Perils of Plastic Bags

For all quiz buffs, here is a question: what is deemed (albeit, derisively) the national flower of South Africa? The answer: the plastic shopping bag, obviously lying discarded here, there and everywhere and proving to be an eyesore. The plastic bag is now ubiquitous, polluting the high reaches of the Himalayas, the depths of our seven seas and the remote corners of the Arctic and Antarctic.

To be honest, the advantages of plastic shopping bags are many: sturdiness, durability, lightweight, water imperviousness and last but certainly not the least, its low cost. Unfortunately these same positive qualities are making it a huge pollution problem. The cheapness means indiscriminate usage and easy discarding and its long life means its survival in the environment for a long period inflicting considerable damage. It is only recently that society is sitting up to the problem.

So what exactly is the problem? First and foremost, it is non-biodegradable. The last word has not been said on the time it takes to degenerate (if at all) and experts have widely divergent opinions as between “hundreds of years” to “one million years” (compare this to, organic waste: 1-2 weeks, paper: 10-30 days, cottons: 2-5 months, wood: 10-15 years, metals: 100-500 years). So, like the proverbial mother-in-law and just as peskily, it goes on and on: littering, clogging gutters and sewerages, etc. (Flooding of Dhaka, Bangladesh was once traced to clogged gutters, leading to a ban on plastic bags in that country).

It is also proving detrimental to animal life on our planet. Cattle in India have been found dead after ingesting plastic bags. The problem has left our shores and into the oceans where members of several species of sea animals like whales and endangered species like sea turtles have died. Probably the sea turtle mistook plastic bags for jellyfish, which is a delicacy to them.

Secondly, add to this the sheer quantity of plastic bags being ‘consumed’ by shoppers - 500bn to a trillion numbers annually worldwide, according to one estimate - and you have the magnitude of the problem.

The sheer quantity of the bags generated also generates a big headache towards disposal. It is often disposed in landfills along with other garbage. Proponents of plastic bags point out that these bags when compacted take up less space than paper bags (also, about only 17 percent by volume of total garbage). Other uses for disposal are also being thought of. For example, in Bangalore, India, it has successfully been used in combination with bitumen to re-lay city roads. Plastics being basically petro-chemicals, have been thought of as a fuel. However, inks and additives in some plastics can create dioxins, and emit heavy metals when burnt. The toxic waste also needs to be disposed of. In a bid to address this Catch 22 situation, scientists at the Sriram Institute of Industrial Research, New Delhi, India, claimed to have come up with a novel technology that converts non-biodegradable plastic wastes by blending them with other carbon-aceous wastes into an eco-friendly green (!) fuel. And unlike plastic, the fuel burns easy.

God bless the scientists at the Sriram Institute of Industrial Research!

Several measures are being considered to tackle the crisis. It is back to paper bags in some places. However, apart from the fact that paper bags are costlier, producing paper is itself no mean a polluting process, generating toxic wastes, besides using more electricity, fossil fuels and water as also denuding precious forest cover. In an effort to induce re-usage of plastic bags and cut down on consumption, some countries have imposed a levy on them. This has reduced consumption dramatically. Some of the countries that have banned or taken action to discourage its use include Australia, Bangladesh (as mentioned earlier), Ireland, Italy, South Africa and Taiwan. Mumbai, India’s business capital has also banished plastic bags from its midst.

One saving grace as far as plastics are concerned is that they are re-workable after re-melting and thus reusable. They have been recommended for several non-food uses like toys, mouse pads, doormats, etc. Re-melting also sterilizes it, rendering it suitable for hospital use. The problem here is that thinner the film from which a bag is made, more uneconomical becomes its recycling. Therefore many authorities have stipulated a minimum thickness for the film to foster recycling. Black and other colours used for the bags leave toxic wastes and colourless, transparent bags are being mandated. However, there are several types of plastics and this makes simultaneous re-melting impossible.

Initiative has also been taken to develop bio-degradable plastics from different organic materials.

What then is the best solution to this conundrum? The answer is not yet clear. Reducing waste generated from plastic (or, for that matter, paper) bags by reusing them, is certainly a priority. Or use the cloth tote bag. In India, we can make an environmentally friendly fashion statement with the humble, good old thalía.

Over 25 percent of all plastic bottles and nearly 20 percent of all plastic containers were recovered in the US in 1995. The amount of plastic waste generated has been increasing by about 10 percent per year for the past 20 years! About half of all American households have access to recycling programme.

(Source: Society of the Plastics Industry 1997)
Lasers Turn Beam on TV Recycling

A laser technique to separate materials in cathode ray tubes (CRT) from TV and PC monitors has been developed to help recycle the useful elements in them. Tonnes of glass and other material is wasted in old TVs and PCs each year, but it has proved difficult to dissect elements cleanly to use in new tubes.

The laser system, made in Finland, means no lead and pollutants are mixed up with useful recyclable elements. Finnish company Proventia Automation has developed the automated laser technique to extract reusable and waste material from CRTs, five to 10 times faster than conventional methods. The laser method means no waste material or by-products make it into the environment or landfill sites at all. Such a system falls in line with sustainable environmental technology, and has been recommended by the Weee directive.

(LBBCN, 15.06.04)

Lisbon to Try Sustainable Living

An ambitious experiment in sustainable living has been started by green groups near the Portuguese capital, Lisbon. The project, a brainchild of WWF and a UK development group, BioRegional, will provide homes, leisure facilities and work spaces for up to 30,000 people. It is planned to show how communities can eliminate damaging pollution and rely on renewable energy, with zero carbon emissions and almost zero waste.

It is intended to demonstrate how the Earth’s rising population and its desire for higher living standards can be accommodated with the resources available. All the energy the residents use will come from renewable sources, and rainwater collection and waste water recycling should mean big cuts in water consumption and irrigation. The development will be built using reclaimed and recycled materials whenever possible, and at least 90 percent of its organic waste will be composted.

Similar developments, each providing for about 5,000 people, are planned in the US, China, South Africa and Australia, with homes, schools, factories, health and leisure facilities, local food sources and sustainable transport networks.

(LBBCN, 28.05.04)

Hybrid Cars and Buses

Hybrid Diesel-Electric Buses: General Motors Corp., the largest automaker, was scheduled to roll out the first phase of its long-term hybrid strategy by delivering 235 hybrid diesel-electric buses to the metro transit system in Seattle. The first 25 buses are to be operational on June 5, and the remainder will hit the road at various points through the end of the year, the company said.

(AWSJ, 28.05.04)

Hyundai to Enter Hybrid Car Segment: Hyundai Motor Co, South Korea’s largest automaker, said it is considering investing about one trillion won to develop and make as many as 10,000 petrol-electric cars a year by 2010. The automaker may start making the so-called hybrid versions of a new passenger sedan to replace its Verna model by the end of 2005, Hyundai Motor said. That will be the first hybrid car produced in South Korea.

(BL, 29.06.04)

Saving a Million Drops to Feed a Billion Mouths

With the water scarcity looming large as ambient temperatures soar in most of the densely populated south, a recent report warns that if water productivity is not enhanced, the poor of the world will suffer the most.

Aptly titled “Water: More Nutrition Per Drop”, the report presented at the meeting of the UN Commission on Sustainable Development in New York warned that if present food production trends continue, the Millennium Development Goal of halving the number of undernourished people by year 2015 will remain a dream. Expectedly, the report highlights statistics and data to present a gloomy scenario. Not without reason, as 840mn people across the world are currently undernourished and some two billion will join them in the next two decades.

(BL, 08.05.04)

Unilever and Greenpeace Launch Eco-Freezer

Unilever, the giant food multinational, has teamed up with Greenpeace to launch a new ecofriendly freezer that will help to reduce global warming. Unilever Ice Cream & Frozen Food has been working with the support of Greenpeace on the development of the brand new freezers which, instead of hydrofluorocarbon (HFC) gases, which do not harm the ozone layer but can contribute to global warming, run on the natural gas refrigerant, hydrocarbon (HC).

HC is claimed to neither contribute to global warming nor deplete the ozone layer.

The new Wall’s freezers (a Unilever brand) also use up to 15 percent less energy than traditional models to keep ice cream at the right temperature. Unilever currently owns 75,000 freezers UK-wide. The new Wall’s freezers are on their way to retailers all over the country and will be recognisable by ‘HFC-free freezer - better for the environment’ stickers.

(EnT, 04.06.04)

Alarm Clocks and Calculators Powered by Water

Gloucestershire (UK) company, already the main distributor for the environmentally friendly ‘Freeplay Radio’, are now entering the market with alarm clocks and calculators powered by water. The Tango Group has become the distributor for an eco-design developed around a pair of alloys, made into a set of positive and negative electrodes. When water is placed in the container, the positive and negative electrodes enable ion movement between the electrodes, causing an electrical current to be created.

The benefits of H2O power over traditional batteries are easily documented. Every year billions of conventional dry cell batteries are used, and the recycling of such waste is not only expensive but often incomplete, resulting in hazardous pollution and damage to our environment.

Tango Group seeks with this new product range to maintain its leadership in creating and developing the market for self sufficient energy products. The initial range of digital clock, calculator and alarm clock, retail at between £5 and £12 and are to be found in most UK retail outlets and specialist environmental resellers.

(EnT, 25.06.04)
World’s View on GM Food

SC Notice on Lack of Regulations: The Supreme Court of India has issued notice to the ministries of agriculture and science and technology on a PIL raising an alarm that absence of a law to regulate entry of genetically modified (GM) seeds into India would spell doom for conventional crops like rice and wheat.

(BS, 05.04.04)

Call for Consensus on GM Crops in Asia: In the second conference on biotechnology for Asian development in Delhi, experts have urged the governments of Asian countries to develop a collective approach and coordination in view of the import regulations for GM food becoming a contentious issue in global trade.

(FE, 08.04.04)

EU Set to Approve GM Maize: The European Union (EU) is poised to lift its five-year ban on gene-spliced foods and will soon arrive at a consensus on purity levels in the seeds. Rules for how much GM material may occur in non-modified seeds prior to labeling has been a thorn in the side of EU members.

(BL, 12.05.04)

UN Gives Okay to GM Crops: A United Nations food agency is coming out in favour of biotech crops, saying GM organisms have already helped small farmers financially, have had some environmental benefits and no ill effects on health. In a report, the UN Food and Agriculture Organisation says the main problem with agricultural biotechnology is that it has not spread fast enough to the world’s poor farmers and has focussed on crops that are mostly of use to big commercial interests.

(HT, 18.05.04)

Affluent and Poor

840mn people in the world go to bed hungry every night. While countries with excess food stocks use it as a diplomatic tool, others struggle to get food merely to survive. This dichotomy persists. How to overcome the food security problem, which is the basic rudiment of world peace? To mark the importance of rice for the hungry world, UN has declared this year as the international year of rice. Ironically, this year would also be the fifth consecutive year of low food production, which was insufficient to meet the demand.

(TNIE, 16.05.04)

First Bio-Diesel Plant to be Set up in Andhra

India’s first bio-diesel plant will be set up in Andhra Pradesh as a joint venture of Indian, Austrian and American companies. The Rs. 135 crore project, to be set up at the port city of Kakinada in East Godavari district, will get feed stock of Jetropha and Mongamia seeds from plantations to be grown in seven districts of Andhra Pradesh.

(TP, 19.06.04)

Seminar on Green Building Materials

The CII-Sohrabji Green Business Centre is organising a two-day seminar on ‘Green building materials and equipment’ beginning on May 6 in Hyderabad, India to create awareness among entrepreneurs and other stakeholders on green building materials and business opportunities in this segment. The seminar would focus on green building materials, eco-friendly materials and equipment and energy-efficient equipment.

(BL, 05.05.04)

Biofertilizers Increase Yield in Field Crops

Biofertilizers are products containing living cells of different types of micro organisms that have an ability to mobilise nutrients from unusable form through biological processes and these groups of micro organisms may either fix atmospheric nitrogen or solubilise insoluble phosphorous and make them available for crops.

Azospirillium, an organism widely used, fixes atmospheric nitrogen on the root surface, which is taken up by plants, and also secretes growth hormones that enhance root development. Another popular organism is phosphobacteria that solubilises phosphorus. The two organisms are recommended both as seed dressing and in soil application. The response of field crops by inoculating these organisms together is quite encouraging. Experiments conducted on different crops - rice, maize, sunflower, sugarcane and cotton indicated that there is increase in plant growth and grain yield. The marginal benefit cost is also high.

(TH, 29.04.04)

Synthetic Ghee Bad for Heart

Synthetic ghee, that is flooding local markets, contains hazardous chemicals and can cause diseases, including cancer. This was stated by the Dairy Products Traders Association, the Federation of All India Dairy Products Traders Association and other dairy products associations in a press conference. The president of the Khari Baoli-based Dairy Products Traders Association, said this synthetic ghee, prepared with hazardous chemicals, is being sold as ‘Agmark’ pure ghee in the market. One of the most dangerous constituents used in this ghee is ‘stylene,’ commonly known as refined palm oil.

(TT, 21.06.04)
And Now... Global Dimming!

With the increase in cloud cover and particles in the atmosphere, the amount of radiation reaching the earth from the sun is decreasing. Since the late 1950s, scientists have observed a 2-4 percent reduction in solar radiation reaching the earth's surface. What was once perceived as a localized phenomenon in the northern hemisphere not of much significance, is now being acknowledged as being worldwide.

But let this not dim your heart! What scientists are saying on the subject actually amounts to global dimming being the knight in shining armour out to rescue (at least, in some measure certainly) hapless mankind from the tyrannies of global warming! Increasing cloud cover blocks the sun’s rays and the scattered light that they allow through takes a zigzag path, bathing every part of the plant’s leaves instead of just one surface. Even if the overall amount of light is lower, this increases the plant’s rate of photosynthesis and more carbon dioxide is removed from the atmosphere. The only plants that might suffer are those in the greenhouses in the colder reaches of the world, which are in desperate need of light.

(TH, 23.05.04)

Carbon Credits - Thrust for Cleaner Technologies

When global warming is the watchword and reducing carbon dioxide (CO₂) emission is the buzzword, can trade be far behind? The latest trade opportunity for developing countries comes from quite unconventional quarters - trading of carbon credits or more specifically in CO₂ credits between developing and developed nations. Developed countries, whose CO₂ emissions are already way beyond those in developing nations, are under compulsion to drastically reduce emissions by 2008-2012. The catch however is the cost - they have to spend about $300-500 for every tonne reduction in CO₂ emissions. Contrast this with $10-25 to be spent by developing countries. The stage is thus set for trade to flourish.

The United Nations Framework Convention on Climate Change’s Clean Development Mechanism (CDM) is the facilitating agency, with Det Norske Veritas of Oslo, Norway accredited by the UN as the validating agency for this trade between developed and developing countries. There is however a rather complex set of conditions to be fulfilled by both sides before trade can actually take place.

(TH, 06.05.04)

Global Warming to Affect Rice Harvests

Global temperature increases could cause significant reductions in yields of rice - the staple food for over half of the world’s population - according to research released recently. Scientists have published ‘direct evidence’ that increased night-time temperatures associated with global warming can cause rice yields to fall. The study, conducted at the International Rice Research Institute (IRRI) in the Philippines, used local climate data from 1979 to 2003 and data on Philippine rice yields from the last 12 years.

The research found that rice yields had decreased by more than 10 percent while the night-time temperatures in the dry season rose by 1.1° Celsius - three times the increase in average maximum temperature over the same period. This trend in nocturnal temperatures is linked to increasing concentrations of greenhouse gases.

(Scidev.net, 29.06.04)

Increased Corporate Action on Climate Change

A increasing number of companies are monitoring, reporting and managing their greenhouse gas emissions, a new survey has found. The Carbon Disclosure Project (CDP), a group of institutional investors representing assets in excess of US$10 trillion, wrote to the world’s 500 largest companies, the FT500, asking for investment relevant information concerning their impact on global warming. This information was then analysed and published in a report by Innovest and used to draw up a Climate Leadership Index - “a list of the 50 companies whose responses best addressed the breadth of climate change issues.”

(Edie, 21.05.04)
Silicon Valley Plans to Fight Global Warming
A coalition of major Silicon Valley companies has announced an ambitious plan to reduce greenhouse gas (GHG) emissions to collectively combat global warming, one of the first such business collaborations in the United States. The Sustainable Silicon Valley project (SSV) is a multi-stakeholder collaborative initiative to produce significant environmental improvement and resource conservation in Silicon Valley through the development and implementation of a regional environmental management system.

(ENN, 08.04.04)

Rise in Norway’s GHG Emissions
Under the Kyoto protocol on global warming, Norway is meant to limit its GHG emissions to one percent above 1990 levels on average in the five-year period ending in 2012. But Norwegian GHG emissions jumped in 2003 and are far above Oslo's plans. Overall emissions, mainly of CO₂ from burning oil and gas in industry, rose by two percent in 2003 to 56.5mn tonnes and were eight percent above 1990 levels of about 52mn.

(PA, 02.04.04)

US Patent for Difluoromethane
The industrial synthetics and refrigerant gases major SRF Ltd has been granted a process patent by the US Patent and Trademark Office for production of difluoromethane. It is an ozone-friendly refrigerant to be used as a component in blends that are replacing hydrochlorofluorocarbons such as HCFC-22, which are being gradually phased out across the world. Global demand for the product is strong and is likely to increase three-fold by 2010.

(BL, 02.06.04)

Backdoor Entry of Ozone-Depleting Gases
Even as there is strict international regulation on the trade in ozone-depleting substances (ODS), consignments of chlorofluorocarbon (CFC) gases, apparently from the US, are being smuggled into Bangladesh, India to be sold to local industries. This came to light after customs officers intercepted a lorry coming from Kolkata in February and recovered 140 cylinders (14 kg each) of ‘Monochloro Di-Fluoro Methane’, an ODS. Sources said the cylinders appeared to be of US origin as they had markings of US Federal Laws. The gases were smuggled in from Bangladesh across the land border.

(TNIE, 15.04.04)

Flood Risk to Affect Two Billion by 2050
One billion people are already at risk from the kind of floods that might occur every 100 years. But with global warming, that number could double by 2050, opined United Nations University researchers, while opening an institute devoted to the environment and human security in Bonn, Germany. The university has its headquarters in Tokyo.

During floods, torrential rains and rising rivers damage crops, sweep away roads and bridges, flood homes and claim around 25,000 lives. Experts calculate the numbers at risk will rise because of more frequent extreme weather events linked to global warming and since sea levels will continue to rise as glaciers melt.

(TG, 14.06.04)

Russia to Ratify Kyoto Protocol?
Russian President Vladimir Putin has announced that Russia will hasten steps towards ratifying the Kyoto Protocol, the treaty aimed at reducing emissions of GHGs linked to global warming. The move would come despite recent recommendations from the Russian Academy of Sciences (RAS) that ratification would not be in Russia’s interests.

(Scidev.net, 28.05.04)

New Satellite for Insight into Ozone Layers
Aura, a new satellite blasts off in June with the dual goals of gaining key information on the earth’s ozone layers and creating a blueprint for the search for other life-bearing planets.

Built to monitor earth, air and sea, the chain of satellites is the latest bid to understand the causes and consequences of climate change. In particular it will look at the relationship between ozone in the lower atmosphere, which is harmful to life and is largely caused by man-made chemicals, and ozone in the upper atmosphere which protects against the sun’s ultra-violet rays and which is destroyed by man-made chemicals. It will also look at compounds in the air — including water vapour — which are major greenhouse gases and which are strongly on the rise.

(PA, 10.06.04)

Gas may have Spurred Ancient Global Warming
In an article in the science journal Nature, Norwegian researchers said they had found traces of thousands of hydrothermal vents in lava off Norway that could have been the source of a rise in GHGs 55mn years ago. A researcher at the University of Oslo and main author of the article opined that magma heated sediments containing organic material and led to an explosive release of gases.

(PA, 04.06.04)

California Board Proposes Cut in Auto Emissions
The California Air Resources Board in June issued a draft plan to reduce greenhouse gas emissions from cars and light trucks by 30 percent. The air board’s plan, which had been expected, would phase in reductions of gases linked to global warming in two steps for cars and trucks sold in California from 2009 through 2014. The board set year-by-year levels for emission cuts for a passenger car/light-duty truck class and a second light-duty truck category.

(PA, 16.06.04)

Global Warming Increases Asthma
Fossil fuel combustion is partly to blame for increased childhood asthma, according to a report published by Harvard Medical School’s Centre for Health and the Global Environment. But the resulting air pollution is just part of the problem. Increasing temperatures encourage growth of moulds and fungi, and higher carbon dioxide levels stimulate plants to produce more pollen earlier in the year.

Childhood asthma in the US rose by 160 percent between 1980 and 1994. Inner city children are at special risk as diesel particles are particularly effective at delivering pollen to immune cells in the lungs, according to the report, called "Inside the Greenhouse." The report advocates local initiatives, such as tree-planting and improved public transport, to reduce GHG.

(Scidev.net, 07.05.04)
“Green” System to Power Fuel Cells

A Japanese consortium led by Honda Motor will test a pilot system that uses hydro-electricity for the pollution-free production of hydrogen to power fuel-cell vehicles.

The novelty in this initiative is that the hydrogen will be produced by electrolysis of water with electricity generated in a hydroelectric power plant. Hitherto hydrogen was produced from fossil fuels, which, in practice has been accused of also producing carbon dioxide as a by-product, thus adding to global warming.

The current Japanese experiments are being carried out in the island of Yakushima that is ideally suited to produce hydro-electricity with rivers cascading down deep mountains. But high production costs and lack of infrastructure for pumping hydrogen are still hurdles for the system to reach ordinary car users.

(ET, 05.04.04)

£2.2mn Solar Energy Boost for UK

Recently the Energy Minister has announced that the solar energy projects will receive a further £2.2mn in grants across the UK. This takes the total budget for solar power conversion grants in excess of £25mn. The growth and expansion of the solar power industry will help take us closer to achieving our renewable energy target of 10 percent of all electricity by 2010, said the minister.

(Edie, 18.06.04)

Australia Promotes Renewable Energy Plan

Australia will spend Aus$2.2bn, or $1.5bn, on fuel-tax cuts for farmers and miners and promoting renewable power as part of a national energy plant. The government will reduce taxes on fuel for businesses and households by Aus$1.5bn by June 30, 2013.

(AA, 17.06.04)

Renewable Energy Bank

The chairman of Alternate Energy Development Board (AEDB) has called for setting up a ‘World Renewable Energy Development Bank’ (WREDB) to encourage the developing world to invest and employ more resources towards finding alternative sources of energy. He emphasised that the proposed bank should be located in a developed country and be responsible for financing renewable energy projects.

(Dawn, 13.06.04)

Rs. 5.9bn to be Spent on Power Generation

The Water and Power Development Authority (Wapda) (Pakistan) will spend Rs. 5.9bn to improve power generation and distribution systems in big cities by erecting new 132 kv transmission lines, 66 kv grid stations and converting existing 66 kv grid stations into 132 kv system. Official sources said that Wapda has been permitted by the Ministry of Water and Power to undertake a new huge project - Secondary Transmission Lines and Grid Stations - throughout the country. The project has been submitted to the Planning Commission for final approval.

(Dawn, 06.04.04)

Energy from Human Waste: Researchers from US-based Pennsylvania State University have developed an electricity generator that is fuelled by human waste. The device, the microbial fuel cell, could prove useful in developing countries. Large-scale waste management plants have high power requirements making them prohibitively expensive for some developing countries. Offsetting this cost by producing electricity could make all the difference. But a microbiologist at the University of Massachusetts believes that a lot of work is to be done before this is used on a commercial scale.

Human waste could also become an important source of energy to power long missions. NASA scientists have discovered Geobacterial Microbes, a bacteria, which feed on human waste and turn it into electricity. Scientists are now investigating how the microbes could help to develop a fuel cell to produce electricity and how to harness it for use aboard a ship or in a Martian colony.

(BL 21.05.04 & DTE 30.04.04)

Power from Biodegradable Waste: Scientists at the Bhabha Atomic Research Centre (BARC), Mumbai, have developed a plant to generate electricity from biodegradable waste like, dry leaves, which are burnt extensively in major cities like Chandigarh causing environmental pollution and posing a health hazard.

(TT, 09.04.04)

Energy from Bananas: Australian scientists have discovered what sportspersons have known all along: bananas are great sources of instant energy. A new government funded study is investigating the possibility of harnessing bruised orspoilt bananas - deemed not worth selling to consumers - to provide energy for 500 homes. In the procedure, bananas would be combined with bacteria to produce methane, which in turn would be piped to a gas turbine coupled to a generator, to produce electricity.

(ET, 01.06.04)

Sweetness to Run the World: Stanley Kravitz and a group of researchers at Sandia National Laboratories have begun to apply for patents converting ways to convert glucose, a basic form of sugar, into energy. Glucose seems an obvious potential source for fuel. It is renewable, cheap, abundant and, it would appear, easier to obtain than another alternative, hydrogen.

(IHT, 22.06.04)

China sets Ambitious Goal for Conservation

China, which has shaken energy markets with its ravenous appetite for oil, announced recently that it would generate 10 percent of its power through renewable sources by 2010. The pledge, made at a conference on renewable energy held in Bonn, surprised experts with its ambition. If China achieves its goal, it will become a world leader in developing alternatives to fossil fuels, rather than just a top consumer.
Free Power for Delhi's Powerful: Sustainable?

According to a proposal, soon to be brought before the Cabinet, Delhi's ministers will be entitled to free unlimited power supply at their residences. Currently, Delhi government ministers are entitled to Rs. 5,000 worth of free electricity every month. Several of Delhi government ministers had sought the hike in their allotted share of electricity, justifying it on the grounds that most of this power is used for the service of common people.

(Mauritius Aims to Develop Renewable Energy Sources)

Mauritius wants to develop local sources of energy in a bid to stave off increasing demand for petroleum imports, the island’s deputy prime minister said. With no indigenous oil, natural gas or coal deposits, 75 percent of Mauritius’ primary energy requirements come from overseas, with petroleum imports making up nine percent of the total value of imports. "The import bill for petroleum products exceeded eight billion rupees ($296mn) for financial year 2003/4," Pravind Jugnauth told an audience at the launch of Indian Oil Corporation’s (IOC) operations in Mauritius.

Use Steam Energy for Cheap Power Generation

The agreement entered into between the Engineering Department of the Peradeniya University and Forbes Marshal (Pvt), India is a milestone in the development of steam generation technology, said Vice Chancellor Kapila Gunasekera at a ceremony held at Swiss Residence Hotel, Kandy (Sri Lanka) recently. He said the steam technology is much cheaper source of energy, especially for a country like Sri Lanka. He appealed to the local industrialists to seek the consultancy services from the university's engineering department so that their industries could be improved.

Cutting Cost of Solar Power

Researchers at the University of Bath are looking at ways of halving the cost of converting the sun’s rays to electricity using solar cells, in the hope of making solar energy more widely used in the UK. The £4.5mn project is the largest single research project into solar power ever funded by the UK research councils and is part of the Engineering and Physical Sciences Research Council’s Supergen initiative - a £25mn project to look at alternative energy sources and more efficient ways of storing power.

Three Indian Projects in Race for Green Oscars

Three Indian projects have made it to the shortlist of this year’s Green Oscars. The Ashden Awards for Sustainable Energy 2004, to be announced in London in June, include IT Power, Prakratik Society and Aurore in their list of seven finalists who will compete for more than £140,000 of prize money for project expansion and replication nation-wide.

The finalists have been selected on the basis of their pioneering and innovative use of sustainable energy to meet the needs of the rural poor. The Ashden Awards aims to support initiatives that contribute to reducing our dependence on fossil fuels, whilst at the same time meeting the urgent energy needs of the millions of people living in rural areas, who still lack access to electricity.

(SOLAR POWER IN INDIA)

BHEL Tasks Sun to Light up West Bengal Island: The Electronics Division of Bharat Heavy Electricals Ltd. (BHEL), Bangalore, in association with the West Bengal Renewable Energy Development Agency (WBREDA), has successfully commissioned a 105-KWp solar power plant at Mousuni island in West Bengal. The facility will ‘empower’ islanders with photovoltaic energy. Besides providing power to individual houses, school buildings and street lights, the plant also powers a deep tube well for providing clean drinking water.

Building that Runs on Solar Power: Chandigarh and surrounding areas can look forward to a greener tomorrow. Conceived as one of its kind in North India, the state-of-the-art building with in-built solar lighting, heating and cooling systems, which become functional as Punjab Energy Development Agency Bhavan in Sector 33, is a case in point.

Sun’s Rays to Power Road Lights: The traffic wing of the Calcutta police is, for the first time, using non-conventional energy sources, like solar cells to power its embedded road dividers. Similar lights, though not solar-powered, are already in place on Red Road. They will be installed in major thoroughfares in and around the city soon.

Solar-Powered Pumps in Punjab: BHEL has bagged a Rs. 19 crore contract for the supply, installation, commissioning and post-sales service of 700 sets of solar photovoltaic water pumping systems for the Punjab Energy Development Agency (PEDA).
**Green Gas from Coal**

While the convenience and price of oil saw it replacing all other energy resources globally, for some time now, issues such as supply security, cartel manipulations and price volatility have seen many large consuming countries look at other alternative fuels to reduce their dependence on oil. Moreover, with environmentalist blaming, mainly, the use of oil and coal for global warming, the move to find more environment friendly fuels has seen countries turn to natural gas. China and India have been projected as two of the largest consumers of natural gas over the next few decades. Ironically, while both countries have huge coal reserves, they are deficient in gas.

(ENN, 17.06.04)

**Pollution could Affect Unborn Children**

Researchers found that genetic mutations known to be caused by some pollutants can be passed through sperm to baby mice. Presumably, the same thing could happen to human beings, they reported in the journal Science.

Their study identifies airborne contaminants as a serious risk factor, the group said in a statement. While pollution does not cause as many heart attacks as high blood pressure, for example, it is a serious risk factor, the group said in a statement.

They also reaffirmed that secondhand smoke causes heart disease. Traffic is one of the worst sources, they found. An eight-year study of 5,000 adults showed people who lived near a major road were more likely to die of a cardiovascular problem. More study was needed to understand how, exactly, pollution caused heart disease, the researchers said.

(Reuters, 03.06.04)

**Plastic Roads!**

The villain of urban environmental degradation, plastic waste, has become an unlikely hero on the roads of India’s Silicon Plateau. On an average, Bangalore city generates about 300 to 400 tonnes of plastic waste every month, part of it is now used by the contractors for building roads. The technology, developed by the city based KK Plastic Waste Management Ltd has provided an option for the civic body to dispose of the plastic waste in a productive way.

After Bangalore, plastic roads are about to become a reality in Delhi. The Municipal Corporation has decided to introduce a technology which uses plastic waste in the construction of roads. The technology is approved by Central Road Research Institute (CRRI) under which plastic is shredded and then mixed with bitumen. It makes the road water resistant and more elastic- preventing erosion.

(TNIE, 24.06.04 & IE, 28.06.04)

**Bad Air Causes Heart Disease**

Air pollution causes heart disease, the American Heart Association said in a statement. While pollution does not cause as many heart attacks as high blood pressure, for example, it is a serious risk factor, the group said in a statement.

They also reaffirmed that secondhand smoke causes heart disease. Traffic is one of the worst sources, they found. An eight-year study of 5,000 adults showed people who lived near a major road were more likely to die of a cardiovascular problem. More study was needed to understand how, exactly, pollution caused heart disease, the researchers said.

(Reuters, 03.06.04)

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(TNIE, 24.06.04 & IE, 28.06.04)

**Sulphur Contamination: The Environmental Culprit!**

With toxic lead finally disappearing from most of the world’s gasoline, a new air pollution fight is emerging around the globe over how much sulphur to allow in fuel. Rapidly developing countries like China, India, Thailand, Mexico and Brazil, where ownership and use of cars and trucks are soaring, are on the front lines. High levels of sulphur contamination occur naturally in some crude oil, especially from the Middle East and Russia.

(TT, 29.06.04)

**Information on Environment**

The Ministry of Environment and Forests, India has launched the Environment Information Centre (EIC), a one-stop source for environmental information. The EIC is a clearing house of environmental information having a private company promoted by Infrastructure Leasing and Financial Services Limited (IL&FS) as its management consultant. Environmental Clearance is mandatory for 30 project categories like multi-purpose irrigation and hydro-electric projects, ports and harbours, tourism/ transport and mining.

(TTI, 29.06.04)

**Ecofriendly House Wins Award**

A unique ecologically self-sufficient, four-bedroom house in suburban Matraville which combines the old Indian lifestyle and maintains an Australian architectural identity has won the 2004 Urban Design Award for Sustainability. The home of Professor Deo Prasad at the University of New South Wales is a perfect example of an environment friendly and architecturally attractive house.

(IE, 21.06.04)

**Are Mobile Phones Ringing in E-Waste ?**

ounding the alarm bell, a Delhi-based NGO, Toxics Link, has described discarded mobile phones as toxic time bombs. In the US an estimated 130mn cellphones will be discarded by next year, resulting in no less than 65,000 tonnes of cellphone waste. Much of it will reach India (as also, such countries as Pakistan and China) illegally for recycling or re-use.

Lead, brominated flame-retardants, hexavalent chromium, arsenic, cadmium and antimony are found in cellphone parts. All these have serious health effects: they may hit lungs, heart, kidneys, stomach and the nervous system. Some are suspected carcinogens. Toxics Link has called upon the Indian Government to move against illegal imports.

(ToI, 10.05.04)

**Scotland’s Strategy for Green Jobs Launched**

he Scottish Executive has recently launched its strategy for Green jobs with the aim of creating opportunities for Scotland in renewable energy, recycling, waste management, and resource efficiency. The commitment to develop the strategy was announced earlier this year in a Green Economy conference. The strategy sets out the opportunities for Scotland in the environmental sectors, asks where there is most scope for developing green jobs across the economy and how business can be supported in accessing these opportunities.

(Edie, 18.06.04)

**Alaska Fishery Awarded Ecolabel**

he $750mn Alaska pollock fishery, the world’s largest fishery, has been approved for a label to identify its products as environmentally friendly. It took several years to get final approval for the ecolabel from the internationally recognised Marine Stewardship Council based in the United Kingdom, said Jim Gilmore, spokesman for the At-Sea Processors Association.

(ENN, 17.06.04)
particulate matter as a contributor to heritable mutation induction in mice; however, a direct link between mutations and health effects has not yet been established. But they mentioned that structural changes in DNA have been detected in human sperm after air pollution exposure. They also noted that air pollution has also been linked to heart disease, lung cancer and birth defects, citing many studies.

Environment Blamed for European Child Deaths

One in three child deaths in Europe is due to environmental factors, according to the first assessment of the overall impact of the environment on child health in the World Health Organisation’s (WHO) European Region. Outdoor and indoor air pollution, unsafe water, lead poisoning and injuries are responsible for 100,000 deaths and six million years of healthy life lost every year in children and adolescents from birth to 19 years of age, researchers found.

Up to 13,000 children aged 0-4 years die from particulate matter outdoor air pollution and 10,000 as a result of solid fuel use at home, the assessment revealed. In the same age group, lead poisoning is responsible for over 150,000 deaths and six million years of healthy life lost every year in children and adolescents from birth to 19 years of age, researchers found.

"Environmental Burden of Disease" was published in the June 19 issue of the British medical journal “The Lancet.”

Check out an Ecofriendly Home

Kathmandu is entering the era of ecofriendly homes. For example, have a look at the houses belonging to environmentalist Bhusan Tuladhar, Clean Energy Nepal, and Dr Roshan Raj Shrestha, Environment and Public Health Organisation.

The environment friendly measures and techniques adopted in these houses are simply exemplary and inspiring. In these houses, solid wastes are either recycled, or processed into compost; rain water is harvested, drinking water is treated with sunrays and waste water is managed and reused. Another remarkable apparatus in the house is a commode with separate holes for urine and faeces. Both the wastes are collected and used as fertilizers.

Environment Friendly Transport

Buses Gear up for Green-Fuel Sprint: The Bangalore Metropolitan Transport Corporation and the Karnataka State Road Transport Corporation will run a bus from each depot on a mixture of diesel and Honge (Pongenmia) oil by May 2005, making these vehicles the most fuel efficient, environment friendly and economical in their class.

(TNIE, 26.05.04)

Green Profits for Northern Railways: Keeping up with its environment friendly image, Northern Railways (NR) has been planting “special” trees on both sides of railway tracks under its jurisdiction since last year. The aim of planting these trees is not only to provide green cover on hundreds of acres of vacant railway land on both sides of the tracks but also to extract “added” benefits. The trees being planted will help compensate for the shortfall of diesel that the Railways procure from the Indian Oil Corporation (IOC).

Northern Railways has already sent in a missive to the IOC to extract oil from the seeds of jatropha trees and mix it with diesel.

(TP, 25.05.04)

TN Village a Hit for Cheap Bio-diesel: Biodiesel from ‘pungan’ seeds! The pioneer of this cheap and ecofriendly fuel is a self help group in Srirangasamallur village in Thoothukudi district in Tamil Nadu. It is sold at Rs. 20 for a litre and can make an autorickshaw run for 72 km on just three litres.

(IE, 06.06.04)

Americans Going for Hybrid Vehicles: Americans are opting for vehicles with environmentally friendly gasoline-electric hybrid engines. US registrations for hybrid vehicles rose to 43435 last year, a 25.8 percent increase from 2002. The trend is expected to continue because of high gasoline prices and the growing number of hybrid models.

(IHT, 23.04.04)

Trains to Run on Vegetable and Used Frying Oils: It will be a turning point in the use of non-conventional fuels when such a big diesel guzzler as Indian Railways runs its first train entirely on a blend of vegetable oil and ‘used frying oil’, something that Railway officials say is only a year or so away. Southern Railway is readying to run a locomotive on a 20 percent blend of ‘bio-diesel’ on August 10, International Bio-diesel Day.

(Bl, 27.05.04)

Veggie Car: As car owners across the country grapple with pumped-up gas prices, some are turning to their favourite restaurants for a solution: recycled vegetable oil. People are going to restaurants to fuel their car. Restaurants that would have to pay to get rid of their old vegetable oil are happy to give it away for free. Vegetable oil is becoming so popular that a Massachusetts company called Greasecar is buying it in bulk from a distributor and selling it to local customers at 90 cents a gallon. Since 2001, Greasecar is also selling conversion kits priced at $800 that allow diesel cars to run on the recycled oil.

(AP, 04.06.04)

‘Clever’ Car that Runs on Natural Gas: Engineers at Bath University has unveiled a project to build a three-wheeled, tilting micro-vehicle which is only a metre wide, has a top speed of 50 mph, and runs on compressed natural gas. The Clever (Compact Low Emission Vehicle for Urban Transport) car is planning to outwit the Smart car, overtaking it as a fashionable and environmentally less damaging way of getting about town. The design, still at a research stage, is being funded chiefly by the EU, which has committed £1.5m to the project. Work is also being carried out by German, French and Austrian scientists.

(BL, 09.04.04)
Walk a Step, Feed a Mouth

2

4,000 people die from hunger or hunger-related causes every day. It kills more people than HIV/AIDS, tuberculosis and malaria combined. But still, sadly, hunger only captures the headlines at the height of a crisis, during an epidemic or war. For a million starving, June 20, 2004 was a memorable day. It was a day dedicated to them when thousands of people all over the world made an effort to bring a change in their lives. On this day, employees of TNT, one of the largest distribution companies and the World Food Programme (WFP) around the world together with their families and friends took part in sponsored walks to raise funds to help thousands of children out of hunger and into schools.

(AA, 20.06.04 & TS, 24.06.04)

Fake Formula Kills Infants in China

Dozens of infants in eastern China have died from malnutrition after being fed fake milk formula with virtually no food value, state media reported. The deaths prompted demands from Prime Minister Wen Jiabao for a thorough investigation and severe punishment of the formula’s manufacturers. The state Food and Drug Administration sent an investigative team to the impoverished inland province of Anhui to trace the origin of the formula.

(IHT, 21.04.04)

Burundi Threatened by Food Shortage

Burundi may have to endure five months of food shortages starting in August because of the early arrival of the dry season, a United Nations spokesman reported. The dry season will bring a sharp drop in bean production. In addition, a virus has devastated cassava plants in the northern and eastern provinces. Recent nutritional surveys by the UN Children’s Fund show that in the north-eastern provinces of Ngozi, Kayanza and Bubanza, 10 percent of children aged between six months and five years are suffering from acute malnutrition. Chronic malnutrition in the same age group is now 61 percent.

(UNNS, 23.06.04)

Delhi to Set up ‘Model’ Villages

The Delhi government has decided to develop “model” villages in Delhi with every infrastructural and civic facility possible. 29 villages have been identified by the government with the aid of various agencies for developing them as “model” villages in the coming financial year. The remaining 177 villages in Delhi will get covered later, said official sources.

(AA, 01.06.04)

International Year of Rice

The United Nations has declared 2004 as International Year of Rice. A number of programmes are planned by inter-governmental and national research institutes across the globe. The UN Food and Agriculture Organisation (FAO) inaugurated the event in February in Rome. The Philippines-based International Rice Research Institute has planned a series of events in collaboration with national governments like International Rice Science Conference in Seoul on September 13-15 and World Rice Research Conference in Tokyo and Tsukuba on November 4-7.

(FE, 12.04.04)

ADB Meet to Focus on Poverty Reduction

Challenges in alleviating poverty in the Asia-Pacific region, which is home to two-thirds of the world’s poor, will be the focus of the annual meeting of Asian Development Bank (ADB) scheduled to be held in May. Over 3,200 delegates will attend the three-day 37th annual meeting of the Board of Governors in Jeju Island, South Korea, to fine-tune ADB’s efforts to reduce poverty and assist its developing member countries reach the Millennium Development Goal of reducing by half poverty and hunger by 2015.

(ST, 22.05.04)

Poverty in India on the Decline

Poverty is falling in India. The World Development Indicators 2004 offer rich details on declining poverty in India as in the rest of the world. The number of Indians earning less than a dollar stood at 34.7 percent in 1999-2000, according to the recently released World Bank (WB) report. The Indian government’s estimates are more complimentary, though. The population living below poverty line dropped to 28.6 percent in 1999-2000 from 36 percent in 1993-1994. The poverty level is determined on the basis of consumption-expenditure survey, which is conducted by the National Sample Survey Organisation.

(FE, 13.05.04)

Agri Sector Promotion must for Poverty Alleviation

Pakistan Finance Minister has opined that focus on the agriculture sector is a must for poverty alleviation, and the government is allocating more resources in the forthcoming budget for the promotion of this sector. He said this while addressing the pre-budget seminar on the topic of ‘Has the time come for redistribution of gains in economy’. The Minister said that the country, at present, is facing some challenges due to high growth rate, and in order to maintain this pace of growth, it is necessary to improve infrastructure facilities in the country.

(BR, 27.05.04)

Call for Urgent Action on Poverty Reduction

Most developing countries are struggling to meet Millennium Development Goals by 2015. A new report from the World Bank and the International Monetary Fund offers agenda for policies and actions by all partners in global campaign to reduce poverty. Poor people in a large number of countries face little hope of emerging from lives of poverty and deprivation unless all actors in the development field - including governments in poor and rich countries alike - take urgent action now to address the root causes of poverty, according to the report.

(TI, 28.04.04)
WHO Warns on Unsafe Use of Alternative Medicines

The World Health Organisation (WHO) has recently sounded the alarm about the unregulated and often unsafe use of alternative medicines ranging from acupuncture to herbal medicines and food supplements. To minimise risks, the United Nations agency issued new guidelines aimed at helping national health authorities develop reliable information for consumers - who often purchase such treatments over-the-counter and fail to inform their physicians. There are increasing reports of adverse and even fatal reactions to so-called traditional or alternative medicines as their use spreads in industrialised and developing countries, according to the WHO. (TP, 24.06.04)

A Silent Emergency

On March 22, the Geneva-based Water Supply and Sanitation Collaborative Council (WSSCC) released a pioneering global report simultaneously in London, Johannesburg, New Delhi and New York on World Water Day. This hard-hitting report, is the voice of about 40 people - engineers, sociologists, doctors, community and non-governmental organisation (NGO) leaders, local government officials, academics and private sector executives - who recount their experiences working with communities in the poor neighbourhoods of Bangladesh, Bolivia, Colombia, India, Kenya, Madagascar, Nepal, South Africa and Uganda. It brings out vividly the 'voices' of those with long experience of, and commitment to, the cause of water, sanitation and hygiene for all'. (TP, 24.06.04)

Ghana's Water Champion Wins Award

A Ghanaian lawyer and human rights campaigner has won recognition for his work to stop water being privatised. Rudolf Amenga-Etego, who is campaigning against a privatisation scheme being backed by the World Bank, has won a 2004 Goldman environmental prize, worth $125,000.

Rudolf founded Ghana's National Coalition Against the Privatisation of Water, an attempt to halt a $400m project, which would have meant water being sold at full market rates. In a country where about 70 percent of the people have no access to clean water, he says, it would be disastrous for the poor. Some Ghanaians already spend up to 20 percent of their income on drinking water, and poor urban families sometimes have to choose between water and education. The prize has been described as "the Nobel prize for the environment." (Frontline, 07.05.04)

School Attendance and Access to Clean Water

As an estimated three-quarters of diseases are linked to unsafe water and poor sanitation, the Bangladesh National Water Policy has placed great emphasis on drinking water issues. This is comforting as obviously health is wealth, but what is not generally known is that according to a new report by WaterAid, school attendance increases when water-hauling time is reduced. Children will not receive education they need if they are too ill to attend school, or too busy fetching water, or if teachers refuse to work because sanitation facilities are poor. (BO, 14.04.04)

Countries Face Food Emergencies

Thirty-five countries now face serious food shortages, including two dozen in Africa, according to a report released today by the United Nations Food and Agricultural Organisation (FAO). The May issue of "Foodcrops and Shortages," a publication of the Global Information and Early Warning System, blames the situation largely on civil conflict and adverse weather, particularly drought. It also notes that in many of these countries, the HIV/AIDS pandemic is a major contributing factor. (UNNS, 01.06.04)

UNICEF Lauds Progress in Health and Education

As Timor-Leste, the world's newest nation and youngest democracy, marks its second anniversary, the United Nations Children's Fund (UNICEF) praised the dramatic improvements in health and education services for children in the southeast Asian country but warned that considerable challenges still remain.

"In Timor-Leste, children make up 60 percent of the population. Only by meeting their basic needs can the country hope to sustain a broader process of development," UNICEF Regional Director for East Asia and the Pacific said in a statement.

Immunisation coverage has increased by more than half to 60 percent and Vitamin A supplements are now provided to 99 percent of children under five. Mobile registration teams, which have already registered more than 17,000 children, are expanding across the country. Nearly 4,000 women and children have been empowered through literacy classes. (UNNS, 21.05.04)
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