

Testimony of Sakthi Kumaran, Ph.D.

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To the House Committee on Agriculture,

Good morning, Chairman Jones, Vice Chairman Klopfenstein, Ranking member Brent, Representative Dean and members of the committee. My name is Sakthi Kumaran. I am a Research Associate Professor of Soil Science and Agronomy at Central State University. I am here today to testify in support of the House Bill 568, a bill to create a healthy soils task force.

I have dedicated over twenty years to the field of soil research. My daily engagement in this discipline has led me to firmly believe that the passage of this bill is essential for preserving a vital natural resource for future generations. Furthermore, it positions Ohio to emerge as a global leader in sustainable food production through a comprehensive and collaborative action plan aimed at promoting soil health and sustainability.

As both a nation and a state, we are continually confronted with challenges that necessitate informed policy and decision-making across various sectors, with agriculture being no exception. At the heart of agriculture lies our soils, which are often mistakenly referred to as mere dirt by the average observer. However, for those of us who study the complexities of soil formation and function, it is clear that soils are far more than just dirt; they are a critical resource that supports agricultural productivity and provides numerous ecosystem services, including the provision of clean water.

In the realm of informed policy and decision-making, I am convinced that soil plays a pivotal role in many of the agricultural and non-agricultural choices we make. For instance, while Governor Mike DeWine's H2Ohio initiative primarily targets the enhancement of water quality in the Western Lake Erie basin, its success hinges on our ability to effectively manage soil health through the implementation of best management practices in the field. Additionally, the implications of soil extend beyond agriculture; decisions in sectors such as energy, where the placement of solar farms is concerned, or the responsible disposal of biosolids from wastewater treatment, are also intricately linked to soil considerations.

It is important to recognize that soil is not only a finite resource, but its functional capacity is also inherently limited and varies significantly across different soil types. For instance, the capacity of soil to retain essential nutrients for plants and subsequently release them to crops is restricted. When these nutrient-holding sites are occupied by undesirable substances the soil's effectiveness in supporting agricultural production is compromised.

The concept of soil health serves as a crucial indicator of a soil's ability to fulfill its various roles effectively. This metric should be of paramount concern to all stakeholders who rely on this vital resource, as it directly impacts agricultural productivity and ecosystem sustainability. Understanding and improving soil health is essential for ensuring that soils can continue to support plant growth and other ecological functions.

To achieve sustainable management of soil resources, it is imperative to engage in deliberate planning and coordination among key stakeholders. This collaborative effort should aim to establish initiatives that prioritize soil health and develop specific action plans for ongoing investment in maintaining and enhancing the quality of soils. Such strategic approaches will not only safeguard this critical resource but also promote long-term agricultural viability and environmental stewardship.

To conclude, I urge the committee to support House Bill 568. It represents a real opportunity to make a difference for the entire State of Ohio and will have a lasting positive impact on sustainable agricultural production and environmental stewardship in our great State.

Thank you for your time, and I am happy to answer any questions you may have.