Soil Health Challenge, CSA100 Mark Renewed Approaches to Sustainable Production

Blog posted on September 14, 2018 by Solutions from the Land

The Global Climate Action Summit in San Francisco this week is bringing together leaders and people together from around the world to celebrate the extraordinary achievements of states, regions, cities, companies, investors and citizens in their efforts to address the challenges of a changing climate. But the summit also serves as a "next-step" launchpad for deeper worldwide commitments and accelerated action from countries – supported by all sectors of society – that can put the globe on track to realize the UN's Sustainable Development Goals (SDGs) and the historic Paris Climate Agreement.

Underscoring the need to continue and strengthen all efforts to reduce all GHG emissions, there is growing global recognition that carbon sequestration in natural and working lands is necessary to meet of goals of the Paris Agreement. It has become well known that changes in agricultural practices can increase the amount of carbon in the soil, improving its fertility and resilience to drought and flood, while raising food production and farm income.

As part of that focus on agricultural practices, the Global Soil Health Challenge – an initiative developed by the California Department of Food and Agriculture (CDFA) together with SfL, the UN Foundation and partners collaborating under the North America Climate Smart Agriculture Alliance (NACSAA).– was announced at the summit yesterday by CDFA Secretary Karen Ross.

The timeliness and urgency of the challenge could not be clearer: The oceans and atmosphere have become overloaded with carbon dioxide, but the terrestrial ecosystem could absorb much more carbon and benefit from it. In the race to constrain the level of carbon in the atmosphere and hold the rise in global temperatures to well below the 2 degrees Celsius called for in the Paris agreement, the challenge offers full recognition that carbon absorption ("negative emissions") will be required at an unprecedented scale. Agricultural soils could annually take up hundreds of millions of tons of carbon dioxide more than they do today, reducing the level and impact of atmospheric carbon and buying additional time to make the transition to low-carbon solutions throughout the global economy.

Across the globe, farmers are beginning to recognize the direct and indirect benefits of climate-smart practices in agriculture, forestry and grazing. Coming to the forefront are sustainable farming systems, including practices that rebuild and protect soil carbon and enhance the vitality of the subsurface microbiome (often recalling traditional practices). These sustainable practices, including minimum or no tillage, rotating crops, keeping the ground covered year-round, and

agroforestry, among others, make the land more productive, increase its capacity to absorb and retain water, and thereby build resilience to increasingly frequent drought and flood.

The challenge is a critical tool in Climate Smart Agriculture (CSA). While it addresses one of CSA's three pillars by reducing emissions, it touches on the concept's other two pillars by increasing crop yields and restoring degraded lands. Improving soil health enables farmers to produce the food needed for a growing world population and eliminate the need to expand into previously protected ecosystems for agriculture, all while increasing producer incomes.

Governments are considering whether – and how – they might strengthen their obligations of action (known as Nationally Determined Contributions, or NDCs) under the Paris agreement at the 2020 Conference of the Parties (the UN Framework Convention of Climate Change, or UNFCCC), a yearly meeting of world leaders to assess progress in dealing with a changing climate. Restoring soil health presents a relatively unknown and untapped opportunity, and the Global Soil Health Challenge seeks to raise the visibility of that opportunity, encouraging public officials to pursue it.

Meanwhile, another prominent campaign that can broaden the acceptance and implementation of climate smart agriculture is the CSA100. Led by the We Mean Business Coalition and several partners, including Business for Social Responsibility (BSR) and the World Business Council for Sustainable Development (WBCSD), CSA100 is a major new commitment platform that brings together 100 of the major companies involved in food and land-based systems. These 100 firms pledge their efforts to jointly meet the challenge of producing food, feed and fiber for 10 billion people by 2050, create climate resilient food and land value chains; and set the GHG targets needed to maintain the world on a 1.5- to 2-degrees pathway.

We call on stakeholders to urge elected officials and policy makers at the federal, state and local levels to enact incentives and programs to promote healthy soils, soil carbon sequestration and enhancement of biodiversity in agricultural areas. Multiple options – policies, supply chain initiatives, regulations, updated farmer education and extension programs, online platforms and in-person events for sharing knowledge and practices – should all be considered to create an enabling environment for farmers, ranchers and those working to restore degraded lands through agriculture.