The Programming for Regional Planning

With the objectives of balancing development between regions; distributing the population and industrial activities properly; pushing the well economic development for assuring the conservation and reasonable utilization of natural resources; thus to improve the living environment and promote the social welfare, CPA has programmed 4 Regional Planning of the North, the Central, the South and the East to reach those goals. In order to fit in with the regional nature and future demand, the 4 regional plans have been overall examined and been promulgated in 1995, 1996 and 1997 respectively.

The Regional Planning Implementation Status in Taiwan Area

Unit: k persons/per km²

Regions	Current Population	Area	The First Overall Examined Year of Plan Promulgation	Target year	Population Planed
Total	22,453	36,006			21,876
North Region	9,763	7,353	11/24/1995	2005	7,786
Central Region	5,670	10,507	8/22/1996	2011	5,306
South Region	6,424	10,002	6/28/1996	2005	7,908
East Region	596	8,144	6/24/1997	2011	876

Note: population and area are base on 2002

a. Examine the Non-Urban Land Distinction & Use Modification

Since the Taiwan Area Regional Planning is put enforced, after examining those larger than 10 hectares non-urban land use modifications, the most modifications for land use were hillside housings, golf courses, university & college campuses, recreation areas, specific aimed enterprises and industrial area. The number of larger than 10 hectares, non-urban land distinction & land use modification by permission, examined in 2002, was 32 cases, totaling 1,554.88 hectares with a rising of 26.9% compared with 1,225.28 hectares of 2001.

Distinguished by counties and cities, Yunlin County was the first with 451.50 hectares of land modifications, all for specific aimed enterprises; Taoyuan County was the second with 415.84 hectares of land modifications, 79.55% of which industrial areas. Pingtung County was the third with 259.26 hectares of land modifications, 47.86% of which industrial areas. Analyzing by land use, the largest type for modification was specific aimed enterprise areas, which reached 560.60 hectares, growing 455.48 hectares in

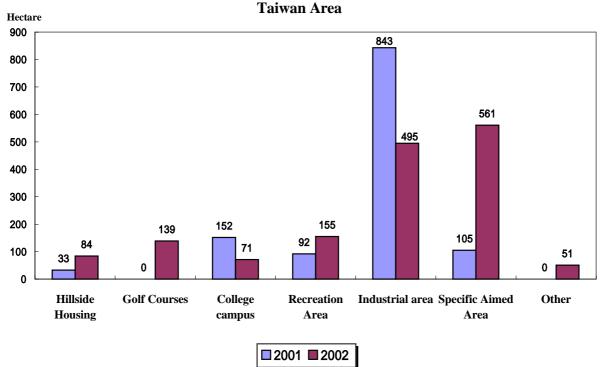
comparison with that of 105.12 hectares last year. The second one was 138.99 hectares for golf courses, increasing 138.92 hectares in comparison with that of 0.07 hectares last year. The third one was recreation areas, which reached 155.32 hectares, increasing 91.64 hectares in comparison with that of 63.68 hectares last year.

The Non-Urban Land Distinction & Use Modification Area Statistic in Taiwan Area
Unit: Hectare

Year of	Total	Hillside Housing	Golf Courses	College campus	Recreation Area	Specific Aimed Area	Industrial Area	Others
1994	302.53	262.35	-	15.57	24.60	-	-	-
1995	1,279.95	101.81	-	40.00	11.70	18.44	1,108.00	-
1996	1,477.06	159.45	96.00	103.45	37.90	31.66	1,048.60	-
1997	1,895.38	311.81	465.33	21.60	222.87	-	846.58	27.19
1998	921.03	10.59	268.41	160.79	57.78	116.13	33.60	273.74
1999	1,582.28	126.96	67.13	108.80	42.89	57.83	1,178.67	-
2000	1,669.17	321.44	320.43	117.66	10.17	185.61	695.00	18.87
2001	1,225.28	33.28	0.07	151.82	91.64	105.12	843.35	-
2002	1,554.88	83.79	138.99	71.22	155.32	560.60	494.50	50.46
2002 compared with 2001 (%)	26.90	151.74	203101.75	-53.09	69.49	433.29	-41.37	-

Source: CPA Central Office and General planning Division

The larger-than-10-hectare, non-urban land use modifications Areas in



b. The remaining Volume of Earthwork & Filling Soil from Construction in Taiwan

The total remaining volume of earthwork & filling soil in 2002 in Taiwan area was 31,542,000 cubit meters. Among them, the volume of earthwork for public facilities was 24,987,000 cubit meters, 79.22% of the total volume. The volume for building constructions was 6,555,000 cubit meters, 20.78% of the total volume. By comparison, the volume of earthwork for public facilities was 3.8 times that of building constructions. The volume of filling soil in 2002 was 4,032,000 cubit meters totally. Among them, the volume of filling soil for public facilities was 3,775,000 cubit meters, 93.63% of the total volume. The filling soil for building constructions were 257,000 cubit meters, 6.37% of the total volume. By comparison, the volume of filling soil for public facilities was 14.69 times that of building constructions. The remaining volume of earthwork in 2002 was 7.8 times that of filling soil. If there is information system about the demand and supply for earthwork and mutual coordination for exchanging earthwork with filling soil during the planning stage of constructions, it will greatly relieve the pressure of lacking earth grounds as well as refrain from environmental devastation caused by digging into hills for earth and soil.

The Remaining Volume of Earthwork & Filled-Soil by Construction in Taiwan
Unit: Cubit Meters (in ten thousand)

Year of	Total		Building Construction		Public facilities	
	Remaining	Filling	Remaining	Filling soil	Remaining	Filling
	earthwork	soil	earthwork		earthwork	soil
1998	3,545.9	2,083.4	1,471.9	19.6	2,074.0	2,063.8
1999	3,508.0	2,412.8	1,656.0	51.8	1,852.0	2,361.0
2000	3,076.8	1,598.6	1,280.7	43.0	1,796.1	1,555.6
2001	1,583.9	512.7	732.5	84.4	851.4	428.3
2002	3,154.2	403.2	655.5	25.7	2,498.7	377.5
2002 compared with 2001 (%)	99.14	-21.36	-10.51	-69.55	193.48	-11.86

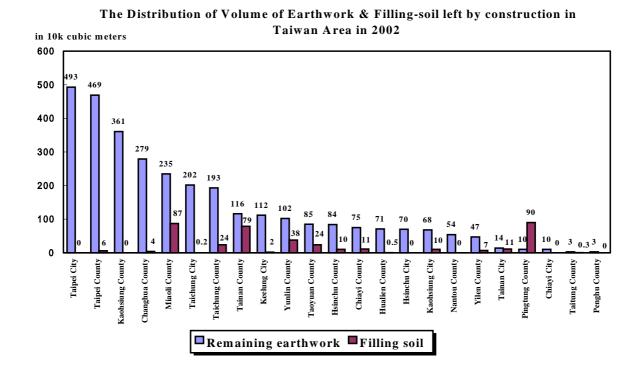
Source: CPA General planning Division

10K CUBIC METERS 3,757 3.546 4000 3,508 3500 3,077 3000 2,413 2,083 2500 1,748 1,599 2000 1.584 1500 1000 500 1997 1998 2001 2002

Remaining earthwork Filling soil

The Remaining Volume of Earthwork & Filling Soil by Construction in Taiwan Area

Analyzing by the distribution of the counties and cities of the remaining volume of earthwork and filling soil in 2002: There were ten counties and cities which their remaining volume of earthwork and filling soil exceed million cubit meters: Taipei City, Taipei County, Kaohsiung County, Changhua County, Miaoli County, Taichung City, Taichung County, Tainan County, Keelung City and Yunlin County by sequence (see Figure 3). There were no county or city which remaining volume of filling soil exceed million cubit meters. There was only Pingtung County which volume of filling soil exceeds the remaining volume of earthwork. It shows that who disposes of waste soil should pass the information with those who need to fill soil in construction. Thus resource of earthwork and filling soil can be re-utilized in order to reduce the damage on our environment.



c. Construction earth resource field

Earth resource field is also called Earth resource piling field. The government vigorously plans and encourages civilians to invest on earth resource fields that can be carefully used to process the remaining earthwork left by construction. After the constructions are completed, the earth resource field may be modified according to its land distinction and land classified type into other uses, such as park or greening, culture, education, social welfare, administration, public facility, public equipment or low density community development. There were altogether 128 earth resource fields in Taiwan area in 2002, with the remaining volume of 44,462,000 cubic meters and the area of 661.50 hectares. Among them, there were 26 lots in Yunlin County the most, 11 lots in Penghu County the second, and 9 each in Taipei county and Tainan County the third.