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STT Group: 26 GHC Name: The Connoisse

Green Heart Action Plan

Problem Definition/ Problem Statement

Diving into the harmful effects of pesticides on our health and food.

Root Cause of the Problem

The chemicals inside the pesticides would be the root cause of the harmful effects.

List at Least Three Credible Resources that Support Your Problem Statement

- <https://foodprint.org/issues/pesticides/#:~:text=Health%20problems%20associated%20with%20long.testicular%20and%20soft%20tissue%20sarcoma.>
- <https://earth.org/the-environmental-and-health-impacts-of-pesticides/#:~:text=Pesticides%20can%20have%20profound%20negative,natural%20pest%20predators%20like%20ladybugs.>
- <https://cultivateconnections.org/what-if-farmers-did-not-use-pesticides/>

Proposed Solution

We would switch to a natural pesticide to cut down on harmful chemicals.

How We Will Measure Our Success

We would test organic, harmful, and natural pesticides on strawberries, and test the ph levels and see if it got more acidic.

Who are Decision Makers We Need to Reach

- ***Pesticide experts***
- ***Chemists working with pesticides***
- ***Farmer market organizers***
- ***Farmers who use pesticides, local (organic) farmers***

Our 3-5 Step Plan for Change

- Grow a strawberry
- Find local sources with strawberries and find what pesticides they use
- Do tests and find what has the best effect as a natural preservation
- Inform our community with infographics and do a stand at a farmers market informing people of the effects of pesticides



Impact & Equity

This would make a positive impact on low income residence preferably in food deserts or not organic foods. This project would help teach how to preserve food, and find less harmful food.

What Help We Need to Be Successful

We need a reliable organic farmers market, and get pH probes from the science center.

Date:	STT Group:	Name:	GHC Group Name:
02/03/26	26	Adissalem Ergano	Connoisseurs

Purpose

"Today is not about getting the 'right' answer. It's about testing your thinking with people who know the work."

Phase 1 - Research Prep Lab: "Lock in your focus."

- "Leave with a tight problem statement + 3 strong questions + 30-sec pitch."

1) Problem Tree Tune-Up Checklist (15 min)

Check	Quality checks (students verify before speaking with partners)
☒	Problem (trunk) is local + specific: who/where/what.
☒	Symptoms are observable (things you can see, count, measure, or describe).
☒	Causes are testable (not just opinions).
☒	Root cause is deeper than a symptom and points to a system (access, policy, infrastructure, education, economics).
☒	Research question matches the root cause (cause → effect).
☒	Evidence gap is clear: what do we still need to prove or disprove?

2) Question-Building Workshop (15 min)

Question type	Write 2 questions	Problem Tree connection (Symptom/Cause/Root)
Clarifying questions	1) what are the cons of Pesticides? 2) what are other ways to Preserve food?	1) Health and environmental effects - Symptoms 2)
Evidence/Data questions	1) how many people get long term effects from pesticides? 2)	1) 2)
'Why' questions	1) why do farmer still use pesticides knowing its affects? 2)	1) 2)
Feasibility/constraints questions	1) why shouldn't we switch to natural pesticides? 2)	1) 2)
'Who else' questions (stakeholders)	1) who else is affected by Pesticides? 2)	1) 2)

3) Student Pitch Template (10 min)

Fill in and practice:
My topic is <u>Affects of Pesticides</u> (Trees/Soil/ <u>Food</u>).
My current problem statement (trunk) is: <u>The harmful effects on our food is caused by Pesticides.</u>
I think the root cause might be: <u>chemicals in pesticides</u> and I need evidence about <u>the difference between harmful pesticides.</u>

Phase 2 - Community Research Rounds: "Talk to the experts."

- "Leave with 3 expert insights + new keywords/data leads."

4) Rotation Note-Catcher (50 minutes)

Round/Partner	Best insight (what changed my thinking?)	New keyword / local lead	Next evidence task
Round 1: <u>Food bank</u>	<u>The different Pesticide costs</u> <u>natural and chemical</u>	<u>different Prices</u>	<u>find the difference of the affects of each input.</u>
Round 2: <u>Planning</u>	<u>we could use specific pesticide brands.</u>	<u>Brands</u>	<u>find specific Pesticide brands.</u>
Round 3: <u>Ms. Hill</u>	<u>collect data from food sources.</u>	<u>food sources</u>	<u>find which brand uses which type of pesticides.</u>

Phase 3 - Action Plan Studio: "Make it real."

- "Leave with an approved action plan + next steps."

Mentor Check-off: Instructor Use only

'Good enough' check	Notes
☒ Local (DeKalb / Metro Atlanta)	<u>Decatur / Clarkston Farmers Market</u>
☒ Clear who/where/what	
☐ Root cause is testable (evidence can confirm/disconfirm)	
☐ Question is not yes/no	
☐ Feasible with available time and sources	
☐ Identified variables to test	

X

Homeroom Teacher
Mentor

RUBRIC for Community Day Assignments

Criterion Title	Criterion Description	Points Possible	Exceeds (100%)	Meets (85%)	Developing (70%)
Phase 1: Research Prep	Quality of the Problem Tree Tune-Up and the 30-second pitch.	20	Pitch is compelling and identifies specific evidence gaps the team needs to fill.	Problem tree is local and specific; pitch identifies topic, problem, and root cause.	Problem tree is too broad; pitch is missing key details or lacks focus.
Phase 2: Expert Engagement	Documenting insights from rotations and maintaining professionalism.	30	High professionalism; asks insightful "Why" or "Feasibility" questions that challenge assumptions.	Active participation; records 3 expert insights and new local keywords/leads.	Few notes taken; minimal interaction with experts; passive listening.
Phase 3: Group Problem Statement	Refinement of the statement into the "North Star" format.	20	Statement is highly narrowed and answerable with evidence rather than opinions.	Follows format: "In [PLACE], [WHO/WHAT] is affected by [ISSUE], which leads to [Impact]".	Statement is broad or missing one or more elements (Place, Who, Issue, Impact).
Phase 4: Action Plan & Variable	Design of the solution, its community impact, and success metrics.	30	Clear Impact & Equity section; variable is highly quantifiable (e.g., amount, cost, or frequency).	Includes a 3-5 step plan, names decision makers, and identifies a specific variable to measure.	Solution is vague; 3-5 steps are missing; no measurable variable identified

