Module 6: Agri-Systems Across the City-Rural Gradient
Think Think Pair Share: Guided Design Jam

Lesson A
Grouping: 2-3 persons
Time: 25-30 minutes for option (1-3)

Materials:
Printed worksheet (this page), Pens or pencils, Scratch paper for drafting, Markers or colored pencils (for sketches), Ruler, and Phone or Laptop (optional)

Objective:
Design a food production system that integrates agriculture into an urban context (e.g., balcony, rooftop, school courtyard). This activity challenges you to consider how land use, resource access, food security, and sustainability intersect in cities.

Instructions:
1. Work with a partner or small group.
2. Choose ONE focus for your design:
    a. Mapping Loops
    b. Water-Use Target
3. Create a rough sketch and description of your system, noting:
    a. Key components (e.g., hydro tower, raised beds, rooftop greenhouse)
    b. Inputs (water, energy, labor, waste)
    c. Outputs (crops, heat, by-products)
    d. Circular links (how waste becomes an input)
    e. Efficiency notes (metrics or technology choices)
4. Be ready to share your design with peers in a short (2–3 min) presentation.

Your Task:
Use the scaffolded tables below to capture your ideas. Sketches can be drawn on a separate sheet or inserted as photos.

Design Table

1. Choose ONE focus (check): □ Mapping Loops □ Water-Use Target (set target: _____ L/kg)	2. If setting a water target, write it here (e.g., 30 L/kg): (step 2 is optional unless a water-use option chosen.)

Key Components: (e.g., Hydro	Inputs: (water, energy, labor, waste)	Outputs: (crops, heat, by-products)	Circular Links: (waste → input loops)	Notes on Efficiency: (metric estimates, tech)

tower, Berry tunnel)				

3. Quick Reflection: What is the most significant sustainability advantage of your design in this zone?

Reflection

Select 3 of these questions to explore with your group:

1. How does the concept of circularity help in building more efficient urban agri-systems?
2. What technologies or strategies would provide the greatest sustainability boost in a city?
3. Which inputs were most challenging to balance in your urban design?
4. If you could only improve one resource flow (water, energy, nutrients), which would it be and why?

Selected Question ____:	Key Insights from Group Discussion:

Selected Question ____:	Key Insights from Group Discussion:
Selected Question ____:	Key Insights from Group Discussion:

Skills You'll Use:

- Systems thinking
- Problem-solving and creative design
- Understanding of feedback loops and circular economy principles
- Communication and collaboration