

**IMPLEMENTATION OF NATIONAL STRATEGY ON CLEAN WATER SUPPLY AND
SANITARY IMPROVEMENT FOR THE RURAL AREA
IN HO CHI MINH CITY, VIET NAM**

FROM THE NATIONAL STRATEGY...

Clean water and a sanitary, healthy environment is a basic need in everyone's daily life but has become a pressing issue to the rural areas in Vietnam where inhabit 75% of the Country's population . Albeit agriculture being the most important component of Vietnam's national economy , people living in the country side are generally poor and increasingly become backward compared to urban inhabitants both in terms of economic growth and quality of life.

At present, 70% of the rural population have to use water of sub hygienic standard and half of the number of rural households do not have proper toilets. Water-borne diseases are common and take highest proportion among those frequently contracted by rural inhabitants. Supply of clean water for domestic use and sanitary improvement is persistently demanded on a large scale.

In this context, the government of Vietnam has, in August 2000, issued the Decision to approve the " National Strategy on Clean Water Supply and Sanitary Improvement for the Rural Areas" . The Strategy defined very concrete objectives to year 2020 (85% country people use clean water, 70% households use proper toilets, all kindergarten, schools, clinics, wet markets have proper toilets and animal waste disposal, etc.) and set forth the basic principles and key measures for implementation, mainly :

- promoting public-private partnership (socialization of the tasks of clean water supply and rural sanitary improvement) by increasing public awareness, organizing public participation in cost sharing, model selection, providing diversified investments or loans, setting up mechanism for the public to take part in operation, maintenance and management of water supply and sanitary projects and services
- establishing credit and subsidy systems whereby individual households or private sectors can get access to capital for project investment at incentive rates.
- Capacity building for application of suitable technology in optimal water distribution, clean water sources exploration, and saving on consumption. Encourage dissemination of tested and proved technology which ensure sustainable uses.
- Increasing administration effectiveness and efficiency by enhancing legislative documents, regulatory institutions and planning tasks .

All line Ministries and People's Committees at provincial and City levels are responsible for enforcement of the Decision and implementation of the Strategy.

...TO THE PILOT PROJECT AND REAL PRACTICES IN HO CHI MINH CITY

- Ho Chi Minh City and the scope of its rural areas

Known as one of the largest cities in Vietnam with very rapid economic growth , Ho Chi Minh City takes pride in being an industrial, commercial scientific and services center of the Southern region , contributing up to 37% of the national GDP yearly. However, among the 22 districts of the City, 4 are outer districts and 5 are suburban districts (with very much rural characteristics of a farming & fishing land) . These occupy 78.97% of the total area (1657.7 square kilometers out of 2,093.7 km² of the whole City). There are approximately 1.7 million people living in these districts , accounting to 32% of the City population.

The suburban farming land is planned to be sprawling space for the urban rapid development, where inner citizens will gradually move out together with the relocation of industries to the City periphery. In practice, uncontrolled growth has taken place as the pulling force of urbanization has drawn rural people from the vicinity and other provinces.

Latest statistical figures indicate less than 90% HCMC people use clean water, the situation is worse for the rural districts, where clean water is hard to access, especially in the two coastline districts of Nha Be and Can Gio. Of the 600,000 cubic meters of the City wastewater being discharged daily, 10% is from industries, which is mainly not treated nor treated to meet standards. Therefore the surface water continues to be polluted, especially on those water bodies along the districts at the downstream.

At present there is only 32.75% of the rural households having proper toilets, on average. The outer and suburban districts are locations where a large number of live stocks are being raised, and animal waste disposal is another problem. All of these factors daily poses more and more adverse impact on the air, the surface water and shallow ground water in these rural areas.

Clean water supply to the distant districts is very limited. People have to pay quite expensively for drinking/cooking water. Or they have to make do with rain water, water from rivers or canals, with very (sometimes no) primary treatment. This causes bad health effects - especially on women and children who are most vulnerable - reduction in productivity and increase in the cost for health care.

- **Project of 6 pilot models in HCMC suburban districts**

The Pilot projects on "Clean water and sanitary environment for the rural area" has been implemented over the period of five months, in 6 villages (wards) of 6 suburban districts of Ho Chi Minh City. All these sites share the typical characteristics of the rural or semi-urbanized area. The main sources of water is either from wells (dug or drilled) or rain water stored in rudimentary earth ware drums. Farming practices are mainly based on handed down experiences, on small family scale and at low yield. Pollution of surface water, air and soil is obvious, which arises from improper use of fertilizers and insecticides; poor farming practices with no barns for cattle and live stocks, no treatment of human nor animal wastes. At the set-off, the objectives were identified as:

- (i) gradually improve the living and working environment of the rural inhabitants,
- (ii) advocate and raise people's awareness on a hygienic lifestyle and on health issues related to actions for the environment, and
- (iii) assist the people to protect their health, prevent disease infections, and increase local productivity.

The Department of Agriculture and Rural Development together with DOSTE provided technical support while the local authorities supervised the implementation of the program. The local Women's Union took charge of loan appraisal and disbursement to needed households. The Youth Union and the Farmers' Association promoted people's participation in public projects. Functional agencies such as Center for Preventive Health care, Clean water Center etc. were responsible for the training and workshops. The households themselves contributed their workman day and performed as guided by the expert agencies.

The results of the projects were briefly reported in line with the main activities having been carried out, as follows:

- 290 underground tanks for animal waste treatment was built.
- 240 biogas facilities has been installed
- 1,910 existing toilets upgraded
- 26 waste bins / stations for solid waste collection and treatment set up
- 2 acres of field application of guidelines on proper use of agrochemicals
- 50 public awareness raising workshops on environmental protection and sanitary lifestyles
- 9 workshops on agric-chemicals use

The total cost of the pilot program in these six locations was reported as VND 2,693,693,080. Of this amount, only 566,802,080 came from the City's budget. The main source of funding was from the contribution of the local people, which accounted to 2,126,890,000 (approximately 80%). It is worth noticing that many households were able to get access to the City's Fund for Poverty Alleviation with no interest and long-term installment payment. Part of these loans were used by the households to cover the direct expenses as they took part in the Project both as beneficiaries and contributors.

Beside the households which received financial and technical assistance to build sanitary improvement projects, people of the whole ward in these sites were exposed to basic knowledge of hygienic ways of life and environmentally friendly farming practices. This has helped much to increase public awareness in protecting the environment and their own health, further reduce epidemic diseases and improve local productivity.

(Table 1 summarizes the total workload carried out in the Pilot Project)

Description of activities :

- (1) building underground tanks for animal waste treatment
- (2) installing biogas facilities
- (3) upgrading existing toilets
- (4) setting waste bins and stations for solid waste collection and treatment
- (5) field application of guidelines on proper use of agrochemicals to protect plants and trees
- (6) public awareness raising workshop on environmental protection and sanitary lifestyles
- (7) workshop on chemicals-chemicals use

Table 1: expenses and workload carried out in the Pilot Project on 6 rural sites

Locality	Projects/activities							Expenses (VND)		
	(1) units	(2) units	(3) units	(4) unit	(5) acres	(6) course	(7) course	total	From budget	City From people's contribution
Ward:Nhon Duc District: Nha Be	50	50	200			6	2	325,570,000	73,320,000	252,250,000
Vinh Loc B, Binh Chanh	30	30	350	2	1	9	2	480,708,560	99,928,560	380,780,000
An Loi Dong District 2	30	30	420			10	2	533,608,000	99,958,000	433,650,000
Tan Thong Hoi Cu Chi	30	100	250	4	0.5	8	1	416,889,520	97,709,520	319,180,000
Tan Xuan Hoc Mon	150		200	20	0.5	7	1	378,922,000	96,072,000	282,850,000
TamThon Hiep Can Gio		10	480			10	1	557,994,000	99,814,000	458,180,000
Total	290	240	1,910	26	2	50	9	2,693,693,080	566,802,080	2,126,890,000

- **PPP for clean water supply in an outer district**

District Nha Be with the population of 64,143 in 1635 households, is one of the most critical areas in Ho Chi Minh City in terms of water for daily activities. Located in the low land downstream, with brackish tidal water, surface water in Nha Be canals and rivers is saline and heavily polluted as well. Water supply pipelines have not reached the area due to high investment cost of connection crossing a lot of water bodies in an under-developed transport infrastructure of the remote land. The topology is not suitable for underground water drilling, in spite of which, 741 wells have been established but still in-adequately supply for use. Most households must pay highly to get clean water distributed by trucks. Even so, it is a real scarcity particularly in the dry months.

In 2001, the City decided to choose a temporary way-out for this pressing needs of the people while pending sufficient investment into water pipeline connection. The Project was to construct 30 water tanks (of two types: 10 or 5 cubic meters capacity each) spreadingly positioned near public places like kindergartens, primary schools, local health care stations, etc. in the most remote wards of the District. Twelve water supply stations were also installed.

The Utilities Service Company was established and operated like a form of concessionary management contract with local government. This Company invested its own water trucks (2 of 9 cubic meters and 3 of 5 cubic meters in capacity) to carry water from the nearest stations to fill the tanks, and must ensure continuous supply of water to the people's demand. In return, the Company was able to set the price of water that allowed viability and sustainability of the scheme.

There has been concern in terms of equity with the argument that the poor people in the remote place had to pay so high for clean water, compared to inner city inhabitants. However, various forms of financial assistance were implemented along the line of the City's overall Poverty Reduction Strategy, whose beneficiaries are actually these very people.

On the other hand, this water price serves as a helpful public awareness tool for the City people in general since it was about the first time when real cost of water has been accounted for (note that currently water price through pipelines is still heavily subsidized). People learn to know that clean water is no more free nor abundant. In addition, reality has shown that the people accepted to pay 18,000 VNDong per cubic meter of clean water, and use them economically, instead of having to run health risks.

The scheme of installing water tanks by government, contract out supply trucks by company, and charge the users partly to cover the financing of water supply may not be the best mechanism in the long run. But for now, it has helped alleviate the thirst of the countryside people at least in terms of drinking/cooking water. In fact, 20 more tanks will be added soon and the scheme is being considered for dissemination to other sites in the rural districts with similar situation.

The National Strategy on Clean Water Supply and Sanitary Improvement for the Rural Areas is a focus national program with high objectives and large-scale activities. Ho Chi Minh City is not among the 15 cities and provinces selected to carry out pilot projects in the Action Plan to year 2005 of the National Strategy. However, several programs have been conducted in line with the Strategy in response to the urgent needs of the City inhabitants in the rural districts. Above are just two small programs which have been implemented. A full evaluation of the results is yet to be done so that lessons could be drawn for possible replication in the remaining parts of the City.