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Every Breath You Take

The last news report on the level of air pollution in Kathmandu said that the repair of the seven air pollution monitoring stations in the Valley was nearing completion. It is not known, however, about the latest pollution levels in the air because these monitoring stations are not operating soundly yet to produce required data. Major government initiatives to improve air quality in the Capital—including the Bagmati Action Plan and the Department of Road's declaration to build urban islands for a Green belt in Ring Road—on the other hand, do not compete well in speed with the rate at which infants or the elderly are contracting pulmonary diseases by just breathing in Kathmandu air. The Department of Transportation Management (DoTM) that pronounced the need to adopt an updated standard for vehicular emission level—with Nepal's adoption of the Euro I level for vehicle emission in 1999 being outdated—has not seen developments thus far. Any hope of reducing air pollution in the Valley thus rests at the individual's hand—a public good as air is, and sluggish as are the efforts of public bodies that

are meant to be concerned with.

Individual initiatives to curb the P10 level (average number of particles smaller than 10mm per cubic metre of air) in Kathmandu's air—which far exceeds the level commended by the WHO—need not rely on stations' data that will, predictably, depict a pollution level hazardous to public health. What needs to be acknowledged, however, is that every travelling individual in the city is responsible for contributing to air dirt, for it is vehicular emission that is the prime culprit for the city's deteriorating air quality. So what could be done by the Everyperson? First, if one is driving a vehicle more than a decade old, one can visit a mechanic to have its emission levels reduced. Check and measure the emission level against a higher Euro standard, for the Euro I standard adopted in 1999, which confines emissions to 2.72-6.90 gms of CO (Carbonmonoxide), 0.97-1.70 gms of HC (Hydrocarbon) and Nox (Nitrous Oxide) and 0.14-0.25 gms of PM (particulate matter smaller than 10 microns) per metre travelled, is outdated for Kathmandu today. Second,

one could opt for public transportation—namely electric tempos—over private vehicles to travel inside the city. Third, one could refrain from diesel fuelled vehicles. Fourth, one could self-initiate building green islands in the city—planting trees and shrubs is cost-friendly and full of positive externalities for one's personal health and beyond. Tree-planting campaigns have been taken up with fervour in this city; more of such activities are required.

Such ideas are a matter of public health. The PM10 particles, which can easily travel and reach one's respiratory and nervous systems are most harmful to growing infants, women and aging seniors—and its level is considered to be dangerous in the city we live in. Improving the quality of the breath we take, therefore, is also a matter of individual responsibility. Waiting for the government to tackle the challenge of air pollution alone is not necessarily the best option.

Source: <http://www.ekantipur.com> December 23, 2011

After Kathmandu, Lalitpur Road Expansion Starts

The Metropolitan Traffic Police Division (MTPD) in collaboration with the Kathmandu Valley Town Development Implementation Committee (KVTDIC) bulldozed roadside structures constructed on encroached land in Lalitpur.

In Kathmandu, authorities in the neighbouring district have also launched a similar drive.

Encroached roadside land at Sorakhutte and surrounding area and two houses were demolished on Saturday. All roadside structures from Kandevata Mandir of Kupandole to Sanepa and Jhamsikhel to Nameste

Supermarket will be cleared in the first phase.

According to KVTDIC chief Bhai Kaji Tiwari, the committee will complete bulldozing work within six months."Construction of the demolished structures will begin soon. We have aimed to finish it in two years," said Tiwari. Stakeholders have

Spurred on by early success of the traffic police's road expansion cam-

planned to broaden the road in all five municipalities of the Kathmandu Valley and 37 VDCs aspiring to be municipalities in near future.

DIG Ganesh Raj Rai, chief of MTPD, said positive public response has made officials given a shot in the arm to execute the demolition drive. "Locals themselves are requesting to begin demolition work in their areas. We are highly elated with huge public support

in favour of our endeavour."

The DIG also informed that reconstruction of the demolished structures will start soon after inviting tenders. "Those whose houses fall on public land are themselves razing their homes. They don't want our bulldozers. We have given them time," said Rai. Officials say the demolition move is in line with the government decision in 1976 on road expansion. The decision was revised again in 1988.

According to the Department of Road, the breadth of main highways, ring roads, main roads and sub roads must be 50, 62, 22, and 14 meters respectively.

Source: <http://www.ekantipur.com> December 25, 2011

Revival of Sajha Yatayat: Sajha Buses to Ply Valley Roads in Four Months

By Binod Ghimire

Yageshwar Sharma, 56, was happy when he heard the news about the revival of Sajha Yatayat (SY) last month. The news made him nostalgic and reminded him of the days when he used to have a cozy journey in double-engine azure buses. As long as Sajha Yatayat was in operation, he never took other buses to travel to his hometown Dang, though he had to queue up for hours at the ticket counter. Like Sharma, thousands of people are eagerly waiting for the resumption of Sajha buses that are likely to come into operation soon.

Sajha Management Board, with the government's support, has intensified work to operate buses under a cooperative model within the next four months. Putting an end to almost half-a-century of government control, SY has now been transformed into a cooperative with directly elected board of directors from the ordinary shareholders.

According to Kanak Mani Dixit, the newly appointed chairperson of the Board, they are already two months behind the schedule as the search for an 'ideal' candidate for the post of chief executive officer (CEO) is on. The seventh annual general meeting of SY in May had mandated the board to resume the service with new buses under a new management after the election of the new board of directors within six months. "We are making another announcement and the operation process will start once we get the CEO," said Dixit.

SY Cooperative plans to procure around two dozens new buses in the initial phase to operate in the Valley and gradually expand the service to other parts of the country. SY Manager Mahendra Pandey informed that they have already managed funds to purchase 20 to 30 buses. During its heyday in the 1980s, SY controlled 60 percent of the transport routes with 182 buses, and generated up to Rs 0.5 million every day. However, corruption, irregu-

larity, and political intervention put to an end to its four-decade-long glorious history in 2002. It has been completely dysfunctional for the last four years after attempts to bring Kathmandu-Lhasa route into operation turned futile. Meanwhile, Sajha loyalists have urged the Board to maintain financial transparency. "It became the centre for recruiting party cadres that led to its downfall. Present leadership should take this fact into account to revive and maintain its glorious history," said renowned comedian Hari Bansa Acharya, who is also a member of Sajha Saathi Samuha that advocated for SY revival. Acharya believes that revival of Sajha Yatayat will help ease the problems of public transport in the country. He has also sung a song hailing Sajha buses as the most popular form of transport. Dixit also vows to maintain transparency in the operation of Sajha buses.

Source: <http://www.ekantipur.com> December 19, 2011

Concerns Over Sustainable Urban Transport in Kathmandu

The issues of urban transportation system in Kathmandu valley were raised and a new direction for the sustainable urban transportation in the valley was discussed in Kathmandu Sustainable Transport Forum, organized on 16 December in Kathmandu.

The main objective of the program was to sensitize stakeholders on sustainable urban transportation (SUT); share approaches and initiatives of governmental, non-governmental and private sectors on SUT in Kathmandu valley; sensitize stakeholders for the need of SUT strategy/programmes and discuss the challenges and way ahead for improving urban transport system in Kathmandu.

The program started with a keynote speech from Krishna Gyawali, Secretary of Ministry of Environment (MoE). Mr. Gyawali emphasized the need to improve the urban transportation in the Kathmandu valley.

Mr. Ganesh Shah, a former Environment Minister, in his keynote speech expressed that transport system is volatile and urban transport infrastructure is one of the major issues in Kathmandu. He also emphasized that pollution tax should be utilized for SUT.

The keynote speech was then followed by technical session with series of presentation. Ms. Anjila Manandhar, Network Coordinator of CANN, presented on existing issues of transport and air quality in Kathmandu valley and provided insight on CANN strategy for SUT. She also highlighted the past, ongoing and planned activities of CANN.

Mr. Bhusan Tuladhar, Regional Technical Advisor, South Asia at UN-HABITAT,

shared on elements of SUT and best practices on SUT from Asia and around the world. He highlighted aspects of SUT on social equity, affordability, road safety, environmental and land use issues.

Mr. Kamal Raj Pande, Joint Secretary of Ministry of Physical Planning and Works, presented of urban transportation in Kathmandu valley focusing on existing policies, acts and plans of government. Mr. Pande emphasized that vision of transport system should be people centric not vehicle centric. He shared different components of KSUT project and principle approach of changing the mode of travel as one of affordable option.

Mr. Laxman KC shared the concept of complete street, traffic safety and needs to manage the transport noise.

Mr. Prashanta from CANN presented on BRT system and its features, benefits and challenges. He shared his learning experience of TransJakarta (BRT system at Jakarta) and emphasized to opt BRT system in developing cities like Kathmandu as BRT system is more affordable and flexible; performs better and provides better service comparable to rail-based system in relatively lower price.

“It is important to develop Environmentally

Sustainable Transport (EST) strategy and the component of EST should be reflected in comprehensive development plan, initiatives and projects of the country” said Ms Amita Thapa Magar from CANN, sharing the EST strategy in Philippines. She also informed that the initiation to formulate of EST strategy in Nepal is being started.

The technical session was followed by panel discussion consisting of 7 experts from government agencies, private agencies, academia and research institution and NGO. Different issues of SUT were raised and discussed by stakeholders in the session.

The program was successful in bringing around 50 stakeholders from government agencies, private sectors, academia, research institution and NGO's to same consortium for discussion on SUT issues and paving a consolidated block directing ahead for SUT. The program was organized by Clean Air Network Nepal (CANN), Clean Energy Nepal (CEN) in coordination with Ministry of Physical Planning and Works (MoPPW) and supported by FK Norway and CAI-Asia.

Source: <http://cen.org.np> December 19, 2011



Accident rate in valley escalates by

Since the beginning of this fiscal year (2068/69), Kathmandu valley is experiencing a constant acceleration in the frequency of road accidents. As many as 2,480 road accidents were recorded in the first five months (mid-July to mid-December) of this year, in which 65 people lost their lives and 1,788 were injured. Compared to the 1,636 accidents that occurred in the same time span last year, the number of road accidents this year has gone up by 844, which measures to more than 51 per cent increase.

According to Monthly Accidental Description (MAD) maintained by Metropolitan Traffic Police Division (MTPD) Kathmandu, out of the total people injured in different road accidents during this period, 223 people suffered serious injuries while 1,565 people sustained minor ones.

As per MAD, there were 614 accidents in the first month (mid-July to mid-August) of this fiscal year, while the consecutive four months witnessed 555, 448, 422 and 441 road accidents respectively. The data reveals that as many as 4,323 motorised and non-motorised vehicles were involved in road accidents in Kathmandu, Lalitpur and Bhaktapur during the period. According to the data, two-wheelers top the chart, with 1,750 motorcycles being involved in accidents. This was followed by car, van and jeep (under single category), which were involved in 1,351 accidents.

The record also shows that Kathmandu witnessed the maximum number of road accidents (3,463), while 598 and 262 road accidents occurred in Lalitpur and Bhaktapur respectively. The highest number of accidents (217) has been recorded in Koteshwor, followed by Gaushala (212), Satdobato (152), Jawalakhel (116), and Durbar Marg (107). The data also shows that majority of accidents (924) took place between 12:00 noon to 6:00 pm, while 726 accidents occurred between 6:00 am to 12:00 noon. Similarly, 661 and 184 accidents reportedly occurred between 6:00 pm to 12:00 midnight and 12:00 midnight to 6:00 am respectively.

According to police reports, negligence of drivers caused majority of road accidents, accounting for 1,668 mishaps. Similarly, 389 accidents occurred because of over speeding, whereas overtaking resulted in 167 accidents. The other causes of accidents include drunk driving, carelessness of commuters, mechanical breakdown, and overloading. Due to the swell in number of road accidents, traffic police have recently intensified monitoring of young riders and cross-checking of drunk driving. Following the launch of an operation focused on drunk driving, police have impounded hundreds of vehicles for non-compliance with the traffic rule during the last couple of days. Of late, in a bid to minimize probable road accidents, traffic police have also been intensifying checks at major

black spots.

Admitting that road accidents are on the rise, Deputy Inspector General of Police at MTPD, Ganesh Raj Rai said, "Due to high vehicular density and rising number of commuters in the valley, it's getting more difficult to control the situation." Stating negligence of drivers to be the major cause of accidents in the valley, he stressed on the need for strict legal provisions against non-compliance of traffic rules and penalties.

Citing the existing procedure of unscientific licence issuance as a major cause of increase in the rate of road accidents, he said, "The licence issuance procedure itself needs to be corrected at first to minimise road accidents." He further explained, "We merely enforce traffic rules, whereas it is the responsibility of the Department of Transport Management to systematise the transportation system and sensitise people about civic sense on the road. According to him, they have been monitoring movement of pedestrians by ensuring that they use zebra crossings and overhead bridges instead of crossing roads haphazardly.

Source: <http://www.thehimalayantimes.com>
December 26, 2011

Nepal Switches on First 'Renewable Energy Village'

The country's first mini wind-solar hybrid power system will be switched on today in the Dhaubadi village of Nawalparasi district thanks to the Government of Nepal with support from the Asian Development Bank (ADB).

For the villagers of Dhaubadi, the electricity from the mini-grid means less time and money spent on their search for firewood or travel to the nearest town to buy costly kerosene.

Two sets of 5 kW wind turbines, complimented by 2 kWp of solar PV panels, have been installed to satisfy the village's electricity

demand of 43.6 KWh per day. The project also provided villagers with solar cookers, solar dryers and biogas systems. There are plans to build greenhouses to absorb solar energy and manage water use for high-value cash crop and vegetable production, which will augment the village's income.

The wind-solar hybrid system was installed under ADB's regional technical assistance (RETA). The Alternative Energy Promotion Centre of the Ministry of Environment is the implementing agency in Nepal. The \$3.8 million RETA will contribute to ADB's "Energy For All" initiative by increasing access to energy in

remote rural areas.

Nepal's chronic energy shortage, its abundant wind and solar resources, and most importantly the strong government commitment toward a low-carbon economy, have led ADB to select Nepal as the first pilot country for ADB's small wind power initiative. The lessons learned in Nepal on the deployment of small wind power systems in rural areas will be very useful in scaling up the systems in Nepal and replicating in other ADB member countries.

Source: <http://www.adb.org/> December 16, 2011

Study Finds Link between Air Pollution and Increase in DNA Damage

A study in the Czech Republic has found a link between exposure to certain air pollutants and an increase in DNA damage for people exposed to high levels of the pollution.

They found that breathing small quantities of a polycyclic aromatic hydrocarbon (PAH), called benzo[a]pyrene (B[a]P), caused an increase in the number of certain 'biomarkers' in DNA associated with a higher risk of diseases, including cancer. Air pollution is a major problem around the world, particularly in urban areas. In attempt to control regional air pollution levels, the EU has introduced legal limits for exposure to a variety of different airborne pollutants. For B[a]

P, the EU air quality standard is 1 nanogram per metre³ (ng/m³) as an annual average that has to be attained where possible throughout the EU. To measure the risk of DNA damage and risk to health caused by exposure to chemicals, such as PAHs, researchers sometimes use 'biomarkers' these are biological features that can provide an indicative picture of risk and disease. Previous studies have suggested that 'DNA adducts' can be used as biomarkers to measure exposure to PAHs. These are, in effect, small molecules, such as PAHs, bound to the DNA. Similarly, 'chromosomal aberrations' - structural changes to a stretch of DNA - can be used as biomarkers to demonstrate the effect of some pollutants on DNA. To test whether

there was a possible link between exposure to PAHs and the frequency of DNA adducts and chromosomal aberrations, the researchers, supported by the EU EnviRisk and INTARESE projects, examined DNA from 950 police officers and bus drivers in Prague. The participants, drawn from three separate studies conducted over a five-year period, all worked outdoors for more than eight hours a day. Each carried a device to measure their personal exposure to PAHs and DNA was extracted from the participants' white blood cells.

Source: <http://www.enn.com> December 19, 2011

Delhi to go greener

After CNG, the national capital is all set to run its public transport fleet on biogas.

The project, once completed, will earn the capital city the distinction of having the country's first public transport fleet that runs on two types of clean fuel: biogas and compressed natural gas (CNG). Delhi already

boasts running the world's largest fleet of vehicles on CNG. Around 450,000 vehicles—this includes some 16,000 buses—in Delhi run on CNG, according to Indraprastha Gas Ltd, a Delhi government undertaking, which is the sole supplier of CNG in the capital.

The compressed biogas is almost similar to CNG, the main constituent of which is meth-

ane. Thus it can be directly injected into CNG cylinders for vehicular use or fed into CNG-fuelled power grid. It can be mixed with CNG and used.

Source: <http://www.downtoearth.org.in> December 31, 2011

To contribute articles, news items, or event announcements for the next issue, send an email with the complete details and URL source to info@cen.org.np or anjila@cen.org.np

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Building Partnership for Clean Air

Clean Air Network Nepal (CANN) is a network of organizations and professionals involved in air quality management in Nepal. The goal of CANN is to increase the ability of professionals and other interested stakeholders to effectively address the problems of air pollution in Nepal. We encourage you to join hands with us to expand our campaign for clean and better Air.

CANN is a Country Network of Clean Air Initiative for Asian Cities.

Clean Air News is a free email publication that features news, information and events related to clean air. Clean Air News is published by CANN to highlight the activities and initiatives for clean air by CANN and its member and partners.

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