

# RESEARCH AND PROMOTION OF THE UNITED STATES DRY PEA AND LENTIL INDUSTRY

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## ABSTRACT

This paper reviews the establishment of the Washington-Idaho Pea and Lentil Commission in the Pacific Northwest of the United States. Lentils and peas are grown in rotation with wheat or barley. Average yields of the legumes are 2,717 kg/ha for peas and 1,226 kg/ha for lentils. The importance of co-operation between growers and processors working together to raise funds for applied and market research is stressed. Promotion and selling of the crops at both the national and international level is improved by the provision of information on methods of cooking them and of their nutritional quality.

*Additional Key Words:* *Lens culinaris, Pisum sativum, marketing, research, utilization.*

## INTRODUCTION

It is a pleasure to be asked to join you at this meeting, because in many respects, you are probably at the same point we were 25 years ago.

My purpose is to give you the background to the formation of the Washington and Idaho Pea and Lentil Commissions and how we have involved farmers, processors, and exporters into an industry-wide organization.

## THE UNITED STATES INDUSTRY

I would like to begin by giving you background on our production area. All of the total commercial United States production of dry peas and lentils is located in the Pacific Northwest corner of the United States. Approximately 118,000 ha to 142,000 ha of peas and lentils are grown annually. This area has a rolling hill topography with a heavy clay loam soil. Farms comprise of 50% to , and 80% sloping land. Slopes range from 8% to 30%. Special combines with levelling devices are required to keep the machines from tipping over on the hills. The average farm size is about 325 ha. The average rainfall varies from 460 mm to 660 mm, which is sufficient for annual cropping.

The main crop is winter wheat which is planted in October and harvested in August. Peas and lentils are planted in April and harvested in August and are an excellent alternate crop for our area. Most farmers use a 2 or 3-year rotation of wheat, peas or lentils, and

wheat; or wheat, peas or lentils, and barley. The same equipment can be used to sow and harvest peas and lentils as wheat. In 1989 year we had an excellent crop. Green peas yielded an average of 2,717 kg/ha over 55,915 ha sown. About 11,947 ha of yellow peas were sown. The 38,225 ha of lentils yielded an average yield of 1,266 kg/ha. The 10-year average yield of peas is 2,107 kg/ha and for lentils, 1,101 kg/ha.

## SELF HELP

I suspect that our organization's beginning was similar to what is happening in this industry. Back in the early 1960's a group of farmers got together to discuss what could be done to encourage more research and to initiate efforts to develop better markets for our products.

They soon found two things. First, there was very little being done in research and marketing; and second, they found that if anything was going to happen, it would require funds.

The local state laws provided a vehicle to set up a checkoff or tax which could be collected after a vote by growers.

In July, 1965, the Washington and Idaho Pea and Lentil Commissions were formed after a favourable vote by growers. It was anything but a unanimous vote. The law required that at least 51% of the growers must approve. A vote of 51.4% validated the referendum which is not exactly an overwhelming majority. Many

growers and processors had serious reservations about the Commission approach and because of those reservations, a provision was added which mandated that every five years the growers must vote on continuing the assessment for another five years. Although the people who helped in getting the Commissions established were disturbed by this provision, I believe it is one of the strongest parts of our programme. If you cannot justify your programmes to the people who are paying the bill, then there is no reason for collecting the funds.

If government agencies operated under this law, I believe we would probably have a lot less government. Every vote since 1965 has resulted in a 90% favourable vote, so we feel that we have a vote of confidence from our growers and feel we are involved in the kind of programmes that growers want.

Funds for the Commission programmes come from the assessments paid by growers and collected by processors which are then remitted to our office. All growers must pay by law, whether they agree with the programme or not, the only exception being the American Indians. Unfortunately, we have two different assessment schedules for our two states. In Washington it is 1% of the net sale price, while in Idaho it is \$US 2.56 /t on peas and \$US 2.76 /t on lentils.

The assessments provide a source of funds to support the programmes administered by the Commissions. Each Commission operates on an average budget of \$US 250,000.

In addition to the Commissions, I also manage the American Dry Pea and Lentil Association. This is a voluntary organization principally of processors and exporters and is supported by a membership fee structure and a voluntary assessment paid by processor of 20 to 30 US cents /t of processed product. The Association's average budget is approximately \$US 100,000.

Each organization by itself does not have a large budget. However, by pooling our resources and cooperating on joint programmes we have a large enough budget to initiate programmes which benefit the entire industry.

From 1968 to 1979 the Commissions administered the programmes from an office located in a mobile trailer. By 1978 the Commission programmes had expanded to the point where the Commissions had to look for new quarters. It was then decided that the industry should build a new office building to hold all industry organizations.

We have two grower associations which operate on budgets of less than \$US 10,000. At that time the American Dry Pea and Lentil Association was operating on a budget of \$US 10,000. The problem then was how to build an office building which cost \$US 165,000 with assets of \$US 30,000.

We decided to ask growers, processors, exporters, and friends of the industry to donate to a building fund. The response was overwhelming. Donations ranged from \$US 1 to \$US 1,000 with an average of about \$100.

We moved into our new quarters in December, 1979, and one year later it was completely paid for. The office is now owned by these three organizations and the Commissions pay rent to them which keeps the funds in the industry.

Housing all organizations under one roof makes sense, as it cuts down on administrative expenses and more importantly, all of the industry programme can be coordinated more effectively.

In 1980 we established a sinking building fund with part of the rental funds in case we needed to expand the present office.

Last year we completed a 302 m<sup>2</sup>, two-story addition which provided additional office and work space for our staff. In addition it provided a meeting room that can hold up to 50 people. This spring we added a complete kitchen facility which can now be used for testing recipes and demonstrations.

The three associations now own a 1/3 interest in a \$US 268,000 facility which is not bad for three organizations which had a total budget of \$US 30,000.

## INDUSTRY PROGRAMMES

The three basic programmes of our industry are Research, Domestic Promotion, and Foreign Market Promotion. One of the growers' first priorities was to establish a viable research programme to develop new varieties. When I first started, the pea and lentil research programme consisted of a 3 m research plot which also included such exotic crops as Cape Marigold and Crambe. We now have two full time scientists working on breeding and production problems. The programme is headed up by Dr Fred Muehlbauer who is becoming internationally known because of his research.

Last year we were able to obtain \$US 150,000 from our government to add another full time scientist to our programme. This was done in spite of very tight budget problems by our government. It was the only

research programme in the entire United States Department of Agriculture budget that received an increase.

Although we are not as large an industry as the wheat, soybean, cotton or rice industries, we have been able to accomplish some things that they have not because we are well organized and we do a very effective job of lobbying in Washington DC. Also, we are not just asking for the funds, we are also willing to tax ourselves to help pay for programmes. It is always easier to obtain funds when you are willing to help pay for part of the programme.

In 1986, the government banned one of the few herbicides we have available, Dinoseb. Although we were told it would be impossible to obtain an exemption after the government had banned the product, we were successful in obtaining a two-year exemption in order to initiate research to find a substitute which, by the way, we have yet to find. The peanut and soya bean industry are still trying to figure out how a small industry like ours could accomplish this. I tell them it's because we utilize our rowers to lobby rather than hiring high-priced lawyers.

One of my concerns is the recent trend by state and federal programmes to concentrate on basic research rather than applied. Part of this emphasis is due to lack of funding for government research programmes. Unfortunately, most of the funding that is available today is in the field of basic science. Applied research areas are not a major source of funds.

There seems to be a trend to put all of our resources into biotechnology, thinking it will solve all our problems. Biotechnology holds great promise for solving many food and agricultural problems, but there is a danger of expecting too much too soon. I am certainly not against basic research because it is the corner-stone that applied results are based on, but if we do not take basic research and develop a cure for cancer or develop a new pea variety, then I believe all that basic research has been waste.

We should not drop all of our applied research thinking that biotechnology will solve all of our problems and even assuming this will happen, the answers are at least 20 years away. It is extremely important that we have a balance between basic and applied research.

## INTERNATIONAL CO-OPERATION

In 1986, the industry sponsored the first ever International Food Legume Research Conference. We

had 400 participants from 51 countries throughout the world. It was a highly successful conference for two basic reasons. We had some very competent and dedicated researchers who organized and put the programme together and secondly, the pea and lentil industry was an integral part of the project from the beginning. The industry was also able to provide funding to initiate the conference, although the majority of the funding for the conference came from government and international organizations.

Out of the conference came two recommendations. First, that another conference be held in four or five years; and secondly, that the United States establish an international research programme to network with all the other national and international research programmes throughout the world. The next conference is now scheduled for Cairo, Egypt in 1991, and the industry has now developed a proposal to establish a Cool Season Food Legume Research programme for peas, lentils, chick peas and faba beans. We have established an annual budget of \$US 1,500,000 for the programme and are now trying to obtain government funding. It is essential that we establish a programme which will cooperate with all research programmes world wide so we can share information and avoid duplication of efforts, which will benefit everyone. Scientific knowledge should be shared.

Industry needs to be a partner in any research programme in order to give direction to researchers so that they are addressing the right problems. Industry needs to prioritize its problems for researchers. We really can not criticize a researcher's programme unless we tell them what problems to address and equally important, unless we provide them with the funds to find the answers.

We have established an industry review panel whose primary objective is to determine the major problem areas that should be addressed by researchers and to prioritize and recommend to the Commissions what projects should be funded.

## INCREASING DOMESTIC SALES

I have always felt that the future of our industry lies in developing the domestic market for our products. It is difficult to compete with Canada, Turkey, Australia, and New Zealand when many of these countries have lower production costs and, in some cases, are closer to export markets.

In the United States the domestic market is virtually an untapped market with many parts of the United

States unfamiliar with our products, particularly with lentils. We are making progress, as the domestic consumption of lentils has gone from 1,360 t 25 years ago to 16,780 t last year. We have a full time domestic marketing director and we feel our advertising and promotion programmes are finally getting results.

One of the first things we found was the complete lack of recipes which we set about developing, and which we continue to do today. We are now in the process of publishing a 200 page recipe book.

In addition to developing recipes for the consumer, we also provide volume size recipes for schools, restaurants, hospitals, and other volume feeders. Last year we hired a chef to put on a series of demonstrations in the large cities for food editors and up market restaurant chefs to convince them to add peas and lentils to their menus.

The consumer of today is more nutrition conscious than ever before. We have a product that is just what the consumer wants. It is high in protein, low in cholesterol, high in fiber, convenient, and inexpensive.

In the past few years the Commissions have concentrated on advertising in the institutional area, as we felt that we could get more increase in market volume for the funds expended. We advertised in major institutional publications as well as providing, free of charge, volume size recipes and merchandising aids such as table tents, place mats and nutritional information to stimulate interest in trying our products. Promotions such as a National Split Pea Soup Week and National Lentils for Lent help publicize our products and aid in securing a lot of free publicity.

In 1980 we formed another organization called PALS, which stands for "women associated with the production of peas and lentils". This is a voluntary organization of grower wives which was organized to help the Commissions with local promotions. We find they are our most aggressive salesmen. They are not only enthusiastic but sincere, because it is their livelihood and they do a terrific job of selling our product and industry. We now have about 100 ladies who volunteer their time and the Commission pays all their expenses. They now staff all of our national exhibits and handle our supermarket demonstrations. They are currently putting together a 200 page pea and lentil cookbook which we plan to market nationally in book stores throughout the United States

Domestic promotion and advertising is a long term programme which we feel is finally beginning to pay off. Domestic sales of peas were up 23% last year and lentils were up an unbelievable 60%.

## EXPORT PROMOTION

Since about 75% of our production of dry peas and lentils is exported, export promotion is an important part of our programme. The price of our products, to a large part, depend on what the current export situation is; and the more customers we have for our products, the more favourable the price.

We currently export to over 50 different countries throughout the world, and that is why foreign market promotion is such an important part of our programme. While the Commissions handle our research and domestic promotion, we have set up another organization to handle foreign market promotion.

The USA Dry Pea and Lentil Council is responsible for directing this programme. The office operating budget is provided by the Commissions and Associations. The Council is then able to take advantage of United States Government funds for our overseas promotional programmes. All of the Government funds must be spent overseas. We currently have advertising and promotional programmes under way in India, Japan, Pakistan, Spain, Sweden, and the Philippines. We also have offices in India, Japan and Spain and will be opening an office in Pakistan in December 1989.

In addition to trade servicing of regular customers, we conduct marketing studies of potential new markets. The United States was the first to open up the Indian market which is now serviced by Australia, Canada, Hungary and New Zealand, as well as the United States

Another successful programme has been to sponsor trade team visits to the United States to acquaint them with our industry and products. These teams represent importers, government officials, canners, and other end users of our products.

We were able to convince Taiwanese vermicelli manufacturers that Austrian winter peas could be used to produce an excellent quality, transparent noodle which is popular in the Far East.

## CONCLUSION

I have tried to briefly outline some of the programmes that our industry has undertaken. The dry pea and lentil industry is no different from any other business. In order to be successful, we must be aggressive, to maintain our current markets and expand into new markets.

I feel that the Commission assessment should be considered as an expense item to the farmer rather than

a tax. The average farm in the United States has more capital investment in land and equipment and utilizes more capital than most businesses in the city. If you look at some of the large companies, you will find that the most successful firms are those who devote a large share of their budget to two items: research and advertising. Those companies who remain on top are the companies who have the strongest programmes in these two areas.

How much of the farmers' operating budget is now spent on research and advertising? Assuming that he did set aside funds for research and advertising, how much would he be able to accomplish by himself? However, if you got together with your neighbours you would have enough funds accumulated to do some good. This is essentially what we have done with the Commissions. We are the research and advertising arm of the farmers' business.

In order to have a successful programme, you must be aggressive; and in being aggressive, you will make mistakes. The only sure way to not make any mistakes is to do nothing. The important thing is to learn from your mistakes.

Sometimes it helps to not be real smart. When someone says that something can not be done, we are so dumb we just go ahead and try anyway and in many

cases we have been successful. If we were real smart, we probably would not even try.

There is strong competition between members of our industry and that is a healthy situation just as we welcome competition from Canada and New Zealand. Even though we compete among ourselves, it is extremely important that we communicate between various phases of our industry and, I believe, the same spirit should apply to the United States and New Zealand in regards to pea and lentil markets and research.

While I realize that we must be competitive in world markets, I believe it is important to keep prices at a level where growers of both countries can make a profit. Tractors, combines, and chemicals cost more each year be it New Zealand or the United States, and it is important that as the cost of production goes up, our price levels reflect these increases. Let's not make the mistake of getting price levels so low that none of us can make a profit.

I appreciate the opportunity and invitation to appear on your programme. I would like to issue a special invitation to each and every one of you to visit our area at any time. Thank you for the opportunity to appear on your programme.