

Project Summary

The Ghana Agricultural Development and Value Chain Enhancement (ADVANCE) II project supports the scaling up of agricultural investments to improve the competitiveness of the maize, rice, and soybean value chains. This helps achieve a greater degree of food security among the rural population in the north while increasing competitiveness in the domestic markets. The project adopts a value chain approach where smallholder farmers are linked to markets, finance, inputs, equipment, and information through larger commercial farmers and traders who have the capacity to invest in these chains. It also builds the capacity of smallholder farmers to increase the efficiency of their farm business with improved production and post-harvest handling practices, including: improved seed varieties; access to quality inputs; mechanization services; and market access.

Exercise Background

In summer 2014, ADVANCE 2 completed the initial registration of beneficiaries. Registration was undertaken by three regional offices (Tamale, Bolgatanga and Wa) for the first group of outgrower farmers (just under 28,000 individuals). Biographical information for each beneficiary farmer was collected on paper forms, then entered into Excel Spreadsheets by data-entry clerks at each office. The submissions for the three sub-offices were appended together in one dataset (attached).

ADVANCE 2 Senior Management would now like to use the data to inform management decisions. Please carefully review the instructions below prior to answering the questions for this exercise.

Instructions

1. Complete the exercise **on your own**. You may explain how you performed your calculations.
2. For Questions 1 to 3, prepare a **1-page visual summary** for each question in the format of your choice (e.g., graphs, charts, KPI, maps).
3. If you are unable to answer any question, explain why and recommend a way forward.

Note: Each individual farmer has been given a unique ID number (Farmer ID)

Evaluation Criteria

During this exercise, you will be evaluated according to your ability to:

1. Follow instructions
2. Clean, organize, synthesize and analyze data
3. Make data-driven recommendations and clearly communicate those to management
4. Provide input to improve existing systems, especially in terms of data quality

Exercise Questions

1. Gender Targeting:
 - a. ADVANCE 2 has a Gender Strategy to improve inclusion of women in its activities. Senior Management has requested that you produce a **1-page visual summary of the proportion of MEN and WOMEN registered by REGION**.
 - b. Additionally, Senior Management would like to enhance gender targeting in those areas which have low proportional participation of women; they have asked you for a recommendation of **which top 3 DISTRICTS** they should target.

2. Major Crop Types by Farmer:
 - a. To facilitate the planning of training and activities, Senior Management has requested a **1-page visual summary of the number of farmers producing each Major Crop Type by REGION**.
 - b. An expert in Soy production has arrived in Ghana and has time to conduct specialized training in up to 3 districts (targeting areas which have more farmers producing Soy). Recommend which **3 DISTRICTS this expert should visit** to provide this training.

3. Volume Produced: Senior Management has requested a breakdown of major crop production in the form of a **1-page Visual summary of the total Metric Tonnes produced for each major crop**.

4. Database upgrade: ADVANCE 2 has decided to invest in the design of a centralized web database to facilitate data management. You will be assigned as the main designer for the new system, particularly establishing **improved parameters to facilitate data entry and quality** (e.g., choice menus, field types, data-capture process). Given your exposure to this Excel dataset, what are your **top 3 recommendations** for the design of the new database?