Soil sampling is the process of taking a small quantity of soil from the field to act as a representative sample of the soil in that particular field. Soil is sampled in order to be tested for soil nutrients and soil pH. Analysis of the samples gives the farmer information about fertility status of the soil in order to: optimize crop production, aid in the diagnosis of plant culture problems, improves the nutritional balance of the soil, saves money and conserve energy and protect the environment.

**Factors to Consider in Soil Sampling**

1. **Size of the land** – The larger the size of the land, the higher the number of samples/cores to be collected.
2. **Cropping system**;
   - For most soil tests the sampling depth is the tillage depth (six inches).
   - Deep-rooted non-legumes such as wheat, bermuda grass, sorghum, and cotton, a separate sample representative of the subsoil should be taken in addition to the tillage depth sample.
3. **Past Management** – Fields used for production of cultivated crops may be sampled any time after harvest or before planting.

**Note**: Soil samples should not be taken from unusual areas. Such areas include dead furrows, terrace stands, old fence lines, old manure heaps, swampy areas, near trees and boundaries, between slopes and bottom land. They may not be representative of the field as they may give misleading results.

Soil nutrients vary by location, slope, soil depth, soil texture, organic matter content, and past management practices. Getting a good soil sample stands out as a major factor affecting the accuracy and usefulness of soil testing.

**Sampling Methods**

There are two methods of soil sampling, these are traverse and zigzag methods. In traverse method, four corners of the field are determined and sampling is done diagonally. In the zigzag method, locations are arranged in such a way that they are in a zigzag form.

**Soil Sampling Procedures**

Soil sampling procedures vary, taking into account the special local situations. Sampling instructions must be followed carefully for one to get reliable results. Generally sampling procedures involve the following steps:

1. **Assemble Sampling Tools**
2. **Choose Sampling Method**
3. **Clear vegetation from the sampling plot**
4. **Make a vertical cut to a depth of 15 - 25 cm for crop land and 5cm for pasture land**
5. **Take a slice from the vertical cut using a spade or preferably soil auger**
6. **Put the soil in clean polythene bag or any suitable container**
7. **Repeat Steps 3 – 4 – 5 – 6 in different parts of the field, preferably 15 to 20 spots**
8. **Mix the soil from all the spots thoroughly, dry and crush**
9. **Take a sub-sample/composite sample from the mixture, label (Name and address of the farmer, Field number and Date of Sampling) and send to the laboratory for testing**

**Soil Testing Centres**

- **Kenya Agricultural & Livestock Research Organization, Nairobi**
  - Tel: +254722206986/
  - +254733-333-223
  - Email: info@kalro.org
  - [http://www.kalro.org/](http://www.kalro.org/)

- **MEA Fertilizer, Nairobi, Nakuru**
  - Tel: +254724253312/
  - +254735-440-267
  - Email: info@mea.co.ke
  - [http://www.mea.co.ke/](http://www.mea.co.ke/)

- **Jomo Kenyatta University of Agriculture & Technology (JKUAT), Nairobi**
  - Tel: +254-067-587001
  - Email: info@jkuat.ac.ke
  - [http://www.jkuat.ac.ke](http://www.jkuat.ac.ke)

- **University of Nairobi, Nairobi**
  - Tel: +254-020-3318262/
  - +254-020-2429997
  - [http://www.uonbi.ac.ke/](http://www.uonbi.ac.ke/)

- **Agrocares/ Soil Care, Nairobi**
  - Tel: +254-728970136/ +254-706511149
  - Email: info@agrocares.com | africa@agrocares.com
  - [https://www.agrocares.com](https://www.agrocares.com)

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