

MESSAGE FROM HON'BLE AGRICULTURE MINISTER ON WORLD SOIL DAY, 5TH DECEMBER 2022



Today, we join the global community in observing the World Soil Day (WSD) – a global event to raise awareness of the importance of soil and its sustainable management. The WSD was officially adopted by the 68th session of the UN General Assembly held in December 2013 following the endorsement and

request submitted by the conference of the Food and Agriculture Organization of the UN, in June 2013.

Soil is the foundation for agriculture and ecosystem sustainability. It provides the basis for food, feed, fibre and fuel production. In fact, 95% of our food comes from soil. Without healthy soils, we will not be able to grow our food and achieve food and nutrition security. Healthy soils are also essential to provide clean water as it purifies the water that we drink. Other important roles played by soils include mitigation and adaptation to climate change and conservation of biodiversity. Healthy soils have the potential to store three times more organic carbon than the atmosphere and vegetation combined. Likewise, soils provide one of the largest reservoirs of biodiversity on earth.

Sadly, however, soil degradation is increasingly becoming a serious threat caused by factors such as unsustainable agricultural practices including imbalance or inappropriate use of chemical fertilizers, steep slope cultivation, infrastructure development, and soil pollution through urban wastes, especially plastics. Globally, nutrient imbalance through overuse, misuse or underuse of chemical fertilizers has been identified as one of the top ten threats to soil health, with negative environmental, social and economic effects.

In Bhutan, while the overall use of chemical fertilizers is still low as compared to other countries, the growing demand and inappropriate use of it is becoming a serious concern. First, the use of chemical fertilizers is concentrated in some agricultural landscapes based on commercial crops, affordability and accessibility. Second, there is imbalance and high rate of fertilizers application that results inefficient use and wastage of nutrients. And third, the decision to use chemical fertilizers is not based on the soil test results or the fertilizer recommendation guide; rather it is influenced by the sense of competition among farmers to use more inputs. As a result, the risk of nutrient imbalance is only going to become more serious, which will deteriorate the overall soil health and the long-term economic productivity of soils. The excessive and prolonged use of agrochemicals can reduce soil microbial activity and their functional diversity, which are important indicators of soil health. Other impacts of imbalanced and excessive use of agrochemicals are the environmental and water pollution and the climate change through release of greenhouse gases into the atmosphere.

Therefore, as we observe WSD, let us **commit** and **call for action** on the following, recognizing that healthy soils have the ability to sustain the productivity, diversity, and the environmental services of terrestrial ecosystem:

- Maintain and enhance soil health and soil conservation to prevent soil degradation.
- Ensure policy support to promote, advocate and mainstream sustainable soil management.
- Work to ensure that the management of nutrients, including the integrated use of different types of fertilizers, becomes more sustainable and efficient, even better geared to the nutrient needs of crops, trees, pastures and grassland, while reducing nutrient losses, mitigating climate change and improving biodiversity.
- Work to ensure **availability** and **accessibility** of **high quality soil data**, inter alia based on soil diagnosis, for guiding decision-making and efficient use of plant nutrients.
- Advocate and adopt the use of **new technologies** and **digital solutions** to assess soil and precise use of nutrients.
- Advocate for coherent, cross-sectoral policies to avoid negative effects from other sectors on agricultural soil and land.
- Strive to increase **public awareness** on the importance of healthy soils for healthy food and healthy life.

Finally, I am happy that the WSD2022 is being observed in Phobjikha under Wangdue Dzongkhag, which is one of the major potato growing areas using heavy chemical fertilizer inputs. I thank Wangdue Dzongkhag and the National Soil Services Centre (NSSC), DoA for jointly celebrating this UN Day.

I wish everyone a Happy and Successful World Soil Day!

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