## Training Farmers for Viability in a Changing Agricultural Policy Environment \*

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#### **Abstract**

This paper examines the current agricultural policy environment within which Irish and European farmers must now operate; it concludes that conventional agricultural training programmes that tend to focus on commodity production are no longer sufficient to enable farmers to survive, mainly because they do not prepare farmers for a constantly changing environment. A new enterprise culture is required if farmers are to generate a viable income from their farms. This does not happen by chance; it must be planned and requires adult farmers to participate in lifelong learning and continuing education programmes that equip them with the knowledge and skills that they need to strategically assess their career options. This paper reviews one novel programme which sought to achieve this in Ireland and its impact is discussed. Lessons learned for the planning and delivery of appropriate agricultural training programmes in the future are presented.

#### Introduction

Farming as an occupation has undergone a major transition in recent decades. A persistent decline of an already low farm income combined with restrictions on output of the most commonly produced commodities has limited the ability of the traditional farming enterprises to generate an acceptable family income. This means that those who wish to pursue farming as a career must adopt an aggressive strategy to identify and meet the demands of the market, improve their technical efficiency and seek alternative sources of income to complement their farm income. Farm families must adopt an entrepreneurial approach to their farm business if they are to survive in rural areas. However, few farm families are accustomed to meeting this challenge; they have neither the experience nor the education to ease this transition. The purpose of this paper is to contribute to the discussion on appropriate training for farm families which will foster an entrepreneurial culture and so allow them to continue to live in rural areas by combining their farm income with income derived from new sources. It commences by reviewing recent developments in EU policy and assesses their likely impacts on the future of farming. It also presents current trends in the structure of Irish agriculture which illustrate the need for a more proactively entrepreneurial attitude among the farming community. An innovative training programme for farm families which seeks to inculcate a culture of enterprise and which has been developed by University College Dublin in collaboration with local development partnership companies is presented and assessed.

Paper submitted for consideration of the Fourth European Farming Systems Symposium (Workshop 5: Education and Training for Farming Systems Research and Extension) to be held at Volos, Greece, April 3-7, 2000

## Agriculture in Ireland

The period since 1990 has been one of exceptional growth for the Irish economy. GDP has grown by about 7% on average per annum, and it has grown by an average of 9% per annum since 1993 (Department of Agriculture and Food, 1999). The number of those in employment increased by over 25% while unemployment fell from a peak of almost 16% in 1993 to 7% at present. Government indebtedness dropped from 92.3% of GNP in 1994 to an estimated 60% by end 1998 (CSO, 1998).

The role of agriculture continues to be of considerable importance to the Irish economy, despite its decline in recent years. This decline, in relative terms, is due mainly to the rapid growth of other sectors of the economy. At present, the agrifood sector accounts for 12.7% of GDP at factor cost, while primary agriculture contributes 5.2% (Department of Agriculture and Food, 1999). This is more important than in any other EU Member State with the sole exception of Greece. Agriculture is the source of 70% of Irish food supplies and the agricultural industry is strongly oriented towards export markets and is an important earner of foreign exchange. Agricultural exports account for over £5 billion or 17% of total Irish exports; this is double the EU average. In addition, 12% of all those at work in Ireland are engaged in agriculture; in fact agriculture accounts for 20% of manufacturing employment (derived from CSO, 1998).

Ireland's agriculture is based mainly on livestock production with tillage being much less important than in the rest of the EU. Crop production in Ireland accounts for just 12% of output while the EU average is approximately 40%. Livestock is the biggest farming sector in Ireland; dairying accounts for 35% of output while beef production contributes 38%.

#### A Changing Structure in Irish Agriculture

There are currently 146,000 farm holdings in Ireland, almost all of which are family farms. The average farm size is 29.5 hectares; this has increased from 27.2 hectares since 1992; however, over 47% of Irish farms are under 20 hectares. There has been a significant decline in the total number of farms, from 161,700 in 1992, with the main area of decline (-18%) being in the numbers of farms of less than 20 hectares. There has been little change in the number of farms in the 20-29 hectares category while the number of farms of 30 hectares and greater has increased by 5% over the period 1992 to 1997 (CSO, 1998).

Ireland has a high proportion of elderly farmers and a low proportion of young farmers. Only 12% of Irish farmers are under 35 years of age while 45% are over 55. Elderly farmers tend to have smaller farms, lower incomes and are reluctant to adopt new farming methods. Younger farmers are likely to be better educated, willing to innovate and are more likely to have off-farm jobs (Department of Agriculture and Food, 1999). Of course, Ireland is not unique in having problems with age structure; there are relatively few young farmers in most EU countries.

Income from farming remains at a chronically low level. The risk of poverty in Irish farm households is high compared with other sectors of society; for instance in 1994 (the most recent year for which these data are available) 20% of farm households were at risk of poverty compared with 15% of other self-employed households and 3% for employees. (Phelan et al, 1998). Furthermore, the ability of farming to generate income varies considerably across different enterprises. For instance, in 1997, farmers with dairying systems had farm incomes 3.5 times greater than cattle farmers (ibid.); indeed the low income problem among cattle farmers is regarded as one of the most persistent and serious problems of Irish agriculture. There is an urgent need for this farming sector to explore options to supplement their farm income if they are to remain viable.

There has been a steady increase in part-time farming in Ireland. In 1997, farmers and/or spouses had an off-farm source of employment on 43% of farms, a significant increase over the 1993 figure of 31% (Teagasc, 1997). The 1997 statistics show that on 29% of farms, the holder had an off-farm job. The likelihood of a farmer having an off-farm job is strongly influenced by the system of farming; over 30% of farmers in drystock systems have off-farm jobs compared to 21% of tillage farmers and less than 11% of dairy farmers. There are also considerable differences between the level of Family Farm Income (FFI) of part-time and full-time farmers; in 1997 the FFI of full-time farmers was almost 2.5 times that of part-time farmers. Also, farmers with an off-farm job tended to be younger, farm a smaller area and have a greater dependency on direct payments than their full-time colleagues. A higher proportion of part-timers are married and a greater proportion of their spouses have an off-farm job. While there has been considerable emphasis on promoting alternative farming enterprises, mainly by Teagasc (Agriculture and Food Development Authority), the proportion of farmers who have succeeded in doing this remains exceptionally low.

#### Impact of Recent Policy Initiatives on Irish Agriculture

The Common Agricultural Policy (CAP) of the EU has been the most significant influence on Irish agriculture for the past three decades. However, the problems of the CAP as originally conceived have been well documented; they focused, inter alia, on mounting food surpluses, escalating budgetary deficits, increasing inequities between resource rich and resource poor farmers and environmental degradation. And yet, the CAP was not achieving its objective of maintaining either the numbers or standard of living of farm families. CAP reform has been ongoing since the early 1980s and each successive round of reform is analysed to determine who will be net beneficiaries and who will lose out. The most recent of these reforms is the Agenda 2000 Agreement which centres on reducing the prices of beef, milk and cereals while increasing the premia or compensation payments. This is really a continuation of the present agricultural policy, albeit at a faster rate than was previously the situation. Other measures have been introduced to encourage more extensive farming which is less harmful to the environment. Frawley (1999) has been reporting on the growing reliance of farmers on direct payments. These direct payments consist mainly of compensatory allowances, premia and payments from the accompanying measures. He cited the case of cattle rearing systems where the level of dependency on direct payments increased from 52% in 1993 to 105% in 1997, implying that sales from these types of farms did not cover the production costs in 1997. Similarly, tillage and sheep farms now have a very high dependence on direct payments.

Indeed, one effect of these new measures is that it is now critically important for cattle farmers to estimate in advance their stocking densities for premium purposes (Dunne, 1999); this type of "paper farming" is geared towards ensuring that the contribution to income from direct payments is maximised and this is not necessarily associated with what has traditionally been considered to be good farming practice. While these payments are critical to farmers' income, farmers' perceptions about farming are still heavily dependent on what is happening in the market place.

The impending further enlargement of the EU to include some additional Central and East European Countries, some of which are large countries with a very high dependence on agriculture, will make it increasingly difficult for the EU budget to sustain a high level of support.

While these changes are occurring within the European Union, other pressures are being applied from outside the EU which will pose further difficulties for agriculture within the EU. The main source of this pressure is the World Trade Organisation negotiations. While there is still uncertainty about how the next round of

negotiations will be organised it is recognised that the main thrust will be to continue the process of reducing EU domestic supports and export subsidies and to continue to move toward free trade by increasing market access.

It is likely that the implications of these policies will be a further downward spiral of farm incomes which will put increasing pressure on farm families to diversify their production away from conventional enterprises or alternatively to engage in off-farm employment. Survival in this liberalised market, in an era of globalisation, requires farmers to have a strong commitment to innovation; this can only happen if they are flexible, creative, are willing to change and try to meet the needs of their customers. Long term competitiveness is characterised by superior organisation and management, innovation and efficient use of strategic assets. This cannot occur without a highly skilled and educated workforce. Yet, vocational training for farmers is still focussed on enabling them to increase production of the commodities that they have traditionally produced.

The Certificate in Farming, delivered by Teagasc, is the main training programme for farmers in Ireland. This programme extends over three years and is directed at improving the husbandry and management skills of new entrants to farming. While there have been efforts to continuously improve this programme, these have focussed on such aspects as modularising the curriculum. However, the content and mode of delivery have not significantly changed. In particular, the training needs of more established or mature farmers have not been addressed and there has never been a serious effort at facilitating farmers to strategically assess their long-term career options and to plan their futures by exploiting all their resources. Consequently, the following education programme for farm families is of interest in advancing our understanding of how to promote entrepreneurial skills among farmers.

#### **Strategic Planning for Rural Enterprise Programme**

The origin of this education programme can be traced to a resource audit carried out in the Ballon-Rathoe area of County Carlow in 1994. The purpose of the resource audit was to analyse the human and physical resources of that rural area with the objective of devising a development strategy for the area (Mulhall, 1995). This study highlighted that, as is typical of most rural areas of Ireland, the local economy was heavily dependent on mainstream conventional farming, but the area was in chronic decline with a persistent decline in the numbers employed in farming. The need to address the difficult situation experienced by sections of the farming community

emerged, especially the issue of insufficient income from conventional farming. The scope for development based on conventional farming was limited due to production restrictions and the market situation. Furthermore, lack of information, lack of awareness and a succession of short term responses had mitigated against sustainable diversification of the local rural economy in the past. These problems were leading to a situation where local people were leaving the area to advance their career prospects. To deal with this problem, a more focused approach to strategic planning by farm families for income sustainability in the Ballon-Rathoe area was proposed. It was evident that there was a low level of marketable skills among the farming community and they had no knowledge or experience of applying the principles of strategic planning to their own careers or farm enterprises. The study forecasted that in the absence of appropriate interventions present trends would continue resulting in an acceleration of out-migration from the area, a further decline in the numbers employed in farming and a further decline in farm incomes. It concluded that one of the critical constraints was a traditional attitude among farming families towards farming as a career; farming was still perceived to be a way of life and there was little evidence of many farmers adopting a business-like approach to the management of their farm enterprises. A more business-oriented approach to allow them to analyse their present situation, examine alternative uses to which their assets might be put and to plan for their futures was required and this could only be brought about by an effective and relevant training programme. However, there was no suitable training programme in existence. Teagasc, the state organisation responsible for agricultural education and training, dealt mainly with the topics of animal and crop husbandry and any of its management courses were quite inappropriate for adult or established farmers who did not have the benefit of the foundation courses. Therefore, it was decided to develop an education programme entitled "Strategic Planning for Rural Enterprise" which would enable farming families to fully evaluate the sustainability of their current sources of income, explore alternative income earning options and develop business planning skills.

#### **Development of the Programme**

A partnership approach was devised to develop the programme. This involved the collaboration of University College Dublin (UCD) with the local development group, (Ballon-Rathoe Development Association), the local LEADER Group (BNS Rural Development) together with representatives of the farming organisations and Teagasc (State Agriculture and Food Development Authority). Each member of the partnership brought unique and complementary strengths to the table. UCD had

specialist technical knowledge of rural enterprise development and curriculum development; the local development group and farming organisations had in-depth knowledge and understanding of the local situation and local farming problems. The LEADER group committed financial resources to the development of the programme. Teagasc shared its experience of organising previous training courses in the area and committed its facilities and expertise of its local staff to the development of the programme. The partnership approach was employed to devise the broad objectives and general content of the programme; the curriculum was then developed at UCD in consultation with the other partners. This work began with general discussion about the programme and the intended outcomes, especially raising the awareness of local farm families about the viability of their current situation. It was decided that awareness raising on its own would not be enough and it soon emerged that the programme would progress through three stages.

The three stages of the programme were identified in terms of assisting the participants to:

- 1. Analyse their current situation;
- 2. Explore alternative income earning opportunities; and
- 3. Develop business planning skills.

Stage One was divided into six sessions and enabled participants to analyse the agricultural policy environment within which they operated and analyse trends in the markets for their products. It also enabled participants to evaluate their own efficiency standards and culminated with a holistic SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis considering all aspects of their current enterprises.

Stage Two was geared to enable participants to research and explore alternative sources of income. It was covered in nine sessions and the enterprises dealt with ranged from those which might be farm-based to non-farm based to area based initiatives.

Stage Three sought to develop business planning skills among the participants. It was covered in ten sessions and dealt with issues such as the management and organisation skills necessary to start a new enterprise, together with the financial and marketing expertise to ensure that the new enterprise would be successful. All sessions of the course were delivered through a combination of presentations by tutors, facilitated discussions and workshops and home-based activity.

### **Organisation of the Programme**

The organisation of the course was divided between the University and the local development group. The latter was responsible for managing the course locally. This involved promoting the course locally and recruiting participants, selecting and remunerating approved tutors and co-ordinating weekly activities. UCD advised on setting up the course, it also provided the group with a course manual which detailed the content and suggested method of delivery of each session. UCD also registered participants, approved tutors, monitored progress and assessed completed assignments. The only form of examination was the completed business plan at the end of the course. This was prepared by each participant and consisted of three main sections: a description and analysis of their current farming enterprises, an examination of alternative income sources and a detailed farm and business development plan. On completion of the farm business plan to an acceptable standard, each participant was awarded a University Certificate in Strategic Planning for Rural Enterprise.

The piloting of the course was at Ballon, Co. Carlow during 1997-98. The following year, 1998-99, the course was conducted at four centres, i.e. Killenaule, Co. Tipperary, Castlecomer, Co. Kilkenny, Portlaoise, Co. Laois, and Newcastlewest, Co. Limerick. At present, 1999-2000, the course is in progress at four further centres.

The level of participation to date is presented in Table 1.

TABLE 1
Participation on the Strategic Planning for Rural Enterprise Programme, 1997-1999

Year	Location	No commenced	No completed
1997-98	Ballon	37	30
1998-99	Killenaule	44	35
1998-99	Castlecomer	34	33
1998-99	Portlaoise	40	33
1998-99	Newcastlewe	32	20
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In each of the centres above participants came from approximately a 10 kilometre radius from the centre. The completion rates from Table 1 represent the proportion of participants who completed farm business plans and submitted these to UCD for

assessment and attained an acceptable standard. These completion rates over the five centres are in excess of 80% on average and are considered to be exceedingly high.

### **Profile of Participants**

The courses at Ballon and at Killenaule have been extensively studied and analysed to determine the lessons that might be learned from such an educational activity. Consequently, the characteristics of the participants at both centres have been assembled. It was envisaged that the participants would be farm family members involved in management decisions on their farms. At Ballon, 37 participants commenced the course, 25 of whom were male but the 12 women were almost all wives whose husbands were also participants on the course. The age of the participants ranged from 24 to 59 years and the average was 39 years. Their standard of general education was better than that of the farming population nationally but this was associated with their relatively young age. All of the participants were farmers and their average farm size was relatively large at 36 hectares of reasonably good quality land. However, this was tempered by the fact that most of them were engaged in less profitable enterprises: they tended to be engaged in mixed drystock (cattle) and cereal farming systems. The characteristics of the participants at Killenaule were broadly similar to those at Ballon, the main differences being that their farm sizes were smaller and their farming system tended to be mixed dairying and drystock - the latter was a more profitable enterprise mix than that which prevailed at Ballon but is nullified by their smaller farm size.

### **Evaluation of the Programme**

The true impact of an educational programme such as "Strategic Planning for Rural Enterprise" can only be determined after several years when participants have actually implemented the plans made. However, it is essential to do an interim evaluation of the course in an effort to determine if the desired outcomes are likely to occur.

#### **Evaluation Methodology**

The findings presented in this section are taken from two separate evaluations. The evaluation framework is based on three aspects: firstly, the participants' assessment of the usefulness of the course; secondly, changes in their knowledge, skills and attitudes impacting on their farm enterprises; and thirdly, changes that participants have already made or intend to make in their farm enterprises, alternative enterprises or off farm employment.

Because the course at Ballon was organised on a pilot or trial basis, it was extensively monitored throughout and subsequently evaluated six months after completion of the programme. Monitoring was carried out by asking the participants at the end of each session to complete and return a simple questionnaire. They were asked to rate and comment on the following aspects of that session: topic relevance; tutor presentation; session structure and content; and any changes that they would suggest. More indepth information was sought from the participants at the end of each of the three stages; a questionnaire was also used on these occasions to determine the extent to which session objectives were achieved. The evaluation methodology that was used six months after completion of the programme consisted of facilitated small group discussions; four such discussions were conducted each with an average of eight participants. The facilitators were independent evaluators, unknown to the participants and previously unconnected with the programme in any way. The primary purpose of these discussions was to determine the participants' opinions of the programme. These evaluators subsequently personally interviewed the participants to ascertain the changes they had already made to their farm businesses or what changes they were considering and to establish the contribution of the programme to the decision to make these changes.

The participants at Killenaule were also personally interviewed some three months after completing their business plans. In this case, the interviews were conducted in the participants' own homes and focused on their opinions of the programme and the changes they are implementing as a result of their participation.

#### Participants' Opinions of the Programme

Participants' opinions of the programme were very encouraging indeed. At Ballon, 84% considered the course to be excellent, while a mere 8% considered that the pace was too fast, or that the content was too complex for them; this latter group felt that they needed more time to assimilate the content of the course. At the other end of the spectrum, 25% of the participants felt that they required even more information than that which the course equipped them with and they wanted a follow-on or more advanced course. A similar picture emerged at Killenaule where a very high 95% of participants said that they were either satisfied or very satisfied with the course. Even more encouraging was the fact that 96% would recommend other farm families in a similar position to themselves to participate in this type of educational activity. When interrogated, they reported that the second and third sections of the course were of most relevance to their needs. It was also very encouraging that the majority of participants recognised the value of a written plan – most of them had not

previously engaged in this activity but they now felt that they would commit their ideas and schedules to paper in future because of the clarity it brought to their planning activities.

### Impact of the programme

Two fundamental issues are considered under the impact of the programme: firstly changes in the participants' knowledge, skills and attitudes; and secondly changes either already cartried out or planned by the participants.

### Changes in Participants' Knowledge, Skills and Attitudes

Participants at Ballon were surveyed at the commencement of the course in order to determine their own rating of their knowledge and skills in a range of issues relevant to the course; the same exercise was repeated at the end. More than 80% of the participants reported an increase in their knowledge in a range of specific areas. The increase in knowledge varied from one topic to another; the greatest increase was knowledge of business planning and the lowest level of increase related to knowledge of employment patterns and trends. It can be concluded that the programme was successful in dealing with management and organisation principles as 94% of participants considered that they had a high level of knowledge at the end of the programme, compared with only 50% at the beginning.

The level of increase in the skills of the participants was dealt with using a similar approach. Again, it was very encouraging that over 80% felt that they had increased their skills in a range of specific areas. The highest level of increase in skill was the ability to access information for enterprise while the lowest level of increase related to the ability to get a part-time or full-time job.

The attitude of the participants towards a range of issues associated with their careers was determined at the beginning and again at the end of the programme. The method used to determine their attitudes involved each participant completing a prepared questionnaire on both occasions in which they gave their reaction to sixteen separate statements. It emerged that the attitudes of more than 65% of the participants improved in a range of issues over the course of the programme.

#### Changes Made by Participants

Changes made by participants were examined in three separate areas, i.e. changes in their farming enterprises, changes in off-farm employment and changes in relation to alternative enterprises. The most significant outcome of the course held at Ballon is that all of the participants there claimed that they were aware of the importance of cost accounting as a

result of the course. This is the first fundamental step towards adopting a more business-like approach towards their farm enterprises. In addition, six participants subsequently established their own group as a limited company; this group is perceived to have two roles, initially as a discussion group but already it is evolving into a purchasing group and will be able to avail of greater discounts because of their collective bargaining power. Five participants are still actively researching flower bulb production; they are doing so collectively and their research is at an advanced stage. Eight have joined the Rural Environment Protection Scheme (REPS). A further five are in the process of rationalising their farming systems while eight are increasing their efficiency standards.

Seven participants are actively pursuing plans to embark on alternative enterprises. One participant is pursuing each of the following: floristry; restoring an old farmhouse for tourism; a mobile dipping unit for sheep; decorative ironwork; developing an equestrian arena; developing a food product and embarking on a housing developing.

Twelve participants have secured off-farm employment. One is now teleworking; two are involved in selling veterinary products; four are working on a part-time basis with the Farm Relief Service, doing farm related tasks; two are employed in office administration while three are engaged in other miscellaneous part-time work activities.

At Killenaule, three months after completion of the programme 78% either had already made significant changes or had advanced plans to make these changes to their current farm enterprises within the following two years. The main changes identified were to increase their dairying enterprises, to reduce their beef enterprises, join REPS, or establish a new farm enterprise such as pedigree bull breeding, horse breeding or worm production. Those establishing a new enterprise or joining REPS felt that the course made an important contribution to their decision making process while those implementing the more conventional adjustment strategies felt that the course made only a slight contribution to the decision.

In addition, 65% of the Killenaule participants considered establishing a new business activity. A wide range of activities were considered such as holiday cottages, bulb production, organic farming, bedding plant production, nursery tree production, wind farming and country market selling. 30% had made definite plans or were already in the start-up phase of their new enterprise. Most felt that the course made an important contribution to their decision making process. The evaluation, analysis and planning skills were found to be particularly useful and relevant.

Only 17% were considering off-farm employment and plans were not well advanced in this regard. The main reasons for seeking off-farm employment were to gain experience that would benefit the business that they were planning to establish in the future.

#### **Conclusions**

A vibrant rural society that is composed of viable rural communities must be based on the key concept of economic diversification: conventional farm enterprises alone geared towards commodity production will not support viable communities in rural areas in the future. Those who wish to continue farming must ensure that their core farm business is developed and managed in a efficient way. However, this alone will not be enough; the development of other farm-based activities and off-farm businesses and services must be considered and planned.

There is an urgent need for education and training for farm families that will enable them to make this transition from solely production-based agriculture to alternative sources of farm income. Education and training can provide both the skills and the confidence that are needed to facilitate the transition. While there is considerable institutional support to provide agricultural education to young entrants to farming the adult community is a forgotten and neglected entity even though they make up the majority of decision makers on farms.

The results of the evaluation of the programme "Strategic Planning for Rural Enterprise" clearly illustrate that there is a strong demand among the adult farming community for education programmes that help them to analyse their current income sources and to plan for their future. It is quite evident that farm families are concerned about their futures and are actively seeking alternative solutions. Their willingness to embark on such a programme and to complete it is evidence that agricultural education should not just be the preserve of new entrants to farming but is part of a life-long learning process. There are clear implications for professionals whose mandate is to provide education and training for the farming community.

The partnership model of planning and implementing agricultural education programmes is novel but is clearly seen to be a most effective way of organising such activities. By any standards, the results of the evaluation of the Strategic planning for Rural Enterprise programme are impressive and encouraging. There is a synergistic effect from combining the respective strengths of the university with a local development agency and with local sources of funding. It ensures that the programme content is relevant to the participants and that the organisation and delivery take cognisance of local conditions. It also addresses the issue of rural disadvantage by bringing training to the farming community to their own locality.

Bringing the programme to the community at a time and place that suits thus recognises local conditions helps to ensure equal access to all members of that community.

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