Nature and Ecosystem Based Solutions for Addressing Intractable SDG Challenges in South Asia

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Presentation outline

1. Increasing environmental and climate change challenges
2. Intractable development challenges
3. Intractable social and institutional challenges
4. Multi-dimensional vulnerability
5. Challenging SDG outlook
6. Natural & ecosystem based solutions
7. Way forward ideas
Recent Headlines on Challenges South Asia is facing (Source: the guardian)

• “South Asia floods kill 1,200 and shut 1.8 million children out of school”

• “In an era of dire climate records the US and South Asia floods won't be the last”

• “As flood waters rise, is urban sprawl as much to blame as climate change?’
South Asian flood disaster, 2017
Key environmental challenges

- Degraded and threatened ecosystems
- Threatened water security (4-5 % of global fresh water for almost 25% of the population);
- Air, land, water, ocean pollution
- Biodiversity loss and invasive species
- Degraded river, coastal and marine system;
- Climate change vulnerability and impacts; and
- Lowest per capita agricultural (0.35 ha) and forest land (0.05 ha) among all the regions
Persistent development challenges

- South Asia has 36% of the global poor;
- 25% global population (1.75b)
- High inequality - both in income and opportunities
- ~50% of the global malnourished children;
- In all HDI, remains behind all regions except perhaps Sub-Saharan Africa;
- Lack of effective institutions, governance and regional co-operation
6 intractable sustainable development challenges facing South Asia

• Poverty and inequality
• Environmental degradation and climate change
• Demography and urbanization
• Poor governance and ineffective institutions
• Poor and imbalanced infrastructure
• Knowledge, capacity and technological gaps
Table 1: Achievement of the Millennium Development Goals in South Asia

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Asia-Pacific
- Early achiever
- On track
- Slow
- Regressing/No progress

South-East Asia
- Early achiever
- On track
- Slow
- Regressing/No progress

Pacific Islands
- Early achiever
- On track
- Slow
- Regressing/No progress

North and Central Asia
- Early achiever
- On track
- Slow
- Regressing/No progress

Asia-Pacific LDCs
- Early achiever
- On track
- Slow
- Regressing/No progress

South Asia
- Early achiever
- On track
- Slow
- Regressing/No progress

- Afghanistan
- Bangladesh
- Bhutan
- India
- Iran (Islamic Rep. of)
- Maldives
- Nepal
- Pakistan
- Sri Lanka
- Turkey

Figure 4: Urbanization in South Asia, 2015 and 2050


Note: *In this figure, Southern Asia includes the Islamic Republic of Iran.
Multi-dimensional vulnerability (HDR, 2014)
Outlook for meetings SDG (UNESCAP, 2017)

• “Many trans-boundary issues will require a regional response, and there are many opportunities for joint action”;

• “Need to strengthen policy coherence and recognize the links between the goals”

• “Implementing the SDGs as a transformative agenda requires new government capacities”;

• “Climate change and its impacts must be urgently tackled across the entire 2030 Agenda, given the vulnerabilities in the region”
SDGs underpin transformational development

• The post 2015 agenda is titled as “Transforming Our World”;
• Emphasis is to cure the root cause of diseases rather than treating the symptoms;
• In SA, this means striking a long-term balance between poverty alleviation and social development with economic and environmental goals.
How achieving SDGs can attain transformational development

- Creating integrated vision and overarching framework;
- Ensuring equitable social institutions and functions and enhancing productivity;
- Providing highest level political commitment for restructuring of power relations and redistribution of resources.
Nature based Solutions (NbS)

- “Actions to protect, sustainably manage and restore natural or modified ecosystems, which address societal challenges effectively and adaptively, while simultaneously providing human well-being and biodiversity benefits”. (IUCN);

- An umbrella concept that covers a range of different approaches.

- WCC, 2016 Motion 062 - Integration of nature-based solutions into strategies to combat climate change (https://portals.iucn.org/congress/motion/062)
The evolution of NbS (Source: G. Walters et al, 2016)

Fig. 1. Forests and their restoration as Nature-based Solutions that can complement other measures to address, in this case, food security.
Figure 2. Timeline of the development of the NbS concept
NbS as an umbrella concept for ecosystem-based approaches

- Ecosystem restoration approaches
- Issue-specific ecosystem-related approaches
- Infrastructure-related approaches
- Ecosystem-based management
- Ecosystem protection approaches
NbS promotes green and inclusive growth

• Creating employment, income and growth
• Strengthening governance and reform economic structures
• Mainstreaming low carbon growth into national development plans and government processes
• Accounting for the essential ecosystem services provided by Nature
• Building resilient and sustainable cities and societies
New generation of Integrated watershed management;

Ecosystem Based Adaptation (EbA);

Payment for Ecosystem Services (PES);

Ecosystem Protecting Infrastructures and Communities (EPIC);

Mainstreaming Eco-DRR and EBA in national policies and plans
Maintaining healthy Nature can build and sustain resilient South Asian communities...

- **Support** development & improvement of both human and ecosystem well-being
- **Require** effective & adaptive ecosystem governance to conserve Nature’s Benefits to People to achieve SDGs
- **Need** policy coherence and decisions that incorporate the conservation of ecosystem services in national planning

... and improve human well being.
Potential benefits of NbS/ES research

• Identify risks and opportunities and inform stakeholders with new knowledge and practice
• Take advantage of new opportunities e.g., markets and influence government policies and plans
• Strengthen existing approaches to NbS such as Eco-DRR, EbM and EbA;
• Improve stakeholder participation & relationships within the society and with ecosystems
• Demonstrate societal benefits by linking improvement in ES to livelihood improvement and inclusive growth
Way forward for implementing nature/ecosystem-based solutions

- Local (rural and urban) governments consider ecosystem integrity while planning development and infrastructures
- Multi-stakeholder and multi-disciplinary approaches in ecosystem governance
- True value of ecosystem services accounted in national budget
Way Forward for tackling SDG challenges

- Governments recognize and mainstream ecosystem services into SD
- Adequate budget is allocated for ecosystem restoration & management
- Inclusive and participatory approaches are adopted throughout the process;
- SDGs implementation is monitored, reported & communicated to public
IUCN/CEM’s work on NbS

• Recently published: *Nature-based solutions to address global societal challenges* (Author(s): Cohen-Shacham, E. Janzen, C. Maginnis, Stewart, Walters, Gretchen);

• NbS is a Thematic Group under the Commission on Ecosystem Management (CEM) [https://www.iucn.org/commissions/commission-ecosystem-management/our-work/nature-based-solutions](https://www.iucn.org/commissions/commission-ecosystem-management/our-work/nature-based-solutions);

• PANORAMA platform ([http://www.panorama.solutions/](http://www.panorama.solutions/)) provides 129 case studies covering three major themes:
Acknowledgement

Organizations:
• International Union for Conservation of Nature (IUCN)
• IUCN Commission on Ecosystem Management (CEM)
• IUCN Country Office, Nepal

References:
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2. Governance and Inclusive Development Programme Group, Amsterdam Institute for Social Science Research, University of Amsterdam, Amsterdam, The Netherlands; UNESCO-IHE Institute for Water Management, Delft, Authors: Joyeeta Gupta (j.gupta@uva.nl) and Courtney Vegelin (c.l.vegelin@uva.nl);
3. ESCAP (2016) Achieving the Sustainable Development Goals in South Asia: Key Policy Priorities and Implementation Challenges
THANK YOU FOR YOUR KIND ATTENTION & QUESTIONS