



# The Monthly Newsletter



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## CHANGSPA STREET

**L**adakh Ecological Development Group (LEDeG) in collaboration with Ladakh Autonomous Hill Development Council (LAHDC) organised a workshop on 'Sustainable Mobility: Changspa Street' on April 18, 2018, at Hotel Singge Palace, Old Road. This workshop was organised under the Liveable Leh Project 2030, which is co-funded by European Union and BMZ. There were 21 participants from the government, private sectors and non-government organisations (NGOs) in the one-day

event. The main objective of the workshop was to get people from all sections of the society, namely bureaucrats, stakeholders, and encourage them to participate in the planning and development of Changspa Street. The idea was to not impose a design on the locals but to work collectively and come to a consensus for a design that fits for all. Avny Lavasa, Deputy Commissioner Leh, was the chief guest for the occasion. Others who took part in the event were Ven. Lobzang Nyantak, Councillor from Upper Leh; Phuntsog Wangdhan Shunu,



Councillor Lower Leh; Anuj Malhotra, Traffic Adviser to Government of Jammu and Kashmir; Moses Kunzang, Additional District Commissioner; Rigzin Spalgon, Administrator, Municipal Committee Leh; Alex Campbell from BORDA, Stanzin Losal, Assistant Superintendent of Police, JK Police Leh; Tashi Motup Kau, President of All Ladakh Hotel and Guest House

Association Leh; Tsetan Wangchuk, President of All Ladakh Tour Operators Association; Tundup Spalzung, Executive Engineer from Power Development Department (PDD); Wangail Punchok, AEE from PHE; Adarsha Kapoor, Urban designer from Creative Footprints; Saad Yazdani, architect, and representatives from Changspa village.

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The government officials, stakeholders and the Liveable Leh team members during the Sustainable Mobility: Changspa Street workshop at Hotel Singge Palace in Leh

The suggestions made by the stakeholders and officials during the workshop were:

- There should be one-way movement of vehicular traffic from Shanti Stupa to the Main Market
- Parking of vehicles should not be allowed along the road
- Encroachment and illegal structures on the Changspa Street should be removed
- Reach a consensus with the property owners, shop-owners and hold a dialogue with the Army as they have a big say in this matter
- Connect the Changspa Road with the Upper Tukcha Road

- Integrate street furniture with the footpath
- There should be specific timing for the movement of heavy utility vehicles on Changspa Road
- Demarcate pedestrian and vehicular roads with bollards
- Ask the restaurant owners to make toilets accessible to the public
- There should be proper signage and maps at the end and beginning of the Changspa road.

Meanwhile, the major outcomes of the workshop were:

- Avny Lavasa gave the green signal for the project
- It was decided that more such workshops should be conducted in the future
- Make the Changspa Street one-way from Shanti Stupa to the Main Market.
- There should be a dialogue between the experts and stakeholders/general public so that they can reach a consensus on the Redevelopment of the Changspa Street.



One of the teams discuss their design for Changspa Street

# FOUR-DAY PLANNING RETREAT

AT LEDEG HOSTEL, RIBOOK

The Liveable Leh Project Planning Retreat was held from April 29 to May 2, 2018 at Ladakh Ecological Development Group (LEDeG) Hostel at Ribook near Shanti Stupa. The members of the Liveable Leh team took part in the 4-day workshop. The 18-member Liveable Leh team, including Dr Norden Otzer, Executive Director of LEDeG, was divided into four groups, namely Planning and Development Team comprising Rishav Paul, Prithvi Aravind, Sonam Chorol, Stanzin Chonjor Dawa and Chemet Rigzin; Events, PR and Communication Team, with Tenzin Motup, Namgail Angmo, Fariha Yousuf and Tashi Lundup as members; Water and Sanitation Team comprising Parth Gohel, Snehit Prakash, Tamchos Gurmet, Arif Ahmed and Thinles

Dorje; and Project Management and Admin. Team, with Dr Norden Otzer, Rachel Nilza, Ruchi Mathur, Dachen Angmo as team-members. Stanzin Tsephel, Manas Rath and Alex Campbell from Bremen Overseas Research & Development Association (BORDA) were present during the training retreat.

**The primary objective of the planning retreat was to develop a detailed planning until the end of the year 2018, and also to review and update staff structures that match with the detailed plans.**

The trio also acted as moderator for the planning retreat. Stanzin Tsephel gave a presentation on logframe. Thereafter, Dr Norden

made a presentation on Sustainable Development Goal (SDG)-11, which highlights the importance of Sustainable Cities and Communities, followed by the presentation from Alex Campbell, who talked about SDG-6, which is about Clean Water and Sanitation for all. Tashi Lundup gave a presentation on Urban Mobility, and post-dinner, Parth Gohel gave a presentation on Integrated Water Management(IWM).

The last two presentations were made by Tashi Lundup and Rishav Paul on the importance of Public Relations and Urban Development, Sustainable Cities, respectively.

Post-presentations, the team members discussed about their goals for the next three years, and prepared work plan, strategy and core products accordingly.

Meanwhile, core 11 topics were identified during the Planning Retreat, which were-

- 1) Improve FSM (including acquiring a new truck)
- 2) Water Detailed Strategic Plan (DSP)
- 3) Public Space Detailed Strategic Plan
- 4) Public Toilets and Urinals
- 5) Redevelopment of Changspa street
- 6) Leadership programmes for Capacity Building
- 7) Project Launch – Liveable Leh 2030
- 8) Launch Leh Vision document (Vision strategy)
- 9) Green House (Urban Farming)

10) Co-treatment (Sewage Treatment Plant)

11) Sustainable Development Goals for Leh

Also, internal works were discussed during the Retreat, which were:

- 1) 24X7 water supply at LEDeG campus
- 2) Raise Rs.10 crore for the Project
- 3) Partnerships and Funder outreach
- 4) Advanced Compost Toilet

A Plan of Operation (POO) was formulated based on the plans of the respective teams. Stanzin Tsephel also asked the Liveable Leh team to start preparation for the Leh Vision document.



The Liveable Leh team members during the four-day Planning Retreat at LEDeG Hostel at Ribook near Shanti Stupa

# YU-LING CHENG

## VISITS LEDEG CAMPUS AND ECOLOGY CENTRE



Yu-Ling Cheng (second from right) with Stanzin Tsephel and Alex Campbell from BORDA

**Y**u-Ling Cheng, a Professor of Applied Science and Engineering at the University of Toronto, visited the LEDeG Campus at Ribook, which is below the Shanti Stupa in Changspa, on May 18, 2018. Cheng received a \$2.2 Million Grant from the Bill and Melinda Gates Foundation under Reinvent the Toilet Challenge Project in 2011 and is working on a prototype that requires no sewage system, no water and no electricity. The prototype can process human waste in 24 hours and costs not more than four rupees per user per day.

Impressed with the work being done by LEDeG, Cheng, who is also the director of Centre for Global

Engineering, hoped for a long-term partnership with the organisation wherein graduate and undergraduate students from University of Toronto would work in an exchange programme with the Leh-based NGO. “There is a growing trend in Europe to provide exposure tours to students to understand the real problem,” said Cheng in the presence of Dr Norden Otzer, Executive Director of LEDeG, and the LEDeG team members at the LEDeG Office, Karzoo.

Cheng, who is currently working on the latest prototype and is looking for a suitable place to test P5, called Leh as the perfect place to test the prototype. She also met Stanzin Tsephel, Director of BORDA South-Asia, and members of Faecal Sludge Management Team (FSTP) in the morning. She also visited the Faecal Sludge Treatment Plant (FSTP) at Bomb Guard.

Cheng specialises in Physical Chemistry, Thermodynamics, Fluid Mechanics, Heat and Mass Transfer.



Yu-Ling Cheng interacts with the Liveable Leh team members at LEDeG Office, Karzoo.

# LIVEABLE LEH TALK SERIES

## First Talk Held At LEDeG Office, Karzoo



P Wangdan Shunu interacts with the audience during the first talk of the Liveable Leh Talk Series at LEDeG Office in Karzoo

**L**adakh Ecological Development Group (LEDeG) organised the first talk of the 'Liveable Leh Talk Series' under the Liveable Leh Project 2030, which is funded by European Union (EU) and BMZ, at the Ecology Center, Karzoo Dzing, on 28<sup>th</sup> May 2018.

P Wangdan Shunu, Lower Leh Councillor, was the speaker for the occasion.

The prominent guests present during the Liveable Leh talk series were Lobzang Tsering, Paldan Phuntsog and Ghulam Rasool—all working Committee Members of LEDeG, Tsering Chondol from Women's Alliance of Ladakh; Ishey Tundup, Principal of Lamdon Model School; Sunetro Ghosal, editor of Stawa magazine; Tsering Angchuk from Speak Ladakh, and Thinlas Chorol from Ladakhi

Women's Travel Company. Fariha Yousuf, who was the host for the evening, gave a brief introduction about LEDeG.

Thereafter Dr Norden Otzer, the Executive Director of LEDeG, gave an overview of the Liveable Leh Project to the audience.

P Wangdan, who is also a member of the Central Working Committee of Jammu and Kashmir National Conference, threw light on the ongoing development in Leh. Wangdan raised three important points during his talk:

1. Even though the general public has to suffer due to ongoing construction work undertaken by the government, they must understand it is for the betterment of the people of Ladakh.
2. There should be a vision document for introduction of inclusive Sustainable Development in Leh.



3. The decision-makers for the development of Leh are sitting in Delhi who do not have any idea about the climate, geographical limitation and terrain of Leh. Therefore, their plans are not feasible for Leh.

He also expressed his concern over the shortage of drinking water in Leh. Wangdan, a former employee of LEDeG, expressed his gratitude to Sonam Dawa, the former director of LEDeG, for teaching him to prioritise truth and honesty.

He said that LEDeG could act as a bridge between Ladakh Autonomous Hill Development Council (LAHDC) and the public to bring inclusive Sustainable Development in Leh.

# VENUGOPAL FROM TOILET BOARD

## VISITS LEDEG CAMPUS



Venugopal Gupta (third from left) with the Liveable Leh team members at LEDeG Office, Karzoo

**V**enugopal Gupta from Toilet Board Coalition, who is also the Director Accelerator Programme India, visited LEDeG Ecology Center on May 11, 2018. Dr Norden Otzer, Executive Director of LEDeG, gave a brief about LEDeG and the Liveable Leh Project 2030. Mr Venu

addressed the Liveable Leh team and told them about the intricacies of business models. He said that capital and labour are the two important resources in a business project and emphasised on the need to have access to capital. He also gave few tips that could help one to become an independent

entrepreneur. Mr Venu said very few business models are Sustainable and cited the example of Aavishkar, which was founded in 2001 with a Vision to catalyse development in India's underserved regions; it identifies capable entrepreneurs, provides them with capital, supplements it with a nurturing



environment and helps build sustainable enterprises. According to him, one should look for three things in a social-impact business:

1. **Big idea, for which there is a big market**
2. **An able-team which can perform tasks**
3. **Business model should be independent of the government**

For entrepreneurs engaged in sanitation projects, there are two central challenges- social and commercial impact business. There are entrepreneurs who are serving the entire community without charging any fee, but according to Mr Venu, there is a certain percentage of population who can pay for the services. Mr Venu suggested that the start-up projects should focus on the 10

-20% of the population who can pay. But, according to him, if one looks at the affordability issue then one should assume that nobody would be able to pay. But despite the challenges, the start-ups should focus on customer-value.

Mr Venu said that customers look at three values- utility, psychological and social. He shared that one should induce trials and delight the people. He then said there are social entrepreneurs and social crusaders in the society. He shared certain business models to counter direct contact with the government. He said that an investor prefers business-to-customer-to-government (B-to-C-to-G) model and informed that the government should be seen as a channel rather than as a customer.

If one switches to business to

government to customer (B-to-G-to-C) model, there is more scope for growth.

Toilet Board Coalition was founded in 2014 and is a unique business-led partnership with the ambition to address the global sanitation crisis by accelerating the Sanitation Economy.

The TBC is enabling Private Sector engagement; connecting large and small companies; and ensuring close collaboration between private, public and non-profit sectors with the common goal to achieve Sustainable Development Goal 6 (SDG6), Universal Access to Water and Sanitation.

The TBC runs the Toilet Accelerator, the world's first accelerator programme dedicated to sanitation entrepreneurs in low-income markets. Blue Water Company is part of this accelerator programme.



# THE SUCTION TRUCK

COMPLETES 108 TRIPS IN MAY



**L**adakh Ecological Development Group (LEDeG) completed the procurement of the new Suction Truck. The truck, also known as the Honey Sucker, collects faecal sludge from septic tanks in Leh town, including the Army cantonment areas.

The Municipal Committee Leh (MCL) facilitates on call facility wherein the people can avail the services of the suction truck to

empty the faecal sludge from their septic tanks once it is filled. The cleaning and treatment of the faecal sludge is mostly done from the month of April to November, which are the peak tourist season. De-sludging is not needed in winters.

The tremendous growth of tourism in the last decade, which led to the mushrooming of Hotels and Guests Houses in Leh town, has seen flush toilets becoming a

common sight in Leh. In the last few years, people have started constructing septic tanks. Tourism boom led to the increase in the production of faecal sludge. However, overflowing septic tanks began leaching into the ground and it resulted in contaminated water coming out from the bore wells. The arrival of large number of tourists in May usually marks the beginning of summers in Leh. The honey sucker was busy in

May as it made 108 trips in Leh, including 55 to Army cantonment and 53 to other areas. In 25 days, a total of 108 de-sludging trip was completed out of which 28 trips were for de-sludging kitchen waste. As the volume of the sludge increases, the demand for the services of the honey sucker increases.

Frantic calls are made by the three battalions of Indo-Tibetan Border Police (ITBP), public toilet operators, hotels, guest-houses, restaurants, Kushok Bakula Rinpoche Airport, households, petrol-pumps and the Army units to do the de-sludging.

With able and hard-working employees like Tamchos Gurmet and Arif Ahmad, the suction truck has become popular among the owners of hotels/guest-houses and households.

The team led by Arif starts their work at 10 PM and



The Honey Sucker has become more efficient thanks to the modification made by Thamchos Gurmet and Arif Ahmad, senior and junior engineer respectively, at Blue Water Company, who has made it possible to do de-sludging from a distance of 250 feet. With an extra pipe of 160 foot at their disposal, de-sludging could be done from a distance of 410 feet.

Once the sludge is brought to the FSTP site, the sludge undergoes various tests to check the thickness, colour, pH value, temperature, total

they clean the Septic Tanks at hotels/guest-houses till 3.00a.m in the morning. They choose to work at night to avoid traffic congestion during day time and also to avoid disturbance to customers at hotels/guest-houses. Before cleaning the septic tanks, they conduct a survey to check the distance of the septic tank from the suction truck.

They also get feedback from the customers after cleaning the septic tanks.

Hotels/guest houses without proper septic tanks are advised to build a standard septic tank. The FSTP team also provides technical assistance in building standard septic tanks without charging any fee.

While cleaning the septic tanks, the team members put on personal protective equipment (PPE) to avoid direct contact with the sludge.



dissolved solids (TDS) and electrical conductivity of the sludge.

The end products—water and sludge which are rich in nutrients— are used for irrigating plants/flowers and also as organic soil conditioner. The suction trucks are owned by the Municipal Committee Leh but it is the Blue Water Company, which takes full Responsibility for the Implementation and Operation of the truck and the Faecal Sludge Treatment Plant (FSTP) at Bomb Guard.

# KNOW YOUR TEAM

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