## **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.

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MORE DETAILS CHALLENGE ADDRESSED **DOMAIN** TYPE OF SOLUTION Harvesting, infrastructure, logistics 4.- Ensure a well-trained workforce through Smart machinery, equipment attractive skills development and education **KEYWORDS DIGITAL SOLUTION** INNOVATION **Exploitation** No Yes mechanisation penibility **COUNTRY OF ORIGIN** SCALE OF APPLICATION START AND END YEAR National 2017 - 2020 France CONTACT DATA OWNER OR AUTHOR REPORTER **FCBA Marin Chaumet** Henri Husson Marin.chaumet@fcba.fr h.husson@crpf.fr https://www.fcba.fr/travaux/technologies-de-linformation-et-de-lacommunication-pour-lexploitation/ **REFERENCES** AND RESOURCES \_\_\_\_\_ MAIN WEBSITE **RESOURCES** https://www.fcba.fr/travaux/extrafor-exosquelettes-pour-le-travail-en-foret/

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PROJECT WEBSITE

PROJECT REFERENCE



## PROJECT UNDER WHICH THIS FACTSHEET HAS BEEN CREATED

Rosewood 4.0

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## A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY





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