

Socio-economic Change in Rural Taiwan: 1950-78*

Cheng-hung LIAO** and Martin M.C. YANG***

Preface

This report is written in two parts. The first part is an overall view of rural development in Taiwan which summarizes the general trends of social and economic changes for the past three decades. The order of the discussion will hopefully reveal how one change services the next. This information may aid planners of rural development programs in eliminating unnecessary expenses and achieving better results with less effort. The second part of this paper summarizes the results of a case study recently conducted in *Ta Yuan* (大園) to uncover specific changes which are not evident in the above-mentioned general but casual descriptions.

I An Overall View of Rural Development¹⁾

1 Factors for Socio-economic Changes

* The authors appreciate the financial support of the Center for Southeast Asian Studies, Kyoto University for conducting the research and the tremendous effort of Professor Shinichi Ichimura in editing the paper.

** Department of Agricultural Extension, National Taiwan University, Taipei, Taiwan

*** Department of Sociology, Soochow University, Taipei, Taiwan

1) Main sources for this section were drawn from Yang [1970a].

The Land Reform²⁾ Program

This program was administered and completed in three stages. The first stage began in 1949, and it simply limited the farm rent to 37.5 % of the annual yields of two main crops: paddy rice and sweet potato. The second stage was started in 1951, and it required the sale of public land to tenants. The third stage implemented in 1953 ordered the landlords to sell their land to the government, except for about three hectares which they were permitted to keep for themselves. The government immediately sold the land to the tenants who were actually cultivating it. The important points of this undertaking were: (a) the landlord's land was carefully surveyed, measured, and recorded; (b) an appropriate purchase price was set by a committee whose members represented landlords, tenants, owner-farmers, local government officials, and community leaders; and (c) the land was paid for by the government, and the tenant was permitted to pay in twenty installments over ten years.

The land reform program accomplished the following: (a) it eliminated the age-long social injustice in land distribution;

2) Please see Yang [1970b].

(b) it freed a majority of Taiwan farmers from peasantry; (c) it gave the hitherto hopeless and downtrodden peasants a free and independent status, dignity, and hope for a brighter future; (d) it motivated them to work harder to improve the productivity of the land; (e) it also helped to convert many landlords from being parasites in society to being producers; (f) it channeled a large part of landed capital into industry and business; (g) it saved Taiwan from falling into the danger of becoming a country controlled by a small number of big landlords with capitalistic plantations employing thousands of poor farm laborers; and (h) finally, with the success of other agricultural development programs, it set the whole farm population in the rural parts of Taiwan into dynamic motion and led to many other consequent innovations.

Popularization of Education

The realization of land reform has made education desirable because education is seen as the surest way to a higher social status. Every farmer's family now has the hope that at least some of their children will go to college and they will climb to the top of the social ladder. The following statistics illustrate the impressive rise in education: (a) in 1953, 87.8 % of 6-11 year-old children were in elementary schools, whereas in 1975 the percentage was 99.3; (b) in 1953 only 13.8 % of boys and girls 12-17 years of age were in secondary schools but in 1975 attendance was 65.5 %; and (c) in 1953 only 0.9 % of the rural population of

18-24 years of age were studying at institutions of higher learning, but in 1975 the percentage was 9.8 [Yang 1970b; 1978].

Agricultural Extension Service and New Farming Techniques

Agricultural extension service teaches farmers new techniques to improve their farming and home economics and gives training to youths. Few farmers would voluntarily seek and adopt new techniques unless they were convinced of the success of these techniques through demonstrations. The land reform, however, motivated them more strongly than ever to seek a higher standard of living with assistance from various sources. Thus, the new owner-farmers became more active participants, ready to adopt whatever they could learn. On the other hand, the agricultural extension programs supported the land reform. The acreage of land given to a tenant through the land reform program was very small, averaging less than one hectare. Land-ownership was initially a great thrill to the farmer's family, but soon they realized that the farm was just as small as before to cultivate. The agricultural extension service, however, taught them to make the best of this small piece of land. Previously landlords were conservative and slow in adopting new technology, but the new owner-farmers had the freedom and willingness to adopt new things. The agricultural extension service also played a role in adult education. As a result, a great majority of

uneducated farmers have had the opportunity to learn from the more progressive and better educated farmers.

A commission was established in the national government to handle postwar rural reconstruction and improvement of agriculture in Taiwan. It has been staffed by a large number of top-notch specialists in plant production and protection, animal husbandry, soil and fertilizer, farming machines, agricultural economics, and agricultural extension services. Every year it has had a big budget for work projects, personnel and administration, and for carrying out the following three functions. The first is to promote the activities of agricultural institutions, such as national and provincial agricultural research institutes, regional agricultural improvement stations, agricultural colleges, and various farm product enterprises. The commission reviews the submitted projects and finances or subsidizes the implementation of many projects. Its second function is to support research projects in the broad sense of agricultural economics. It also extends loans to farmers who are willing to grow new crop varieties, to raise new breeds of domestic animals, or to adopt new farm management practices. The third function of this commission is to democratize the farmers' association. The commission not only introduced the modern type of extension service but also made it a regular activity of the farmers' association.

Agricultural development has been achieved through new farming methods.

The notable ones are the introduction of new crop varieties and new cropping system, new cultivation methods and farm management, better fertilizers, soil conservation, insecticides and weeding, improved irrigation, and veterinary treatment of animals. The initial success of these methods made the farmers more open-minded to other innovations.

Industrialization and Improved Communication

As economic development progressed in Taiwan, modern industries not only attracted workers to urban centers but also spread to the rural areas, offering employment to the farmers' family members. The increase in part-time farmers can be attributed to this new opportunity. A wide range of farmers were exposed to new economic, social, and cultural experiences associated with modern factories. The impact of industrialization quickly reached every corner of the small island of Taiwan. Now Taiwan is entirely covered and served by a well-knit network of all-weather highways, railroads, and postal service. A super freeway connects Keelung in the north with Kao-hsing in the south. When modern transportation and communication reached isolated areas, various changes immediately occurred in the economic activities, social behavior, and cultural affairs of the people. The interaction between industrialization and rural development is a subject which requires careful analysis of the process of economic and social development.

Contributions of Mainlanders

A large number of political refugees arrived in Taiwan just before the Communists took over Mainland China. This group included not only the high-ranking military personnel but also the highly-educated people, including professors, teachers, scholars, writers, and government officials, as well as professionals, business managers, industrial engineers, and agricultural experts. They brought to Taiwan new ideas, skills, and culture, as well as capital. They took positions as school teachers and college professors, writers, and journalists. Through the educational system and mass media they have greatly influenced the thinking of the local people and the youth.

2 The Major Socio-economic Changes³⁾*Changes in Family and Village Life*

Many rural families are encouraged by agricultural extension workers to talk over important family matters at meetings attended by all the adult family members and to plan or make decisions together. They are also advised to decide farming projects after the village-level study classes are held and to form joint cultivation teams and similar groups. After the land reform the new owner-farmers became active in such group meetings and learned to speak up. With this training they also began to think and speak with considerable rationality. The range of discussion topics was broadened to include ways and means of improving

agricultural production and marketing as well as non-farm employment opportunities and even local politics.

Family structure is beginning to change, and the traditional extended family is rapidly disappearing. But the Western type of nuclear family does not seem to be welcome even among younger people. It is doubtful whether it will ever be accepted universally by Chinese families. Most college students still perceive a family consisting of grandparents, parents, and unmarried children. The size of the family, however, has decreased because all the married sons tend to live separately from the parents and the number of children is smaller due to family planning, in contrast to the long tradition of honoring ancestors by having many children. Relations between husband and wife have become more equal. As a whole, women's position in society has been raised considerably. This change is much more evident among mainland families.

The father's authority is no longer exercised as much as before, and parents and grownup children often consult each other now. The main reasons are that the children are better educated and more informed about new things than their parents, and that they have their own jobs. Moreover, one can say that the general social trend is anti-authoritarian. If, for instance, a father tries to cling to his traditional authority, he is likely to be ridiculed by his neighbors. The family is no longer an individual's sanctuary from society. Grownup off-

3) Yang [1970a; 1978].

spring are expected to stand on their own feet. This also implies that in daily life their wishes and activities are the central concern of the family. Parents often yield to their children's demands. Permissiveness is widely practiced, and inhibitory discipline is no longer regarded as appropriate for bringing up children.

Changes in Community Structure and Leadership

The rural community is rapidly changing from a traditional folk and kinship community to an associated society: from *gemeinschaft* to *gesellschaft*. Its structure is also changing from a hierarchical setup to a horizontal network. The trend is far from complete but moving at a high speed. The traditional structure was linear, from top to bottom, and consisted of: (a) the village or community gentry which included the heads of families of any significance and persons with education high enough to be gentlemen or school teachers, (b) the official community head and his staff, (c) the *pao* and *chia* heads, (d) the lane or neighborhood lay leaders, and (e) the common citizens. Power and leadership came from the gentry on top and passed through all the levels to reach the common citizens. Practically all of the social or kinship organizations had such a structure.

This hierarchical structure is collapsing. Under pressure to become more democratic, the structure is spreading out horizontally. It is already common for community affairs to be handled by two parallel bodies: the village people's

assembly and the village government. In a township, which is one level above the village, the two are the assembly of township representatives and the township government. The village people's assembly and the assembly of township representatives are legislative bodies, while the village and township governments are executive ones.

In both the legislative and executive bodies the present manner of handling public affairs is much more horizontal than hierarchical. The chairman of the village people's assembly, for example, periodically calls all the villagers, or representatives of all the families, into session one evening to discuss some important matters concerning the well-being of the whole village. Ad hoc committees may be organized to investigate certain problems. Either formal or informal suggestions or proposals may be accepted by a consensus of all the participants. A similar process is followed by the assembly of township representatives. In the villages and township governments, the chief of the government periodically calls together all of his staff members or, if the staff is too big, only the senior ones to draw up plans or programs according to proposals made by the assemblies. Program committees may be organized. This process implies that the flow of power or authority and the communication of thought and information are horizontal rather than vertical. The old way of passing orders from top to bottom is practiced much less now.

Other groups are formed to deal with problems of similar interests. These days social relations are more often based on mutual and equal friendship or interests, rather than respect for paternalistic affection or seniority. The latter type of relationship is now limited to close kinship circles and some student-teacher relations. However, traces may still be found in government offices.

It is not unusual for intellectuals to sit among workers on the same floor in the same hall. On the township level, quite a few extension workers are college graduates, but they work alongside the farm people and share their hardships and problems.

In this period of transition not all the changes are encouraging or desirable. Some have served to disintegrate the unity of the community. For instance, the emergence of new political interests or political relations has resulted in the division of the community into numerous rival factions. This division has been detrimental to the village's performance in constructive undertakings. Many village elders wish that the so-called changes had never come. The weakening of the traditional hierarchical structure and social relations based on paternalism, kinship, and seniority made it very difficult for them to organize community programs and also keep the young people within the old moral code.

Traditionally the village gentry consisted primarily of the heads of the strong clans, wealthy families, and big landlords. In many cases the three categories meant

the same persons. In addition, one or two Confucian academicians and some persuasive personalities were also included. Now with the disappearance of landlords, the decline of kinship influences, and dying out of old Confucian scholars, the traditional village gentry has practically collapsed, and the community's leadership is changing. It is too early to say how this change is evolving. The trend seems to be toward the development of a joint leadership by a federation of successful business people, well-known professionals, school superintendents, farmers' association managers or board members, local politicians, and community affairs experts.

Unlike the traditional gentlemen with much leisure but little positive function, the new leaders must engage in a great deal of activities, good and bad, so that they tend to be much younger. Women are also gradually included. The new leadership has become elective, and it will stay this way.

From Self-sufficiency to Interdependence

Formerly, a great majority of the rural people were self-reliant and depended almost exclusively on the blessing of natural forces. It is true that within the family and the local community there was some mutual help, but they seldom blamed other people for failures and seldom expected other people to help, except those closest in the kinship network or the village community.

This attitude has changed in the past twenty-five years. First of all, the success

of land reform increased the farmers' confidence in the government, because no other authority could conduct such a program; besides, a number of things closely related to land reform had to be carried out by the government.

Secondly, the farmers learning from the extension workers, saved a lot of labor and capital and yet had greater and better crops, hogs, and chickens. All these results convinced the farmers to cooperate with the agricultural extension service.

Thirdly, marketing the farm products required a fair amount of working capital which could not be raised by individual farmers from private money lenders or loan agencies. The government had to help. It established both the general farm credit system and special commodity loans in the state banks, the government-owned Food Bureau (an agency in charge of food administration and promotion of food production), the Taiwan Sugar Corporation, and the Tobacco and Wine Monopoly Bureau. In an emergency, public loans could be negotiated through the township farmers' association. Once convinced of the government's true purpose in rendering such services, the farmers increasingly relied on the government.

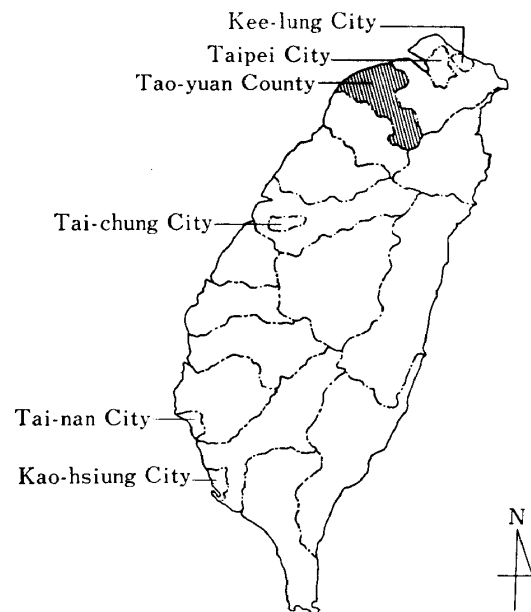
Fourthly, the farmers have gradually been adopting a joint cultivation system and establishing marketing cooperatives. This has made possible the economical utilization of modern farm machinery and techniques. Although the fruits of these efforts are not obvious yet, the

farmers have at least begun to work with each other. They are learning interdependence between neighbors and other people in the local community. Interdependence and cooperative production and marketing are certainly important features of rural development.

II Rural Development in Ta-yuan Hsiang

1 Ecological Conditions of Ta-yuan Hsiang

Ta-yuan Hsiang (大園鄉) is a rural township situated 40 kilometers southwest of Taipei, as is shown in Map 1. Transportation and communication with Taipei and other cities are very good. During the past 15 years or so it has been influenced by industrialization and urbanization in surrounding towns like Tao-yuan (桃園), Chung-li (中壢), and Kui-shan (龜山), but remains primarily



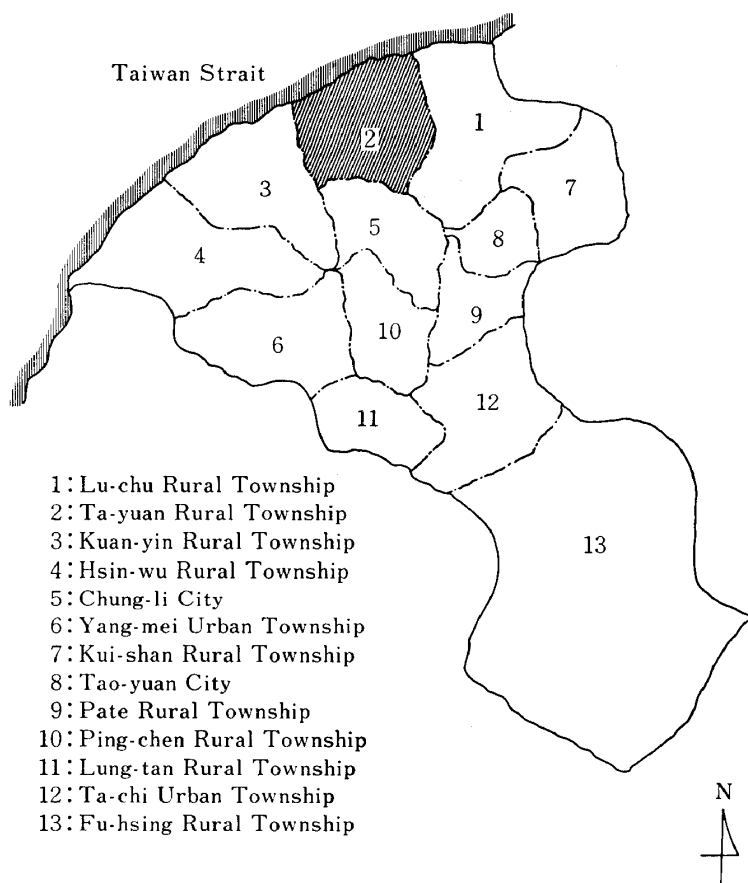
Map 1 The Location of Tao-yuan County in Taiwan

a rural township. It was chosen for this study because it was previously studied in 1968 and 1969 for its social, economic, and cultural conditions. A comparison of the present conditions with the earlier ones will clarify the various changes over the past ten years in quantitative terms.

Ta-yuan Hsiang is an administrative area consisting of one township center called Ta-yuan Tsun (大園村) and 18 farm villages. The area extends more than 12 kilometers from north to south and about the same length from east to west. The total acreage of this area is 87 square kilometers. Topographically,

it is situated on Tao-yuan tableland and declines toward the northeast. Although the area is hilly with no mountains, it is entirely covered with paddy fields. There are two rivers, both of which are effectively utilized by the farmers to irrigate their rice and vegetable fields. Moreover, dams, reservoirs, and canals can be seen everywhere in the area, and the 12-kilometer long seashore offers a well-known fishing harbor in the northwest corner. It is one of the best harbors of refuge in the northern part of Taiwan. It is known that in 1968/69 there were more than fifty fishing boats with 4 to 5 horsepower engines. But basically it is

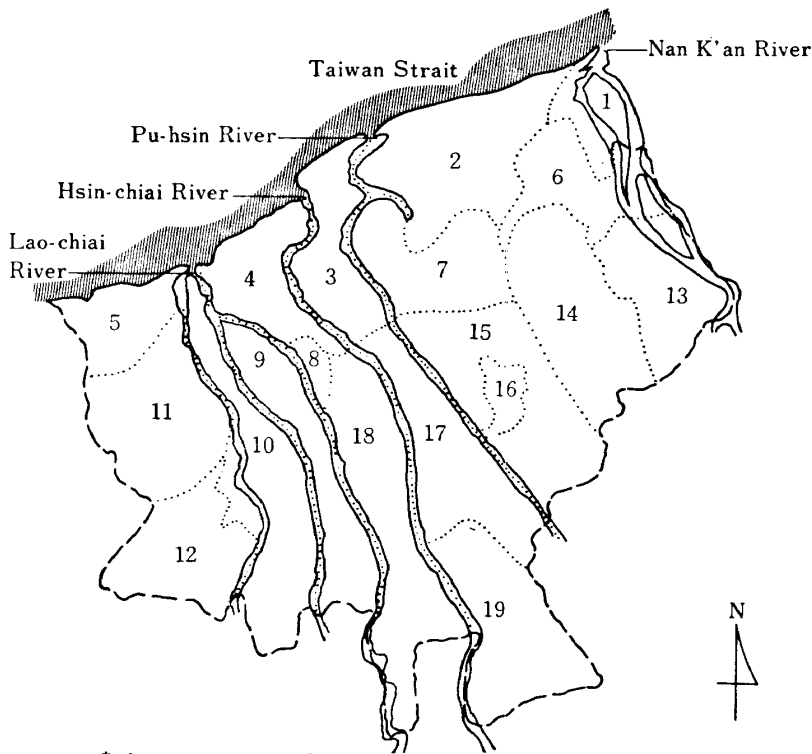
a rich agricultural township known as a "country of fish and rice" (魚米之鄉). The construction of the huge Tao-yuan Internatinal Airport within the township, however, has reduced the farm land. Maps 2 and 3 and Table 1 show these conditions and changes.



Map 2 The Location of Ta-yuan Hsiang in Tao-yuan County

2 Data and Methods Used in This Study

Data were obtained from two sources: official reports, including statistical charts, and the field survey conducted in August 1978. The survey was based on multi-stage sampling. In the first stage of locating the places to study agricultural population served as the criterion. Of 19 villages in Ta-yuan Hsiang, 7 villages were excluded because they had less



- * districts surveyed
- | | | |
|-------------------|--------------------|---------------------|
| 1: Hai-ko Tsun | 8: Ta-yuan Tsun | 15: Ta-hai Tsun |
| 2: Sha-lun Tsun | *9: Tien-hsin Tsun | 16: Chian-hua Tsun |
| *3: Tsun-tou Tsun | *10: Si-hai Tsun | 17: Pu-hsin Tsun |
| *4: Nei-hai Tsun | *11: Nan-kong Tsun | *18: Hung-hong Tsun |
| 5: Pei-kong Tsun | 12: Ho-ping Tsun | 19: Wu-chung Tsun |
| 6: Chu-wei Tsun | 13: Kuo-lin Tsun | |
| *7: Hou-tsu Tsun | 14: Sun-shi Tsun | |

Map 3 The Administrative Districts of Ta-yuan Hsiang

Table 1 Population Density of Ta-yuan Hsiang, 1905-76

| Year | Total Population (people) | Total Area (km ²) | Density (people/km ²) | Total Farm Land (ha) | Density of Farm Land (people/ha) |
|------|---------------------------|-------------------------------|-----------------------------------|----------------------|----------------------------------|
| 1905 | 11,675 ^a | 87.4 | 134 | | |
| 1968 | 49,735 ^a | 87.4 | 569 | 6416 | 7.75 |
| 1976 | 51,327 | 87.4 | 587 | 4502 ^b | 11.40 |

Source: a. Taken from Yang [1970b: Table 1-2, 4].
 b. Ta-yuan Township Office [1978: 376].

than the average percentage of agricultural population which was 47.7 % at the end of 1977. Out of the 12 remaining villages, 7 were chosen from the viewpoint of geographical location and convenience of communication (See Map 2).

They are: Tien-hsin (田心), Si-hai (溪海), Hung-hong (橫峯), Hou-tsu (后厝), Tsun-tou (圳頭), Nei-hai (内海), and Nan-kong (南港). The second stage was selecting some households in each village. After setting the sample size arbitrarily at 200, the number was distributed according to the proportion of each village's number of households to the total. The results are in the order of the villages listed above: 27, 46, 35, 20, 26, 20, and 26 respectively. The final stage was identifying individual respondents. They were chosen from *lins* (鄰) selected randomly. *Lin* is the basic administrative unit in the village consisting of about ten neighboring households. A pair of *lins* was always selected: one for actual interview, another for stand-by. The data needed for the sampling were obtained from official records. In order

to make an international comparison possible, the interview schedule originally prepared by the Center for Southeast Asian Studies, Kyoto University, was used with some modifications to suit the situation in Taiwan. The final schedule

Table 2 Population Change of Ta-yuan Hsiang, 1905-76

| Year | Population Size (people) | Annual Growth Rate (%) | Net-migration Rate (%) | Natural Increase Rate (%) | |
|-------------------|--------------------------|------------------------|------------------------|---------------------------|--------|
| 1905 ^a | 11,675 | | | | |
| 1968 ^a | 49,735 | 1.84 | 0.36 | -15.4 | |
| 1969 ^b | 51,330 | | | | |
| 1972 ^b | 53,386 | 0.58 | | | -15.25 |
| 1973 ^b | 53,755 | | | | -19.4 |
| 1974 ^b | 54,006 | -2.49 | | | -6.91 |
| 1975 ^b | 51,481 | | | | 2.41 |
| 1976 ^b | 51,327 | | 2.21 | | |

Source: a. Taken from Yang [1970b: Table 1-1, 4].
 b. Taken from Republic of China [1969-1976].

and interview techniques were decided after a pretest interview with 17 households and discussions among the interviewers and the author were held.

The responses to the schedule were generally very satisfactory, so that no single case was entirely discarded. Even when some questions were not properly answered, the rest of the answers were included in our final results so that the totals of some items do not add up to 200. The final results were analyzed at two levels, the macro and micro levels. At the macro level, related official records and statistics were mainly used to describe the overall changes in Ta-yuan Hsiang, while at the micro level the responses to the interview questions were closely examined to identify significant changes in the attitudes and family and social lives of the villagers. So that a comparison with previous case studies of the same village would be possible, descriptive statistics were used to analyze the key variables, and no further analytical techniques were used.

3 Demographic Changes

The population of Ta-yuan Hsiang has gone up and down several times from 1905 to 1976, as is shown in Table 2. The population density per total area did not change much, but that per farmland increased significantly due to the construction of the airport. The average rate of growth in total population, 0.36 %, was lower than the national average and largely due to negative net migration, while the national rate of growth remained relatively stable.

The Practice of Family Planning

Although the contribution of family planning to the decline in population of Ta-yuan Hsiang was not as much as that of migration, it stabilized the population increase. Table 3 shows the rapid rise in use of IUD. The cumulative acceptance rate increased from 23.7 % in 1968 to 101.4 % in 1975.

Changes in Occupational Distribution

In the period from 1967 to 1976 there was a major change in occupational dis-

Table 3 Practice of Family Planning in Ta-yuan Hsiang, 1968-76

| Year | | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 |
|---|-------------------------------|------|------|------|------|------|------|------|-------|--------|
| No. of Females between 20-44 Years of Age with Spouse | N | 5915 | 5931 | 5951 | 5985 | 6017 | 6091 | 6018 | 5915 | 5930 |
| | % | 11.9 | 11.4 | 11.3 | 11.2 | 11.6 | 11.6 | 11.1 | 11.1 | 11.5 |
| IUD | No. Accepted | 410 | 450 | 734 | 661 | 587 | 605 | 750 | 805 | 783 |
| | Cumulative No. of Acceptance | 1401 | 1851 | 2585 | 3246 | 3833 | 4438 | 5188 | 5993 | 6776 |
| | Cumulative Rate of Acceptance | 23.7 | 31.2 | 43.4 | 54.2 | 61.5 | 32.9 | 86.2 | 101.4 | 114.3* |
| Pill | No. Accepted | 61 | 60 | 221 | 229 | 278 | 229 | 201 | 166 | 228 |
| | Cumulative No. of Acceptance | 108 | 168 | 389 | 618 | 896 | 1125 | 1326 | 1492 | 1720 |
| | Cumulative Rate of Acceptance | 1.8 | 2.8 | 6.5 | 10.3 | 14.9 | 18.3 | 22.3 | 25.2 | 29.0 |
| Condom | No. Accepted | | | 33 | 55 | 67 | 105 | 122 | 153 | 157 |
| | Cumulative No. of Acceptance | | | 33 | 88 | 155 | 260 | 382 | 535 | 692 |
| | Cumulative Rate of Acceptance | | | 0.6 | 1.5 | 2.6 | 4.2 | 6.3 | 9.1 | 11.7 |
| Tubal Ligation | No. Accepted | | | | | | | 8 | 41 | 86 |
| | Cumulative No. of Acceptance | | | | | | | 8 | 49 | 135 |
| | Cumulative Rate of Acceptance | | | | | | | 0.1 | 0.8 | 2.3 |

Source: Ta-yuan Township Office [1978:320].

* The cumulative rate of acceptance over 100 might be due to over counting of those who adopted IUD before, but had moved out or passed the age group under study.

Table 4 Changes in Employment Structure of Persons Fifteen Years Old and Above in the Important Occupations of Ta-yuan Hsiang, 1967-76

| Year | Sex | Total | Occupation | | | | | | Categories | | | | |
|------|-----|-------|------------|-------|------|-------|------|------|------------|------|------|-------|------|
| | | | A | B | C | D | E | F | G | H | I | J | |
| 1967 | M | N | 11450 | 9053 | 7 | 220 | 23 | 47 | 391 | 102 | 72 | 1519 | 16 |
| | | % | 99.99 | 79.06 | 0.06 | 1.92 | 0.20 | 0.41 | 3.41 | 0.89 | 0.63 | 13.27 | 0.14 |
| | F | N | 776 | 311 | 0 | 51 | 1 | 0 | 139 | 25 | 1 | 243 | 5 |
| | | % | 100.14 | 40.13 | 0.00 | 6.58 | 0.13 | 0.00 | 17.94 | 3.23 | 0.13 | 31.35 | 0.65 |
| 1969 | M | N | 13303 | 9243 | 11 | 342 | 24 | 69 | 372 | 120 | 63 | 2949 | 110 |
| | | % | 100.00 | 69.48 | 0.08 | 2.57 | 0.18 | 0.52 | 2.80 | 0.90 | 0.47 | 22.17 | 0.83 |
| | F | N | 668 | 329 | 0 | 39 | 1 | 0 | 56 | 35 | 0 | 205 | 3 |
| | | % | 100.00 | 49.25 | 0.00 | 5.84 | 0.15 | 0.00 | 8.38 | 5.24 | 0.00 | 30.69 | 0.45 |
| 1976 | M | N | 14272 | 7848 | 7 | 1688 | 49 | 385 | 691 | 452 | 97 | 3046 | 9 |
| | | % | 100.00 | 54.99 | 0.05 | 11.83 | 0.34 | 2.70 | 4.84 | 3.17 | 0.68 | 21.34 | 0.06 |
| | F | N | 4093 | 517 | 0 | 2426 | 3 | 16 | 461 | 92 | 50 | 528 | 0 |
| | | % | 99.98 | 12.63 | 0.00 | 59.26 | 0.07 | 0.39 | 11.26 | 2.25 | 1.22 | 12.90 | 0.00 |

Source: Ta-yuan Township Office [1978: 145, 146].

Abbreviations: A: Agriculture, Fishing, and Forestry, B: Mining and Quarrying, C: Manufacturing, D: Electricity, E: Construction, F: Commerce, G: Transportation and Communication, H: Insurance & Real Estate, I: Service Supplying, J: Others

tribution among Ta-yuan Hsiang villagers, which is shown by Table 4. This change was largely induced by industrialization. The greatest change took place in the manufacturing industries, but the number employed in commerce, transportation, construction, and service sectors also increased.

4 Agricultural Development

General Trends

Agriculture in Ta-yuan Hsiang today is chiefly for the market with farmers growing more and more of the so-called cash crops such as vegetables, fruits, and flowers and less of the traditional crops of rice and sweet potatoes. Stock-raising has become very important, and it is now a very professional business requiring a large amount of investment. Some farms specialize in supplying materials to the food processing industry. Sugarcane production, however, has fluctuated sharply due to international market

conditions.

Saving labor and working time has been one of the main objectives of the farmers, but it has not led to an immediate shift in the use of farming machines such as tractors, harvesters, or transplanting machines and an increase in land productivity. The farmers found it easier to earn non-farm incomes. A great number of small pieces of farms are often left uncultivated, and rural people are partly farmers and partly factory workers these days. The resulting shortage of labor is overcome 69.5 % by hired labor, 6.5 % by the labor exchange system, 12.5 % by contracted labor, and 7 % by using both labor exchange and contract labor (4.5 % is missing). For this reason land tenure conditions have not changed in the past ten years, as seen in Table 5. Owner-farmers are still the majority, and many of the part-owners have taken up non-farm jobs. Our findings show that 92 % of the 200 inter-

viewed were owner-farmers, 0.5% landlords, and 7.5% tenants. The average family farm is 1.2 hectares, and the average family income is NT\$ 142,165, of which 55.4 % comes from non-farm sources.

Green Revolution

In the early 1970s the Taiwan government became concerned about the farmers' loss of interest in rice-growing, particularly

Table 5 Land Ownership Status in Ta-yuan Hsiang, 1972-76
unit: persons, %

| Year | Owner | Part-owner | Tenant | Non-farm Jobs & Absentee Farmer | Farm Laborer | Total |
|------|---------|------------|--------|---------------------------------|--------------|--------|
| 1972 | N 30020 | 4390 | 2965 | 391 | 520 | 38286 |
| | % 78.41 | 11.47 | 7.74 | 1.02 | 1.36 | 100.00 |
| 1973 | N 27496 | 4344 | 2543 | 386 | 504 | 35273 |
| | % 77.95 | 12.32 | 7.21 | 1.09 | 1.43 | 100.00 |
| 1974 | N 27500 | 4346 | 2554 | 398 | 534 | 35332 |
| | % 77.83 | 12.30 | 7.23 | 1.13 | 1.51 | 100.00 |
| 1975 | N 27306 | 1494 | 3074 | 647 | 833 | 33354 |
| | % 81.87 | 4.48 | 9.22 | 1.94 | 2.50 | 100.01 |
| 1976 | N 26914 | 1520 | 3101 | 655 | 822 | 33012 |
| | % 81.53 | 4.60 | 9.39 | 1.98 | 2.49 | 99.99 |

Source: Ta-yuan Township Office [1978: 376].

in view of the world-wide food shortage. The government adopted measures to encourage the more intensive growing of paddy rice. Land utilization in Ta-yuan Hsiang is, however, already very intensive. There are two rice crops a year. The first crop takes about five months from the first week of March to the end of July, and the second one is started in the last week of August and is harvested toward the end of November. During the three months of December, January, and February some intermediary crops such as vegetables and green manure plants are grown. The vegetables are not only for the farmer's table, but also for the markets in Tao-yuan and Taipei. The green manure plants are plowed back to replenish the soil's fertility. In areas along the seashore, where the soil is of sandy loam texture, sweet potato and peanuts are mainly grown. In some districts, the farmers have made handsome profits by growing watermelon. According to findings of this study, 80.5 % of the 200 families interviewed have been planting the same kind of crops in the last ten years. Only 17.0 % added one new crop, and 1.5 % or 1.0 % added 2 or 3 new crops. On the whole the farmers in Ta-yuan Hsiang were not

innovative in diversifying their cropping system. The major innovations took place in rice-growing itself.

In recent years farmers have been increasingly willing to adopt new and better rice varieties, new cultivation methods, and necessary farm facilities. As soon as they heard of the merits of a new variety, they were ready to plant it, even though there was no name for it. When it finally reached the stage for distribution, 88 % of the Ta-yuan Hsiang farmers had already adopted it over a period of three years. Information had been exchanged mainly among neighbors and relatives. These remarkable facts are shown in Tables 6 and 7.

At the same time the method of paddy rice cultivation changed. The notable changes are: (1) straight rows, small hills, and closer space planting, with an average of 64 hills per ping; (2) improved pattern and size of the nursery area, which looks like a piece of wooden board, 4 feet wide, and is covered with synthetic cloth when the weather is cold; (3) use of the so-called "composite cultivation" method for production (Ta-yuan Hsiang was the first to adopt this new method); (4) use of several kinds of chemical weed killer; (5) use of team work and airplane

Table 6 The Number of Farm Families Interviewed Adopting the New Variety of Paddy Rice, Tainan 5

| Year Family | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | Missing | Total |
|----------------|------|------|------|------|------|------|------|---------|-------|
| N | 45 | 72 | 59 | 3 | 3 | 0 | 1 | 17 | 200 |
| % | 22.5 | 36.0 | 29.5 | 1.5 | 1.5 | 0 | 0.5 | 8.5 | 100.0 |
| Adjusted | 24.6 | 39.3 | 32.2 | 1.6 | 1.6 | 0 | 0.5 | | 99.8 |

Table 7 Sources of Information of the New Paddy Rice Varieties for the Families Interviewed

| Sources | N | % |
|-----------------------|-----|-------|
| Newspaper | 1 | 0.5 |
| Rural Leader | 2 | 1.0 |
| Neighbors & Relatives | 175 | 87.5 |
| Extension Agency | 3 | 1.5 |
| Others | 4 | 2.0 |
| Missing | 15 | 7.5 |
| Total | 200 | 100.0 |

broadcasting method to control plant diseases and insects; and (6) wider use of powered farm machinery.

It was found that the amount of chemical fertilizers applied to paddy rice and other important crops has increased in the last ten years. Between 1968 to 1978 the amount increased from 9.34 standard bags per hectare to 14.85 bags. Weeding in the rice field is now 79 %

done with chemical weed-killer, 20.5 % partly with weed-killer, and only 0.5 % by hand.

In addition, such new practices as raising young plants collectively in a community rice nursery have become common, and farm work is more mechanized and organized. The farmers' association sponsors the plowing centers which do the plowing with big and small tractors. A more common practice is controlling plant diseases and insects on a regular basis by teams or by a temporary farmers' group. Ta-yuan Hsiang farmers have also been praised for rapidly adopting new and better rice seeds which are the Tainan No. 5, Hsinchu No. 56, and Tainan No. 61. These seeds are used very widely, along with new and improved cultivation techniques. The farmers in one district must agree to plant

Table 8 Age Distribution of Employed Persons in Families Interviewed

| Age Group | Occupational Status | Full-time Farmers | Non-farmers | Part-time Farmers (More-farming) | Part-time Farmers (More Non-farming) | Total |
|-----------|---------------------|-------------------|-------------|----------------------------------|--------------------------------------|-------|
| | 30- | N | 39 | 201 | 12 | 15 |
| | % | 14.83 | 83.75 | 27.27 | 53.57 | 46.43 |
| 31-40 | N | 46 | 27 | 9 | 6 | 88 |
| | % | 17.49 | 11.25 | 20.45 | 21.43 | 15.30 |
| 41-50 | N | 80 | 10 | 17 | 6 | 113 |
| | % | 30.42 | 4.17 | 38.64 | 21.43 | 19.65 |
| 51-60 | N | 63 | 1 | 5 | 1 | 70 |
| | % | 23.95 | 0.42 | 11.36 | 3.57 | 12.17 |
| 60+ | N | 35 | 1 | 1 | 0 | 37 |
| | % | 13.31 | 0.42 | 2.27 | 0.00 | 6.43 |
| Subtotal | N | 263 | 240 | 44 | 28 | 575 |
| | % | 100.00 | 100.01 | 99.99 | 100.00 | 99.98 |
| Total | N | 263 | 240 | 44 | 28 | 575 |
| | % | 45.74 | 41.74 | 7.65 | 4.87 | 99.98 |

only these seeds, not any other kind, to protect them from being adulterated by undesirable ones. They must also agree to follow the improved methods or practices as mentioned above.

It must be pointed out that substantial migration to urban areas has caused the age composition of farmers to go up (Table 8) and the marital status to include married people only (Table 9). The labor shortage both off-season and at harvest time has

Table 9 Marital Status of Employed Persons in Families Interviewed

| | | Full-time Farmers | Non- farmers | Part-time Farmers (More- farming) | Part-time Farmers (More Non- farming) | Total |
|-----------|---|----------------------|-----------------|--|--|--------|
| Married | N | 218 | 68 | 33 | 18 | 337 |
| | % | 82.89 | 28.33 | 75.00 | 64.29 | 58.61 |
| Unmarried | N | 27 | 170 | 9 | 10 | 216 |
| | % | 10.27 | 70.83 | 20.45 | 35.71 | 37.74 |
| Divorced | N | 1 | 2 | 0 | 0 | 3 |
| | % | 0.38 | 0.83 | 0.00 | 0.00 | 0.52 |
| Widower | N | 9 | 0 | 1 | 0 | 10 |
| | % | 3.42 | 0.00 | 2.27 | 0.00 | 1.74 |
| Widow | N | 8 | 0 | 1 | 0 | 9 |
| | % | 3.04 | 0.00 | 2.27 | 0.00 | 1.39 |
| Subtotal | N | 263 | 240 | 44 | 28 | 575 |
| | % | 100.00 | 99.99 | 99.99 | 100.00 | 100.00 |
| Total | N | 263 | 240 | 44 | 28 | 575 |
| | % | 45.70 | 41.70 | 7.70 | 4.90 | 100.00 |

Table 10 Kind and Number of Farm Machinery Presently Owned and Used by Farmers of Ta-yuan Hsiang

| | unit: set |
|--------------------------------|-----------|
| Power Duster | 417 |
| Power Sprayer | 9 |
| Hand Sprayer | 914 |
| Hand Duster | 41 |
| Slicer | 151 |
| Grass (Leaf) Cutter | 20 |
| Hand Cart | 765 |
| Motor Grain Separating Machine | 4110 |
| Peddler Thresher | 65 |
| Check Row Marker | 385 |
| Weeding Machine | 165 |
| Power Pump | 21 |
| Tractor | 527 |
| Combined Harvester | 9 |
| Power Transplanter | 21 |
| Power Winnowing Machine | 1100 |
| Power Grass Cutter | 40 |
| Grain Dryer | 1 |

Source: Ta-yuan Township Office [1978: 377].

given the farmers a strong incentive to mechanize. The present ownership of

farm machinery is shown in Table 10.

This study found that among all farm machinery the number of tractors and rice polishers increased the most. There was an increase of nearly 49 % in the number of families with tractors and an increase of nearly 20 % of those with rice polishers (See Table 11). In order to use the power farm machinery most efficiently and to keep them in good condition some of the farmers,

under the sponsorship of a united development demonstration project, have organized themselves into farm machinery utilization teams according to various purposes such as controlling plant diseases and pests, plowing, planting, harvesting, training young people in the use of farm machinery, and servicing and maintaining the machinery. While these groups have contributed much toward the mecha-

Table 11 The Increase and Decrease in Farm Machinery Held by the 200 Families Investigated within a Ten-year Period

| Farm Machinery | Increase | | Decrease | |
|----------------|----------|-------|----------|------|
| | N | % | N | % |
| Tractor | 97 | 48.50 | 2 | 1.00 |
| Rice Polisher | 39 | 19.50 | 1 | 0.50 |
| Power Pump | 1 | 0.50 | | |
| Sprayer | 2 | 1.00 | | |
| Harvester | 10 | 5.00 | 1 | 0.50 |
| Transplanter | 7 | 3.50 | | |
| Others | 28 | 14.00 | 13 | 6.50 |

nization of agriculture in Ta-yuan Hsiang [Ta-yuan Township Office 1978: 386-393], the agricultural extension service should be credited for the overall advancement of agriculture in Ta-yuan Hsiang. There are presently 187 farm study classes with 6,726 participants, studying such topics as paddy rice, vegetables, dairy farming, and mushroom culture.⁴⁾

Development of Industry and Trade

In 1952 there were only 25 small family businesses. All but one were indigenous rice mills. The only exception was a small weaving and dyeing factory. In the beginning of the 1960s industrialists discovered that Ta-yuan Hsiang is an excellent site for manufacturing plants. After 1968 factories mushroomed, and the township found it necessary to pass a law in 1974 prohibiting the construction of unauthorized plants. According to a statistical survey made at the end of 1974 there were at the time more than 70 industrial plants in Ta-yuan Hsiang [*ibid.*: 422-428]. A great majority of these enterprises were involved in the so-called light industries. Such industries could make the best use of untrained or half-skilled workers recruited from the nearby farm villages. The statistics show that in 1976, 59.26 % of the women and 11.83 % of the men worked in these manufacturing operations.⁵⁾

Formerly the shops in Ta-yuan Tsun

carried only the basic necessities, and the volume of business was pitifully small. Consequently the living standard of shopkeepers and itinerant peddlers was very low. According to a survey in 1976, however, Ta-yuan Hsiang had a total of 780 stores. Of this number 214 were general stores; 123, grocery stores; 46, hardware and building supply stores; 39, bicycle and motorcycle shops; and 41, drug stores [*ibid.*: 442]. Expansion in the tertiary section was really remarkable.

Another change in the lives of Ta-yuan Hsiang farmers is that they have other opportunities for making a living. The important ones are those connected with construction of the Tao-yuan International Airport, development of a special industrial area called "Nei Hai" (内海), building of the Shah Lun (沙崙), a gasoline distribution station for the Tao-yuan Refinery of the China Gasoline Company, and the proposed development of the old Hsu Ts'u (許厝) harbor into a commercial harbor. All these development projects have provided new job opportunities and influenced the pattern of agricultural development [*ibid.*: 524, 544, 551].

Improvement in the Standard of Living

From July to September, 1978, the Taiwan Province Family Planning Research Institute conducted a very extensive survey entitled: "The Degree of Modernization and the Characteristics of Balloting Behavior of the Citizens in the Republic of China (Taiwan)"

4) Data were obtained from Farmers' Association of Ta-yuan Hsiang in November, 1978.

5) See column C of Table 4.

[*Central Daily* 1978]. In the study 8,219 households were interviewed with carefully prepared questionnaires. The findings of this study are not of course identical with those in Ta-yuan Hsiang. Since, however, the majority of those sampled were farmers, fishermen, storekeepers, and housewives, the findings do not seem to differ much. The information on the living standard may be applied to the people in Ta-yuan Hsiang.

The main findings of the survey may be summarized as follows:

1. The occupational distribution of the 4,000 respondents to the questionnaires was: agriculture, 17.52 %; laborers, 16.24 %; commerce, 14.51 %; and homemaking, 18.68 %. These four categories made up 66.95 %. Professionals and college teachers were 2.13 %, even fewer in number than the students who made up 2.33 %. Of the fathers of those sampled 54.95 % were engaged in farming or fishing; 14.68 % in commerce; and 9.43 % were laborers.

2. The majority, 77.39 %, had a monthly income of less than 6,500 Taiwan dollars. Those with incomes less than 2,500 Taiwan dollars composed 39.27 %. The average family income ranged from 5,000 to 12,500 Taiwan dollars. Such families made up 64.92 %. Families with less than 5,000 Taiwan dollars made up 16.69 %. The rest, or 18.39 %, were in the high income class.

3. The majority believe that they belong to the middle socio-economic class. To be exact, 51.86 % claimed to be middle class; 5.79 %, upper middle class;

and 32.83 %, lower middle class. In the interviewers' opinion, only 5.2 % belonged to the lower class, whereas 9.55 % of the families interviewed said they belonged to the lower class. When asked about the standing of previous generations, 21.66 % of the families responded that the older generation belonged to the low socio-economic classes. This finding implies that the social and economic conditions recently have improved considerably and that most families are optimistic about the future.

4. As high as 76.33 % of the families interviewed were satisfied with their present condition, 16 % not quite satisfied, only 7.64 % not satisfied at all. A great majority, 74.54 %, of the families were satisfied with the environment they lived in and 25.43 % were not quite satisfied.

5 Changes in Education

School Education

There has been no significant change in the elementary and middle school levels for the past ten years because the number of people with these levels of education was already fairly high in 1968. There has been an impressive change at the college level, as shown in Tables 12 and 13.

Table 12 Percentage of Ta-yuan Hsiang Population with College Education, 1967, 1976

| Year | No. of Persons with College Education | Total Population | % |
|------|---------------------------------------|------------------|------|
| 1967 | 457 | 48943 | 0.93 |
| 1976 | 1467 | 51327 | 2.86 |

Source: Ta-yuan Township Office [1978: 132, 150].

Table 13 Percentages of the Whole School-age Population, 1966-76

| | Elementary | | | Junior Middle | | | | | Senior Middle | | |
|------|------------|------|--------|---------------|------|-------|------|----|---------------|------|-------|
| | A | B | C | A | B | C | D | E | B | D | E |
| 1966 | 9621 | | | | | | | | | | |
| 1967 | | | | | | | | | 3244 | 816 | 25.15 |
| 1968 | | | | 1314 | 4183 | 31.41 | 2342 | 56 | | | |
| 1971 | 9040 | 9032 | 100.09 | | | | | | | | |
| 1976 | 8188 | 7832 | 104.55 | 2459 | 4120 | 59.68 | 3378 | 82 | 3868 | 1940 | 50.16 |

Source: Ta-yuan Township Office [1978: 132, 133, 150, 493, 497, 499].

Abbreviations: A: Number of children attending schools in Ta-yuan Hsiang

B: Number of school-age children in Ta-yuan Hsiang

C: Percentages of children attending schools in Ta-yuan Hsiang

D: Number of children attending schools both inside and outside of Ta-yuan Hsiang

E: Percentages of children attending schools both inside and outside of Ta-yuan Hsiang

There is no college located in Ta-yuan Hsiang but many Ta-yuan Hsiang people have received college education in the last ten years. In 1967, for instance, the number of people with college education was 457, or 0.93 % of the township's total population of 48,943 persons. It increased to 1,467, or 2.86 % of the population of 51,327 persons in 1976. There are at present 5 Ta-yuan Hsiang people who hold doctoral degrees.

Parents' Expectation for Children's Education

Parents today hope that many of their children will go on to college. Although there is still some discrimination against daughters with regards to education, the difference is no longer very serious. Table 14 shows how much education they are willing to give their children, and Table 15 lists the reasons why they want their children to attain these levels. The first reason given in the case of sons was to be able to find a better job. The

next was reflected by the statement: "Inasmuch as the boy has ability, why not give him the chance to reach his limit." The third was expressed in this manner:

Table 14 Parents' Expectation of Children's Education Levels for the Families Interviewed

| Education Levels | Son | | Daughter | |
|------------------|-----|-------|----------|-------|
| | N | % | N | % |
| Elementary | 5 | 2.5 | 11 | 5.5 |
| Junior Middle | 20 | 10.0 | 32 | 16.0 |
| Senior Middle | 23 | 11.5 | 27 | 13.5 |
| College | 151 | 75.5 | 128 | 64.0 |
| Missing | 1 | 0.5 | 2 | 1.0 |
| Total | 200 | 100.0 | 200 | 100.0 |

Table 15 Reasons for Children to Have Higher Education for the Families Interviewed

| Reasons | Son | | Daughter | |
|-----------------------------------|-----|--------|----------|--------|
| | N | % | N | % |
| Have the means (money) to support | 32 | 21.19 | 24 | 18.75 |
| Children have ability | 45 | 29.80 | 46 | 35.94 |
| For a better job | 57 | 37.75 | 43 | 33.59 |
| Others | 9 | 5.96 | 9 | 7.03 |
| Missing | 8 | 5.30 | 6 | 4.69 |
| Total | 151 | 100.00 | 128 | 100.00 |

“We have the means to support him, so let him have as high an education as he can reach.”

Ninety four percent of the parents expressed satisfaction with the quality of education given at schools in the com-

Table 16 Comments about School Education by the Families Interviewed

| Comments | N | % |
|--|-----|-------|
| Favorable Comments | | |
| To learn reading & writing | 102 | 51.0 |
| To get new knowledge | 44 | 22.0 |
| To learn good manners | 5 | 2.5 |
| To get better job opportunities | 4 | 2.0 |
| To contribute to national development | 2 | 1.0 |
| To improve standard of living for family | 3 | 1.5 |
| To contribute to rural development | 1 | 0.5 |
| For the future of children | 2 | 1.0 |
| Unfavorable Comments | | |
| Need children's help for work | 1 | 0.5 |
| No use for living | 2 | 1.0 |
| Teachers are not good | 3 | 1.5 |
| Present schooling is not satisfactory | 3 | 1.5 |
| Others | 2 | 1.0 |
| Missing | 26 | 13.0 |
| Total | 200 | 100.0 |

munity. Only a few, 12 out of 200, made unfavorable comments. The main comments, both favorable and unfavorable, are summed up in Table 16. Parents also had views on how to improve the education. In general they expected more of the practical matters to be taught, as Table 17 shows. There are some differences between boys' education and girls' education in the minds of the representative parents.

6 Changes in Social Participation

Findings of Nationwide Survey

The survey quoted above in connection with education discovered that 71.8 % of the interviewed did not participate in any kind of social group. Those who did mostly participated in farmers' associations. Next, in order of importance, were guilds, industrial enterprises, and religious organizations. Political participation was also low; only 31.6 % expressed interest in political activities, 36.9 % had only a little interest, and 31.49% had

Table 17 Parents' Opinions on the Improvement of School Education

| Teaching Contents Should Emphasize on | For Son | | For Daughter | | For Both | | Not Important | | Total | |
|---------------------------------------|---------|------|--------------|------|----------|------|---------------|------|-------|-------|
| | N | % | N | % | N | % | N | % | N | % |
| Read & Write | 8 | 4.0 | 4 | 2.0 | 102 | 51.0 | 86 | 43.0 | 200 | 100.0 |
| Modern Liberal Arts | 2 | 1.0 | 5 | 2.5 | 6 | 3.0 | 187 | 93.5 | 200 | 100.0 |
| Religious and Moral Education | 14 | 7.0 | 1 | 0.5 | 38 | 19.0 | 147 | 73.5 | 200 | 100.0 |
| Business Education | 31 | 15.5 | 20 | 10.0 | 34 | 17.0 | 115 | 57.5 | 200 | 100.0 |
| Training for Farming | 21 | 10.5 | 1 | 0.5 | 12 | 6.0 | 166 | 83.0 | 200 | 100.0 |
| Practical Education for Daily Life | 23 | 11.5 | 45 | 22.5 | 87 | 43.5 | 45 | 22.5 | 200 | 100.0 |
| Civic Education | 24 | 12.0 | 16 | 8.0 | 26 | 13.0 | 134 | 67.0 | 200 | 100.0 |
| Health Education | 8 | 4.0 | 24 | 12.0 | 8 | 4.0 | 160 | 80.0 | 200 | 100.0 |
| Rural Development | 18 | 9.0 | 0 | 0.0 | 4 | 2.0 | 178 | 89.0 | 200 | 100.0 |
| Others | 0 | 0.0 | 1 | 0.5 | 1 | 0.5 | 198 | 99.0 | 200 | 100.0 |

no such interest at all. Among the November 1977 voting population 23.2 % were Kuomintang members and 9.6 % Kuomintang friends or would-be members. Only 57 persons, or 1.4 %, were members of other political parties. Those who did not have any kind of political party affiliation made up 65.5 %. At election time, 68.7 % voted for Kuomintang candidates. Of great interest was the finding that 86.55 % of the voters who actually casted ballots made the statement that "to cast the ballot is to fulfill a citizen's obligation and any ballot may have a great bearing on the result of the election." It was also discovered that only 21.86 % had often or occasionally participated in the *Ts'un* or *Li* people's general meetings; 58 % had never participated on account of being too busy or lacking interest.

As for the attitudes of those sampled toward socio-economic conditions and public affairs, the study found that as high as 76.33 % of the people were satisfied with their present living conditions, and 16 % said they were not quite satisfied. Only 7.64 % complained that they were not satisfied at all. Those who were satisfied with the environment they lived in accounted for 74.54 % while 25.45 % were not quite satisfied. Those who said they were satisfied with various public and private medical institutions, facilities and services were 73.20 %. There were, however, still 26.77 % who felt that conditions could be better. Those who felt that the present economic conditions were good were 92.40 %. Only 7.57 % felt

the opposite. As high as 92.58 % of the sampled believed that the ten national reconstruction projects were very helpful to the overall social, economic, and cultural development. There were still 41.46 % of those sampled who felt that the government had not done its best in carrying out social welfare programs.

As for the attitude toward the government and its administration 81.51 % expressed satisfaction with the National Government, 77.95 % felt the same with the Taiwan Provincial Government, and 74.29 % were satisfied with the local governments. Those who were satisfied with the farmers' associations and the farm water associations were 65.97 % and 55.80 % respectively. The people satisfied with the nation's labor policy, labor insurance, and labor welfare accounted for 66.16 % of the total sampled. As for the nation's food policy, 59.74 % were satisfied.

Changes in Participation of Public Positions

In Ta-yuan Hsiang such public positions as *hsiang* people's representatives, village heads, neighborhood leaders, members of the family heads' committee, head of the local farm water association, directors of the farmers' association, heads of the farm study classes, heads of the home economics improvement classes, and heads of the small agricultural units have long been in existence. Any local resident who is interested and is qualified may run for office. Since there has not been much change in the kind or number of these positions the number of incumbents

has by and large remained the same. There have been, however, changes in qualifications required for securing and holding any of the positions. Formerly, for instance, the qualifications reflected emphasis on seniority, family status, social tradition, personal appearance, and persuasive ability. Now the important criteria are wealth, social position, eagerness to serve, being aggressive, and knowledge about public affairs and matters outside the village.

Of the 200 families interviewed, 183 or 91.5 %, had not participated in any of the above-mentioned social or public positions ten years ago. Sixteen or 8 % had participated once and 1 or 0.5 % had participated two times. There has been some change, but very little. One hundred seventy nine families or 89.5 % reported no participation whatsoever. Altogether only 21 families or 10.5 % had participated once. As Table 18 shows, there was indeed a decrease in non-participants in the last ten years.

Table 18 Participation in Public Positions by the Families Interviewed

| Frequency of Participation | | 0 | 1 | 2 | N |
|----------------------------|---|------|------|-----|-------|
| | | Year | | | |
| 1968 | N | 183 | 16 | 1 | 200 |
| | % | 91.5 | 8.0 | 0.5 | 100.0 |
| 1978 | N | 179 | 21 | 0 | 200 |
| | % | 89.5 | 10.5 | 0.0 | 100.0 |

Changes in Interest in Social Participation

The interest of Ta-yuan Hsiang people in social participation has changed little over the ten years. Only 23 out of the

200 families said they were more interested, 20 families said there was no change, and 157 families did not answer this question. Those who said that their interest in social participation had increased gave these reasons: (1) "One can gain knowledge through social participation," (2) "I had to accept the position because people had elected me," (3) "I can profit from it and increase my income," and (4) "It is a way to serve the community." Those who answered negatively gave such reasons as: (1) "I have no time to participate," (2) "I am not capable of participating," (3) "I am too old," and (4) "I am afraid participation will bring me too much trouble." Those who did not answer the question may not have necessarily had no interest at all in the matter. It might be that they did not quite understand the meaning of the question and therefore did not know how to answer, or because their interest in social participation had not changed any in recent years.

Changes in Interest in Political Affairs

The majority, 61.5 % of the 200 families interviewed, expressed no interest in political affairs, either presently or in the past. A little over one-fourth, 27.5 %, said that they had an interest but it had not changed over the last ten years. Only 20, or 10 %, claimed that they did not have any interest before but now had one. Two families said that they had an interest but less than before. Those who were not interested in political affairs gave five reasons: lack of political

capability, no time to spend on such activities, afraid of getting into trouble, political affairs do not concern one's own problems, and disgust with the irregular practices of those running for public office.

Those who were interested in public offices presented such reasons as: "many peoples in my community have become enthusiastic about public affairs and I want to follow their example; our local government has gotten better and better and I want to be a part of it; since we are having more and more public office elections, we'll have to become involved; my social position has risen since I became an owner-farmer and it has made me interested in my community's public affairs; participation in political activities may raise my social position; increased knowledge (enlightenment) has made me more interested in political activities since I realized that political participation is one of the citizen's obligations and fulfillment of this obligation has a great deal to do with the community's and nation's well-being."

Changes in Interest in Matters Outside the Village

Of the interviewed, 149 or 74.5 % said that their interest in matters outside the village had not changed. Only 50 families or 25 % said that they have become more interested. When asked why they have this interest the following answers were given: I can increase my knowledge; because neighbors and friends often discuss current events; because of mass

communication; and contacts with the outside world have increased due to progress in transportation and these contacts have made me more concerned. The reasons given by those who had not acquired much interest are: first, "knowledge of foreign things has nothing to do with my problems and so it is not my concern"; and second, "I am too old to cultivate this kind of interest."

Changes in Contributions to Schools or Temples

Ten years ago, 58 or 29 % of the 200 families were willing to give as large donations as possible to the building of schools; 136 or 68 % gave according to the established general standard; and 6 families or 3 % were not willing to make any donation. Now these figures have changed to 64 or 32 %, 133 or 66.5 %, and 3 or 1.5 %, respectively.

As for the building of temples, ten years ago 47 families or 23.5 % were willing to give as much as possible; 146 or 73 % gave according to the established general standard; and 7 or 3.5 % were not willing to make any donation. Now these figures have changed to 48 or 24 %, 141 or 70.5 %, and 11 or 5.5 %, respectively (See Table 19). Thus one can say that the number of families willing to contribute to schools increased slightly, but the number for temples decreased. The number of families not willing to make any contributions increased, though not much, and the number of those willing to give in accordance with the established general standard decreased, though also

Table 19 Attitudes of Families Interviewed Regarding Making Donations to the Building of Schools and Temples of Indigenous Religions (Compared with Ten Years Ago)

| Donation to the Building of | School | | | | Temple | | | |
|-----------------------------|---------------|-------|---------|-------|---------------|-------|---------|-------|
| | Ten Years Ago | | Present | | Ten Years Ago | | Present | |
| | N | % | N | % | N | % | N | % |
| Want to Contribute More | 58 | 29.0 | 64 | 32.0 | 47 | 23.5 | 48 | 24.0 |
| Follow General Standard | 136 | 68.0 | 133 | 66.5 | 146 | 73.0 | 141 | 70.5 |
| Do Not Want to Contribute | 6 | 3.0 | 3 | 1.5 | 7 | 3.5 | 11 | 5.5 |
| Total | 200 | 100.0 | 200 | 100.0 | 200 | 100.0 | 200 | 100.0 |

not much.

Finally it should be noted that those who had positive attitudes were also earnest and enthusiastic about social and political participation and concerned about the well-being of the community and nation. Most of these people came from the stem and nuclear types of families and had more education and contact with mass communication. Furthermore, they were comparatively young.

7 Changes in Family Life and Structure

It is not an exaggeration to say that the family is the backbone of Chinese society, especially in the rural community. While other social institutions have undergone numerous changes many times the family has by and large remained intact. This stability of the family may be due to a number of reasons, but the most important one may be due to the fact that the family is part of a long-established agricultural society. As agricultural development progresses in Taiwan, the family may change. This will certainly affect the stability of social, economic, and cultural institutions.

Family Types

The number of extended families greatly decreased over the past ten years. Ten years ago 34.8 % of the families sampled were of the extended type. This study found that only 12 % were of the extended type. There was a decrease of 22.8 %. While the number of extended families decreased, the number for the stem and nuclear types naturally increased. Ten years ago the stem type accounted for 35 %, whereas in 1978 it was 52.5 %. There was an increase of 17.5 %. The number of nuclear families did not increase significantly, only a little more than 5 % (See Table 20).

Table 20 Changes in Family Types of Families Interviewed

| Family Type | Extended | Stem | Nuclear | Total |
|-------------|----------|------|---------|-------|
| 1978 | N 24 | 105 | 71 | 200 |
| | % 12.0 | 52.5 | 35.5 | 100.0 |
| 1968 | N 157 | 158 | 136 | 451 |
| | % 34.8 | 35.0 | 30.2 | 100.0 |

Changes in the number of the three types of families can be attributed largely to shifts in the people's sentiment regarding the various types. Formerly more

than one half (52.0 %) of the 200 families interviewed preferred the extended type for three reasons: (1) This type of family has more hands to do the necessary tasks (39.5 %), (2) with more people the family atmosphere is more lively and full of action (35.0 %), and (3) when a family member needs help, there is always someone available (17.1 %). Today conditions have changed; more people prefer the stem family or nuclear family. Of the people interviewed 31.5 % preferred the stem family while 31.0 % chose the nuclear family. These two groups together made up 62.5 % (See Table 21). The reasons given for preferring these two types were: (1) There

Table 21 Preference of Family Type by Families Interviewed

| Family Type | Extended | Stem | Nuclear | Total | |
|---------------|----------|------|---------|-------|-------|
| Present | N | 75 | 63 | 62 | 200 |
| | % | 37.5 | 31.5 | 31.0 | 100.0 |
| Ten Years Ago | N | 104 | 49 | 47 | 200 |
| | % | 52.0 | 24.5 | 23.5 | 100.0 |

are fewer family disputes (40.5 %), (2) there is more personal freedom (21.0 %), (3) family life is comparatively quiet and relaxed (6.5 %), and (4) every member of the family works more willingly and energetically (5.5 %).

As a result, family size compared with

that ten years ago has decreased by two persons. In 1978 the average size was 8.02 with a standard variation of 3.34 persons. Each family had an average of 2.90 persons employed and earning income for the family, as Table 22 shows.

Intra-familial Relations

In order to find out about intra-familial relations all adult members of the 200 families were asked: Who makes the final decision regarding the adoption of a new rice variety, the purchase of an important piece of farm machinery, the sale of the family's rice harvest, disposal of the family's land property, the practice of family planning, the amount or years of a child's education, the selection of an occupation for a child, and the selection of a spouse for an offspring. The answers indicated: (1) the authority of the senior or elder members has declined in all these matters, (2) the opinions and interests of offspring and young people carry greater weight and are respected by their parents and people of their generation, (3) regarding relations between the husband and wife, the former's authority is still by and large greater than the latter's.

Generally, the children decide matters directly concerning them. On matters

Table 22 The Average Family Size

| | Family Size | Employed Persons | Unemployed Persons in Various Age Groups | | | Total |
|--------------------|-------------|------------------|--|-------|------|-------|
| | | | 15- | 15-65 | 65+ | |
| Mean | 8.02 | 2.90 | 2.41 | 2.37 | 0.36 | 5.14 |
| Standard Deviation | 3.34 | 1.48 | 2.02 | 1.48 | 0.19 | 2.81 |

Table 23 Frequency of Making the Final Decision on Selected Items by Family Members

| Selected Items | | F | M | H | W | C | F & H | H & W | Others | Total |
|--------------------------------|---|------|-----|------|-----|------|-------|-------|--------|-------|
| To Adopt New Varieties of Rice | N | 45 | 5 | 147 | | | 2 | 1 | | 200 |
| | % | 22.5 | 2.5 | 73.5 | | | 1.0 | 0.5 | | 100.0 |
| To Buy Large Equipment | N | 44 | 5 | 148 | | | 2 | 1 | | 200 |
| | % | 22.0 | 2.5 | 74.0 | | | 1.0 | 0.5 | | 100.0 |
| To Sell Harvested Rice | N | 44 | 5 | 148 | | | 2 | 1 | | 200 |
| | % | 22.0 | 2.5 | 74.0 | | | 1.0 | 0.5 | | 100.0 |
| To Dispose of Farm Land | N | 44 | 5 | 148 | | | 2 | 1 | | 200 |
| | % | 22.0 | 2.5 | 74.0 | | | 1.0 | 0.5 | | 100.0 |
| Practice of Family Planning | N | 39 | 3 | 148 | | 1 | 2 | 7 | | 200 |
| | % | 19.5 | 1.5 | 74.0 | | 0.5 | 1.0 | 3.5 | | 100.0 |
| Years of Schooling for Child | N | 15 | | 79 | 2 | 100 | | 2 | 2 | 200 |
| | % | 7.5 | | 39.5 | 1.0 | 50.0 | | 1.0 | 1.0 | 100.0 |
| Job for Child | N | 4 | | 25 | | 169 | | 2 | | 200 |
| | % | 2.0 | | 12.5 | | 84.5 | | 1.0 | | 100.0 |
| Selection of Child's Spouse | N | 2 | | 17 | | 179 | | 2 | | 200 |
| | % | 1.0 | | 8.5 | | 89.5 | | 1.0 | | 100.0 |
| Total | N | 237 | 23 | 860 | 2 | 449 | 10 | 17 | 2 | 1600 |
| | % | 14.8 | 1.4 | 53.8 | 0.1 | 28.1 | 0.6 | 1.1 | 0.1 | 100.0 |

Abbreviations: F: Father, M: Mother, H: Husband, W: Wife, C: Children

directly related to the family's farming business decisions are largely made by the husband or father. Only in a few cases are decisions made by the wife or by the husband and wife together after a discussion. Statistically, the decision-making authority for matters listed above is distributed as follows: father, 14.81 %; mother, 1.44 %; husband, 53.75 %; wife, 0.13 %; children, 28.06 % (See Table 23).

Inter-family Relations

The families were asked to whom they went for help on the following matters: borrowing rice grain, borrowing money, borrowing farm tools or machinery, repairing the house, helping with rice planting, helping with harvesting, help-

ing with a wedding or a funeral, and personal affairs. According to findings presented in Table 24 a neighbor was the one most sought out (52.3 %) and next was a relative. In case there was no such neighbor or relative, someone was hired to do the job (13.3 %).

Family's Functions

The traditional functions of a Chinese family have been: (1) to continue the family's blood line by producing and training children, especially male children, (2) to produce or earn the means to sustain the life of every member in the family, (3) to take care of the physical and mental safety and development of infants and children, (4) to administer socialization and moral teaching upon its young mem-

Table 24 Frequencies of Being Asked for Assistance on the Selected Items

| Selected Items | | P | S | R | N | F | H | Ne | Others | Total |
|---|---|------|------|------|------|------|------|------|--------|-------|
| To Borrow Rice when Short | N | 6 | 16 | 9 | 124 | 20 | 0 | 22 | 3 | 200 |
| | % | 3.0 | 8.0 | 4.5 | 62.0 | 10.0 | 0.0 | 11.0 | 1.5 | 100.0 |
| To Borrow Money when Short | N | 5 | 11 | 17 | 108 | 46 | 0 | 9 | 4 | 200 |
| | % | 2.5 | 5.5 | 8.5 | 54.0 | 23.0 | 0.0 | 4.5 | 2.0 | 100.0 |
| To Borrow Farming Tools | N | 3 | 16 | 20 | 146 | 0 | 0 | 12 | 3 | 200 |
| | % | 1.5 | 8.0 | 10.0 | 73.0 | 0.0 | 0.0 | 6.0 | 1.5 | 100.0 |
| To Help Build and Repair the House | N | 2 | 9 | 19 | 78 | 0 | 84 | 4 | 4 | 200 |
| | % | 1.0 | 4.5 | 9.5 | 39.0 | 0.0 | 42.0 | 2.0 | 2.0 | 100.0 |
| To Help with Transplanting | N | 0 | 7 | 5 | 118 | 0 | 64 | 1 | 5 | 200 |
| | % | 0.0 | 3.5 | 2.5 | 59.0 | 0.0 | 32.0 | 0.5 | 2.5 | 100.0 |
| To Help with Harvesting | N | 0 | 8 | 6 | 118 | 0 | 61 | 1 | 6 | 200 |
| | % | 0.0 | 4.0 | 3.0 | 59.0 | 0.0 | 30.5 | 0.5 | 3.0 | 100.0 |
| To Help with Holding Marriage & Funeral | N | 4 | 16 | 83 | 92 | 0 | 1 | 0 | 4 | 200 |
| | % | 2.0 | 8.0 | 41.5 | 46.0 | 0.0 | 0.5 | 0.0 | 2.0 | 100.0 |
| Personal Matters | N | 55 | 29 | 58 | 53 | 0 | 0 | 1 | 4 | 200 |
| | % | 27.5 | 14.5 | 29.0 | 26.5 | 0.0 | 0.0 | 0.5 | 2.0 | 100.0 |
| Total | N | 75 | 112 | 217 | 837 | 66 | 210 | 50 | 33 | 1600 |
| | % | 4.7 | 7.0 | 13.6 | 52.3 | 4.1 | 13.3 | 3.1 | 2.1 | 100.2 |

Abbreviations: P: Parents, S: Sibling, R: Relative, N: Neighbor, F: Farmers' Association, H: Hired Labor, Ne: Never

bers, (5) to represent all of its members as one body in community participation, (6) to take care of its old and infirm members, (7) to conduct sacrificial offerings and memorial services for its deceased members, especially ancestors, and (8) to inherit from ancestors and pass down to offspring the family's property and other heritage.

Changes have occurred in every one of these functions. Both the practice of family planning and postponing the birth of the first child have practically extinguished the idea of having children for the continuation of the family line. Many a family nowadays is no longer one united economic production or earning group. Two or three of its adult members may work on different jobs in

different places. They may pool what they have produced or earned except for a portion of their earnings for personal use. This new practice is a chief factor in the disintegration of the rural extended family. In the old days, taking care of the baby was the grandmother's responsibility or pleasure. Today almost all young daughters-in-law want to be independent of their mothers-in-law, the sooner the better. If this is not possible in reality, it cannot but be so in mind. As a result, few grandmothers are willing to take care of their infant grandchildren. Occasionally young mothers may ask their own mothers for help. But this is possible only when young couples have their own homes and when the old women are free from duties to their own

families. For these reasons, numerous child-care institutions have sprung up in cities and villages alike.

It is a well-known fact that many of the so-called modernized families have relaxed their efforts to discipline the youth. This relaxation is due to the parents' being fully occupied by money-making jobs or an indulgent type of social life. Sometimes parents believe that permissiveness is the better way to raise healthy boys and girls. There are, of course, ideal but rarer cases where discipline or socialization is based on communication and understanding between parents and children. The parents teach through examples or demonstrate in deed rather than through emotion-laden scolding.

Since the corporate type of community organization and social action has become common, social participation today involves the individual rather than the family as a whole. The fifth function of the family has thus changed.

The sixth function has become difficult to fulfill, because the children live and work in the city while the old parents remain in the country. Besides most homes in the city are small apartments. Very often the result is that the old parents decide to stay at the old home in the countryside with mixed feelings, and the son and his wife stay in the city but are not happy either. This problem remains to be solved.

There have not yet been observable changes in the seventh function. As in the past families seem to be dutifully

carrying out sacrificial offerings before their ancestors' tablets at home or tombs. Such factors as education, occupation, and modernization have had no effect on this custom. When there are religious festivals or observances, thousands upon thousands of city people travel back to the countryside where their ancestors' remains are buried to pay the most venerable homage.

The eighth function has not changed much. About 60 % of the farm families still want to leave their land and house to their children. This is the major reason why so many rural families refuse to dispose of their small inherited farms even though they no longer depend on them for their livelihood. However, it will only be a matter of time before they realize that the best way to handle their capital is to sell the land at high prices and invest in industry or business. When that time comes family sentiment attached to small pieces of land will begin to dissipate.

In conclusion all but one of the family's traditional functions have changed somewhat in recent years and changes will continue to occur. Some of the changes are in degree or extent, while others are in the nature or significance. Many family affairs or relations are referred to in the traditional manner but the meanings or implications are beginning to be very different.

References

1. Republic of China, Ministry of the Interior. 1969-1976. *Taiwan-Fukien Demographic Fact Book*.

2. Ta-yuan Township Office. 1978. *Ta-yuan Hsiang Chi*.
3. Yang, Martin M.C. 1970a. *Socio-economic Results of Land Reform in Taiwan*. Honolulu: University Press of Hawaii.
4. ————. 1970b. *Land Reform Impacts on Social Institutions in Rural Taiwan*. Academia Sinica. Taipei: Sino-America Cooperation for Studies in Social Sciences and Humanities. (in Chinese)
5. ————. 1978. Social Change in Rural Taiwan, 1950–1975. Paper presented at IX World Congress of Sociology, Uppsala, Sweden, August 14–19.
(Newspaper)
The Degree of Modernization and the Characteristics of Balloting Behavior of the Citizens of Republic of China (Taiwan). *Central Daily*. Taipei, Taiwan. December 9, 1978.