# GLOBAL AND LOCAL MARKET ANALYSIS AND ECONOMIC OUTLOOK SEMINARS FOR PRODUCERS UTILIZING THE INTERNET AS AN INTERACTIVE DELIVERY SYSTEM; AN INNOVATIVE, COLLABORATIVE APPROACH TO DELIVER RISK MANAGEMENT EDUCATION FOR AGRICULTURE PRODUCERS IN THE 21<sup>ST</sup> CENTURY

Michael T. Roberts

North Carolina State University

## Abstract

The Rural Prosperity Risk Management Initiative was designed to deliver timely and relevant risk management information. Participants included producers, Extension educators, and agricultural community influencers consisting of lenders, input dealers, and agricultural commodity processors. The program was designed and delivered so producers could make sound risk management decisions; Extension educators and Ag. Influencers could help clients make good business decisions; and extremely limited Extension program delivery resources could be highly leveraged.

Changing commodity fundamentals, large speculative influences, and higher input costs have producers, Extension educators and agricultural community influencers scrambling for ways to increase agricultural prosperity and sustainability. The project utilized D. Merrill Ewert's matrix of approaches to Extension work as a catalyst for change. The underlying theory is that Extension programs are most successful when they combine process (in this case Polycom technology and the Internet) and content (risk management education) instead of strictly one or the other. Beginning in 2006, this project utilized the Internet and other interactive communication tools to bring risk management education to over 275,000 participants consisting mostly of producers. Remote and onsite presentations were made in real time by agricultural economists and experts from many U.S. states and foreign countries. All remote presentations were live and completely interactive. Extension specialists from U.S. land grant universities, U.S. and foreign government agencies, and industry made presentations. Remote presentations originated from areas across the United States, South America and France. In addition to reaching more than 275,000 participants of which most were producers, the project saved over \$281,000.00 in direct meeting costs, and increased net-farm profits by \$5,166,099.31 as of December 2009. Evaluations via survey, focus groups, and personal contact show that the majority of participants are very accepting of this type of extension program delivery method and even preferred this type of Extension outreach experience over traditional methods.

Keywords: Innovative, Interactive, Collaborative, Leadership, Risk Management,

Subthemes:

- 1. Use innovative technology for Extension program delivery that highly leverages scarce fiscal and physical resources.
- 2. Provide innovative leadership collaboratively to deliver Marketing and Trade information to producers and other agriculture influencers so they could make sound farm management decisions in order to prosper and sustain rural agricultural businesses.

### Situation:

This paper focuses on innovative, collaborative Extension program delivery of risk management education to farm and ranch owners. The catalysts for the project were the increased need for risk management information by agriculture producers to make sound farm management decisions amid an environment of diminishing land grant university outreach and Extension program delivery resources.

In this day and age farm and ranch business owners are increasingly experiencing diminished marginal returns on their production outputs due to volatile prices for both inputs and commodities sold. The days of simply producing more to fix the problem are gone. The one - dimensional approach to rural prosperity of merely increasing cash flow is no longer adequate.

Profit margins continue to decrease even though 2007 USDA census data show gross farm income in the U.S. is up. This is due largely to increased cost of inputs and volatile market prices. To compound the issue there is the continued reluctance among aging farm owners to use modern risk management tools like futures markets to hedge against risk. Far too often producers are heard to say, "I used futures or options once to protect commodity price risk and ended up being burned by margin calls." Other statements include, "I missed pricing the top (a seller) or bottom (a buyer) of the market." "Boy, I won't ever do that again!"

The challenge of prospering rural agriculture through education and outreach has been exacerbated by a continual cycle of decreased program delivery resources. Budgets to fund educational programs continue to shrink across all land grant institutions. These resources are both fiscal and physical. The pool of Farm Business Management specialists and agents, as well as Extension Agriculture economists has been shrinking for the last 10 years. Federal, state, and local fiscal support has eroded severely over time and continues to do so. Farm business management education activities increasingly rely on competitive grants, payer funded programs such as fee-based Farm Business Management associations, and corporate sales consultants. The bottom line is that farmers and ranchers need to know and understand, now more than ever, how to utilize risk management tools not only to thrive but to survive as resources for information transfer from unbiased sources continue to diminish.

Amid this backdrop and economic environment a unique Extension program utilizing video conferencing and the Internet as a live and completely interactive delivery system was conceived and successfully carried out. The project successfully delivered risk management education to more than 200,000 agriculture producers so they could make sound, farm business management decisions that would have the highest probability of prospering the farm in the 21<sup>st</sup> century.

### Inputs:

The collaborative partners for this project consisted of experts from fourteen land grant institutions, governmental agencies from the United States, South America, and France. Additionally, non-government agencies (NGOs), and private community colleges collaborated with program delivery. Financial supporters included the Southern Region Risk Management Education Center (SRRMEC),

the Virginia Farm Bureau, Colonial Farm Credit, several community banks, and producer commodity groups. Experts provided presentations, either face-to-face or via video remote regarding various risk management topics.

Project funding by year consisted of \$1000.00 for the 2006 pilot provided by NGOs and local sponsors; a competitive grant from the SRRMEC for \$50,000.00 in 2007; a competitive grant from the SRRMEC for \$50,000.00 in 2008; and a competitive grant from the SRRMEC for \$49,455.00 in the final funding year of 2009. Funds were used for travel, lodging, per diem, honoraria, technology fees, some technology hardware and software, program and meeting logistics, educational materials for extended learners, evaluation activities, and reporting. Some facilities and video conferencing activities were supported by "in-kind" resources provided by community colleges, the Virginia Department of Transportation, and the Virginia Farm Bureau.

## **Project Description:**

The project was designed with considerable input from producers and potential participants. The goals of the project were to: 1) deliver timely and relevant economic outlook information to a broad range of diverse agricultural producers and influencers in a cost effective manner, 2) engage a number of Extension agents from different regions in Virginia and surrounding states in such a way they would be better equipped to help their local producers and agriculture influencers make good production and marketing decisions, and 3) utilize a team approach to evaluate the use of Ewert's matrix of approaches to Extension's educational mission (McDowell, 2001). This project used the transformative education aspects of the intersection of Polycom-based learning with risk management content propose by Ewert's matrix that postulates that Extension programs are most successful when they combine process (in this case Polycom video technology and the internet) and content (risk management education) instead of strictly one or the other.



### Figure 1.

The project director teamed with producer participants and agriculture influencers to evaluate participant impacts. Program efficacy was measured by using participant focus groups and other evaluative tools such as key informant interviews, telephone follow-up, written survey, and web site feedback forms.

Beginning in 2006 a one-half day commodity outlook seminar was designed for cattle and row-crop producers attending a pesticide recertification meeting. The first half of the day was devoted to pesticide and safety topics with face-to-face speakers in a conventional Extension-meeting setting. The afternoon was devoted to outlook information for corn, soybeans, wheat, and beef cattle. One session was given regarding outlook for input costs. Each session during the day included a 20 minute presentation with 10 minutes set aside for questions and answers. The outlook topics were given by professors and Extension specialists via video conference utilizing the Internet, various distance-learning tools, and technology-enabled facilities in a completely interactive environment. After the pilot project proved successful the project was funded in 2007 and 2008 to deliver national and international market outlook and economic information in one-day seminar settings. Each year featured eight six-hour seminars held in various portions of Virginia, North Carolina, and Maryland. Each seminar featured outlook presentations for commodities germane to the area of the meeting location and one "So what" session at the close of the day. The final session wrapped up the outlook information in such a way that participants could take it and make it useful to their farming operations. The subject matter for each of these seminars was presented by an alternating mix of on-site and remote presenters. These audiences showed high acceptance levels of program delivery methods and significant positive business impacts.

The program design was altered for the project year 2009. That year two county level meetings were held targeting women in agriculture and small farmers, of which the latter group trends more to ethnic minority. These audiences showed less acceptance of program delivery methods but business decisions resulting in greater net farm income were noted. At the request of a beef cattle commodity association and the dairy industry in Virginia a six-week risk management curriculum was designed to deliver an educational module that included agriculture economic outlook information, as well as information about the U.S. futures markets and how to use them to manage risk.

### **Results:**

The results were quite impressive and met or exceeded all project goals. As with many endeavours, both positive and negative, unanticipated impacts were noted. The seminars and workshops provided a way to collaborate with Extension researchers and specialists located in other land grant universities, experts from a broad spectrum of government and non-government agencies, and experts from industry in both the United States and other countries. During the 2009 project, producers and presenters participated from thirty-three U.S. states and 14 international countries. At times these many diverse locations participated simultaneously. This project broadly leveraged educational program dollars for everyone involved while enhancing the quality of risk management information exchange. Fortunately, this project is fully replicatable and transferrable to varying types of program delivery as designed. As information systems and technology evolve projects like this become more and more sustainable as an effective educational delivery method to improve and sustain rural prosperity.

There were three areas of impacts noted. First, this project reached a total of 1,596 producers, 701 Extension Agents, and 591 agriculture community influencers in face-to-face contacts. Other contacts of note are 3,067 extended learners (those downloading or requested information after a meeting) and 270,402 participants who attended via live-streaming Internet video during the last six-

week session alone. Evaluations showed that over 86% those attending via live streaming video were producers. Second, as a direct result of participating in one or more of the seminars, workshops, or courses producers reported an aggregate increase in net profits of \$5,166,099.31 as of July, 2010. Also measured in dollars were direct meeting savings in speaker costs. The aggregate total for the four year project was \$281,905.00 as of July, 2010. Third, as noted there were unexpected impacts. These included: 1) an expanded expert pool willing and able to make educational presentations, 2) new ways to communicate with producers without going to the farm or them coming to the office were discovered, 3) increased transformative education aspects of the intersection of Polycombased learning with risk management content (experience and material retention) were discovered, 4) older participants were more accepting of the technology than expected, and 5) younger participants formed cooperative business relationships to build synergistic risk management strategies. The one negative impact was that established Extension Agents were least likely to adopt the program delivery model. During follow-up focus group sessions it was determined the reasons for this were agents were fearful of technology they did not understand and did they feel they had time to learn how to deliver educational programs in

a new manner. Lastly, this project was awarded a national award by the national professional Extension Agent Association. The National Association of County Agriculture Agents (NACAA) gave the project the NACAA National Search for Excellence in Farm and Ranch Management award for 2009.

## **Lessons Learned:**

There were several lessons learned during this project. It was learned that by combining technology and collaborative efforts that transformational impacts able to prosper rural businesses and communities can be achieved. It was learned that in order to survive in an ever changing environment that Extension educators must use new methods and collaborative relationships to inject synergistic energy to achieve greater program efficacy. It was learned that when a "safe" learning environment is provided for intergenerational audiences increased risk management communication and cooperation across multi-generational levels will occur. Lastly, it was learned that those who will not adopt new technology will most likely be left in the dust of the past.

### **References:**

- Franz, N. & McCann, M. (2007). Reporting Program Impacts: Slaying the Dragon of Resistance. Journal of Extension [On-line]. 45 (6). Available at: <u>http://www.joe.org/joe/2007december/tt1.php</u>
- McDowell, G. R. (2001). *Land-grant universities and Extension into the 21st century.* Ames, IA: Iowa State University Press.
- Prins, E. & Ewert, D. M. (2002). Cooperative Extension and Faith-Based Organizations: Building Social Capital. *Journal of Extension* [On-line]. 40 (4). Available at: http://www.joe.org/joe/2002june/comm2.php

## Acknowledgements:

This project is based upon work supported by USDA/CSREES under Award Number 2007-49200-03891