



7<sup>th</sup> Ndizotheka Eminent speaker

Theme: Surmounting soil health challenges: Practical solutions for enhancing agriculture Productivity in line with MW2063.

Date: Thursday 2<sup>nd</sup> December 2021 Time: 5pm to 7pm

Takeaways from the eminent speaker, Prof. Pedro A. Sanchez

- Malawi soils are good, but they are sick as such there is a need to adopt a more comprehensive soil health program and not just organic fertilizer.
- This has come about as a result of dilapidated nutrients due to soils being left bare hence they are susceptible to soil erosion and runoff.
- In order to reverse this, there is a need to:
  - Add mineral fertilizers correctly integrate with organics.
  - Plant on time using the best hybrids varieties and Practice good agronomy, spacing, contours.
  - Keep the soil covered, to continue preventing runoff and erosion. This can be done through the use of deep-rooted plants to capture water and nutrients from the entire subsoil and keep a vegetative ground cover over the topsoil for the rest of the dry season.
  - Produce additional biomass in the soil to rebuild Soil Organic Carbon (SOC) through crop diversification, intercropping, double cropping using grain legumes, biological N fixation (BNF). This increases positive macrofauna and microbes essential for rebuilding SOC which is essential to rebuild physical, chemical, and biological soil components.

In response to how this can be done, Prof Sanchez proposed that:



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- There is a need to consult the farmers first and often – how to keep the soil covered on their farm?
- Transform AIP into a Soil Health Program including high yielding varieties and hybrids, small, medium, and large farms (ex tobacco).
- Grow nutrient-dense foods (grain legumes, tree nuts, unsaturated oils, milk, chickens, eggs, red meat for weaned babies. Fewer cereals, root crops, saturated oils, sugar.
- Intensify on Extension services.

In conclusion, Prof Sanchez recommended that there is need to:

- Modify AIP to focus on restoring soil health.
- Use part of AIP budget to:
  - Maximum use of grain legumes.
  - Keep soil covered the year around.
  - Use deep subsoil as far as deep roots go
  - Rethink improved fallows, maybe around cropped fields
  - Try *Brachiaria ruziziensis* and other ones repatriated to Africa. Can be done quickly like in DRC.
  - Focus on growing nutrient-dense foods.
  - Make extension highly exciting.

Take away points from Discussant

Dr. Patson Nalivata discussed some of the major challenges which Malawi is facing.

These included;

1. Soil degradations, bare soils
2. Low crop productivity
3. Low uptake of technology



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4. Continuous crop removal and
5. Soil erosion
6. Losing 30ton/ha of soils

He then said there is a need to address these issues by:

- Promoting good agronomic practices to enhance agro-ecology
- Increasing the share of agriculture in the GDP

The panel discussion agreed with the two speakers on improving soil health, extension, and integrating soil fertility management techniques and inorganic fertilizers.



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