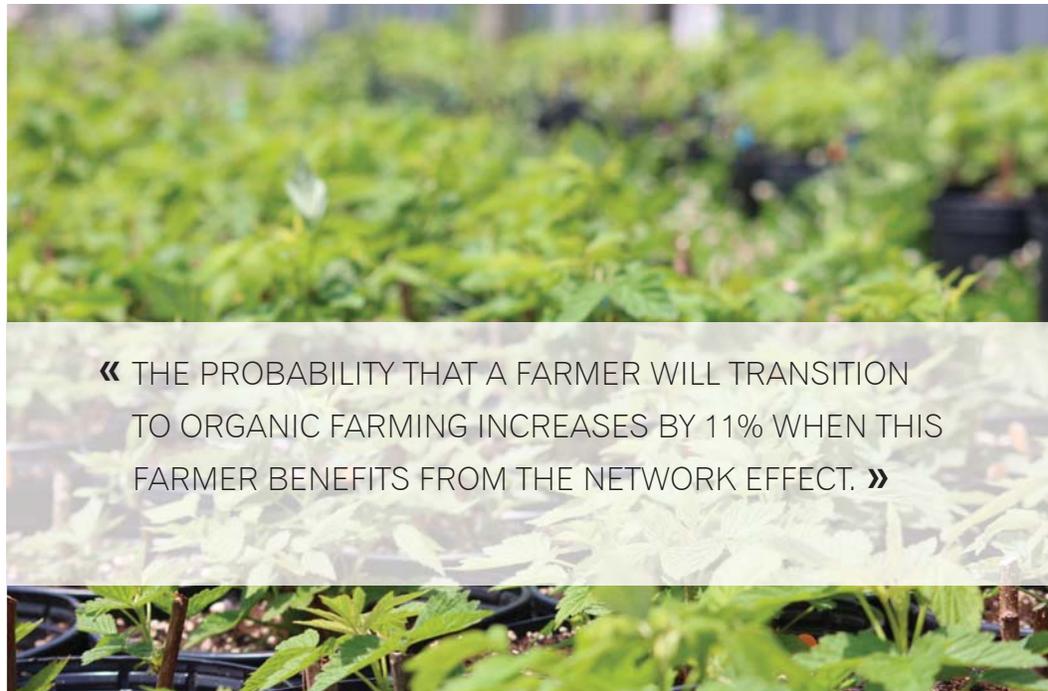
LUC BELZILE¹ AND JINGRAN LI¹

Many stakeholders in the Quebec agriculture and agri-food industries would like more farmers to adopt organic farming. One of the reasons for this trend is the fact that supply cannot meet demand in several organic farming sectors. Experts estimate that only 30% of organic products consumed in Quebec are also produced here. With this in mind, the organic industry has made it a research priority to learn more about the factors that support and hinder the transition to organic farming. We have achieved this goal in this project. Some of the findings are outlined below.

METHODOLOGY

In this study, we used logistic regression to analyze the effect of certain factors on the probability that a farmer will or will not adopt organic farming. We carried out an analysis on five productions dealt with individually, namely, maple syrup production, field crops, milk and market garden production as well as livestock production, whose marketed product is meat. In addition, we used a general sixth model based on all of the data (all productions combined).

The logistic regression findings are expressed in marginal effects on the probability that an event will occur. In other words, for each factor included in the analysis, this marginal effect is measured in percentage points on the probability of transitioning to organic farming. The marginal effects of the variables that have a significant effect are shown in figure 1.



« THE PROBABILITY THAT A FARMER WILL TRANSITION TO ORGANIC FARMING INCREASES BY 11% WHEN THIS FARMER BENEFITS FROM THE NETWORK EFFECT. »

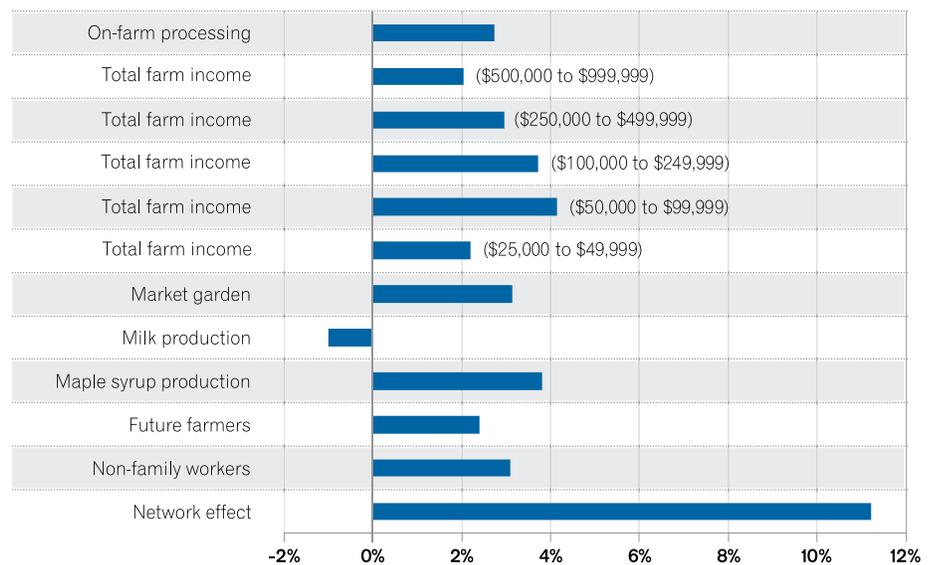


Figure 1. Marginal effect of certain factors on the probability of transitioning to organic farming

FINDINGS

Overall, the probability that a farmer will transition to organic farming is higher if the farmer:

- 1 has a farm income of between \$50,000 and \$249,999;
- 2 has non-family labour and family future farmer;
- 3 benefits from a network effect by a relatively high number of organic businesses in the same production and region;
- 4 does processing on the farm; and lastly,
- 5 if the farmer is in maple syrup or market garden production. However, the transition probability decreases if the farmer is in milk production.

We obtained sector-specific findings in specific productions. For example, in market garden production, we determined that the transition probability significantly increases if the main operator of the company is a young woman. It is interesting to note that in addition to this finding, several studies on the characteristics of consumers of organic products have shown that women who are mothers of young children are more inclined to buy these products.

Family labour does not sufficiently support the transition to organic farming and the transition probability significantly increases when non-family labour is available. This finding emerged in all agricultural production, particularly for milk, market garden and meat production.

Consulting services do not have any effect on the transition probability. However, one important qualification must be mentioned. A distinction must be made between "traditional" consulting services provided to conventional producers and organic farming consulting services provided to producers who have already made the transition. Consulting services are thus polarized, and between the two, there are probably few consulting services that specifically focus on the transition as such. This would explain



the lack of effect of consulting services on the probability of transitioning to organic farming.

Lastly, statistical tests were conducted to measure the effect of certain institutional variables, such as supply management or Farm Income Stabilization Insurance (ASRA), depending on the production. The test findings show that supply management does not adversely affect the probability of transitioning to organic farming. Conversely, ASRA does not positively contribute to this same transition. This means that a guaranteed income level is not sufficient, which is a specific characteristic of both factors; rather, it is essential to ensure a secure market for the production, which is a unique feature of supply management production.



PARTNERS

FOR FURTHER INFORMATION

Luc Belzile, M. Sc.,
agronomist, economist

418 643-2380, ext. 630
luc.belzile@irda.qc.ca