

PLANNING CONSTRAINTS

THE MANAGEMENT

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At the moment New Zealand's exotic wood resource appears at least fully committed to existing processing plants, with additional pressure on standing timber being sporadically applied by log export spot marketeers. Privately owned old crop of easy access, non-demanding of specific logging equipment has long gone, leaving the stands of difficult access and extraction to be fought over. Many more recent plantings, jointly comprising significant areas, are in this category.

So it is the future logger required to handle the many varied terrain and soil types, product types and access conditions, which the main thrust of this seminar focuses.

While many constraints encountered in logging are common to major large scale operators and the smaller logger, this discussion will investigate the realm of the latter - the small operator. Most of the logging operations beyond the confines of the Volcanic Plateau are undertaken by those who fall into the category of "small operators". Their function has been most important in the past, during the phasing - in of exotics at the expense of indigenous, to maintain many and varied local industries based on exotics. Until recently adequate supplies of relatively accessible logs were readily available, such logs being harvested using simple and cheap equipment. This situation no longer exists. The present day logger, and those of the future are facing most complex circumstances, a reflection of advanced social and economic change.

For many of us, harvesting small lots of a non-recurring nature, will comprise the source of wood on which many processors will rely heavily in future.

The Small Lot:-

For the purpose of this exercise a small lot comprises any volume that is insufficient to occupy or justify the type of equipment most suited to its extraction, for a period in excess of nine months, or any other area where constraints may necessitate periodic production breaks. Many Forest Service Sale Areas fall into this category, together with company, local body, and farmer owned plantations.

Planning For The Future:-

The future logger will be engulfed by the aftermath of presently evolving sophistication. The weight of increasingly burdensome constraint effects, must be shared, the costs of which apportioned to all parties on whom the logger depends. He is frequently a small man (in financial terms only) yet has a major cost-benefit impact on his dominating partners between whom he will likely be constrained (the grower and the purchaser).

Preservation of the future of this small scale logger implies understanding of the total spectrum of constraints within which he is required to operate, by the forest owner and the log purchaser. Tactical planning of his operation therefore embraces at least two parties (logger and purchaser) but more likely the logger, purchaser, and forest owner.

The planning considerations are numerous, and the expertise necessary to ensure adequacy of planning is very varied. Our present understanding of 'logging planning' i.e. the matching of field conditions to equipment, in order to supply logs as and when required at a price acceptable to the purchaser, comprises only part of the planning component of the future. Even this element of planning has been found inadequate particularly where one party alone has assumed responsibility for its compilation.

The Constraints:-

The constraints well known to loggers that can and should be anticipated are:-

1. (a) Weather:-

- extraction
- loading
- transport, forest roads, County road closures during Winter.

(b) Resource Size:-

- inadequate to justify the type of machinery most suited to extraction, loading & cartage.

(c) Production Requirement:-

- Processor or purchaser unwilling or unable to accept sufficient regular supplies to justify the operation of equipment most suited to the field conditions.

Other constraints that are not predictable and cannot as a rule be anticipated are those which may have serious financial consequences to one or more parties along the harvesting chain. Despite being termed 'unpredictable', the industry has a long record of such eventualities.

2. (a) Market Collapse:-

- export log, roundwood, sawn timber.

(b) Major Financial Collapse:-

- any one or more parties between forest and market.

(c) Invasion of Working Circle:-

- new competitor seeking to secure the logging by price cutting; a new competitor for the logs; processor being attracted to the purchase of cheap logs from an outside source, dumping of cheap sawn timber on a (or roundwood) "foreign" market necessitating production cuts.

Forest management and environmental constraints are those which will likely emerge as major considerations in the near future. An awareness by forest owners, catchment authorities and county councils that logging may be undertaken without severe site damage, will likely force the hand of industry to employ equipment and techniques to take account of these emerging values. The limitations county councils may place on logging in future, or in fact have already enforced in some counties, may prove to be particularly onerous. Forest owners may require cable systems to be employed as an aid to re-establishment of weed infested sites. These and numerous other in - forest constraints will either load costs of logs landed at the market, or constitute a re-education in value to the grower. Either way the logger in the centre will surely carry a share of the burden.

Assuming the above constraints are taken account of, the small logger proceeds in accordance with his interpretation of the options available. The constraints personal to any logger are those centred on his business risk, the most crucial constraints to the sole trader. It is these aspects of logging the forest owner and log purchaser desire to be shielded from, in most cases anyway.

1. Equipment:

- (a) Type - hauling, loading, trucking.
- (b) Utilisation - adaptability, flexibility.
- (c) Risks to capital employed - value in event of forced sale.

2. Labour:-

- (a) Degree of permanence - stability.
- (b) Cost - special skills.
- (c) Training, safety.
- (d) Redundancy or alternative work.

3. Produce Disposal:-

- (a) Security of produce outlet over range of product types.
- (b) Capacity of purchaser to carry stocks.
- (c) Ability and willingness of purchaser to agree to and accept a monthly volume for a sustained period.

4. Job Security:-

- (a) Wood procurement.
- (b) Price reviews.

Discussion:

In general a contractor enjoys support of either a forest owner, or the log buyer, providing this employer is satisfied the operator is 'efficient'. Efficiency is generally measured in terms of amount of royalty received (in the case of the forest owner being the employer) or the cost to put logs on a truck (when the log buyer is the employer). The indirect costs incurred in achieving this "efficiency" may not be taken account of, therefore the total efficiency is questionable. Operators required to work small lots will surely avoid specific equipment. The resultant compromise will result in skidder areas and hauler areas being respectively trodden to death or quarried by the old D7. Constraints on production and the effects of insecurity allow the operator no alternative.

While some operators will never enjoy the luxury of owning a soundly based logging business with an assured future, enlightened tactical planning could vastly improve the status of logging in some regions at least.

The basic requirement of any logger is that he is efficient. Efficiency cannot be gauged any longer by direct cost comparison, as most employers tend to believe. For efficiency to be achieved in real terms, the forest owner, log purchaser and logger must be committed to tactical planning, the means by which account can be taken of the entire spectrum of constraints, enabling costs and benefits to be accurately established. Each party must therefore be technically equipped to participate in such planning, an exercise essentially in the recognition and assessment of basic principles.

If it is considered desirable that the small logger continues to play a major role in the harvesting scene it will be most important that work duration and volume is adequate to justify the provision of specific equipment. It is likely log purchasing agreements will be conditional upon the provision of specific gear, such gear being mandatory to meet requirements as defined in a meaningful logging plan.

A step toward the achievement of logging efficiency has been taken by two competing sawmillers whose individual annual requirements could not attract the type of equipment most suited to efficient extraction. A successful joint tender for a State Forest Sale Area produced a simple solution to what had been a major logging problem for two sawmillers over many years. A case where commonsense prevailed and several D7's were retired in favour of a hauler. Grouping of small lots (particularly cable hauler areas) must surely be forced upon the owners to enable such areas to be marketed in future. In some way loggers must be attracted to these stands otherwise many will remain standing.

Those involved in marketing of wood from areas that necessitate specific equipment (hauler) must appreciate the planning constraints that demand full recognition. Of equal importance, the log buyer must play his part. It therefore follows, the logging planning exercise must be undertaken ensuring total involvement of the woodlot owners (or forest owner) the processor or log buyer and most importantly the logger. Each must make a commitment in the interests of the other parties. Where such co-operation is not possible the logical solution will be for the forest owner or the log purchaser to shoulder the burden of equipment ownership and labour management. This may be his first opportunity to understand fully what logging is all about.