

# BLESSED FARM PARTNERSHIP

Rona O'Brien, (Sheffield Hallam University) with Jayne Ducker, Antony Head and Susan Richardson

*This case study is taken from Ducker, J., Head, A., McDonnell, B., O'Brien, R. and Richardson, S. (1998), A Creative Approach to Management Accounting: Case Studies in Management Accounting and Control, Sheffield Hallam University Press, ISBN 086339 791 3.*

## INTRODUCTION

This case study is set in the British Isles, which has experienced major changes in its agricultural sector since the late 1970s. The majority of farming takes place on small to medium sized holdings of 20 to 150 acres where farmers grow cereals, vegetables and food stuffs for farm animals and rear cows, cattle, pigs and poultry. Larger holdings have tended to concentrate on the production of milk with some cereal crops. When the country joined the European Community (EC) in 1972, new funds flowed into the agricultural sector. For the first time this sector experienced price stability as a result of an EC common agricultural policy (CAP) intervention scheme. Under this scheme, farmers were guaranteed a market for all that they produced. Any products that could not be sold through the normal channels were bought up via the intervention scheme at a guaranteed price.

Land prices increased dramatically as farmers sought to increase the size of their holdings, knowing that their ability to repay loans was enhanced by their new-found stability of income. Farmers began to specialise as grants were awarded for expansion in specific areas. Agricultural products had always been processed and sold through factories and outlets owned by local farms such as agricultural cooperatives. On joining the EC this continued on a greater scale, with co-operatives developing sophisticated processing and marketing methods.

Pig farming benefited from the changes brought about by EC membership. EC grants for capital investment were plentiful and were enthusiastically taken up. Pig farming suited the many small holdings that existed and most farmers had the necessary expertise. The national pig herd grew as did the factories and co-operatives for processing and marketing pig products.

However, the intervention scheme was not available for pig products and therefore pig prices remained volatile relative to other agricultural products. Factory farming\* for pigs was introduced and became popular with the farming community. The only cloud on the horizon was the volatility of pig prices.

[\*Factory farming is rearing farm animals under intensive conditions, usually in specially built units with artificial heating and lighting. Sows are usually tethered all day in a small pen and are kept in darkness for most of the day. Other pigs are kept in small pens, again with little lighting, so that they remain inactive and put on weight.]

## THE PIG FARM

Mr Brighton and Mr Stayton, who have both been in farming for some time, decided in partnership to take advantage of EC grants and the expansion in the pig market to build and run a pig farm, producing pigs for slaughter. The pig farm was funded by an EC grant (50 per cent of the capital cost), a bank loan and capital provided by Mr Brighton. Mr Brighton also provided the necessary expertise, since he was formerly a manager for one of the biggest pig co-operatives in the country. He is also an advisor to the Government on matters relating to pig farming. Mr Stayton provided land, as he had recently inherited the three hundred acre family farm, currently used for the production of cereals and beef.

## THE HERD

The Farm has housing for one hundred sows and their piglets and four boars. The building has an automated system for feeding, heating and ventilation. The sows are tethered in stalls, which reduces cleaning and allows them to be easily controlled. When the sows are about to give birth they are moved to the farrowing quarters, where they are also tethered to prevent them crushing their piglets and for ease of handling, although this can lead to difficulties when they are giving birth. On being weaned the piglets are moved to small kennels with slatted runs. When they have reached 18 kg in weight they move into larger pens and at 45 kg they are transferred into fully slatted accommodation.

This method of factory pig farming has many advantages. Large herds of pigs can be kept on very small amounts of land and little labour is needed. However, due to the conditions in which the pigs are kept, mortality can be high. Sows can become lame from standing on concrete floors and because this condition is very difficult to treat, affected sows are usually put down. The cramped conditions are also ideal for the spread of disease, leading to high medical costs. Many of the diseases, for example “blue ear”, are very difficult to eradicate. Spending the majority of the day tethered in the dark leads to inactivity, and the resulting boredom and stress can reduce fertility. Boredom and stress due to inactivity also affect the younger pigs, who tend to relieve their stress by eating each others’ tails and other body parts. As a result, infections develop and their rate of growth is reduced.

On the Farm each sow produces two litters every year. On average nine live piglets are born and seven survive to maturity. These figures are below average for this type of herd and Mr Brighton would like to see more piglets produced each year in the future.

More piglets can be produced each year by increasing the number of times that a sow produces a litter. To achieve this, the time between a sow weaning her litter and becoming fertile again must be reduced. One way of doing this is to remove the piglets from the sow a few days after they are born and rear them by artificial means. This option is very expensive because it entails building specialised housing and purchasing special feed. A cheaper option is to provide extra nutrition to the sow, so that she recovers swiftly after giving birth and quickly returns to fertility.

The artificial rearing of piglets could increase the average number of litters per sow per year to almost three. Improving nutrition could increase the average number of litters per year to just over two.

There are problems with both solutions and a number of trade-offs must be considered when seeking the best way to increase the number of litters per year. The strain of constant pregnancy can reduce the life span of sows. Increasing the average number of litters tends to lead to a reduction in the number of piglets born and to an increase, for sows and piglets, in illness and mortality. Sows do not have sufficient time to recover between litters, which can leave them vulnerable to illness and can lead to the production of lower-weight piglets. In addition, when piglets are weaned after a few days and reared artificially, mortality and illness rates can be very high. Most of these disadvantages can be addressed, to some extent, by improved husbandry and preventative medicine.

## THE STAFF

The Farm employs two full-time staff, Mike Fulwood and Mary Blake, who are both experienced farm hands. Besides her husbandry duties, Mary keeps the farm and accounting records and also orders all medication and feed.

The Farm's records show the age of each sow and its medical history, the number of litters per sow, the number of surviving piglets, which boars have mated with the sow and the family history of sow and piglets. Only basic accounting records are kept to enable the local firm of accountants to prepare a profit and loss account and balance sheet at each year end. As the Farm is a partnership, it does not have to publish accounts. The accounts are used primarily as a basis for determining profit distribution to the partners, for grant and loan applications and for tax purposes.

Labour relations on the Farm are satisfactory and wages are very good for the area. A monthly bonus is paid, based on the number of piglets surviving to weaning. The staff, who have four week's holiday per year, work an eight-hour day and alternate weekends. Weekend work consists of a half day on both Saturday and Sunday and includes afternoon feeding.

Despite good wages and working conditions, there are some problems between the staff and Mr Stayton. He is not used to managing staff, having previously worked only with his close family. Even then, working relationships were not always harmonious. He thinks that all staff should be on call for twenty-four hours a day and should work a full day every Saturday and a half day every Sunday. He does not understand the need of staff for time away from work and for such "long" holidays. He himself takes only one week's holiday each year. The staff are opposed to his ideas, since no overtime payment is on offer and they wish to keep their free time. This is especially true of Mike Fulwood, who has a young family.

Mr Brighton has experience of managing large numbers of staff and is on good terms with everyone. However, he is not involved in the day-to-day running of the farm. He spends his days meeting suppliers, the bank manager and the accountants and in bringing the pigs to market. He visits farms at home and abroad to see how they are managed and to evaluate future developments in pig farming. Mr Stayton spends a large part of his day at the Pig Farm, which is a source of conflict between himself and the staff, since they feel that they should be left to manage the Farm without close supervision.

## THE ENVIRONMENT

There are a number of environmental problems associated with the Pig Farm, which is situated in an area of outstanding natural beauty. When planning permission was first sought, local residents and farmers objected. Residents feared the smell from the Pig Farm would prevent them from sitting in their gardens and would permeate their houses. Farmers were anxious that the new farm would flood the local market and reduce prices. Residents and farmers were also worried about any future expansion of the Pig Farm. This would mean that more pig waste storage would have to be built, increasing the smell from the Farm.

A historically important house, which is open to the public in the summer, is situated near to the Pig Farm. The owners, Lord and Lady Blessed, objected strongly to the setting up of the farm, as they feared that their house would attract fewer visitors. They felt that, as the Pig Farm overlooked the house, it would make the view less attractive and, worse still, the smell in summer would be very strong. Consequently, the Pig Farm had to put special paint on the buildings so that they blend in with the surrounding countryside and, to reduce odour, is not allowed to spread pig waste as fertiliser in fields on the Farm. Pig waste must now be transported out of the Farm by road. This has made the narrow, and previously quiet, country roads very busy and residents are concerned for their children's safety. If the farm expands, the cost and problems of waste removal will increase.

## THE PRESENT TIME

Mr Brighton and Mr Stayton have been in business for two years and feel the need to review their current situation and plans for the future. At present the market for pigs is very good. Pigs go to slaughter at an average of 160 days old and they have a good lean to fat ratio, i.e. a minimum of fat. Prices are good and the factories are taking all that the Farm produces at the optimum time.

Mr Brighton feels that the market for fatteners is very volatile, not only in terms of price but also in terms of having pigs slaughtered when they are in prime condition. The market for pigs is influenced greatly by German pig producers and relatively small changes in the supply of pigs from Germany can

have a huge effect on both prices and on the rate at which factories will accept pigs. If a factory delays accepting pigs, the pigs will put on more weight, but this will be in the form of fat rather than lean meat and thus the price will be reduced. The lean to fat ratio is very sensitive to age and even a delay of one week in getting pigs to the factory can have a very detrimental effect on the ratio.

Mr Brighton would like to reduce their dependence on this market, but Mr Stayton feels that it is the market that they know very well. He is nervous about moving into areas in which he lacks experience and that could prove costly. Mr Brighton, after talking to Mr Stayton for some time, has persuaded him to consider some proposals for change. Both parties have set out some proposals that are described below:

## PROPOSAL 1

At the present time the Farm produces pigs for slaughter. Replacement sows and boars are bought in from pig producers who provide disease-free breeding stock. Mr Brighton would like to produce replacement breeding stock, both for sale to other farms and for use by themselves. A sideline would be the slaughter of pigs not suitable for breeding. The Farm has a special advantage in this area in that the breeding herd has “disease-free” status. This means that none of the serious diseases to which pigs are subject are present on the Farm. The demand for breeding stock from this type of herd is very high and such stock commands a price premium. There is also the possibility of an export market to Canada for this type of pig. Mr Brighton feels that this route would be beneficial for the Farm because of the price premium and because of the reduced dependence on the present volatile pig market.

Mr Stayton is mindful of the great expense and work involved in producing disease-free breeding stock. Such stock cannot be born in the normal way, instead, piglets are surgically removed from the sow under anaesthetic. The sow is then killed and the piglets are reared by artificial means. Veterinary bills for this procedure are high and each sow can only produce one litter. Hygiene on the Farm, and particularly in the special breeding unit that will need to be set up, must be maintained at a high level. Feed and medication for the piglets will be very expensive. An extra person will need to be employed to oversee the breeding programme. Buildings with an artificial environment for rearing the piglets must be erected.

## PROPOSAL 2

The Farm could continue to produce fatteners, but decrease its dependence on the factories, which dictate when they will take pigs from the farm. The price paid is determined by two factors, namely weight and leanness. There is a very narrow age range in which a pig is both at an ideal weight and at peak leanness. A week can make the difference between a good and a poor price for a pig. A further problem is that male pigs produce a hormone after a certain age which taints their meat. It is essential that male pigs are killed in time, otherwise they are fit only for pet food.

To reduce their dependence on the factories, Mr Stayton would like to expand the herd and build a processing plant on, or near to, the Farm. The plant could slaughter the pigs and process and pack the meat, or the slaughtering could be done elsewhere and processing alone could be done at the Farm. Specialised marketing needs, relating to type of cuts and hanging time, could be catered for in such a processing plant and an export market is a possibility.

Alongside the processing plant, Mr Stayton would also like to build a mill so that the Farm could produce its own feed. Feed is one of the highest costs of production and Mr Stayton feels sure that they could produce it more cheaply in their own mill.

## PROPOSAL 3

The factory farming conditions under which the pigs are currently reared is very efficient but not always effective. Under these conditions, medication costs are high, sows tend to suffer from arthritis of the knee joint, which reduces their useful life span, piglets are commonly crushed by their mothers and sows can have difficulties becoming pregnant again after giving birth. Despite these difficulties, this method of

farming is very popular. The reasons for this popularity is that the need for staff is very low, since one person can look after fifty sows and feeding and cleaning can be automated. Mr Brighton is aware of pressures from animal rights groups and is prepared to consider converting from factory to free-range farming. Meat from free-range pigs commands a price premium and has a ready market.

Converting the Farm to free-range farming will involve a considerable amount of reorganisation of the Farm and increased expenditure. The sows will live in individual huts and therefore the main building will have to be dismantled. More land will be needed because free-range pigs graze on grass, need room to root and, to prevent disease, the land must be rested periodically.

More people will need to be employed, at a ratio of about one for every twenty-five sows, but less medication will be used, fertility should increase and feed costs will decrease (factory farming increases nutritional needs). Breeding stock will need to be purchased, since free-range pigs cannot attain “disease-free” status.

## PROPOSAL 4

Mr Stayton is worried that all of the above proposals, even the one he is particularly interested in (proposal 2) would stretch the resources of the Farm. He proposes that they continue with the Farm in its present state for the next two to three years.

## QUESTIONS

- 1** Identify Blessed Farm’s stakeholders.
- 2** What is motivating them to become involved with Blessed Farm?
- 3** Evaluate each proposal identifying:
  - i** Blessed Farm’s relative strengths and weaknesses in respect of each proposal;
  - ii** The information required before such a proposal can be undertaken;
  - iii** The sources of that information;
  - iv** Which stakeholders are likely to be for or against the proposal and what their relative power is to obstruct its implementation;
  - v** The changes that have to be made in order to implement the proposal.