5.5 Wind erosion

What does wind erosion mean and how could you represent it in a model with simple materials?

In many parts of the world, the change from agricultural land to low-nutrient soils is very often due to wind erosion.
Develop a way to protect farmland from wind erosion.

Set up:

- branches
- leaves
- possibly 1 plant
- dry sand
- dry soil
- small stones
- 1 large tray or something similar (flat cardboard, etc.)

How to conduct the experiment:

1. On a tray or a small piece of cardboard, create a growing area out of sand, soil and plants.
2. Generate wind by blowing on your growing area or fanning it (for example, with some cardboard). Write down what happens.
3. Then build a small protective barrier out of branches, stones or plants.
4. Generate wind again and write down what happens.
5. Compare the stability and the function of your protective barrier with that of the other groups.
6. Make a drawing of your arrangements on page 2.

Without a protective barrier:

With a protective barrier:

How would you advise farmers who are increasingly affected by wind erosion?

Wind erosion also dries out soil. How can you measure this?

Technical application and vocational orientation:

Space for your sketches