**My system, teabot, deals with tea leaf disease detection, it contributes to sustainable agriculture, reducing chemical misuse, and improving crop health. Below are the SDGs it addresses and the problem definition:**

**Part 1: SDG Selection and Problem Definition**

**SDG Selection**

* **Primary SDG**: **SDG 12: Responsible Consumption and Production**
  + Ensures **sustainable agricultural practices** by reducing the overuse of pesticides through **AI-powered disease detection**.
  + Helps **tea farmers optimize crop health and yield** using data-driven insights.
* **Secondary SDG**: **SDG 3: Good Health and Well-Being**
  + Reducing excessive pesticide use minimizes human health risks.
  + Improves the quality of tea consumed.

**Problem Definition**

* **Problem Statement**:  
  Tea farmers struggle to detect and manage diseases, leading to crop loss, excessive pesticide use, and lower-quality production. There is a lack of **affordable, real-time disease detection** tools tailored for small-scale farmers.
* **Solution**:  
  My **TeaBot** app **automates tea leaf disease detection** using **AI (YOLOv8) and a chatbot (GPT + Dialogflow)**, enabling farmers to:
  + Scan infected leaves and **detect diseases instantly**.
  + Receive **custom treatment recommendations**.
  + Store and analyze disease trends via **a database**.