

## Press Review 02/2012 - Vietnam, Water and Environmental Technology,

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No	Title	Date	Source	Region	Catalogue	Description
1	Hanoi's lakes getting narrowed, environmentalists raise alarm	2/2/2012	VN Net Bridge	Hanoi	Environment	Some lakes and ponds in Hanoi have disappeared during the urbanization, while many others are getting narrowed, and many of them are getting seriously polluted.
2	World Bank to offer \$70 million credit for climate change response	3/2/2012	VN News	Vietnam	Climate Change	The WB has approved the Viet Nam Climate Change Development Policy Operation, the first of three operations scheduled to promote the development and adoption of priority actions to enhance strategies, policies, and institutions needed to respond to climate change.
3	Clean-up improves 'dirtiest canal'	4/2/2012	VN News	HCM	Environment	The 10-year-long Nhieu Loc-Thi Nghe Environmental Sanitation Project in HCM City is expected to be completed by National Day on September 2.
4	VN in top 10 for worst air pollution	7/2/2012	VN News	Vietnam	Pollution	Viet Nam is listed amongst the top ten countries with the worst air pollution in the world.
5	Water supply to return to 40,000 homes today	7/2/2012	VN News	Hanoi	Water	About 40,000 households in the southwestern area of Ha Noi are expected to regain their water supply again today after a water pipe from the Da River in northern Hoa Binh Province broke.
6	VN to dump 44 million tonnes of waste by 2015	10/2/2012	VN Plus	Vietnam	Waste	By 2015, Vietnam will produce 44 million tonnes of solid waste per year, which causes water, air and land pollution and threatens community health.



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**Vietnamese – German Office for Water and Environmental Technology**

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7	Water quality monitoring systems outdated	13/2/2012	VN News	HCM	Water	The water environment's observation system is too outdated to manage the large river systems and the rapid pace of development in the country.
8	New approach needed to address flooding: WB	14/2/2012	VN News	Vietnam	Environment	Urban flooding has become an increasingly serious development challenge for fast growing low-and-middle-income countries in East Asia, including Viet Nam.
9	Da Nang: wastewater treatment system that causes pollution	14/2/2012	MVWSS	Danang	Wastewater	Although the wastewater treatment system of Tho Quang Industrial Zone has just been operated for more than 1 year, it has been always encountering problems and causing environmental pollution.
10	Water pollution in VN the real situation & solution	14/2/2012	MVWSS	Vietnam	Water pollution	Although there have been many efforts from agencies, government in implementing policies and law on environmental protection, environmental pollution is still a concerning problem, esp. water resource pollution.
11	Is protecting the environment incompatible with social justice?	14/2/2012	Guardian	World	Environment	It is the stick with which the greens are beaten daily: if we spend money on protecting the environment, the poor will starve, or freeze to death, or will go without shoes and education.
12	Polluting company vows to clean up, apologises	16/2/2012	VNNews	Quang Ngai	Wastewater	After being found to discharge untreated waste water, Dung Quat bio-ethanol plant in central Quang Ngai Province's Binh Son District has committed to treat pollution in the surrounding environment within the week.



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13	Land-slide projects take time to enact	16/2/2012	VN News	HCM	Environment	Complaints from residents about compensation rates have stalled a project approved five years ago to strengthen and build embankments in landslide-prone areas along Thanh Da Canal in HCM City.
14	WB helps Vietnam tackle urban flooding	16/2/2012	VN plus	Vietnam	Environment	The World Bank (WB) affirmed it will continue assisting Vietnam in coping with risks of urban flooding through loans, technology support and analysis.
15	Mekong tributary becomes sewer	20/2/2012	VN News	Mekong	Pollution	The section of Tien River, which is one of two main branches of the Cuu Long (Mekong) River running through Viet Nam, is heavily polluted by daily and industrial waste.
16	GMS policy-makers discuss growth amid water, energy and food challenges	20/2/2012	VN News	Mekong	Environment	Policy-makers from the Greater Mekong Subregion (GMS) began discussions today on the challenges and opportunities for balancing economic growth with environmental sustainability in Bangkok.
17	Portugal, Greece pose risk of contagion	22/2/2012	VN News	World	Other	Harsh austerity programmes dictated by the IMF, EU & European Central Bank will lead to Greece & Portugal's financial collapse, economists argue
18	Viet Nam faces rising temperature risk	24/2/2012	VN News	Vietnam	Climate Change	The Meteorology Office/Hadley Centre, the UK's foremost climate change research facility, yesterday warned Viet Nam of a four degrees Celsius temperature rise at a climate change conference held by British Council in the capital.



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19	Farmers await pollution compensation	24/2/2012	VN News	Dong Nai	Environment	Nearly 200 households in southern Dong Nai are still waiting to receive compensation from Sonadezi for the impact its substandard waste water discharges had on their aquaculture farming and fruit growing areas.
20	Untreated wastewater muddies Trai River	24/2/2012	DT News	Nghe An	Wastewater	Trai River, in Nghe An Province, has become seriously polluted by the discharge of untreated wastewater from a nearby mining and metallurgy company.
21	Mining industry wastes resources	25/2/2012	VN News	Vietnam	Waste	As a country rich in mineral resources, which serves the building material industry, Viet Nam is in need of comprehensive changes to develop the industry sustainably.
22	Report underlines City water pollution problem	27/2/2012	VN News	HCM	Water Pollution	All canals in HCM City are heavily polluted by domestic and industrial waste water.
23	Thanh Hoa communities struggle with stagnant environmental project	28/2/2012	DT News	Thanh Hoa	Environment	Over 800 households in Thanh Hoa Province are struggling to maintain decent living conditions after the relocation of a water drainage project.
24	Changing rural people's behaviour on safe water	29/2/2012	Vfej	Vietnam	Water	A communication campaign to promote the use of safe water and environmental sanitation was reviewed at a seminar in Hanoi
25	Coastal land uses to be inspected	29/2/2012	VN News	Vietnam	Other	MONRE will inspect land use allocation and leasing in coastal and alluvial areas in the nation's central region beginning next month.



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## **Hanoi's lakes getting narrowed, environmentalists raise alarm**

Some lakes and ponds in Hanoi have disappeared during the urbanization, while many others are getting narrowed, and many of them are getting seriously polluted.

According to the Hanoi Construction Department, there are 111 ponds and lakes in Hanoi which cover a total area of 1165 hectares. The total area of lakes has decreased sharply during the urbanization, while a lot of them have disappeared. It is estimated that 80 percent of the lakesides have got polluted, 71 percent of lakes have suffered from pollution, 26 percent of the lakes still do not have embankments, while 8 percent of lakes have partial embankments.

Environmentalists have called on to take urgent actions to protect the remaining lakes, or they would also disappear one day.

Showing the electricity pole, which was 100 meters far from the Quang Trung lakeside, Phuong, the owner of a tea shop said that in the past, the lakeside reached to the electricity pole. "The houses on the other side of the lake are located on the place which used to be the lake. However, local residents have encroached on the lakes to get land for building houses. As a result, the lake has got narrowed," Phuong said. "The place where I am sitting was also the surface of the lake. When I was small, I did not dare to go there because of the deep water," she added. The Quang Trung Lake in front of the Tuoi Tre Park is one of the seven lakes which still can exist in Hai Ba Trung district.

Local residents said that the lake once covered an area of 10,000 square meters, but it has got smaller. People try to encroach on the lake, then build houses and restaurants on the lakeside. As the local authorities built embankment, the lake encroachment has been stopped. A lot of other lakes in Hanoi are suffering the same situation. A lot of ponds and lakes have disappeared. On the places, which were once the lakes, a lot of urban areas or apartment blocs have arisen.

The noteworthy thing is that the area of lakes has been decreasing rapidly. In 1986-1994, the area of lakes decreased by 16 hectares. One year later, in 1995, 23 more hectares of lake area disappeared.

The West Lake, which once covered an area of 500 hectares, equal to 50 percent of the total area of lakes and ponds in Hanoi, has also been narrowed to 446 hectares.

The Linh Quang Lake's area has reduced from six hectares to 5.2 hectares. The lakes and ponds have been replaced with houses and other civil construction works.

Hanoi is the city with the highest number of lakes and ponds in Vietnam. This is considered a unique beauty of the land with thousands of years of culture. This has a high historical and cultural value. Besides, the lakes and ponds in Hanoi play a very important role in regulating the water level and prevent flooding for the capital city.

According to Truong Quang Hoc from the Vietnam Association for Conservation of Nature and environment in early twentieth century, Hanoi had 600 -750 ponds and lakes. However, the number has dropped to 100.

Meanwhile, the lake encroachment by local residents continues. They throw construction waste, earth and rubbish on the lakeside areas. Meanwhile, waste water discharges to the lakes, causing thicker layers of mud at the lake bottom, thus reducing the area and the capacity of the lakes. In an effort to protect the lakes, the Hanoi's authorities have kicked off the project on upgrading the lakes in the inner city.

## **World Bank to offer \$70 million credit for climate change response**

The World Bank has approved the Viet Nam Climate Change Development Policy Operation, the first of three operations scheduled to promote the development and adoption of priority actions to enhance strategies, policies, and institutions needed to respond to climate change.

Under the deal agreed to yesterday, the International Development Association under the World Bank will offer a US\$70 million credit with a 25-year maturity and 5-year grace period.

The operation aims to support Viet Nam in its efforts to deal with climate change by adopting policies and bolstering institutional capacity to promote climate resilient and lower carbon intensity development.

It will focus on four policy objectives: improving the resilience of water resources, taking full advantage of energy efficiency potential, strengthening the capacity to formulate, prioritise and implement climate change policies, and the financing framework to support climate change action.

## **Clean-up improves 'dirtiest canal'**

The 10-year-long Nhieu Loc-Thi Nghe Environmental Sanitation Project in HCM City is expected to be completed by National Day on September 2, a city official has said.

Nguyen Huu Tin, deputy chairman of the city's People's Committee, ordered contractors to ensure the progress of the project's final components so that it would be put into operation by the September 2 deadline.

Speaking at a ceremony held in HCM City on Thursday, Tinh stressed that it was important to ensure that the project remained on schedule.

Under the project, Truong Sa and Hoang Sa streets bordering Nhieu Loc-Thi Nghe Canal from Le Van Sy Bridge in District 3 to Nguyen Huu Canh Street in Binh Thanh District will be expanded by six to nine metres in the second phase of the final project component, according to Le Quyet Thang, director of the Urban Traffic Management Unit No.1 under the city's Transport Department.

The 10-km section will have three lanes with lighting and trees along both sides of the canal.

The first phase of the project, a five-km section along the canal between Ut Tich Street in Tan Binh District and Le Van Sy Bridge in District 3, was completed last year.

With a total cost of more than VND407 billion (US\$19.3 million), the final component aims to facilitate the traffic network as well as improve the landscape along the canal, which is considered the dirtiest canal in the city.

The Nhieu Loc-Thi Nghe Environmental Sanitation Project received total capital of US\$316.8 million, most of which was from Official Development Assistance (ODA) loans from the World Bank.

## **VN in top 10 for worst air pollution**

Viet Nam is listed amongst the top ten countries with the worst air pollution in the world, according to the 2012 Environmental Performance Index (EPI) released during this year's World Economic Forum in Davos, Switzerland.

The annual study uses satellite data to measure air pollution concentrations and has been produced by researchers at Yale and Columbia universities.

Of 132 countries whose environments were surveyed in relation to effects on human health, Viet Nam places 123rd in the air category, 80th in the water category and 79th in addressing pollution control and natural resource management challenges.

Professor Pham Ngoc Dang, chairman of the Viet Nam Environment Construction Association said air in most urban areas was filled with dust, especially in traffic junctions, construction sites and industrial parks.

According to experts, air pollution will seriously affect people's health, causing diseases related to the respiratory system, eyes, ears and skin.

The United States places 49th in the 2012 EPI, significantly behind other industrialised nations, including France (6th), the United Kingdom (9th), Germany (11th), and Japan (23rd).

Switzerland leads the world in addressing pollution control.

## **Water supply to return to 40,000 homes today**

About 40,000 households in the southwestern area of Ha Noi are expected to regain their water supply again today after a water pipe from the Da River in northern Hoa Binh Province broke, according to the Fresh Water Business and Construction Investment Joint-Stock Company (Viwaco).

The broken section of the water pipe, with a diameter of 1.5m, was reported last Saturday at An Khanh Commune in Hoai Duc District. It caused a water shortage for over 40,000 households in Hoang Mai, Thanh Xuan, Cau Giay, Tu Liem and Thanh Tri districts over the past days.

A local resident in Thanh Xuan District's Nhan Chinh Ward described the situation: "Water supply stopped over the past four days and we had to find ways to save as much water as possible as we did not know when it would be restored. Many of my neighbours who do not have water tanks had to buy or ask for water from other areas for daily use."

Viwaco's director Nguyen Anh Viet said this was the worst breakdown so far since the pipe was installed five years ago. It forced the company to stop supplying water for the citizens in order to fix the problem.

"Workers are installing a new pipe about five metres underground to replace the broken one with an estimated cost of VND3 billion (US\$144,000). It is expected to be completed today and water supply should be resumed," he said.

"While the new pipe is being installed, the company has tried to supply water for people in some areas from standby water supply stations and use tank trucks to provide water to hospitals and schools in the areas."

Water erupted from the broken pipe and flooded two underpasses of the Thang Long boulevard section at Yen Lung Hamlet. The water was then drained off and traffic has since resumed.

The incident was believed to be the result of an unstable land structure in the section of Thang Long Boulevard which runs across Yen Lung Hamlet, Viet said.

However, the incident had no effect on the road surface, according to Deputy Director General of the Thang Long boulevard management board Ho Ngoc Loan.

## **VN to dump 44 million tonnes of waste by 2015**

By 2015, Vietnam will produce 44 million tonnes of solid waste per year, which causes water, air and land pollution and threatens community health.

The figure was released by the Ministry of Natural Resources and Environment in a report on preparations for a “National target programme to handle and improve environmental pollution during the 2011-2015 period”.

The ministry forecast that the figure will increase to 68 million tonnes in 2020 and 91 million tonnes in 2025, 2-3 times higher than current figures.

Only 70 percent of solid waste is collected in urban areas and the remaining waste is affecting urban landscapes, taking up large areas of land and cannot be recycled, the ministry said.

According to statistics collected in 2008 alone, the country produced a total of 28 million tonnes of solid waste, which was mainly buried at waste disposal sites. Meanwhile, each urban area in Vietnam has only one or two waste dumps and 85 percent of urban areas apply waste disposal measures that fail to meet hygienic standards.

Minister of Natural Resources and Environment Bui Cach Tuyen underlined the need to focus on financial sources for treating pollution and rehabilitating the environment in areas that are poisoned by unhygienic waste dumps.

Tuyen also proposed building a treatment centre for hazardous waste as a measure to improve the environment in seriously polluted areas as part of the national programme.

## **Water quality monitoring systems outdated**

The water environment's observation system is too outdated to manage the large river systems and the rapid pace of development in the country.

Viet Nam has a dense system of rivers and streams, which makes up 2 per cent of the total river flow in the world. The country's 13 biggest river systems have a total area of more than 10,000sq.km.

They are being threatened by pollution caused by industrialisation and urban and rural development.

The observation systems are so outdated and ineffective that sufficient collection of information for forecasting and management cannot be done.

Without proper data, it is difficult to stop the degradation of rivers and streams. In Viet Nam, there are only four centres that observe and analyse surface water on the mainland.

Three centres that observe radioactivity in 287 water monitor stations in 18 provinces and cities. They conduct observations four to six times a year.

In addition, five centres analyse 132 sea water monitor stations, which conduct observations four times a year. Given the large number of rivers that exist in the country, more centres as well as more frequent observations are needed, according to experts.

Most of the main rivers, including Hong (Red) in Ha Noi, Cam in northern Hai Phong, Lam in central Nghe An Province, Huong in central Hue City, Han in central Da Nang City, Sai Gon in HCM City, Tien and Hau in southern Tien Giang Province, and Hau in southern Can Tho Province have pollution concentration exceeding the permitted level by 1.5 to three times. The lower streams of Cau, Nhue, Day and Dong Nai rivers are the most polluted.

Most of the rivers, lakes and canals inside the cities and urban areas have serious levels of organic pollution concentration, exceeding the permitted level by two to six times.

The pollution in brackish water has also been increasing, with the content of oil in water in Bai Chay area in northern Quang Ninh Province and the central coastal area reaching an alarming level. Agricultural and industrial activities, occupational villages, aquaculture, seafood processing and waste water from daily activities have all been blamed for causing pollution in rivers nationwide.

The water environment's observation system is an important factor in controlling pollution and minimising pollutant sources, but the country's system lags far behind its function for the necessary tasks.

The Ministry of Natural Resources and Environment has drawn up national technical standards on managing surface water, underground water, coastal water, daily waste water and industrial water. However, the current observation system has a long way to go before it can meet the requirements of observing and analysing water quality nationwide.

It is far behind the national goals set by the government in 2007 to have 42 national semi-automatic environmental observation centres by 2020.

## **New approach needed to address flooding: WB**

Urban flooding has become an increasingly serious development challenge for fast growing low-and-middle-income countries in East Asia, including Viet Nam, according to a new World Bank guidebook released yesterday.

As developing countries transformed into largely urban societies, the concentration of people and assets has made urban flooding even more costly and difficult to manage, it said.

This is why there is an urgent need for integrated flood risk management related to urban planning and governance.

The guidebook, entitled "Cities and Flooding: A Guide to Integrated Urban Flood Risk Management for the 21st Century", provides forward-looking operational guidance on how to manage the risk of floods in a transforming urban environment and changeable climate.

"Urban expansion often creates poorer neighbourhoods which lack adequate infrastructure and services, making them more vulnerable to floods. The poor are hit hardest, especially women and children," said World Bank Vice President for East Asia and the Pacific Region Pamela Cox, who led the launch of the book via cross-country videoconference from Tokyo yesterday.

"But rapid urbanisation also means we have the opportunity to do things right the first time, so cities and towns can support sustainable development, saving lives and money," she said.

Abhas Jha, lead author of the guidebook and urban specialist for Disaster Risk Management, said that recent large-scale disasters such as the earthquake and tsunami in Japan and the floods in Thailand and Australia emphasised the need for a new approach to disaster risk management and resilience.

"We need to design systems that recognise the complex and uncertain nature of flood risk management and its impacts. Design should be comprehensive, flexible and iterative to avoid an over-reliance on any one given solution which may not be enough to counter the dynamic nature of risk," he said.

According to the guidebook, the most effective way to manage flood risk is to take an integrated approach that combines both structural and non-structural measures.

This includes building drainage channels and flood-ways, incorporating "urban greening" such as wetlands and environmental buffers, creating flood warning systems as well as land use planning for flood avoidance.

Speaking of mapping risk and vulnerability, the Washington-based lender has already worked with partners to support meteorological services in the Lower Mekong Basin. This will assist cities in Viet Nam and Indonesia to develop a medium term resilience plan that takes into account the uncertainties and risks from natural hazards.

While floods are the most frequent among all natural disasters, causing widespread devastation, economic damage and casualties, the East Asia and Pacific region is particularly vulnerable.

The number of floods in Asia amounted to around 40 per cent of the total worldwide over the past 30 years.

## **Da Nang: wastewater treatment system that causes pollution**

Although the wastewater treatment system of Tho Quang Industrial Zone (Son Tra, Da Nang) has just been operated for more than 1 year, it has been always encountering problems and causing environmental pollution.

At the discussion between people and members of the Congress on November 28th, Mr Nguyen Ba Thanh, Secretary of the Communist Party of Da Nang city, said: “Tho Quang wastewater treatment plant uses very out-of-date technology. I don’t know what you did to make people complain a lot. During the past time, people have continually called me not less than 200 phone calls to complain about the pollution. Hence, according to me, Da Nang People’s Committee should consider solution to construct a new wastewater treatment plant to replace this one”.

### **CONTINUALLY POLLUTING**

In 2009, to solve the serious pollution in Tho Quang Industrial Zone (Son Tra), Da Nang people’s committee allowed Quoc Viet environmental science and technology limited company, shortly called Quoc Viet Co to invest and construct the centralized wastewater treatment plant. The plant was designed with capacity 2,500m<sup>3</sup>/day that can collect and treat wastewater for 13 factories within the IZ with the total investment 12billion VND. However, when the plant was first in operation in July, the tank was broken. Since then, this plant has been discharging wastewater to the environment for many times.

Mr Pham Trung Tien, vice manager of the plant who is in charge of operation, admitted: the plant is overloaded every time there is rain. Capacity of the plant is 2,500m<sup>3</sup> with 4 submerged pumping machines (capacity = 60m<sup>3</sup>/hr) but at the period of 15:00-16:00 every day when 13 enterprises releases wastewater concurrently, the plant becomes overloaded. In the rainy days, about 4,700-5,800 m<sup>3</sup> wastewater comes to the plant which makes the fact that the plant is overload an obvious fact.

Mr Tien explained: “When we designed for the construction, we surveyed and noticed that 13 enterprises only discharge 2,300-2,400m<sup>3</sup>/day; therefore we built the plant with the capacity 2,500m<sup>3</sup>/day. But when the plant is officially in operation, the real amount of wastewater is so large”. Not only being overloaded, Mr Nguyen Dieu – Director of DONRE Da Nang, also added: The plant was built carelessly, the structure is not stable. I am really afraid for the tank to be broken every time I go for survey and asked Quoc Viet Company to quickly recover.”

### **MORE MONEY, MORE LAND, SAME POLLUTION**

Although the treatment plant was continually complained by people, Quoc Viet company still asked for more land from Da Nang People’s Committee to expand the site and upgrade the plant to the capacity 6,000m<sup>3</sup>/day. At the same time, they also asked for 5 billion loans to improve the treatment system and asked for permission to reconsider the wastewater tariff. Right after that, Quoc Viet was given 5,000m<sup>2</sup> more of land to construct some articles more for the treatment plant. In October, 2011, People’s Committee allowed the wastewater fee to be increased from 4,900 VND/m<sup>3</sup> to 6,000m<sup>3</sup>/day.

For the question about the poor capacity of the investor, Mr Nguyen Dieu shared that before issuing, the City set a delegation to Ho Chi Minh City for visiting, check and examine projects of this Company. However, many accidents kept on happening after Da Nang allowing Quoc Viet Company to build the wastewater treatment plant.

### **PEOPLE SURROUNDING THE PLANT**

Local citizens have tried to surround the plant for many times due to over pollution whose peak is on November 3rd, when hundreds of local people attacked to the plant area and asked for the plant to stop working.

Mr Vo Van Hung, Director of Quoc Viet Company, answered: Because of continuous heavy rain, wastewater comes to the tank with so large amount that microorganisms are not enough to degrade waste, resulting in bad smell. Before that, in July, 2011, Police office of environmental violation did charge this company a fine of 150million for discharging untreated wastewater to the environment.

## **Water pollution in Vietnam the real situation & solution**

Nowadays in Viet Nam, although there have been many efforts from agencies, government in implementing policies and law on environmental protection, environmental pollution is still a concerning problem, esp. water resource pollution.

Water pollution is the negative change of biological, chemical, physical characteristics, with liquid, solid and soluble strange substances which make water resources toxic to human and organisms and decrease the diversity of aquatic organisms. With regard to the spreading speed and the impact size, water pollution is more serious than soil pollution.

It can be concluded that water pollution is the visible issue around us and it is becoming more and more serious which seriously affect to daily life and production.

Water resources of many lakes, streams, rivers are apparently polluted. Hot spots on water pollution, water scarcity are increasing alarming. Industrialization and modernization along with population increase are causing stresses on water resources within the locality. In reality, most of the water released is untreated or improperly treated. Thousands of out-of-date establishments without wastewater treatment system have been put to the black lists by environmental agencies. However, they are still releasing wastewater without concerning about social responsibilities and legal responsibilities. Though there are some wastewater treatment plants from newly-founded industrial zones, they don't operate regularly and do not comply with national technical regulations which results in treated wastewater doesn't meet the standards.

Water pollution due to industrial production is really serious. Textile, pulp and paper industries often release wastewater with average pH from 9-11; BOD, COD can be up to 700mg/l, 2.500mg/l respectively; suspended solids is times higher than allowable range. Wastewater from these industries contain CN<sup>-</sup> (84 times higher); H<sub>2</sub>S (4.2 times higher); NH<sub>3</sub> (84 times higher). Therefore, it caused serious pollution within the nearby residential area. Level of water pollution in Industrial zones, export processing zones is very high.

Thousands of cubic meter of wastewater in areas of steel, textile production are released everyday.

Water pollution in urban area is most apparently in Ha Noi and Ho Chi Minh City. In these 2 cities, domestic wastewater is not discharged to the centralized wastewater treatment system but directly to the receiving bodies (river, lake, channel, dams). On the other hand, many other establishments do not treat wastewater; a large amount of solid waste can't be collected which are important sources causing pollution. Specifically, total wastewater in Ha Noi is 300,000-400,000m<sup>3</sup>/day; only 5/31 hospital with wastewater treatment system, accounts for 25% of hospital's wastewater; 36/400 establishments treat wastewater; uncollected domestic waste (1,200m<sup>3</sup>/day) is released every day to channels, dams inside the city; BOD, DO, NH<sub>4</sub>, NO<sub>2</sub><sup>-</sup>, NO<sub>3</sub><sup>-</sup> all exceed allowable regulation. Meanwhile, in Ho Chi Minh City, waste can be up to 4,000 tones/day; only 24/142 healthcare centers treat wastewater; 3,000 production establishments who pollute and have to move. In other cities as Hai Phong, Hue, Da Nang, Nam Dinh, Hai Duong, domestic wastewater is also not treated, level of pollution of receiving bodies exceeds allowable range, parameters such as SS, BOD, COD, DO all exceed 5-10 times or even 20 times of the allowable standards.

For water pollution in the countryside and agricultural production areas, 76% of the population lives in the countryside with poor infrastructure, most of the waste of human and animals are not treated, which makes water pollution in terms of organic substances and microorganisms more and more serious. From the report of Ministry of Agriculture and Rural development, average Coliform fluctuates from 1,500-3,500 MPN/100ml in areas along with Tien and Hau River,

3,800-12,500MPN/100ml at irrigation channels. In agricultural production, water resources such as lakes, rivers, dams are seriously polluted due to over use of pesticide, plant protection products.

Due to statistics of Ministry of Aquaculture, total water surface area used for aquaculture till 2001 is 751,999ha. Due to rapid, unplanned growing and do not comply with technical procedure, many negative impacts have affected to water environment. The fact that chemicals used a lot and not in a proper way along with food residues in the bottom of the pond, river bed pollutes the water environment with organic matters which causes pathogenic microorganisms and some toxic algae; there have even been signals of red tide in some coastal region of Viet Nam.

There are many reasons, both objective and subjective causing water pollution, such as over population, side effects of industrialization, modernization, low and out of date infrastructure, low awareness of people on environment... significantly is the problem in environmental management and protection. Awareness of governmental authorities, management agencies, responsible organizations and individuals is not deep and thorough enough. They have been awarded that water pollution is the one that cause direct danger, daily danger and difficult to be recovered for human life as well as the sustainable development of the country. There is a lack of regulations on environmental protection and environmental management (e.g. there has not been regulation and technical procedure on water resource protection yet). Assignments and coordination among agencies, professions and locality are not homogenous, they are still overlapped, and responsibilities have not been regulated clearly. There is no strategy, plan on exploiting, using and protecting water resources. There is no proper regulation in financial contribution to manage and protect water environment which causes financial depletion for water environment protection.

From reality: budget for water environment protection is still very low (Some ASEAN countries have allocated 1% of GDP for water environment protection where as this budget is 0.1% in Viet Nam). The number of educational programs on environment in general and on water environment in particular is very low. There is a lack of staff on water environment management both in terms of quantity and quality (currently there is about 3 staff of environmental management per million of people whereas this number is 70 staffs per million people in some ASEAN countries)...

For the recent years, the water resources management in general have been cared and focused in the levels of government, locality and have achieved many achievements. The investigation, judgment of polluted rivers, organizations, individuals who release polluted wastewater is the basic and important information that shows the emergent status on water pollution. Water resource pollution is the problem of the whole society. Hot spots, main rivers with serious pollution have been gradually solved by ministries, professions, agencies. Awareness on responsibilities of organizations, individuals has been increased.

The issuance of certificate to release wastewater to receiving bodies has been developed strongly. Many enterprises, Industrial zones have been issued the certificate for releasing wastewater with the commitment to treat their own wastewater to meet the standard before releasing to the water resources. Polluted wastewater is gradually controlled. Awareness of people has been increased in the recent years.

It is the monitoring, discovery and surveying of people when enterprises, establishments pollute the water resources; that plays an important role in controlling pollution, altogether with authorities. Water resources pollution will be controlled step by step as long as there is the coordination of the whole society.

## **Is protecting the environment incompatible with social justice?**

It is the stick with which the greens are beaten daily: if we spend money on protecting the environment, the poor will starve, or freeze to death, or will go without shoes and education.

Most of those making this argument do so disingenuously: they support the conservative or libertarian politics that keep the poor in their place and ensure that the 1% harvest the lion's share of the world's resources.

Journalists writing for the corporate press, with views somewhere to the right of Vlad the Impaler and no prior record of concern for the poor, suddenly become their doughty champions when the interests of the proprietorial class are threatened. If tar sands cannot be extracted in Canada, they maintain, subsistence farmers in Africa will starve. If Tesco's profits are threatened, children will die of malaria. When it is done cleverly, promoting the interests of corporations and the ultra-rich under the guise of concern for the poor is an effective public relations strategy.

Even so, it is true that there is sometimes a clash between environmental policies and social justice, especially when the policies have been poorly designed, as I argued on this blog last month.

But while individual policies can be bad for the poor, is the protection of the environment inherently incompatible with social justice? This is the question addressed in a discussion paper published by Oxfam on Monday.

Oxfam, remember, exists to defend the world's poorest people and help them to escape from poverty. Unlike the rightwing bloggers, it is motivated by genuine concern for social justice. So when it investigates the question of whether concern for the environment conflicts with development, we should take notice. Kate Raworth, who wrote the report, has created an essential template for deciding whether economic activity will help or harm humanity and the biosphere.

She points out that in rough terms we already know how to identify the social justice line below which no one should fall, and the destruction line above which human impacts should not rise.

The social justice line is set by the eleven priorities listed by the governments preparing for this year's Rio summit. These are:

- food security
- adequate income
- clean water and good sanitation
- effective healthcare
- access to education
- decent work
- modern energy services
- resilience to shocks
- gender equality
- social equity

- a voice in democratic politics.

The destruction line is set by the nine planetary boundaries identified in Stockholm in 2009 by a group of earth system scientists. They identified the levels beyond which we endanger the earth's living systems of:

- climate change
- biodiversity loss
- nitrogen and phosphate use
- ozone depletion
- ocean acidification
- freshwater use
- changes in land use
- particles in the atmosphere
- chemical pollution.

We are already living above the line on the first three indicators, and close to it on several others.

The space between these two lines is the "safe and just space for humanity to thrive in". So what happens if everyone below the social justice line rises above it? Does that push us irrevocably over the destruction line? The answer, she shows, is no.

For example, providing enough food for the 13% of the world's people who suffer from hunger means raising world supplies by just 1%.

Providing electricity to the 19% of people who currently have none would raise global carbon emissions by just 1%.

Bringing everyone above the global absolute poverty line (\$1.25 a day) would need just 0.2% of global income.

In other words, it is not the needs of the poor that threaten the biosphere, but the demands of the rich. Raworth points out that half the world's carbon emissions are produced by just 11% of its people, while, with grim symmetry, 50% of the world's people produce just 11% of its emissions. Animal feed used in the EU alone, which accounts for just 7% of the world's people, uses up 33% of the planet's sustainable nitrogen budget. "Excessive resource use by the world's richest 10% of consumers," she notes, "crowds out much-needed resource use by billions of other people."

The politically easy way to tackle poverty is to try to raise the living standards of the poor while doing nothing to curb the consumption of the rich. This is the strategy almost all governments follow. It is a formula for environmental disaster, which, in turn, spreads poverty and deprivation. As Oxfam's paper says, social justice is impossible without "far greater global equity in the use of natural resources, with the greatest reductions coming from the world's richest consumers".

This is not to suggest that all measures intended to protect the environment are socially just. Raworth identifies the evictions by biofuels companies and plantation firms harvesting carbon credits as examples of the pursuit of supposedly green policies which harm the poor. But before the sneering starts, remember that the fight against both these blights has been led by

environmentalists, who recognised their destructive potential long before the libertarians now using them as evidence of the perfidy of the green movement.

But there are far more cases in which poverty has been exacerbated by the lack of environmental policies. The Oxfam paper points out that crossing any of the nine planetary boundaries can "severely undermine human development, first and foremost for women and men living in poverty." Climate change, for example, is already hammering the lives of some of the world's poorest people. You can see the consequences of crossing another planetary boundary in the report just published by the New Economics Foundation, which shows that overfishing has destroyed around 100,000 jobs.

Just as mistaken green policies can damage the poor, mistaken poverty relief policies can damage the environment. For example, where fertiliser subsidies encourage farmers to use more than they need, as they do in China, money supposed to relieve poverty serves only to pollute the water supply. Development which has no regard for whom or what it harms is not development. It is the opposite of progress, damaging the Earth's capacity to support us and the rest of its living systems.

But extreme poverty, just like extreme wealth, can also damage the environment. People without access to clean energy sources, for example, are often forced to use wood for cooking. This shortens their lives as they inhale the smoke, destroys forests and exacerbates global warming by producing black carbon.

With a few exceptions, none of which should be hard to remedy, delivering social justice and protecting the environment are not only compatible: they are each indispensable to the other. Only through social justice, which must include the redistribution of the world's ridiculously concentrated wealth, can the environment and the lives of the world's poorest be defended.

Those who consume far more resources than they require destroy the life chances of those whose survival depends upon consuming more. As Gandhi said, the Earth provides enough to satisfy everyone's need but not everyone's greed.

## **Polluting company vows to clean up, apologises**

After being found to discharge untreated waste water, Dung Quat bio-ethanol plant in central Quang Ngai Province's Binh Son District has committed to treat pollution in the surrounding environment within the week.

Pollution caused by the factory of the PetroVietnam Central Biofuels Joint Stock Company (PCB) caused widespread fish and duck fatalities over the past week, said Chairman of Binh Thuan commune's People's Committee Nguyen Quang Huy.

"The waste water discharged by the factory seriously polluted the water sources, making nearly 100 nearby households lack safe water for their daily use," he said.

At a working session with the company on Tuesday to find solutions to settle the problem, Deputy Chairman of the Quang Ngai People's Committee Pham Nhu So urged the factory to promptly treat the pollution, compensate for local residents and install some public water supply stations for local households while waiting for the water sources to be treated.

The company has sent around 30 workers to the polluted area who have blocked all water drainage systems to prevent the further spread of pollution. They were using biological chemical products to treat the bad smell and clean the water, Huy said.

Dang Vinh Nghi, chairman of PCB, admitted that the factory's waste water caused the deaths of fish and ducks raised by local households nearby.

He said the company would work with the factory and local authorities to treat the pollution and assess losses for appropriate compensation.

Nghi apologised to the local residents for the pollution and committed to not let a similar incident happen again.

The Dung Quat bio-ethanol plant was built in 2009 with a total investment capital of more than VND2 trillion (US\$96 million). Its first batch of product was rolled out early this month.

## **Land-slide projects take time to enact**

Complaints from residents about compensation rates have stalled a project approved five years ago to strengthen and build embankments in landslide-prone areas along Thanh Da Canal in HCM City.

The speed of land clearance along canals has been slow although the city administration told agencies to speed up efforts to prevent landslides on Thanh Da Peninsula after a dozen houses were swept away.

The ongoing landslide prevention projects are behind schedule due to delays in acquiring land and compensation negotiation. The project began in 2007.

Residents in Binh Thanh District's Ward 27 were unhappy with the compensation rate that local authorities had offered them.

Citizens complained that they did not understand the compensation policy offered by the local government.

Luu Mai Tram, whose house subject to relocation, said she was offered only 30 per cent of the compensation value. She bought the house from another person in a private agreement before 2001.

The owner of a neighbouring house received 100 percent compensation, Tram told Sai Gon Giai Phong (Liberated Sai Gon) Newspaper.

Nguyen Van Quang, deputy head of land clearance and compensation board in Binh Thanh District, told the paper that the land receiving 20 to 30 per cent of the official compensation rate was land encroaching on the canal and river.

Lawyer Nguyen Van Tran said the country's Land Law requires that residents with land and houses withdrawn for public projects should be compensated 100 percent if the land is used before October 15, 1993.

Additionally, they will receive compensation if the properties are not in dispute and the land-owners had paid their annual taxes.

Phan Van Dinh, office chief of Binh Thanh District's People's Committee, told the paper that the district had requested the district's land clearance and compensation board and relevant agencies to report the issues related to compensation in the district.

With the report, the Binh Thanh District administration will report to the city's Party Committee and then results will be given to citizens in the district.

Dinh said the district had finished construction on the sections No 1.1 and 1.3 and the sections No. 1.2 and 1.4 had not been built due to dissatisfaction with compensation. Nearly 164 households will be affected when the sections are built.

Four months ago, the city government urged local government agencies to complete the project soon and give priority to prevent riverbank erosion. Land clearance has not been completed for the remaining two embankment sections.

The city has 50 riverbank areas facing a high risk of landslides, with a total length of more than 30km in Districts 2, 9, Binh Thanh, Thu Duc, Nha Be and Binh Chanh.

## **WB helps Vietnam tackle urban flooding**

The World Bank (WB) on Feb. 14 affirmed it will continue assisting Vietnam in coping with risks of urban flooding through loans, technology support and analysis.

The WB pointed out that Vietnam is among the most vulnerable countries to natural disasters, especially floods, which are encroaching on cities as the country's urbanisation proceeds rapidly.

In a recently released book entitled, "Cities and Flooding: A Guide to Integrated Urban Flood Risk Management for the 21st Century", the WB recommends some priorities in policy to help Vietnam and other countries deal with the challenges of floods.

In the context of growing pressure from economic development causing higher risks of flooding to urban residents in Vietnam, it is a critical need to integrate flood risk management into regular planning of cities and towns.

The WB has provided 161 million USD to a project on natural disasters management, aiming to improve the disaster warning system as well as disaster mitigation infrastructure. In 2010, it offered an additional 75 million USD to activities in post-disaster reconstruction.

## **Mekong tributary becomes sewer**

The section of Tien River, which is one of two main branches of the Cuu Long (Mekong) River running through Viet Nam, is heavily polluted by daily and industrial waste.

Residents who live on the riverbanks said seafood processing factories bordering the river discharge untreated waste water into the river, according to a report by Tuoi Tre (Youth) newspaper. The polluted portion of the river is located in the provinces of Dong Thap, Vinh Long, Tien Giang.

Nguyen Van Thu, a resident in Tien Giang Province's Song Thuan Commune, said processed-fish waste can sometimes be seen floating on the river.

"We get itchy spots on the skin after swimming in the river," he said.

Nguyen Van Tu, a fisherman of 20 years experience on the river, said he had noticed fewer natural fish in the river.

According to the departments of natural resources and environment of Tien Giang and Vinh Long provinces, tests showed that the water contains suspended solids and iron over allowed level, while the COD (chemical oxygen demand) and BOD5 (biological oxygen demand) are lower than normal.

Tests by the Dong Thap department showed that harmful chemicals were in the water.

Luu Minh Manh, director of the department of environmental protection in Tien Giang Province, said the province's My Tho City discharges each day about 50,000 cubic metres of untreated waste water into the river.

In Dong Thap, many farmers who raise fish did not comply with waste water treatment requirements and released untreated waste from their ponds directly into the river, according to the natural resources and environment division of Tan Hong District.

The water has also been polluted by industrial waste water from nearby industrial zones and pesticide overuse by farmers.

Manh said the My Tho City should develop proper waste water treatment and educate residents about waste prevention. Locals often dump waste directly into the river.

Nguyen Van Hai, head of the Dong Thap Province People's Committee's office, said the province had set up a plan to check whether fish raising ponds comply with waste water treatment regulations. Many ponds in the province are located near the river.

## **GMS policy-makers discuss growth amid water, energy and food challenges**

Policy-makers from the Greater Mekong Subregion (GMS) began discussions today on the challenges and opportunities for balancing economic growth with environmental sustainability in Bangkok.

The two-day conference, entitled The GMS 2020: Balancing Economic Growth and Environmental Sustainability, is organised by GMS countries including Viet Nam, Cambodia, China, Lao, Myanmar and Thailand in collaboration with the Asian Development Bank.

Strategic measures are expected to ensure economic growth is balanced with food, water and energy security, especially in light of increasing climate variability.

Since the six countries sharing the Mekong River formed the economic co-operation program in 1992, gross domestic product growth in the subregion has averaged about eight per cent a year, while real per capita incomes more than tripled between 1993 and 2010. However, as the economies grow, so do competing demands for natural resources.

Conference participants, including government officials, development partners, academics and private sector representatives, will examine how growth has impacted the environment and look at the future of water in the region. They will also look at whether economic growth has led to poverty reduction, forecast food and water needs to 2050, and discuss ways of scaling environmental and economic challenges.

GMS countries have already co-operated on the Core Environment Program Biodiversity Conservation Corridors Initiative, which addresses adaptation and mitigation measures, as well as environmental implications for agriculture, energy, tourism and transport planning and investment decisions. The GMS leaders have also endorsed a 10-year strategy to enhance agricultural development, pro-poor sustainable tourism, low-carbon development and management of the sub-region's richly diverse ecosystems.

Since 1992, ADB has provided the GMS Economic Co-operation Program with technical assistance worth more than US\$57 million for specific environmental initiatives.

Harsh austerity programmes dictated by the IMF, EU and European Central Bank will lead to Greece and Portugal's financial collapse, economists argue

## Portugal, Greece pose risk of contagion

Mario Queiroz

**LISBON** — The flood of economic woes devastating Greece and Portugal are evidence that the German prescription imposed by a troika of multilateral creditors is not working, and that both countries are heading into a blind alley, says economics professor Mario Olivares.

"National debt and fiscal deficit problems can only be overcome by economic growth," said Olivares, a Portuguese academic.

The harsh austerity programmes prescribed by the International Monetary Fund (IMF), the European Union and the European Central Bank (ECB) are dragging Greece and Portugal into a downward economic spiral.

In these two southern European countries, and more recently in Spain and Italy as well, "growth and investment are being sacrificed, creating an alarming in-

crease in unemployment", said Olivares, head of the economics department at the School of Economics and Management (ISEG) of the Technical University of Lisbon.

"There is colossal pressure on the Greek economy, which has already seen a fall in GDP far greater than forecast, due to an adjustment model that isn't working because, in spite of wage cuts, exports are not increasing," he said.

The crisis in Spain, Portugal and Greece, "with cuts in consumption and public spending, as well as slower growth in Germany, the Netherlands, France and Belgium, change the scenario, because the expected increase in exports is not happening", Olivares stressed.

In the case of Portugal, public accounts are being regulated with iron discipline in order to meet the fiscal deficit goals demanded by German Chancellor Angela Merkel, whom Olivares describes as "mas-

ter of the EU" in contrast with the weakness of the European Commission, the bloc's executive arm.

Economic analysts agree that the wage cuts, longer working hours, cancellation of several public holidays and tax hikes have led people in Portugal to spend less and save more, not to create a solid foundation for stability, but to sink further into poverty.

The recession deepened in the last quarter of 2011 because of contraction in household consumption and only modest investment, factors that brought about a 2.7 per cent fall in GDP that quarter, and an annual average shrinkage of 1.5 per cent of GDP with respect to 2010, according to the National Institute of Statistics (INE).

The INE report predicted that "acceleration of the recession in the last three months of 2011 will set a trend that will also blight 2012, during which we expect a new fall in private consumption".

The most recent estimates forecast a 3 per cent drop in Portugal's GDP this year.

A crucial factor is that Portugal's 20 largest companies invested 23 per cent less in 2011 than in 2010, which severely affected economic growth and produced drastic job losses.

In its report released February 15, INE said unemployment in the fourth quarter of 2011 reached 14 per cent, the highest jobless rate in Portugal since records began to be kept. Youth unemployment is even worse, at 35.4 per cent.

But the situation is much worse than the official figures suggest, as INE recognises only 770,000 unemployed persons within an economically active population of nearly 5.6 million — a figure that only includes unemployed persons who were available for work, and actively seeking work, during the survey period.

It does not include those who

have given up looking for a job, nor people with part-time jobs.

Thus, the real number is almost 1.3 million people out of work, which gives an estimated unemployment rate of 22.6 per cent.

Given the fear of contagion of the crisis in the rest of the EU and other parts of the world, IPS consulted Professor Andres Malamud, who holds a doctorate in social and political sciences and is a research fellow at the Institute of Social Sciences of the University of Lisbon. Like Olivares, Malamud is not at all optimistic about the future.

"In the best-case scenario, the European economy is going to stagnate for several years. The most probable outlook is simply recession, accompanied by social unrest, political radicalisation and institutional fragmentation, with some countries leaving the eurozone and even the EU itself," said Malamud.

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Advertisement

### Invitation for Pre-Qualification

SOCIALIST REPUBLIC OF VIETNAM

Wastewater Disposal in Provincial Towns, Programme South: Tra Vinh  
Tender 2, Package 3: Pumping stations, pressure mains, river crossings,  
Wastewater Treatment Plant in Tra Vinh City

The Socialist Republic of Vietnam has been granted a loan from the German Development Bank (KfW Entwicklungsbank) towards the costs of a project to finance investments in Tra Vinh City. The loan covers 70% of the investment costs while 30% of the investments are local financial contribution.

The Tra Vinh Project Management Unit (PMU) now invites interested Construction Companies to submit their Applications for the Works / Contracts described hereafter.

The works form part of the overall wastewater disposal system in Tra Vinh City and aim at improving the environmental situation, the living conditions of the population and the socio-economic development in Tra Vinh City.

The works shall be executed as "Works designed by the Contractor" according to FIDIC Yellow Book regulations (1st Edition 1999) and comprise of, but are not limited to:

- o Some 2,500 m of gravity sewer lines, interceptors and laterals, prefabricated reinforced concrete pipes DN 900 to 2000. To be included are the corresponding manholes with connecting pipes (prefabricated reinforced concrete DN 300).
- o Some 450 m of prefabricated reinforced concrete culverts (WxH 1x1 m - 1.6x1.6 m). To be included are the corresponding manholes with connecting pipes (prefabricated reinforced concrete DN 300). (Note: Prefabricated box culverts shall include a prefabricated flume, all made from high-grade, sulphate resistant concrete.)
- o Three pumping stations:
  - o PS-01 (Flow rate per pump 110 l/s, 3 (2+1) pumps, outgoing pressure main DN 400, made of Ductile Iron) receiving foul wastewater from two gravity interceptors (one box culvert 1.2x1.2m; one DN 2000) in town through a DN 500 and delivers to a gravity sewer (DN 900, included in this lot) leading out of town to the treatment facility. The structures (inlet, pump chamber, valve chamber) are of rectangular shape (inlet has two cut edges), approximately 18 m by 13 m and about 8 m deep, made of reinforced concrete. High groundwater tables prevail.
  - o PS-02 (Flow rate per pump 70 l/s, 3 (2+1) pumps, outgoing pressure main DN 350, made of Ductile Iron) receiving foul wastewater from three gravity interceptors (one DN 600, one DN 800 and one box culvert 1x1 m) in town through a box culvert 1.6x1.6 m and delivers to the same gravity interceptor (DN 900) as PS-01, leading out of town. The structures (inlet, pump chamber, valve chamber) are of rectangular shape, approximately 14 m by 8 m and about 8 m deep, made of reinforced concrete. High groundwater tables prevail.
  - o PS-03 (Flow rate per pump 170 l/s, 4 (3+1) pumps, outgoing pressure main DN 600, made of Ductile Iron) receiving foul wastewater from the gravity interceptor DN 900 coming from town. The structure shall be of square shape, approximately 10 m by 7 m and about 8 m deep, made of reinforced concrete. High groundwater tables prevail.
- o Some 2,000 m of buried pressure main DN 600, made of Ductile Iron (DI) incl. fittings, air valves, etc.; the alignment of the pressure pipeline DN 600 shall be alongside the new access road. Where necessary anchor blocks must be installed to compensate for water hammers. High groundwater tables prevail.
- o Two river crossings:
  - o One above-ground river crossing RC-1 (Long Binh River, length approx. 65 m);
  - o One above-ground river crossing RC-2 (Rach Kinh River, length approx. 45 m);
- o Wastewater Treatment Plant (WWTP):
  - o The construction of the WWTP for Tra Vinh shall be phased into two stages:
    - For stage 1 mechanical treatment with screen chamber, aerated grit chamber and primary sedimentation with sludge line (digesting and dewatering) is foreseen;
    - In stage 2 the WWTP shall be extended by trickling filters and final sedimentation tanks plus extension of the sludge digestion and dewatering line.

The implementation period shall be 21 months followed by a 12 months Defects Notification Period.

Procurement of contracts is governed by the KfW Guidelines for Procurement (see <http://www.kfw-entwicklungsbank.de>). Criteria to be used in the evaluation are: (i) General Construction Experience, (ii) Special Experience, (iii) Regional Experience, (iv) Plant and Equipment, (v) Personnel Resources as well as (vi) Financial Capabilities.

Interested Applicants may purchase Pre-Qualification Documents from 27 February 2012. Pre-Qualification Documents may be obtained upon submission of an application letter to the address below and upon payment of a non-refundable fee of VND 600,000 (Vietnam Dong six hundred thousand only) in cash. The documents may also be sent by courier for an additional charge of VND 200,000 if sent within Vietnam or for the respective costs arising for delivery to outside of Vietnam. Interested firms may obtain further information at the address below during office hours (07:30 to 11:00 and from 13:30 to 16:00 hours local time (GMT +7), Monday to Friday).

All Applications must be delivered in sealed envelopes to the address below bearing the senders full name and address, the project title and the contract name until 13 April 2012, 14:00 hours local time. Late Applications will be rejected.

Tra Vinh Project Management Unit (PMU)  
Wastewater Disposal in Provincial Towns, Programme South: Tra Vinh  
226 Tran Phu Street, Ward 7, Tra Vinh City, Vietnam  
Tel: +84 / (0)74 / 386 6915; Fax: +84 / (0)74 / 386 6916; Email: [travinhpmu@gmail.com](mailto:travinhpmu@gmail.com)  
Account holder: Duong Tam Account No.: 40929769  
Beneficiary Bank: MeKong Housing Bank MHB, Tra Vinh Branch  
SWIFT code: MHBBVNVX

### Invitation for Pre-Qualification

SOCIALIST REPUBLIC OF VIETNAM

Wastewater Disposal in Provincial Towns, Programme South: Tra Vinh  
Tender 1, Package 4, Lots 1, 2 and 3:  
Construction of Combined Sewer System in Tra Vinh City

The Socialist Republic of Vietnam has been granted a loan from the German Development Bank (KfW Entwicklungsbank) towards the costs of a project to finance investments in Tra Vinh City. The loan covers 70% of the investment costs, while 30% of the investments are local financial contribution.

The Tra Vinh Project Management Unit (PMU) now invites interested Construction Companies to submit their Applications for the Works / Contracts described hereafter.

The works form part of the overall wastewater disposal system in Tra Vinh City and aim at improving the environmental situation, the living conditions of the population and the socio-economic development in Tra Vinh City.

The works shall be executed as "Works designed by the Employer" according to FIDIC "Red Book" standard form of contract (1st Edition 1999) and comprise of, but are not limited to:

- o Some 300 m of gravity sewer lines, interceptors and laterals, prefabricated reinforced concrete pipes DN 900. To be included are the corresponding manholes with connecting pipes (prefabricated reinforced concrete DN 300).
- o Some 3,500 m of prefabricated reinforced concrete culverts (WxH 1x1m - 2.5x2.5m). To be included are the corresponding manholes with connecting pipes (prefabricated reinforced concrete DN 300).
- o One CSO (combined sewer overflow) with one outlet (equipped with flap valve and stop log) and some 50 m of gravity pipe, prefabricated reinforced concrete DN 1500.
- o Some 4,700 m of prefabricated reinforced concrete culverts (WxH 1x1m - 2x2.5m). To be included are the corresponding manholes with connecting pipes (prefabricated reinforced concrete DN 300).
- o One CSO (combined sewer overflow) with one outlet (equipped with flap valve and stop log) and some 20 m of gravity pipe, prefabricated reinforced concrete DN 1500.
- o Some 1,600 m of gravity sewer lines, interceptors and laterals, prefabricated reinforced concrete pipes DN 900 to DN 2000. To be included are the corresponding manholes with connecting pipes (prefabricated reinforced concrete DN 300).
- o Some 3,400m of prefabricated reinforced concrete culverts (WxH 1x1m - 2x2.5m). To be included are the corresponding manholes with connecting pipes (prefabricated reinforced concrete DN 300).
- o One lifting station LS-1, (Flow rate per pump 47 l/s, 2 (1+1) pumps, outgoing pressure main DN 200, length approx. 110m, made of Ductile Iron (DI) incl. fittings); LS-1 receives foul wastewater from a gravity interceptor (box culvert 1.2x1.2m, included in this lot) in south of town through a DN 250 and delivers to a gravity interceptor (DN900, included in this lot) in town (leading to PS-1). The structure is of rectangular shape, approximately 7.5 m by 3.0 m and about 6.5 m deep, made of reinforced concrete. High groundwater tables prevail.
- o This lifting station is combined with
  - o One outlet (equipped with flap valve and stop log) with gravity pipe, prefabricated reinforced concrete DN 1500.

Note: Prefabricated box culverts shall include a prefabricated flume, all made from high-grade, sulphate resistant concrete.

The implementation period shall be 18 months for each Lot, followed by a 12 months Defects Notification Period.

Procurement of contracts is governed by the KfW Guidelines for Procurement (see <http://www.kfw-entwicklungsbank.de>). Criteria to be used in the evaluation are: (i) General Construction Experience, (ii) Special Experience, (iii) Local Experience, (iv) Plant and Equipment, (v) Personnel Resources as well as (vi) Financial Capability.

Interested Applicants may purchase Pre-Qualification Documents from 27 February 2012. Pre-Qualification Documents may be obtained upon submission of an application letter to the address below and upon payment of a non-refundable fee of VND 600,000 (Vietnam Dong six hundred thousand only) in cash. The documents may also be sent by courier for an additional charge of VND 200,000 if sent within Vietnam or for the respective costs arising for delivery to outside of Vietnam. Applications will automatically be assessed with respect to all three lots.

Interested firms may obtain further information at the address below during office hours (07:30 to 11:00 and from 13:30 to 16:00 hours local time (GMT +7), Monday to Friday).

All Applications must be delivered in sealed envelopes to the address below bearing the senders full name and address, the project title and the contract name until 30 March 2012, 14:00 hours local time. Late Applications will be rejected.

Tra Vinh Project Management Unit (PMU)  
Wastewater Disposal in Provincial Towns, Programme South: Tra Vinh  
226 Tran Phu Street, Ward 7, Tra Vinh City, Vietnam  
Tel: +84 / (0)74 / 386 6915; Fax: +84 / (0)74 / 386 6916; Email: [travinhpmu@gmail.com](mailto:travinhpmu@gmail.com)  
Account holder: Duong Tam  
Account No.: 40929769  
Beneficiary Bank: MeKong Housing Bank MHB, Tra Vinh Branch  
SWIFT code: MHBBVNVX

## **Viet Nam faces rising temperature risk**

The Meteorology Office/Hadley Centre, the UK's foremost climate change research facility, yesterday warned Viet Nam of a four degrees Celsius temperature rise at a climate change conference held by British Council in the capital.

The warning came in accordance with the centre's new "4 Degree Map" launched at the conference, which shows the potential impact of global warming in South East Asia and Viet Nam.

"Negative impacts may occur in Viet Nam and other South East Asian countries due to rising global warming," according to Chris Gordon, head of the Science Partnership at the UK Meteorology Office/Hadley Centre.

He added that if Viet Nam took no action, there would be a four degrees Celsius temperature increase, causing a 65 cm rise in the sea-level and the shrinking of many coastal regions, especially in the low-lying Mekong Delta.

"Around half of the delta will be shrunk", Gordon said.

Such a sea-level rise would totally submerge the lowest parts of the delta with up to 13 per cent (5,100 sq meter) of land mass disappearing, doing significant damage to the annual 4.7 tonnes rice economy.

Gordon added that the ecology of the region, in terms of forests, crops, water availability, marine life, drought, permafrost, tropical cyclones, extreme temperatures, and health, displayed on the map via nine different colours, would also be affected.

Speaking at the event, Antony Stokes, British Ambassador to Viet Nam, emphasised the close co-operation between the UK and the country in handling the current global warming crisis.

According to the co-operative agreement signed earlier, the UK will help the Ministry of Natural Resources and Environment train Vietnamese environmental officials.

Many guests attended the event including Associate Professor Dr Tran Thuc, director of the Institute of Meteorology, Hydrology and Environment and Dr Nguyen Van Tai, director of the Institute of Strategy, Policy on Natural Resources and Environment, amongst others.

## **Farmers await pollution compensation**

Nearly 200 households in southern Dong Nai Province's Long Thanh District and Bien Hoa City are still waiting to receive compensation from Sonadezi Long Thanh Company for the impact its substandard waste water discharges had on their aquaculture farming and fruit growing areas.

Residents in Tam An and Tam Phuoc communes filed complaints with local authorities demanding more than VND16 billion (US\$768,000) in compensation from the company seven months ago when the company was discovered discharging untreated waste water into Ba Cheo canal which flows into Dong Nai river.

No action has been taken so far. People's Committee Chairman of Tam An Commune Vo Van Luat told Viet Nam News that the pollution caused by the company's waste water had killed a mass of fish and disrupted farming for nearly 200 households in surrounding areas. "However, we still have to wait for a conclusion about the level of environmental and agricultural damage caused by the company from provincial authorities and related agencies to define the level and method of compensation," he said. "A delegation from the provincial authorities and department of environment and natural resources took a field trip to the affected areas to assess the damage early this month but we still do not know when to expect the results," Tuan said. "A similar field trip was made by related agencies in October," he added.

Nguyen Van Phuoc, Director of the HCM City-based Institute of Environment and Resources, which is responsible for assessing the damage, told Viet Nam News yesterday that an assessment of the environmental impacts caused by Sonadezi Long Thanh's waste water was ongoing.

He was unable to provide information about when the assessment results would be available for farmers to seek compensation.

Nguyen Dang Quang, a lawyer from Ha Noi, said the affected farmers could ask the local Farmers Association to petition the provincial People's Committee to require relevant agencies to quickly define the level of damage.

In the event that the provincial People's Committee did not meet farmers' demands, the farmers could file a complaint with higher levels such as the Ministry of Natural Resources and Environment, and even the Government to deal with the case, Quang said.

Sonadezi Corporation Deputy Director General Chu Thanh Son told Nong thon Ngay nay (Countryside Today) that its affiliate Sonadezi Long Thanh was willing to handle the case in line with regulations upon receipt of a conclusion by authorised agencies.

Sonadezi Long Thanh, which is responsible for treating waste water for 42 companies in Long Thanh Industrial Park in southern Dong Nai Province, was found discharging 9,300 cubic metres of untreated waste water into the river via three underground pipelines in August.

The company was fined VND405 million (US\$19,440) for violating the environmental protection law.

According to the Environmental Police Department, the company had discharged 14 million cu.m of untreated waste into Dong Nai river over the past five years.

## **Untreated wastewater muddies Trai River**

Trai River, in Nghe An Province, has become seriously polluted by the discharge of untreated wastewater from a nearby mining and metallurgy company.

Viet Duc-Nghe An Mining and Metallurgy Limited Company, headquartered in Thanh My Commune, Nghe An Province, has been widely blamed for the pollution.

Even though the company has been licensed since March 2008, they only started official operation in the last three months. Lacking land for processing ore, they leased land in Thanh Huong Commune, which is adjacent to the river.

When questioned about the environmental impacts, Do Minh Hieu, Director of Viet Duc, claimed that the Trai River was just muddy because the reservoir overflowed after heavy rains. He added that the amount of wastewater was small in comparison and would cause no harm. He added that the company is in the process of completing a wastewater treatment system.

However, the only "system" the company has installed so far is a pipeline that diverts water from the river to the two reservoirs, which they use to wash the ore. The actual treatment system is not yet under construction. Both reservoirs are thick with industrial byproducts, and locals say that even the land surrounding the plant is covered with an oily muck.

Nguyen Canh Hoan, a resident who lives near the Trai River said, "Ever since the company started operating you can see that the river looks muddy. Our crops and cattle used to drink from this river. In the summertime we would even swim there, but now the river is dying."

The contrast between the murky colour of the waters downstream of the discharge point and the clear waters are quite telling.

Another fact that causes concern for families in the vicinity is that neither of the plant's reservoirs have barriers. They are 5 to 8 metres deep, and their toxic contents pose a health risk for neighboring children and livestock. The transportation of raw materials also causes air pollution along the road.

The problems these communities face are not unique in Vietnam, and many see them as signaling the need to balance environmental concerns with economic development.

## **Mining industry wastes resources**

As a country rich in mineral resources, which serves the building material industry, Viet Nam is in need of comprehensive changes to develop the industry sustainably.

Speaking at an international workshop on mineral mining and processing on Thursday in Ha Noi, deputy minister of construction Nguyen Tran Nam said that wasteful mineral mining, outdated technologies and insufficient planning hampered the industry's development.

Most enterprises did not pay sufficient attention to mining technologies and mainly exported raw materials that generated low value, he added.

It was reported that between 2005 and 2010, Viet Nam mined and processed over 3.2 billion tonnes of minerals to produce building materials. This left hundreds of limestone and granite mountains and over 10,000ha of land unusable.

Resources have also been exploited without approval or even illegally, resulting in a massive waste of resources.

Over 3,500 mining licences, usually granted by provincial People's Committees, were still valid across the country, said vice director of the Geography and Mineral Department under the Natural Resources and Environment Ministry (MONRE) Do Canh Duong.

Duong said the issuance of mining licences now revealed problems, urging adjustment.

Ministries of Construction, Industry and Trade, MONRE and localities needed to tighten inspection measures and assess planning for building material production in general and cement production in particular, he said.

Before allowing local authorities to grant licences, MONRE should identify the areas eligible for mining activities, Duong said.

President of the Viet Nam Association for Building Materials Tran Van Huynh said small-scale companies with poor management, using outdated technology were wasting resources, polluting the environment and not ensuring the safety of workers.

In the next 10 years, the country is expected to exploit nearly 10 billion tonnes of minerals to produce building materials such as cement, bricks, stone and sand.

To do so, he said, it was necessary to revamp management practises of mineral mining and production as well as improve technology to ensure efficient and environmentally-friendly mining.

Accordingly, the mining of mineral resources needed to be strictly managed under a planned scheme to grant licences, use minerals, protect the environment and further regulate mineral resource mining.

In addition, raising awareness among organisations and enterprises in the mineral mining and processing activities, especially those serving the building materials industry, should be central to any sector change. — VNS

## **Report underlines City water pollution problem**

All canals in HCM City are heavily polluted by domestic and industrial waste water, according to a newly issued report from the city's Department of Natural Resources and Environment.

Testing of environmental criteria for suspended substances, BOD (biodiversity oxygen demand), COD (chemical oxygen demand) and coliform showed a rate 1,000 times higher than the allowed level. The pollution is worse when the tide is low.

Bui Thanh Tam Phuong of the department's Environment Management Division said many facilities operating in the city did not have waste water treatment and released their waste directly into the canal system.

The city has moved a number of polluting facilities from residential areas to industrial zones. But those facilities have set up phony waste water treatment systems, which have fooled management agencies.

When the agency asks them to build new treatment systems, they contend that there are no spare land plots or that they have insufficient capital.

Nguyen The Dong, deputy director of the General Department of Environment, was quoted by Sai Gon Giai Phong (Liberated Sai Gon) newspaper as saying that laws on environmental protection has many loopholes, leading to an increasing number of environmental violations.

Part of the problem is that too many agencies are taking part in overseeing the regulations, and as a result, criteria and penalties have been issued differently by agencies.

In addition to environmental police and inspectors from environmental agencies, industrial zones and local authorities also have the right to set up teams to discover violations, according to Dong.

The Ministry of Natural Resources and Environment has just decided to fine the Dak Lak-based Ea Pok Coffee Company VND91 million (US\$4,530) for discharging untreated wastewater with high levels of toxic substances into the environment.

## **Thanh Hoa communities struggle with stagnant environmental project**

Over 800 households in Thanh Hoa Province are struggling to maintain decent living conditions after the relocation of a water drainage project.

Currently, these residents are living in a seriously polluted environment in makeshift houses and damaged roads.

Slow to the finish

The Dong Son water drainage project is one of the largest in Thanh Hoa. It began construction in December 2009.

Investment in the project has been increased to over VND730 billion (USD35 million) from initial estimate of VND362 billion (USD17.35 million), most of which came from Government bonds.

The project is expected to be completed in 2012 in order to improve water drainage systems in districts of Dong Son, Thieu Hoa, and Quang Xuong, as well as Thanh Hoa City, hopefully improving the living conditions of surrounding residents.

In order to facilitate the project, around 800 households were relocated, while 1,200 other families in 11 wards and communes have been affected. Compensation is estimated at VND138 billion (USD6.61 million).

Still, despite the plans, the project has been at a standstill for over two years.

In the relocation area, families are made to live in hastily-built temporary homes while they wait for compensation.

Nguyen Trong Minh, a resident of Thanh Hoa City's Lam Son Ward, said, "We have yet to see any signs of the speeding up of the site clearance and compensation process. We don't know where we will move or how much we will receive."

Nguyen Cong Binh, a local man from the same ward, said roads along some sections of the river running through Lam Son, Truong Thi, Dong Ve, and Nam Ngan Wards, as well as Dong Huong Commune currently are torn up and awaiting repair by the investors.

Slow capital disbursement

Nguyen Van Thanh, head of the project's management board, said, "We have yet to receive the capital, and the city hasn't allocated land for resettlement. There is nothing we can do to improve the situation."

Meanwhile, Nguyen Tu Khanh, Vice Chairman of the municipal People's Committee, said, "In order to deal with the resettlement problems, it's vital to have capital and land in hand. Despite huge investment, just VND100 billion (USD4.79 million) was disbursed, slowing down the construction process."

## **Changing rural people's behaviour on safe water**

A communication campaign to promote the use of safe water and environmental sanitation was reviewed at a seminar in Hanoi on February 27.

The seminar was jointly held by the Ministry of Agriculture and Rural Development, UNICEF and Lien Aid, a non-governmental organisation of Singapore.

Addressing the event, Deputy Minister of Agriculture and Rural Development Dao Xuan Hoc said the national rural safe water and environmental sanitation programme could not have been implemented unless people's behaviour and awareness changed.

After one year of information promotion with goodwill ambassador, comedian Xuan Bac, the programme has helped change rural people's behaviour, awareness and habits and considerably improved the community's environmental sanitation. It also encouraged agencies and organisations to become involved in safe water, personal hygiene and environmental sanitation issues.

Chief Representative of the United Nations Children's Fund in Vietnam Lotta Sylwander highlighted the wholehearted role of Xuan Bac as rural water and environmental sanitation goodwill ambassador.

The effective cooperation among Government agencies, UN bodies and donors has created an impetus in raising people's awareness and changing their behaviour, she said.

She pledged to continue supporting the programme so all rural people, particularly children, can access safe water and sanitation and enjoy a healthy life.

## **Coastal land uses to be inspected**

HA NOI — The Ministry of Natural Resources and Environment will inspect land use allocation and leasing in coastal and alluvial areas in the nation's central region beginning next month, and will report findings to the Prime Minister.

Meanwhile, the ministry has asked cities and provinces in the region to review land-related documents to ensure compliance with the Land Law, as well as take drastic measures to punish violations.

The ministry's move is in response to the Prime Minister's directive earlier this month, following an unlawful land seizure in the northern city of Hai Phong's Tien Lang District.