The Next Green Revolution - Using Biotechnology through Selective Breeding

1. Read the following national geographic article to learn more about smallholder farmers in Africa and how biotechnology can be used to improve agricultural production.

https://www.nationalgeographic.com/foodfeatures/green-revolution/

2. You must choose a crop that is commonly grown by smallholder farmers in Africa:
    a. Sorghum
    b. Millet
    c. Maize
    d. Cassava

****Things to keep in mind: smallholder farmers don't typically have money to spend on inputs such as fertilizer/irrigation/etc.****

3. Then, research your crop to determine issues surrounding the production of that crop (diseases, climate, pests, etc.) This will give you background knowledge that will help you decide how to improve the plant through selective breeding.

4. Identify specific plant characteristics that you will selectively breed for. Be sure to explain why you chose those characteristics.

5. Make an informational poster. It should include:
    a. Information about the famine occurring in Africa
    b. Information about the plant you chose - where/how is it grown, what are the problems that occur when growing it?
    c. How will you improve the crop through selective breeding?
        i. Explain why you chose each characteristic
    d. Make sure you include a drawing of your plant before and after selective breeding.