

# Activity

Link to application: <https://microworld-dissertation-tcd.vercel.app/>.

**Warning:** Refreshing the screen will reset the world. Progress will be lost. Please refrain from doing so. If you'd like to refresh, you might consider downloading your work first so that it may be restored later.

## Warm Up

(15 mins)

Familiarize yourself with the tool.

Use the help page, and/or ⓘ symbols.

Ask questions.

## Exercise 1

(40 mins)

Maximize income.

- Draft a plan.
- Run it.
- What is the overall income you made? This is your overall long-term earnings.
- What was the lowest income in any rotation? This is the minimum amount you are guaranteed to earn in a rotation with your current plan. This is your short-term earnings.
- Update plan and try again.

1. Try different rotation periods (40 years, 20 years, 10 years, 80 years).
2. Try plantation v/s mixed forest.

Note down observations.

## Exercise 2

(20 mins)

Set rotation period to a good value as identified from the previous challenge.

Set the lowest CO<sub>2</sub> target that you can satisfy:

- Start with some target atmospheric CO<sub>2</sub> concentration.
- Check if the target is still green by year 300.
- If so, you've met that target! Try to lower it and go again.
- If not, then perhaps alter strategy and try again, or settle for a higher target value.

1. No chopping at all.
2. Chop only older trees.
3. Chop only younger trees.

Note down observations.

## Cool Down

(45 mins)

Presentations & discussion.

Questionnaire: [https://docs.google.com/forms/d/e/1FAIpQLSdWo-ZsW2kTO-gkc0gQ0hettY08L5G7jTs0WvaTIQxn161z3Q/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSdWo-ZsW2kTO-gkc0gQ0hettY08L5G7jTs0WvaTIQxn161z3Q/viewform?usp=sf_link)