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## THE EFFECTS OF LABOUR STRIKE ACTION ON A LARGE SCALE DAIRY ENTERPRISE

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### Abstract

Industrial labour practices in southern Africa are new to all those involved with agriculture. The impact of a strike on an on-going biological production process has far more serious long term implications than does a similar stoppage in a factory production line producing with inert (non-living) materials. On a large irrigated scheme in the Eastern Cape, which includes a pasture based dairy enterprise, a number of work stoppages have taken place over the past 18 months. The paper quantifies the immediate and longer term financial impacts of work stoppages. The immediate consequences of the stoppages are loss of milk sales and market share, and the longer term consequences include the cost of premature drying off, lost production due to lower lactation over the recovery period as well as the cost of missed heats and inseminations on extended inter-calving periods. The various work stoppages were undermining the scheme which led to the resultant involvement of a recognised trade union in the area, believed to be one of the first trade unions recognised in agriculture. The conditions of the trade union agreement are highlighted. In conclusion, the implications of strike action for agricultural managers, development planners, investors and trade unions are discussed.

### 1. Introduction

Labour relations in southern African agriculture have lagged well behind much of the rest of the world. Only over the past five years the first evidence of movements of organised labour has become apparent. It is evident that abuses in the past have taken place and that there were instances of exploitation.

Strike action will become more common in the future as the labour movement increases in activity and influence. This paper analyses some of the effects of a farm labour stoppage on a dairy enterprise and concludes that understanding of each others situation is necessary to ensure that both labour and management benefit from the negotiating process.

### 2. The effect of cessation of milking on lactating dairy cows

Lactation is the result of two processes, namely the synthesis and secretion of milk into the alveolar lumen and secondly, the removal of milk from the gland. The majority of dairy cows will be pregnant again within three to four months of calving and lactation is terminated as a management practice, at least two months before the cow is due to calve again. 300 days is regarded as a standard lactation length.

Several important factors affect the yield of a lactating cow. These include the cow's genotype, the nutrient supply, climate (particularly temperature extremes), the age of the cow, disease conditions (particularly mastitis), hormonal influences (including the milking stimulus and also the oestrus cycle) and finally, removal of the milk on a regular basis, to allow further milk secretion. Incomplete milking has an inhibitory effect on subsequent milk secretion and this inhibition increases in degree as increasing amounts of milk are left in the udder.

There is no inherent diurnal variation in the rate of milk secretion, provided the udder is milked out at regular intervals. Increasing the interval between milking does reduce milk secretion and the instantaneous secretion rate drops to zero at between 30 and 36 hours after the last milking. It is recorded that on average the hourly secretion rate over a milking interval of 24 hours may be 15 per cent lower than over an interval of 12 hours. The long interval not only results in reduced milk yield over that interval, but the effect is extended to subsequent

intervals. In practical dairy farming terms, 16 hours is the longest permissible interval between herd milkings if yields are not to be affected.

### 3. The situation

The enterprise considered in this study is that of a large scale, pasture based dairy herd on the Ncora Irrigation Scheme, a Transkei Government funded irrigation project in the southern African Region D. The herd consists of about 2 000 Friesland female stock of which there are an average of some 760 cows in milk at any one time. Milking is carried out twice daily in two rotary milking parlours that are situated some six kilometres apart. Milk is collected daily and transported to the Ncora dairy factory, where it is processed and packed into a range of products for marketing.

Many of the dairy workers have been employed since the dairy herd was started twelve years ago. Wages and salaries are based on the agricultural minimum wage rates applicable in Transkei. A nine hour day, five day week is worked with additional pay for weekend work. The project encourages workers to improve their skills and status and since its inception a number have risen through the ranks and after appropriate training, are today employed as managers.

### 4. Herd productivity

The productivity of the herd at Ncora has been reasonable over the past six years, averaging 15,6 litres per cow per day. The average daily yield over these years for the month of April (the strike month) has been 13,4l/cow. The results of various efficiency measures used by Ncora, such as the numbers of cows in calf, cows inseminated, insemination success rates, animal weights, and intercalving periods compare favourably with study groups in Natal and the eastern Cape.

As in any dairy herd, milk production varies through the year due to many variable factors. This natural variation complicates the extraction of data applicable directly to strike action. In this paper only readily identifiable deviations from "normal" production trends have been investigated.

### 5. The effect of the strike on productivity and milk sales

The parlour workers did not report for duty in the afternoon of 10th April 1991 and cows were not collected and milked and again until the afternoon of 12th April. This was in effect a stoppage of 48 hours and four milkings were missed.

Average production at the two parlours from the 736 cows in milk on each of the two days preceding the strike was 10 457 litres. The direct loss of production due to the two day strike is therefore estimated to be 20 913 litres.

On the second day after the strike, Day-2, the yields were around 60% of yields before the strike and by Day-7 they had improved to around 75%. By Day-14 yields were at 81% of pre-strike levels and at Day-21 at 94%. Yields were near to normal by Day-28. It was encouraging to see overall herd yields return to "normal" after this relatively short time as it was feared that the lactation levels of all cows would be lower for the remainder of their lactations.

Some cows in late lactation were effectively dried off by the cessation of milking for 48 hours, the effects of which have been excluded from the above analysis. By Day-13 there were 96 less cows in milk than before the strike, whereas it should have been constant. Of these it is estimated that at least 90 cows were dried-off prematurely with a resultant loss of 17 640 l milk. Although production from cows in late lactation is low (5 to 8 l/cow/day), this is very economical milk as feed concentrates are not fed to these cows.

#### Missed Inseminations

If a cow in oestrus is not observed, recorded and inseminated, a further 18 to 21 days will pass before she is in oestrus again. This naturally signifies that her next calving will be delayed by three weeks and also that once she has been dried off at the end of her lactation, the "dry period" will be three weeks longer than necessary.

Over the past 60 months there has been an average of 78 calvings per month, representing an average of 2,5 successful inseminations per day. It can therefore be assumed that over the two days of the strike, five successful inseminations were missed. This in turn means that the Scheme will carry the cost of 105 additional unproductive cow days.

Further losses incurred this financial year are the milk sales of the five cows due to their calving three weeks later.

#### Gross Losses

The gross financial losses of the two day strike to the farm component of the dairy, before financing, are broadly estimated to be the following:

■ Direct milk sales	R14 430
■ Post strike milk sales	R21 590
■ Milk of dried off cows	R12 170
■ Unproductive cow days	R 300
■ Delayed milk production	R 1 300
TOTAL	R49 790

Various costs were not incurred during the strike which would reduce the net losses to the Scheme. These include mainly labour costs and feed concentrate costs at the time of the strike which are estimated to total some R11 060. The net cost for the two day strike, before financing and other fixed overhead costs was thus in the order of R38 730 or R19 365 per day. The total costs are thus some 2,7 times that of the loss of milk sales during the strike.

One can surmise that the compounding affect of, say, a five day strike would follow an exponential relationship, because longer strikes would cause further complications, such as the increased

incidence of both clinical and subclinical mastitis, an increase in cows prematurely dried off and ultimately the cessation of milk production altogether.

#### Affect on Dairy Factory

It is not the intention here to investigate the effects of the strike on the factory, save a few observation of relevance. In general, consumers require most dairy products on a daily basis so once stocks are depleted, or stoppages affect distribution, the factory's market share is immediately affected. Most of the markets in Transkei are supplied to a degree by large scale processors from the RSA based in Natal and the eastern Cape. Ncora must compete with these processors who operate extremely competitively and are willing to capitalise on any problem the Scheme may experience. The strike occurred at a time when a price war had just broken out in the Transkei and eastern Cape which proved advantageous to competitors.

Interruption of supply has negative implications for contracts, which are usually to institutions, but has the greatest impact on the loyalty of buyers in the retail sector, where contracts are not the norm. After the strike, Ncora was able to regain its market share after a week, but would experience substantially increased resistance if supplies should be interrupted again.

Dairy processing needs to be at a large scale and should include a wide range of products unless the production area is situated close to markets. The recent concentration of many RSA processors, such as NCD's (Clover) operations in Durban, and closure elsewhere in Natal, confirms the requirement for economies of scale. Past performance has shown that, at high volumes, Ncora is able to compete in the Transkei markets. The local market is valuable to Ncora but only accounts for some 35% of production with the remaining production being sold up to 200 km from the project.

### 6. Capital intensification of milking operations

It is to be expected that as the unions establish their position in the labour market in southern Africa, particularly if achieved through strike action, large milk producers will have to investigate options for reducing their risk exposure to labour. One alternative is to change to a less labour intensive milking operation.

The current parlours at Ncora are both 28 stall rotary "turnstyle" parlours, originally designed for rapid throughput and labour efficiency. Most parlours in southern Africa are "herringbone" or "tandem" parlours which are suitable for the handling of lower volumes of cows but have substantially higher labour requirements than turnstyle parlours. The option exists for the conversion of these parlours to a turnstyle type, but even here it is possible to reduce labour dependency further by installing automatic cluster removers and recorders. For example, in this case labour numbers at Ncora could be reduced by 60%.

As illustrated, it is possible to reduce dependency on labour, but the very nature of farming will not allow for the exclusion of labour altogether.

### 7. Trade union recognition

Over recent years the labour movement has become active and more influential in Transkei and has exerted tremendous pressure on both private and official organizations to improve wage levels and conditions of employment. This led to the introduction of minimum wages and a realization of the power of the labour movement. Although there has been relatively little labour union activity in agriculture elsewhere in southern Africa, this was not the case at the Ncora Irrigation Scheme owing to its size and resultant concentration of people and economic activity.

The Scheme has experienced a series of strikes over the past 18 months instigated largely, but not entirely, by the trade union movement. Strikes for higher wages occurred in October 1989, November 1989 and February 1990. These actions proved successful for the union because they were seen to have contributed to wages being increased by some 132% over this period. The Scheme's existing grievance procedures and liaison structures were rendered ineffective by the new movement, particularly since many issues were of importance beyond the boundaries of the Scheme. As a result, the continued operation of the Scheme was placed in jeopardy. Its closure would have been to the disadvantage of all concerned - jobs for the workers, essential services for the farmers and the erosion of a valuable national asset of the Government. Some extraordinary action was required to avoid such a disaster. Project management therefore pursued channels of communication that led to contact with appropriate trade union representatives who had the necessary authority. Management needed assurance firstly that the organization with which it was negotiating truly represented the sentiments of the majority of workers and, secondly, that set procedures would be adhered to.

Negotiations culminated in the signing of a recognition agreement with the Food and Allied Workers Union (FAWU) in November 1990. This was the first known agreement between FAWU and a predominantly agricultural business or company. The general principles of the agreement are briefly:

- a commitment by the Union and Scheme management to abide by the terms of the agreement which are enforceable by law;
- consultative procedures to resolve differences and to avoid disputes;
- respect for the affairs of each party including the commercial objectives of the scheme;
- freedom of association and membership rights of employees.

The details of the Agreement covers a wide range of aspects including:

- representation - Union support by 50% of the bargaining unit (workers) is regarded as representative;
- access - procedures for communication by Union officials with members have been identified;
- subscriptions - the Scheme would assist in the collection of Union subscriptions on a stop order basis;
- shop stewards - shop stewards would be elected annually to represent the members (initially eight appointed);
- negotiation and consultation - the structures for regular meetings and wage negotiations have been established;
- disputes - procedures for the identification and declaration of disputes have been determined;
- peace obligation - both parties have accepted the obligation of following set procedures and the respecting the rights of each so as not to disrupt the orderly negotiation process;
- other - health and safety matters, disciplinary, grievance and redundancy procedures are also included in the Agreement.

The Agreement and resultant liaison has, without question, avoided many disruptive situations and contributed to an improved understanding between the parties. However, the Agreement cannot prevent all problems as was borne out in March 1991 when members went on an illegal strike in sympathy with a dismissed colleague. This was repeated in April (the implications of which are analysed in this study) following disciplinary action on members involved in the March incident. The matter was taken to appeal, upheld, a number of legal strikes were threatened, various conciliation meetings took place and finally the matter went to external arbitration. The whole matter is extremely complex, but the Agreement, and the rapport which has subsequently been established between the

parties, helped to reduce the duration of the strike and ensured that the arbitration process continued along a path perceived to be fair by both parties. Generally the arbitration findings supported the actions of management in this particular case.

The "learning curve" for both parties will continue and conditions of the Agreement can be expected to change over time. For example, it is expected that more cognizance will be taken of those biological and humanitarian issues which pertain specifically to agricultural activities.

## 8. Conclusions

The study has shown that the production of milk from a dairy herd is an on-going biological process that cannot be simply stopped at will and then resumed after an interval. A short work stoppage on a dairy farm has both short and long term costs. A longer strike would terminate production altogether. Strike action can therefore be financially devastating on a dairy enterprise or any other similar biological process. The example of a government scheme has been given, but the implications would be the same for all existing large dairy producers in southern Africa.

The negotiation process is never complete and situations of conflict at Ncora can be expected to arise again in the future. So far the dairy herd has survived, and is still in production, because management sought all possible ways of addressing issues. In other circumstances the effects could have been disastrous - such as occurred at other schemes.

A number of conclusions can be drawn from this analysis which could be useful to agricultural managers, development planners, investors (government and private) and to trade unions:

- Workers in the agricultural sector have suffered from conditions of employment which have been worse than comparative labour in the industrial sector. It is therefore only reasonable that they should negotiate for the best possible conditions of employment. Southern Africa is entering an era of significant political and social change so the time is opportune for labour unions in agriculture to enter into the bargaining process and to assert their influence.
- The financial impact of strike action greatly strengthens the bargaining position of a labour union in any labour dependant, biological, enterprise such as a dairy project. Unless a compromise agreement can be arrived at with the labour unions, there will be less incentive for investors to establish similar enterprises, owing to the risk involved. This can only prove detrimental to development and job creation.
- The husbandry of animals must not be neglected while the bargaining process is under way. Such humanitarian issues need to be addressed so that the suffering of animals is minimized. Similar approaches to those applying to emergency services, such as in hospitals, should be considered.
- Generally in the case of dairying, production and particularly processing needs to be at a large scale unless the production area is situated close to markets. Ncora has proved its ability to compete effectively against RSA processors in the Transkei market - but only at high volumes and with regular supplies. The replacement of the Ncora factory with many small scale processing plants, to reduce the risk of strikes, would not be a viable alternative.
- The risk of large scale strike action can in theory be reduced at the production level, either through capital intensification or through risk dissemination. Capital intensification would occur together with an

increase in the level of expertise required, thereby further reducing employment opportunities in developing economies. Risk can be disseminated if many family operated dairy farms are established rather than a few large enterprises. This option is being investigated by the Scheme's management, but the record of success of such an approach is not good elsewhere in Africa, as a result of the level of technology required, economics of scale and the land ownership issue.

- Management must ensure that the labour unions are kept well informed of general business and market conditions at all times, so that labour action at an

inopportune time does not cause the demise of the project -to the disadvantage of all. Management, on the other hand, must be aware of employees' attitudes and conditions of employment to ensure that employees do not end up in the situation where they believe that desperate action is the only avenue open to them.

**Note**

The assistance of the Ncora Irrigation Scheme staff is gratefully appreciated as is the co-operation of the Transkei Department of Agriculture and Forestry.