

## Expected investment of Tocantins farmers, Brazil, to apply integrated crop-livestock system during Embrapa's technology transfer

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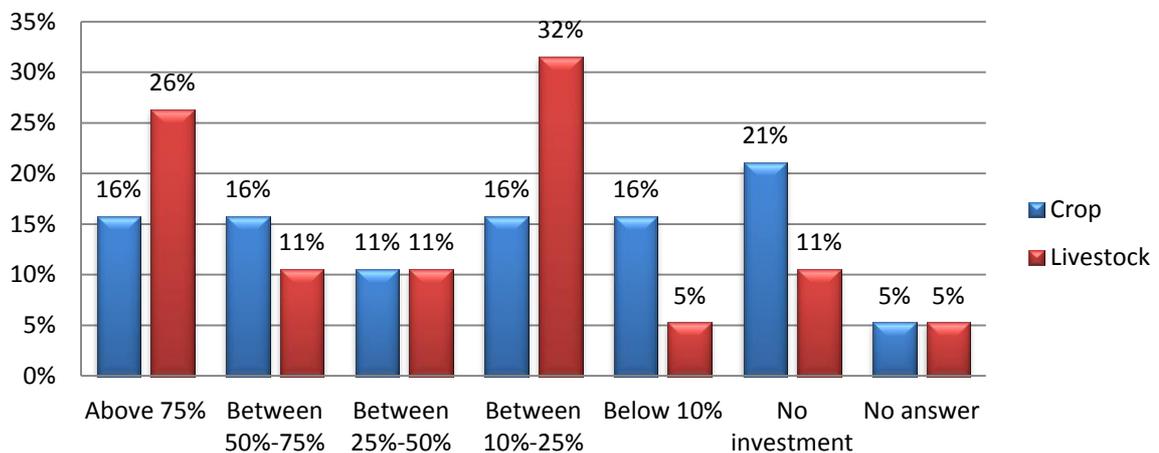
**Introduction** In 2012, Embrapa started the project named "Technology transfer for the consolidation of low carbon emissions agriculture in Tocantins" that aims to train rural extension professionals of the region on techniques in integrated crop-livestock (ICL) systems. The training of these professionals has resulted in transfer of new technologies to many farmers of Tocantins. The project monitors the results of some of these farmers for further impact assessment of applied technologies. In this presentation, we report the data of these farmers collected in the beginning of the project to analyze their current conditions and expectations regarding the implementation of the new integrated system.

### Material and Methods

A questionnaire was given to 19 farmers that started the implementation of the ICL techniques in Tocantins. Tocantins is a state in the Brazil's northern region and it has Cerrado (Savanna) and Amazon Forest as biome. Social and economic data were collected of these farmers from which it was possible to analyze the current condition and expectations regarding the implementation of ICL. Besides, these data allowed measuring the socioeconomic background of the farmers.

### Results and Conclusions

Fig. 1. Annual investment expected in agriculture and in livestock to apply ICL over the annual revenue before using the new system.



The results show that 79% of farmers have more than 10 years of experience in rural activities, which is a positive point for the successful implementation of ICL system. Before applying ICL system, one third of farmers produced only one culture, mainly corn. This fact indicates that although savvy, they need to adapt the farms to the new system. About investment expectations for the implementation of ICL, Fig. 1 shows that farmers intend to invest more in livestock than in crop. 26% of them expect to invest yearly in livestock more than 75% of the annual revenue of the farm. On the other hand, 21% of farmers do not intend to invest in any additional crop, indicating that they will only maintain the production of the current culture and add after livestock in the system.