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1	Industrial park neighbors battle pollution	4/5/2011	VN news	HCM	Pollution	Residents who have not moved from two industrial parks in Binh Dinh Province because of compensation disputes are suffering serious smoke and dust pollution.
2	UN eyes nation's disaster readiness	11/5/2011	VN news	Vietnam	Environment	Viet Nam's efforts in passing legislation to allocate sufficient resources to disaster risk management have been highlighted by a United Nations report.
3	Delta prepares to fight land erosion	12/5/2011	VN news	HCM	Environment	Authorities in the Cuu Long (Mekong) Delta provinces are taking several measures to deal with the growing problem of land erosion in a region crisscrossed by thousands of rivers and canals.
4	Northwest region prone to unstable geological hazards	12/5/2011	VN news	Ha Giang	Geology	The nation's northwestern region is susceptible to a wide range of geological hazards but research on the nature and extent of the risks remain limited, says the Viet Nam General Association of Geology.
5	Australia to provide $150 million in ODA	12/5/2011	VN news	Hanoi	Others	The Australian Government will provide Viet Nam with A$137.9 million (US$150 million) in official development assistance during 2011-12, an 8.2 per cent increase on 2010-11 figures.
6	Strategy on climate change to be done early June	13/5/2011	VN net bridge	Vietnam	Climate Change	The Ministry of Natural Resources and Environment will submit a strategy on climate change to the Government for final approval by early June this year.

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7	Climate change plan is vital for Viet Nam	14/5/2011	VN news	Hanoi	Climate Change	Climate change has affected the socio-economic development of many countries around the world, including Viet Nam.
8	Hai Phong, Brest jointly protect sea environment	16/5/2011	VN plus	Haiphong	Environment	Vietnam's northern coastal city of Hai Phong and the city of Brest of France have agreed to continue to cooperate in protecting sea environment.
9	IPs play dirty in war on waste	16/5/2011	VN news	HCM	Waste	The unchecked release of untreated effluents into the environment by a majority of industrial parks (IPs) is killing rivers as well as fishing as a vocation in many localities nationwide.
10	Illegal gold exploitation pollutes Dak Rong River	17/5/2011	VN news	Quang Tri	Pollution	Illegal gold exploitation has caused serious pollution along the Dak Rong River in the central province of Quang Tri.
11	Nation develops plan to mitigate climate change	18/5/2011	Vfej	Vietnam	Climate Change	Viet Nam has developed a general plan to minimize and cope with the impacts of climate change with the assistance of development partners.
12	Ancient turtle wants to return to Hoan Kiem Lake	18/5/2011	VN net bridge	Hanoi	Environment	The legendary turtle has shown signs of unsuitability to the life in the artificial tank. The Hanoi Department of Science and Technology is seeking way to put her back into the lake as soon as possible.
13	City flood prevention efforts begin to pay off	19/5/2011	VN news	HCM	Environment	Flood-prevention works undertaken recently in HCM City have begun to bear results in several inner city areas.

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14	HCM City to spend VND4 trillion for climate change	20/5/2011	Vfej	HCM	Climate Change	From 2011 to 2015, HCM City will implement 30 projects to cope with climate change, focusing on natural resource, waste, energy and land management.
15	HCMC plans to ensure roads are safe during rainy season	20/5/2011	VN news	HCM	Environment	The Department of Transport in HCM City has prepared a plan to minimize the subsidence of road surfaces in order to ensure residents' safety during the upcoming rainy season.
16	Ha Noi prepares flood measures	20/5/2011	VN news	Hanoi	Environment	The Ha Noi Water Drainage Company has prepared a flood scenario in preparation for potential flooding in inner Ha Noi during the upcoming rainy season.
17	Ha Noi officials determined to fight environmental pollution	24/5/2011	VN news	Hanoi	Pollution	Ha Noi City People's Committee Deputy Chairman Vu Hong Khanh spoke with Ha Noi Moi (New Ha Noi) newspaper about measures to improve environmental quality.
18	City seeks funds to dredge river	25/5/2011	VN news	HCM	Pollution	At least VND9 trillion (US$435 million) is needed to continue the Soai Rap River dredging project so that larger vessels can enter Nha Beø District's Hiep Phuoc Port Complex.
19	Work halted on port construction	25/5/2011	VN news	Khanh Hoa	Port	Construction of the Van Phong International Port in the southern central province of Khanh Hoa has been suspended for one year with no indication of a resumption date.
20	Underground water exhausted, Hanoi to use river water	26/5/2011	VN net bridge	Hanoi	Water	Hanoi will give priority to projects to explore water from the Red, Duong and Da rivers, since the underground water resources have been

						exhausted.
20	Support for climate framework	27/5/2011	VN news	Vietnam	Climate Change	Viet Nam has given its full support for the proposed Global Framework for Climate Services on the sidelines of the 16th congress of the World Meteorology Organisation.
21	Deputy PM calls for collective effort against climate change	27/5/2011	VN plus	Vietnam	Climate Change	Deputy Prime Minister Hoang Trung Hai has called on nations worldwide to share common responsibility in protecting the Earth and cope with climate change.
22	Mekong Delta at risk from landslides during dry season	27/5/2011	VN news	Me Kong	Environment	Unlike in the past landslides are now a threat even during the dry season along the Tien and Hau Rivers in the Cuu Long (Mekong) Delta.
23	Dams over troubled waters	29/5/2011	VN net bridge	Me Kong	Water	Much has been said about the impacts of dams on freshwater fish stocks in the Mekong River. However, the effects on marine fishery output also deserve thorough consideration.
24	Hydropower plants depleting rivers	30/5/2011	SGGP	Gia Lai	Water	Construction of hydro power plants has interfered with the water flow in large rivers in the Central Highlands, resulting in a steady depletion of water.
25	Japan disasters offer disturbing lesson for Vietnamese officials	30/5/2011	VN news	Vietnam	Environment	The recent quake, tsunami and nuclear incident in Japan had rung alarm bells for Viet Nam, said Vietnamese Deputy Prime Minister Hoang Trung Hai.
26	Germany to close all nuclear plants by 2022	31/5/2011	AFP news	Germany	Nuclear Plants	Europe's economic powerhouse, Germany, announced plans Monday to abandon nuclear energy over the next 11 years.

Industrial park neighbors battle pollution

Residents who have not moved from two industrial parks in Binh Dinh Province because of compensation disputes are suffering serious smoke and dust pollution, local authorities say.

Workers operate a wastewater treatment system in the central province of Binh Dinh's Phu Tai Industrial Park. Residents near the province's industrial parks are facing critical levels of pollution due to insufficient waste treatment systems. — VNA/VNS Photo Pham Biet

When the site was cleared for two industrial parks – Phu Tai and Long My – in the central province's Qui Nhon City, about 30 per cent of the households had refused to accept the compensation offered, said Nguyen Ngoc Toan, deputy head of Binh Dinh's Economic Zones Management Department.

The Sai Gon Tiep Thi (Sai Gon Marketing) newspaper last Monday cited Toan as saying unfeasible site clearance policies had held back progress in site clearance work at both parks.

Provincial authorities, therefore, decided to postpone site clearance work in some residential areas where they were still negotiating compensation with residents, Toan said.

He said the 30 per cent of households who stayed back should move because pollution in provincial IPs in general and Phu Tai and Long My in particular had become more critical.

Thousands of households live on one side of National Road 1A, facing hundreds of factories on the other side that process wood, stone, agricultural products and building materials, emitting thick smoke and dust into the air everyday.

Worst till, 10 per cent of the agricultural land in the area has been inundated with waste and rubbish discharged by manufacturers in the industrial parks for the last seven years, local officials say.

According to Dang Thuc, a Party cell secretary in Bui Thi Xuan ward, many factories in industrial parks do not have waste treatment systems and discharge all their untreated waste into the public sewer system, seriously choking it.

The 348ha Phu Tai industrial park and 210ha Long My industrial park are located in Bui Thi Xuan and Tran Quang Dieu wards, respectively.

UN eyes nation's disaster readiness

Viet Nam's efforts in passing legislation to allocate sufficient resources to disaster risk management have been highlighted by a United Nations report.

The report was launched by UN Secretary General Ban Ki-Moon at the Third Session of the Global Platform for Disaster Risk Reduction in Geneva yesterday.

The Viet Nam case was given in the context that most countries reported little progress toward strengthening their disaster risk management, said the report entitled Revealing Risk, Redefining Development.

Viet Nam's resources for implementing disaster risk management included structural measures, from national level down to individual communities, said the report, the second edition of the United Nations 2011 Global Assessment Report on Disaster Risk Reduction.

With Viet Nam's approval of the National Disaster Risk Management Strategy, the National Target Programme to respond to Climate Change (NTP on CCA) and the Community-Based Disaster Risk Management (CBDRM) Plan, significant resources had been budgeted to implement these priorities and activities.

The three main funding sources in Viet Nam included the State (central and local), international contributors, and civil society and individual contributors. For example, the implementation of the CBDRM plan from now to 2020 would require VND988 billion (US$48 million), of which the State would cover 55 per cent, individuals 5 per cent and official development assistance 40 per cent.

The Global Platform for Disaster Risk Reduction was established in 2007 as a biennial forum for information exchange and partnership building across sectors to improve the implementation of disaster risk reduction through better communication and co-ordination among stakeholders.

Delta prepares to fight land erosion

Authorities in the Cuu Long (Mekong) Delta provinces are taking several measures to deal with the growing problem of land erosion in a region crisscrossed by thousands of rivers and canals.

Can Tho City's Department of Agriculture and Rural Development said landmarks are being planted at vulnerable sites to warn residents and a plan is being prepared to evacuate residents from erosion prone areas.

By 2015, the city will resettle 40 per cent of the families that live on river and canal banks in new urban zones, it added.

A report by the General Department of Environment under the Ministry of Natural Resources and Environment shows that Dong Thap Province has at least 100 river and canal sections where the threat of collapse is high.

The report puts the number of erosion-prone sites in An Giang and Hau Giang provinces at 56 and 55 respectively. These provinces have said they also planned to evacuate people and shore up river and canal banks with concrete.

In Chau Thanh District, a land erosion hotspot in Tien Giang Province, local authorities have developed three new residential areas to resettle families. But local officials said they did not have the budget to build dykes.

The problem of land erosion has gained greater urgency with recent collapses claiming human lives and destroying property.

In Can Tho, the collapse of a market section on May 9 killed two vendors and injured five people. In An Giang, a landslide on National Highway 91 last year blocked traffic for nearly one week.

Experts have said that the main reasons for increasing land erosion are the low volume of water in rivers and canals, over-exploitation of sand, and weak dyke systems.

Northwest region prone to unstable geological hazards

The nation's northwestern region is susceptible to a wide range of geological hazards but research on the nature and extent of the risks remain limited, says the Viet Nam General Association of Geology.

Prof Dao Van Thinh from the association's Institute of Geology and Environment said that earthquakes were one of few hazards to have received relatively meticulous research, and studies have shown that the northwestern region has the highest earthquake danger in Viet Nam.

In the century between 1903 and 2003, the region was struck with 340 recorded earthquakes of different magnitudes. Over 70 per cent measured less than 5 magnitude on the Richter scale, which would cause noticeable shaking of indoor items and rattling noises but minimal damage.

Prof Nguyen Dich Dy from the Centre of Geographic Environment and Territory Management said the typical geological features of the region were topographical extremes of elevation and subsidance.

"The amplitude of displacement in the region is amongst the highest in the nation and the neo-tectonic deformation is ongoing, resulting in complex tectonic settings of large differentia," Dy said.

Thinh agreed, noting high landslide risks in such areas as along National Highways 32 and 12 connecting Lai Chau and Dien Bien provinces and National Highway 127 from Muong Te to Lai Chau.

A survey conducted by the National Centre for Hydro-Metorological Forecasting also found that, between 1953 to 2004, there were at least 317 flash floods nationwide, with the majority occuring in the northwest region.

"Flash floods are occurring at greater frequency and causing more extensive damage," Thinh said.

Centre director Dinh Van Hung said that, apart from natural factors, widespread and unplanned exploitation of natural resources has also destabilised the region's geography.

"It is high time the northwestern region should have a master plan on land use and management," Hung told Viet Nam News.

The northwestern region of Viet Nam includes Hoa Binh, Yen Bai, Son La, Dien Bien, Lao Cai, and Lai Chau provinces and part of Phu Tho Province.

Australia to provide $150 million in ODA

The Australian Government will provide Viet Nam with A$137.9 million (US$150 million) in official development assistance during 2011-12, an 8.2 per cent increase on 2010-11 figures.

"The increase in aid funding to Viet Nam demonstrates Australia's long-term commitment to assist the country in reducing poverty and achieving sustainable development," said the Australian Ambassador to Viet Nam, Allaster Cox.

Part of the aid will be spent on financing the design of Cao Lanh Bridge in southern Dong Thap Province. The bridge is expected to deliver significant economic and social benefits by improving transport access to local residents.

Australia also plans to award Viet Nam with 245 scholarships during 2012 in order to promote the knowledge, education and skills of Vietnamese people in better contributing to the country's development.

The aid, managed by the Australian agency for International Development, aims to help Viet Nam strengthen its human resource development and economic integration programme while improving infrastructure and ensuring environmental sustainability.

Strategy on climate change to be done early June

The Ministry of Natural Resources and Environment will submit a strategy on climate change to the Government for final approval by early June this year.

Deputy Minister Tran Hong Ha told the Daily on Tuesday that the draft strategy would be completed this month after collecting suggestions from international and domestic scientists.

Scientists and environmentalists in northern and central provinces will gather at a seminar in Hanoi next week to discuss the strategy on adapting to negative impacts of climate change for the country within the next 50 years, he said.

“The national strategy on adaptation to climate change will include concrete actions and prospects until 2050 with a vision to 2100. It will focus on some main actions such as the construction of coastal breakwaters, and irrigation works to fight seawater intrusion and prevent high tides,” he said.

According to a latest calculation by the World Bank, Vietnam needs to spend some US$850 million each year between now and 2050 on the basic works to adapt to climate change.

At a seminar on climate change organized in HCMC on March 18, a representative of the World Bank said Vietnam needs the mentioned budget for the four main sectors including US$160 million for agriculture and US$450 million for basic infrastructure.

Vietnam is one of the countries most vulnerable to climate change in the coming years.

Scientists said if global temperatures surged by 2-3 degrees Celsius, sea levels would rise by 75 centimeters and that vast areas along the coast and the Mekong Delta would be submerged under water. If sea levels rose by one meter, 38% of the land area in the delta would be under permanent flooding.

Related to a decision of Laos to postpone construction of Xayaburi Hydropower Dam, Ha of the environment ministry said that was a positive signal from the Lao government. He stressed that if the Xayaburi dam was constructed, millions of people in the lower Mekong River would be badly affected by the depletion of aquatic products.

Ha also said Vietnam and the Netherlands had started a project on adapting to climate change for the Mekong Delta. The project focuses on mapping out sustainable development solutions for the water-clogged area in the coming years.

Climate change plan is vital for Viet Nam

Climate change has affected the socio-economic development of many countries around the world, including Viet Nam.

Despite its negative impact, it has given people a chance to re-think sustainable development in terms of low-carbon production out-put. It has also given the international community a chance to join hands in response to environmental protection, said Deputy Minister of Natural Resources and Environment Tran Hong Ha.

Speaking at a consultation workshop, set up to draft a Strategy on Climate Change from 2050-2100, held in Ha Noi yesterday, Deputy Minister Ha said that such a strategy was necessary in order for the country to develop drastic measures in coping with the global issue of climate change.

Under the draft, Viet Nam aims to ready itself for active response to natural disasters in terms of weather surveillance, with the implementation of a modern early warning system.

The country aims to complete its network of surveillance stations by 2015.

All hydro-meteorological forecasting stations will be upgraded to keep pace with those in developed countries while, by 2020, 90 per cent of stations will be expected to operate automatically.

Le Cong Thanh, director of the Department of Hydro-Meteorology and Climate Change, responsible for drawing up the strategy, said that the Vietnamese Government had previously approved an action plan in response to climate change in 2008, but that it only focused on measures to adapt and mitigate the impact. Provinces and cities nation-wide were called upon to design their own detailed action plans to further local socio-economic development.

The initial strategy additionally covered the reduction of green house gas emissions, he said.

"Tasks outlined in the draft would not only be related to the impact of climate change, but also to food and water resource security as well as the efficient use of energy," he said.

The draft proposes raising the country's forest coverage to 47 per cent by 2020, seeing as forests could help deal with flooding and soil degradation. Authorities responsible for forest projects could enjoy financial support from the Government as well as international organizations.

Thanh said that relevant ministries were currently drafting criteria for climate change response projects.

He additionally emphasized that scenarios for climate change were not fixed due to changing situations, urging authorities to be flexible in adapting policies and projects.

During the last 50 years, the country's average temperature has increased by about 0.5 Degrees Celsius while the sea level rose by about 20 cm. Extreme weather conditions including storms, floods and droughts were occurring more and more frequently, according to the Ministry's Hydro-meteorology and Environment Institute.

Hai Phong, Brest jointly protect sea environment

Vietnam's northern coastal city of Hai Phong and the city of Brest of France have agreed to continue to cooperate in protecting sea environment.

Hai Phong's authorities signed related documents with representatives from Brest Métropole Océane and Technopole Brest-Iroise organizations of Brest city on the sidelines of an international conference entitled "Safer seas: For safer and cleaner seas" in Brest from May 10-13.

Dr Nguyen Dinh Lan, Deputy Director of Vietnam's Institute of Marine Environment and Resources said these documents will enable Hai Phong and Brest to launch the second phase of their cooperative programme on sea environment.

The French side will provide Hai Phong with funding and experts to undertake the transfer of technology to the city, helping it build an information system on natural resources and marine environment in its waters, Dr. Lan told the Paris-based Vietnam News Agency correspondent.

The French side will also assist the Vietnamese city in establishing a coastal project management board as well as in developing a specialized mapping system to monitor and give early warnings on environmental incidences.

The first stage of cooperation between the two cities kicked off in February, 2007, focusing on analyzing the protection of marine environment.

The conference "Safer seas: For safer and cleaner seas" brought together 600 representatives from coastal cities worldwide, including Deputy Chairman of Hai Phong People's Committee Hoang Van Ke and Deputy Director of Hai Phong Seaport Nguyen Chu Giang.

IPs play dirty in war on waste

The unchecked release of untreated effluents into the environment by a majority of industrial parks (IPs) is killing rivers as well as fishing as a vocation in many localities nationwide, residents complain.

Officials at all levels agree. A recent report by the Department of IP Management under the Ministry of Planning and Investment said just 105 out of 260 industrial parks (IPs) in the country had central wastewater treatment systems.

The remaining 155 dumped their effluents directly into the environment without any treatment, and this poses a serious pollution threat, the department said.

Inspectors with the Ministry of Natural Resources and Environment affirmed this, saying 40 per cent of IPs in the country have been targeted for inspection after violating environment protection laws.

In HCM City, inspectors of the city Department of Natural Resources and Environment have said that the Cat Lai 2, Hiep Phuoc, Tan Tao, Tan Thoi Hiep, Tay Bac Cu Chi and Binh Chieu IPs released around 1,000 cubic metres of untreated wastewater directly into the environment every day.

The department has also listed other IPs such as Tan Phu Trung, Linh Trung III, Le Minh Xuan as hotspots of environmental pollution. In neighbouring Binh Duong Province, 14 out of 21 IPs have been found polluting the environment with untreated effluents, including eight that exceeded the allowed level by as much as 10 times.

The eight offenders were: Binh Duong, Song Than 2, Tan Dong Hiep A, Tan Dong Hiep B, Dong An 1, My Phuoc 3, Nam Tan Huyen and Viet Huong 2.

Three out of eight IPs in Ba Ria – Vung Tau Province were operating without a wastewater treatment system and two of them – Phu My I and My Xuan A2 – were exceeding allowed levels, inspectors of the Ministry of Natural Resources and Environment said.

New wastewater treatment kicks off

HCM CITY — South Korean environmental scientists have urged city officials to use the upflow multi-layer bio reactor (UMBR) for waste treatment as it uses less energy, has lower construction costs, and needs less land compared to conventional activated-sludge processes and other biological nutrient removal processes.

"UMBR will also provide easier operation and maintenance, as demonstrated by several full-scale applications," said Eung-Taek Lee, chief of South Korea-based Ecodigm company's Technical Research Centre.

The UMBR acts as a primary settling tank, anoxic reactor and thickener, and requires low energy by mixing the up-flow stream. A plug flow reaction with the up-flow mode allows a high amount of biomass to be maintained.

From September 2009 to August 2010, a pilot UMBR project for sewage treatment with capacity of 30 m3/day ran at Binh Hung Hoa decentralised wastewater treatment plant and Le Minh Xuan Industrial Park. — VNS

Inspectors have also found that IPs in the northern region were guilty of similar pollution offences as their southern counterparts.

Many people have called for stricter management of waste treatment including making an effective system mandatory for approving an IP.

They have also said that no new IPs should be allowed in localities already suffering pollution caused by existing parks.

Moribund rivers: Rivers are the biggest victims of wastewater discharged by IPs.

In Ba Ria – Vung Tau Province, residents who live on the banks of the Rach Van River, have complained that several factories have severely polluted the river, affecting the fish on which their livelihoods depend.

"The factories often use the cover of rain to illegally release wastewater, killing massive numbers of natural and farmed fish, as well as fish fry," said Duong Van Phan, a resident of Long Son Commune.

This has been happening for the last six years, he said.

Vo Van Mui, chairman of the Long Son Commune, said he had informed concerned agencies about the pollution that has become severe, but there has been no response. "I have to bring the problems up at the upcoming People's Council congress," he said.

Fish have been dying in large numbers in a 14-km section of the Serepok River in Dak Lak Province's Hoa Phu Commune.

Residents there said the direct discharge of wastewater by sugar mills in the Tam Thang IP, which had a total capacity of 1,500 tonnes of sugarcanes per day, have seriously polluted the river.

Fishermen in the commune have had to give up their vocation, they added.

Unhealthy hospitals: In HCM City, the pollution problem is worsened by hospitals.

A recent report by the city's Department of Natural Resources and Environment said there were 7,200 healthcare clinics, 322 local clinic stations and four hospitals operating without waste treatment systems.

Forty hospitals are equipped with waste treatment systems but the amount released is higher than allowed, and the culprits include leading institutions like Cho Ray, Buu Dien II, and Thong Nhat hospitals, as well as the Pasteur Institute.

Experts are concerned that the pollution caused by hospitals can prove more dangerous than normal because they are based in predominantly residential areas.

They acknowledge that authorities have asked the medical institutions to upgrade their waste treatment systems, but add that this is happening at a very tardy pace.

Illegal gold exploitation pollutes Dak Rong River

Illegal gold exploitation has caused serious pollution along the Dak Rong River in the central province of Quang Tri.

According to Dak Rong District Police, dozens of companies have been exploiting gold in the district, but only five have licenses. One mineral exploitation company in the district was granted a license by the Ministry of Natural Resources and Environment, while the other four have been licensed by the provincial People's Committee.

"Local police have tried to fine and stop unlicensed companies mining in the area but they continue to repeat their violations," said Ho Quang Than, head of the district police.

And the licensed companies were also discharging waste water into the river from which 90 per cent of residents in the district obtained their water, he said.

Mineral Joint-stock Company No 4 had also been drilling late in the day disturbing local residents – a flagrant violation of its license, he added.

The Mineral Joint-stock Company No 4 and the Bach Dang Construction Joint-stock Company often hire local residents to illegally exploit gold in the area. Most of those are ethnic Pa Co and Van Kieu. "[They are poor] which means they are easily taken advantage of," Than said.

"The areas where gold is illegally exploited are also hot spots for heroin trafficking and gambling," he added.

Last month the district police clamped down on mining in A Vao and Pa Tang communes. Police confiscated explosives and six drilling machines.

This month police would carry out further raids in A Bung, A Vao, Ta Rut and Ta Long communes, Than said.

The police have also given local people's committees details of those firms that are breaking the law.

Nation develops plan to mitigate climate change

Deputy Prime Minister Hoang Trung Hai delivers a speech at the 17th Future of Asia Conference in Tokyo, Japan. — VNA/VNS Photo Hong Ha

Viet Nam has developed a general plan to minimize and cope with the impacts of climate change with the assistance of development partners, said Deputy Prime Minister Hoang Trung Hai yesterday in Tokyo.

Hai is attending the 17th Future of Asia Conference held by Nikkei and the Japan Centre for Economy Research, which urges all nations to act for change. He emphasized that it was essential for countries to not only increase their adaptability to change but also develop suitable economic development models.

Hai called on countries to share responsibility in protecting the Earth by seeking a common voice and agreement in international treaties.

Recent disasters in Japan affected not only the country but also others in the region, he said. Without good coping measures a natural disaster could diminish many years of previous efforts and result in a greater barrier to sustainable development of the region, he said.

Hai said Viet Nam had concentrated on building policies and methods to cope with climate change in its sustainable development strategy. Plans called for the activities to be built and carried out flexibly in all localities, sectors and ministries.

The Vietnamese Government would also create good conditions and support for enterprises to adopt environmental protection measures and cope with climate change, he said, adding that Viet Nam would take advantage of international experience and support in building and carrying out the measures and policies.

On the sidelines of the conference, Deputy Prime Minister Hoang Trung Hai spoke with leaders of several Japanese socio-economic agencies.

The Deputy PM talked with people from the Japan Bank for International Cooperation, the Japan External Trade Organisation, the Japan-Viet Nam Friendship Parliamentary Group and the Japan International Cooperation Agency. Hai committed to creating favorable conditions for Japanese enterprises to participate in development projects in Viet Nam and thanked the Japanese Government for allocating Official Development Assistance (ODA) to Viet Nam during the past 20 years as it had helped to develop the country's economy and infrastructure.

He affirmed that Viet Nam would make the best use of ODA and expressed his hope that Japan would continue to boost important projects approved by the two countries. Hai also took the opportunity to express sympathy over the devastating tsunami and earthquake that struck Japan on March 11. He said that as a strategic partner, Viet Nam would always stand shoulder to shoulder with Japan and support the Japanese people in overcoming the consequences of disaster.

The Japanese leaders thanked the Vietnamese Government and people for their great support both in material and spiritual aid during their most difficult time. They said they believed that Japan-Viet Nam relations would be further improved and developed in the future, while revealing that Japanese businesses would soon restore manufacturing processes affected by the disasters in foreign countries.

Ancient turtle wants to return to Hoan Kiem Lake

The legendary turtle has shown signs of unsuitability to the life in the artificial tank. The Hanoi Department of Science and Technology is seeking way to put her back into the lake as soon as possible.

Dr. Bui Quang Te, leader of the turtle treatment team, said that in the recent hot days, the turtle did not eat for three consecutive days. "I've warned that it would be a matter if the temperature is over 30 degree Celsius. The turtle must be brought back to the lake as soon as possible," Dr. Te emphasized.

Dr. Dang Gia Tung, deputy director of the Hanoi Zoo, also said that the turtle must be released back into the lake early. However, experts should fence a zone in the lake as the home for the turtle. He also worried that the turtle may be tamed after a long time living in an artificial tank, especially the way it is fed.

"I was surprised that they strike fish dead and give dead fish to the turtle," he said.

Other experts agreed to release the turtle back into the lake as soon as possible, but the turtle must be ensured to not be shocked, hungry or get diseases again.

Le Xuan Rao, director of the Hanoi Department of Science and Technology, said that the treatment has nearly finished, but the Hoan Kiem Lake has not been cleaned up yet to welcome the turtle back.

"Fish have not been released to the lake, so there is no food for the turtle right now," said Prof. Dang Dinh Kim from the Institute for Environmental Technology.

His research work shows that the projects to dredge the lake in 2009 and 2010, helped eliminate harmful micro-organisms in the surface of the mud layer in Hoan Kiem lake, but this solution is unsustainable.

Many solutions to clean the lake have been suggested, including using bio-products which were used to clean up the lake at the Temple of Literature last year and a German method to dredge mud.

Dr. Leah Wollenberrger from the Dresden University (Germany) said that equipment will be brought to Vietnam in November 2011. The project will be implemented in a year to dredge 50,000 cum of mud. Dresden University and some Vietnamese institutes will make observation.

At the same time, sticking chipset to the turtle is a controversy. Tim MacCormark from the Asian Turtle Preservation said that there are two ways to stick chipsets to turtles. For hard-shell turtles, the chipset is often stuck by special glue and for soft-shell turtles; the device is stuck by a belt or through a hole at the turtle's tale.

Vietnamese scientists did not agree with both ways. Dr. Nguyen Viet Vinh said that if the device is stuck these ways, the Hoan Kiem turtle may be stuck with objects in the lake bed and die.

Many experts say that it is unnecessary to stick chipset to keep track of the turtle.

Director of the Hanoi Department of Science and Technology, Le Xuan Rao said that the department would collect all opinions and report to the Hanoi authorities for final approval.

City flood prevention efforts begin to pay off

Flood-prevention works undertaken recently in HCM City have begun to bear results in several inner city areas.

People living in Nguyen Thi Nho Street in Districts 6 and 11, Tran Binh Trong Street in District 5, Le Hong Phong Street in District 10, Pham The Hien Street in District 8, and Phan Dinh Phung and Dinh Tien Hoang streets in Phu Nhuan District used to dread the rains because their houses would be flooded.

But some flood-prevention projects completed last year have eased their misery.

Tran Quoc Tai, owner of a rice shop on Nguyen Thi Nho Street, said: "Since last year this street and the Cho Lon Passenger Bus Station area have not been flooded."

Phan Chau Thuan, director of the HCM City Environmental Sanitation Project in the Nhieu Loc – Thi Nghe Basin, said a culvert system would be completed this year.

That would reduce the flooding caused by rain and river tides in Districts 1, 3, 10, Binh Thanh, Tan Binh, Phu Nhuan, and Go Vap, he said.

The city People's Committee has ordered relevant departments and agencies to draw up a programme for 2011-15 focusing on improving sites that are prone to flooding.

It will include relocation of all illegal slums along canals by the end of next year.

It will also replace small old sewers on main streets with larger ones to prevent flooding in Districts 5, 6, 11, 12, Binh Tan, Tan Phu, Go Vap, and Binh Chanh.

The People's Committee has also instructed relevant departments and agencies to speed up work on several ongoing projects to prevent flooding caused by high tides and heavy rains, including the second phase of the Water Environment Improvement Project in Ben Nghe – Tau Hu and Kenh Doi-Kenh Te Canals, dyke construction along Sai Gon River's right bank, and dredging of Thu Dao, Ba Lon, Ong Lon, and other canals.

In 2009, there were 96 spots prone to flooding during heavy rain and 67 during high tide.

But last year only 50 streets were flooded.

HCM City to spend VND4 trillion for climate change

From 2011 to 2015, HCM City will implement 30 projects to cope with climate change, focusing on natural resource, waste, energy and land management.

The total funding for these projects is around VND4 trillion ($200 million), according to the HCM City Steering Board for Implementing Plan against Climate Change.

The HCM City Department of Natural Resources and Environment reported that under impacts from climate change, the weather in HCM City will become complicated.

The districts of Binh Chanh, Can Gio and Cu Chi will suffer the most from the impacts.

Due to climate change, the city's temperature will increase by 0.5 degree Celsius while the rainfall will increase by 0.6mm a year, making flooding more serious in the city.

HCMC plans to ensure roads are safe during rainy season

Motorists travel along flooded Huynh Tan Phat Street in HCM City's District 7. Local authorities have set out a five-year programme to prevent flooding in the inner city. — VNA/VNS Photo Hoang Hai

The Department of Transport in HCM City has prepared a plan to minimize the subsidence of road surfaces in order to ensure residents' safety during the upcoming rainy season.

The plan requires the project management boards and contractors who have undertaken underground and pavement works to ensure they check and maintain quality as well as compliance with set construction procedures.

They should make sure that the works avoid damaging the drainage system.

It also asks experts to be present while construction is happening so that they can observe and make timely adjustments and corrections in the work.

The contractors and project management boards should also make a plan to check and review all drainage systems in order to find out flaws that could affect roads and bridges, the transport department has said.

Traffic management agencies, meanwhile, have also been asked to enhance inspections so that problems in the traffic lighting system are discovered and fixed early.

The department has said that it will be strict in punishing violations.

Last month, a three-hour downpour left behind many holes in the city's roads, especially at the cross-roads of Vo Van Tan Street and Cach Mang Thang Tam Street in District 1; Le Quy Don Street and Dien Bien Phu Street in District 3; and Le Thanh Ton Street and Ton Duc Thang Street in District 1.

The holes made it difficult and dangerous for commuters to use the roads, eliciting a lot of public complaints.

Ha Noi prepares flood measures

The Ha Noi Water Drainage Company has prepared a flood scenario in preparation for potential flooding in inner Ha Noi during the upcoming rainy season.

The scenario was conduced after the National Centre for Hydro Meteorological Forecasting predicted that this year's rainy season would come earlier and last longer than in previous years. Heavy downpours began this month and are expected to go on until July.

Director of the company Nguyen Le said the scenario was divided into three likely possibilities according to progressively higher water levels.

Specifically, with less than 50mm of rainfall, Ha Noi would experience little flooding but stagnant water would likely cover low-lying areas. In this case, rescue forces would be on duty to dredge ditches and facilitate water drainage.

With rainfall of between 50 and 100mm, flooding would likely be reported in several key areas. The Yen So Pumping Station, together with Thanh Liet Dam and other stations in Kim Lien Tunnel and Chui Bridge, would operate at full capacity to pump excessive water into Hong River. Mobile pumping forces would be ordered to take duty positions on Thuy Khue, Ngo Quyen and Ton Dan streets.

If rainfall were to exceed 100mm, as many as 23 flooded areas would likely be reported. All available task forces would be mobilized to facilitate city drainage and dams would be opened if necessary.

Deputy Director of the municipal Department of Construction Le Van Duc said the city could handle quick drainage if rainfall measured 310mm or less over a two day period.

Last Wednesday, the municipal People's Committee chairman Nguyen The Thao noted that drainage units must conduct regular checks and improve drains in an effort to curb flooding.

Duty units would be required to work with traffic police and inspectors to assure traffic safety. Relevant ministries and sectors were asked to mobilize capital to construct nine drainage systems worth VND117 billion (US$5.6 million) this year.

Currently, a $350 million Drainage Project for Environmental Improvement is being carried out in Ha Noi. Phase 1 of the project was completed in 2005 which brought the city's drainage capacity to a maximum of 172mm per two days. The second phase, which kicked off last November, will increase drainage capacity to 310mm over two days.

The project is scheduled for completion by the end of this year.

Ha Noi officials determined to fight environmental pollution

Ha Noi City People's Committee Deputy Chairman Vu Hong Khanh spoke with Ha Noi Moi (New Ha Noi) newspaper about measures to improve environmental quality.

Environmental pollution has been a pressing issue throughout urban areas. How has Ha Noi dealt with this problem? Environmental pollution, in the case of solid waste, waste water and polluted air in particular, has not yet been improved.

Ha Noi City People's Committee has called on the municipal Natural Resources and Environment Department to adopt a range of measures, including organizing environmental inspection teams and punishment measures to help curb environmental pollution.

The city, with assistance from local enterprises, has achieved some progress in implementing pilot projects based on curbing the pollution of water at various inner city lakes.

Last year saw 170 production units out of an inspected 220 in violation of environmental laws. Criminal proceedings were taken in 20 cases, 10 of which lead to prosecution. According to some, Ha Noi will run out of places to dump rubbish by 2020. Is this true?

Ha Noi City has given priority and called on authorities to implement specific and effective strategies for collecting and treating solid waste. All surrounding communes and towns have established waste collection teams. Some communes and towns have even taken the initiative of developing small-scale sites to bury waste.

Having already anticipated an overload at existing dumping grounds, the city has specified seven waste treatment areas in the outlying districts of Dong Anh, Quoc Oai, Thach That, Ung Hoa, Phu Xuyen, Dan Phuong and Chuong My. The city also plans to expand the Xuan Son waste treatment zone in Son Tay District and the Nam Son waste treatment zone in Soc Son District.

Some enterprises have responded to the city's appeal for more effective waste treatment, a pioneer of which, AIC company, is currently developing a waste treatment factory based on German technology in Soc Son District as well as implementing an additional project on solid waste treatment in My Duc District.

A recent Ha Noi Party Congress resolution mentions certain criteria essential for improving environmental quality. Are these criteria feasible? Environmental protection is a regular and long-term task.

According to the resolution 100 per cent of rubbish is planned to be collected and treated daily, 100 per cent of new production units will be required to apply clean technology and be equipped with waste treatment equipment, 85 per cent of dangerous solid waste and 100 per cent of hospital waste will be treated in accordance with given standard.

In order to achieve these targets, in addition to speeding up the implementation of construction projects, the city will focus on disseminating information in order to raise awareness regarding the importance of environmental protection amongst city dwellers.

The city has called on the Natural Resources and Environment Department, in co-ordination with the planning, investment and finance departments, to prioritize effective financial allocation in implementing environmental protection projects and programmes focused on waste water treatment, rubbish collection, water improvement in lakes and sewage management. With the dedicated participation of the city, its departments and its people, I believe Ha Noi's environment will become increasingly green, clean and beautiful.

City seeks funds to dredge river

At least VND9 trillion (US$435 million) is needed to continue the Soai Rap River dredging project so that larger vessels can enter Nha Beø District's Hiep Phuoc Port Complex, according to HCM City officials.

The issue was discussed last week between the city's leading officials and Truong Tan Sang, Politburo member and standing member of the Secretariat of the Party Central Committee.

Sang told the city government to conduct a survey and use the land fund for capital to dredge the river and speed up Hiep Phuoc Port construction, which was in the second phase.

Only two months ago, the city had to allow the Soai Rap River Dredging project to go up for bid again because of the volatile exchange rate between the Vietnamese dong and US dollar.

The project was originally planned with an investment of around VND1.5 trillion, which would be raised from other sources than the State budget. The first of the three phases of the dredging project began in April 2009.

The first phase, to last until 2010, would allow 30,000-50,000-DWT (dry weight) ships to pass through.

The second phase in 2012-13 would see 50,000-70,000 tonne ships come up to the Hiep Phuoc Port Complex, and after 2015 the river would be dredged to a depth of 12 metres, allowing 70,000-tonne vessels.

Le Cong Minh, general director of Sai Gon Port Company, said the first phase of the construction of Sai Gon - Hiep Phuoc Port had been completed. It would be put into use in the fourth quarter of the year.

However, the access road to the port had not been built because the second phase of construction had faced a shortfall of capital, Minh added.

Work halted on port construction

Construction of the Van Phong International Port in the southern central province of Khanh Hoa has been suspended for one year with no indication of a resumption date.

Ships in Van Phong Bay in the southern central province of Khanh Hoa, Construction of the Van Phong International Port in the province has been suspended for a year with no indication of a resumption date. — VNA/VNS Photo Le Ba Duong

"Construction will resume pending a decision by the Prime Minister", said Nguyen Ngoc Quy, director of the Viet Nam National Shipping Lines (Vinalines) Management Board of Marine Projects No 1, in charge of managing the project.

Port construction began at the end of October 2009 in Van Thanh Commune, Van Ninh District.

The port, with a total investment of US$3.6 billion, is hoped to become the hub of Viet Nam. Construction is set to reach completion after 2020, according to the project investor Vinalines.

With only five months left for completing the first phase construction, which would enable the port to handle container ships of up to 9,000TEU, the building site remains deserted.

Construction had been suspended due to a geological recheck, Quy said. Initial explorative drilling did little to encompass area geology, causing faults in pile design. To date, only 6 per cent of the total number of piles, priced at VND10 million ($476) per meter, has been completed.

The project has been faced with a number of obstacles apart from those related to geology, Quy said. "It has been extremely difficult to mobilize capital for a huge project such as the Van Phong Port, current interest rates being so high," Quy added.

Deputy Director of the Van Phong Economic Zone Management Board Hoang Dinh Phi said that Vinalines were committed to ensuring sufficient capital for project completion.

An additional problem relates to port design, which has changed continually. At first, the port was planned to handle container ships of 6,000TEU, then of 8,000TEU and finally of 9,000TEU.

Rapid economic development had increased the demand for goods transportation, Quy said. The Thi Vai – Cai Mep Port in nearby Ba Ria – Vung Tau Province is already capable of handling 9,000TEU container ships.

The current design also needed changing in order to keep abreast of development, he added. The Government had agreed with Vinalines in changing port design to enable it to handle 12,000TEU and 15,000TEU container ships. Quy could not confirm when work would be resumed.

According to a Khanh Hoa People's Committee report, the Van Phong Economic Zone has attracted 101 projects, of which only 16 have come into full operation.

Slow progress is rife, especially at the $4.5 billion Nam Van Phong Oil Refinery, and the $3.8 billion Van Phong Electricity Centre.

According to experts, the Van Phong International Port will play a key role in the development of the Van Phong Economic Zone, despite slow progress having hampered investment in the area.

Underground water exhausted, Hanoi to use river water

Hanoi will give priority to projects to explore water from the Red, Duong and Da rivers, since the underground water resources have been exhausted.

The capital for these projects is estimated at over VND7.86 trillion or $393 million for the period of 2011-2015.

Le Van Duc, Deputy Director of the Hanoi Department of Construction, Hanoi's demand for clean water reaches around 965,500 cum a day. It will rise to over 1.23 million cum a day by 2015.

To meet the rising need for clean water, Hanoi will build the Red River water supply plant and Duong River water plant, while raise the capacity of the Da River water supply plant.

According to the Hanoi Clean Water Company, the capital city's underground water resources have been exhausted, especially in the dry season. The input cost for exploring underground water, thus, has increased extensively, causing losses for the company.

The $393 million plan to exploit river water has been submitted to the Hanoi authorities for approval. Accordingly, the entire residents of ten urban districts and Son Tay town will be supplied with tap water.

Hanoi, the second biggest city in Vietnam, with 6.5 million people, currently has four water works which provide nearly 700,000 cubic meters per day.

The majority of the city's water comes from underground reserves, and only a small percentage came from the surface.

Overexploitation of underground reserves would have a massive effect on the city's strata, and cause depressions on construction sites and in urban areas.

Support for climate framework

Viet Nam has given its full support for the proposed Global Framework for Climate Services on the sidelines of the 16th congress of the World Meteorology Organisation.

The proposed framework is designed to help countries – particularly the most vulnerable – cope with climate variability and climate change. It is one of the priorities under discussion at the congress which is held every four years.

The framework would effectively close the gaps in the provision of existing information and services, said Deputy Minister of Natural Resources and Environment Tran Hong Ha on Wednesday.

It would make them available to around 70 developing countries which had little or no such climate information, providing tailor-made information systems which were accurate, reliable and relevant.

The implementation of the framework would create an important step to countries like Viet Nam in their efforts to combat the impacts of climate change, said Ha, who heads the Viet Nam delegation to the congress from May 16 to June 3.

Viet Nam was one of the front-line countries affected by the impacts of climate change and had experienced an increase in the frequency and changing pattern of floods and storms, he said.

The consequences of climate change would be serious, he said. Early forecasts and sufficient climate change information would have positive impacts, particularly in natural disaster reduction.

It was for this reason that Viet Nam supported the establishment of the framework and hoped it would soon be put into practice, he said.

By the end of the 21st century, the average temperature in Viet Nam was forecast to rise by 2.3C, with more rainfall in the wet season and less in the dry.

Seawater could rise by 0.7cm to 1m compared to the 1980-1999 average. Such a level would flood 40 per cent of the Mekong River Delta, 11 per cent of the Red River Delta and 3 per cent of other coastal areas. About 20 per cent of HCM City will be under water.

Viet Nam wanted to fully prepare and mitigate the impacts of climate change through early forecasts, Ha said.

At the Congress, Viet Nam was selected by organisation members to take part in a 12 member nomination committee in preparation for the congress's election of the leading bodies.

The Vietnamese delegation took part in several important sessions and had bilateral contacts with delegations from China, Japan, South Korea and the United States.

The Congress yesterday elected David Grimes from Canada as organisation president and Michel Jarraud its secretary-general for the 2011-15 period.

Deputy PM calls for collective effort against climate change

Deputy Prime Minister Hoang Trung Hai has called on nations worldwide to share common responsibility in protecting the Earth and cope with climate change.

Consequences of earthquake and tsunami in Japan on March 11 (Source: AFP/VNA)

At the 16 th International Conference on the Future of Asia in Tokyo, Japan, on May 26, Deputy PM Hai emphasised the urgent need for each nation and the region to enhance adaptation, mitigate impacts of climate change and seek a sustainable economic development model.

Coping with climate change requires not only the efforts of a single nation but also global joint activities in terms of adaptation and mitigation, he said.

He spoke of the impacts of the recent earthquake and tsunami in Japan which have greatly influenced not only the country and but also the world in various fields.

Construction and development achieved over many years can disappear in a disaster unless there were accurate forecasts and timely measures to cope, Hai said.

He noted that disasters and environmental challenges would hinder socio-economic development and threaten national and regional sustainability unless appropriate measures were put in place.

According to the Deputy PM, Vietnam has over the past years devised policies and taken measures to cope with climate change in its sustainable development strategy.

The nation has provided financial assistance to businesses in environmental protection and coping with climate change, he said.

Mekong Delta at risk from landslides during dry season

Unlike in the past landslides are now a threat even during the dry season along the Tien and Hau Rivers in the Cuu Long (Mekong) Delta.

In dozens of areas, their banks slid into the water this year, taking buildings with them, and occasionally killing people.

Le Van Hung, head of Dong Thap Province's Irrigation Bureau, said while in the past landslides were rarely a threat during the dry season, now they occur throughout the year.

Dong Thap alone has 100 landslide-prone spots, with many in the districts of Thanh Binh, Tam Nong, Hong Ngu, and Chau Thanh being especially dangerous.

The An Giang Province Department of Agriculture and Rural Development said 45 spots along the banks of the two rivers have been designated as highly threatened.

In Can Tho, there are 24 such spots that pose a major risk to people.

Nguyen Huu Chiem of Can Tho University's Department of Environment and Natural Resources Management said the uncontrolled mining of sand has changed water flows, causing the rivers to run onto their banks and set off landslides.

Authorities in the region are trying to prevent the landslides but it is a difficult task.

Dong Thap and An Giang Provinces are building housing in safe areas to relocate people from risky areas, while Can Tho plans to build 24 embankments by 2030.

But irrigation experts warn that the solutions can only be temporary because there is no foolproof way to completely prevent landslides

Dams over troubled waters

Much has been said about the impacts of dams on freshwater fish stocks in the Mekong River. However, the effects on marine fishery output also deserve thorough consideration.

The Mekong Delta boasts Vietnam's biggest marine fishery output although its coastline is only some 736km long, less than a quarter of Vietnam's.

Figures from the General Statistics Office show that marine fishery output in the Mekong Delta hit 606,500 tons in 2009, almost equal to that of Vietnam's southeastern region, central and northern central regions and the Red River Delta combined, and nearly eight times that of the Red River Delta (77,900 tons). The Mekong Delta had 25,000 fishing boats in 2008, including 6,000 off-shore vessels, and saw its fishery export jump from US$1.2 billion in 2003 to US$4.2 billion in 2009. In fact, its export destinations number more than 130 countries at present.

The fishing industry also fuels the growth of some other sectors such as processing, transport, commerce and material supply. It is thus no surprise why Kien Giang's fishing ports are the biggest in Vietnam. The south's abundant seafood output is ascribable mainly to nutrients supplied by the Mekong River.

The plume

The Mekong River basin extends far beyond its estuary to include a plume, whose seafood output depends on nutrients from the river. On average, the Mekong River discharges some 475 billion cubic meters of water per annum into the sea. The volumes discharged peak in October and hit their trough in May.

Together with climate change, pollution, over fishing and the decline of mangrove forests, hydropower dams have posed a threat to the Mekong Delta's fishery output. The strategic environmental assessment (SEA) report compiled by the Mekong River Commission (MRC) contends that the primary biological productivity of nearby coastal areas will fall due to a nutrient supply crunch. Consequently, the fishing industry and supporting sectors will suffer.

The report states that the delta's marine fishery hinges on approximately 16,000 tons of attached nutrients deposited by the Mekong plume in the shallow, near-coastal shelf of the region. The issue is to what extent marine fish stocks will be affected by current and upcoming hydropower dams.

Experience from the world

The detrimental effects of dams on marine fishery have been evident in many countries for a long time. A report by A.A. ALEEM published in Marine Biology and presented at a conference in September 1970 in Tokyo indicated that the construction of Aswan dam in Egypt and disruptions in the flow of the Nile River into the Mediterranean River since 1965 (35 billion cubic meters per annum) were deleterious to coastal areas in the region. Brackish-water fish stocks also dropped.

The nutrient content slid sharply, plankton virtually vanished and sardine catches plunged from 15,000 tons in 1964 to 4,600 tons in 1965 and 554 tons in 1966. As nutrients, organic substances and silt deposits shrank, biodiversity was adversely affected. Coastal erosion also accelerated, inflicting damage on reservoirs and leading to an urgent need for remedies.

Meanwhile, statistics from the Food and Agriculture Organization (FAO) show that Australia's freshwater and marine fishery outputs in 2005-2007 reached about 140,000 tons per annum on

average. According to the Australian Bureau of Agricultural and Resource Economics, the country's marine fishery output dipped below 250,000 tons in 1997-2004.

These figures trail far behind the Mekong Delta's although Australia has a coastline of 35,000km (only the continent is considered), nearly 50 times as long as that of the delta. In fact, Australia's marine fishery output is approximately the same as Kien Giang Province's (239,000 tons in 2000). This is ascribable to Australia's vast deserts and low rainfall, which cause limited surface runoff and nutrients. As a result, Australian waters are not conducive to marine life.

Once hydropower dams along the Mekong River have all been inaugurated, the Mekong Delta risks facing the same problem, triggering a domino effect that leaves many sectors in tatters. Farmers, in particular, will be hit the hardest.

Research is vital

A growing consensus among scientists is that the dams are among factors that will reduce nutrient supply and fish catches in the Mekong River. The SEA report also forecasts that silt and nutrient supply to nearby coastal areas will fall by some 50-75% by 2030 and exert pernicious impacts on marine fishery output, as well as Vietnam's fishing industry and related sectors, which have clocked up blistering growth over the past decade.

The report admits that scientists have only a tenuous grasp of the Mekong River's marine fishery potential even though its seafood catches have surpassed 500,000 tons per annum. It is added that when the impacts have been clearer, estimated losses are likely to be enormous.

Unlike in the case of other important rivers such as the Amazon, the Yangtze or the Mississippi, the plume of the Mekong River has not been the subject of extensive and intensive research. Socio-economic and environmental impacts on the Mekong Delta remain murky, making it hard to assess the transnational effects of hydropower dams on the Mekong River.

It is clear, however, that the Mekong Delta is prone to a growing array of disasters with grave environmental, economic and social implications. The damage that hydropower dams inflict upon the Mekong River's marine fishery output and productivity will probably be irreparable and permanent. Research on the magnitude of such damage is therefore crucial, as is that on natural processes in coastal areas and at estuaries. This task entails efforts, time and money, and must be implemented as soon as possible.

Hydropower plants depleting rivers

Construction of hydro power plants has interfered with the water flow in large rivers in the Central Highlands, resulting in a steady depletion of water.

The 220MW Thuong Kon Tum Hydropower Plant broke ground two years ago on the upper reaches of the Dac Snghe River, which originates from a height of 1,780m to flow into the Dak Khich and Dak Chum Rivers and converge in the Dac Bla River.

The entire Dac Snghe River valley is located on the Kon Tum highland with its various eco systems and river edge forests. The area thus plays an important role in regulating the water resources for low-lying areas including the Se San River.

However, the Thuong Kon Tum plant has been designed to receive water from the Dac Snghe River and release into the Tra Khuc River in the neighboring province of Quang Ngai, at nearly 12 cubic meters a second, instead of flowing into the low-lying areas.

According to Nguyen Thanh Cao, Chairman of the Union of Science and Technology in Kon Tum Province, this will badly affect ecological diversity and the livelihoods of the people of the lowlands.

Additionally, the water current of the Dac Bla River will weaken, especially during the dry season. Water levels in other hydropower plant reservoirs on Se San River like Ialy, Se San 3, Se San 3A and Se San 4 will also drop, causing an estimated reduction of 321 million kWh of electricity produced from these plants.

Moreover, Gia Lai Province has permitted the building of the 63MW Se San 4A Hydropower Plant in Ia Grai District at the location of a reservoir built to regulate water on the lower sections of Se San River.

Dinh Van Nhan, director of the Se San 4 Hydropower Company said that when the Se San 4 Plant was allowed construction, the Mekong River Commission asked Vietnam to build the reservoir to regulate water on the lower sections in case the plant operates at a low capacity or not at all.

Yet, the Se San 4A is being built on the location of the reservoir, which will completely deplete the lower sections of the Se San River.

Ba River depleting

The two plants of An Khe, Kanak Hydropower Complex have been built on Ba River in Gia Lai Province. Kanak is located on the upper reaches of the river and An Khe on the lower section.

The Kanak plant has a reservoir of 8.3 cubic meters but its capacity is only about 10MW while the An Khe plant with a smaller reservoir of about 5.6 cubic meters has capacity up to 160MW.

The second plant has such a high capacity as execution units have installed pipes to release water from its reservoir in An Khe town to Kon River in Binh Dinh Province where the plant's engine units are built.

Because the water has run into Binh Dinh since the beginning of the year, Ba River has been depleted in Giai Lai and Phu Yen Provinces.

When An Khe, Kanak Hydropower Plants accumulated water in January this year, An Khe water plant provided fresh water to 70,000 households in the region. However, since the beginning of March, it has stopped operating.

The 28km section of the Ba River from An Khe town to Krong Chro District has become a dead river as all water has been blocked for the engine units in Binh Dinh Province.

Se Re Pok in high danger

At the end of the Se Re Pok River running through Yok Don National Park, a new hydropower plant is under construction. The 64 MW Se Re Pok 4A will take water from Se Re Pok 4 Plant through a 13km pipe system.

People are worried that it will lessen the water released from Se Re Pok 4 plant to the Se Re Pok River down to 8.23 cubic meters per second reducing the natural current of the river.

When the Se Re Pok 4 plant comes into operation, it will deplete the river especially during the arid season, which will prove advantageous for lumberjacks to wade across the riverbed to the Yok Don National Park and cut down trees.

Japan disasters offer disturbing lesson for Vietnamese officials

The recent quake, tsunami and nuclear incident in Japan had rung alarm bells for Viet Nam, said Vietnamese Deputy Prime Minister Hoang Trung Hai during his working visit to Japan that ended yesterday.

Hai said that over the past 10-15 years Viet Nam had lost 1-2 per cent of its GDP and about 500 people died each year from natural disasters.

Within the framework of the 17th International Conference on the Future of Asia, the Vietnamese delegation worked with Japanese leaders and officials of various ministries and major economic organizations during the five-day visit.

At the meetings, Hai affirmed that as a strategic partner of Japan Viet Nam would always support and assist the Japanese Government and people to rebuild their economy and infrastructure destroyed by natural disasters.

During the working sessions with the Japanese ministries, the two sides discussed continuing co-operation programmes related to Japanese official development assistance (ODA).

Although Japan was facing many difficulties, Japan had pledged to maintain the volume of ODA for Viet Nam, Hai said. Last year it provided 150 billion JPY (US$1.86 billion) in this form of aid.

Regarding solutions to cope with climate change, Hai said Viet Nam was coordinating closely with other nations worldwide, including Japan, to carry out projects to prevent, adapt and mitigate impacts of climate change and natural disasters on the country.

In collaboration with Japan and other nations, Viet Nam had embarked on 20 projects and programmes with a combined funding of $1.3 billion to deploy measure to cope with natural calamities. Some 10 other projects worth $1.3 billion will be implemented in the future.

Hai also praised the efforts and proactive measures the Japanese government and people and international organizations had taken to overcome the aftermath of the nuclear incident, quake and tsunami which happened more than two months ago.

Germany to close all nuclear plants by 2022

Europe's economic powerhouse, Germany, announced plans Monday to abandon nuclear energy over the next 11 years, outlining an ambitious strategy in the wake of Japan's Fukushima disaster to replace atomic power with renewable energy sources.

Chancellor Angela Merkel said she hopes the transformation to more solar, wind and hydroelectric power serves as a roadmap for other countries.

"We believe that we can show those countries who decide to abandon nuclear power -- or not to start using it -- how it is possible to achieve growth, creating jobs and economic prosperity while shifting the energy supply toward renewable energies," Merkel said.

Merkel's government said it will shut down all 17 nuclear power plants in Germany -- the world's fourth-largest economy and Europe's biggest -- by 2022. The government had no immediate estimate of the transition's overall cost.

The plan sets Germany apart from most of the other major industrialized nations. Among the other Group of Eight countries, only Italy has abandoned nuclear power, which was voted down in a referendum after the 1986 Chernobyl disaster.

Policy shift

The decision represents a remarkable about-face for Merkel's center-right government, which only late last year pushed through a plan to extend the life span of the country's reactors, with the last scheduled to go offline around 2036. But Merkel, who holds a Ph.D. in

physics, said industrialized, technologically advanced Japan's "helplessness" in the face of the Fukushima disaster made her rethink the technology's risks.

Phasing out nuclear power within a decade will be a challenge, but it will be feasible and ultimately give Germany a competitive advantage in the renewable energy era, Merkel said.

"As the first big industrialized nation, we can achieve such a transformation toward efficient and renewable energies, with all the opportunities that brings for exports, developing new technologies and jobs," Merkel told reporters.

The government said the renewable energy sector already employs about 370,000 people.

Germany's seven oldest reactors, already taken off the grid pending safety inspections following the March catastrophe at Japan's Fukushima Dai-ichi nuclear plant, will remain offline permanently, Merkel said. The plants accounted for about 40 percent of the country's nuclear power capacity.

At the time of the Japanese disaster, Germany got just under a quarter of its electricity from nuclear power, about the same share as in the U.S.

"We don't only want to renounce nuclear energy by 2022, we also want to reduce our CO2 emissions by 40 percent and double our share of renewable energies, from about 17 percent today to then 35 percent," the chancellor said.