

Got Food? – Looking Ahead

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One of the best learning experiences I can remember was being part of the FFA (Future Farmers of America) forum team during my high school years back in the late 60's. A team would debate a topic and hopefully come to a consensus of thought, at least on the major issues. One of the topics debated was "how to supply the increasing demand for food in the last part of the 20th century". The world population was growing at such a rapid pace the ability of agriculture to meet the demand for food was in question. It was suggested that drastic advances in agricultural science and production capacity would be needed to meet the growing demand for food but the distribution to all areas of the world would be the problem.

Fast forward to 2009 and looking back, agriculture research and the farmers responsible for food production saved the day. The predicted dire food shortage never happened but the problem of distribution, to many of those that need food, still exists. Advances in the size, scope and efficiency of food production increased like never before, in some cases to the point of over production. Plant breeding, selection, weed control, fertilizer use and research along with farmer know-how contributed to the tremendously increased levels of food production.

As they say, "what goes around comes around" and here we are looking at the year 2050 with dire predictions of food needs being 70% more than today. A recent article by Ev Thomas in the William H. Miner Agricultural Research Institute Farm Report made several interesting points on why and how this demand will occur and possible solutions. The facts are that in the face of a global weather change and that Will Rogers was right about land: "They ain't making any more of the stuff." An estimated 90% of the increase in food production will need to be from higher yield per acre and increased cropping intensity, such as double cropping. Increased food demand will come from growing population, mostly in developing countries, but also from rising personal incomes. Extra money will be spent on food, mostly meat, with world wide demand for meat expected to increase by 75%.

What are the challenges facing agriculture that may not have existed in my FFA contest days? We face an uncertain demand for biofuels (food used to make fuel), the conversion of good cropland into non-agricultural uses and the realization that much of the land that will come into production won't be nearly as productive as what is already farmed. We must also consider the growing scarcity of water available for agricultural uses. Mr. Thomas points out that a 70% increase in food production will require the use of "all available technology" and that "family farms" will continue to be the backbone of agriculture, but the size and scale of these farms will cause the uninformed and misinformed to consider them "factory farms" and oppose their existence.

I would contend that "local food production" will play a major role along with mid-west 2000 acre grain farms, 60 cow grazing farms will co-exist with 2000 cow dairy operations and "organic" will supply a consumer need but also co-exist with technology

based conventional agriculture, the type of farming that has always been “sustainable agriculture” practiced for generations.

Cornell Cooperative Extension has helped provide research, guidance, and education, to producers throughout the years, providing vital resources for facing the challenges of feeding the world. The same is true of CCE today with multidimensional programs for all sizes and types of agricultural enterprises. Small farm programs, organic, large scale vegetable and livestock enterprises, farmers markets, specialized farm operations, value added products and much more are all part of Cornell Cooperative Extension programming. The challenge of growing and supplying the food needs of 2050 will be addressed by these programs and ever adapting farmers. Cooperative Extension resources provide assistance to backyard farmers as well as large scale operations which are all part of the future success of meeting the future needs of food production.