



### Focus of the month

#### Ecofarming – a winning complement to ecological sanitation



Jeevan (in check shirt) shows his work to visitors

The use of urine diversion toilets in Nepal began about ten years ago with the first WHO efforts in Siddipur village to promote ecological sanitation. Slabs for ten toilets were provided. Today, the number of such toilets has expanded to more than a hundred in this village, and to over a thousand toilets in Nepal as a whole.

In the global effort for green action, ecological sanitation is gaining increasing currency as a serious alternative for safe sanitation. But this Nepal initiative goes beyond just saving precious water; recycling leads to greater productivity. The urine collected from these villages toilets is used for fertilizing household vegetable patches. Some households are able to fully use the urine they generate, while others do not and the excess is used by others. These extra volumes are collected by enterprising farmers, who put it to good use. One such energetic farmer is Jeevan arguably the most enthusiastic and motivated farmer in the village.

Jeevan took to this practice after witnessing an eco-sanitation demonstration about five years ago. He learned urine separation and the bio-gas process from an NGO demonstration in his village. He quickly gave up the chicken farming he had done until then — which anyway ran at a loss and switched to vegetable production

with eco-farming with uses urine and cow dung as his choice of crop fertilizer. Since his change to this eco-friendly method of farming, he has completely given up the use of chemical fertilizers to boost his crops.

Jeevan's produce has expanded and now gives him much better quality and volume. Previously, his farming produced just enough for his household consumption. Now he has surplus to sell. He has long been able to cover his losses from poultry-rearing and now gets a respectable profit of about 10-15 000 rupees per month. His produce is sought after in the village market, customers wait especially for him because of his product's quality and taste. He now saves the 1 000 rupees or so he used to spend on firewood, and at least 7 000 he spent each year on chemical fertilizers before he began eco-farming.

When asked how he became interested, he said that it was his inner keenness to try this out. He had nothing to lose. Jeevan saves on firewood through his household-level biogas plant, fueled by the dung from two cows he keeps in the stable under his house. He uses urine drip irrigation to fertilize an acre of vegetable plots around his house. He collects excess urine from neighboring homes, whose owners are only too happy to give him their surplus. He experiments by himself on more effective ways to use urine for greater productivity.



Urine separator toilet

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In Jeevan's kitchen, bio gas fuelling the flame

His biogas plant provides lighting and fuel for cooking twice a day. Others see him as a good example and have begun to learn from him. Jeevan is ready to share his experience with anyone who wants it, he says.

Jeevan's example depicts the value of self-motivated people in our communities when they are given the opportunity to discover their inborn passions and ingenuity development moves forward as a sustainable process.

Those in critical policy-making positions in government owe it to the communities they govern to encourage these innovations. For more information, please contact Dr Abdul Sattar Yoosuf, Director, Sustainable Development and Healthy Environments, email: [yoosufa@searo.who.int](mailto:yoosufa@searo.who.int)

## SDE News

### WHO urges reducing demand for Lindane and other POPs.

WHO, in collaboration with the Participatory Rural Development Initiative Society (PRDIS) and the Agriculture University in Hyderabad, aims to develop a curriculum for a season-long Training of Trainers and Farmer Field Schools programme on Integrated Pest Management (IPM) in sugarcane. WHO, together with Food and Agriculture Organization (FAO), participated in the Curriculum Development Workshop for organizing training of facilitators and farmer field schools for sustainable sugarcane production, held in Hyderabad on 26-28 November, 2008. Promoting integrated approaches to manage crop pests is a follow-up to implementing World Health Assembly Resolution 50.13 which calls for "promotion of chemical safety, with special attention to persistent organic pollutants". It specifically calls for reducing the need for pesticide use in controlling crop pests and disease vectors. This training, which will include environmental and bio-control measures to grow healthy crops, will reduce the demand for Lindane and other persistent chemical pesticides. The training has been underway since February 2009 and will continue to 2011 to ultimately empower about 4500 farmers to implement IPM. United States Environmental Protection Agency (USEPA) provided initial funding for the first two phases of this initiative till 2009 under its programme on risk reduction from Lindane emissions. WHO will be seeking further funds for the project phases 3 and 4.

Mr Alexander von Hildebrand and Mr AK Sengupta, technical staff from SEARO and WHO country office in India, are working with PRDIS to specifically ensure that health aspects are taken into account during the development of the curriculum. This initiative is also to be highlighted as a community-based adaptation measure to address the effects of climate change, such as the possible increase of pest pressure on food production. For more information, please contact Alexander von Hildebrand, Regional Adviser – Environmental Health and Climate Change (RA-EHC), email: [hildebranda@searo.who.int](mailto:hildebranda@searo.who.int).

### Bhutan initiates fog harvesting in water-scarce mountain village

With SEARO support, the first pilot project on fog harvesting was initiated in March this year in Borangchilo, a remote village in Samdrupjonkha district of Eastern Bhutan, and was implemented jointly with the beneficiaries. It was completed within ten days and was handed over to the beneficiary household after proper instructions on maintenance. During the next one year, the beneficiary will record the water



Fog harvesting net setup



Collecting the water in jerry can

collection data on a regular basis in a simple data collection sheet provided by the Public Health Engineering Department (PHED). Compared to other countries, Bhutan is known for its pristine and abundant water resources. However, there are a few communities settled on mountain ridges that experience water access problems as it takes several hours to fetch drinking

water from lower elevations. The usual pumping technology is neither appropriate nor cost effective in such settlements, most of which use rainwater harvesting as a viable alternative. But meteorological and geographical conditions and the unavailability of corrugated galvanized iron roofs limit the use of this option. The Public Health Engineering Division of the Ministry of Health, after considering alternatives, sees fog harvesting as a feasible option.

## WHO supports “Bijli” alert in Bangladesh

On 18 April 2009, cyclone Bijli swept across the Chittagong-Cox’s Bazar coast. There were only a few deaths but all administrative machinery was put under full alert. The Emergency and Humanitarian Action (EHA) programme of WHO, Bangladesh worked closely with Director General of Health Services (DGHS), Ministry of Health & Family Welfare (MOH&FW), providing technical support and monitoring the situation. The Department of Relief and Rehabilitation allocated food grains and cash to residents. A number of medical teams were also activated and reportedly adequate emergency drugs available for treating the injured. The Immunization and Vaccine Development (IVD) programme of WHO, Bangladesh had also been alerted to provide support.



Cyclone Warning Dissemination [Courtesy Muslim Aid]

## EH News

### SEARO Interdepartmental workplan mainstreams climate change and health action

In response to requests from the SEA Regional Committee and other policy forums in the Region, the Regional Director has established a SEARO Working Group on Protecting Health from Climate Change. It has crafted a plan of action that involves several technical departments of SEARO in assisting regional countries with the implementation of the relevant World Health Assembly and Regional Committee resolutions on climate change and health. The Working Group’s members comprise focal points of all six SEARO departments, and will concentrate on preparing and implementing its 2008-2009 plan of action – now enriched by this slate of activities. (Weblink: <http://www.searo.who.int/en/Section260/Section2468.htm>) Besides soliciting partnership action

within WHO and outside it, this plan of action aims to enhance reporting to this year’s Regional Committee on progress made on implementing World Health Assembly resolution WHA 61.19, the regional framework for action plan to protect human health, and the WHO Global Plan of Action.

The plan of action attempts to strengthen the capacity of health



systems to address the challenges posed by climate change, increase awareness of its health consequences, promote research and pilot actions to assess local vulnerabilities to climate change, empower communities to be more climate change resilient, and generate intersectoral collaboration for assessing health impacts from adaptation and mitigation measures.

Implementing this plan entails the orchestration of a host of actions that will require dedicated attention from several technical staff in the country offices and the Regional Office in cooperative team spirit—both in work process and the sharing of funds. SEARO has allocated US\$ 800,000 to implement these activities within the year.

### World Health Assembly 2009 to table WHO Global Plan of Action to combat climate change

The Sixty-Second World Health Assembly will table a Global Plan of Action to combat Climate Change. Prepared in close collaboration with Member states and regional offices, the plan includes various the regional frameworks for action to protect human health which were developed during the past two years. (Please see SEARO and WPRO websites for the detailed frameworks).

The WHO Global Plan of Action will attempt to strengthen the response of health systems to climate change, increase awareness of issues related to climate change, promote applied research and pilot projects to assess health effects stemming from to climate changes, and



empower communities. (For more information, please contact Alexander von Hildebrand, Regional Adviser – Environmental Health and Climate Change (RA-EHC), email: [hildebranda@searo.who.int](mailto:hildebranda@searo.who.int).)

### Bhutan gets ready to roll out climate change and health GEF project

On request from the government, Alex Hildebrand, SEARO Environment Health Advisor, visited Bhutan to facilitate a reformulation of their Global Environment Facility (GEF) funded climate change and health Global Project. In addition to enhancing the subject awareness, programme managers received orientation on how to mainstream climate change and health dimensions in their current and future work agendas. The visit also made possible meetings with key figures in the agriculture, energy and transport sectors as well as with NGOs, which has a good opportunity to identify concrete joint actions that will help accelerate the implementation of the GEF project.

Among the agreed actions to be undertaken immediately and sponsored by SEARO is a two-week training course for new occupational health programme managers on worker's safety and climate change to be conducted by a WHO Regional Collaborating Center. A team of health and agriculture staff from Bhutan will also visit the WHO-sponsored integrated pest and vector management project in Sri Lanka, to assess how this approach can be used to reduce the burden of climate change effects at the community level. The NGO Royal Society for the Protection of Nature will prepare school-based education materials on climate and health, to be disseminated through the Ministry of Education. (For more information, please contact Alexander von Hildebrand, Regional Adviser–Environmental Health and Climate Change (RA-EHC), email: [hildebranda@searo.who.int](mailto:hildebranda@searo.who.int).)

## Visits and missions

### JMP workshop

#### JMP workshop encourages data harmonization

SEARO organized an intercountry workshop on the Joint Monitoring Programme for Water Supply and Sanitation in Jakarta, Indonesia from 27-29 April 2009. A total of 40 participants attended, consisting of senior and mid-level officials from the water and sanitation sector, health information, environmental health and national statistical offices from Indonesia, India, Maldives, Myanmar, Sri Lanka, Thailand and Timor-Leste. Jointly facilitated by WHO and UNICEF, professionals from the World Bank, UNICEF India, UNESCAP and local NGOs also attended this workshop to assist countries to develop appropriate data reconciliation processes and to ensure that national monitoring initiatives effectively contribute to

international monitoring needs. The workshop recommended better coordination between JMP and countries, and cited the need to hold national-level stakeholder meetings between the national statistical offices, line Ministries, international agencies and other stakeholders on harmonizing definitions, consolidating data collection mechanisms, and strengthening monitoring systems. For clarifications contact Payden at [payden@searo.who.int](mailto:payden@searo.who.int).



## Publications and learning materials

### Healthy settings in the WHO South-East Asia Region



#### Healthy Settings

Short Training Course  
in  
Managing Healthy Settings



Starting with the Bangkok Initiative in 1993, the programme on “healthy settings” has been introduced in all but two countries of the Region. It addresses health issues covering a wide gamut of concerns including water and sanitation, food safety, community empowerment actions for women and income generation. However, inconsistencies in programme execution call for a better understanding of the principles that govern the settings process.

A brochure has been prepared giving brief descriptions of course content, learning objectives, and a set of modules for a **Short Training Course in Managing Healthy Settings**. This set of modules will help generate a core group of healthy settings practitioners in this Region to execute effective action with the participation and leadership of the communities themselves, which is the essence of sustainable community action. For more information, please contact Dr Abdul Sattar Yoosuf, Director, Sustainable Development and Healthy Environments (email: [yoosufa@searo.who.int](mailto:yoosufa@searo.who.int)).

## TIPS for Green Behaviour

### Daily Green Tips for Every Family

These easy eco-friendly tips are things you can do every day.

- Use the same cups over and over.
- Don't run the dishwasher unless it's absolutely full.
- Don't throw clothing or shoes away, especially leather shoes.
- Buy clothes at second-hand, consignment, or resale shops.
- Put power strips on your TV to turn everything off when you go to bed or leave for the day. "Vampire" or standby power drains energy.

### Significant events of the Quarter

- Sixty-second World Health Assembly, Geneva, 18-22 May 2009
- 125<sup>th</sup> Executive Board Meeting, Geneva, 23 May 2009
- Regional High-level Meeting on Rainwater Harvesting, Kathmandu, June 27-29, 2009

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Previous issues of Environmental Health Update are available at  
[http://www.searo.who.int/en/Section23\\_12688.htm](http://www.searo.who.int/en/Section23_12688.htm)