Dear Friends,

This month we shall discuss the 15th Sustainable Development Goal: ‘Life on Land’. In this blog, we shall try to explain:

a. What it is and why is this relevant  
b. What are its indicators and targets  
c. Where do we stand in India  
d. What can we do to support the goal

As stated earlier, I have little to contribute on my own. I have attempted to provide a few references, so that if anyone is interested in probing deeper, you could do so.

What is SDG 15? [1]

The purpose of SDG 15 is to ‘Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss’.

An ecosystem may be any area, large or small, with all forms of life on it, including plants, animals, insects, birds and fish (where applicable), nourished and supported by the non-living surroundings like soil, water, air, minerals, sunlight, wind, rain, snow etc. Basically such systems may be on land or in water, known as terrestrial and marine ecosystems respectively. Diversity of different life forms mutually supports and strengthens the health of the entire ecosystem. Land degradation and desertification makes life difficult for all flora and fauna.

Like the oceans, forests are equally important for human lives, providing us food to eat, clean air to breathe and fresh water to drink.

Why is this important? [2]

Out of the 3 planetary boundaries transgressed by humanity, climate change has received considerable attention but the dangers of bio-diversity loss has not yet occupied the public mind so far. We are right in the midst of the sixth massive extinction of species in Earth’s history, caused by relentless destruction of wildlife habitats for human use. A recent UN report estimates that about 1 million species of plants and animals face extinction within a few decades, unless we undertake corrective measures. In fact, climate change is getting accelerated due to degradation of land, while at the same time, as we push back wild life, zoonotic (transmitted from animals) diseases are on the rise, killing 2 million people every year globally. Covid-19 is the latest example. It is estimated that the livelihoods of around 3.2 billion people, all of them from the relatively poorer segments of society are impacted.
This is why it is essential that we prevent further deforestation, actively pursue afforestation programs, arrest further desertification, reclaim degraded land and stop further loss of biodiversity.

**What are its indicators and targets? [1, 3]**

The targets for SDG-15 are as under:

**15.1** By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

**15.2** By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally

**15.3** By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world

**15.4** By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development

**15.5** Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species

**15.6** Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed

**15.7** Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products

**15.8** By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species

**15.9** By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts

**15.A** Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems

**15.B** Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation

**15.C** Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities
Where do we stand in India?

The following images [4] offer some national as well as global status on SDG-15 and trends:

![Status of SDG-15 in 2020](image1)

The above figure shows that the status in India comes under the category ‘Significant challenges remain’ while the trend in India (below) shows that it is ‘Decreasing’ i.e. deteriorating.

![Trends SDG-15 in 2020](image2)
Specifically, India’s standing in 2019 [5] is shown below:

**SDG15 – Life on Land**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2019 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean area that is protected in terrestrial sites important to biodiversity</td>
<td>26.1</td>
</tr>
<tr>
<td>Mean area that is protected in freshwater sites important to biodiversity</td>
<td>15.2</td>
</tr>
<tr>
<td>Red List Index of species survival (0-1)</td>
<td>0.7</td>
</tr>
<tr>
<td>Permanent Deforestation (5 year average annual %)</td>
<td>0.0</td>
</tr>
<tr>
<td>Imported biodiversity threats (per million population)</td>
<td>0.3</td>
</tr>
</tbody>
</table>

The standing in 2020 [6] is as under:

![SDG15 – Life on Land table for 2018 and 2019]

In the following graph we offer a comparison of SAARC nations, 3 ASEAN countries and UK, and USA on the performance on SDG-15 in 2019. India is ahead of Mauritius, Indonesia and Malaysia only. All other nations in the comparison group are ahead of India. USA tops the list. The key indicators are: forest area as a proportion of total land area, proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, progress towards sustainable forest management, proportion of land that is degraded over total land area, Mountain Green Cover Index and Red List Index.
If we look at the indicators level, the comparison is shown below [5]:

<table>
<thead>
<tr>
<th>Country</th>
<th>Normalized Score</th>
<th>Dashboard Color</th>
<th>Normalized Score</th>
<th>Dashboard Color</th>
<th>Normalized Score</th>
<th>Dashboard Color</th>
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<th>Dashboard Color</th>
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<td>0.11</td>
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<td>100.00</td>
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<td>99.38</td>
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<td>99.69</td>
<td>green</td>
<td>99.38</td>
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<td>99.69</td>
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<td>20.76</td>
<td>orange</td>
<td>40.44</td>
<td>red</td>
<td>97.84</td>
<td>green</td>
<td>99.69</td>
<td>green</td>
<td>99.38</td>
<td>green</td>
<td>99.69</td>
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<tr>
<td>Bhutan</td>
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<td>green</td>
<td>99.38</td>
<td>green</td>
<td>99.69</td>
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<td>Mauritius</td>
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<tr>
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<td>green</td>
<td>99.38</td>
<td>green</td>
</tr>
</tbody>
</table>

What can we do to support the goal? [2, 7]

The key is hidden in sustainable consumption and production – SDG-12. We could adopt the 3-R principle: reduce, reuse, and recycle. We could eat locally grown food, thereby reducing our carbon footprint. We could support responsible eco-tourism that does not disturb wildlife. We could participate in our local community based eco-preservation initiatives.

SDG 15 is about preservation of bio-diversity by protecting the entire land ecosystem. This includes managing forests, reclamation of degraded land and arresting desertification. With only 2.4% of the total land area, India is one of the 17 mega-biodiverse countries of the world, hosting approximately 8% of the global bio-diversity resources. The Voluntary National Report [7] filed by India in 2020 notes a series of policy level measures adopted by India. Civil participation in these national efforts are important components for the success of the programs. Each one of us could familiarise ourselves with the multitude of existing programs listed below, and help disseminate the relevant ones in our respective communities, for their successful implementation.

- Restoration of 26 million hectares (Mha) of degraded land by 2030
- The National Afforestation Programme (NAP) covering 2.1 Mha of forest area
- National Mission for a Green India (GIM)
- Forest Fire Prevention and Management Scheme (FFPM)
- Protected Areas numbering more than 900, covering 165,000 Sq. KM area - 5% of land mass
- Joint Forest Management (JFM)
- Recognition of Forest Rights Act, 2006
- India’s wetlands - 37 of them recognized under Ramsar Convention
- Wetland (Conservation and Management) Rules 2017
• Environment (Protection) Act, 1986
• National River Conservation Plan (NRCP)
• National Plan for Conservation of Aquatic Ecosystems (NPCA)
• Tigers in the wild, 2,969 in 2018, an increase by 33 per cent in 4 years
• Community Reserves – 163
• Signatory to the United Nations Convention to Combat Desertification in 1994
• Integrated Watershed Management Programme,
• A global leader in the Convention on Biological Diversity (CBD)
• National Biodiversity Authority operationalises the CBD through Biodiversity Management Committees (BMC) and People Biodiversity Registers
• Exceeded the terrestrial component of 17 per cent of Aichi target 11

The need to strike a balance between human needs and prevention of ecosystem degradation poses a challenge to human ingenuity. The report admitted that ‘57 of India’s faunal species are critically endangered’.

References

   Accessed on October 09 2020 14:00 IST
2. 15_Why-it-matters.pdf
4. SDG Index Dashboard