On the other hand, the new technology offers a number of real advantages: it can free up workers occupied in heavy manual labour, reduce the incidence of on-the-job injury, raise labour productivity. There is one solution to this dilemma: we have to define precisely the optimum system of machinery that would result in the maximum reduction of losses.

Last year "Krasnoyarsklesprom" Association enterprises felled almost half of the total volume of timer with feller units and used chokerless tractors to skid 66% of the logs. Experts concluded that one LP-19 working in a complex with two LP-18s was equal to five LP-49 feller-skidders in volume of work done. At current prices the cost of the five feller-skidders would be 40,000 roubles more than the above-mentioned complex. The LP-49, of course, is highly productive. Thus, if it were made more reliable and the design improved it would justify itself for use in stands with a low long-log volume.

The situation with another feller-skidder, the VM-4A, is quite another story. It was designed for operations in stands of large pines where there is no viable undergrowth. Over the past 15 years stands of this type have practically disappeared in the Krasnoyarsk Kray: there is a surfeit of undergrowth in almost all the felling sites. As a result, the fines that have to be paid for destroying the undergrowth have risen correspondingly. Thus, it turns out that unproductive costs increase yet the take of commercial timber per hectare falls.

After numerous requests from this
Association and from other associations as well, the
Ministry has asked the USSR State Committee for
Forestry (Goskomles) to permit the use of multi-unit
machinery in felling sites covered in undergrowth.