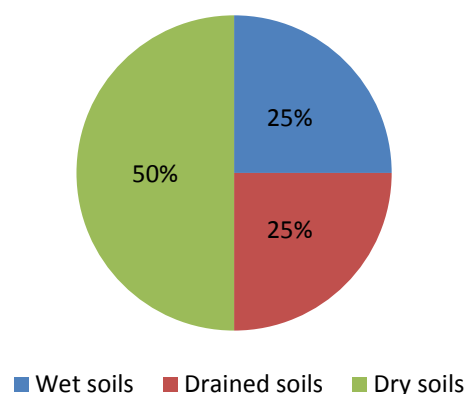


Non-durable use wood motor roads

Matiss Bicevskis, JSC “Latvia`s State Forests”, m.bicevskis@lvm.lv

Latvia`s forests cover about half of the country's total area. About half of the total forest area is located on drained or wet soils. Due to that circumstance, logging is possible in frost conditions or near good forest roads network.

Latvia`s forest soils distribution, %



But there are situations when forest roads building are not rational, but timber supplies must be ensured throughout the year. In these cases Joint stock company “Latvia`s State Forests” (LVM) has started to implement non-durable use wood motor roads technology in producing processes.

The project commenced in 2009 when the project team began to identify the best practices of wood roads. The summarized expertise and the defined needs have been conveyed to the designers who in turn have offered the respective solutions of their own. Based on the solution developed, the first prototype was manufactured in 2010.

Non-durable use wood motor road`s shields



The technology is based on wood shields fabricated of sawn timber. These shields are laid on pre leveled ground. Along such roads, timber trucks with a total weight of 52 tons can

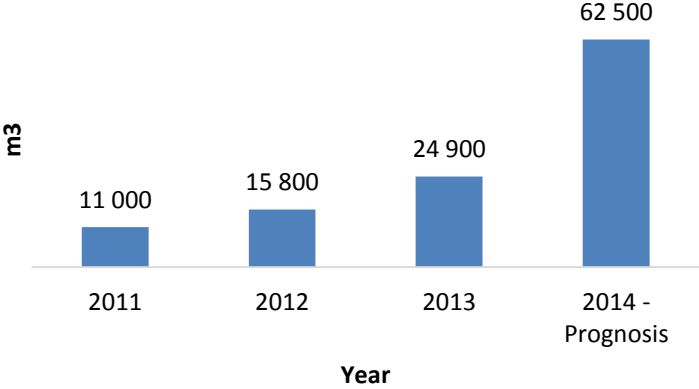
move. It is possible to construct these roads on soils with very low bearing capacity – even in places where it is impossible to drive with forwarders permanently.

Field testing of prototype



Field tests confirmed the calculation results. The implementation of this technology into the production processes was started. Currently LVM operates 3.5 kilometres of wood roads. Total amount of round timber transported across the wood roads is growing from year to year.

Total amount of round timber transported across the wood roads, m³



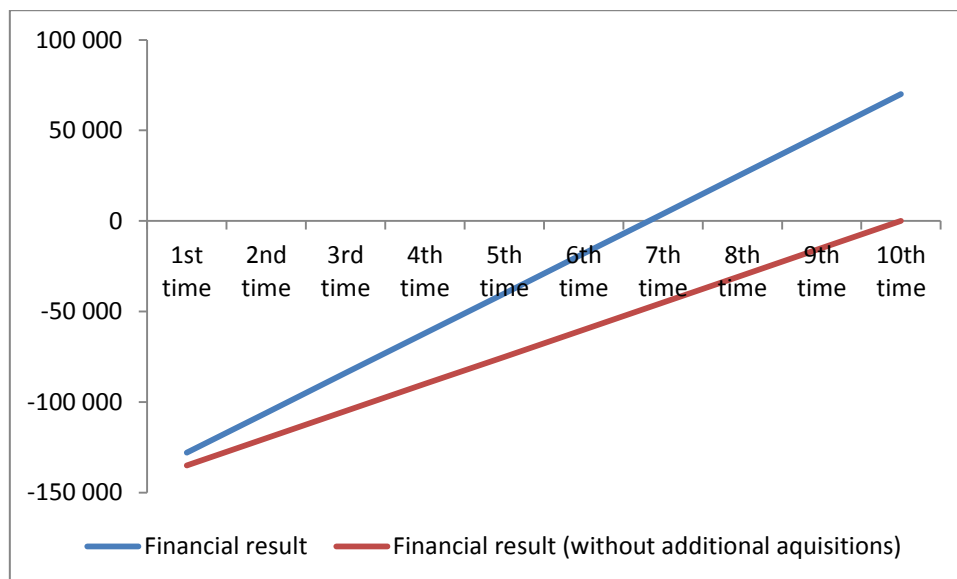
Production facility



Due to wood roads technology it is possible to make landings in felling areas. It economizes time and resources that would be used to carry timber from felling areas to existing roads with forwarders.

The experience shows that the wood road related costs can be covered of cutting down transportation costs. If we make due allowance for such things as timber availability and environmental aspects, the wood road usage will pay back as early as the seventh operating cycle. It should be noted that one wood road set can be used at 3 sites at an average in the course of the year.

The financial effect of using non-durable wood roads, EUR



This technology decreases timber logging impact on the environment, reduces timber logging costs and ensures timber availability.

Non-durable wood road track 3 months after the dismantling of the road

