EXTRAFOR | Exoskeletons for forest works

The Extrafor project aims to reduce the drudgery of logging by creating an exoskeleton adapted to the needs of manual logging.

The mechanization rate for harvesting hardwood stands is only 10% and mechanization in silviculture is very limited. Many operators report musculoskeletal disorders.The use of exoskeletons in the forest would make it possible to assist the operators in their work, it would make their task easier while aiming to preserve their health, without of course compromising their safety. It is a hybrid solution that combines the acuity of manual work with the strength and endurance of a machine, while obviously remaining affordable. Equipping field workers with ergonomic exoskeletons, adapted to work in the forest is an intermediate and complementary solution between mechanisation and manual work, allowing the unblocking of certain difficult situations. Seeking to increase human capacity instead of replacing it is also a way of meeting the various expectations of citizens (maintaining jobs in rural areas, social acceptability of forest sites) and of enhancing the value of work in the forest (and the sector) by promoting this type of initiative.

MORE DETAILS

CHALLENGE ADDRESSED

4.- Ensure a well-trained workforce through attractive skills development and education

DOMAIN

Harvesting, infrastructure, logistics

TYPE OF SOLUTION

Smart machinery, equipment

KEYWORDS

Exploitation
mechanisation
penibility

DIGITAL SOLUTION

No

INNOVATION

Yes

COUNTRY OF ORIGIN

France

SCALE OF APPLICATION

National

START AND END YEAR

2017 - 2020

CONTACT DATA

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https://www.fcba.fr/travaux/technologies-de-linformation-et-de-la-communication-pour-lexploitation/

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REFERENCES AND RESOURCES

MAIN WEBSITE

https://www.fcba.fr/travaux/extrafor-exosquelettes-pour-le-travail-en-foret/

PROJECT WEBSITE

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PROJECT REFERENCE

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RESOURCES

LOGO OF BEST PRACTICE

LOGO OF MAIN ORGANIZATION

PROJECT UNDER WHICH THIS FACTSHEET HAS BEEN CREATED

Rosewood 4.0

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