ANNUAL PROGRESS REPORT
(16TH JULY 2017 – 15TH JULY 2018)

LEADERSHIP FOR ENVIRONMENT
& DEVELOPMENT NEPAL

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1. About Leadership for Environment and Development (LEAD) Nepal

In 2004 a small group of people with diverse background and work experience got together, united by the belief that we can develop a sustainable economy strengthening the ecosystem services delivery that works for the people and the earth that we live in. With this belief and drive Leadership for Environment and Development Nepal (LEAD Nepal) a non-profit organization was registered with the government of Nepal in 2004 (Registration#: 334/061/62; PAN #: 302893166; Affiliated in the Social Welfare Council Affiliation #: 26846)

1.1. Vision:

A just world with sustainable economic growth harmonizing the capacity of the earth's ecosystem services and contributing to organic products for food security, nutrition, health and enhance livelihood by 25%.

1.2. Mission:

- Dedicate to improve the quality of life in a way that protects and restore earth's environment and its services so as to provide the needs and aspiration of current and future generations Our Objectives
- Protect, promote and reinforce the ecosystems for incessant delivery of its services in terms of organic agriculture, agro-forestry, watershed management, animal husbandry, renewable energy, deforestation, and biodiversity;
- Reduce carbon footprints by addressing rural and urban consumption pattern focusing in resource efficiency and reducing holistic waste;
- Mainstream women, children, elderly and indigenous groups during the planning, designing and implementing phase of the projects through all levels;
- Obtain social justice and green economic growth.

1.3. Our Values

LEAD Nepal to support its mission depends on the ability of its staff to uphold and promote the highest standards of ethical and professional conduct. We are personally and collectively responsible for maintaining the standards listed below:

- Inclusive and nonpartisan approach in all stages of the programme including staffing;
- Work in partnership with government, NGO's, business houses, farmers, forest users groups, rural & urban community based organizations, academicians and the international communities with respect and dignity;
- Strive to apply donor's funds to the highest standards of accountability;
- Create environmental solutions that make a lasting difference;
- Innovative approach when designing and using a wide range of problem-solving tools;
- Embrace ambitious environmental goals while taking into account real world dynamics;
- Devote to Impact Investment by reflecting the ecosystem services provided are equitably spread to all social growth

1.4. Areas of work:

1.4.1. Green Economy

The Green economy aims at sustainable development without degrading the environment. The 2011 UNEP Green Economy Report argues, "That to be green, an economy must not only be efficient, but also fair. Fairness implies recognizing global and country level equity dimensions, particularly in assuring a just transition to an economy that is low- carbon, resource efficient, and socially inclusive".

One of Lead Nepal's core mandates is to uplift the living standard of marginalized group by increasing their income by 25%. This is achieved by introducing innovative healthy approach towards self-sustainability at the same time creating income-generating activity and linking producers and business entity to build a safe and healthy environment for today and the future. LEAD Nepal, tries best to promote pro-equity interventions in its entire program so as to achieve fairness during the process of a green economy. Few of the examples are stated below:

a) Organic Farming

By 2014, Lead Nepal has builds the capacity of 3800 farmers family and directly linked them to business centers who sell their products to many outlets within and outside Nepal. Organic Mountain Flavor Pvt. Ltd. alone exported 297 tons of ginger in 2014. LEAD Nepal's five year plan (2020) is to enhance the capacity of 36000 more farmers covering an area of 9000-hector farmland between the elevations of 300 to 3700 meter, increase their yield by 25%, acquire organic certificates and directly link them to business houses. Currently, LEAD Nepal is exploring export market opportunities.

b) Agro-Eco Village

Lead Nepal has converted Sankhu Palubari village into an agro-eco village and income made from their products run the community school and cultural function.

c) Waste Management

Waste diversion is another green economy that Lead Nepal is involved in. The first step towards it was converting urban waste to organic compost, which became a lucrative business. Currently, LEAD Nepal is working towards waste to energy and is assisting the SWMTSC, Ministry of Local Development, in preparing zero waste strategy for Solid Waste Management, for Kathmandu.

d) Wetland Project

Products such as bamboo baskets, mats and natural fiber products are another green economy introduced and about 100 women in Tapuksohi, were empowered on macramé knotcraft.

1.4.2. Wastes Management

Waste has significant impact on ecosystem and pose threats to human health and wellbeing. Waste also threatens the integrity of habitats that are essential to biological diversity. The challenge is to develop responses to waste issues that can improve the quality of human life and biodiversity. [1]

LEAD Nepal aims to reduce reuse and recycle (3R) waste, with minimum waste going to landfill. LEAD Nepal jointly with other NGO's and PPAP conducted research and organized workshops on waste management in and outside Kathmandu valley.

In 2009, LEAD Nepal with partnership with Solid Waste Management Recovery Center, Ministry of Local Development Nepal, conducted a research on Zero Waste Management Project for Kathmandu and Lalitpur District in Nepal. LEAD Nepal based on its research extended its service to prepare the technical proposal for Integrated Solid Waste Management of Kathmandu Valley with BOT model on zero waste concepts.

1.4.3. Disaster Waste Management

In 2008, LEAD Nepal with support from Nepal Eco-tech Pvt. Ltd. did a research on Earthquake Hazard Management. Further, in response of the earth quack on 25 April 2015, Ministry of Federal Affairs and Local Development (MoFALD) jointly with Lead Nepal support by UNEP conducted a research on Disaster Waste and have prepared the Disaster Waste Management Policy, Strategy an Action Plan for Nepal. LEAD Nepal has conducted several workshops locally and have travelled internatinally representing Nepal on issues related to Disaster Waste Management

Nepal jointly with Karuna Shechen, has assessed the situation on 12 earth quack affected districts and is working on disaster waste management in the field level

1.4.4. Soil Protection

Protecting forests and trees are essential for warding off environmental degradation and rural poverty. In spite of the significance of forests and tree-based resources, present trends are not encouraging. Forest resources continue to be poorly managed and not used rationally. Deforestation mainly occur due to clearing for agriculture in areas not suitable for this purpose, fire wood collection, and urban and infrastructure development.

LEAD-Nepal, participated in planting tree, shrubs, bamboos in areas prone to land slide. In some areas terrace farming was promoted in order manipulates the water flow preventing from gathering speed and washing soil from farmlands. Contour farming was also implemented since crops planted parallel to the land slow the flow of water that prevents soil erosion, in open land trees and shrubs were planted as windbreakers which prevent soil erosion by slowing the force of the wind over open ground. Wetlands were also restored which is one of the most effective ways to prevent soil erosion. Wetlands act as natural sponges, absorbing rainwater and preventing it from carrying the soil away. They also provide a habitat for birds and other wildlife and help prevent water pollution. We also planted mixture of grasses, shrubs and trees as buffer strips along stream banks which helped hold stream banks intact during times of flooding.

1.4.5. Agro-forestry and Watershed Management

Agroforestry systems protect crops and forage, increase their production, protect soil and water resources, conserve energy, improve ecosystem “richness”, create additional wildlife habitat, and increase landscape diversity. They also provide additional farm or ranch products: timber, pulpwood, firewood, posts, fruit, nuts, and fodder to name a few. Agroforestry represents a collection of multipurpose practices that are enduring and help achieve sustainable agriculture.

Increase damage of agriculture is competing with forest-based livelihood. While it can offer hope for short-term poverty eradication, agriculture expansion can damage the natural services that woodlands provide to local community.

Encouraging farmers to grow indigenous verities of trees and shrubs in combination with crops or forage. Also include tree and shrub plantings on the farm that improve habitat value or access by humans and wildlife, or that provide woody plant products in addition to agricultural crops or forage. Currently, LEAD Nepal is working on 12 earthquake-affected districts in capacity building of the locals on efficient use of agro-forestry while protection and restoring ecosystems services for incessant delivery of its services.

1.4.6. World Mountain Product Branding

The world mountain people's voice and hard work needs to be heard. Their experience, challenges and lessons learned have to be shared within the mountain people for a result-oriented solution. As a result, The World Mountain Product Association (WMPA) and World Mountain Product Branding as a wing was formed out of the World Mountain Forum held at UNESCO (Paris) and in Chambéry (Savoie – Alps) in June 2000 on the initiative of the National Association of Elected Officials of the Mountains (ANEM).

The international brand for mountain produce will give a platform to acknowledge and recognize the different products produced by the world mountain people and will improve the economy of these regions promoting their ideas and culture. Their experience sharing will lead to the creation of a network of mountain people, which can then be coordinated at an international level by WMPA. This global branding will act as an umbrella brand for specific mountain region or particular mountain product.

LEAD Nepal is working with farmers in Upper Mustang for the organic certification and has secured approval from WMPA for branding it as World Mountain Product. WMPA will market the products internationally on behalf of the farmers in Mustang.

1.4.7. Facilitation of Organic Certification Process

As a consumer, how can you tell whether a product is truly organic? Today, as consumers become more aware and responsible about what they eat and drink, there is an increasing interest in, and consequently a rising demand for, organic products. Therefore, Organic certifications have been put in place to provide the consumer with confidence in the product they buy.

Lead Nepal on behalf of the farmers have facilitated the process of organic certification with leading organic certification institutes and currently is in the stage of an internal inspection process.

Lead Nepal has imparted workshops and on the job training on the stages of conversion to organic farming. Workshops on monitoring and evaluation on the conversion to organic farming were provided, as it is a core requirement for the successful output. Currently Lead Nepal is in the process of acquiring organic certification for Upper Mustang region and the region around Surkhet.

1.4.8. Improve Irrigation Efficiency and Water Management

In the face of increase water security, demand for water is outstripping supply therefore we need to address the challenges that we face ensuring productive and efficient use of land and water resources to meet present and future demand while ensuring the long-term sustainability of the land and water quality and quantity.

We have facilitated new approaches to water use that include farming practices that use less water without affecting productivity. Specifics are integrated water resources management, water harvesting, groundwater, use of non-conventional water, reuse of treated wastewater, and modernization of irrigation systems, on-farm water management, and water quality management. We also need to developing policies, programmes, best practices and tools in the fields of irrigation and drainage, soil conservation, drought mitigation, water rights, access to natural resources, and improvement of land markets. Research still needs to be done in securing these sectors.

1.4.9. Improving Efficiency of Fertilizers

Soil condition is a key measure of the long-term productive capacity of an agro-ecosystem. Both natural weathering and human management affect soil quality, and maintaining soil quality requires that soil degrading and soil-conserving processes be balanced. Fertilizer is the engine of agriculture, but its inefficient use creates greenhouse gases, algae blooms and contaminated drinking water. Nitrous oxide pollution from agriculture mainly comes from using inorganic nitrogen fertilizers and from improper storing of manures.

Lead Nepal promotes the need to reduce nitrous oxide emissions by ensure fertilizer use is efficient and nitrogen losses are minimized.

LEAD Nepal actively promoted and gave trainings and seminars on different methods of producing organic fertilizer, organic growth motivators and organic method of combating pests. Training on crop nutrient management, planning and soil analysis was given which is also part of the long-term productive capacity of agro-ecosystem.

1.4.10. Organic Farming

It is a proven fact that organically managed soils can convert carbon from a greenhouse gas into a food-producing asset. It's nothing new, and it's already happening, but it's not enough. Organic food is healthier, better for farmers' livelihoods and does not destroy the ecological balance.

Rising temperatures, decreasing water availability and un-organic methods of agriculture in the long run reduce the yields particularly in developing countries where agriculture is vital for food security. Therefore, agriculture must also adapt to changes in climate in order to provide food security.

Organic agriculture has considerate potential for reducing emission of greenhouse gas and generally requires less fossil fuel per hectare and kg of produce due to avoidance of synthetic fertilizers. Since 2004, Lead Nepal has relentlessly worked on promoting organic agriculture that aims at improving soil fertility and nitrogen supply by using crop rotation system. The enhanced soil fertility leads to stabilization of soil

organic matter and in cases to a sequestration of carbon dioxide into the soil. This in turn increases the soil's water retention capacity, thus contributing to better adaption of organic agriculture under unpredictable climatic conditions with higher temperatures and uncertain precipitation levels. Thus small and large organic farming is essential to restore our food, livelihood and health security while mitigating ecological balance.

1.5. Approach of Work

1.5.1. Private-Public-Academic Partnership

To make a larger impact for a safe and healthy ecosystem plus economic viability, multi-functional partnership including government and international communities are cornerstone of LEAD Nepal's working strategy.

We try our best to work with socially responsible business sectors that respect and understand ecosystem services not only of its broad impact, but also because of its power to spur innovation, influence supply chains, inform consumer choice, and shape public policy.

At the grass root level, Lead Nepal works with the community mobilizers, community based organizations (CBOs), mothers and youth groups, village school forest users group, media house and VDC who were instrumental in creating awareness and inspiring the community in understanding the ecosystem services consequently motivating them to protect, prevent and mitigate the ecosystem and its services. Further, these groups jointly with the university students, professors and business house and LEAD Nepal conducted base line surveys, researches and progress status on different wings of the ecosystem services.

Lead Nepal help build the capacity of 3800 farmers, 10 mothers group, 10 Cooperatives, 9 youth groups, 6 Community schools, 8-forest users groups and selected students from 3 universities. Seventy percent of the target groups are females from diverse ethnic groups and many holding leading positions. By 2020, Lead Nepal plans to directly reach 36000 farmer HH's covering an area of 9000-hector farmland between the elevations of 300 to 3700 meter.

The start of private sector partnership was in 2006, whereby LEAD Nepal with its mandate linked The Organic Village presently known as The Organic Valley (TOV) with the farmers. With the support of LEAD Nepal the organic products were examined and an MOU signed, followed by establishing a processing unit in Kathmandu for packaging and processing of organic products. By end 2007 the organic spices and grains were showcased in leading departmental stores in Kathmandu.

LEAD Nepal with its growing farmers families and the successful surplus yield of ginger and turmeric expanded the business horizon of the farmers, which encouraged LEAD Nepal to participate in numerous agricultural exhibitions abroad and within Nepal. Finally in 2013, with the intervention of LEAD Nepal a joint venture company was registered, "Organic Mountain Flavor Pvt. Ltd" (OMF). A ginger-processing unit with the capacity to process 600 tons each day was established in Surket District, Nepal.

By 2014, LEAD Nepal had linked 3800 farmers' family directly to business centers in Nepal who sell their products to many outlets including OMF. By end 2014 OMF alone exported 297 tons of ginger annually,

which was produced by 1700 farmers in Surket District. LEAD Nepal's five year plan (2020) is to enhance the capacity of 36000 more farmers covering an area of 9000-hector farmland between the elevations of 300 to 3700 meter, increase their yield by 25%, acquire organic certificates and directly link them to business houses. Currently, LEAD Nepal is exploring export market opportunities.

1.5.2. Reinforcing the Ecosystem

Sustainable Agriculture: LEAD Nepal with the support of WWF Nepal assisted in a baseline survey of illegal wildlife trade in Mustang Valley and is currently involved in another project in Upper Mustang. The work scope involves promoting farmers to grow organic seeds and grains; empower them holistically in organic way of life; acquire organic certificates; establish an industry and market their product in the attempt to secure a healthy and comfortable life as well as mitigate climate change in a sustainable manner. The entire project is gender sensitive and inclusive in nature. LEAD Nepal is in partnership with TOV and the project is funded by WWF, Nepal.

LEAD Nepal to promote the right of education particularly for girl children successfully developed Suntol VDC, Sankhu Palubari, Bishambhara village into an Agro-Eco Village (going organic from school to home). LEAD Nepal trained the villagers on organic farming, water shed management and organic way of living and the surplus income generated from their products were used to run their village school and community programmes. This programmed became a success with the full support of District Agriculture Development Organization (DADO) and the community of Sankhu village.

Lead Nepal with its specialization on organic farming has worked as consultant all over Nepal and with its techniques of organic growth promoters, organic composting and organic pest management have builds the capacity of numerous farmers.

Organic Coffee: Lead Nepal, build the capacity of about 220 farmers on organic coffee plantation in six districts namely Illam, Kaski, Sankhuwasabha, Parbat, Lamjung and Nuwakot. The production capacity in these districts is about 100 tons of green beans per annum but currently only 15 tons are being produced. LEAD Nepal is exploring recourses to expand the training to 300 more farmers and acquire organic certification for the full utilization of the land available and uplift the living standards of the farmers.

Wetland Project: LEAD-Nepal jointly with TOV empowered 100 women in Tapuksohi, Nepal on macramé knot craft. Products such as bamboo baskets, mats and natural fiber products were designed and marketed in Nepal. The aim was to ensure maintenance and enhancement of wetland biodiversity and environmental goods and services for improved local livelihood in Nepal. The project objective was to strengthen national and local capacity in ecosystem management and sustainable use of wetland biodiversity in the Koshi Tappu wild life reserve area.

Mitigating Soil Erosion: LEAD-Nepal, with the local community and forest users group participated in planting tree, shrubs, and bamboos in areas prone to land slide in the urban and rural areas of Nepal. In some areas Terrace farming was promoted in order manipulates the water flow preventing from gathering speed and washing soil from farmlands. Contour farming was also implemented since crops planted parallel to the land slow the flow of water that prevents soil erosion, in open land trees and shrubs were planted as windbreakers which prevent soil erosion by slowing the force of the wind over open ground. Wetlands were also restored which is one of the most effective ways to prevent soil erosion. Wetlands

act as natural sponges, absorbing rainwater and preventing it from carrying the soil away. They also provide a habitat for birds and other wildlife and help prevent water pollution. We also planted mixture of grasses, shrubs and trees as buffer strips along stream banks which helped hold stream banks intact during times of flooding. They also prevent runoff from entering waterways. The re-establishment of forest cover provides an extensive, tree-root network that offers a long-term solution to soil erosion. It can function both as a windbreak and a means to anchor soils in place.

1.5.3. Rural and Urban Environment Management

Waste Management is another arena where we have made a difference. We started with serious of research and awareness programmes in and outside Kathmandu valley on reducing waste from source and waste diversion programmes. During 2004, the concept of waste to sustainable economy was un-thought of by the government and the civil societies but with continues awareness programmes, today it's become a viable business. Lead-Nepal went to the extent of reaching out not only to the government and civil societies but aimed at school children who then would transfer their knowledge to friend and families. LEAD Nepal was the first to convert urban waste to organic compost. Supported by Jordan Foundation and Government of Nepal Solid Waste Management and Resource Center created training manuals conducted training on waste management at source.

In 2009, LEAD Nepal with partnership with Solid Waste Management Resource Center, Ministry of Local Development Nepal, conducted a research on Zero Waste Management Project for Kathmandu and Lalitpur District in Nepal. LEAD Nepal based on its research extended its service to prepare the technical proposal "Integrated Solid Waste Management of Kathmandu Valley (Package 1; Public-Private Partnership in BOT Model"). Lead Nepal also conducted a feasibility study on waste to energy for Kathmandu Valley with the support of Compunication OY & Bioste Company, Finland. Currently, Lead Nepal is part of the research and advisory team for preparing the detailed project report on zero waste management for Kathmandu Valley.

In 2008, LEAD Nepal with support from Nepal Eco-tech Pvt. Ltd. did a research and report on Earthquake Hazard Management. Soon after the 25 April 2015 earthquake, MoFALD and LEAD Nepal with the technical and financial support from UNEP jointly prepared disaster waste management policy, strategy action plan for Nepal. There were several meetings and consultations organized during the preparation process. These includes: (i) round table discussion on "Disaster Waste Management in Nepal"; (ii) workshop on "Disaster Waste Management in Nepal with International Development Partners and Funding Agencies";(iii) Sharing mission findings on "Field Observation and Findings on Disaster Waste Management; (iv) consultation with international experts at UNEP IETC,; (v) roundtable consultation on the draft Disaster Waste Management policy, strategy and action plan. Currently the team is finalizing the draft for its implementation.

Further, On 12 July 2015 LEAD Nepal signed MOU with Karuna Shechen to work as a response team for the relief, rehabilitation and restoration program in 12 earthquake-affected districts. [1] A base line study jointly conducted by Karuna Shechen and LEAD Nepal identified the potential risk for girl child trafficking and sexual and gender-based violence (SGBV). Hence the core reason for the intervention is to mitigate girl child trafficking and SGBV. LEAD Nepal believes that restoring social justice and introducing green economy, simultaneously creating awareness on the right of the child, CEDAW and gender sensitive actions with its protection and response mechanism will help mitigate SGBV. LEAD Nepal is also working with INHURED for the rights based approach. Currently LEAD Nepal work scope involved a) watershed

replenishment, maintenance and management; b) bio forestry c) sustainable farming, d) kitchen gardening e) organic composting and pest management; f) animal husbandry; g) crop storage technology; h) cash crop cultivation & i) awareness on SGBV j) reconstruction of schools.

With the support from JHPIEGO, USA, Dr. Neol MCintosh and Linda Tietjen USA LEAD Nepal conducted a baseline study on the water and sanitation challenges along the Bagmati river banks. In order get the best result LEAD Nepal with its experts gave orientation on the impact of poor sanitation and water pollution to 50 students from ASY Higher Secondary School, 51 students from Gate College and 100 squatters from Bagmati riverbanks. This group formed a team lead by Lead Nepal and jointly designed a project to protect, prevent and mitigate the environmental challenges posed by untreated sewage flowing through Bagmati River including the practice of dumping waste in the river. We can proudly claim that individuals who took part in this research are today taking a leading role in cleaning the Bagmati Riverbanks and so is Lead Nepal.

2. Major Activities

2.1. Integrated Strategic Environment Assessment Project (ISEA):

2.1.1. Background

In February 2016, UNEP met with Ms. Laxmi Kumari Basnet, Joint Secretary, Ministry of Population and Environment (MOPE) and discussed on the implementation for Integrated Strategic Environmental Assessment (ISEA) to support Nepal's post-2015 earthquake reconstruction efforts.

The ISEA is based on the successful experience of implementing the approach in Sri Lanka's Northern Province, shortly after the end of its 30-year civil war in 2010. The ISEA approach proved a very effective way of enabling Government Ministries to make decisions more efficiently and strategically on proposed development projects, while ensuring environmental safeguards and disaster risk considerations were factored in decision-making. Through this new project, UNE is aiming to develop more practical experiences on ISEA in post-crisis contexts, by building national capacities in two other countries and promoting learning exchanges on ISEA best practices. Nepal and Cote d'Ivoire are the two countries selected for ISEA implementation.

2.1.2. Activities:

a) 6 August 2017 Second Technical Committee Meeting:

The meeting was organized after the updating the Landslide Susceptibility map incorporating the rainfall information with the support from ICIMOD. The committee also suggested including the quarry site location for the construction and maintenance of the PDRF listed Local Roads. It was also suggested to have the field verification of the map on alignment passing through land cover and land susceptibility areas.

b) 4th Mission (15-26 November 2017):

This mission planned four days field visit to Sindupalchowk and Rasuwa districts followed by a pre-workshop meeting on 16 November with 25 participants from the core group. The final national consultation workshop was held on 17 November jointly with government agencies, practitioners and

international development partners. There were 85 participants and the workshop presented the mapping results of the 14 earthquake affected districts, the result study on the environmental guidelines, identified areas of conflict and entry points for streamlining guidelines and the draft report on ISEA Lessons Learnt.

In between the missions there were several meetings held at MOPE and NRA office in order for the process to continue. All the activities were coordinated by LEAD Nepal with close coordination with the UNEP focal point representation in Kathmandu. In addition a vedio documentary project was introduced and the outcome will be a 3-4 minute video clip on the field trip and the last consultation ISEA workshop.

One of the outputs from the final consultation workshop is to finalize the report on ISEA Lessons Learnt and produce 100 copies for final distribution.

c) Study Tour on Lessons learnt on ISEA from Ivory Coast (9-15 September 2017):

Three government officials from MOPE and NRA participated the study tour on learning the lesson on implementation of ISEA in Abidjan, Ivory Coast along with the officials from Sri Lanka during 9-15 September 2017. The main objective of the Ivory Coast to the government officials on learning the ISEA implementation model adopted in Ivory Coast and compare the Nepal ISEA implementation process and products.

d) Third Technical Committee Meeting (29 October 2017):

This meeting further validated data collection efforts and brought in a few new stakeholders especially from the government agencies working on roads.

e) Visit to Sindhupalchowk for the field validation and interaction with District officials (30 October 2017):

A field validation with the field visit and interaction program with the district level key line agencies officials was organized on at Chautara with the participation of the Mayor, Chair of District Coordination office, Local Development Officer and representatives of development offices. Brief presentations were made on ISEA process and its application for identifying areas for development opportunity in the municipality and district. The participants found the ISEA tools very useful for the municipal level development planning.

Field validation in the Sindhupalchowk district was conducted with collection of the data using Geographic Positioning System (GPS) to identify the major landslides along the roads. These data were used to validate the maps used for the analysis.

f) Fourth Technical Committee Meeting (16 Nov 2017):

The meeting was organized after the update of draft report and workshop. A presentation and agenda were finalized for the workshop by the committee members.

g) Consultation Workshop on Post-Earthquake Integrated Strategic Environmental Assessment with focus on road reconstruction (17 Nov 2017):

The National Consultation Workshop on post-earthquake Integrated Strategic Environmental Assessment with focus on road reconstruction was held in Hotel Annapurna, Kathmandu, Nepal on 17th November 2017. Over 80 participants from different governmental, non-governmental and international organizations participated in the workshop. This workshop was jointly organized by Government of Nepal (GoN), United Nations Environment Program (UNEP) and Leadership for Environment & Development (LEAD) Nepal. A presentation and interactive question and answer session was organized to present about the progress of the ISEA report.

h) Africa-Asia Regional Forum on ISEAs, with a focus on Post-Conflict situations (27-29 November, Bangkok, Thailand):

A Nepal delegation from MOPE and NRA attended the three-day program which brought together 50 participants from 10 different countries to share various ISEA experiences and explore opportunities for up-scaling.

i) Fifth Technical Committee Meeting (28 December 2017):

A Technical committee meeting was organized after successful completion of workshop. In the meeting committee suggested on report and work for finalizing the report was started.

j) 16 February 2018: Mission to Sitganga ISEA sharing workshop:

The core ISEA technical Team visited Sitganga Muncipality, ArghKhanchi District, Province #4 for four days and conducted workshop and seminars including field visit to landslide pron areas and sensitive landscaping.

Figure 1: Workshop on Sitgagnga Municipality

Workshop Objective:

- Present mapping results with a focus on roads in 14 earthquake affected districts;
- Discuss and note the priority development areas in the municipality wards
- Presentation/orientation on "Eco-safe roads" and landslide risk reduction for sustainable road construction.

Workshop Conclusion:

Mr. Hari Belbase Chief Administrative Office (CAO) Sitganga delivered the speech is stating the importance the ISEA methodology and need for the development plan for the municipality based on which the budget allocation will happen to attain the sustainable development of the Municipality. He expressed thanks for giving the knowledge to the elected members about the development planning process, which is crucial in delivering the aspiration of the voters in planned way.

Figure 2: Workshop on Sitganga Municipality

Mr. Surya Prasad Acharya Mayor, Sitganga Municipality delivered concluding speech emphasizing the need for preparing the development plan in which the knowledge of the ISEA will be used to identify the sustainable development projects. He further emphasized that there is a need to identify the environmentally sensitive areas for the settlement development projects for the supporting the people livelihood. He also informed that he will try to allocate the budget for preparation of Sustainable development plan in consultation with each ward members which will give the development direction for the elected member in coming days.

2.2. Disaster Waste Management

As a follow up to our previous DWM Policy, Strategy and Action Plan Draft Document, a small group of experts invited by MOFALD and facilitated by Mr. Dipendra Oli, Acting Director General of Solid Waste Management Technical Center was catered.

Discussion on DWM Policy, Strategy and Action Plan for Implementation
Venue: Solid Waste Management Technical Centre (SWMTC)
12th October 2017

Background: The discussion on Disaster Waste Management Policy, Strategy and Action Plan was held at the Office of SWMTC, Ministry of Urban Development, Pulchowk on 12th October 2017. Fifteen participants participated in the Discussion and representative from MOFALD, Department of Environment, 5 Municipalities and experts. This event was organized by SWMTC to revisit the Disaster Waste Management Policy, Strategy and Action Plan and how best to strengthen the document for government endorsement. The event was support with the technical supported by UN Environment IETC and LEAD Nepal.

Opening Session: Mr. Dipendra Oli, Acting Executive Director, Ministry of Urban Development, SWMTC, MOFALD, welcomed the participant and highlighted the importance of DWM and further stressed on the implementation of the strategy and requested all participants to provide constructive comments. Ms. Aisha Khatoon, CEO LEAD Nepal, provided the overview of the Report and opened the floor for discussion.

Major Discussion Points: Government has allocation empty space during the earthquake however; they failed to specify the uses for the empty space. Was the space allocated to build temporary shelter, or was it store debris etc. Because of the lack of clearly most of these spaces were unused.

Mapping is required of Drug and Pesticides stores. Hospitals, industries, petroleum's stations etc. so as to anticipate the hazardous that is expected during disasters and the contingency plans drafted accordingly.

The representatives from the different municipalities discussed on the importance of integrated the DWM strategy and action plan into the local government strategy given the federal structure and their implementing power. And how best to link the national strategy into the newly formed federal local government.

The need to include other disaster waste was highlight in order to make a comprehensive DWM strategy document. This document would also help the municipalities and provinces to guide them in making budgeting prioritizing the coming year.

The necessity for Capacity building was identified as core within all level of the federal hierarchy structural. Mass communication was also stressed in order to reach the mass population and a TV program was given as an example.

The right technology for reuse of disaster waste, training on safe demolition and waste segregation were also some of the priority needs.

The team unanimously agreed that a comprehensive DWM strategy is crucial and required the urgent endorsement from the government before another disaster hits them.

Closing Remark: Mr. Oli, Acting Executive Director, Ministry of Urban Development, SWMTC thanked the participants for the constructive comments and agreed to send all a copy of the Report on DWM Policy Strategy & Action Plan 2015.

2.3. Strengthening National Capacity in Environmental Data Sharing and Reporting Activities

2.3.1. Questionnaire preparation:

A set of questionnaires was prepared by group discussion with export. The questionnaire contain institutional structure, plans and policy of organization, strategy of organization, future-plan, challenges, and about ESSAT tool.

2.3.2. Field Work (17 October – 26 December 2017):

After the completion of questionnaire, filed visit was conducted form 17th October to 26th December 2017. A team of technical staff from LEAD Nepal visiting 20 ministries, departments and INGO and questionnaire as well as ESSAT was filled.

2.3.3. Technical Committee Meetings of Strengthening National Capacity in Environmental Data Sharing and Reporting

a) First meeting (27 November 2017):

Based on the recommendation a technical committee representing experts was organized. The meeting raised the question about the requirement and challenges that rise during field visit. The objective was to minimize the challenges and to collect as much statistic data as possible.

b) Second Technical Committee Meeting (27 December 2017):

The meeting was organized after the completion of field visit. During the meeting, the committee discussed about the outcome from questionnaire and ESSAT. The committee also suggested the gaps and recommendation also discussed about draft report writing. Further a short introduction discussion on IRIS was done.

c) Third Technical Committee Meeting (1 January 2018):

The technical committee meeting was held on 1st January 2018 for the further discussion on draft report. The meeting suggested about the draft report (as I was not in the meeting I am unable to write the proper discussion held on that date; mam as you were in every meeting hope you are well know about it)

d) Fourth Technical Committee Meeting (24 January 2018):

The meeting was organized to discussed about the workshop. The technical committee suggested a group discussion on the workshop to finalize the report. In the meeting the participants list, and date of workshop was also finalized.

e) National Workshop on Strengthening National Capacity in Environmental Data Sharing and Reporting (14 February 2018)

The final review on the assessment report on "Strengthening National Capacity in Environment Data Sharing and Reporting" was held at Hotel Del' Annapurna. Fifty participants from different Ministries and INGOs attended the review sharing and discussion workshop where by the team validated the contents of the report and added some more suggestions. UN Environment and LEAD Nepal supported the event.

Major Discussion Points:

The absence of a proper institutional arrangement for environment statistics was identified as the major gap. Further at the provincial level the government has yet to establish an institutional arrangement for environment statistics. Capacity building was listed as second in the priority however there was a debate that probably capacity building should be the first as priority as the poor or none existence of an institutional arrangement for environment statistics is becomes the official at the policy making level is not aware of the importance of statistics. Thus, they need capacity building so as to make an informed decision on a proper institutional arrangement. Further the gap on human resources is more so because of the volume of environment statistics that is required for informed decision making against the available trained or untrained statistician recruited. The importance of recruiting environment education background statisticians was stressed so that they understand the why and how to extract environment data and, in the process, other statisticians will be receiving on the job training. The continuation of the State of Environment Report is important to students, researchers, private companies, INGOs and the UN organizations. It is based on this report that reliable information on Environment is disseminated and references can be making nationally and internationally. There is an urgent need for a national environment data portal. The Masters and PHD students who are collecting primary data while conducting their research study are getting lost in paper work or in the old shelves of the university. These are important data that can be stored in a common portal so that the public can access and make use of it.

The Department of Survey announced that if there is any metadata of any relevant sector their department is ready to compile and publish the data.

f) Fifth Technical Committee Meeting (26 March 2018):

A Technical committee meeting was organized after successful completion of workshop and finalization of report. The committee approved and finalizing the report for publication.

2.4. Waste and Climate Change Project:

2.4.1. Background:

Solid Waste Management (SWM) in Nepal has become a major concern for municipalities and the county as a whole. With rapid and uncontrolled urbanization, lack of public awareness, and poor management by municipalities has intensified environmental problems in towns in Nepal, including unsanitary waste management and disposal. The total MSW generation from 58 municipalities is estimated as 524,000 tons/year. Disaster waste is another concern for waste management in Nepal. The PDNA, Nepal Planning Commission 2015 stated that 14 millions ton of waste was generated alone in the earthquake of 2015.

The Constitution of Nepal 2015 guarantee the right to live in a health and clean environment have access to clean water, hygiene and live in dignity. Improper MSW disposal and management causes all types of pollution: air, soil, and water. Indiscriminate dumping of wastes contaminates surface and ground water supplies. In urban areas, MSW clogs drains, creating stagnant water for insect breeding and floods during rainy seasons. Uncontrolled burning of MSW and improper incineration contributes significantly to urban air pollution. Greenhouse gases are generated from the decomposition of organic wastes in landfills, and untreated leachate pollutes surrounding soil and water bodies. Worldwide it is estimated that current waste methods specially emission from landfill account for almost 5 % of the world's emissions of methane a greenhouse gas with an impact more than 20 times that of carbon dioxide.

The project proposal 17_I_292_Global_M_SLCP, "Waste & Climate Change was approved for funding on 25 April 2017 by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety as part of the International Climate Initiative.

Pursuing the principle of 'delivering through partnership', UN Environment is partnering with Leadership for Environment & Development Nepal (LEAD Nepal) is a national non-governmental organisation. It has been actively engaged in waste management since its establishment in 2004 in Kathmandu.

Under the direct supervision of MoFAGA led project LEAD Nepal will host the project management unit in Nepal to capitalise on national knowledge and expertise. LEAD Nepal will partner with UN Environment IETC to ensure that the day-to-day management of the project activities is conducted smoothly and to ensure sustainability of the project objectives beyond the project life-span.

The Waste and Climate Change Project will aim to:

Reduction in GHGs and SLCPs emissions from the waste sector in Nepal.

Increase in the mitigate capacity of the target countries by focusing on the International climate initiative (IKI) Goal Dimension

Strengthened capacity of policy makers and waste sector practitioners, in order to contribute to the objectives of the Nepal's Climate Change Policy.

2.4.2. Activities:

LEAD Nepal signed a MoU with the Ministry of Federal Affairs and General Administration (MoFAGA) with clear roles and responsibilities of the parties on the execution of project. Based on the MoU, 13 members technical committee was formed with the chairmanship of Suresh Adhikari, joint secretary, MoFAGA. Technical committee comprises of the experts of the line ministries, department and academia.

With the joint partnership with Academia, integrated waste management baseline survey has been completed in 16 municipalities across seven provinces of Nepal. Based on the outcome of the survey a draft Baseline Assessment report on Waste Management of Nepal and National Integrated Waste Management Strategy have been prepared.

Both of the documents are on the process of approval from MoFAGA. After the MoFAGA accepted it, the documents would help in planning process of Government of Nepal.

Events Organized:

Regional training on achieving international climate change commitments in the waste sector in Bhutan, Mongolia and Nepal in Bangkok, Thailand has been organized in December 2017 with the participation of experts from Ministry of Environment, MoFAGA and Solid Waste Management Technical Support Centre (SWMTSC).

a) **Training Programme on Achieving International Climate Change Commitments in the Waste Sector in Bhutan, Mongolia, and Nepal 11-15 December 2017, Bangkok, Thailand**

SUMMARY

The Waste Management Cluster in partnership with the United Nations Environment - International Environmental T echnology Centre (IETC) organized a five-day training programme on "Achieving International Climate Change Commitments in the Waste Sector in Bhutan, Mongolia, and Nepal" from 11 to 15 December 2017. The training programme was part of a capacity building programme for the International Climate Initiative (IKI) funded project "Strengthening the capacity of policymakers and practitioners in Bhutan, Mongolia, and Nepal to reduce greenhouse gases and short-lived climate pollutants from the waste sector, based on the circular economy concept" (Waste and Climate Change – WCC project). The UN Environment IETC in partnerships with World Wildlife Fund Bhutan, The Asia Foundation Mongolia, and Leadership in Environment and Development Nepal is implementing the Waste and Climate Change project.

Fifteen representatives from the national and local government and executing partner institutions in three countries attended the training programme. The training programme was successful in transferring necessary skills to participants from Bhutan, Mongolia, and Nepal, in support of achieving long- term reductions of greenhouse gas (GHG) emissions and short-lived climate pollutants (SLCPs) generated from the waste sector. During the training programme, participants were navigated through various tools and concepts associated with the waste policy framework, waste baseline, strategic planning, assessment and selection of technologies, climate change impact of waste disposal and climate change mitigation in the waste management. At the end of the training programme, the participants developed a strategic

"roadmap" for implementing the Waste and Climate Change project in each country, thus contributing to the successful achievement of the project goals and outcomes.

The training programme received positive feedback that all the sessions were relevant to the WCC project outputs. Overall, the training programme was a success with bringing a significant increase in the in the knowledge level of the participants.

Figure 3: Training Programme on Achieving International Climate Change Commitments in the Waste Sector, Bangkok

Participants from Nepal: Ms. Safala Shrestha, Deputy Director General, Ministry of Population and Environment, Mr. Yubaraj Subedi, Under Secretary, Ministry of Federal Affairs and Local Government, Mr. Dipendra Oli, Legal officer, Solid Waste Management Technical Support Centre, Ms. Aisha Khatoon, Executive Director, LEAD Nepal and Ms. Karuna Adhikari, Project Manager, LEAD Nepal.

b) Global Recycling Day

LEAD Nepal marked first Global Recycling Day with involving 25 youths and monks from Mustang (District of Upper Himalaya). Major activities include, hands-on exercise at LEAD Nepal office and Mustang Monastry and half day education tour to the scrap dealer shop at Budhanilakantha area.

The students had a day field trip visiting scrap dealers and witnessing the recycling and reuse activities within Kathmandu.

Another batch of students participated in an entire day activity on the 3 R principal the reuse and recycling of waste materials from their homes, offices and institutes.

Monks in Jomsom were also involved in a two-day activity using waste in a creative way as a demonstration to the people in Jomsom.

Figure 4: Recycling waste

c) SWEET Assessment

28 May to 3 June 2018, an expert from UNEP on SWEET Tool Assessment for the measurement of SLCP and Green House Gas Emission from Waste Sector visited Nepal.

Waste, a by-product of human activities has effects on human health and can have impact on air quality, water, soil and natural ecosystems. The waste sector has also global effects contributing to nearly 5% of anthropogenic GHG emissions7. Landfills are the third largest source of anthropogenic methane (CH4) emissions, accounting for approximately 11% of estimated global methane emissions8. The waste sector is hence responsible for both near and long-term climate impacts and other serious pollution to the environment.

SLCPs are air pollutants that have relatively short lifetime in the atmosphere and a warming influence on our climate. The municipal waste sector is a significant source of SLCP emissions such as methane (CH4), black carbon (BC), NOx, and organic carbon (OC). As opposed to carbon dioxide (CO2), which has an atmospheric lifetime of about 100 years, SLCPs have an atmospheric lifetime of a few years to even a few days. The most common SLCPs are methane and black carbon, which results from emissions from waste handling equipment, emission from trucks, and emission from landfill fires, open burning of waste, and emission from organic waste decompositions. Reducing these SLCPs through well-managed waste systems will contribute to overall efforts to mitigate climate change and could have significant health, environmental, and economic co-benefits, including improved quality of life for local communities.

The Conclusion comparison between Kathmandu and Hetauda was:
Overall emissions from the waste sector caused by Hetauda municipality results in 7'294 Metric tons of CO2eq in the year 2018 (figure 1). Comparing with Kathmandu, the population that receives collection service is more than 20 times less and the amount of waste arriving at landfill, which is 7.25 Metric tons per day (2'649 Metric tons per year) is about 1.2% of the amount of waste disposed at Sisdol landfill in Kathmandu. Therefore emissions are much lower in Hetauda than Kathmandu (around 4% of that of Kathmandu in 2018).
Comparing the results with the National Communication Report of 2014
According to the Second National Communication Report (2014) the emissions from solid waste management account for a total of 252 Metric Gg of CO2eq (data from 2000). The report took into account emissions from landfills coming from overall national urban population, which was in total 3'044'400 people. Breaking down the emissions reported in the National Communication Report (2014) to the population in Hetauda, which was 129'872 people1 in 2001, the emissions accumulate to 10'750 tons of CO2 eq for the year 2000. In comparison, the estimate by the SWEET tool adds up to 5'941 tons of CO2 for the year 2000, which is 45% less.
The difference might be due to the fact that only about 40% of the population of Hetauda live in formal collection zones and thus only 40% can be considered urban? Breaking down the emissions from the National Communication Report (2014) to 40% of population of Hetauda, the emission estimate results in 4'300 tons of CO2 eq, or 24% less compared to the SWEET tool estimate.

[1] https://www.citypopulation.de/php/nepal-mun-admin.php?adm2id=3104

d) Hetauda Mission

LEAD Nepal Management staff and an officer form SWMTSC under MoFAGA visited Hetauda, an exemplary municipality in terms of waste management. The aim of the mission was to observe the good practices in Hetauda on waste management.

The team had a meeting with the Assistant Mayer and the team of government staff from the municipality. Both the team visited the landfill site and some sharing sessions were conducted on the reforms and the current impact on climate change because of unmanaged waste management practices. Further collaboration issues and a survey teams upcoming visit to Hetauda were shared. Based on the information collected during the mission the SWEET Tool was used to asses the GHG emission form the landfill site.

e) Gender & Waste Management:

LEAD Nepal facilitated the Gender mainstreaming mission on June from GRID Ardenal. SWMTSC facilitated the visit to Sisdol landfill sites of Kathmandu. The aim of the visit was to integrate gender concerns in the planning budgeting and implementing programme within the waste and climate change project.

Selected findings/observations:

Gender roles

One male and two females from three different households representing various social groups and castes were interviewed on waste prevention, general, segregation and household waste disposal. The interviewees confirmed that household roles generally are well divided between men and women giving that woman are more responsibility for waste management at home. Women are also responsible for cooking in many households and manage therefore the kitchen waste, which, according to the baseline study forms around 56 per cent of total waste generation in Nepal.

Considering the role dynamics in households and assuming that the situation won´t change in the nearest future, there is a great possibility that women play an important role in segregating between wet and dry waste at source in such a way considerably improving recycling of garbage, reducing the costs and environmental impacts. It is easier to convince women than men that segregation is important.

Socio-economic parameters are underlaying ground for waste management in general. Ethnical groups and caste affiliations have determined particular roles in society, also connected to serve systems such as rubbish collectors, street sweepers and others. It has been observed that the culture is changing in Nepal and the gap between the castes is slowly narrowing. For instance, many individuals from Pode caste[2] worked in the waste sector, but this situation is changing. Lately, there is more diversity representing different castes in the waste sector.

Roles in the waste sector are very segregated. It has been observed that women are responsible for sweeping, primarily waste segregation at transfer stations, collecting payments from households etc. Women are also often taking on handicraft works. It has been indicated that it is difficult for women to take on management positions, because the “system” doesn´t really support that (interview with Khaalisisi Friends – established by a young female entrepreneur).

[2] Lowest case . - *Fishermen, sweepers, traditional executioners*

Females work both dependently and independently of men. It has been observed that female scavengers are independent in their positions, they can decide by themselves. They are more independent with the earnings, for instance. Whereas women in transfer stations are very much dependent of men (e.g., registering weights of collected recyclables is done by men, they are not paid out right away but once a month).

It was observed through the interviews that women scavengers have intelligent reflections and have potential for education and development. It is clear that these human resources are heavily underused. With some support and education these females can also run their own waste recycling enterprises. At present there are a number of obstacles.

Men tend to be drivers of smaller and bigger trucks, waste pickers by bicycles, and are in management positions. It is believed that those jobs are fitting men more. It has been observed that men often oversee the work of women (example of the NePSEMAC transfer station). There are also men (and boys) waste pickers, but proportionally the numbers are lower.

Roles are divided not only by sexes but also by ethnical groups. It was observed that the majority of waste pickers by bicycle and waste traders are Indians, and the vast majority of men come from North India but they are living in Nepal to earn money. Many of these men have families back home in India. Waste pickers are also vulnerable females often migrating into the city to earn some money.

Gender disaggregated data is not collected in a systematic way. It is therefore challenging to address any gender sensitive policies. It should be followed up with some interviewees e.g., Solid Waste Management Technical Support Centre on female driver entrepreneurship.

f) Inception Workshop

The 1st National Workshop: Launch of IKI Project (Waste and Climate Change) has been already organized on 14 June 2018 in order to share the findings of National Baseline Assessment of Integrated Waste Management.

Background

The national workshop to validate the baseline assessment report on Waste and Climate Change Project was held at Hotel Ambassador on 14 June 2018. Fifty-three waste stakeholders have participated from the government, the private sectors, NGOs, CBOs and waste experts. The MOFAGA, the UN Environment, IETC and LEAD Nepal supported the event.

Opening Session:

Mr. Suresh Adhikari, Joint Secretary, MoFAGA and Chair of the Technical Committee highlighted the project objectives and its expected outputs. He emphasizes the importance of the baseline survey and the strategy document on waste management and requested all participants to actively engage in this workshop, as their input would outline the national and local strategy on waste for Nepal.

Ms Aisha Khatoon, CEO, LEAD Nepal shared the message from Claudia Giocavelli, Associate Programme Manager, UN Environment, IETC and shared the programme agenda and the expected outcome. This was followed by presentation on the findings of the Baseline Assessment Report from LEAD Nepal and a session on knowledge café which was also support by Dr. Nawaraj Khatiwada, waste expert.

Major Discussion Point:

- Means of recovering organic waste effectively within the municipality with guidance from experts.
- Advocacy on source segregation and 3 R principals not adequate
- Involvement of private companies essential
- Minimum or Zero waste to landfill site
- Coordination and networking meetings like this workshop essential - A pledge from a private company (waste collection) was made to provide three tons of organic waste per day to a compost producing private company.
- Poor enforcement of the law was identified as the other challenge at all the tiers of waste management.
- Capacity building needs at the national and local government was stressed including the civil societies

Outcome of World Café Session:

Theme 1: Why should a WM strategy be developed at central, provincial and municipal level?	**Theme 2: How should institutions work in order to improve the overall WM system?**	**Theme 3: What are the priorities for WM in Nepal?**	**Theme 4: How can we improve the waste architecture in Nepal?**
Strategy is needed to i) Translate policy into action ii) Inter Institutional Coordination iii) Amend and update existing act and regulation iv) Collaborate with donor/development partner v) Allocate budget with time frame	**Policy and coordination:** Federal government and provincial government shall formulate policy assuring that it incorporates all waste issues of all the regions. i) Provision of law after preparation of directive. ii) Protection of private sector investment iii) Tax flexibility for private sector involved in waste collection iv) Providing grant to household, group and organization involved in minimization of waste.	**Classification of the waste:** **i)** Bio-waste (kitchen waste, agricultural waste, animal waste); ii) Construction waste (Road waste); iii) Trash waste (Diapper, sanitary pads); iv) Non-bio waste (Industrial waste, hospital waste, plastic waste, environmental waste, E-waste)	**Suggestion on Technology development:** i) Management of colored bin ii) Installing leachate box in waste collection van iii) Establishment of segregation plant, bio-briquette plant, compost plant iv) Methane recovery from landfill site v) Leachate treatment plant at landfill vi) Examination and analysis of block chain analysis
Strategy shall incorporate following issues: i) Private sector collaboration	**Implementation:** i) Local government shall take all responsibility of	**Priorities shall be given based on:** **Importance:** waste as resource; Bio-fertilizer- agriculture; Food-	**Suggestion on collection and transportation**: i) Increase the frequency of awareness on source

ii) Resource mobilization and local innovation iii) Revenue generation iv) Infrastructure development and maintenance v) Integrated Waste management vi) EST identification and implementation vii) Resource recovery viii) Capacity Development	overall waste management system ii) Application of new commercial working plan coordinating with private sector.	animals; Source of income; Raw material for industry; Fuel (Bio gas, electricity, briquette) **Management**: waste segregation; Management of bio-waste; Reuse management; Pursuing 3R rule (Recycle, reuse, and reduce); Used in curriculum **Risk (Environmental Pollution):** Negative Impact on human health; Direct impact on animals; Impact on plants; Impact on climate; Negative impact on beauty of environment; Noise pollution;	segregation so as to reduce waste amount ii) Segregated waste should not be dump again mixing it up together iii) Dumping of waste according to its nature and physical properties iv) Recycled factory should be more in numbers

Closing Remark:

Closing Remarks: Ms. Sita Duwadi, Section Officer, MoFAGA extended her gratitude to all the representatives from various government and non-government organizations including Private sectors and LEAD Nepal for their contribution in making this event a success. Further she announced that the workshop has achieved its goals and assured all participants that their feedback will be incorporated in the strategy document.

g) National Integrated Waste Management Strategy

Planning the waste management or all of the waste produced in Nepal is an enormous task which involves both logistical planning and scientific knowledge and understanding in order to balance the impact on the environment, health and the cost effectiveness of the process. It is important to remember that Nepal's resources and landfill sites are limited and this has a major bearing on the kind of activities we carried out. Effective waste architecture and environmentally friendly resource recovery facilities play an extremely important role in the global cleanliness and sustainability drive, with people's health and the conservation of resources being the responsibility of every individual.

In the modern world burying all of our rubbish is not a sustainable solution. While primitive humans produced very little waste, and that which was produced would biodegrade quickly, modern humans produce much larger amounts of waste, much of which is not biodegradable. Additionally, many types of waste may be damaging to the soil, ground water and surrounding habitat.

The most important reason for waste management is the protection of the environment and the health of the population side by side making waste management financially sustainable.

Proper waste management can help conserve our planet's natural beauty, which can be flawed by thoughtless disposal of waste, fly-tipping and senseless littering. Landscapes can be ruined through littering and places of tourist interest can lose their attraction; it is also a blight for those who live in areas where waste collection and recycling is not managed effectively and responsibly. Natural beauty is a legacy and a right for future generations and conserving it, as well as our natural resources, for their benefit is our responsibility today.

h) Technical Committee Meetings of Strengthening National Capacity in Environmental Data Sharing and Reporting

First meeting (18 March 2018):
Based on the recommendation, first technical committee representing experts was organized. The meeting suggested some changes on the municipalities list for baseline survey. The objective was to finalize the list of municipalities and questionnaire for baseline survey.

Second Technical Committee Meeting (6 May 2018):
The meeting was organized after the completion of baseline survey. During the meeting, the committee discussed about the outcome from questionnaire of field. The committee also suggested about the contain of report.

Third Technical Committee Meeting (14 May 2018):
The technical committee meeting was for further discussion on the analysis of the questionnaire outcome and baseline survey draft report. The technical committee commented on the baseline survey draft report. Also, during the meeting, the participants list, and date of workshop was also finalized.

i) National Consultation Workshop on Baseline Assessment Report of Waste and Climate Change Project (14 June 2018):

The national workshop to review on the baseline assessment report on Waste and Climate Change Project was held at Hotel Ambassador on 14 June 2018. Fifty-three participants from different ministries, departments, NGOs, private sectors and experts attended the consultation workshop where by the team validated the contents of the report and added some more suggestions. UN Environment IETC and LEAD Nepal supported the event.

Major Discussion Point:
The discussion was mainly focused on how to recover organic waste effectively within the municipality. The experts involving on the treatment of organic waste advocate the existing technology that they are using since decades i.e. vermi-composting and pit composting. Also, they requested the private companies who are involved on waste collection and transportation to provide organic chunk of waste to them so as to divert the organic fraction of waste to the landfill site. The forum was used to pledge donation of approximate three tons of organic waste/day for composting to one renowned composting company who is practicing composting as a business since decade.
In addition, the inefficiency of a proper legislative framework for waste management in the new context of restructuring of country was identified as the major gap in establishing efficient waste management system at all tiers (household, institutional and commercial). Along with this, capacity building at all level of government was also identified. Specifically, the issue was raised on the capacity of the local government to meet the expectation based on broader responsibilities on addressing multiple issues at the ground including waste management in particular. The government official used the forum to inform the stakeholder that the local level alone or jointly with other local level can make their own law and policy on need basis and requested the local level to focus on resource recovery rather than dumping the waste.

j) Fourth Technical Committee Meeting (26 June 2018):

A Technical committee meeting was organized after successful completion of workshop and finalization of report. The committee approved and finalizing the report for publication.