**Learning Outcome:**

Discuss the importance of good soil management in relation to soil sampling & testing & analysis of results, fertiliser or slurry / manure application.

**Keywords:**

Auger, potassium, random, sampling, analysis, application, manure, slope, organic matter, soil index

**Numeracy:**

Min 25 samples, %OM, pH, length time after fertiliser / lime application, soil index

**How to take a soil sample:**

* Taken using a soil auger
* Min 25 samples
* Taken at random
* Avoid water troughs & gateways
* Take from areas that have different soil types, crop history, slope, drainage, different yield
* Don’t sample for 3 – 6 months after P & K & slurry application
* Don’t sample for 2 years after lime application

**Task:**

Look at the following secondary data from soil test results & answer the questions that follow:

1. What is the % Organic Matter (OM) of the soil sample?
2. How does this relate to the average soil composition?
3. Based on the % OM result – what does this tell you about the slurry / FYM application on the farm?
4. What is the pH of the soil? Is this the correct pH? What would you recommend farmers to do to adjust the pH of the soil?



1. Above are the recommendations from the soil test –
	1. What does the terms index 2 for phosphorus tillage & index 3 for phosphorus grassland mean? Why is there a difference between the P requirement in tillage & grassland?
	2. What is meant by index 3 for Potassium?
	3. What is the recommended lime requirement for the soil?
2. This is another soil test result from the same farm:



* 1. Compare the %OM in both soil samples
	2. Compare the pH in both samples.
1. This is the recommendations from the lab for the results given in Q6:



* 1. What is the lime requirement of the soil?
	2. What is meant by the index 3 for tillage P & index 4 for grassland P? Why is there a difference in the figures?
	3. What is meant by the index 4 for K?
	4. What would your recommendations be to the farmer with this soil sample?
1. The above 2 soil samples are taken from the same farm, from neighbouring paddocks. Can you explain the difference in soil results?