Decision Science in International Agricultural Extension: An Idea Ready for Prime Time?

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Abstract

Methods and techniques from the field of decision science have been taught for many years in business schools around the globe. Many small businesses have used these tools to improve management skills and ensure that the production and marketing decisions have a systematic, logical basis. However, have these methods been included in programs developed for international extension efforts? If not, why not? Can the concepts of decision science be taught and used in situations where computers and calculators are not at hand? Is there a perception that these methods are too complicated for use in developing nations? The purpose of this poster is to explore the idea of developing a program or curriculum for introducing decision science concepts into international development programs.

Many of the concepts involved in decision science modeling entail complicated mathematical relations and calculations. However, when one looks at the underlying notions, the use of even the most basic comparison techniques can yield better decisions without unwieldy mathematics. Making good decisions is all about accurately defining issues (problems and opportunities), identifying possible decision alternatives, and recognizing the various events that could affect the outcome once a decision has been implemented. From there, a decision maker then estimates the outcomes (usually financial) expected from each combination, and applies one of a number of simple decision rules based on the situation. This poster will depict a series of techniques that can be used regardless of access to computers and calculators. In addition, specific examples of international development scenarios will be shared in which the techniques could be used.

The primary educational importance of this poster is to raise awareness of the concepts and methods of decision science for the agricultural education and extension profession. In addition, it is hoped that this awareness will stimulate research related to answering the questions posed in the introduction. Decision science, as a tool, can be powerful in aiding farmers in maximizing their outcomes. However, awareness and understanding of this tool must be achieved in order to reap the benefits in agricultural development.

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