Attachment C

 **A Blooming Investment in Ethiopia **

***Lesson 3: Wolaita Livestock and Environmental Challenges***

**Farm to Table in Wolaita Curriculum Unit:** *Ethnobotany in Wolaita*

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Follow the directions to complete this project:

1. Research a topographical map of Ethiopia. Draw an image of Ethiopia on a piece of 8 ½” x 11” paper. You’ll be using this map to reference the land that is appropriated for flower investments in Ethiopia.
2. Reflect on the articles you viewed in class about livestock and land management in Ethiopia and key points you discussed in class (specific reference to ideal growing locations in Ethiopia for flowers is noted below):

“Ethiopia allocates 3,000 hectares of land for flower investment” **by, Satenaw,** July 29, 2017 08:19 <http://www.satenaw.com/ethiopia-allocates-3000-hectares-land-flower-investment/>. “Ethiopia, the fourth largest supplier of flower to the world market, is endowed with suitable weather condition for flower and other horticultural products.”

“Investing in Ethiopia: Floriculture” <http://www.ethiopianembassy.org/PDF/InvestingFlower.pdf>

“Diverse agro-climatic conditions in the highlands and lowlands of Ethiopia make it a suitable place for the production of a wide range of flowering plants, making cut flower production a fast-growing export business. Ethiopia has 12 river basins, 18 natural lakes (including the Rift Valley lakes) and a potential of 3.7 million hectares of irrigable land. About 80-90% of these resources are located in the west and south-west of the country, which is home to 40% of the population. Temperatures are conducive to floriculture and there are long hours of sunshine - usually more than 11 hours a day. Water for irrigation is available in ample quantity and the well-drained soil in Ethiopia is suitable for growing horticultural products.”

“Ethiopian flowers attract foreign investment” <http://www.hortibiz.com/item/news/ethiopian-flowers-attract-foreign-investment/>

“Parts of the country south of Addis Ababa are 2,000 meters (6,561 feet) above sea level, and this makes it an ideal environment for floriculture, according to Shiferaw Mitiku, a researcher and agricultural marketing consultant in Addis Ababa.”

1. Here’s information about Ethiopia’s land: Ethiopia consists of about 1,277,000 square kilometers of land mass and 7,500 square kilometers of surface water with zero sea front. <http://www.answers.com/Q/Land_size_of_Ethiopia>

*Note:* 1 Square Kilometer = 247.105381 acres; an acre is about 0.4047 **hectare** and one **hectare** contains about 2.47 acres.

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1. Refer to the above statistics about Ethiopia’s land mass. Use your drawing of Ethiopia to determine how much of Ethopia’s land mass will be used if 3,000 hectares of land is consumed for a new flower industry. Record this usage of land on your drawing.
2. Reflect on previous class discussions of how land management measures are being implemented to prevent soil degradation and ensure quality farm land for successful crops. Based on the information you have reviewed thus far regarding Ethnobotany in Wolaita, Ethiopia, how will this floriculture investment impact the natural resources of Ethiopia? Consider preservation of valuable indigenous plant species, socio-economic developments, and sustainability measures to preserve the integrity of the land. In particular, consider the importance of growing eucalyptus trees and its multiple, widespread usage both in the urban and rural areas of Wolaita. It is used for fuelwood, building materials and many more purposes. It’s also a source of revenue for farmers. Consider the eucalyptus tree’s fast growth rate and harvesting time as well as its effect on the soil. Discuss your reflections of this topic within a small group setting and present your ideas to the class in a 5 minute presentation. Use visual aids such as charts, graphs and scenarios to present your opinions.