

## **CUSTOM MADE LOGGING TRACTOR**

This enterprise was founded in 2001; division forest-timber founded in 2005. It is one of the biggest Enterprises in Slovakia, which provides forest services. Annual turnover is approximately 100 000 000 sk (EUR 3319000). Division forest-timber creates 14% of total turnover of the enterprise.

It is one of the biggest private firms in Slovakia who provide forest services. It employs 73 employees and is cooperating with many sole traders. In division forest-timber is working 20 employees (including 5 forest engineers).

Employees are qualified in activities, which they are carrying out. Operating staff of harvesters have mostly long work experiences from foreign countries.

### **Machinery**

Equipment is quite new, modern with qualified operators. Investments in innovation are markable.

Harvesters: ROTTNE H14, ROTTNE 5005, ROTTNE H8

Forwarders: TIMBERJACK 1110D, ROTTNE F14, ROTTNE F9, TIMBERJACK 810D

Others: Processor forest cableway MOUNTY 2000, 2x special logging tractor REFORM custom made, grinder JENZ AZ 660D,...

All of these were bought new.

Enterprise is searching for novelties to get advantages against competition – it is very open-minded. Whole research and development activities are reserved to suppliers of machines. (Firm has bad experiences with cooperation with research institutes)

Investments to new technologies are in large amount. In 2007 was bought most of current technical equipment (total investment of 120 000 000sk – EUR 3983300).

This is a private enterprise with relatively big turnover, so the investment conditions are good. In 2007 was this firm the most investing private enterprise in forest machinery in Slovakia.

Firm is utilizing structural funds for buying forest machinery in maximum amount.

In comparison with state forests, there is easier acquisition, because of simpler selection procedure.

### **Policies fostering development**

- Council Regulation (E.C.) No 1698/2005 (National strategic plan for rural development SR 2004-2006, axis 2.1) Enterprise had bought innovative tractor REFORM with subvention of 50% of tractor's price.

- act of National Council of the Slovak Republic No 239/2001 – red diesel oil – lower tax; red diesel oil could be used only by registered subject and only for machines working in agriculture and forestry. – Lower expenses for fuelling (11, 5% cheaper whit comparison with normal diesel oil).

### **The Innovation**

Custom made logging tractor made by firm REFORM. Innovation is based on foreign research and development (Firm REFORM). Enterprise is trying to find out the optimum machinery for Slovak conditions.

This tractor was bought for its tender work in forest terrain. Horses, as skidding device, are still harder to find, so firm was searching for technical replacement of it.

Enterprise doesn't do any own research.

Tractor REFORM was ordered on the basis of concrete enterprise's requirements. Welsh firm REFORM is innovating its own machines by impulses of KT servis, with which has durative cooperation. Requirements were given on basis of experiences from praxis.

This tractor is new not only for enterprise, but for whole Slovak market and probably for Foreign markets too.

It can provide advantage against competitors in sense of more careful tractor skidding (it gets near to horse skidding)

On the present, the staff is learning how to work with this tractor effectively, to use fully its advantages, but first orders realized by this tractor indicate its wide use in Slovak forests.

Seeing that this is a unique machine, we can suppose, that there will be a wide request for its services.

The general actor of this innovation was director of division forest-timber, who addressed firm REFORM with question, if it is possible to make a tractor with 200m cable. No special research was done before this innovation, but experiences from praxis were used as the foundation of this innovation.

Director of division after consultations with workers came to an opinion, that small tractor with long cable can be really effective skid timber in terrain conditions of Slovakia. Tractor was bought with 50% help of structural funds of EU on basis of presented project. There wasn't any role of regional policy agents.

Fostering factor was at first the subvention covering 50% of price of the tractor, which was provided by Agriculture Paying Agency. Next was the long-time cooperation with firm reform, with which enterprise sustains good relations. One of the impeding factors is protectionist associations, which prefer animal skidding facilities against machines. On the present, there is a lack of horses for work in forest and the same problem is with horseherds.

This was actually the goal of this innovation. The other impeding factor is that the subvention from structural funds is limited to 200 000sk and can be provided only one time in 3 years.