

# *The Role of Extension in Meeting Meat Industry Challenges*

Robert E. Rust

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## **Early History**

The idea of extension programs for the meat industry is relatively new. It is, however, rooted in the concepts of the entire Cooperative Extension program, which, in itself, is less than a century old. Actually, Iowa is celebrating 100 years of Extension this year. While extension programs for production agriculture were well established when I began my professional career in the early 1950's, programs for agricultural-related industries were new and even greeted with some skepticism by the old line Extension administrators.

When I began my career as an extension specialist at Michigan State, it was to pioneer a new effort to provide educational programs for the food retailers. Food retailing, at that time was largely the province of independent entrepreneurs who felt, and rightly so, that their existence was threatened by the large retail chains. Technologies such as new merchandising techniques, better sanitation, improved customer service, prepackaging and self-service meats were developing rapidly. We saw the leading food chains beginning to hire technically trained personnel to support these programs. Lacking that technical expertise in house, the independents turned to their local Land Grant University for support. In providing that support it became evident that the intermediate marketing step, the packer/processor, could also benefit from technical support.

## **Challenges**

One of the major challenges facing us at that time was the lack of applied research information that is critical to the support of any viable extension program. Remember that in the early 1950's Meat Science, as a distinct discipline, was in its infancy. Most of the research was centered

on meat animal composition. Very little was being directed toward meat processing problems. This meant convincing some of our researchers to redirect their efforts or relying on a body of knowledge that was emerging from within the meat industry itself or from supplier industries. Organizations like the American Meat Institute Foundation Research Laboratory in Chicago were a most valuable resource. In retrospect, this was one of the most powerful groups of meat researchers ever assembled and I feel it was a severe loss when it was disbanded. This is an area where many European countries were well ahead of us with their government and industry supported meat research institutes.

Another obstacle was establishing credibility with our prospective audiences. While the credibility of production agriculture-related extension activities was firmly rooted, business and industry still viewed us with some degree of suspicion. We had to prove the value of what we had to offer. Remember that, in the mid 1950's, meat extension activities were confined to home butchering, carcass evaluation and quantity barbecues! In fact, even the concept of a Meat Science extension program was rare. At RMC's in the mid 1950's, Roy Snyder at Texas A & M and I were the only full time Extension Meat Specialists. There were a few others who shared duties with other extension activities or with teaching and research.

Believe it or not, one of the hurdles to overcome was the reluctance of Extension administrations to charge for extension activities. They were still married to the idea that Extension's services had to be "free." That philosophy has changed 180 degrees! I recall one of the criticisms leveled at our early one-week short courses was that "we didn't charge enough." It didn't take me long to remedy that problem! It is my experience that people tend to value information in direct proportion to the cost of that information.

## **Industry Activities**

Industry was working hard to fill the information gap. Perhaps one of the most notable programs was the one-week short course offered by the Films Packaging Division of the Union Carbide Corporation (now Viskase) under the able leadership of Warren Tauber. This proved to be an excellent program to emulate.

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Robert E. Rust  
Iowa State University  
118 East 16th Street  
Ames, IA 50010

rrust@iastate.edu

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The American Meat Institute offered a series of correspondence courses for industry. After revising the text for the course on Sausage and Processed Meats Manufacturing, I convinced them to use this text as the basis for a series of two and one-half day seminars to be presented at various venues throughout the country. These were a lecture format using a mix of speakers from industry and academia. These proved to be popular with the meat industry and usually played to capacity audiences. Eventually, Iowa State “inherited” these courses from AMI as they directed their activities elsewhere.

The one drawback to a lecture type program is the restriction on audience participation. If the audience comes largely from production operations, these people are not used to sitting for prolonged periods taking notes. Some form of “hands on” activity is far more appealing.

### Industry Cooperation

Industry cooperation in our extension programs has proven to be essential. Many of the activities that we included in our short courses could not have happened without the help of the supplier industry and the participation of experts from the supplier and the meat processing industry itself. The early development of Iowa State’s one-week short course (now in its 25th year) was helped tremendously by participation in planning and program development from people like Hans Schneider of Teepak and consultants like Erwin Waters and Bill Shannon. The danger in using persons from the supplier industry is one of commercialization of the program. Nothing can destroy the credibility of a program, as well as the credibility of the speaker and the company he/she represents, faster than overt commercialization. This has come through loud and clear when participants turned in their evaluations of the program. Needless to say, it did not take long to “uninvite” an industry speaker who used this as an opportunity to commercialize. Fortunately we have a number of industry representatives who are thoroughly professional and objective in their approach. I won’t mention them by name here for fear of omitting someone.

Perhaps one of the prime examples of industry cooperation was the relationship we established that aided in the development of a Spanish language version of our Sausage and Processed Meats Short Course. Early on we began to have a number of Latin American visitors to our regular summer short course. Some of these even went to the extent of bringing their own translator along. With this evident need for a course in Spanish, we made a try at organizing one. Attempting to market this course was a failure and we abandoned the idea. We just did not have the contacts in the Latin American market to secure the required minimum audience.

Then, along came the late Dr. Abraham Saloma of Protein Technologies International, now Solae, who agreed to cooperate with us in conducting the course. The result was successful and this cooperation continues on a more or less

annual basis to this day. I should add here that Dr. Saloma was one of the chief proponents of the AMSA International Award. I remember talking to him about the award, never dreaming at the time that I would one day be the recipient.

### Translation

Working with technical programs in another language presents its own set of challenges. There is always the problem of finding translators who are familiar with the technology. Good translators in the Meat Science area are few and far between. There is an amusing story that goes with this. For several years we hosted a group from the Czech Republic and Slovakia as part of a US-AID program. The best translator that we found turned out to be a vegetarian!

We can often find technically competent translators who can handle alternate translation but finding those that can handle simultaneous translation is another story. Simultaneous translation is an art in itself. A word or two of caution when using translators: never trust one that does not keep a note pad handy. This is how important facts can be “lost in translation.” Also, it is always helpful if there is someone in the audience that knows both languages and can alert you if the translator goes off course. I have been in a situation where the translator, who was knowledgeable in the technical area, began to editorialize.

If you have the equipment and the facilities, I would much rather work with simultaneous translation. It doubles the amount of material you can cover. The effectiveness of simultaneous translation is reduced however, when it involves a hands-on demonstration. It does take a good deal of coordination between presenter and translator. I like to spend some time with the translator going over the details of a presentation, particularly if a demonstration is involved.

### Working in Foreign Countries

Many of you have been called upon to present technical programs in other countries. I have learned, as I’m sure that many of you have that this is not as easy a task as it may seem when you first receive the invitation. My first advice is the same as the oft repeated line in the opening song in *Music Man*, “You gotta know the territory.” If at all possible, I like to get some feel of the product and the market that I will be dealing with. Many times, common US technology, no matter how good, just doesn’t fit the situation. While the addition of fat in a sausage formulation might reduce the cost here, it could increase the cost in a tropical country where fat often costs more than lean. Our US technology isn’t always the best when applied in certain foreign situations.

It is also imperative to get some indication of the level of the audiences that you will be working with. Just as here in the US you wouldn’t want to present the same technology to a small processor making 25-pound batches that you would to someone with a 6000 pound per hour continuous frankfurter line. One size does not fit all.

If I am asked to put on a technical seminar in a country that I am not completely familiar with, I like to have at least a day if not more to observe the products in the local market and also some typical processing operations. In fact, I try to follow the same plan when doing an in-house seminar for a US processor. I definitely want to see the operation toward which I will be directing my remarks.

## Demonstrations

As much as I like hands-on demonstrations as a teaching tool and as much as I enjoy doing them, I try to stay away from them unless I am thoroughly familiar with the venue. I have been burned too many times when I was assured that the facilities were complete and fully operational only to find, on the day of the program, that half of the stuffer parts were missing or that nobody in the organization had the faintest idea how the equipment went together. This even happened in a well-known meat research institute! After too many of these fiascoes, I insist on having a day prior to a demonstration type program for a dress rehearsal.

This same philosophy also applies to visual aids. I recall one instance where a colleague of mine and I were assured that PowerPoint projection equipment would be available. It was available all right but in one program the projector wasn't compatible with the computer, in the next the projector would not function at all and in a third we were greeted with "We thought that you were bringing the projector." Fortunately, we had our overhead transparencies as a backup, something I won't leave home without. Relying on one medium for presentation is always a risky business.

One of the things that I have tried to avoid is a meat cutting demonstration. Generally the cutting pattern used in another country really does not match ours although it seems to adequately satisfy the local market. In fact, in many cases, I have found that cutting systems in use in some other countries make more sense than some of ours. Too often the audience gets caught up in technique and, as a result, loses the message that you are trying to convey. I recall the days when representatives from the National Livestock and Meat Board would cut up a beef or hog carcass while wearing a tuxedo and never even got their shirt cuffs dirty. It wowed the audience but did it really convey any critical technology?

## Extension in Other Countries

As I mentioned earlier, the Extension concept is largely a US phenomenon. The idea of a "university for the people" was the basic concept of the Land Grant system and Extension was a natural offshoot. Many other countries followed a different route, that of the Meat Research Institute which often was a government/industry partnership. Technical conferences organized by these institutes were more the rule than the format of an applied teaching activity. In effect, they were more like the old Meat Industry Research Conference where the AMIF presented the results of their

research efforts. The proceedings of the AMIF Research Conferences are still good references, by the way.

Recently I had an opportunity to talk to Dr. Svein Aage Berg of the Institute for Food and Biotechnology in Goteborg, Sweden. He informed me that he was beginning a series of short courses for industry based on the format that he had observed while on sabbatical at Iowa State. I have also seen similar programs gaining in popularity in other countries.

Conducting programs in other countries can often bring some interesting challenges. Among these is the cultural difference. When working in the Czech Republic, we felt that it was important to introduce the concept of HACCP. This was an easy concept for them to embrace up until we got to the development of HACCP teams. Did you ever try to teach the concept of participatory management to someone who had grown up under 50 years of totalitarian rule?

For a long period of time meat research institutes in other countries have offered consulting activities, either on a subscription basis or on a charge per project basis. This format is gaining popularity in the US and, with tightening budgets, may well become the Extension paradigm for the future. In all probability, the days of extension assistance "for free" may well be over.

## Safety v. Technology

This is an interesting challenge that is facing us with the ever-increasing demand for food safety and HACCP related programs. I have talked with many of my former colleagues and find that they are devoting the larger share of extension time and effort toward supporting their clientele's needs in developing and maintaining a viable HACCP program. I would hope that we, meaning Extension, would not abandon the area of processing technology. If we do, someone will fill that void, most likely the supplier industry. While many members of the supplier industry can do an excellent job, let's face it. They do have a vested interest and it would be a shame if we deprived the processors of a truly independent source of information. I hope that we will continue to maintain good processing technology as one of our objectives.

## Selling a Program

The idea that, "If you build it they will come," may have worked in the movie "Field of Dreams" but my experience is that it doesn't work in extension programs. A former professor of mine that taught adult education, used to say that there is no "felt need" for continuing education. The need or interest must be driven by some outside force such as economics, the need to comply with regulations, etc. It is important to be cognizant of these driving forces and to capitalize on them when promoting a program. A lot of good programs have died because they were not properly promoted to the potential audience.

## Professionalism

Given my age, experience, white hair and the fact that I am more than 50 miles away from home, I consider this a license to philosophize. More and more we find ourselves caught between the scientific truths and a position that is "politically correct." With our muckraking "friends" in the popular news media stirring the spark of a smoldering breach in meat safety into a full-scale conflagration, someone has to stand for the scientific truth. I have been stuck in that position many times. It ranged from the trivial like should we base the ultimate superiority of a meat animal on performance and carcass value or the opinion of some guru

to the livestock industry with a large hat, a loud voice and a cane to a serious issue like the perceived danger of nitrite in our processed meats. In the latter case I was caught squarely between the Des Moines Register, a couple of powerful members of Congress and the truth. That was one time I was really thankful for tenure. In the final analysis if we, as professional Meat Scientists don't stand up for scientific truths, who will?

Remember too, that if you are going to pioneer a new program or concept you are going to be viewed as a heretic. More than a few heretics in history got barbecued for their efforts!