

## 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

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### 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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### OWNER OR AUTHOR

#### FCBA

Marin Chaumet

Marin.chaumet@fcba.fr

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

### REPORTER

Henri Husson

h.husson@crpf.fr

## REFERENCES AND RESOURCES

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### 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

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LOGO OF MAIN ORGANIZATION

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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

