

CONCLUSIONS AND RECOMMENDATIONS

Assessment of the "Contractual Responsibility System"

The assessment here focusses on the changes since the introduction of the "Contractual Responsibility System". There are four stages to the changes in rural organisation and management:

- o The "Contractual Responsibility System" changed the principle of equal distribution of benefits. The distribution system now provides more income for those who do more work.
- o Based on this change in the distribution system, economic structures also changed and led to the disintegration of the ownership patterns among the commune, the brigade, and the production team. Various economic organisations, such as industrial complexes, rural and township enterprises, credit foundations, and joint-stock firms have been established, following the policy of decentralisation. These are run by local people rather than by local government departments.
- o The production structure has been adjusted in order to realise better economic returns. The single production pattern, prevalent in traditional rural cultivation systems, has been changed into diversified, all round agricultural development (combining forestry, animal husbandry, sideline production, fishery, industry, commerce, construction, transportation, and associated services).
- o An adjustment in socioeconomic relationships has brought about better trading relationships among farmers, rural organisations, and government departments. The state monopoly on purchasing and marketing of agricultural products has been broken. Pricing is not subject to so many restrictions now, and products are managed and marketed in a variety of ways.

The reforms outlined above have provided the basic patterns for agriculture and forestry development in Miyi County. It is a feasible pattern, considering the rapid development of production forces in the county. In the last four to five years, the rate of development surpassed the sum total of the previous 30 years and living standards have increased considerably. The farmers are satisfied with the current management and contract systems. During the study, we did not hear anything negative in this respect, and, hence, we are able to predict that productivity will continue to increase until the year 2000 A.D, if the organisation and management systems do not change. Currently, farmers are hoping that the present system will stabilise and that there will be no further changes in rural policy. It is possible that if the "Contractual Responsibility System" continues to be implemented in all production areas (apart from that of grain production), developments will improve in all areas of production (cash crops, industry, trade, transportation, rural enterprises, and education).

The current organisational and management forms are flexible enough to include state, collective, and private systems. Within the collective system there are variations, such as those by towns, villages, communes, and even by groups. Hence, the farmers feel free to choose the system that suits them and to make whatever adjustments are necessary, to suit their needs. By doing so, radical reforms are avoided in favour of gradual change, unlike in the past when reforms were frequent and farmers negatively motivated.

However, in Miyi County, reforms are still in the initial stages and there is no doubt that improvements are necessary in ownership patterns, economic operations' and economic control mechanisms. The "Contract System" has resolved land use problems, but has not addressed the key problem of ownership. This means that farmers are still not fully independent in the production and management aspects in agriculture.

Rural marketing is another problem area. State monopolies in purchasing and marketing still play an important role. Economic control mechanisms are used by the administration mainly to control and adjust the economic activities of farmers rather than to develop them. The existing laws and democratic management organisations have, therefore, not been capable of guaranteeing the full participation of farmers in economic development. This can be attributed to the fact that the organisation and management in Miyi County are as yet not sufficiently democratic, lawful, or reasonable and need considerable improvement.

Rural Development Problems in Miyi County

Advances have been made in reforming the prevalent systems and there is no doubt that the county has developed in socioeconomic terms. The problems connected with rural development have already been discussed in Chapter Three and this section will be devoted to discussing the weaknesses in the current development process. It is our belief that attention should be given to these problems now, before they become insurmountable obstacles to all future developments.

Small Scale of Management and Production

Fixed production quotas during the "Commune Period" resulted in small scale management and production in farming. Capacity is very low because farmers cultivate small pieces of land. Each family owns about 10 pieces of land of which the largest areas are less than 0.06 ha and the smallest less than 0.006 ha. Such small pieces of land can only be suitable for small-scale farming and limited production.

The "Contractual Responsibility System" went into operation in 1981/1982 and production reached an all-time high in 1984. However, from 1984 to 1988 agricultural production fluctuated and grain production actually decreased. This demonstrates that the actual impetus stimulated by the "Contract System" could not be maintained. Any system that is to sustain agricultural development should be dynamic and capable of adopting and adapting to new measures on a continuing basis. With increased modernisation and mechanisation, current methods become unsuitable. When agricultural production become intensive, it is necessary to adjust the organisational structure accordingly. Farmers should be asked to carry out reforms in organisation and management willingly and consciously rather than having it forced upon them from above. To ensure this requires foresight and judgement concerning when to carry out reforms and at what level production should be developed.

Disparity between Rich and Poor Farmers

At present, this is a glaring problem. During the "Commune Period", everyone was poor and disparities were not so obvious. With the reforms, the following differences have appeared:

- o Areal differences: Valley areas with their favourable natural and economic conditions are better off, whereas mountain areas are poor. For example, in Qinpi Village (3,400 inhabitants) the income per capita is \$270 and in Xingshan township (1,614 inhabitants), the per capita income is less than \$27.
- o Disparities within the same village: Rich people have per capita income as high as \$ 2,700 or more. The per capita income among the poor in the same village may be as little as \$ 270 or less. The rich own new houses and electronic goods, whereas the poor do not have enough for food and clothing. This disparity shows itself in other ways too. For instance, the rich compared to the poor are healthier, better educated, and more skilful.

The above factors render it difficult to improve the conditions of the poor and the Government is finding it difficult to resolve the disparities. The current policies encourage the rich to become richer and the administration merely subsidises the poor instead of introducing measures to get rid of poverty. Unless this problem is soon solved, further socioeconomic developments will be seriously hindered.

Increase in Rural Labour Force

In 1986, the surplus labour force in the county totalled 28,860 and accounted for 42 per cent of the agricultural labour force. The following reasons account for the surplus labour:

- o There are more people than land. Each person has less than 0.06 ha of land. Qinpi Village provides an example of what we mean. Though there are many employment opportunities in this village, the surplus labour is as high as 40 per cent. Of those employed, 40 per cent are involved in cultivation, 10 per cent in animal husbandry and pig-raising, and 10 per cent in rural enterprises, travel, and transportation.
- o In some areas, specialised production is being carried out. For example, in Liagpan Village, one family has contracted an orchard of ten hectares. They organise all the work among the family members.
- o The efficiency of the farmers has increased. During the Commune Period, the farmers commenced and ceased work at the same time in the same field and efficiency was low. After the establishment of the "Contract System," efficiency improved. Previously, field work stretched over the whole year, currently it is completed in three to four months. This is the major reason for the surplus labour force.
- o Surplus labour figures vary in different seasons. This is because farming is seasonal and is still largely manual. Harvesting and planting are peak seasons in terms of labour use and there is a slack season that lasts for four months.

Surplus labour is a common problem in Miyi County. The only way to solve it is by creating more employment by setting up rural enterprises and developing trading and transportation. However, such developments are limited because of poor education and the low management capacity of farmers.

Irrigation Projects in Disrepair

Almost all the irrigation projects, whether large, medium, or small, have long been out of repair. From 1949 to 1979 there was an increase in area under irrigation in the range of 70-700 ha each year (except for 1960, 1961, and 1969). Since 1980, the rate of increase slowed down each year. In 1980, the increase was only 20 ha; in 1981, 50 ha; in 1982 it was nil, and in 1983, 20 ha. However, by 1984, the area under irrigation decreased by 230 ha and in 1985 and 1986, it decreased even further.

Of the eight villages studied, only Qinggang was able to increase the area of land under irrigation from 1984 to 1987. Guabang township, to which Qinggang belongs, repaired a canal for irrigating 350 ha and increased the area of irrigated land by 170 ha. The cultivated land under this township totals 640 ha. The other seven villages have not done any irrigation extension works since 1980 and their canals are in a state of disrepair.

Irrigation is extremely important for agricultural production, especially in mountain areas. In the past decades, the county had undertaken a lot of irrigation construction works, but currently irrigated areas account for only 30 per cent of the total cultivated land. Of the eight villages studied, only Qinggang has improved on irrigation. It now has 130 ha cultivated area of which 87 ha are irrigated. There are few irrigated areas in the other seven villages. How to repair and construct irrigation projects is a matter that needs serious attention.

The Problem of Environmental Protection

This problem has already been described. Degradation has chiefly been caused by extensive farming and unplanned development of the small farmer economy. Eventually the result could be the destruction of all natural resources; thus hindering agricultural and socioeconomic development.

Paradoxes between Government Directives and Farm Management

Currently the production quotas for main crops, such as grain, rape seeds, sugarcane, and pigs are still fixed by the State and the products are purchased by them. There is an obvious contradiction between state monopoly and free marketing principles. Most farmers do not want to produce fixed crops and they do not want to sell to the State. For instance, the production of sugarcane competes with vegetable production. Farmers do not want to plant sugarcane because the inputs in terms of labour and capital are high. However, quotas are fixed by the State (at both provincial and county level) and the cane is compulsorily purchased by the county's sugar mills. The production is assigned by the county to townships, by townships to villages, and villages to families. Amounts are assigned according to the size of the family and total area of land cultivated. Because farmers do not like this assignment, although they plant the fixed amount of sugar cane every year, the output is low. In addition to the small size of production, the fields are scattered and the purchase and transportation difficult.

In addition, there are other problems that can be anticipated:

- o Educational levels are not adequate and the illiteracy rate is high; by 1987 only 2.2 percent of the population were engineers or technicians. This impedes development. Some township enterprises have no assistant engineer.

In 1988, the county was short of \$ 270,300 dollars for education and this resulted in serious problems at the middle and primary school levels. With the help of the county administration, some research institutes at provincial level have formulated a number of comprehensive programmes for socioeconomic and scientific development by the year 2000. However, unless the educational standards are improved, the people will not be able to implement them. At the village and township level, the concern is to improve income. In the eight villages studied, farmers have no long term development plans because they are satisfied with their work and with the current living standards. They do not think in terms of what will happen beyond the year 2000 or even about potential crises in a more localised context.

- o Prices of materials for agricultural production, such as, chemical fertilisers, farm machinery, chemicals, and plastic sheets, have risen; they are also in short supply. This is a hindrance to development.
- o At present, there is little competition for fruit production; prices are high and marketing has presented no problems. However, this will not be so in future (five to ten years hence) when other mountain areas enter fruit production. At that time pricing mechanisms, marketing, transportation, and preservation will pose a number of problems.

Recommendations for Future Development

Today Miyi County is in a position to provide sufficient food and clothing for its population. The people are striving to improve their incomes and this should lay a sound basis for agricultural modernisation in the next century.

Improvement of Overall Production Capacity

By the year 2000, development will have reached quite a high level. Per capita income will be more than \$ 270 and grain production per capita will be 400 kg. The development indicators forecasted for the year 2000 A.D. are as shown in Table 5.1. The calculations are based on 1980 prices.

In order to achieve the objectives, a great deal of attention will have to be given to the use of natural resources within the next ten years. The pattern of resource usage should account for the double pronged approach to industrial development and the three-tiered economic development system.

Table 5.1: Development Targets for 2000 A.D.

Total Population	201,500	
Total Grain Output	79,643	tons
Total Sugarcane Output	30,000	tons
Total No. of Pigs	169,600	head
Total Volume of Retail Sales	\$ 72.35	million
Output Value of Industry & Agriculture	\$ 66.28	million
Output Value of Agriculture Only	\$ 25.48	million
Gross Income	\$ 77.06	million
Revenue	\$ 8.97	million

The base is that of grain production which is stable, integrated, and complex. Industry should be divided into local industries and rural enterprises in order to develop the local economy and increase the revenue of mountain areas. This will, in turn, improve the living standards and gradually establish integrated industries, business, and the transport and service sectors.

Three tiered economic development involves the integrated use of local resources, including:

- o The comprehensive production and processing of sugarcane.
- o The production, processing, packaging, and distribution of non-staple foods
- o The development of mining, production of building materials, and extraction of diatomite, granite, marble, and limestone.

Change in Organisation and Management Systems

Increase in production will cause changes in the organisational system. Accordingly, the organisation and management in terms of the exploitation and protection of natural resources will also change. The socioeconomic system will be affected by these changes and the consequential adjustment will bring about changes in it also.

The principal goal of the county is the modernisation of agriculture and rural construction. The development process has to take into consideration the transition from traditional to modern agriculture which includes a number of changes such as:

- o from self-sufficiency to commercial production,
- o from simple usage to cyclic integration, and
- o from simple administration to comprehensive organisation and management systems

In the immediate future, changes will merely convert the scattered self-sufficient economy into a large-scale marketing economy. However, the basic management forms will not have to change a great deal but detailed adjustments in the current system will be necessary. The county administration will have to improve its policy making procedures and reinforce the "Contract System". Village development needs to undergo the following changes:

- o Families who specialise in particular products should be encouraged to get contracts for large areas of land. Currently they manage areas that are under 0.33 ha in area. Orchard plantations, animal farms, and grain production should be encouraged and the involved families should be given contracts and permitted to hire labour.
- o Cooperative organisations should increase. Groups of families in specialised occupations should be encouraged to form collectives. They will be responsible for running large orchards, fish farms, animal farms, and small reservoirs. Villages, as well as family collectives, can undertake such contracts, and other types of cooperatives, based on joint stock in industries or in agriculture, can be formed.
- o Some farmers should be encouraged to relinquish farming and engage in processing and handicraft industries, building construction, transportation, trades, and services. This will bring about a desirable decrease in the number of traditional agriculturalists although it will result in a more complex societal structure.

- o Two types of production, namely family-scale and collective scale, should coexist. Most farmers will be involved in both forms of production for a long time to come.
- o Since rural development requires a lot of capital, cooperative credit funds should be established. Under the "Contract System", construction of middle and large-scale projects (roads, large reservoirs, and irrigation canals) will pose problems. Apart from state allocations, it will be necessary to collect money from farmers for such projects. Cooperative credit funds will also be useful for the establishment of agro-based rural enterprises.

In the near future, organisation for rural economic development should be more flexible and be adaptable to the farmers' felt needs and local conditions.

Constraints on Future Development

The following is not a comprehensive list of constraints but rather a number of suggestions for overcoming the constraints that we have observed.

Objectives of further reforms should be based on:

- o pluralistic ownership systems and a variety of production and management forms which permit independence of both producers and enterprises, so that internalisation of procedures and disciplines conducive to greater production will develop;
- o improvement of marketing systems and commercialisation of the rural economy; and
- o administrative reforms on the rural economy should use the market mechanism, i.e., state adjustment of markets which in turn influences rural enterprises.

The following are the land reform measures that should be adopted:

- o land ownership systems (e.g. private, collective, and state ownership) should be permitted to exist simultaneously;
- o ownership of land tilled by farmers should be recognised by law; and
- o based on the above, land should be divided into grain fields and "contract" fields. Fields under the "Contractual Responsibility System" should be allocated to families or collectives and should be managed independently. In return, the families will fulfill certain obligations to the State such as selling their products under contract and protecting the environment. Mortgages should be raised on the land and some of the income derived paid to the collectives according to the terms of the contracts.

Rural policy implementations must be a continuous process. Adjustments should be made based on previous experiences until a point is reached where organisation and management patterns adjust gradually and continually, avoiding a large amount of upheaval. At the same time, some administrative organisations need to be changed to suit the requirements of commercial enterprises. Informal organisations that have been successful should be formalised and administered under relevant laws.

The county should improve socioeconomic conditions by basing development efforts on actual village conditions. To do so, villages should be categorised for the purpose of macro-level development and inputs should be timely and appropriate.

Marketing systems should be improved, especially for production inputs; funds should be made available and techniques provided to support rural development. Land use should be revised; production techniques and materials improved.

Contributions from science and technology should be augmented. Dissemination systems should be related to resources and products and qualified personnel should be trained to provide proper information and guidance on new techniques. Service systems need strengthening in order to establish firm bases for commodity production, processing industries, seed selection, land use, farming techniques, cultivation techniques, vegetable and fruit preservation, transportation, and markets.

Farmland, water resources, areas under irrigation, and land extensions in middle mountain areas should be improved and enlarged. Reforestation should be encouraged not only for domestic and commercial purposes but for water and soil conservation. Known techniques should be used to convert slope land into terraces, improve the quality of dry farm land, and increase soil fertility.

Enhancement of environmental protection and stabilisation of the ecosystem is essential. An Environmental Protection Organisation should be established at county level to monitor the environment and programmes that will affect it. It should also launch and implement environmental protection programmes and continually promote the same.

Finally, universal education is the most important factor in development. Compulsory education to middle school level should be introduced. In order to implement this, more funds will have to be allocated in order to improve the schools, quality of teachers, and quality of curriculum. Vocational schools should be established to develop technical skills for rural development.