Unit 2: Agroforestry

Lesson 1: Introduction to Agroforestry - Teacher’s Guide

Estimated Completion Time: 45 minutes

Student Learning Objectives:

- As a result of this lesson the student will…
  - Improve understanding of what agroforestry is.
  - Recognize the different branches in agroforestry.
  - Recognize the value of agroforestry in an existing agricultural enterprise.

Purpose: Imagine for a moment you are taking a drive through the country side. What do you see? You are likely see fields with growing corn, soybeans, wheat, or even cotton. There may be cattle grazing or horses running. You will see livestock buildings, farmer’s houses. These are the things commonly thought of as making up our agricultural countryside, but there is an important piece that is often overlooked. Trees and shrubs interworked throughout the countryside serve a variety of purposes unknown to many people.

Directions: Access the commodities and products tab on the AgMRC website (http://www.agmrc.org) and find the link to agroforestry. Utilize information located here to answer the questions below:

1. Brainstorm with a partner to make a list of the ways trees and shrubs can be combined with livestock or crop systems to be useful.
   - Students will work with one partner to think about the trees and shrubs they see around livestock and crop systems.
   - The list they make can be used to lead a class discussion and make one list as a class.

2. Use the AgMRC website to research Agroforestry. What is Agroforestry?
   - Under the commodities and products link, then Agroforestry.

3. What is “forest farming”? How could it add value to an existing agricultural enterprise?
   - This link is at the bottom of the “Agroforestry” page labeled “non-traditional forest products”.

4. What is a riparian buffer? What might trees planted in a riparian buffer need to be able to tolerate?
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- Students will need to think about what these buffers do. Trees will be exposed to potential flooding, and increased amounts of chemical pesticides and nutrients.

5. Some of the main types of Agroforestry practices are alley cropping, forest farming, riparian forest buffers, silvo pasture, windbreaks and wildlife habitat areas. In groups of 3 or 4, discuss which you think has the most value. You will first need to research all the practices on your own, write your thoughts, and report to your thoughts to your group.
- Students will need to research each agroforestry practice to determine what they are and what value they have.
- More than just a definition will be needed to determine overall value.
- Using the information, students evaluate the practices individually to determine which practice adds the most value. They will then discuss their thoughts among a small group.