

GUIDELINES ON TAKING, STORING AND TRANSPORTING SOIL SAMPLES FOR AGRO- ECOLOGICAL ZONING PURPOSES

The Agro- Ecological Zoning is a pre-requisite activity in coming up with a comprehensive Community Watershed Plan. Its significance lie in the determination of appropriate crops (crop matching) and a important step for land use mapping. It can be done together with the Production Base Assessment and other Participatory Rural Appraisal activities. Soil analysis through sampling is one of the major component of AEZ. The AEZ manual fully described the methodologies but as required by the PPOs during the Management Committee meeting in Lake Sebu last November 23 to 24, 2000, this guideline is required. The following points would help in the processing of soil samples.

1. To facilitate analysis, the nearest Regional Soils Laboratory, Bureau of Soils and Water Management are located as follows:
 - a. PPO 1 Compostela Valley, PPO 2 Davao Oriental and PPO3 Davao del Sur- DA Regional Soils Laboratory, Bangoy St., Agdao, Davao City
 - b. PPO 4 Sarangani and PPO 5 South Cotabato- Bureau of Soils and Water Management, Lagao, General Santos City
2. The source of funds for analysis can be source out in the Budget Line- Watershed Planning- 20.32
3. Sampling procedures and what soil qualities to be analyze are described in the AEZ Manual. Basically those required to be analyze are:
 - a. Soil acidity (pH)
 - b. Nitrogen, Phosphorus and Potassium (NPK) content
 - c. Organic Carbon content of topsoil

NPK content and soil pH can be determined immediately through the use of the soil test kit. The LGUs have soil test kits and are trained to do initial soil analysis. To save on cost of analysis, the ATs could take readings on NPK content and soil pH. Organic carbon can even be deduced from topsoil thickness but to get an accurate reading and to fit in the crop matching requirements, the soil sample should be analyzed in the laboratory. The BSWM rates for 1 kg. Soil samples on the following are the following:

Organic Carbon- P 15.00 Soil pH- P 15.00 NPK content- P 15.00

It is recommended that one sampling should be done per station of the AEZ transect line.

The soil sample should weigh 1 kilogram and should be homogenous- it should contain the soil qualities not only of the top or bottom (50 cm or 1/2 m depth) but also of the mid/in between layers. This can be done using the quartering method- mixing and dividing the dug up soils into 4 quarters, then removing the 2 quarters and combining the remaining 2 quarters and getting 1 kilogram sample from this.

The soil samples should be air dried and not sun dried. Make sure that there are no contaminants e.g. grass/plant leaves; cigarette butts; animal manure etc.

The soil sample should be properly labeled- pencil on paper :

- a. The name of collectors- AT name or LGU team
- b. Area where sample is collected (Sitio, Barangay, Municipality)
- c. Type of crops normally grown in the area and even type of fertilizers used
- d. Topography- % slope

Attached is a hand-out from the Bureau of Soils and Water Management, Regional Soils Laboratory for your guidance and reproduction for LGU use. Like what we did with PPO2, we could facilitate the replenishment of Soil Test Kit chemicals needed by the LGUs.

For your information.