



## MY MEETING NOTES

### Fourth Global Soil Week Conference Catalysing SDG Implementation through a Land and Soil Review (GSW 2017) May 22-24, 2017 Berlin, Germany



*Global Soil Week Conference, 2017, looked at SDGs through the lens of land and soil conservation and development. Mrs. V. Usha Rani, IAS, Director General, MANAGE, participated in the conference and shares her experiences and insights from the conference here.*

#### THE CONTEXT

Global Soil Week, first convened in Berlin, Germany in 2012, initiated an exchange of dialogue and ideas among stakeholders from different sectors in order to develop sustainable land and soil management plans and initiate follow-up actions on the progress made on the decisions taken by the UN Convention on Sustainable Development in 2012. Subsequently, the fourth Global Soil Week 2017 (GSW 2017) Conference was conducted from 22 to 24 May, 2017 to address the theme “Catalysing SDG Implementation through a Land and Soil Review” with emphasis on successful implementation of the Sustainable Development Goals (SDGs) that are under review by the High Level Political Forum (HLPF) on Sustainable Development 2017.



The aim of the Global Soil Week Conference was to use the insights from the HLPF review and High Level Event on “Land Degradation, Desertification and Drought” held at UN headquarters in New York, USA, on 1 May 2017 to fill knowledge gaps and provide a basis for building strategic partnerships so as to scale up SDG implementation and monitoring.

## THE PROGRAMME

GSW 2017 concentrated on focusing strategies to integrate efforts in soil and land development for effective implementation of the following SDGs: 1 (No Poverty), 2 (Zero Hunger), 3 (Good Health and Well-being), 5 (Gender Equality), 9 (Industry, Innovation and Infrastructure), 14 (Life Below Water), 15 (Life on Land), and 17 (Partnerships for the Goals). The principles of GSW 2017 were Plurality (Universality lives of Diversity), Power (Building local cells of accountability), and Human Rights (Responsible mediation of competing demands on natural resources).

### The LAB

The LAB, an open platform for multi-stakeholder deliberation on gaps and synergies within and between the SDGs and their implementation to be approached through the lens of soil and land, focused on eradicating poverty and promoting prosperity in order to jointly develop priorities for action at different scales throughout the coming years. The LAB promoted convergence of actors, perspectives, and discussions from the workshops of the GSW 2017 so as to synthesize knowledge, formulate concrete policy actions, and enable collaboration and cooperation between UN agencies, national and international organizations, scientific institutions, and civil society.

### Workshops

Three workshops provided an opportunity for governments and other stakeholders to deliberate and exchange views under the following themes:

1. *Soil Rehabilitation for Zero Hunger: Up-scaling people’s technologies by sharing lessons and developing strategies.* This workshop focused on soil health and equitable land use for sustainable development, better livelihoods, ending hunger, improving human health and well-being, and contributing to gender empowerment. It identified synergies that supported the collective of partners (Ministries of Agriculture in Benin, Burkina Faso, Ethiopia and Kenya, and other stakeholders under the BMZ initiative ‘ONE WORLD, No Hunger’) for efficient implementation of SDGs at local and national levels.
2. *Right to (defend) Land: Strengthening accountability at the local level through thematic reviews.* Legitimization of land tenure rights increases pressure on resources and injustice, leading even to human rights violation. Protecting land rights, their defenders and strengthening the local accountability mechanism is essential to achieving the SDGs, and this workshop focused on creating a support function for accountability at national levels by governments so as to increase the empowerment of local and indigenous people and their land rights.
3. *Competing Pressures on Soil & Land: Securing our natural resource base for food security.* Continuous degradation of fertile soils across the globe threatens successful implementation of SDGs, and therefore production of food, feed, fibre and fuel to reach zero hunger. Both micro (local production of food crops and energy crops) and macro (global level trade of land-based goods and services) level activities affect soil health. This workshop focused on the critical competing demands on soil and linked this with practical steps for reducing land degradation so as to achieve food security.

## LESSONS AND ACTION POINTS

The conference clearly established in the minds of participants that “Soils are the important element of Nature for the support of mankind”, and hence it is important that we pass on this message to the next generation in the same manner we received it from our forebears. Unfortunately, today soil degradation and soil erosion leading to loss of top soil worry us immensely about the future of agriculture.

To address this issue, every human being should respect soil as “Mother Earth”. There is no human existence without “Mother Earth”. Whatever human beings eat ultimately comes from the soil. Food originating from a rich soil with good organic content is plentiful in nutrients and vitamins and the opposite is true as well.

Unfortunately, we understand soil in the very limited context of N, P, K micronutrient contents, but there is much more to understand about soil. Soil texture, structure, chemical properties, aeration, permeability, microbial activities and so on must be understood for maintaining sustainable agriculture. Otherwise, the current way we continue with agriculture expecting just fertilizer addition to increase yield proportionately will no longer be a reality or productive.



Even in India we have been noticing that soils have stopped responding to addition of chemical/mineral fertilizers in many regions. Soil restoration by adding organic matters and other reclamation material is a long term process and it takes generations to achieve. Degraded soils also lead to severe health problems, thereby creating a huge impact on human health and on future socioeconomic development. Hence, preventive measures have greater relevance.

Thoughtless deployment of heavy machinery is also resulting in compaction of soil thereby affecting breathing of soil and its permeability. This complicates the problem leading to excess runoff, erosion of soil and silting of water bodies. The problem is alarming as severe depletion of groundwater is arising because of soil compaction.

It is often thought that development of more and more high yielding varieties will be beneficial but often they end up in quick depletion of soil nutrients. Hence, comprehensive research and coordination among soil scientists, breeders, and machinery experts is the need of the hour.

To restore soil nutrient status, social action by NGOs, youth and women is greatly needed. Due to short-sighted approaches, soils are getting polluted by release of industrial effluents and plastics, which also pollute groundwater. The actions of people living in urban areas also have a direct bearing on soil health. Hence, soils must be equally cared for by both rural and urban people.

Water-soil-plants-food-human health form a chain in the eco system as all are mutually dependent. To sensitize people, children should be educated from school level, and youth should be made an integral part of any soil action plan. They must realize how their food habits – more dependence on non-vegetarian food and wastage of food – contribute to pressure on soil resulting in degradation of soil. The National Policy on Soils is

the need of the hour and there is a need to declare soils as a national resource. Creating long-term lease rights for the poor is also much needed so as to improve soil nutrient and restoration status.

Access to soil for the poor is a key issue in achieving many of the SDGs, such as SDG 1 (No poverty), SDG 2 (Zero hunger), SDG 3 (Good health and well-being), SDG 14 (Life below water), and SDG 15 (Life on Land). Hence, local innovative practices, such as raising green leaf manure crops before season and incorporating the same into soils, and composting and incorporating such crop residues into the soil should be encouraged. Such best practices should be promoted among farmers and governments should incentivize adoption of these practices.

A sound National Soil Policy supplemented with local action should be put into place for treating soil hectare by hectare. Some of the papers presented at the conference drew attention to the extreme levels of soil contamination with heavy metals and other poisonous substances due to abusive practices such as the release of untreated industrial effluents into the soil. Hence, collective action to protect the planet, especially its soil health for future generations, is the duty of every citizen.

### Extension for soil health management

In today's world where natural non-renewable resources are being extensively and exhaustively used, collective social action along with multidisciplinary research is necessary to counteract current practices along with greater public awareness on soil health. Extension and advisory services have to play a major role in enhancing the quality of soils by promoting integrated nutrient management, use of cover crops, and adoption of appropriate tillage mechanisms.



Farmers who are custodians of soil should be sensitized by the extension and advisory services. The extension system should

incorporate all aspects of soil and not just restrict themselves to Soil Health Card and promotion of recommended doses of fertilizer. A balance of mineral/chemical fertilizer, bio-fertilizers, and a conducive atmosphere in soil to encourage microbial activity is vital. 'Crop diversity' and 'biodiversity' are also key factors in maintaining good soil health.

Some steps that may be taken by Extension, Research and other Development Stakeholders are:

- a. *Inclusion of NGOs, youth and women in promoting better soil health management practices:* As the contribution of industrial pollution is growing in soil and water pollution, inclusion of NGOs in the cleaning act could prove fruitful. Greater involvement of youth will increase action and help them to become the architects of a better future. Women in rural areas are more closely related to soil and water, so increasing their awareness will bring about mass change at the grassroots level.
- b. *Addressing inclusion gap, financial gap and gender gap:* Extension should be inclusive – covering all poor and women – and they must also be included in financial schemes so that they can take up soil and water conservation work.
- c. *Promote soil health in school curricula:* Appropriate modules/lessons that enhance awareness on soil health needs to be incorporated in the school curricula.
- d. *Support drafting of a National Policy on Soils:* A National Policy on Soil addressing the current challenges and future interventions needs to be formulated with deliberations from natural resource

management stakeholders, soil scientist, and multi-disciplinary experts. Soils need to be declared as a national resource cutting across urban and rural areas. Long term lease rights for poor and indigenous people will also improve their nutrition and restoration status. Extension should engage with the national policy making process if this has to be achieved.

- e. *Promotion of Indigenous Technical Knowledge (ITK)*: Local innovative practices and ITK, such as raising green leaf manures before and after cropping seasons, composting, incorporating crop residues, etc., should be encouraged.



- f. *Multidisciplinary approach*: Extension personnel should be well-versed with agronomic practices and crop physiology in order to promote environment friendly practices in farmers' fields. *Integrated farming systems* with an animal husbandry component should be put in place for sustainable crop production. Extension professionals must have thorough understanding of soil microbial actions and beneficial organisms.
- g. *Irrigation water quality*: Extension functionaries should focus on promoting practices to preserve and improve irrigation water quality as it directly affects soil health and indirectly impacts humans, livestock and the overall ecology.

## FINAL REMARKS

The conference and LAB sessions provided opportunities for participants to share their perspectives on improving soil health, and to re-visit traditional practices of soil and water conservation. The conference emphasized the need for collective action to reclaim and restore Nature's most valuable gift to us – 'the soil.'

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