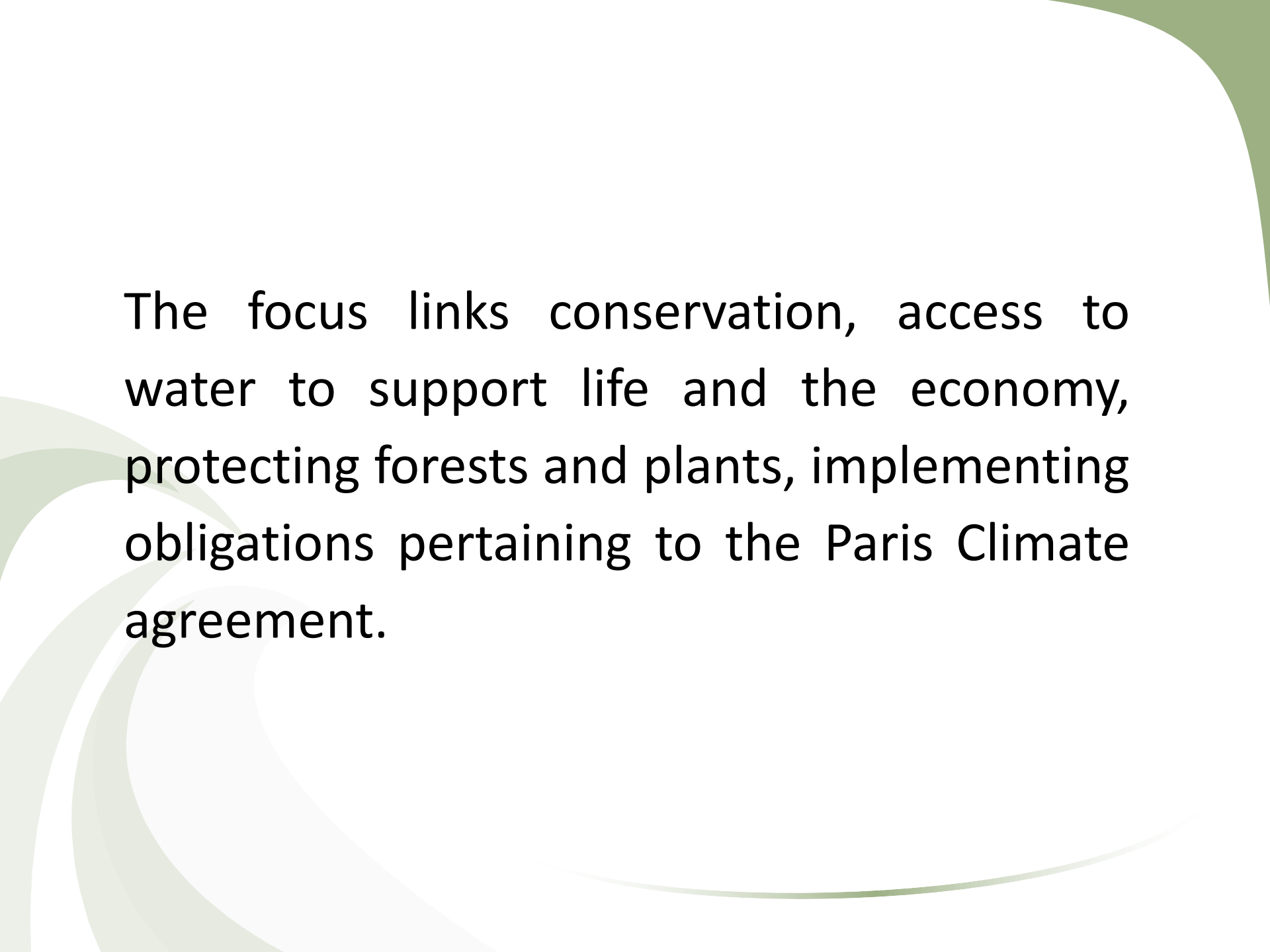


Disaster Risk reduction and our future in Sri Lanka

CHA

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The focus links conservation, access to water to support life and the economy, protecting forests and plants, implementing obligations pertaining to the Paris Climate agreement.

Biodiversity and Ecosystem Services

- Sri Lanka, has a total land area of 65,610 km².
- 30 species of marine mammals in monsoon scrub jungle in the northwest and southeast, monsoon forest and grassland, inter monsoon forest, rain forests and grasslands below 3000 feet, between 3000-5000 feet and above 5000 feet.

Biodiversity and Ecosystem Services

- Dry forests, savanna and grasslands are the three major natural terrestrial vegetation types found in the dry land of Sri Lanka.
- 4% of the country's land area is covered by water
- 103 distinct natural rivers
- over 10,000 manmade lakes and canals countrywide

Biodiversity and Ecosystem Services

- Sri Lanka harbors over 370 aquatic or wetland plant species of which 12% are endemic to the country. They provide an array of human benefits including food and drinking water, raw material, and medicinal herbs.
- ***Wetlands are considered as the transitional zone between land and water and provide several ecological functions such as ground water buffering and reducing pollution.***

Why forests will make or break the climate fight

Forests also provide ecosystem services such as protection from floods, clean air and water, medicinal plants, and are a sacred and cultural place for many people.

Water Security in Sri Lanka

- We face serious problems pertaining to ownership, supply and use of water. Water sources for our main rivers are above 5000ft where forest cover is reducing. Downstream water retention is poor, flowing into the sea. Trapping water requires reservoirs.
- Our rain fall has not decreased but occurs for shorter periods with longer droughts increasing consumption by 1.5.

Water Security in Sri Lanka

- Growing population, increased economic activities and improved standards of living demands, limited fresh water resources. A healthy terrestrial ecosystem in the upstream area of basins is important for rainwater infiltration, ground water recharge and lively river flow regimes.

Water Resources and Allocation Policies

- **About** 75%-85% of the developed water is withdrawn for irrigation with more than half of the water diverted for agriculture not reaching farms due conveyance losses. Inappropriate application methods and poor on farm management practices wastes further, contributing to water logging, salinity and low productivity.

Water Resources and Allocation Policies

- Unplanned ground water withdrawal from many aquifers in the country in a haphazard manner has caused depletion of ground water table and saline water intrusion in to the aquifers.

Water Supply & Sanitation

- Clean water must be accessible to each and every one irrespective of their social and economic status and place of living.
- Sri Lanka does not have ground water mapping system done for most of the rich aquifers in the country, with planners and developers in dark.

Power Generation- Most of the natural flow sites for hydropower have been fully developed, changing the flow domain of the rivers spatially and temporally, impacting habitats, forest, wild life and loss of fertile land. Thermally modified return flows from power plants changes river life and flow regime downstream, causing damages to ecosystem and flora fauna, changing the climatic and land use pattern in the catchments area with adverse effects in the future.

- **Environmental Needs** - Ecosystems are water dependent for building matter, nutrient carrier and cooler.
- **The Need for Water Pollution Abatement** - Water pollution affects fresh and ground water sources and the entire ecosystem. Therefore, abatement of water pollution becomes of fundamental importance requiring a radically improved approach.

Strengthening Partnerships

Sri Lanka has an abundance of wealth in the Institutions addressing Biodiversity Conservation and Climate Change issues in Ministries, Line Agencies, Government Corporations, Private Sector, INGOs, NGOs and others. (See table below). The strategy is to form key partnerships which will address issues effectively and implement projects successfully in mobilizing bilateral and multilateral donor funding. Key Government institutions for conservation of biodiversity are also found attached.

Conclusion

List of actions that needs to be taken to ensure the country is in the correct path to addressing Biodiversity Conservation:

- Research on climate change risks and vulnerability of the sector.
- Building of strategic partnerships and alliances.
- Strengthening of Institutional Policy framework in the context of Climate Change Mitigation and Adaptation issues.
- Ensure country targets are met as per Paris Agreement and other global conventions.
- Ensuring Water Security



Thank You