Strengthening Civil Society Capacity to Advocate for Mainstreaming Biodiversity (CAMB)

Aichi Biodiversity Target (ABT) Assessment Report for Nepal

Photo Credit: ICIMOD, 2018

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Submitted by: Deepa Basnet, Researcher

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Contents

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Abbreviations and Acronyms

ABS	Access and Benefit Sharing
ABT	Aichi Biodiversity Target
ACA	Annapurna Conservation Area
ANCA	Api-Nampa Conservation Area
ANSAB	Asia Network for Sustainable Agriculture and Bioresources
BCN	Bird Conservation Nepal
CAMB	Capacity to Advocate for Mainstreaming Biodiversity
CBD	Convention on Biological Diversity
CBO	Community Based Organization
CCAP	Climate Change Adaptation Planning
CEO	Communication, Extension and Outreach
CFUG	Community Forest User Group
CHAL	Chitwan Annapurna Landscape
CITES	Convention on International Trade of Endangered Species of Wild Fauna and Flora
CNP	Chitwan National Park
CSO	Civil Society Organization
DDC	District Development Committee
DFRS	Department of Forest Research and Survey
DNPWC	Department of National Parks and Wildlife Conservation
DoF	Department of Forest
DSCO	District Soil Conservation Office

DSCWM	Department of Soil Conservation and Watershed Management
EBA	Ecosystem Based Adaptation
FAO	Food and Agriculture Organization
FECOFUN	Federation of Community Forestry Users Nepal
FUG	Forest Users Group
GAC	Germplasm Exchange Authority Committee
GoN	Government of Nepal
IAP	Invasive Alien Plant
IAS	Invasive Alien Species
ICIMOD	International Centre for Integrated Mountain Development
IMISAP	International Strategy and Action Plan
INGO	International Non-Governmental Organization
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
ITPGRFA-MLS	International Treaty on Plant Genetic Resources for Food and Agriculture and Multi-Lateral System
KSL	Kailash Sacred Landscape
KTWR	Koshi Tappu Wildlife Reserve
M & E	Monitoring & Evaluation
MFE	Ministry of Forests and Environment
MIST	Management Information System
MOAD	Ministry of Agriculture and Livestock Development
MoALMC	Ministry of Agriculture, Land Management and Cooperatives

MoCTCA	Ministry of Culture, Tourism and Civil Aviation
MoFSC	Ministry of Forests and Soil Conservation
MoPIT	Ministry of Physical Infrastructure and Transport
MSc	Master of Science
NAGRC	National Agriculture Genetic Resource Center
NARC	National Agriculture Research Centre
NBIMS	National Biodiversity Information Management System
NBSAP	National Biodiversity Strategies and Action Plans
NCHM	National Clearing House Mechanism
NGO	Non-Governmental Organization
NLDC	National Lake Conservation Development Committee
NTFP	Non Timber Forest Product
NTNC	National Trust for Nature Conservation
ODA	Official Development Assistance
PES	Payment on Ecosystem Services
RBPR	Rapid Bioassay of Pesticide Residue
REDD	Reducing Emissions from deforestation and degradation
RPP	Readiness Preparation Proposal
SALT	Sloping Agricultural Land Technology
SDG	Sustainable Development Goal
SFM	Scientific Forest Management
SHL	Sacred Himalayan Landscape

SMART	Spatial Monitoring and reporting Tool
TAL	Terai Arc Landscape
TEEB	The Economics of Ecosystem and Biodiversity
UK	United Kingdom
UNDP	United Nations Development Programme
USD	United States Dollar
VDC	Village Development Committee
WWF	World Wide Fund for Nature
ZSL	Zoological Society of London

Executive Summary

The Nepal's Biodiversity Strategy and Action Plan (NBSAP henceforth) is the country's prospectus for the conservation and sustainable use of biodiversity into sectoral and cross-sectoral policies and programmes, institutional and legal preparedness to achieve its targets by 2020. The NBSAP was developed in 2014 subsequently after the Strategic Plan for Biodiversity (2011-2020) and the Aichi Targets, adopted at COP 10 to the Convention on Biological Diversity (CBD henceforth) in October 2010. The NBSAP was revised and improved by the Ministry of Forests and Soil Conservation (MoFSC henceforth) with the funding from Global Environment Facility owing to the United Nations Environment Programme). The CBD conference on 4-17 December, 2016 at Cancun, Mexico called upon for the Voluntary Peer Review (VPR henceforth) process globally. It was to:

i. Assess the national progress towards current CBD Strategic Plan and resulting in species recommendations for the Parties under review

ii. Provide peer /collaborative learning opportunities

iii. Allow greater Governmental transparency and accountability to the general public and other Parties

However, the country has entered into the federal structure since with 6 metropolitan, 11 sub-metropolitan cities, 276 municipalities, 460 rural municipalities with 753 entities in 77 districts. The brand new units has been initiated both at the provincial level and local level. Similarly, the institutions at the National levels are being revised as well to fit the changes. Nepal is also committed to practice and implement the Sustainable Development Goals (SDGs henceforth) by 2030. Hence, the periodic plans and annual budgets have already started to reorient the policy and budget priorities in order to reflect these commitments (NPC, 2017).

Due to which, there's a need of translating the NBSAP targeting to all the stakeholders and general public. It can contribute to have more impact on the real ground with the new federal structure. So, the Ministry of Forests and Environment (MoFE henceforth) called upon the Voluntary Peer-Review process so that the peer-review would be done in Nepalese perspective for NBSAP.

Evaluation Rationale:

- To review progress towards the Aichi Biodiversity Targets (ABT henceforth) and Implementation of Strategic Plan:
  The report will focus on monitoring the effectiveness of national strategies and actions in achieving National and Aichi Biodiversity Targets and related biodiversity outcomes. It required an assessment progress on achieving national targets, using the global and/or national indicators of biodiversity status and trends.

Methods

- Assessment of progress towards each national targets related to Aichi Biodiversity Targets
- Consultations with stakeholders to verify data and progress assessments and address information gaps
- Compile, review, revise and finalize the Aichi Biodiversity Target assessment report

The study is entirely based on the review of literatures, face-to-face interviews with key resource persons, pertaining to the progress and achievements of the National Targets after the implementation of NBSAP in 2015. The rigorous search process for literature included: peer-reviewed journal articles, books/chapters, dissertations, institutional reports, proceedings, management and development plans, newspaper articles, official websites, GIS maps etc. In addition, the national and global policy interventions contributing to biodiversity conservation in Nepal were also reviewed. The results were then collected and tabulated as per their respective Strategic Goals of the Aichi Targets of CBD.

Overall assessment of the national targets under thematic areas and cross-cutting themes

Thematic areas:

1. Protected Area Biodiversity (6 National targets)

S.N.	National Targets	Implementation Status			
		VG	G	P	NI
1	Program of Work on PAs (POWPAs) developed and implemented by 2016				√
2	By 2020, conservation plans for 20 additional priority species (10 animals and 10 plants) will be developed and implemented		√		
3	Methods/processes for economic valuations of ecosystem services made available by 2017			√	
4	Plans for sustainable management of at least five grasslands and five wetlands inside protected area prepared and implemented by 2020				√
5	"Overpass and/or underpass" built in at three key locations (including one at the highway in Barandabhar corridor) to allow free movement of wild animals across adjacent habitats by 2020			√	
6	Protected area tourism management system revised (including structure of the entry fee and distribution) by 2016		√		

2. Forest Biodiversity outside Protected Area (8 National targets)

S.N.	National Targets	Implementation Status			
		VG	G	P	NI
1	Percentage of production forests come under sustainable management			√	
2	Remaining government managed forests come under community based management		√		
3	District Forest Offices (DFOs henceforth) and Forestry User groups (FUGs henceforth) develop and implement NTFP management plan		√		
4	Districts, Community forests, Collaborative forests, Leasehold Forests have mandatory biodiversity chapter			√	
5	All forests in the five north-south corridors have conservation friendly management			√	
6	Reduction of forest loss rate			√	
7	Reclamation of forested land			√	
8	Rehabilitation of degraded forests through leasehold forests			√	

3. Rangeland Biodiversity (3 National targets)

S.N.	National Targets	Implementation Status			
		VG	G	P	NI

1	Improving understanding of rangeland ecology and biodiversity			√	
2	Improved conservation of rangeland biodiversity			√	
3	Sustainable utilization of rangeland resources for enhanced livelihoods			√	

4. Wetland Biodiversity (10 National targets)

S.N.	National Targets	Implementation Status			
		VG	G	P	NI
1	By 2017, status of biodiversity in at least 10 major wetlands assessed			√	
2	By 2020, additional five wetlands of international importance will be enlisted as Ramsar sites			√	
3	By 2020, plans for maintaining unhindered north-south biological connectivity in at least three major rivers developed and implemented				√
4	By 2017, at least three suitable wetlands will be declared and managed as fish sanctuaries				√
5	By 2020, encroachment and eutrophication will be controlled in at least 10 major wetlands			√	
6	By 2020, conservation plans (in-situ & ex-situ) for at least 10 threatened and economically valuable native fish and other aquatic species developed and implemented			√	
7	By 2020, plans to control industrial pollution in at least three major rivers and three other wetlands will be developed and implemented			√	
8	By 2016, the roles and responsibilities of different government line agencies (such as DoF, DoA, NEA, DoI) in the management of wetlands located outside protected areas			√	

9	An effective mechanism to control mining of gravels and sands from rivers and streams developed and implemented by 2015			√	
10	By 2020, commercial fish farming initiated in at least three hydropower reservoirs				√

5. Agrobiodiversity (7 national targets)

S.N.	National Targets	Implementation Status			
		VG	G	P	NI
1	By 2020, effective functional linkage established between the Gene bank and community based seed or gene banks			√	
2	By 2020, the Gene bank will collect and conserve genetic materials of at least 75% of the commonly cultivated crops and horticulture species		√		
3	By 2020, community based management of agrobiodiversity will be strengthened expanded to at least five additional districts		√		
4	By 2020, a plan to monitor the level and nature of use of insecticides, pesticides and chemical fertilizers developed and implemented		√		
5	By 2020, one-door system for regulating genetic resources (both PGR & AnGR)			√	
6	By 2020, at least 10 wild relatives of domesticated crops are effectively conserved		√		
7	By 2020, DNA level characterization of at least 10 native breeds of livestock completed	√			

6. Mountain Biodiversity (2 National targets)

S.N.	National Targets	Implementation Status			
		VG	G	P	NI
1	By 2020, at least 10,000 ha. of degraded mountain ecosystems will be restored through implementation of Ecosystem Based Adaptation (EBA henceforth) approach			√	
2	Research focusing on biological richness of mountain ecosystems, and diversity-driven ecosystem services completed in at least 10 major mountain ecosystems by 2020			√	

7. Cross-cutting themes

a) Enabling environment (8 National targets)

S.N.	National Targets	Implementation Status			
		VG	G	P	NI
1	By 2015, a National Strategic Framework for Conservation will be developed and implemented			√	
2	By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization will be ratified				√
3	By 2016, the Genetic Resources and Benefit Sharing Bill will be finalized and enacted				√

4	By 2017, a *sui generis* legislation for protection of plant varieties will be formulated and enacted by 2017				√
5	By 2018, intellectual property rights legislation will be formulated and enacted			√	
6	By 2016, the National Parks and Wildlife Conservation Act (1973) amended to address the changed ecological, social and political context	√			
7	By 2018, legislations on CITES, ABS , Plant protection and farmer's rights will be formulated and enacted			√	
8	By 2018, an umbrella legislation for conservation and sustainable use of biodiversity will be enacted			√	

b) Biodiversity mainstreaming (2 National targets)

S. N	National Targets	Implementation Status			
		VG	G	P	NI
1	By 2019, biodiversity considerations incorporated in the policies, plans and programs of relevant line ministries and other relevant government and non-government agencies			√	
2*	By 2016, the Government of Nepal (Allocation of Business) Regulations (2012) will be revised for giving biodiversity mainstreaming due importance			√	

c) Gender equality and social inclusion perspective (3 National targets)

S. N	National Targets	Implementation			
		VG	G	P	NI

1	By 2020, ensuring equitable access of men and women, including disadvantaged social groups to biological resources and benefit sharing			√	
2	By 2020, government and all other stakeholders will ensure at least 33 percent meaningful participation of women, *Dalit, Janajatis* and marginalized communities at all levels of planning and decision making				√

d) Biodiversity mainstreaming for institutional strengthening (5 National targets)

S. N	National Targets	Implementation Status			
		VG	G	P	NI
1	By 2015, the separate Biodiversity and Environment Division will be established at the Ministry of Forests and Soil Conservation (MoFSC henceforth)		√		
2	By 2016, organizational structure of the MoFSC departments will be revised as per the changed context			√	
3	Environment Friendly Governance district/village/Municipality Coordination Committees will be established in at least 15 selected District Development Committees (DDCs henceforth) and 30 Village Development Committees (VDCs henceforth) / Municipalities to plan, coordinate, monitor and execute biodiversity management in respective areas			√	
4	By 2020, Local Biodiversity Strategy Action Plan (LBSAP henceforth) will be developed and implemented by 30 VDCs/municipalities", the NBSAP prioritizes to provide a framework for LBSAP			√	
5	By 2016, a forestry sector human resource development plan developed and implemented			√	

e) Landscape management (3 National targets)

S. N	National Targets	Implementation Status			
		VG	G	P	NI
1	The landscape management strategy will be revised and implemented by 2016		√		
2	By 2020, a participatory and integrated soil and water conservation initiatives will be implemented in at least 30 critical sub-watersheds		√		

f) Invasive Alien species

S. N	National Targets	Implementation Status			
		VG	G	P	NI
1	By 2020, detailed survey of the coverage, modes of propagation, ecological and economic damage and loss, control measures, and possible uses of at least five most problematic invasive alien species will be completed			√	

g) Climate change adaptation mainstreaming in biodiversity conservation (5 National targets)

S. N	National Targets	Implementation Status

		VG	G	P	NI
1	By 2020, a low carbon economic development strategy and climate-smart biodiversity management plan will be developed and implemented			√	
2	By 2016, The national Reducing Emissions from Deforestation and Forest Degradation (REDD+ henceforth) Strategy will be finalized and approved		√		
3	By 2020, Climate Change Adaptation Planning (CCAP henceforth) will be adopted by at least 3,000 Community Forest User Groups (CFUG's henceforth)		√		
4	By 2020, at least 5% of the forested ecosystems will be restored through implementation of REDD+				√
5	By 2020, the concept of Smart Green Infrastructure will be captured while constructing new infrastructure such as roads, railways and transmission lines affecting protected areas			√	

h) Knowledge generation, acquisition and management (7 National targets)

S.N	National Targets	Implementation Status			
		VG	G	P	NI
1	Updating knowledge of biodiversity at ecosystem and species level			√	
2	Publication of Flora of Nepal by 2020			√	
3	A National Biodiversity Information Management System (NBIMS) will be established at the MoFSC and operationalized by 2016				√
4	National Clearing House Mechanism will be upgraded and made fully functional by 2015			√	

5	By 2016, an updated information on endemic plant species			√	
6	By 2020, status of nationally threatened, rare and endangered species of flora and fauna will be updated			√	
7	By 2020, baseline survey of NTFPs and animal genetic resources will be completed			√	

i) Communication extension and outreach (4 National targets)

S. N	National Targets	Implementation Status			
		VG	G	P	NI
1	By 2020, no. of training and other awareness raising events organized			√	
2	By 2020, at least 100 new audiovisual packages on different aspects of biodiversity will be prepared and disseminated		√		
3	By 2020, change in knowledge, attitude and capacity of stakeholders (government and nongovernment) towards biodiversity conservation and ecosystem services			√	
4	By 2020, change in number and types of awareness raising infrastructural facilities (such as on-site lecturing, demonstration and interpretation) will be established and operationalized in protected areas and Ramsar sites				√

j) Results-based Monitoring and Evaluation (M & E henceforth) (1 National target)

S. N	National Targets	Implementation Status			
		VG	G	P	NI
1	By 2020, Result based M & E framework system developed and implemented in at least two programmes				√

k) Traditional Knowledge (1 National target)

S. N	National Targets	Implementation Status			
		VG	G	P	NI
1	Supporting the protection of traditional knowledge, innovations and practices of indigenous people and local communities on biological and genetic resources genuinely involved indigenous people's organizations in policy formulation process and programs			√	

l) Fund Generation (1 National target)

S.N	National Targets	Implementation Status			
		VG	G	P	NI
1	Progress status, the government budget allocation in forestry and related biodiversity sectors sector constitutes progress, however, contribution from CBOs, Donors, INGOs and private sector was very less, and involvement of private/corporate sector in PES is poor			√	

Note: VG = Very Good, G = Good, P= Poor & NI= Not Implemented, *= repeated targets

All the thematic areas (**6**) and the cross-cutting themes (**12**) reveals that 8 of those are completely on track to achieve targets by 2020 whereas 12 are towards meeting the national targets but at an insufficient rate. And, altogether there are **77** national targets, to meet by 2020, where 3 targets have already surpassed the Aichi target by meeting it before deadline. Similarly, 15 are completely on track to achieve it by 2020 and 44 are towards the target at an insufficient rate but 15 have no overall progress since 2014. The positive aspect of the implementation of these national targets are: 2 are already achieved before the timeframe that none of it are shifting from the targets.

Aligning NBSAP with the CBD Strategic Plan and Aichi Biodiversity Targets 2020

Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society

Target 1: By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.

S.N	National targets	Status
1	National Clearing House Mechanism will be upgraded and made fully functional by 2015	Though, the National Clearing House Mechanism has not been upgraded and made fully functional at the MoFSC (now MoFE) by 2015, the MoFE is maintaining the updated website (http://www.mope.gov.np/index.php). Slow progress towards target at an insufficient rate.

2	A National Biodiversity Information Management System (NBIMS henceforth) will be established at the MoFSC and operationalized by 2016	Though, the National Biodiversity Information Management System has not been established and operationalized at the MoFSC, the MoFE is maintaining the updated website (http://www.mope.gov.np/index.php). Slow progress towards target at an insufficient rate.
3	By 2020, at least 100 new audiovisual packages on different aspects of biodiversity will be prepared and disseminated	More than 100 audiovisuals have been prepared and publicized by Government of Nepal (NARC, and International/Non-government Organizations (BCN, CARE Nepal, ICIMOD, IUCN, Red Panda Network, UNDP, WWF Nepal, and WWF UK) and many others. Progress is completely on track to achieve by 2020.
4	By 2020, change in knowledge, attitude and capacity of stakeholders (government and nongovernment) towards biodiversity conservation and ecosystem services	The public engagement can lessen and mitigate environmental degradation if protected areas and buffer zones can be improved (Sharma et al., 2018). For ex: Invasive Weed Awareness Day, on Sep 17, 2017. The MoFE, MoLMC, other responsible ministries & NGO's made an effort to raise awareness on interlinkage between biodiversity conservation and tourism, and physical infrastructure like: road and hydropower etc. Slow progress towards target at an insufficient rate.
5	By 2020, on-site lecturing, demonstration and interpretation infrastructure will be developed in at least five selected protected areas and Ramsar sites	The Department of National Parks and Wildlife Conservation (DNPWC henceforth) have been implementing the protected area specific programs/activities for grasslands and wetlands. The Banke National Park, Bardia National Park, Chitwan National Park, Parsa National Park and Shuklaphanta National Park have separate grassland management Guideline by now. Slow progress towards target at an insufficient rate.

6	Protected area tourism management system revised (including structure of the entry fee and distribution) by 2016	Different protected areas such as: Annapurna Conservation Area, Banke National Park, Bardia National Park, Guarishankar Conservation Area, Manaslu Conservation Area and Shuklaphanta National Parks are promoting ecotourism through training and awareness workshops, operationalizing better homestays, community infrastructure development program such as: constructing forest roads and building watch towers etc (NTNC, 2014; 2016). And, revising the entry fee structure for 3 protected areas (ex: Chitwan National Park) (M. Dhakal, personal communication, Sep 3, 2018). Progress is completely on track to achieve by 2020.

The 2 day workshop was organized by the Central Department of Environmental Science (CDES henceforth) in order to mainstream "Payment on Ecosystem Services (PES henceforth) Financing" in curricula of B.Sc. and M.Sc. of Tribhuvan University supported by WWF Nepal and Biodiversity & ICIMOD on Dec 11-12, 2015 (N. Dhital, personal communication, August 28, 2018), which is already included hence forward. Again, the key stakeholder's discussion was held on January 12, 2018 for the design and review of initiating New MSc Curriculum on Wildlife Management and Biodiversity Conservation. The academicians, faculties, experts from Government of Nepal/Ministry of Forests and Environment and the national experts enriched the workshop (N. Chettri, personal communication, September 2, 2018).

Target 2: By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems

S.N	National targets	Status

1	By 2016, the Government of Nepal (Allocation of Business) Regulations (2012) will be revised for giving biodiversity mainstreaming due importance	The Government of Nepal amended the Allocation of Business Regulations in 2018. It incorporated biodiversity, forestry and agriculture area (MoFE, 2018). However, mainstreaming biodiversity conservation in tourism (successful example of Annapurna Conservation Area) and industry; and infrastructure projects of road, hydroelectric power for green infrastructure is very essential in coming future. Slow progress towards target at an insufficient rate.
2	Methods/processes for economic valuations of ecosystem services made available by 2017	The valuation studies were carried out mainly by ICIMOD & IUCN especially for protected areas, mountains, wetlands and the landscape. For ex: Kailash Sacred Landscape (Nepal et al., 2018), for Koshi Hill (Rai et al., 2017; Bhatta, L.D. et al., 2017), sub-catchment of Shivapuri-Nagarjun National Park (Pant & Rasul, 2013), Koshi Tappu Wildlife Reserve (Chettri et al., 2013) wetland services from Koshi Tappu Wildlife Reserve (Sharma et al., 2015) and Jagadishpur Ramsar site (Baral et al., 2016). Slow progress towards target at an insufficient rate.
3	By 2019, biodiversity considerations incorporated in the policies, plans and programs of relevant line ministries and other relevant government and non-government agencies	The Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES henceforth) Act and its subsequent regulation was reformed for biodiversity conservation and development. The forestry and agriculture sector has incorporated biodiversity significantly (Dhakal, 2018). Including the ministries like: Ministry of Forests and Environment & Ministry of Agriculture, Land Management and Cooperatives and the relevant government agencies, I/NGO (BCN, ICIMOD, IUCN & WWF Nepal) promoted tourism as a promising avenue for

		development of Nepal, harmonizing with biodiversity. Similarly, the physical infrastructures, road networks and hydropower were highlights too. These opportunities are yet to be explored more and be aware of. Slow progress towards target at an insufficient rate.
4	Environment Friendly Governance district/village/Municipality Coordination Committees will be established in at least 15 selected District Development Committees (DDCs henceforth) and 30 Village Development Committees (VDCs henceforth) / Municipalities to plan, coordinate, monitor and execute biodiversity management in respective areas	The establishment of environment friendly governance structure for 15 DDC's and 30 VDC's/Municipalities has already been completed. The main aim is to plan, coordinate, monitor and execute biodiversity management in corresponding sectors. Slow progress towards target at an insufficient rate.
5	By 2020, Local Biodiversity Strategy Action Plan (LBSAP henceforth) will be developed and implemented by 30 VDCs/municipalities", the NBSAP prioritizes to provide a framework for LBSAP	The NBSAP also prioritized to provide the framework for Local Biodiversity Strategy and Action Plan (LBSAP henceforth). It was targeted to have LBSAP developed and implemented for 30 VDC's or municipalities, which hadn't been started yet. No overall significant progress.

5	Updating knowledge of biodiversity at ecosystem and species level	Nepal has been identified as one of the blank spot for data by the Inter-Governmental Panel on Climate Change (IPCC henceforth) including other HKH countries (Sharma, 2010). There's a need of biodiversity profiling and updating, for which few taxa were upgraded. Few researchers described 6 types of forests depending on the altitudinal belts, climatic types, humidity types etc. along with the information of plant life forms and anthropological effect (Chaudhary et al., 2016). Nepal is blessed with 7,000 vascular plant species with largest family of Orchidaceae (458) and Compositae being the second largest with 395 species (Rokaya, et al., 2012), 366 species of Gramineae, 304 species Leguminosae, 191 species of Cyperaceae etc. (Miehe et al., 2015). The status of 212 mammals were revealed by (Amin et al., 2018) and birds by (Inskipp et al., 2017). The biodiversity inventory for the Api-Nampa Conservation Area (ANCA, 2015) and for the Kanchenjunga landscape (Chaudhary et al., 2015; Kandel et al., 2018) were recorded too after NBSAP. Slow progress towards target at an insufficient rate.

Target 3: By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions

S. N	National Targets	Status
1	By 2018, legislations on CITES, ABS , Plant protection and farmer's rights will be formulated and enacted	The plan to monitor the level and nature of use of insecticides, pesticides and chemical fertilizers is already implemented in order to improve the agrobiodiversity. The Plant Protection Bill 2017 is prepared to harmonize with IPCC guidelines that's in the process of parliamentary approval. Slow progress towards target at an insufficient rate.
2	By 2020, DNA level characterization of at least 10 native breeds of livestock completed	The NARC has been conducting research in native breeds of goat *(Khari, Terai, Sinhal, Chyangra)*, sheep *(Lampuchhre, Kage, Baruwal, Bhyanglung)*, cow *(Lulu, Achami, Siri, Terai)*, buffalo *(Lime, Parkote, Gaddi, Terai)*, pig *(Hurrah, Chwanche, Bampudke)*, yak *(Yak, Nak, Chauri)* and chicken *(Sakini, Ghanti Khuile, Puwankh Ulte)*. The GoN formulated Nepal's umbrella strategy "National Strategic Framework for Sustainable Development (2015-2030), National Seed Vision (2013-2025) and approved National intellectual Property Policy (2017) for conservation of agro-biodiversity too (Gauchan et al., 2017). At the same time, One-door regulating system is established for the plant genetic resources only for better and controlled exchange of genetic materials, excluding animal genetic resources. Based on Implementation Strategy and Action Plan (IMISAP henceforth), the Germplasm Exchange Authority Committee (GAC henceforth) is formed to regulate the exchange of plant genetic resources inside the country. The GAC and the National Genebank will be responsible for the database management

		(http://moad.gov.np/public/uploads/79095687-Germplasm%20Exchange%20Authority%20Committe_ToR_Guideline_Format.pdf). Target has already been achieved.

Target 4: By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits

S. N	National Targets	Status
1	By 2015, a National Strategic Framework for Conservation will be developed and implemented	The National Strategic Framework for Conservation was prepared with the technical support of IUCN. It will implement the framework through short-term, mid-term and long-term plan during the period of 2015-2030. It has been developed and in-place already, designed for conservation and sustainable development [National Strategic Framework for Sustainable Development (2015-2030), 2015]. Individual commitment to the group efforts from stakeholders are most essential to effectively implement the framework. Slow progress towards target at an insufficient rate.
2	By 2020, additional five wetlands of international importance will be enlisted as Ramsar sites	Out of 27 globally recognized freshwater wetlands, 20 are found in Nepal (Rijal, 2016). The National Lake Conservation Development Committee (NLCDC henceforth) completed inventory of 62 districts until 2014. Then, the Department of Forests conducted the inventory of wetlands in 13 districts (Achham, Baitadi, Bajhang, Bajura, Dadeldhura, Darchula, Dolpa,

		Doti, Gulmi, Humla, Jajarkot, Kanchanpur and Kailali) lying below 3,000 m.a.s.l. with core area of more than 0.5 ha using the Wetland Inventory, Assessment and Monitoring Tool in 2015/16. It shows that condition of 5 wetlands are good whereas 8 others are degrading (DoF, 2017). The biodiversity assessment programme was conducted in the Lake cluster of Pokhara valley, Bishazari lake and Ghodaghodi lake (MoFE, 2018). Slow progress towards target at an insufficient rate.
3	By 2020, a low carbon economic development strategy and climate-smart biodiversity management plan will be developed and implemented	The Low carbon economic development strategy is under preparation and the climate-smart biodiversity management plan has been prepared for the Chitwan Annapurna Landscape (CHAL henceforth), Kailash Sacred Landscape (KSL henceforth), Shivapuri-Nagarjun National Park and the Koshi Tappu Wildlife Reserve (M. Dhakal, personal Communication, September 10, 2018). The Climate-smart management plans are prepared from protected areas to the landscape level (Langtang National Park, Koshi Tappu Wildlife Reserve, Shivapuri-Nagarjun National Park, Kanchenjunga Conservation Area, Kailash Sacred Landscape and Chitwan Annapurna Landscape) by the government with support of conservation partners. Slow progress towards the target at an insufficient rate.

4	District Forest Offices (DFOs henceforth) and Forestry User groups (FUGs henceforth) develop and implement NTFP management plan	The Government of Nepal has already identified 10 valuable NTFP's. The separate management plan for the *Jatamanshi (Nardostachys grandiflora)* is prepared and under development for the remaining. The District Sector Plans and Community Forestry Operational Plans are already mainstreaming the status, distribution, inventory of few NTFP's etc. Few studies were also conducted on diversity, status, traditional use and conservation in the Kailash Sacred Landscape & the Kanchenjunga Landscape for the NTFP's too (Aryal et al., 2018; Uprety et al., 2018). Slow progress towards the target at an insufficient rate.
5	By 2017, status of biodiversity in at least 10 major wetlands assessed	The Protected areas management plans envisions the wetlands and grasslands restoration. All the 10 wetlands are already enlisted as Ramsar Sites of Nepal. The Ministry of Environment and Forests have prepared Ramsar Strategy and Action Plan (2018-2022). The Management Plan for Bishazari and its associated lakes, Ghodaghodi lake and Jagdishpur reservoir have been prepared already. The River Ecosystem Monitoring Guidelines are under preparation for the Rapti and Narayani river as well (G.S. Gurung, personal communication, WWF Nepal, Sep 23, 2018). Progress is completely on track to achieve by 2020.
6	Carrying out inventories to assess status and trends of rangeland resources and regulating the use of	Various grassland management plans like: slash and burn techniques for reeds, elephant grasses etc. have been conducted for 3 years in Shuklaphanta National Park (https://glocalkhabar.com/featured/59771/). Similarly, the grassland habitat mapping in Chitwan National Park in 2016 (CNP, 2016), status of Tigers and its prey in 2014 (Dhakal, 2014)

	rangelands as per their carrying capacities	and status of Snow leopard in Eastern Himalayan Landscape in 2017. The GoN have also developed Snow Leopard and Ecosystem Management Plan (2017-2026) for the Langtang National Park and Kanchenjunga Conservation Area etc (MoFE, 2017). The Conservation Action Plan was developed and implemented for rangeland-dependent species of flora and fauna (Yartsa Gunbu, Snow leopard, Tiger, Rhino, Black buck, Bengal florican, Elephants). Another, the Yarsa Gunbu Management Directive – 2073 have been issued by the DNPWC for its collection and transport ("New directives issued," 2017). Very little harmonization between Department of Forests & Department of Livestock Services for managing the rangeland outside protected areas but satisfactory cooperation is seen among the local level and district level people for better livestock herding practices. Need to revision the target due to new federal structure of country. Slow progress towards the target but at an insufficient rate. Slow progress towards the target at an insufficient rate.
7	Remaining government managed forests come under community based management	The GoN is applying scientific forest management for the community, collaborative and government-managed forest to achieve the Sustainable Forest Management. As of March 2018, about 81,500 ha. of forest is managed by 285 Community Forestry User's Group, 30 Collaborative Forest User's Committee, and 6 District Forest Offices for the block forests (Poudel et al., 2018). The Community Forestry in Nepal is one of the most well-established and successful example in forestry affiliating 29 million households benefiting 22,266 community forest (MoFE, 2018).

		Till date, about 5,35,808 ha. of government managed forests was brought under community management in the form of community forests, leasehold forests and the religious forests (MoFSC, 2014; MoFE, 2018). Slow progress towards the target at an insufficient rate.
8	Program of Work on PAs (POWPAs) developed and implemented by 2016	The POWPA framework is not uploaded on CBD official website till now. Nevertheless, regular conservation activities have been continuing in all the protected areas through the guidance of Management Plans. For ex: Tiger Conservation Program in the protected areas of Terai (Banke, Bardia, Chitwan, Parsa and Shuklaphanta National Park), Snow leopard Conservation Program in Kanchenjunga Conservation Area (ZSL, 2018). Slow progress towards the target at an insufficient rate.

Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use

Target 5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced

S. N	National Targets	Status

1	By 2020, reduction of forest loss rate	The rate of forest loss seems to be very satisfactory declining when we compare with earlier decades. The rate of forest loss was 2.1% from 1990 - 2000, 1.4% from 2000 – 2005 (FAO, 2011). According to the (DFRS, 2015), the rate of forest loss was 0.44% from 2010 - 2010 in Terai region. Slow progress towards the target at an insufficient rate.
2	The landscape management strategy will be revised and implemented by 2016	The conservation activities in the Terai Arc Landscape (TAL henceforth), Sacred Himalayan Landscape (SHL henceforth), Chitwan Annapurna Landscape (CHAL henceforth), Kailash Sacred Landscape (KSL henceforth) and Kanchenjunga Landscape (KL henceforth) by the partners like ICIMOD & WWF Nepal is supporting government to meet the national targets. Progress is completely on track and was achieved by 2016.
3	By 2020, reclamation of forested land will be achieved	The Forest Encroachment Control Strategy (2012) has already been enacted by the GoN to vacate the encroached land and 88% was reported from the Terai region ("Forest Encroachment alarming", 2014). As per (Department of Forest, 2017), about 1,613 ha. of encroached forestland was reclaimed which is about 16% only. Slow progress at an insufficient rate.

Target 6: By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries

have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits

S.N	National Targets	Status
1	By 2017, at least three suitable wetlands will be declared and managed as fish sanctuaries	Few selected section of the Phewa lake and the Kaligandaki dam site has been restricted for fishing (T.B. Gurung, Personal Communication, Sep 24, 2018). No significant overall progress.
2	By 2020, conservation plans (in-situ & ex-situ) for at least 10 threatened and economically valuable native fish and other aquatic species developed and implemented	The Conservation plan has been developed and implemented for Golden Mahseer fish in the periphery of Barahi temple at Phewa lake. There are at least 10 threatened and economically valuable endemic species. No significant overall progress.
3	By 2018, introduction and spread of invasive fish species will be effectively controlled and regulated	There are 16 invasive species of fish in Nepal. For ex: *Clarias batrachus, Gambusia affinis* etc. (Budha, 2014). No significant overall progress.
4	By 2020, encroachment and eutrophication will be controlled in at least 10 major wetlands	The GoN and other conservation partners are on track for controlling encroachment and eutrophication at the Phewa, Beeshazai and Mai Pokhari lake. The probe committee has been formed for investigating encroachment at the Phewa lake, after the Supreme court order (Sharma, 2018). The first ever locally made water mower was introduced by WWF Nepal to wipe the invasive species (WWF, 2018). The successful example of active local institution and implementation of Local Action Plan (2004) for controlling encroachment was depicted in the

		Barju Lake of Sunasari district (C.K. Bhagat, Personal Communication, Sep 1, 2018; Bhusal, 2018). Slow progress at an insufficient rate.
5	By 2020, commercial fish farming initiated in at least three hydropower reservoirs	Before 2014 only, fish farming activities reported in the Kulekhani and Kaligandaki river. Still, there's no commercial fish farming initiated in the hydropower reservoirs. No significant overall progress.
6	By 2020, plans for maintaining unhindered north-south biological connectivity in at least three major rivers developed and implemented	The flow-ecology relationships were studied in the Koshi basin (Doody et al., 2016) and in Karnali basin (Rajesh Sada, Personal Communication, Sep 25, 2018). Nevertheless, no any plans for maintaining unhindered north-south biological connectivity was noticed till date. No significant overall progress.

Target 7: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity

S. N	National Targets	Status
1	By 2020, percentage of production forests come under sustainable management	The GoN is applying scientific forest management for the community, collaborative and government-managed forest to achieve the Sustainable Forest Management. As of March 2018, about 81,500 ha. of forest is managed by 285 Community Forestry User's Group, 30 Collaborative Forest User's Committee, and 6 District Forest Offices for the block forests (Poudel et al., 2018).

		Slow progress at an insufficient rate.
2	By 2020, remaining government managed forests come under community based management	5,35,808 ha. of national/government managed forest was managed under the community management as community forest, collaborative forest, leasehold and religious forest (MoFE, 2018). Progress is completely on track to achieve target by 2020.
3	Districts, Community forests, Collaborative forests, Leasehold Forests have mandatory biodiversity chapter	The districts and Forest Users Groups (FUG's) have prepared biodiversity chapter in their management plans. It also helped the Community Forests Development Program Directives required to have biodiversity chapter. Progress is completely on track to achieve target by 2020.
4	By 2020, additional five wetlands of international importance will be identified and enlisted as Ramsar sites	The Lake Cluster (9) of Pokhara valley is the newly designated wetland/Ramsar site in 2016. The clusters are: Phewa, Begnas, Rupa, Maidi, Khaste, Gunde, Neurani, Dipang, Kamalpokhari. Slow progress towards target at an insufficient rate.
5	By 2020, community based management of agrobiodiversity will be expanded to at least five additional districts	Community based management of agro-biodiversity has been expanded to 21 districts till date. The culturally protected areas (temple), protected areas of government, different types of forests, rangeland and wetland, farmers seed network system etc. can enhance the mechanism as well (MoAD, 2017). Progress is completely on track to achieve target by 2020.

Target 8: By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity

S. N	National Targets	Status
1	By 2020, plans to control industrial pollution in at least three major rivers and three other wetlands will be developed and implemented	International Treaty on Plant Genetic Resources for Food and Agriculture and Multilateral System (ITPGRFA-MLS henceforth) Implementation Strategy and Action Plan (2018-2020) (MOAD, 2017). The Rapid Bioassay of Pesticide Residue (RBPR) Guideline 2071 is already implemented and revised (Adhikari, 2017). No such plans have been implemented for controlling industrial pollution. However, the National pollution Control Strategy and Action Plan (2017-2032) has been prepared already ("Draft of National Pollution Control finalized, 2017"). No significant overall progress.

Target 9: By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment

S. N	National Targets	Status
1	By 2020, detailed survey of the coverage, modes of propagation, ecological and economic damage and loss, control measures, and possible uses of at least five most problematic	The Department of Forest Research and Survey has been the center for Invasive Alien Plant Species. The DPR collected 91 alien species containing 25 IAPs (Clark & Shrestha, 2018). Lots of patchy work has been done at the landscape level and regional level as well. The "Inventory and Impact Assessment of Invasive Alien Plant Species in Kailash Sacred Landscape" was developed by ICIMOD (Shrestha et al., 2018). This target has specially been prioritized by GoN.

	invasive alien species will be completed	The country has started developing maps and policies, conducting inventories, improving awareness through publications, workshops among different stakeholders and monitoring results. On May 17-18, 2018, the workshop on "Impact Assessment of Invasive Alien Plant Species of Nepal" was conducted. The experts in it proposed 4 problematic IAP's in Nepal to assess their threat category by means of Environment Impact Classification of Alien Taxa (EICAT henceforth), adopted by IUCN. Altogether 26 species were assessed, 4 as massive, 9 as major, 10 as moderate and 3 as minor categories. The massive species were: *Chromolaena Odorata, Eichhornia crassipes, Parthenium hysterophorus, and Lantana camara* (A. Shrestha, personal communication, Aug 31, 2018). Similarly, *Chromolaena odorata, Bidens pilosa, Ageratum houstonianum, Lantana camara, Chromolaena odorata* are some of the dominant invasive alien species found in Siwalik and Terai region as well, due to plant cover and plant frequency (Dhakal, 2018). For the biological control of *Eichhornia,* NARC has imported the 2 weevils, *Neochetina eichhorniae* Warner and *Neochetina bruchi* Hustache from US and *s*tarted research on it (Shrestha, 2016). (Bisht et al., 2016) identified 5 species like: *Ageratina adenophora, Lantana camara, Parthenium hysterophorus, Ageratum houstonianum, Erigeron karvinskianus in the* KSL. Similarly, (Lamsal et al., 2018) estimated that *Ageratum conyzoides* and *Parthenium hysterophorus* will capture all suitable area by 2010 in the Himalayan region. No proper comprehensive management plan is leading to short-sighted efforts. For ex: controlling *Eichhornia crassipes* manually in Phewa and Bishazari lake, Pokhara (Poudel, 2018).

		The Community Training Manual on invasive alien species of the KSL was introduced by ICIMOD in 2017. It was to aware the local communities about it, its cause of spread, its impact and would be action, with the picture series. Slow progress towards target at an insufficient rate.

Target 10: By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning

S.N	National Targets	Source
1	By 2020, at least 10,000 ha. of degraded mountain ecosystems will be restored through implementation of Ecosystem Based Adaptation (EBA henceforth) approach	Just about 0.12%, i. e: 120 ha. of degraded land was successfully rehabilitated through the EBA project by IUCN (GoN/DoF/UNDP, 2016). The total of 314 ha. of degraded land were reforested where 194 ha. was by trees, fruit trees, cash crops in the vulnerable lands through the South-south cooperation for EBA (Twinomuhangi, 2017). On the other hand, court has banned sand, pebble and stone mining in Kaligandaki river using heavy machines this year (Baral, 2018). Mere researches were carried in this topic as well. For ex: Study of community forestry as a social-ecological system to show eba supports resilience and adaptation in Thuli Community Forestry User's Group (CFUG henceforth), Kavre (Sapkota et al 2018). Also, the Cost benefit analysis model of EBA (ICIMOD, 2014). No significant overall progress.

2	By 2020, Climate Change Adaptation Planning (CCAP henceforth) will be adopted by at least 3,000 Community Forest User Groups (CFUG's henceforth)	Majority of the CFUG's adopted the CCAP plan as soon as the GoN enacted the Community Forest Development Programme Guideline (2014). This guideline explicitly necessitate the adoption of climate change adaptation plan acknowledging that it would be the part of Forest Operational Plan. Altogether, 374 Forest Operational Plans adopted CCAP (DoF, 2017). Progress is on track to achieve target by 2020.

Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

Target 11: By 2020, at least 17% of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascapes

S. No	National Targets	Status
1	By 2020, at least 25% area of the country will be sustainably managed under protected area system	Nepal has already surpassed Aichi target by putting 23.23% (i.e. 34,185.62 square kilometer) of its land area under protected area management. Also about to meet the National target. Target has already been achieved.

3	All forests in the five north-south corridors have conservation friendly management	The SHL & the CHAL of WWF Nepal; KSL of ICIMOD have conservation friendly management due to community managed forests (MoFSC, 2014; 2015; 2016). The Singhalila corridor of Kanchenjunga Landscape, Panchase corridor & Barandabhar corridor forest of CHAL and Jaljala corridor of Western Mountain Conservation Landscape – newly declared conservation landscape (DoF, 2018). And, the SHL, CHAL, KSL have conservation oriented community based forestry. The Western Mountain Conservation Landscape is recently declared (DoF, 2018) that have north-south corridors. Nepal and China will be jointly conducting study to explore the possibility of cooperation for the development of north-south economic corridors ("Nepal China to study," 2018). Slow progress at an insufficient rate
4	Change in coverage and quality of protected forests	The forests, Laljhadi - Mohana (Kanchanpur), Basanta (Kailali), Khaata (Bardiya), Kankrebihar (Surkhet), Barandabhar (Chitwan), Panchase (Kaski, Parwat, Syangja), Madaane (Gulmi) & Dhanusadham (Dhanusa) etc. have been declared as Protected forest in 2012. Similarly, Mahabharat (Dadeldhura), Gaumukhi (Pyuthan), Ramdhuni (Sunsari), TinjurE-Milke-Jaljale (Tehrathum, Sankhuwasabha, Taplejung), Resunga (Gulmi), Thaple Satyawati (Gulmi), Shivagadhi Surainaka (Kapilbastu) & Rauta (Udayapur) have been nominated by DoF and send it to Department of Forests and Soil Conservation. The total area of the declared and nominated protected forests is 194957.55 ha. (DoFSC henceforth) (DoF, 2016). Slow progress towards target at an insufficient rate

5	"Overpass and/or underpass" built in at three key locations (including one at the highway in Barandabhar corridor) to allow free movement of wild animals across adjacent habitats by 2020	The 4 underpass have been constructed in the Barandabhar corridor of Chitwan National Park by the Department of Roads for free movement of wild animals (Neupane, 2018). This also follows the construction of other underpasses in Chitwan and Nawalparasi district too. Slow progress towards target at an insufficient rate
6	By 2020, the concept of Smart Green Infrastructure will be applied while constructing new infrastructure such as roads, railways and transmission lines affecting protected areas	But then again, the guidelines or frameworks are under preparation as these green structures did not met the standards (difficulty in passage of big mammals through underpasses). It will be used in railways and transmission line as well. Slow progress towards target at an insufficient rate.

Target 12: By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained

S.N	National Targets	Status
1	By 2020, status of nationally threatened, rare and endangered species of flora and fauna will be updated	The status of threatened, rare and endangered species of flora is still unknown though, Department of Plant Resources (DPR henceforth) has been conducting exploratory survey in the potential area of habitat of endangered species of plants. Slow progress towards at an insufficient rate.

2	By 2020, conservation plans for 20 additional priority species (10 animals and 10 plants) will be developed and implemented	The Conservation Action Plans for 9 animals (Snow leopard, Elephant, Tiger, Rhino, Black buck, Gharial, Vulture, Bengal Florican, & Pangolin) are prepared and under preparation for the Pheasants and Red panda. For ex: Pangolin Conservation Action Plan for Nepal (2018-2022) (DNPWC & DoF, 2018). The Conservation Action Plan for Bijaysal *(Pterocarpus marsupium)* (2018-2022) is there by now (DoF, 2018) whereas under preparation for Satisal *(Dalbergia latifolai)*, Okhar *(Juglans regia),* Rudraksha *(Elaeocarpus sphaericus),* species of Rhododendrons etc. The Central zoo, Elephant Breeding Center, Vulture Conservation Breeding Center and Crocodile Breeding Center are the efforts for ex-situ conservation. The Government of Nepal has already established the "National Zoological Garden in Suryabinayak, Bhaktapur. Similarly, the GoN is planning to build 7 zoos in 7 states of Nepal. Progress is on track to achieve target by 2020.
3	By 2020, change in knowledge, attitude and capacity of stakeholders (government and nongovernment) towards biodiversity conservation and ecosystem services	The Department of National Parks and Wildlife Conservation (DNPWC) organized the wildlife stockpile management on 22 May, 2017 with more than 48 national and global coverage. It was to aware the people about the value of body parts of animals when they are alive and after death. Preventive and curative measures work together to deal with human-wildlife conflict. There's the Wildlife Relief Policy for compensating NRs. one million to death of victims family caused due to depredation from wildlife. Not only this, livestock, property/crop damage and human injury are also covered in the policy to mitigate human-wildlife conflict.

		For awareness, MoFSC also prepared the "Red Panda Field Survey and Protocol for Community Based Monitoring" in 2015 (MoFSC, 2015). Slow progress towards at an insufficient rate.

Target 13: By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity

S. N	National Targets	Status
1	By 2020, the Gene bank will collect and conserve genetic materials of at least 75% of the commonly cultivated crops and horticulture species	74 agricultural crops, 145 horticultural crops and 75 forages totaling to 494 indigenous species and 93 exotic species are being cultivated in Nepal (Joshi et al., 2017). The percentage of genetic diversity conserved over time is limited. Since, 2010 to date, Gene Bank has collected more than 7, 299 accessions of 52 crops from 62 districts (Joshi et al., 2017). A total of 11, 389 accessions has collected on an average of 1,000 per year, however the target cannot be achieved before 2020. Hence, the target needs to be revised seriously. Slow progress towards at an insufficient rate
2	By 2020, community based management of agrobiodiversity will	The National Agriculture Genetic Resource Center (NAGRC henceforth) – NARC, Nepal has implemented various strategies to manage and conserve the agricultural plant genetic resources inside the country. Both the ex-situ conservation (seed bank, tissue bank, field gene

	be strengthened expanded to at least five additional districts	bank, DNA bank) and the on-farm conservation (community seed banks) are adopted by NAGRC. It supports local households, Community Seed Bank & the Community Gene Bank, National Gene Bank established in Protected areas and Field Gene Bank established by farmers/farmers groups etc. (Luitel et al., 2016). The Community Seed Bank Directives and Procedures are in place (GC & Acharya, 2018). The clear guideline for the establishment and management of the Community Seed Bank (Shrestha, 2018) and repatriation system of accessions to strengthen functional linkage and core conservation function. Not only this, but the NAGRC also provides technical and financial aid to Community Seed Banks for landraces collection, conservation and improvement; and for the Field Gene Bank. Progress is on track to achieve target by 2020.
3	By 2020, at least 10 wild relatives of domesticated crops are effectively conserved	More than 500 wild relatives of cultivated agricultural crop are found in Nepal (Singh et al., 2017). The seeds and herbarium of 65 accessions of 16 wild relatives of crops are collected and conserved in the National Gene Bank. For ex: *Dacus spp., Oryza spp., Malus spp., Eleusine spp., Musa spp., Solanum spp., Rumex spp., Chenopodium spp., Avena spp., Vicia spp., Lathyrus spp., Prunus spp., Medicago spp., and Barberis spp., etc.* Progress is on track to achieve target by 2020.
4	By 2020, one-door system for regulating genetic resources (both PGR & AnGR)	One-door regulating system is established for the plant genetic resources only for better and controlled exchange of genetic materials, excluding animal genetic resources. Based on Implementation Strategy and Action Plan (IMISAP henceforth), the Germplasm Exchange Authority Committee (GAC henceforth) is formed to regulate the exchange of plant genetic

		resources inside the country. The GAC and the National Genebank will be responsible for the database management (http://moad.gov.np/public/uploads/79095687 Germplasm%20Exchange%20Authority%20Committe_ToR_Guideline_Format.pdf). Progress is on track to achieve target by 2020.

One of the priority actions for management of agrobiodiversity included in the NBSAP relates to improving and expanding the existing on-farm conservation and use of agricultural genetic resources. Another important action includes a provision for strengthening the existing collection, conservation, rejuvenation, characterization, and documentation capacities of the national Gene Bank for improved and expanded ex-situ conservation of agricultural genetic resources. Enhanced networking and collaboration with relevant stakeholders at national, regional and international levels is another key strategy included in the NBSAP. The strategy for management of forest biodiversity includes a provision for restoration and recovery of economically and socially valuable wild species through in-situ and ex-situ conservation actions.

Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services

Target 14: By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable

S. N	National Targets	Status
1	By 2020, participatory and integrated soil and water conservation initiatives will be implemented in at least 30 critical sub-watersheds.	The President Chure - Tarai Madhesh Conservation and Management Master Plan of Government of Nepal in 2017 recognized 64 critical watersheds or river systems. The Department of Soil Conservation and Watershed Management (DSCWM); and the District Soil Conservation Office (DSCO henceforth) have been planning, implementing and monitoring the integrated approach of soil and water conservation initiatives. CARE Nepal, FECOFUN, ICIMOD, IUCN, and WWF Nepal etc. are the conservation partners here. Progress is on track to achieve target by 2020.
2	Rehabilitation of degraded forests through leasehold forests	In 2013, (7,413) people were involved in management and conservation of 42,733 ha of the leasehold forests (lack of data in 2013) (MoFSC, 2014). But, only 544 ha. of degraded forest were rehabilitated due to the pro-poor leasehold forestry program. It covers about 43,317 ha. of forests managed by 43,3127 local poor people (DoF, 2018). There wasn't much fully potential forests left in order to hand over to the community (DoF, 2018). Slow progress towards at an insufficient rate.
3	By 2020, the loss and degradation of *Siwalik* forests will be reversed or at	The Community Forestry in Nepal is one of the most well-established and successful example in forestry affiliating 29 million households benefiting 22,266 community forest (MoFE, 2018).

	least controlled by making it a priority of the central and local governments (i.e. DDCs, VDCs).	Till date, about 5,35,808 ha. of government managed forests was brought under community management in the form of community forests, leasehold forests and the religious forests (MoFSC, 2014; MoFE, 2018). Progress is on track to achieve before 2020.

Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification

S. N	National Targets	Status
1	By 2016, The National REDD Strategy will be finalized and approved	Nepal has been proactively participating in the REDD+ Readiness preparation since 2008 meeting several governance requirements. The country also developed Revised Readiness Preparation Proposal (R-PP henceforth) in October 2010 (MoFE, 2018c). Also, the Biodiversity Monitoring Protocol for REDD+ has been prepared in collaboration with DNPWC, NTNC, and ICIMOD, for measuring and monitoring biodiversity changes after REDD+ implementation especially in TAL. The National REDD+ strategy was finalized in 2016; approved and endorsed in 2018 with prospects for jointly working for climate change mitigation & adaptation and, biodiversity conservation (Dhakal, 2018). Progress is on track to achieve target by 2020.

2	By 2020, at least 15% of the forested ecosystems will be restored through implementation of REDD+ and ecosystem based adaptation programs	The forest area coverage increased from 40% to 44%. But, only 5% (2,98,000 ha.) of the forested ecosystem got restored through REDD+ program out of 5.96 million ha. of total forests. However, from 2019 to 2024, new REDD+ program in Nepal is prepared to protect 2.4 million ha. of forests (http://www.wwfnepal.org/?uNewsID=330394) No significant overall progress.
3	By 2020, development and implementation of plans (by DFOs and FUGs) to significantly reduce occurrence of forest fires.	The satellite data can help to detect and monitor the forest fire in Nepal (Maden, 2018). In 2017, about 39,000 ha. of community forests and other forests got seriously damaged due to forest fire (Shahi, 2017). The District Forest Officers, themselves were chiefly involved as per the annual plan for control, suppression and management of forest fire (Somlai et al., 2017). No significant overall progress.

Target 16: By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation

S. N	National Targets	Status
1	By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits	The Nagoya Protocol was endorsed by the Legislature parliament of Nepal government on September 5, 2017. No significant overall progress.

	Arising from their Utilization will be ratified	
2	By 2018, an umbrella legislation for conservation and sustainable use of biodiversity will be enacted	The umbrella legislation for "Conservation and Sustainable use of biodiversity" was enacted in 2016. No significant overall progress.
3	By 2016, the Genetic Resources and Benefit Sharing Bill will be finalized and enacted	The Genetic Resources and Benefit Sharing Bill is under process. Slow progress towards target at an insufficient rate.
4	By 2017, a *sui generis* legislation for protection of plant varieties will be formulated and enacted by 2017	The *sui generis* legislation for protection of plant varieties and farmer's right is in the process of developing. The Agro-biodiversity Policy was revised and firstly amended in 2014. However, the "Conservation and Utilization of Agrobiodiversity Bill" is underway. Slow progress towards target at an insufficient rate
5	By 2018, legislations on CITES, ABS , Plant protection and farmer's rights will be formulated and enacted	By 2017, the CITES Act was enacted. The country is in the process of developing Access and Benefit Sharing Bill (Bhatta, 2018). Slow progress towards target at an insufficient rate.

The project titled "Strengthening Capacities for Implementation of the Nagoya Protocol in Nepal" of IUCN is being implemented for 2 more than years from Jan 2017 to June 2019 in Dolakha and Kaski District. The project will support the "Ministry of Forests and Environment, Nepal to guarantee that the draft ABS law meets the constitutional requirement also incorporate agro-diversity and

implement the ITPGRFA and to advocate for its enactment (https://www.iucn.org/asia/countries/nepal/strengthening-capacities-implementation-nagoya-protocol-nepal).

Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building

Target 17: By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan

S. N	National Target	Status
1	Status of development and implementation of the NBSAP	Constitutional provisions, Acts, Plans and Policies formulated in biodiversity and different related sectors create enabling environment for implementation of Nepal NBSAP. It was endorsed by the GoN in 2014 & started implementing in 2015 (M. Dhakal, personal Communication, Sep 3, 2018). Slow progress towards target at an insufficient rate.

The Ministry of Forests and Soil Conservation, as the national focal agency for CBD, has recently developed a revised National Biodiversity Strategy and Action Plan (NBSAP). The NBSAP is expected to be endorsed by the Council of Ministers and started implementation by second half of 2014.

Target 18: By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national

legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels

S. N	National Targets	Status
1	Supporting protection of traditional knowledge, innovations and practices of indigenous people and local communities on biological and genetic resources genuinely involved indigenous people's organizations in policy formulation process and programs.	Extending support to the National Foundation for Development of Indigenous Nationalities and Nepal Federation of Indigenous Nationalities, government and the organizations nicely involved them in policy formulation process and programs. There were mere researches on indigenous practices on agriculture (Atreya et al., 2017). Slow progress towards achieving target by 2020.
2	By 2018, intellectual property rights legislation will be formulated and enacted.	The GoN has drafted the Intellectual Property Rights Legislation. However, the Constitution of Nepal, 2015 states fundamental rights of the owners of traditional knowledge as intellectual property rights (Atreya et al., 2017). Slow progress towards achieving target by 2020.
5	By 2020, government and all other stakeholders will ensure at least 33 percent meaningful participation of women, *Dalit, Janajatis* and	Even the Constitution of Nepal has already ensured the representation of women and culturally backward community like: *Dalits (Dalit* women) in the local government, national and provincial assemblies. 33% of the meaningful participation of women, *Dalits* and disadvantaged groups have been ensured by CFUG's as well (Khanal et al., 2012).

	marginalized communities at all levels of planning and decision making	Slow progress towards achieving target by 2020.

Target 19: By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied

S. N	National Targets	Status
1	Publication of Flora of Nepal by 2020	Initiation of checklist preparation for flowering plants of Nepal, with few publications. The 91 families of Gymnosperms and Angiosperms (Cycadaceae - Betulaceae), 696 genera and 3004 taxa were recorded in the Handbook of Flowering Plants of Nepal: Vol. 1 (Shrestha et al., 2018). It comprised of 40% of Nepal's flora. 12% increase in species number recorded since 2000 in (Press et al., 2000). The Department of Plant Resources (DPR) has intended to bring out 3 volumes for flowering plants of our country, out of which Vol. 1 is already published covering 58 families, 421 genera and 1715 flowering plant species (Rajbhandari & Rai, 2017). "The Flora of Nepal- Vol. 3" is the only one published out of 10 in 2011, shows that there's only 10% of progress. It was updated with 312 endemic flowering plants belonging to 126 genera and 46 families (Rajbhandari et al., 2017). The least information can be found for the Fungi with 1822 species (Chaudhary et al., 2016) consisting of 5 monotypic genera and 142 species, endemic to Nepal. Based on available literatures, it is important to develop more researches for other groups (Kost & Adhikari., 2015). Slow progress towards target but at an insufficient rate.

2	By 2015, National Clearing House Mechanism will be made fully functional	Several census programs for Tiger and Rhino had been conducted, not forgetting the wildlife buffalo, swamp deer, black buck, blue sheep count etc. The Management Information System (MIST) and Spatial Monitoring and reporting Tool (SMART) patrolling has been adopted for wildlife monitoring since 2016 (Dhakal, 2018). Slow progress towards target but at an insufficient rate.
3	By 2016, a National Biodiversity Information Management System will be established at the MoFSC and operationalized	Though, the National Clearing House Mechanism has not established at the MoFSC (now MoFE) by 2016, the MoFE is maintaining the updated website (http://www.mope.gov.np/index.php). No significant overall progress.
4	Updating knowledge of biodiversity at ecosystem and species level	Many individual researchers and conservation institutions conducted researches on mountain ecosystem (Khanal et al., 2018; Twinomuhangi 2017), forest ecosystem (Karki & Adhikari, 2015), agroecosystem (Subedi et al., 2016), wetland ecosystem (Chaudhary et al., 2016; Lamsal et al., 2017) etc. No significant overall progress.
5	By 2020, status of nationally threatened, rare and endangered species of flora and fauna will be updated	The comprehensive study was made on the status of birds in Nepal with the guidance of DNPWC and support of Zoological Society of London (ZSL). It was concluded with a book called "The Status of Nepal's Birds: The National Red List Series (2016) – Volume 1 to 6". It revealed 168 nationally threatened birds where 99 are Critically Endangered birds out of above 3000 birds in the publication (Inskipp et al., 2016).

		Slow progress towards target but at an insufficient rate.
6	By 2020, baseline survey of NTFPs and animal genetic resources will be completed	The GoN has prioritized 34 species of NTFP's for commercial promotion. Also, (Uprety et al., 2016) highlighted 134 species from Nepal for sustainable development and conservation. The Asia Network for Sustainable Agriculture and Bioresources (ANSAB) developed various toolkits on "Participatory Inventory of Non-timber Forest Products" in 2010. No significant overall progress.

Target 20: By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan 2011-2020 from all sources and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization should increase substantially from the current levels. This target will be subject to changes contingent to resources needs assessments to be developed and reported by Parties

S.N	National Targets	Source
1	Progress, status, the government budget allocation in forestry and related biodiversity sectors sector constitutes progress, however, contribution from CBOs, Donors, INGOs and private sector was very less,	The NBSAP has identified eight specific cost categories and 11 possible internal and external sources of funding for its implementation. Government funding will remain the major source of funding. In the fiscal year (2017/18), only 1.7% of the total budget was allocated for the implementation of NBSAP (Dhakal, 2018), which is very less to attain the targets by 2020. The National Biodiversity Trust Fund couldn't be started despite of being envisioned by the National Biodiversity Strategy (2002) to support the National Biodiversity Coordination Committee (Dhakal, 2018).

	and involvement of private/corporate sector in PES is poor	About NRs. 35.82 billion was allocated for the forestry sector. Similarly, USD 23.39 million for the Multi Stakeholder Forestry Programme in 2014/15 and USD 14 million for the Hariyo Ban Project of WWF Nepal (M. Dhakal, Personal Communication, Sep 12, 2018). Similarly, the contribution of CBO, NGO, INGO, and private sector is negligible and same for the private-corporate sector in PES for implementation of NBSAP. Slow progress towards target but at an insufficient rate.

Road maps for enhancing synergies between all stakeholders

- Reinforcing/enhancing of NBSAP mainstreaming at different levels:

  a) Orientation program for all levels of political leaders from Federal leaders to Provincial leaders and local leaders

  b) Orientation program for all the CBO's, regional and local level NGO's, Civil Society Organizations (CSO's henceforth), Local Communities and Indigenous Peoples and the Women's groups, in Nepali language

  c) Leaflets/brochures/posters/banners etc. can be prepared and disseminate among the local stakeholders

  d) Referring to NBSAP's document before planning, developing and implementing the programs by the MoFE, Ministry of Agriculture, Land Management and Cooperatives (MoALMC henceforth), Ministry of Culture, Tourism and Civil Aviation (MoCTCA henceforth), Ministry of Physical Infrastructure and Transport (MoPIT henceforth), and Ministry of Energy, Water Resources and Irrigation (MoIR henceforth) etc. It had to be monitored by the Biodiversity and Environment Division at MoFE

  e) While developing the policy documents like: NBSAP, Sustainable Development Goal (SDG henceforth) and Three-Year Development Plan etc., the national targets should be similar/consistent.

Finally, it would add great value if it's instructed at the highest political level to implement these national targets.

- Enhancing legal preparedness:

  a) Putting Access & Benefit Sharing Bill (2017), Intellectual Property Rights legislation and *sui generis* legislation in place

  b) Enforcing policy like: Environmental Impact Assessment (EIA henceforth) and Initial Environmental Examination (IEE henceforth), very strictly

  c) PES, Eco-certification, taxation and equitable sharing of benefits arising from utilization of the biological resources

Observations/Gaps/Issues: The status review of the National Targets reveals that the implementation of these strategies are moving forward satisfactorily. Yet, more proactive and effective measures are needed to address the current loss of biodiversity by 2020 and sustaining ecosystem services. In this regard, few observations with gaps and issues are mentioned below:

- The measures taken to meet the biodiversity targets are already in the right direction still, these trends are not positive. For example: aquatic biodiversity, wetlands, rangelands and habitat in Chure (https://www.youtube.com/watch?v=QEDgwWy_t7Y) etc. are facing environmental degradation
- Though, the NBSAP is well mainstreamed in central departments there's a need of improving it with other Central government/department, provincial and local government
- More effective cooperation and collaboration needed between the Government, Donors, I/NGO, CBO and other private sectors
- Require further attention to address key pressures driving biodiversity loss, habitat loss, degradation and fragmentation, threatened species categories (endangered, vulnerable, rare), spread of invasive alien species, impacts of climate change on habitat and species, risk of eutrophication and loss of biodiversity, and ineffective law enforcement against extraction of river originated resources in Chure region

- Strengthen the effort to monitor the status of biodiversity and ecosystem services and its trends to facilitate the development of national ecosystem accounting that can contribute in national, sub-national economy
- Develop synergies and translations of international biodiversity conventions and treaties to integrate biodiversity conservation and sustainable use

Desirable key actions for implanting and monitoring the targets

The key actions for implanting and monitoring the targets are categorized under Revising National Targets and Strengthen implementation, which are described below:

i. Revising National Targets

Some of the national targets are needed to be revised due to the new federal structure of the country. There has been change in the roles and responsibilities of the Organizations. Few revisions can be done due to the following reasons:

a. Changes in administrative context

- The restructuring of the state has entrusted several authorities and responsibilities to the Local Government Units which were earlier exercised by the central level departments. "By 2020, sustainable utilization of rangeland resources for enhanced livelihoods" and "By 2016, the roles and responsibilities of different government line agencies (such as DoF, DoA, NEA, DoI) in the management of wetlands located outside protected area", the 2 targets falls under the Local-level government. Both the targets can be dealt wisely through the inter-departmental coordination.

- The targets "LBSAP's for 30 VDC's/municipalities" hasn't been taken seriously yet. Hence, the same LBSAP can accommodate plan for climate change and disaster risk management.

b. Needs further elaboration

Targets are needed to be more clear and specific. For examples:

- What is production forest here in the target "By 2020, Percentage of production forests come under sustainable management"?
- And the target "By 2020, plans for maintaining unhindered north-south biological connectivity in at least three major rivers developed and implemented"– Which is the exact north-south corridor is it talking about?
- Does it mean mutually exclusive conservation plans for the target "By 2020, conservation plans for 20 additional priority species (10 animals and 10 plants) will be developed and implemented"?
- What is unhindered biological connectivity in the target "By 2020, conservation plans for 20 additional priority species (10 animals and 10 plants) will be developed and implemented"?
- It's better divide into 2 different baseline survey for NTFP's and animal genetic resources in the target "By 2020, baseline survey of NTFPs and animal genetic resources will be completed"
- "By 2020, conservation plans for 20 additional priority species (10 animals and 10 plants) will be developed and implemented" – it can be separated into Conservation plans for animals and plants. It's because the Conservation plans for plants is prepared by the DoF but for animals is prepared by DNPWC.

c. Needs more attainable targets

Few targets in the NBSAP is impossible to achieve within the mentioned timeframe of 2020, needs revision. For examples:

- "By 2020, the Gene Bank to collect and conserve genetic resources of at least 75% of the commonly cultivated crop and horticulture species" - it's unattainable.

- "By 2020, additional five wetlands of international importance will be enlisted as Ramsar sites" – it's unattainable. It can be only possible if each Province can put their efforts in finding one.

d. Revise to make targets more impactful and meaningful

There's a need of upscaling the magnitude of implementation to make more impactful. For example: "By 2020, encroachment and eutrophication will be controlled in at least 10 major wetlands" – the number of controlled wetlands from encroachment and eutrophication can be increased simultaneously with the increasing pollution and urbanization.

e. Need of more comprehensive targets

All the legislations and bills can be created more comprehensive to fall under one umbrella legislation. For example:

- "By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization will be ratified" + "By 2016, the Genetic Resources and Benefit Sharing Bill will be finalized and enacted" + "By 2017, a *sui generis* legislation for protection of plant varieties will be formulated and enacted" & "By 2018, intellectual property rights legislation will be formulated and enacted"
- Likewise, while preparing the LBSAP's under the target "By 2020, Local Biodiversity Strategy Action Plan will be developed and implemented by 30 VDCs/municipalities", the NBSAP prioritizes to provide a framework for LBSAP", it can also include the target "By 2020, a low carbon economic development strategy and climate-smart biodiversity management plan will be developed and implemented"
- The targets "A National Biodiversity Information Management System (NBIMS) will be established at the MoFSC and operationalized by 2016" and "National Clearing House Mechanism will be upgraded and made fully functional by 2015" can be merged into one

f. Needs additional targets

In order to address all the emerging issues of biodiversity, there are the needs of additional targets. For example: Human-wildlife conflict management, wildlife health, forest fire and create the Biodiversity Code in national accounting system. The target "By 2020, Local Biodiversity Strategy Action Plan (LBSAP henceforth) will be developed and implemented by 30 VDCs/municipalities" can be revised to include all of the above mentioned points. In summary, synergies can be developed among different targets if comprehensive plans can be prepared. For example: LBSAP development can take account of climate change and disaster risk management, biodiversity conservation etc.

ii) Strengthen implementation

Followings can be done to strengthen implementation of national targets of NBSAP:

a) Allocate adequate resources (financial, human and networks) to strengthen institutional capacity
b) Report the progress of NBSAP implementation to the Biodiversity and Environment Division, MoFE for comprehensive picture
c) Pro-active role of Parliamentary Committees, NPC, NBCC etc. for monitoring implementation of NBSAP, pulling financial resources for biodiversity conservation, and establishing separate Trust Fund
d) Pro-active role of MoFE is very optimistic to have good cooperation with all the Conservation partners at national and regional level
e) Strengthen and improve the knowledge base for biodiversity and ecosystems of Nepal backed up with the scientific researches and innovative processes. More cooperation and collaboration with the Universities, research organizations and Government
f) More efficient and active participation of the implementing Organizations to complete the uncomplete as well as the unstarted targets of NBSAP.

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Annex

Annex I

List of videos created by I/NGO, GoN & others for biodiversity

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