

RELATIONSHIPS OF POPULATION GROWTH AND  
SOCIO-ECONOMIC DEVELOPMENT BETWEEN  
SATELLITE AREAS AND THE INNER CITY  
— TAIPEI METROPOLITAN CASE\* —

*Hong-chin Tsai\*\**

I. BACKGROUND AND OBJECTIVES

In the twentieth century, population and socio-economic development in urban areas are two major social phenomena in many countries. In this process of urbanization the relationship between inner cities and their satellite areas becomes evident as well as more complicated. However, the relationships between the inner city and its satellites areas may be not be the same in all countries or regions, due partly to different geographical conditions and partly to different urban and regional development policies among different countries and regions. Several studies on relationships between cities and satellite rural areas in other countries have been accomplished. In this research, a case study on the relationships of population growth and socio-economic development between Taipei inner city and its satellite areas is made.

Taipei City and its satellite areas have in fact experienced rapid population growth and socio-economic changes in the past decades. But information about the relationships between population growth and socio-economic developments in Taipei City and its satellite areas have not been systematically analyzed. Therefore the present study is needed to fill in a research gap and to meet administration purposes.

Theoretically, population growth and socio-economic development are interactional. In an open society, population growth and socio-economic develop-

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\*\* Director of the Population Studies Center, NTU; Chairman of Department of Agricultural Extension, NTU.

ment in one place are also greatly affected by the growth and the change in other places. In Taiwan society, free internal migration has been allowed by the constitution. Thus the population growth in the biggest city, Taipei, is caused partly by natural increase and partly by net in-migration from other places. However, part of population in this city may also migrate to other places, mostly to its satellite areas.

E. S. Lee and other noted migration experts had indicated a theoretical concept that migration would be the function of development condition in either the origin or the destination community. Many sociologists and economists must also have paid attention to the fact that migration from or to a community must be affected by or resulted in social and economic changes in the community.

Based on the theoretical concept and practical situation mentioned above, the main objective of the present study is to explore and identify the comprehensive interrelationships between the inner city of Taipei and its satellite areas from population and socio-economic points of view. Specific attention will be paid to examine empirical data in the following four aspects: (1) the population growth and industrial deconcentration in Taipei Metropolitan Area, (2) effects of population growth on demographic and socio-economic changes in satellite areas, (3) effects of population and industrial growth in satellite areas on demographic and socio-economic changes in the inner city, (4) interrelationships of public services and facilities between the inner city and the satellite areas. In the last part of this paper the author will also point out the necessity and the problems of the integration between the inner city and satellite areas in Taipei Metropolitan Area.

## II. THE POPULATION GROWTH AND INDUSTRIAL DECONCENTRATION IN THE URBAN EXPANSION PROCESS OF TAIPEI METROPOLITAN AREA

### 1. Population growth and deconcentration in Taipei Metropolitan Area

Population in Taipei City and its satellite county, Taipei, have been growing rapidly since Taipei City changed its territory boundary in 1968. However the increase was more rapid in industrialized satellite areas than in the inner city. From 1968 to 1982, the population of Taipei City increased from 1,579,346 to 2,327,641 and the population of Taipei County increased from 1,078,615 to 2,445,129. The former and the latter increased by 47% and 127% respectively. Both growth in these two types of areas are faster than the growth in Taiwan as a whole. During the same period population of Taiwan increased from 13,682,588 to 18,515,745

or only by 35%. The greater increase of population in Taipei City and its satellite county reflects a fact of the rapid urbanization process. The greater increase of population in Taipei County than in Taipei City reflects another fact that population deconcentration process in the biggest metropolitan area of Taiwan was taking place.

Population deconcentration process can also be observed from the fact that net migration and population growth in several inner districts of Taipei City were negative in recent years. During the same period, the net migration and population growth in most satellite townships and cities of Taipei were positive. Detailed statistical data are presented in Table 1 and Table 2.

Table 1. Net Decreases of Population in Old Districts of the Inner City of Taipei, 1968-1982

| Years<br>Districts                 | 1982<br>(1) | 1968<br>(2) | Changes                   |                          |
|------------------------------------|-------------|-------------|---------------------------|--------------------------|
|                                    |             |             | Number<br>(3) = (1) - (2) | %<br>(4) = (3)/(2) x 100 |
| Taipei Municipality                | 2,327,641   | 1,579,346   | 748,295                   | 47.38                    |
| Lungshan Ch'u                      | 50,662      | 71,986      | -21,324                   | -29.62                   |
| Chengchung Ch'u                    | 55,662      | 80,442      | -24,780                   | -30.80                   |
| Chiengcheng Ch'u                   | 34,773      | 58,553      | -23,780                   | -40.61                   |
| Yenping Ch'iu                      | 37,839      | 61,355      | -23,516                   | -38.33                   |
| Tatung Ch'u                        | 93,926      | 114,219     | -20,293                   | -17.77                   |
| Sub-total                          | 272,862     | 386,555     | -113,693                  | -29.42                   |
| Other Ch'us in Taipei Municipality | 2,054,789   | 1,192,791   | 861,988                   | 72.27                    |

Sources: Ministry of Interior, Taiwan Fukien Demographic Fact Book, Republic of China, 1968 p. 50; 1982, pp. 96-98.

Table 2. Population Growth of the 16 Important Satellite Areas and the Inner City of Taipei, 1968-1982

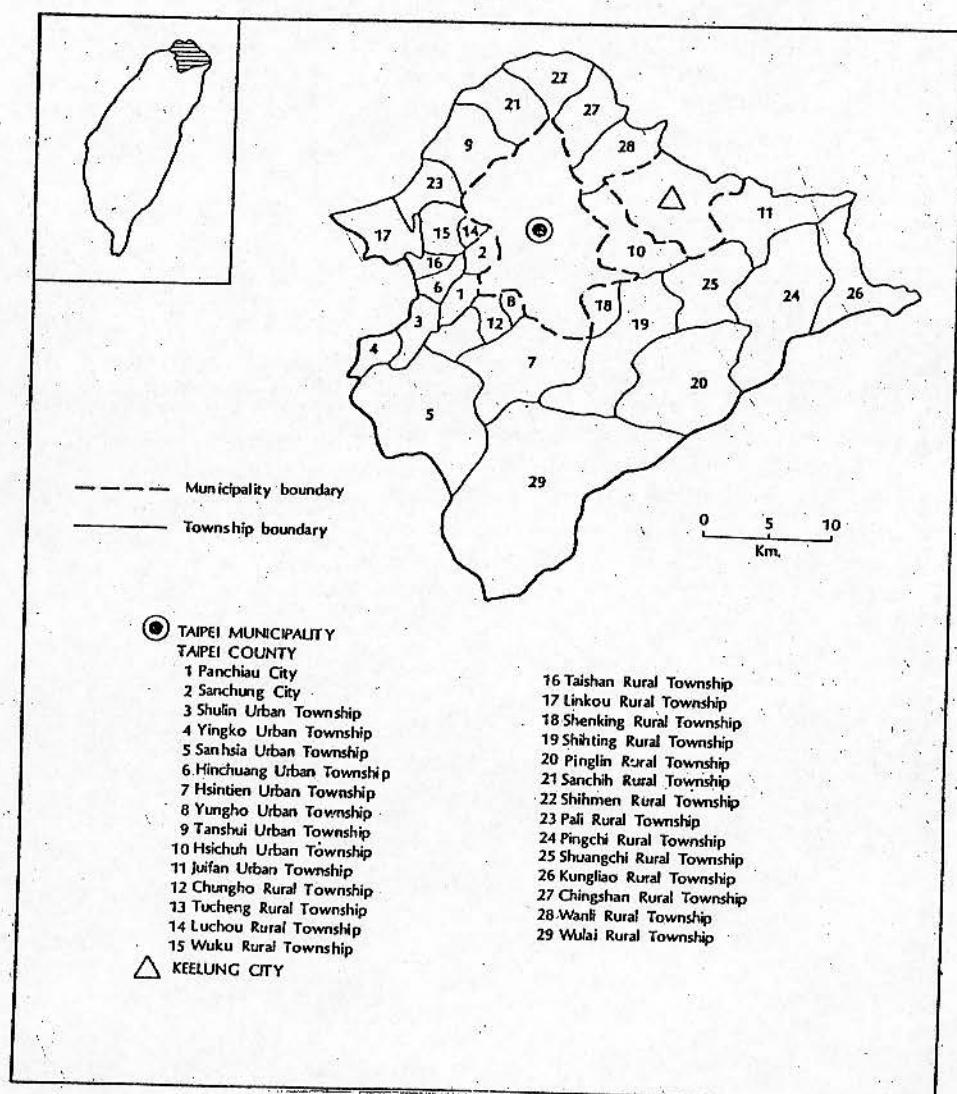
| Years<br>Areas                  | 1982<br>(1) | 1968<br>(2) | Changes                   |                          |
|---------------------------------|-------------|-------------|---------------------------|--------------------------|
|                                 |             |             | Number<br>(3) = (1) - (2) | %<br>(4) = (3)/(2) x 100 |
| Taipei County                   | 2,445,129   | 1,078,615   | 1,366,514                 | 126.60                   |
| Sanchung City                   | 340,581     | 200,318     | 140,263                   | 70.02                    |
| Panchiao City                   | 440,180     | 86,341      | 353,839                   | 409.82                   |
| Shulin U. T.                    | 81,452      | 37,616      | 43,836                    | 116.54                   |
| Yingko U. T.                    | 51,253      | 28,126      | 23,127                    | 82.22                    |
| Sanhsia U. T.                   | 53,606      | 43,312      | 10,294                    | 23.77                    |
| Hsinchuang City                 | 202,211     | 37,431      | 164,780                   | 440.22                   |
| Hsintein City                   | 178,173     | 82,815      | 95,358                    | 115.15                   |
| Yungho City                     | 221,298     | 76,812      | 144,486                   | 188.10                   |
| Tanshui U.T.                    | 68,484      | 47,204      | 21,280                    | 45.08                    |
| Hsichuh U.T.                    | 72,002      | 41,700      | 30,302                    | 72.67                    |
| Chungho City                    | 294,621     | 56,284      | 238,337                   | 423.45                   |
| Tucheng U.T.                    | 69,484      | 27,422      | 42,062                    | 153.39                   |
| Luchou R. T.                    | 52,894      | 20,642      | 32,252                    | 156.24                   |
| Wuku R. T.                      | 36,576      | 23,308      | 14,268                    | 63.96                    |
| Taishan R. T.                   | 41,870      | 13,569      | 28,301                    | 208.57                   |
| Linkou R. T.                    | 24,370      | 19,444      | 4,926                     | 25.33                    |
| Subtotal                        | 2,229,055   | 841,344     | 1,387,711                 | 164.94                   |
| Other Township of Taipei county | 216,074     | 237,271     | -21,197                   | -8.93                    |
| Taipei City                     | 2,327,641   | 1,579,346   | 748,295                   | 47.40                    |
| Taiwan                          | 18,515,754  | 13,682,588  | 4,833,166                 | 26.10                    |

Sources: Same as Table 1, 1968, pp. 7-9; 1982, pp. 56-58.

Notes: C = City, R. T. = Rural Township. U. T. = Urban Township

## 2. The deconcentration of industries in the urban expansion process

As population of Taipei City increased rapidly, most factories in the inner city migrated to suburban areas. In the most recent years, many, newly established factories had also been allocated in satellite areas of Taipei. From the year of 1968 to 1983, the total number of registered factories in Taipei City increased from 2,805 to only 3,514. The increase was only 25%. But during the same period the number of factories in the satellite county of Taipei increased 2.5 times or from 3,487 to 12,118. Among the total number in 1983, 11,797 or 97% were located in the 16 most accessible satellite cities and townships. The locations of these 16 satellite areas are shown in map 1



Map 1 The Taipei Metropolis



From 1968 to 1982 when Taipei City increased by 24.9% in its number of factories, most of the important satellite areas increased by more than 100% of their total number of factories. To compare the deconcentration of industry with that of the population in Taipei Metropolitan Area in the past one and half decades, we can see that the former is more clear than the latter.

Table 3. Changes in Number of Registered<sup>1</sup> Factories in Satellite Areas and in the Inner City of Taipei, 1968-1982

| Areas                           | No.<br>years | Number of registered factories |             |                           |                                       |
|---------------------------------|--------------|--------------------------------|-------------|---------------------------|---------------------------------------|
|                                 |              | 1982<br>(1)                    | 1968<br>(2) | Change<br>(3) = (1) - (2) | increase rates<br>(4) = (3)/(2) x 100 |
| Taipei County                   |              | 12,118                         | 3,487       | 8,531                     | 244.7                                 |
| Sanchung C.                     |              | 1,743                          | 969         | 774                       | 79.8                                  |
| Panchiao C.                     |              | 1,175                          | 351         | 824                       | 42.6                                  |
| Shulin U.T.                     |              | 1,211                          | 122         | 1,089                     | 892.6                                 |
| Yingko U.T.                     |              | 623                            | 260         | 363                       | 139.6                                 |
| Sanhsia U.T.                    |              | 218                            | 79          | 139                       | 175.9                                 |
| Hsingchuang C.                  |              | 2,628                          | 325         | 2,303                     | 708.6                                 |
| Hsintien C.                     |              | 504                            | 124         | 380                       | 306.5                                 |
| Yungho C.                       |              | 194                            | 84          | 110                       | 131.0                                 |
| Tanshui U.T.                    |              | 270                            | 130         | 40                        | 30.8                                  |
| Hsinchuh U.T.                   |              | 285                            | 139         | 146                       | 105.0                                 |
| Chungho C.                      |              | 889                            | 250         | 639                       | 255.6                                 |
| Tucheng R.T.                    |              | 951                            | 83          | 868                       | 1,045.8                               |
| Luchou R.T.                     |              | 327                            | 74          | 253                       | 346.6                                 |
| Wuku R.T.                       |              | 370                            | 85          | 296                       | 348.2                                 |
| Taishan R.T.                    |              | 280                            | 57          | 223                       | 391.2                                 |
| Linko R.T.                      |              | 69                             | 52          | 17                        | 32.7                                  |
| Sub-total                       |              | 11,737                         | 3,184       | 8,553                     | 268.6                                 |
| Other 13 T. in<br>Taipei County |              | 381                            | 303         | 78                        | 25.7                                  |
| Taipei City                     |              | 3,594                          | 2,805       | 699                       | 24.9                                  |
| Taiwan Area                     |              | 59,223                         | 33,057      | 26,166                    | 79.1                                  |

Sources: (1) Taipei County Government, Statistical Abstract of Taipei County, 1968, p 134; 1982, p.116.

(2) Bureau of Budget, Accounting and Statistics, Taipei Municipal Government, Statistical Abstract of Taipei Municipality, 1968-1982, p. 308.

(3) CEPD, Taiwan Statistical Data Book, 1984, p. 96.

### III. EFFECTS OF POPULATION AND INDUSTRIAL DECONCENTRATION ON DEMOGRAPHIC AND SOCIO-ECONOMIC CHANGES IN SATELLITE AREAS

The expansion and/or deconcentration of population and industry from Taipei City to satellite areas has caused severe changes in many demographic and socio-economic aspects in these areas. In this section our presentation will focus on examining effects of population growth and industrial development on other aspects of demographic and socio-economic changes.

#### 1. Effects on changes in age and sex composition

Industrial and commercial developments in satellite areas have absorbed a large number of young adult laborers moving into these areas. This selection of age in in-migration in the 16 highly industrialized and commercialized satellite cities and townships of Taipei during 1968-1982 resulted in a greater increase of the proportion of young adult population aged 25-39 in all ages in these areas than in the inner city. Percentage of these young adult population was respectively 6.2, 5.3, 3.0 and 0.5 for the 16 highly developed satellite areas, for the inner city of Taipei, for the whole Taiwan Area and for the rest of the satellite areas of Taipei County. Consequently the percentage of young adult population in all age population for the highly developed satellite areas in 1982 was higher than that for other places in the same year. Data in Table 4 show 26.8% of young adult population for the 16 highly developing satellite areas, 17.6% for the rest of the townships of Taipei County, 26.2% for Taipei City, but only 22.6% for Taiwan Area as a whole.

Sex selection in new in-migrants to satellite areas is likely to be affected by types of industrial development in these areas. In areas with high development of tertiary and light industries, such as textile, have generally absorbed more females laborers than male laborers. It resulted in greater decreases in sex ratio for young adult population during the period in these areas than in other places. Panchiao, Hsingchuang, Hsintien, Lucho, Taishan and Linko are the satellite areas which had greater decreases in sex ratio for young adult population aged from 25 to 39. As a result the sex ratio for young adult population aged 25-39 in these places and in other two satellite cities, Yungho and Chungho, in 1982 were relatively low, although they are not lower than that for Taipei inner city. Detailed data described above are presented in Table 5.

Table 4. Changes in Percentages of Young Adults Aged 25-39 in All Age Population in Satellite Areas and the Inner City of Taipei, 1968-1982.

| Years<br>Ages<br>Areas       | 1982                |                         |                      |                     | 1968                    |                      |                     |                         | Changes              |                     |                         |                         |
|------------------------------|---------------------|-------------------------|----------------------|---------------------|-------------------------|----------------------|---------------------|-------------------------|----------------------|---------------------|-------------------------|-------------------------|
|                              | Total<br>Population | Population<br>Age 25-39 | %<br>(3)=(2)/(4)x100 | Total<br>Population | Population<br>Age 25-39 | %<br>(6)=(5)/(4)x100 | Total<br>Population | Population<br>Age 25-39 | %<br>(9)=(8)/(7)x100 | Total<br>Population | Population<br>Age 25-39 | %<br>(12)=(11)/(10)x100 |
|                              | (1)                 | (2)                     | (3)                  | (4)                 | (5)                     | (6)                  | (7)                 | (8)                     | (9)                  | (10)                | (11)                    | (12)                    |
| Taipei County                | 2,445,129           | 635,576                 | 26.0                 | 1,078,615           | 216,683                 | 20.1                 | 1,366,514           | 418,893                 | 30.6                 | 288,278             | 211,910                 | 5.9                     |
| Sanchiao C.                  | 340,581             | 85,993                  | 25.2                 | 200,318             | 45,424                  | 22.7                 | 140,263             | 40,569                  | 28.9                 | 79,694              | 20,915                  | 2.5                     |
| Panchiao C.                  | 440,180             | 123,005                 | 27.9                 | 86,341              | 18,107                  | 21.0                 | 353,839             | 104,989                 | 29.7                 | 248,850             | 73,812                  | 6.9                     |
| Shulin U.T.                  | 81,452              | 20,562                  | 25.2                 | 37,616              | 7,664                   | 20.4                 | 43,836              | 12,898                  | 29.4                 | 30,938              | 8,914                   | 4.8                     |
| Yingko U.T.                  | 51,253              | 11,654                  | 22.7                 | 28,126              | 5,307                   | 18.9                 | 23,127              | 6,347                   | 27.4                 | 16,780              | 4,633                   | 3.8                     |
| Sanshia U.T.                 | 53,606              | 9,959                   | 18.6                 | 43,312              | 8,002                   | 18.5                 | 10,294              | 1,957                   | 19.1                 | 9,337               | 1,957                   | 0.1                     |
| Hsingchung C.                | 202,211             | 57,425                  | 28.4                 | 37,431              | 8,101                   | 21.6                 | 164,780             | 44,324                  | 27.0                 | 120,456             | 31,211                  | 6.8                     |
| Hsintion C.                  | 178,173             | 49,689                  | 27.9                 | 82,815              | 16,406                  | 19.8                 | 95,358              | 33,283                  | 34.9                 | 62,075              | 29,835                  | 8.1                     |
| Yungko C.                    | 221,298             | 62,875                  | 28.4                 | 76,812              | 15,958                  | 20.8                 | 144,486             | 46,917                  | 32.5                 | 97,569              | 27,648                  | 7.6                     |
| Tnshui U.T.                  | 68,484              | 15,509                  | 22.6                 | 47,204              | 8,916                   | 18.9                 | 21,280              | 6,593                   | 30.9                 | 14,687              | 4,391                   | 3.7                     |
| Hsichuh U.T.                 | 72,002              | 17,426                  | 24.2                 | 41,700              | 8,127                   | 19.5                 | 30,302              | 9,299                   | 30.7                 | 21,003              | 6,000                   | 4.7                     |
| Chungko C.                   | 294,621             | 86,408                  | 29.3                 | 56,284              | 11,215                  | 19.9                 | 238,337             | 75,193                  | 31.5                 | 163,144             | 48,000                  | 9.4                     |
| Tucheng R.T.                 | 69,484              | 18,186                  | 27.1                 | 27,422              | 5,187                   | 18.9                 | 42,062              | 13,629                  | 32.4                 | 28,433              | 11,766                  | 8.2                     |
| Luchou R.T.                  | 52,894              | 13,785                  | 26.1                 | 20,642              | 4,261                   | 20.6                 | 32,252              | 9,524                   | 29.5                 | 22,728              | 6,761                   | 5.5                     |
| Wuko R.T.                    | 36,576              | 8,034                   | 22.0                 | 22,308              | 4,464                   | 20.0                 | 14,268              | 3,570                   | 25.0                 | 10,698              | 2,800                   | 2.0                     |
| Taishan R.T.                 | 41,870              | 11,502                  | 27.5                 | 13,569              | 2,852                   | 21.0                 | 28,301              | 8,650                   | 30.4                 | 19,651              | 5,900                   | 6.5                     |
| Linkou R.T.                  | 24,370              | 4,863                   | 20.0                 | 19,444              | 3,640                   | 18.7                 | 4,926               | 1,223                   | 24.7                 | 3,703               | 923                     | 1.3                     |
| Subtotal                     | 2,229,055           | 597,505                 | 26.8                 | 841,344             | 173,631                 | 20.6                 | 1,387,711           | 423,874                 | 30.6                 | 963,837             | 276,917                 | 6.2                     |
| Other T. of<br>Taipei County | 216,074             | 38,071                  | 17.6                 | 237,271             | 43,502                  | 18.1                 | -21,197             | -5,341                  | -24.7                | -26,538             | -21,197                 | -0.5                    |
| Taipei C.                    | 2,327,641           | 610,283                 | 26.2                 | 2,327,641           | 329,667                 | 20.9                 | 748,295             | 280,616                 | 37.4                 | 467,679             | 179,167                 | 5.3                     |
| Taiwan                       | 18,457,923          | 4,167,130               | 22.6                 | 13,682,588          | 2,623,866               | 19.2                 | 4,833,166           | 1,543,264               | 31.9                 | 2,289,900           | 713,864                 | 3.0                     |

Sources: Same as Table 1, 1968, pp. 6-11; 1982, pp. 56-61.



Table 5. Changes in Sex Ratios for All and Young Adult Age Groups in Satellite Areas and in the Inner City of Taipei, 1968-1982.

| Years<br>Ages<br>Areas       | 1982    |       |       |       |       |         |       | 1968  |       |       |         |       |       |       | Changes |  |  |  |  |
|------------------------------|---------|-------|-------|-------|-------|---------|-------|-------|-------|-------|---------|-------|-------|-------|---------|--|--|--|--|
|                              | All age | 25-39 | 25-29 | 30-34 | 35-39 | All Age | 25-39 | 25-29 | 30-34 | 34-39 | All Age | 25-39 | 25-29 | 30-34 | 34-39   |  |  |  |  |
|                              |         |       |       |       |       |         |       |       |       |       |         |       |       |       |         |  |  |  |  |
| Taipei County                | 106.6   | 100.5 | 93.9  | 103.3 | 110.4 | 111.6   | 112.6 | 97.0  | 107.3 | 142.8 | -5.0    | -12.1 | -3.7  | -4.0  | -32.4   |  |  |  |  |
| Sanchung C.                  | 105.3   | 107.0 | 98.1  | 107.2 | 114.9 | 109.2   | 112.0 | 102.5 | 110.2 | 129.3 | -3.9    | -5.0  | -4.4  | -3.0  | -14.4   |  |  |  |  |
| Panchiao C.                  | 105.5   | 98.4  | 90.7  | 100.9 | 110.2 | 111.3   | 105.2 | 92.5  | 99.7  | 132.7 | -5.8    | -6.8  | -1.8  | 1.2   | -22.5   |  |  |  |  |
| Shulin U.T.                  | 106.5   | 103.1 | 90.6  | 105.1 | 129.5 | 108.5   | 113.4 | 97.8  | 115.8 | 135.9 | -2.0    | 5.3   | -7.2  | -10.7 | -6.4    |  |  |  |  |
| Yingko U.T.                  | 105.6   | 105.5 | 96.4  | 116.9 | 108.3 | 104.8   | 108.1 | 98.2  | 104.3 | 126.9 | 0.8     | -2.6  | -1.8  | 12.6  | -18.6   |  |  |  |  |
| Sanhasia U.T.                | 118.0   | 109.5 | 114.1 | 108.3 | 100.9 | 108.3   | 117.7 | 109.9 | 111.9 | 137.2 | 9.7     | -8.2  | 4.2   | -3.6  | -36.3   |  |  |  |  |
| Hsingchung C.                | 120.1   | 99.1  | 87.1  | 101.3 | 122.4 | 112.6   | 116.4 | 98.7  | 116.0 | 148.9 | 7.5     | -17.3 | -11.6 | -14.7 | 26.5    |  |  |  |  |
| Hsintien C.                  | 106.7   | 94.5  | 91.2  | 95.6  | 99.8  | 129.2   | 128.3 | 88.1  | 102.5 | 223.2 | -22.5   | -33.8 | 3.1   | -6.9  | -123.4  |  |  |  |  |
| Yungsho C.                   | 102.3   | 93.4  | 87.9  | 95.5  | 100.2 | 114.7   | 95.5  | 73.4  | 91.2  | 139.9 | -12.4   | -2.1  | 14.5  | 4.3   | -39.7   |  |  |  |  |
| Tanshui U.T.                 | 108.5   | 103.4 | 100.8 | 95.5  | 101.0 | 107.1   | 115.6 | 106.9 | 112.9 | 130.4 | 1.4     | -3.5  | -6.1  | -17.4 | -29.4   |  |  |  |  |
| Hsichuh U.T.                 | 106.9   | 104.4 | 100.0 | 108.1 | 113.3 | 107.4   | 112.4 | 103.3 | 106.5 | 133.9 | -0.5    | -2.1  | -3.3  | 1.6   | -20.6   |  |  |  |  |
| Chungsho C.                  | 105.0   | 96.6  | 87.2  | 105.8 | 107.7 | 111.4   | 95.7  | 75.9  | 86.6  | 138.7 | -6.4    | 0.9   | 11.3  | 19.2  | -31.0   |  |  |  |  |
| Tucheng R.T.                 | 111.9   | 111.5 | 95.8  | 102.4 | 141.4 | 112.8   | 107.1 | 87.8  | 100.7 | 144.5 | -0.9    | 4.4   | 8.0   | 1.7   | 3.1     |  |  |  |  |
| Luchou R.T.                  | 108.4   | 107.4 | 99.2  | 110.7 | 121.8 | 110.3   | 120.0 | 104.9 | 121.2 | 142.8 | -1.9    | -12.6 | -5.7  | -10.5 | -21.0   |  |  |  |  |
| Wuko R.T.                    | 111.4   | 98.3  | 101.6 | 102.3 | 86.9  | 111.0   | 109.9 | 68.5  | 103.4 | 210.1 | 1.4     | -11.6 | 33.1  | -1.1  | -123.2  |  |  |  |  |
| Taishan R.T.                 | 107.4   | 100.8 | 78.9  | 111.4 | 138.4 | 109.1   | 115.1 | 82.4  | 106.1 | 196.9 | -1.6    | -14.6 | -3.5  | 5.3   | -58.5   |  |  |  |  |
| Linko R.T.                   | 111.3   | 102.9 | 100.7 | 103.7 | 106.1 | 110.6   | 114.4 | 93.8  | 108.1 | 154.3 | 0.7     | -11.5 | 6.9   | -4.4  | -48.2   |  |  |  |  |
| Subtotal                     | 106.0   | 99.6  | 92.1  | 110.6 | 110.8 | 111.8   | 110.6 | 93.5  | 105.0 | 145.3 | -5.8    | -11.0 | -1.4  | 5.6   | -34.5   |  |  |  |  |
| Other 13 T. in Taipei County | 112.7   | 115.6 | 122.7 | 111.8 | 103.3 | 111.0   | 120.9 | 113.9 | 117.3 | 133.7 | 1.7     | -5.3  | 8.8   | -5.5  | 30.4    |  |  |  |  |
| Taipei C.                    | 105.2   | 94.0  | 96.4  | 93.1  | 92.5  | 114.7   | 106.0 | 91.4  | 100.5 | 133.7 | -9.5    | -11.4 | 5.0   | -7.4  | -41.2   |  |  |  |  |
| Taiwan brea                  | 108.5   | 105.4 | 104.4 | 105.2 | 105.6 | 109.6   | 110.7 | 105.6 | 106.6 | 122.0 | -1.1    | -5.3  | -1.2  | -1.4  | -16.4   |  |  |  |  |

Sources: Same as Table 1, 1968 pp. 6-7; 1982 pp. 96-97.

From data shown in Table 5, we can also see the fact that sex ratios for the more migratory group aged 25-39 were decreasing in most of other satellite areas, but the decreases were not as great as the decreases mentioned above. However, most of sex ratios for young adults aged 25-39 for the 16 important satellite areas were still higher than 100.

## 2. Effects on changes in industrial structures

One of the most important effect of industrial and population deconcentration from Taipei City on economic changes in satellite areas of this city is the shift of industrial structure from predominantly primary industrial pattern to predominantly secondary or tertiary industrial pattern in most of these areas. Table 6 shows

Table 6. Changes in Industrial Composition of Male Working Age Population in Satellite Areas and the Inner City of Taipei, 1968-1982.

| Industries<br>Areas | 1982 |      |      | 1968 |      |       | Changes |       |      |
|---------------------|------|------|------|------|------|-------|---------|-------|------|
|                     | 1st  | 2nd  | 3rd  | 1st  | 2nd  | 3rd   | 1st     | 2nd   | 3rd  |
| Taipei County       | 7.8  | 45.2 | 48.1 | 26.8 | 33.9 | 39.3  | -19.0   | 11.3  | 8.8  |
| Sanchung C.         | 2.6  | 49.8 | 47.6 | 12.6 | 37.5 | 49.9  | -10.0   | 12.3  | -2.3 |
| Panchiao C.         | 1.2  | 45.0 | 53.8 | 17.5 | 30.7 | 51.8  | -16.3   | 14.3  | 2.0  |
| Shulin U.T.         | 14.1 | 49.3 | 36.6 | 23.2 | 43.0 | 33.8  | -9.1    | 6.3   | 2.8  |
| Yingko U.T.         | 15.4 | 57.6 | 27.0 | 23.8 | 44.7 | 31.5  | -8.4    | 12.9  | -4.5 |
| Sanhsia U.T.        | 26.0 | 38.5 | 35.4 | 55.4 | 27.3 | 17.3  | -29.4   | 11.2  | 18.1 |
| Hsingchung C.       | 4.0  | 55.2 | 40.8 | 30.5 | 33.2 | 36.3  | -26.5   | 22.0  | 4.5  |
| Hsintien C.         | 4.1  | 31.1 | 64.8 | 12.8 | 43.1 | 44.1  | -8.7    | -12.0 | 20.7 |
| Yungho C.           | 0.2  | 32.3 | 67.5 | 7.5  | 19.1 | 7.3   | -7.3    | 13.2  | -5.9 |
| Tanshui U.T.        | 27.2 | 29.5 | 43.3 | 49.7 | 11.9 | 38.4  | -22.5   | 17.6  | 4.9  |
| Hsichuh U.T.        | 8.3  | 47.1 | 44.6 | 23.0 | 43.7 | 29.7  | -14.7   | -0.2  | 14.9 |
| Chungho C.          | 1.4  | 36.1 | 62.5 | 13.8 | 33.8 | -52.4 | -12.4   | 2.3   | 10.1 |
| Tucheng R.T.        | 8.6  | 51.1 | 40.2 | 28.8 | 37.0 | 34.2  | -20.2   | 14.1  | 6.0  |
| Luchou R.T.         | 14.7 | 43.7 | 41.6 | 28.7 | 33.3 | 38.0  | -14.0   | 10.4  | 3.6  |
| Wuku R.T.           | 14.8 | 46.1 | 39.1 | 44.8 | 11.5 | 43.7  | -30.0   | 34.6  | -4.6 |
| Taishan R.T.        | 12.8 | 50.0 | 37.2 | 42.5 | 16.3 | 41.2  | -29.7   | 33.7  | -4.0 |
| Linkou R.T.         | 37.5 | 22.3 | 40.2 | 53.5 | 14.7 | 31.8  | -16.0   | 7.6   | 8.4  |
| Taipei City         | 3.8  | 30.0 | 66.1 | 6.3  | 27.5 | 66.2  | -2.5    | 2.5   | -0.1 |
| Taiwan Area         | 26.8 | 29.2 | 43.9 | 45.1 | 17.5 | 37.4  | -18.3   | 11.7  | 6.5  |

Sources: Same as Table, 1968, pp. 74-75; 1982, pp. 235-237, 284-285.

the fact that the percentage of employed population engaged in primary industry decreased in all of these satellite units and decreases were greater than that of Taipei inner city. On the contrary, in most of these satellite areas both percentages of employed population engaged in the secondary and in tertiary industries increased. The decrease in the percentage of employed population in primary industry or the increase in the percentage of employed population in the secondary and tertiary industries in satellite cities and townships can be mainly accounted by the effect of the industrial and commercial developments in these areas.

### 3. Effects on changes in farm enterprise

The expansion of population and industries from Taipei inner city to its satellite areas has also resulted in great changes on farm enterprise in these areas. One of the most important change is the decrease in areas of cultivated land. In addition to this effect, the farming structure also have been affected.

The total cultivated land areas in the 16 satellite areas decreased by 28.3% in the short period of 1968 through 1982. Among these 16 satellite areas Chungho City, Yungho City, Sanchung City and Panchiao City being four highest urbanized areas in Taipei County have lost a relative large portion of their cultivated land. They decreased respectively by 83.2%, 74.2%, 65.3% and 61.8% of cultivated land during the 1968-1982 period (see Table 7). Most of these dismissed cultivated land have been used for sites of factories, for constructing housing and public infrastructure, as well as for other kinds of non-agricultural purposes.

One important change in farming structure of the satellite areas in urban expansion process is the increase in proportion of horticultural production in total agricultural production. A relatively large portion of rice field in these areas has been used for growing vegetables, flowers, and fruits. Table 8 demonstrates the fact that in most of the 16 important satellite areas the proportion of vegetable land in total cultivated land increased.

Accompanying the rapid population growth in Taipei Metropolitan Area, the demand of high value agricultural production including vegetables, flowers and fruits in these areas also increased rapidly. This created a distinguished opportunity for farmers in these areas to earn better income than those in remote rural areas.

### 4. Effects on the growth of business and service activities

As population in satellite areas of Taipei Meteropolitan Area increased during the period 1968-1982, the types and number of each type of business and service

Table 7. Changes in Cultivated Land Areas for Satellite Areas of Taipei, 1968-1982.

| Years<br>ha.<br>Areas           | 1982       | 1968       | Changes         |                     |
|---------------------------------|------------|------------|-----------------|---------------------|
|                                 | (1) ha     | (2) ha     | (3) = (1) - (2) | (4) = (3)/(2) x 100 |
| Taipei County                   | 39,214.88  | 47,236.40  | -7,961.52       | -16.9               |
| Sanchung C.                     | 177.50     | 511.80     | -344.31         | -65.3               |
| Panchiao C.                     | 376.58     | 984.54     | -607.96         | -61.8               |
| Shulin U.T.                     | 1,311.90   | 2,199.86   | -887.96         | -40.4               |
| Yingko U.T.                     | 790.24     | 1,171.42   | -381.18         | -32.5               |
| Sanhsia U.T.                    | 3,981.20   | 4,903.49   | -922.29         | -18.8               |
| Hsingchung C.                   | 689.12     | 1,167.83   | -478.71         | -41.0               |
| Hsintien C.                     | 2,447.30   | 3,313.51   | -866.21         | -26.1               |
| Yungho C.                       | 64.58      | 250.71     | -186.13         | -74.2               |
| Tanshui U.T.                    | 3,757.35   | 4,241.85   | -484.50         | -11.4               |
| Hsichuh U.T.                    | 913.61     | 1,775.11   | -861.50         | -48.5               |
| Chungho C.                      | 165.01     | 981.16     | -816.15         | -83.2               |
| Tucheng R.T.                    | 709.71     | 1,073.57   | -363.86         | -33.9               |
| Luchou R.T.                     | 426.20     | 568.03     | -141.83         | -24.9               |
| Wuku R.T.                       | 1,824.23   | 1,904.28   | -80.03          | -4.2                |
| Taishan R.T.                    | 417.02     | 545.82     | -128.80         | -23.5               |
| Linko R.T.                      | 1,886.39   | 2,226.99   | -340.60         | -18.1               |
| Subtotal                        | 19,937.94  | 27,819.89  | -7,881.95       | -28.33              |
| Other 13 T. in<br>Taipei County | 19,336.94  | 19,416.51  | -79.57          | 0.409               |
| Taipei C.                       | 8,271.70   | 16,619.62  | -8,347.92       | -50.23              |
| Taiwan Area                     | 890,630.00 | 899,926.00 | -9,096.00       | -1.0                |

Sources: Same as Table 3, (1) 1968, pp. 64-65; 1982 p. 616.

(2) 1970, p. 9; 1984 p. 29.

(3) 1984, p. 58.



Table 8. Changes in Proportion of Land Used for Harvesting Vegetables in Total Cultivated Land in Satellite Areas of Taipei, 1968-1982.

| Land Areas                  | 1983                |                    | 1968                |                    | %      | Changes<br>(5) - (6) = (7) |        |
|-----------------------------|---------------------|--------------------|---------------------|--------------------|--------|----------------------------|--------|
|                             | Cultivated land (1) | Vegetable land (2) | Cultivated land (3) | Vegetable land (4) |        |                            |        |
| Taipei County               | 39,274.88           | 9,597              | 47,236.40           | 4,031.59           | 24.40  | 8.50                       | 15.90  |
| Sanchung C.                 | 177.50              | 487                | 511.81              | 414.05             | 274.36 | 80.89                      | 193.47 |
| Panchiao C.                 | 376.58              | 865                | 984.54              | 943.90             | 229.69 | 95.87                      | 133.82 |
| Shulin U.T.                 | 1,311.90            | 75                 | 2,199.86            | 417.30             | 5.70   | 5.30                       | 0.40   |
| Yingko U.T.                 | 790.24              | 318                | 1,171.42            | 228.80             | 40.20  | 19.50                      | 20.70  |
| Sansia U.T.                 | 3,981.20            | 528                | 4,903.49            | 349.41             | 13.26  | 7.13                       | 6.13   |
| Hsinchung C.                | 689.12              | 535                | 1,167.83            | 731.24             | 77.60  | 62.60                      | 15.00  |
| Hsintien C.                 | 2,447.30            | 491                | 3,313.51            | 604.23             | 20.06  | 18.24                      | 1.82   |
| Yungko C.                   | 64.58               | 146                | 250.71              | 203.58             | 226.10 | 81.20                      | 144.89 |
| Tanshui U.T.                | 3,757.35            | 88                 | 4,241.85            | 538.60             | 2.30   | 12.69                      | 10.39  |
| Hsichun U.T.                | 913.61              | 243                | 1,775.11            | 279.10             | 26.59  | 15.70                      | 10.89  |
| Chungko C.                  | 165.01              | 99                 | 981.16              | 164.15             | 59.99  | 16.70                      | 43.29  |
| Tucheng R.T.                | 109.71              | 124                | 1,073.57            | 704.44             | 17.47  | 19.04                      | -1.57  |
| Luchou R.T.                 | 426.20              | 1,426              | 568.03              | 755.58             | 334.58 | 133.00                     | 201.58 |
| Wuku R.T.                   | 1,824.23            | 1,365              | 1,904.28            | 760.90             | 74.80  | 39.96                      | 34.84  |
| Taishan R. T.               | 217.02              | 86                 | 545.82              | 82.47              | 20.60  | 15.10                      | 5.50   |
| Linkou R.T.                 | 1,886.39            | 338                | 2,226.99            | 469.20             | 17.90  | 21.06                      | -3.16  |
| Subtotal                    | 19,937.94           | 7,214              | 27,819.89           | 7,137.95           | 36.18  | 25.65                      | 10.53  |
| Other 13 T.in Taipei County | 19,336.94           | 2,383              | 19,416.51           | -3,106.36          | 12.30  | -16.00                     | -28.30 |

Sources: Same as Table 3, (1) 1968, pp. 86-87; 1982, p. 89.

also increased significantly. The total number of registered business companies and stores for Taipei County was 16,260 in 1968 and 55,769 in 1982. It increased by 39,509 units or 243 %. During the same period the total number of business enterprise of Taipei City increased from 37,950 to 163,940. It increased by 125,990 or 323%. Although the growth of business in whole satellite county was not as fast as the growth in the inner city, the increase in the percentage of tertiary population in total employed population for several satellite areas were greater than the increase in Taipei City. From data shown in Table 6, we can also see that the percentage of tertiary employment population for Taipei City decreased by 0.1% and the percentage for Hsintien City, Sanhsia Township, Hsichuh Township, and Chungho City increased respectively by 20.7%, 18.1% and 10.1%.

When types of new growing business and services in satellite areas and in the inner city are compared, we can see that several kinds of business and services, e.g. shipping company and recreation park, have been spread to satellite areas. This is because these kinds of business and services can more easily occupy space in satellite areas for operating.

#### 5. Effects on changes in household income

Industrial and business developments in satellite areas in the last one and a half decade had effectively increased the household income in these areas. The increasing speed of household income for Taipei County was higher than that for Taipei City, although the total amount of increase for Taipei County was still lower than that of Taipei City.

The faster increase in household income in Taipei County finally resulted in decreasing the income gap between Taipei City and Taipei County. The decrease of income gap appears not only in total income but also in most specific income categories except the item of mixed income. Changes in these income data described above can be seen from Table 9.

### IV. THE EFFECT OF POPULATION GROWTH AND SOCIO-ECONOMIC DEVELOPMENT IN SATELLITE AREAS ON THE DEMOGRAPHIC AND SOCIO-ECONOMIC CHANGES IN THE INNER CITY

Population growth and socio-economic development in satellite areas may have great effects on many aspects of socio-economic life in the inner city. In Taipei Metropolitan Areas, three aspects of the effect would be more significant than

Table 9. A Comparative Increases in Family Income in Taipei County and Taipei City, 1972-1982

| Year                                 | 1982                 |                    |                             | 1972                 |                    |                             | Increase 1972-1982           |                                |                            |                       |
|--------------------------------------|----------------------|--------------------|-----------------------------|----------------------|--------------------|-----------------------------|------------------------------|--------------------------------|----------------------------|-----------------------|
|                                      | Taipei<br>County (1) | Taipei<br>City (2) | % (3) =<br>(1)/(2)<br>x 100 | Taipei<br>County (4) | Taipei<br>City (5) | % (6) =<br>(4)/(5)<br>x 100 | County<br>(7)=(1)-<br>(4) \$ | Taipef<br>(8)=(7)/<br>(4)x100% | City<br>(9)=(2)-<br>(5) \$ | (10)=(9)/<br>(5)x100% |
| Grand total                          | 356,076              | 419,532            | 84.9                        | 63,386               | 84,320             | 72.5                        | 292,690                      | 461.76                         | 335,212                    | 397.55                |
| Wages &<br>Salaries                  | 231,483              | 252,825            | 91.6                        | 43,602               | 51,220             | 85.1                        | 187,881                      | 430.90                         | 201,605                    | 393.61                |
| Property<br>Income                   | 49,677               | 68,735             | 72.3                        | 6,119                | 11,897             | 51.4                        | 43,558                       | 711.84                         | 56,558                     | 477.75                |
| Mixed<br>Income                      | 63,029               | 72,010             | 85.2                        | 11,467               | 6,802              | 168.6                       | 51,562                       | 499.66                         | 51,562                     | 988.06                |
| Gift &<br>other transfer<br>receipts | 12,250               | 22,878             | 53.5                        | 2,141                | 14,402             | 14.9                        | 10,109                       | 472.16                         | 8,476                      | 58.85                 |

Sources: (1) Department of Budget, Accounting Statistics, Taiwan Provincial Government, Republic of China, Report on Survey of Family Income & Expenditure, Taiwan Province of Republic of China, 1968, 1982.

(2) Taipei Municipal Government, Report on Survey of Family Income and Expenditure, Taipei Municipality, 1968, 1982.

other. These effects are discussed as follows:

**1. The growing population in satellite areas can be potential labor resources, in-migrants, consumers and trouble makers for the inner city.**

Part of the population living in satellite areas may change their residential place and chose inner city as their destination. Other people residing in satellite areas also may go to work, do shopping or even create problems in the inner city every day. A large number of commuters from satellite areas to work in business companies in Taipei City resulted in serious traffic problems for about 7:00 to 8:30 a.m. and from 5:00 to 6:30 p.m. on several highways connecting the inner city to satellite areas in different directions of the city. Many commuters may later on migrate to live in the city when they save enough money to buy a new apartment in the inner city. As we can see, a large portion of new migrants from rural areas to Taipei Metropolitan area often select satellite areas as their first destination. It is mainly due to lower rent and housing prices in these areas than in Taipei inner city. After their social and economic conditions have been improved, their willingness to migrate to inner city also rise. Migrants from satellite areas to the inner city may select skirt zone of the city as their destination place.

Population living in satellite areas could be also potential customers or consumers of many kinds of business in the city. Wholesale business in the inner city always play an important role of suppliers for retail business in satellite areas. Residents in satellite areas may also come to shop in department stores, to enjoy food and entertainment in restaurants or in clubs in the city. Unemployed or underemployed persons in satellite areas may occasionally do illegal activities such as stealing, robbing or smuggling in the city.

**2. Effect of industrial development in satellite areas on business development in the inner city**

Almost every factory located in satellite areas has at least one associated business company in the inner city of Taipei. Factories produce commodities for associated business companies on one hand and consume materials purchased by the associated companies on the other. Thus processing of materials and production of goods in factories in satellite areas have significantly supported the associated business companies to survive and develop in the inner city.

Business companies in the capital city of Taipei could associate factories over the whole island of Taiwan. However, factories located in satellite areas of



Taipei comprise a large portion of total number of factories in Taiwan. Among all administrative units of Taipei County, those which were located on the east side of the inner city are distributed to mountainous areas, so there are less factories in these areas. Most of the factories in satellite areas of Taipei are distributed to outskirts townships and cities toward the west and the south of the inner city. Data in Table 3 shows that among 16 important satellite areas, Hsingchuang, Shulin, Tucheng and Panchiao which are all located in the south of Taipei City and have a relatively large number of factories than other satellite places. Although these factories are not far from Taipei City, they still have associated companies in the city.

### 3. Horticultural development supply urban needed fruits, vegetables, flowers, and tea

Several important reasons led to the development of horticulture in suburban areas of Taipei City. First, as people's living standard in Taipei City and in other places of Taiwan rose, the ratio of their consumption on horticultural production in the total consumption also increased. Second, farmers like to grow high value horticultural production instead of low value rice and other traditional crops. Third, the importing grain policy have effects of changing much of rice land for growing horticulture crops including vegetables, fruits, flowers, etc. Fourth, The improved horticultural cultivation techniques have been efficiently applied to farms. Fifth, the relative short distance and lower transportation cost from satellite areas to Taipei City reduced the cost for developing horticultural production in these areas. Sixth, both governments and farmers' associations in Taipei City and Taipei County implemented the "tourist farm project" as a strategy for increasing farmers' income and to satisfy urban residents' demand. This project has effectively developed horticultural production in satellite areas of the inner city.

What we like to emphasize here is that horticulture development in satellite areas has effectively supplied the increasing needs of fruits, vegetables and flowers consumption in inner city of Taipei. Almost all flower sellers in the holiday-flower-market are farmers of Taipei City and satellite areas in Taipei County. Vegetables and fruits supplied by farms in all satellite areas comprise a significant portion of the total consumption in the city.

## V. RECIPROCAL REQUIREMENTS AND PROVISIONS OF PUBLIC FACILITIES AND SERVICES BETWEEN SATELLITE AREAS AND THE INNER CITY

Taipei City and satellite townships and cities located in Taipei County are separate in their administrative system, but they often require and provide public facilities and services reciprocally. Several important kinds of public facilities and services which have been reciprocally used by people living in these two parts of Taipei Metropolitan Area are transportation facilities, schools, hospitals, parks, recreation places, water supply system, fireproof facilities and services. In this section of the present paper we attempt to focus on discussing characteristics of interrelationships of service requirement and provisions between Taipei City and satellite areas on transportation, educational facilities and medical services.

### 1. Inter-relationship of transportation system

Public transportation systems in Taipei Metropolitan Area includes the Taipei Municipal Bus System, Sanchung Bus system, Hsintien Bus System and Taiwan Provincial Highway Bus System. All of these bus systems transport passengers from the inner city to satellite areas and from satellite areas to the inner city every day. Among these four bus systems Sanchung and Hsintien are under administration of Taipei County Government. The other two systems are respectively administered by Taipei Municipal Government and Taiwan Provincial Government. Both Taipei City Government and Taipei County Government have to borrow right of road from each other for extending their own bus lines.

### 2. Inter-relationship of educational services

Taipei City and its nearest satellite cities and townships have commonly exchanged student population for each other. Many students living in Taipei City could study in schools located in satellite areas. Also many students living in satellite areas could study in schools located in the inner city. Panchiao Senior High School and Taishan Senior High School which are located in satellite areas have joined with Taipei public senior high school league. In every year these two public senior high schools cooperate with other public senior schools in Taipei City to hold the unified entrance examination. Thus the proportion of Taipei residing students in these two schools are relatively higher than in other schools in satellite areas.

### 3. Interrelationships of medical services

Both public and private hospitals in Taipei City and in satellite areas are opened to patients everywhere. But the number of patients from satellite areas to hospitals in the inner city are usually more than the number of patients from city to hospitals in satellite areas. In most recent years, several big hospitals in Taipei City set branch hospitals in different satellite cities and townships. Such a branch system has resulted in dispersion of patients in Taipei Metropolitan Area. Since then patients have been possibly transferred to branch hospitals located in satellite areas.

According to the organization system of big hospitals, main hospitals and their branch hospitals could exchange medical personnel and facilities for each other. This exchange system also means the mutual provisions of medical services between the inner city and satellite areas.

## VI. TOWARD INTEGRATED METROPOLITAN COMMUNITY ORGANIZATION AND DEVELOPMENT —NECESSITY, PROBLEMS AND THE SOLUTION

Although the inner city of Taipei and its satellite areas have so much influences of and close inter-relationships between each other, much disintegration has still between them. Since the administrative system of Taipei City and Taipei County are separate, they cannot effectively help each other in many aspects of development affairs. In the most recent years Taipei City requested spaces in Taipei County for garbage dumping field very urgently, but people in Taipei County cannot comply with this request. On the other hand people in Taipei County expect Taipei City to assist them with financial resources for improving public facilities in Taipei County, but the Taipei City Government cannot accept this request either.

In facing this disintegrating problem, both Taipei City and Taipei County have once considered improveing the shortcomings through refining the administrative boundary between them. But the main reason for this proposed plan held by two sides of people are different. Residents and representatives in Taipei City have agreed to expand the city boundary to cover several nearest satellite cities and townships so as to enlarge activity spaces. But residents and representatives in nearest satellite areas would not agree to incorporating their administration units into the boundary of Taipei City.

Although a change in administration boundary may effectively lead to integration between these two parts of Taipei Metropolitan Area, it may still create new

problems in this metropolitan area. One of the most serious problem would be the loss of land resources and taxation revenue in Taipei County. This problem may also result in worsening financial condition and development effectiveness in the rest of townships within the county.

However, the inter-dependency between Taipei City and Taipei County will become greater in the future, therefore these two administrative units need also cooperate with each other more intensively in the future. The integration and cooperation could be effectively achieved through organizing a metropolitan affair committee to monitor affairs of both Taipei City and Taipei County Governments. The organization and functions of the committee should be designed to solve all kinds of business and problems which are in common with these two administrative units.

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# 衛星地帶與內圍都市之間人口成長 與社會經濟發展的相互關係 ——台北都會區的案例

蔡 宏 進

(中文摘要)

鑑於本世紀內各國都市的人口及社會經濟發展為顯明的社會現象，在我國的情形也然。又都市化過程中衛星地區及市中心地帶的相互關係甚為複雜，各地情形不一，本論文乃針對台北都會區的衛星地帶及內圍市區之間的人口成長與社會經濟發展的相互關係，作一個案研究，研究的結果一來可從學術觀點增多對都會化現象之了解，二來也可供改進都會地區施政之參考。

本研究的內容包括下列五方面：(1)指明台北都會區的人口成長及工業分散化，(2)分析人口與工業分散化對衛星地區社會經濟變遷的影響，(3)分析衛星地帶的人口成長及經濟發展對內圍市區人口及社會經濟變遷的影響，(4)說明衛星地帶及內圍市區在公共設施及服務方面的供需關係，(5)指出朝向整合性都會社區組織發展的必要性，問題及解決途徑。

針對第一點有關台北都會區的擴展過程中人口成長及工業分散化的現象，本論文指出以往十五年內台北都會地區（大致包括台北縣市）的人口數及工廠數不斷成長，但衛星鄉鎮市的成長速度遠比內圍市區的成長速度快。針對第二點有關人口及工業分散化對衛星地區的人口及社會經濟變遷的影響，本論文指出青壯人口的移入使這些衛星地區的青壯人口所占比率相對較高，而不同的小地區因工商業發展的性質不同，所移入的青壯人口的性比率也分別有所不同。工商業發展的結果，使衛星地區人口的行業結構也產生改變，初級行業人口所占比率減少，次級及三級行業人口所占比率提高。此外這些外圍地區農業生產結構也發生重大改變，主要的改變是農地面積減少，蔬菜、花卉及水果的生產占總農產的比重提升。此外，都會的衛星地帶商業及服務業的類型及數量也都增加，家計收入增加的速度也較內圍市區的增加速度快。

在第三大方面有關衛星地帶的人口及社會經濟發展對內圍市區的人口及社會經濟變遷的影響，本文從三大方面說明：(1)衛星地區成長的人口成為內圍市區的潛在勞力、移入人口及

消費者等，(2)外圍地區的人口成長及社會經濟發展也帶動內圍市區的商業發展，(3)外圍地帶的園藝生產供應內圍市區所需求的水果、蔬菜、花卉及茶葉等。

第四大方面係有關衛星地帶及內圍市區在公共設施及服務方面的相互供需。在這部份本文指出相互供需的公共設施及服務包括交通系統、教育服務及醫療設施服務等。

最後一節在討論朝向整合性都會社區組織及發展一節中，本文指出雖然台北都會區內的衛星地帶與內圍市區在多方面的關係密切，但因行政區的界限，使其在許多事務上不能有效相互協助，故今後需要特別加強彼此間的整合。為達此目標，不一定要重新劃界，却需有一超縣市之決策委員會，來設計、協調並推行縣市間的許多共同事務。

本研究所使用的方法係先經取用可靠之次級性資料，而後運用適當的人口統計及社會統計方法，再加計算出所需要之量化資料，根據計算資料作適當之說明與解釋。