





SOIL DAY REPORT 4 December 2020 by Selotia Tausi

Theme: "Keep soil alive, Protect soil biodiversity"

Aims

To raise awareness of the importance of maintaining healthy ecosystems and human well-being by addressing the growing challenges in soil management, fighting soil biodiversity loss, increasing soil awareness and encouraging governments, organizations, communities and individuals around the world to commit to proactively improving soil health.

INTRODCTION

Soil is a living and life-giving natural resource that should keep healthy in order to be productive. Soil health can be defined as "the capacity of soil to function as a vital living system, within the ecosystem and land-use boundaries, to sustain plant and animal productivity, maintain or enhance water and air quality, promote plant and animal health" (Doran and Zeiss, 2000).

Tuvalu islands have poor soil and the land is very low and narrow with coral atolls. It is a group of nine atolls scattered between 501,932 square mi of the western Pacific Ocean and between Kiribati and Samoa. In response to the global climate change, Tuvalu's underground water table is threatened as the highest point in Tuvalu is 4.6m above sea level. The population is approximately 11,146 Tuvaluans, of whom 96 percent are Polynesian and 4 percent Micronesian.

Soil health is an issue that need to highlight to the people to enhance their knowledge and skills on the importance of the soil. Soil diurnal is a day that we share information and knowledge to our people and remind them on the importance of soil and its components to the sustainability of different diversity in the soil. It is also the day that we collect our information from the people's perspective views on soil and how they manage their soil and the living things in it. The day program was mainly targeting the youth, students, religious groups, Island communities and farmers on the island.

There are a lot of people (25) attended the program and they are very delighted and glad to be part of the program as it is a very constructive program for their life and other biodiversity living

on the land. The attendees were very delighted to improve their knowledge and skills in soil and other agriculture activities that can increase the quality of the soil.

The Minister of Local Government and Agriculture also express his sincerity to the CSIRO for making this day possible in providing financial assistance and he hope that CSIRO and SPC continues their support to the Tuvalu Government in the future mainly on Agriculture.

Program Activities on the soil day

The MC (Selotia Tausi) of the day started the program with the opening remarks and welcoming words for the Minister and parties, Reverend, official from the Agriculture and all the participants. Followed by the opening prayer conducted by Reverend Alefaio Honolulu and in his speech, he mentioned that God create all the living things on the earth. Our land is given by God so it must be kept properly and well.

Opening remarks from the Minister of Local Government and Agriculture, his honorable Mr. Katepu Laoi. He deliberated the importance of soil health and some of the function that soil may involve in and we can keep it safe and healthy all the time.

The program started with a presentation from different presenters for the morning session which includes;

- Soil and Health Overview (Overview on Tuvalu soil) by the Director of Agriculture, Mr. Uatea Vave
- Importance of Soil Health and its components, presenting by Ms Selotia Tausi (project Coordinator).
- Soil Structure & Soil Texture leading by Mr. Sama Sapakuka (Principal Agroforestry Officer)
- > Soil Biodiversity conducted by Ms Selotia Tausi includes the following topics;
 - What is Soil Biodiversity?
 - o How soil biodiversity loss?
 - o What we can do to prevent biodiversity loss?

The MC did provide twenty minutes for discussion, questions and answers. Refreshment followed straight after the twenty minutes discussion.







The group has a chance to visit the Taiwan Technical Mission Garden (Fatoaga Fiafia), where the TTM leader Mr Roy Huan and his colleague invited the group in for a demonstration on how to make compost in their compost shed using heavy machines. They also distributed leaflets on compost preparation to the participants and they provide the participants some time for discussions. The participants were also have a great time touring around the garden and see the different crops that TTM plants in the garden. They also given the opportunity to taste some of the fruits prepared by the TTM staffs and workers.













Lunch follow after the Taiwan Technical Mission visit and then discussion for ten minutes with participants on the tour to the Taiwan Technical Mission.

Visiting the Agriculture Agroforestry Nursery where the agriculture staffs did involve in the demonstration on compost preparation that manually not using machines and carry out a soil test using the soil test kit in hand. The soil that were tested was collected from the nursery and compost because it is raining on the soil day. The testing was concentrating on two nutrients that is the pH and the magnesium. The participants also given chances to ask questions and to respond to some of the questions from the staffs. Thirdly, there were also some time given to the staffs to practically demonstrate the sowing of seeds, thinning-out of seedlings and planting. The

participants really enjoyed the activities prepared by the staffs and they have asked a lot of questions.





The last event of the day was sightseeing to the Agroforestry sites and the Dumping sites where they can compare the two sites and the types of soil. One of the participants Ms. Sagatua say that the day activities was very fruitful and very interesting as this are the first time for them to see other activities like soil testing, where you can know or have a clear understanding on the nutrients in the soil before planting or after planting. She also recommended if there is a possible way that the Department of Agriculture can also assist the farmers in testing their soil after they harvest and before they grow the other crops. The Director of Agriculture also give feedbacks to the questions and he mentioned that the Department only have one soil test kit like this one so they could not do the testing for every farmer, however, the question is well noted for future development and future assistance from the department. Since the Department have no allocation for this kits it is very hard to purchase it, but they will try and find a better solution for this requirement.

Refreshment follow after sightseeing. Word of thanks from the Director of Agriculture and the MC of the day and then follow with the closing of the day event with a prayer. The Director of Agriculture also enlighten the day by providing participants with free seedlings (vegetables & local planting materials) from the two nurseries.

Evaluation of the soil day was also done and distributed to provide feedbacks on the understanding of the participants in the information deliveries during the day. It is been given in the local language where everyone can understand it and feedbacks also provide in Tuvaluan.

FEEDBACKS FROM THE EVALUATION FORMS

According to the evaluation, it is deliberately show that most of the participants are very fortunate to have a soil day per year, so they can improve the knowledge in soil nutrients and health.

Most of the participants are eager to know the basic soil contents and some of the basic skills and materials in improving the soil nutrients. During the soil day, there are a lot of activities presented to attract the participants' involvement in improving soil quality. The participants are very fortunate to see the soil testing demonstration and they requested that the project can help provide a soil test kits for the department so they can test their soil first before planting their plants to make sure that they can add the right nutrients. Additional to that, they also need a one week program for the soil day, as it is a very important and value portion that need to discuss and increase training on it, so the information can reach all the people in Tuvalu so they can

aware on the importance and keep the soil safe for the future generation. Maintaining and sustaining soil biodiversity can benefit to all living and every biodiversity in the country.

CHALLENGES

The activities for the day are flowing according to the requirements, however, raining can delay some of the activities and the participants, but the program went well and accordingly to the requirement. During the activities we cannot test the soil from the different sites because the soil is wet, but we managed to take some soil from the nursery and soil after the compost have been added.

CONCLUSION

The soil day health program was a very initiative day where all the participants are happy and very interested in absorbing the knowledge on soil health and soil biodiversity. The program was really captured the attention of the participants where most of the participants involve in activities and have time to ask questions. The project is very glad that the participants are involve in all the activities and in discussions. One of the participants mentioned that the day's activities are very informative and they hope that all the information they get from this day can well taking care for the betterment of the soil for the future generation. The Department of Agriculture also looking forward for this event on the years to come.

ACKNOWLEDGEMENT

The Minister of Local Government and Agriculture, on behalf of the Government of Tuvalu express his warm gratitude to the SPC under the project of Soil Health for his guidance in the program. Secondly to the CSIRO for providing funding for the program to make it through and IFAD for assisting and funding the project on Health Soil. We also express our thanks to the staffs of the Agriculture for their contribution on the day activities and presentations. And most of all the word of thanks to the participants who make the day a fruitful day and to involve in the day program.