## 2040 - Food Security and Urban Farming



Name	Class

## **Student Worksheet**

# Thought-starter: What is food security and why is it important?

### **Urban Agriculture in Your Area**

In this part of the lesson, you will be working in groups to develop an agriculture project in your area. In your groups you will need to:

- Identify a site. This could be in your school (such as an unused part of the school) or in your community (such as vacant or under-utilised land, or unused buildings).
- Identify what form of urban agriculture would be most suitable, such as vertical farming or green walls, hydroponics, aquaponics, rooftop or backyard gardens, street landscaping, animals (e.g. chooks) or bees, or greenhouses.
- Create a report, poster, or video to share your ideas this should include maps, diagrams, proposed forms of urban agriculture, and justification for design and site selection and.

#### **Site Selection**

Record the details of the site selected for your urban agriculture design below.

Location of the site (give the address and/or coordinates):

Type of site (e.g. unused land in town, curbside land, school land etc.):

Details of the site (e.g. existing vegetation, existing infrastructure such as walls or paths, size of site, etc.):

### **Urban agriculture selection**

Now think about how the parameters of your site might affect the type of urban agriculture you will choose, for example, if your site is adjacent to a wall and does that mean you could incorporate vertical farming? If your site is reasonably isolated, could you plan for bee hives? Or if you have a larger open space, could you be adventurous and design for aquaponics?

Discuss your ideas with your classmates and when you have chosen a form of urban agriculture for your site, record this below.

The type of urban agriculture we propose for our site is:
We have chosen this form of urban agriculture because:

Once complete, spend some time thinking about and addressing the following (add notes to address each point):

Size of the site - Some forms of urban agriculture require significant infrastructure; will your site be able to accommodate this infrastructure? Justify:
Potential site disturbance - Some sites may experience regular foot traffic; how might you mitigate against site disturbance?
Shading - Some forms of urban agriculture will require sunlight; does the form of agriculture you have chosen require sunlight and how will your site accommodate this?
Energy and water - Some forms of urban agriculture require access to electricity and water; how might you ensure your site has access to these resources?

## **Create a proposal**

You now need to work in your groups to create a report that describes your proposal. This should include:

- Site selection and details of the site, including map (including BOLTSS Border, Orientation, Legend, Title, Scale, and Source) and photos of site (if available).
- Suggested form of urban agriculture and justification for this form of urban agriculture, including a sketch of how your design might look once complete.
- Social and environmental benefits of your design.
- Risks and challenges of design and proposed measures to address these.

## Reflection

Work independently to suggest a response to the following question:
Do you think we should be including urban agriculture in all future designs of urban environments? Explain your answer.

## These lessons have been created in partnership with 2040, Good Thing Productions



