



Current Technology in Forestry Plant Production

Year 11 Agriculture

Case Studies:

a) Spot Messenger and Ezy2See

b) Cengea

c) Optimiser

Outcomes

A student:

P3.1 explains the role of decision-making in management and marketing of agricultural products in response to consumer and market requirements

P5.1 investigates the role of associated technologies and technological innovation in producing and marketing of agricultural products.

Students learn about:

Use of technologies in producing and marketing plant products

Students learn to:

Research and describe a current technology in plant production or marketing



Technology in Agriculture

Technology is defined as “The application of scientific knowledge for practical purposes, especially in industry..... Machinery and devices developed from scientific knowledge”.¹ Technology in Agriculture has significant advantages to all stakeholders.

Activity One

Click on the following link and identify 6 benefits of technology:

<https://www.reference.com/business-finance/advantages-technology-agriculture-e98bd9e54f61b68f>

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

The forestry industry in Australia “contributes over **\$22 billion** of economic turnover each year and employs **66 000** people”³. The use of forestry products range from paper production to housing construction to biofuel generation to furniture manufacture and are a product that we utilise regularly in our everyday lives.

Producing timber sustainably, and at a rate that can meet consumer demand, is important to the industry and technology assists producers in meeting these targets.



Activity Two

Watch the following video link on technologies that are being utilised in the Forestry industry in Victoria and answer the following questions. [Technology in Forestry Part One](https://www.youtube.com/watch?v=y4djkgFIG0zA) - (6.40) → <https://www.youtube.com/watch?v=y4djkgFIG0zA>

1. Identify 2 aims of the innovations.

a)

b)

2. Cengea is basically a _____

_____.

3a. Prior to Cengea, describe how harvested logs were recorded?

3b. Identify some of the issues with this method of data collection.



4. Describe some of the information that Cengea can collect that is beneficial to stakeholders in the Forestry industry and supply chain.

Table 1:

Data that can be collected from Cengea:	
---	--

5. Explain how Cengea has improved Occupational Health and Safety (OH&S) in the Forestry industry.



6. Construct a flowchart in the space provided showing how information is collected by Cengea and where it flows to.

Flow of information from Cengea.



7. Define the term “chain of custody”.



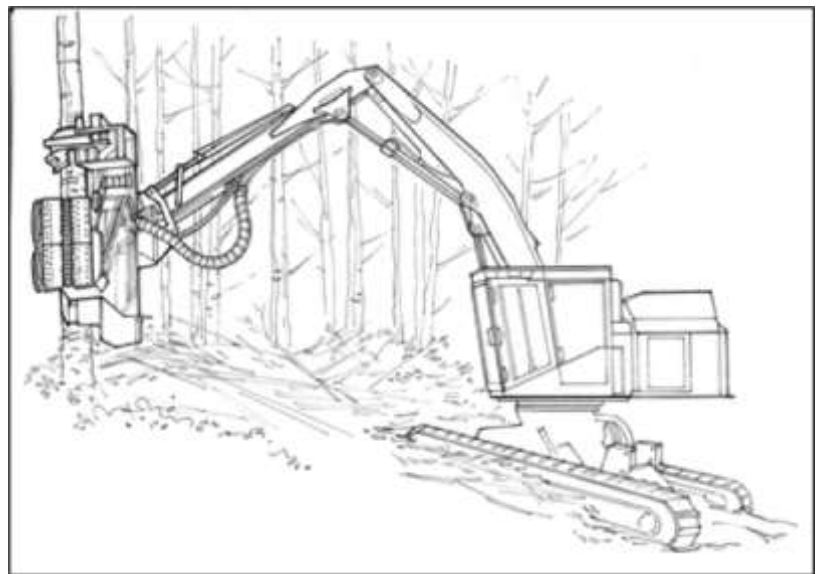
Activity Three

The following video link provides a case study on the “Optimiser”. This is an optimisation head that is incorporated onto the current machine that harvests timber to provide extensive ‘real time’ information to the producer regarding the trees they are felling. [Technology in Forestry Part Two](#) (5.44) -

<https://www.youtube.com/watch?v=7TiYPTFi6Lo>

- a) Watch Technology in Forestry Part Two using the link above and annotate the diagram to identify positive features of this technology.

Optimisation Head



- a) In Table 2 below select two features of The Optimiser and describe why these features are advantageous to the industry.

Table 2:

Feature	Description of advantage.



b) Describe how the technology **Spot Messenger** assists employees and employers in the Forestry industry.

c) **Ezy2See** is a technology that is being utilised by workers in the industry. Explain the advantages of this technology from an OHS perspective.

References

1. Oxford dictionaries -
<https://en.oxforddictionaries.com/definition/technology> accessed 12/4/2017
2. <https://www.reference.com/business-finance/advantages-technology-agriculture-e98bd9e54f61b68f#>
accessed 12/4/2017
3. Technology in Forestry - Part One
<https://www.youtube.com/watch?v=y4djKFIG0zA> accessed 12/4/2017
4. Going Bush 6 - Episode 2- SEG B - Forest Technology Part 2
<https://www.youtube.com/watch?v=7TiYPTFi6Lo> accessed 11/4/2017
5. Image of Optimisation Head
<http://www.nzffa.org.nz/farm-forestry-model/the-essentials/roads-and-harvesting/timber-harvesting-in-new-zealand/> accessed 12/4/2017

Commons License



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

ForestLearning is an initiative of Forest and Wood Products Limited and these resources have been developed by qualified educators and designed to assist teachers deliver the Australian Curriculum.