

CHALLENGES IN LOGGING BUSINESS MANAGEMENT

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INTRODUCTION

I have been asked to address the Seminar on the economic and financial aspects of machinery developments in logging from an Accountants perspective. I believe the topic can be broken into two related parts.

Firstly, machinery developments can be taken as meaning just newer, bigger, better machines basically doing the same old job. It doesn't require great changes in conceptual thinking.

However machinery can also mean mechanisation and utilisation of totally different operating systems than have been available, or used, in the past. This will require significantly altered thinking both by Contractors and Forestry Company Management.

I believe that to survive in today's current difficult economic environment we are all going to have to be prepared to be innovative. This doesn't mean some "new fangled" or "smart-alec" way of doing things. It means being prepared to open our minds to the possibility that there are better ways of doing things than in the past, examining these alternatives and researching them properly, and then being prepared to implement these new techniques in a properly planned manner.

The people who are going to have to deal with these innovations are Contractors, Company Management and Government. I will deal with each of these groups separately.

CONTRACTORS

In the past the Contractor has generally operated one to two machines and a single crew operation. This probably involved investment of a maximum of \$0.5M and frequently significantly less, and rates were set based on production to enable a (hopefully) reasonable level of return somewhat above a Foreman's earnings.

This type of operation required a relatively high degree of supervision, had a relatively fixed rate of income, and featured a lack of willingness to innovate. By and large it didn't require a great level of Management skills, or these skills were not perceived as being especially important, more the physical skills as a Gang Boss and the ability to achieve target were important.

Of course these skills are important but I believe now days a Logging Contractor should be perceived as a person of many talents:

- Logger
- Man Manager
- Mechanic
- Machine Operator
- Negotiator
- Business Administrator/Manager.

These last two skills have not been greatly emphasised in the past but will I believe have greater importance as investment in machinery, or mechanised systems, becomes larger. This will involve significant and greater exposure to fixed capital costs with an accordingly higher level of risk.

For example, look at the "average" operation utilising a Skidder, a Bell and six men, with approximately 36% of daily costs in machine operating costs, approximately 55% in labour, travel and saw costs, and the remaining 9% to cover overheads and profits.

Utilising more expensive equipment to either replace labour units or increase production utilising the same labour units, is going to result in a significant increase in fixed capital costs, and accordingly the risk exposure of the Contractor.

This is going to demand significantly greater Management skills from the Contractor, not only in ensuring this system is operating smoothly in the forest, but also ensuring that it is priced and managed correctly.

LIRA has already recognised this by undertaking its programme of Business of Logging courses throughout the country, with the specific aim of improving Contractor's Management skills. One simple illustration from this course emphasises the importance of Management, and also the question of risk. Looking at an "average" gang again, a 10% increase in over or under production results in a 40% change in profitability. i.e. The over-producing Contractor is going to have a profit 133% greater than the under-producing Contractor. This differential is going to be greater as capital investment increases. i.e. The rewards are potentially greater, but so are the risks.

Risk Management

So how are these risks to be managed? As well as improving his own Management the Contractor needs to consider utilising the skills of professionals in a variety of industries servicing the Logging Industry e.g. Accountants, Insurance Companies, Banks, Solicitors, Professional Industry Associations (LIRA) and Finance Companies.

The question of Finance Companies is perhaps an interesting one. While several Finance Companies are well versed in the industry, greater flexibility is going to be required in terms of length of loan contracts on some of the proposed new equipment. Much of the increase in production coming on stream is going to have to be harvested by haulers.

The costs of haulers and ancillary equipment at times are well in excess of \$1.0M, but with a service life on the Haulers of conservatively eight years. There potentially are significant cashflow problems if Financiers refuse to finance over greater than the four to five years which has been the norm in the past.

Risk can only be managed by availability of relevant and up to date information.

Management Reporting

A particularly relevant example of the type of Management Reporting which should be utilised more is the use of the cost and profit centre concept.

This is where in a multi-machine operation, (e.g. Skidder and Loader), the direct operating costs of each of the machines at the very least, should be able to be separated in Management Reporting, thereby enabling the Contractor to identify and better understand his cost structure. Once that knowledge is available he is in a better position to determine what steps he should implement to improve his cost structure.

Most importantly for multi-crew operations is the profit centre concept, whereby the income and expenses from each operation, should be separately analysed to determine its profitability and to enable appropriate remedial measures to be undertaken if necessary. If some form of profit sharing is being undertaken to provide the appropriate incentives to Foreman/Managers, then this concept becomes even more important.

Similarly, it is important to know the profit for each operation to ensure that there is no element of cross-subsidy e.g. in a recent analysis undertaken by us for one of our Contractor/Clients, we were able to identify that his logging operation was being subsidised by his contracting operation i.e. effectively the Contractor would have been better just owning the log production operation.

These kind of analyses have been undertaken all too rarely in the past. They must be combined with production of up-to-date information for Contractors in a form readily understandable to them.

My experience is that Management is the critical factor in an operation. For example, traditionally it has been felt that maintaining newer machinery is potentially more profitable due to lower repairs and maintenance and greater machine availability and hence production. I am aware of several Contractors who run very old equipment. Even though their repairs and maintenance cost is high, the capital cost is minimal, and the profitability is still very good, mainly because they are excellent negotiators and Managers of their operations, and they have the information available to make the right decision.

COMPANY MANAGEMENT

Areas which may require a change in Management attitudes and philosophies relate to: production layoffs; contract tenure; application of appropriate machinery, safety and the required level of supervision.

Production Layoffs

Increasing capital costs tied up in high valued conventional machinery, as well as mechanised systems, is going to require a change in Management attitudes. It is not going to be as easy for Contractors to accept layoffs for even a few days, when their fixed cost structure is significantly higher.

This will require longer term planning and marketing by Companies to ensure such situations do not arise. Perhaps a "take or pay" system needs to be put in place i.e. where if a Contractor is laid off through no fault of his own an agreed percentage of the daily rate, necessary to cover the fixed operating costs, should be paid.

Contract Tenure

Similarly, the greater risks associated with mechanisation can be significantly reduced to the Contractor if he has a longer term contract, with less "out" clauses than is presently the norm.

If a Contractor is to invest upwards of \$1.0M in equipment, then he certainly is going to want some assurance as to long term work availability. If they know that they have the continuity of work they can cost the most appropriate machinery. Also Finance Companies are likely to have more confidence in lending to.

Tender System

An examination of the tendering systems which are becoming more popular may be required. I classify tenders as either "clean" or "dirty" tenders. A "clean" tender being when Contractors tender for a set rate of production from a specific area, whereby if they win the tender it is their decision as to the machinery they consider appropriate for that particular block and that they know they are working that block.

A "dirty" tender is one whereby a Contractor is required to look at a number of blocks and give an indicative price for logging those blocks, then perhaps ends up logging an altogether different area, with a price and/or target based on the indicative rate, which then brings all sorts of subjective factors into the costing equation.

This latter type of tender does not encourage Contractor confidence.

It also means that Contractors are likely to buy multi-purpose, more flexible and perhaps higher cost machines and allow for this in their rate, rather than concentrating on a special machine for a specific area or type of logging condition.

A further problem in tendering is the fact that some Companies require not just a rate per tonne, but also detailed costings backing up that rate. They then refuse to recognise any explicit profit element in the price, effectively expecting a Contractor to work for little more than wages. This is a ridiculous situation, and if Companies are wishing to attract the right quality of Contractor, and are serious about mechanisation they must recognise that an adequate return on investment, and allowance for risk is necessary.

Machinery Application

Mechanised operations, may have significant potential if utilised in the correct applications in New Zealand. However all too often mechanisation is seen merely as the opportunity to get machines to undertake the toughest, hardest blocks, where it is undesirable to use Motor Manual systems. Consequently the best results are at times not achieved, and the mechanised operations are regarded as failures.

Perhaps if they were utilised in the correct applications in the appropriate conditions then the enhanced levels of production may make them more cost effective.

I believe the Forestry Companies themselves perceive the potential benefits of larger, more mechanised operations. One Logging Manager recently commented to me that they believed there is a potential for up to a 20% cost reduction by utilising the appropriate systems. Others have commented that there is no way mechanised operations will be looked at until they can be proven to be cheaper than current production systems.

I believe that such comments focus too much on a cost centred type of operation. While potentially there may be cost savings in some mechanised operations, alternatively there may be enhanced profit potential on the more accurate mechanised systems, producing a higher quality product enhancing the return to the Company. Similarly the greater flexibility in certain circumstances for machinery to be double shifted to increase production rapidly where required, should also be allowed for. These factors need to be examined, as well as merely cost, by Company Management.

Safety

Company Management always, and quite correctly, stress the importance of safety. Both Australian and Swedish experience indicates that mechanised operations can significantly reduce the number of accidents. Are Companies prepared to pay a small premium for such operations to recognise these safety factors.

Another area to be considered on the topic of safety, is that utilising improved machines with higher specifications should not be seen as an opportunity to push such machinery out into more marginal (i.e. steeper) country where the risk of accidents increases. Many of the Contractors I deal with already comment on the difficult terrain under which current ground based systems are required to operate. Just utilising the new machinery to extend these limits further could be dangerous. At times a totally new system, rather than just adjusting current systems may need to be considered.

Supervision and Planning

Having crews mechanised and producing improved quality could also reduce the number of supervisors required, particularly if rates paid incorporated bonuses for good quality, with greater responsibility falling on the Contractor. The reduction in supervisory costs could achieve significant savings.

One of the areas to be considered is utilisation of fully mechanised systems. In the past quite often one particular machine from a system has been utilised without the remainder of the system. Quite often there are sound reasons for using a fully integrated system, although this may require more sophisticated planning in terms of wood flow, wood availability and uplift by the forestry company than has been required in the past.

Effectively there may be a trade off between a possible lack of flexibility (in terms of operating capabilities), of mechanised systems, against potentially higher quality (and value) production, and the ability to increase production when required. Logging Companies may have to decide what they want and be prepared to operate within changed constraints. Undoubtedly motor-manual systems will remain the most economic in certain applications, but equally there is potential for utilisation for appropriately planned mechanised systems in the correct applications.

GOVERNMENT

I believe the Government also has a role to play in the development of mechanisation, notwithstanding the Government's apparent desire to become less involved in industry or in applying artificial subsidies etc.

The reason the Government should take an active interest in Forestry is that Forestry is perceived as one of the great hopes for New Zealand's economic future, with a significantly expanded resource coming on stream over the next few years. I believe that the Government has an interest in two main areas, Training and Safety.

Training

Is that increased resource capable of being harvested under traditional motor-manual systems? Much of it will require hauler operations. Training programmes need to be set in place and funded.

One of the areas to consider is that lack of adequately trained labour resource is often quoted by Contractors as a constraint in their operations. Rather than training up many more workers in traditional motor-manual systems (presuming that there are people wishing to undertake this work), perhaps it is more efficient to encourage current Contractors to expand production by utilising mechanised technology where appropriate.

Similarly the industry tends to be hard on men, with not many older Contractors being actively involved in logging operations. Rather than seeing that pool of experienced talent removed from the Industry, mechanised operations offer significant potential to retain those experienced Contractors in the work force.

We need to be either prepared to put the money into training new people into the industry to handle the greater wood volumes, or re-organise and utilise more effectively the people currently involved in the industry. A decision must be made in this area.

Safety

Similarly I believe the Government needs to recognise the social costs of accidents associated with the forest industry. This is not just in terms of the direct cost of, say, chainsaw accidents, but also long term costs of seriously injured men, and in particular long term back injuries which appear commonly amongst many Contractors. Unfortunately current measurement of accidents only appears to concentrate of numbers and severity without an analysis of long term costs. Perhaps more work needs to be done in this area.

Utilisation of mechanised systems clearly offers significant safety potential. Swedish figures for example show that over the last 20 years mechanisation has gone from 17% to 80% of their operations. Over a similar period of time the accident rate dropped by 75%, while production eventually increased.

Many countries offer accelerated depreciation incentives on machinery. While I am aware the Government is interested in a "level playing field" concept, perhaps accelerated depreciation allowances or allowing say 150% depreciation claims on machinery rather than just limited to cost price, could significantly enhance the attractiveness of mechanisation, effectively creating an incentive to become more mechanised at very little cost to Government, with significant indirect savings in long term health care costs.

Such an approach may, to an extent, also compensate the industry for the disincentive to mechanise due to high interest costs previously imposed upon the industry by Government policies prevalent at the time. Those high interest rates clearly encouraged motor manual systems and set back mechanisation a number of years.

CONCLUSION

I have deliberately taken a fairly wide overview of a variety of financial and economic aspects involved in machinery and mechanisation developments. I have attempted to emphasise a number of areas which I believe require consideration. It is not for me to attempt to provide the answers in all those areas, rather it is for the industry itself to examine these areas.

I believe we can learn a lot from overseas experiences in machinery development and mechanisation. However it is very important that we acknowledge that overseas systems are best for overseas conditions and that we look at such systems very closely to ensure they are appropriate to New Zealand conditions.

There certainly will be times when they will not be. Equally there will be times where, if we are prepared to innovate and examine what is available elsewhere, these can be adapted appropriately to New Zealand conditions. The work of organisations such as LIRA in examining such mechanisation will be helpful, but to an extent someone will always have to bite the bullet and be the first to trial a new system. Consideration must be given as to who carries the risks for such trials, the Companies or the Contractors, (or perhaps the risk should be shared?)

It is obvious that greater investment in machinery is going to increase risk (and hopefully returns) to all involved. It therefore requires improved information systems and Management skills by Contractors to handle these risks, together with some examination of Company Management planning in certain areas, supplemented where necessary by appropriate assistance from Government.