ACTUAL URBAN WATER SUPPLY SITUATION OF VIETNAM construction and development program until 2010 and 2020

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OVERVIEW

- Total design capacity: 3,78 million m^3/day
- Total exploitation capacity: 3,2 million m^3/day (66% of surface water, 34% of groundwater).
- In provincial capital town urbans there has been a water supply system installed with different sizes.
- Among a total of about 670 small and medium urban areas (grade IV and V) there are 200 townlets and towns which are accessible to water supply plant with a range of capacity from 1000 to 2,000-3,000 m^3/day.

I/PENDING ISSUES AND CHALLENGES

Low water supply coverage:

Average coverage: 50% - 55%

Urban of type1 and 2: 70% - 80%

Urban of type 4 and 5: 15% - 20%

- Design capacity is not appropriate to practical condition: Some where lack, particularly in some place only exploitable at a range of around 15% - 20% of design capacity.
- High rate of un-accounted for water:

Average range: 30% - 40%

Some locals reach: 50%

- Water quality is not satisfactory to the allowable standard due to many reasons:
  - Escalation in source of water.
  - Inaccurate investigation on the source of water.
  - Incomplete treatment technological process and not compatible to water source condition of Vietnam
  - Serious water contamination status.
  - Management of water exploitation has not been paid reasonable attention.
- Policy and regime of water sector remains a lot of shortcomings, especially the water tariff issue . The principle that" *water is the goods*" has not been fully implemented; way of thinking "*water is an asset offered by the Lord*', Subsidiary government still exists widely in many locals.
- Staffing organization of water sector is not consist and suitable to business model of the water sector.

II/CONSTRUCTION AND DEVELOPMENT PROGRAM:

- The Gov. approves Direction for water supply until 2020.
- Framework program of MOC provides guidance to implementation for the locals.
- Target of Direction for urban water supply development : until 2020 reaching 100% urbanists is accessible to clean water supply at a standard of 150 - 180 l/per capita per day for large size urban and 120 - 150 l/per capita per day for small and medium sized urban areas.
- MOC in co-ordination with MPI and Central government's Departments and local governments will con tact with international financing institutions and donors in order to search for investment fund to build urban water supply systems. Local resources are expected to be mobilized with the active participation of various socio- economic sectors.

According to survey data conducted on 170 water supply :

- 130 projects are funded by the foreign source with an average investment rate of between 500 USD and 700 USD per 1 m^3 water
- 40 projects are funded by the local source with an average investment rate of between 150 USD and 200 USD per 1 m^3 water

1/Water supply scheme for cities, townlets as provincial capital towns has been implemented in 64 urban areas at different levels

Typical water supply projects include:

1.1 Hanoi water supply system: ground water source is now under exploitation with a capacity of about 500,000 m^3/day, groundwater source is degrading and polluted, especially int eh South of the city. Hanoi is planning to use water taken from Da River and Red River.

1.2 Da River water supply project has a total capacity of 600,000 m^3/day, with a total investment amount of approximately 158 million USD. The project will supply water to the urban chain covering Sơn Tây – Xuân Mai, Hòa Lạc – Miếu Môn, Hà Đông and Hà Nội. The first phase of the Project (300,000 m^3/day) is scheduled to complete by the end of 2007

1.3 Red River water supply project is studied and proposed by Hanoi People's Committee:

- Capacity of 300,000 m^3/day is sub-divided into 2 stages
- Stage I with an investment cost of about 42 million Euro

1.4 Lo river water supply project is proposed by Vinh Phuc People's Committee:

- Capacity under stage I is 45,000 m^3/day with a total cost of 29.79 million USD

1.5 Hai Phong city water supply project with a capacity of 200.000 m^3/day. Water source is seriously polluted.

1.6 Da Nang city water supply system has a capacity of 180,000 m^3/day. Source of water is contaminated, salty contamination is lengthy during dry-season months. Planning for water supply to Da Nang and some urban areas in the Middle land and Highland extracting water from Sêrêpok river is now under studying and to be implemented after the year 2010.

1.7 HCMC Water Suply system, with a capacity of about 1,4 million m^3/day (of which source of surface water of Dong Nai and Sai Gon rivers is 1.2 million m^3/ngđ, and groundwater is 200,000 m^3/day).

1.8 Originatign from the actual situation, recently MOC has co-ordinated with some locals in order to develop water supply program to serve for the inter-regional and inter-provincial services (Da River water supply project, Sêrêpok river water supply project, Dong Nai water supply project etc…)

2/ 1/Water supply scheme for cities, townlets as district capital towns : Prime Minster has permitted to implement phase 1 with a total cost of 200 million USD for 180 urban areas.

3/ The program for anti un-accounted for water and losses with such criteria as: percentage < 40% for the existing water supply system and < 30% for the new water supply system.

4/ Other programs:

- Renovation and finalization of Technology
- Materials and equipment for the water supply sector
- Staff training for capacity building

III. PROPOSALS AND RECOMMENDATIONS

1/ Protection of surface water source (surface and ground water). Local government should take strict actions to deal with violations that cause water source contamination.

2/ Water drainage and supply project should respect the criteria of safe and sustainable facility and being friendly with the environment.

3/ Complete documents on financial regime and policy should be developed with appropriate organization model. Training for capacity improvement of staff, engineers and workers in the water sector should be conducted.

4/ Urban water drainage and supply is of highly social nature , therefore it is advisable to well perform the socialization policy, attract any investment from both local and foreign sources, educate to increase the public knowledge and awareness in combination with bonus, merits and administrative fine treatment

5/ For inter-regional and inter-provincial water supply system, there should be early regime and policy and model for implementation organization.