

The planning for Water Drainage System

The Water Drainage system is divided into two parts: the Rain Drainage and the Sewage Drainage, which are different in their characters. The rain drainage is used for expelling the rain, while the sewage drainage is used for disposing of family and industrial sewage.

1. The rain drainage construction

The Construction and Planning Agency, based on “The Six-Year Construction Plan of Rain Drainage in Taiwan Area”, has been pushing forward the construction vigorously. Till December of 2002, the accumulated length of rain drainage pipeline being planned in Taiwan area is 6,535.12 kilometers, while the accumulated length of rain drainage pipes being installed is 3,616.82 kilometers, which is 55.34% for the implementation percentage out of the whole rain drainage plan. In Taiwan area, Taipei City is the first, achieving 94.76% of the implementation percentage of rain drainage. Kaohsiung City is the second best with 92.00%, and Penghu County 90.58% the third.

2. The sewage drainage construction

The sewage drainage system is one of the essential public facilities that help cities developing healthily. Executive Yuan has already taken the prevalence rate of sewage drainage as one important indicator for lifting national competitiveness and living quality. We hereby describe respectively the prevalence rate, construction result, planning and funding of sewage drainage system in recent years as follows:

a. The prevalence rate of sewage drainage system

Till the end of 2002, the prevalence rate of sewage drainage in Taiwan and Fujian Area is 18.8%. Compared with 15.7% of the previous year of 2001, there is 3.1% increase. In which, the prevalence rate of public sewage drainage piping to the population residences is 9.8%, and the prevalence rate of designated sewage drainage piping to communities or industrial area that are more than 100 households or 500 people is 9.0%.

The prevalence rate of sewage drainage in Taiwan and Fujian Area

Year of	Population at the end of the year (in thousands)	Pipe-connected Household (household)			The prevalence rate of Pipe-connected household (%)		
		Total	Public sewage drainage	Designated sewage drainage	Total	Public sewage drainage	Designated sewage drainage
2001	22,405	881,813	455,933	425,880	15.7	8.1	7.6
2002	22,521	1,058,860	550,639	508,221	18.8	9.8	9.0
Taiwan Province	18,079	533,978	63,195	470,783	11.7	1.4	10.3
Taipei City	2,646	406,697	383,828	22,869	61.6	58.1	3.5
Kaohsiung City	1,491	115,825	101,256	14,569	30.7	26.8	3.9
Fujian Province	61	2,360	2,360	-	13.9	13.9	-
2002 compared with 2001 (%)	0.51	20.07	20.77	19.33	3.1	1.7	1.4

b. Sewage drainage construction status

(1) Systems completed

In Taiwan and Fujian Area till the end of 2002, there are 18 sewage drainage systems completed, including three each in Taipei City and Taipei County, two each in Taichung City and Nantou County, and one each in Jiayi County Kinmen County, Tainan City, Taoyuan County, Taichung County, Kaohsiung City and Pingdong County.

(2) System being constructed

In Taiwan and Fujian Area till the end of 2002, there are 49 sewage drainage systems being constructed, including nine in Taipei County the most, four each in Kaohsiung, Pingdong and Kinmen Counties the second, three each in Taichung County and Kaohsiung City the third, two each in Keelung City, Hsinchu County, Miaoli County, Jiayi County and Penghu County, and one each in Hsinchu City, Yilan County, Taoyuan County, Taichung City, Nantou County, Yunlin County, Jiayi City, Tainan City, Tainan County, Hualien County, Taidong County and Lianjiang County.

c. Sewage drainage planning status

(1) Planed to construct systems

Till the end of 2002, there are 61 sewage drainage systems planned to be constructed, including eight in Zhanghua County the most, seven each in Taichung County and

Jiayi County the second, four each in Taipei county, Taoyuan County, Yunlin County, Tainan County, Kaohsiung County and Pingdong County, three each in Nantou County, Hualian County and Taidong County, two each in Miaoli County and Yilan County, and one each in Taichung City and Penghu County.

(2) Planning systems

Till the end of 2002, there are 18 sewage drainage systems in planning status, including two each in Taoyuan County, Hsinchu County, Miaoli County, Jiayi County and Tainan County, and one each in Taichung County, Nantou County, Zhanghua County Taitung County, Yunlin County, Kaohsiung County, Pingdong County and Penghu County.

d. Sewage drainage piping and facilities

Concerning the length of the pipeline, till the end of 2002 there have been constructed 993,002 meters of 600mm or larger sewage drainage pipeline, 581,730 meters of 300-500mm sewage drainage pipeline, and 734,585 meters of 300mm or smaller sewage drainage pipeline. As for sewage processing facilities, there have been constructed 1,039 processing plants, 85 pumping stations, and 25 water filtering stations.

e. Sewage drainage operation status

The operating management expense for sewage drainage in 2002 was NT\$1,335,110,000 dollars, 26.95% increase compared with NT\$1,051,648,000 dollars on 2001. Among NT\$1,335,110,000 dollars, there were 35.3% of NT\$471,562,000 dollars for payroll the most, 26.24% of NT\$350,382,000 dollars for electricity bill the second, 4.4% of NT\$58,760,000 dollars for maintenance the third, 3.7% of NT\$49,442,000 dollars for chemical dosages, 3.7% of NT\$49,268,000 dollars for compensation fund, 1.9% of NT\$25,914,000 dollars for equipment materials, and 24.7% of NT\$329,782,000 dollars for the others.

**The Sewage drainage Systems Construction Staus
At the end of 2002**

