

Problems of the Responsibility System

Differential Capacity among Households

Households differ in a number of respects, in the context of their abilities to benefit from the system. These have been described below.

1. Discrepancies in numbers in the labour force.
2. Discrepancies in management skills and capabilities
3. Discrepancies in conditions of production and technical equipment and input because of socioeconomic factors (some farmers have a greater facility for procuring good quality inputs etc than others).
4. Discrepancies in commodity conversion rates (some households are more remote and cannot market their products as easily as others)

These factors are bound to create discrepancies in rural prosperity between one household and another. The current discrepancy in increase in income is relative, based on the simultaneous increase of income among all income groups. There will be inevitable increase and decreases in income in the course of development. Some discrepancies will be inter-regional and others intra-regional. For example, in 1980, in the towns, on average the difference between the maximum and minimum incomes was 2.34 and by 1982 the income differential had increased to 8.54. In 1980, in production teams, on average, the difference between maximum and minimum income was 5.01, in 1981 it was 7.68, and by 1982 it had increased to 10.

Therefore, based on income differential, on the household basis, before the *Responsibility System* it was 1-5 and afterwards it became 5-20. By comparing a few poor minority families from mountain areas with a few *Han* families from the river valley areas one can come up with an income differential of from 50-100.

Discrepancies between a Market Economy and a Planned Economy

A market economy is based on the demands for a number of commodities and the market mechanisms to produce and distribute them. The planned economy is management of goods and services according to unified, centralised planning. The former produces according to guided planning and the latter according to ordered planning. There are obviously discrepancies between the two. After the adoption of household contracts, the contradictions become more obvious. An example of these contradictions can be seen by examining sugarcane and vegetable production in Miyi County.

Sugarcane production is subject to ordered planning by the State. Miyi is the main cultivation area in Sichuan Province. A sugar refinery producing sugar worth 10 million *yuan* a year pays four million *yuan* yearly to the County. However, farmers derive little benefit from it because they receive an income of only 500 *yuan* per mu for their cane. Sugar is the only crop that can be grown within the year, thus, they cannot grow grain.

Vegetable production on the other hand, is quite different. One season of early maturing vegetables brings a return of 1,000 - 1,400 *yuan*, 2-2.8 more than sugar production. The growth period lasts for only two months and after the vegetables are harvested, rice can be planted. The income from vegetables together with that from grain gives an annual benefit per mu which is

3.3 to 3.5 times that of sugar cultivation. Thus it is difficult to get farmers to engage in cane cultivation (ordered planning) when vegetable production (guided planning) is so beneficial.

Reappearance of Old Social Conflicts

After the move to household management, farming families have begun to rely once more on blood relations. Patriarchal traditions have re-emerged and this had led to inter-familial disputes (e.g. over water, land boundaries, irrigation ditches, etc.). This, in its turn, can lead to the reassertion of feudal superstitions and loyalties and other backward customs. Although there are few regions where this problem exists, (perhaps accounting for 3-5% of all farming households) when it occurs it usually does so amongst families in the extremely poor areas or amongst families in the much richer urban areas.

Reduced Scale of Production

The household - level of production has reduced the scale of agricultural production and land management to several *mu* of land per family. This leads to fragmentation of lands, particularly in the mountains, so that each family has an equal plot. This means that the several *mu* can also be scattered throughout several places. This is a serious weakness, and hampers development. Farming small scattered plots of land does not facilitate rational management and families are unable to take proper advantage of improved technological inputs.

Hindrance to the Construction of Large-Scale Water Reservoirs

Most of the large-scale water reservoirs in Miyi were constructed from the 1950s to the 1970s. They have long been in disrepair and are flooded or silted up. Since there is now no centralised labour force, it is difficult to get farmers to construct such works anymore. Table 11 depicts the construction of such works over the years, and the change in water storage capacity in the County.

After 1980, it is found that the number of irrigation channels increased slowly. From 1955-1965, 235 new channels were constructed and from 1975-1985, 82 new channels were constructed. The number of large-scale reservoirs has not increased, but has reduced considerably. Even the construction of small ponds has almost ceased. From 1955-1965, 230 new ponds were built with an increase of 1.2 million m^3 of storage capacity and from 1975-1985, the total storage capacity increased to 2.48 million m^3 , but two-thirds of the ponds had been constructed before 1980 (Table 11).

Hindrance to Agricultural Modernisation

Roads are a basic condition for the modernisation of rural areas. Although main roads and feeder highways are financed by the State, village roads in mountain areas are constructed with funds raised from the farmers themselves. Road construction is expensive because of the topography and benefits are low because of the scattered population. Collective accumulation of funds is low, and therefore it is difficult to build roads. When labour was centralised, such activities were easy to organise, now that has changed.

Household division of management is not conducive to the promotion of advanced agricultural technologies either. Some technologies (seed selection, pest and disease control) need time for experimentation and a certain amount of basic investment. All these things involve benefit and risk. When risk is there and benefits cannot be guaranteed it is difficult to secure the involvement of households. Two adjoining households had fruit trees that were invaded by pests. One sprayed

insecticide, the other did not. This meant that even the household using a modern technique did not benefit as the insects from the unsprayed trees simply spread.

Mechanisation is also a problem. This does not make too big a difference in mountain areas where mechanisation would be difficult anyway, but it makes a big difference in the plains.

Table 11 : The Number of Water Reservoirs Built Over the Years in Miyi County and the Change in Storage Capacity

Year	Total Channels	Total Reservoirs		Small Water Ponds	
		Numbers	Storage Capacity 10000 m ³	Numbers	Storage Capacity 10000 m ³
1975	1392	10	864	617	272
1976	1402	15	989	626	328
1977	1420	10	1448	651	315
1978	1432	18	1448	664	360
1979	1441	21	1528	669	396
1980	1446	23	1675	685	436
1981	1451	23	1675	691	452
1982	1457	23	1675	692	453
1983	1459	23	1675	695	456
1984	1467	23	1675	696	461
1985	1474	13	1630	714	520

Education

Investment in education has been hindered for two principal reasons. These are outlined below.

The value of Child Labour. The "Household Contract" System has increased the use of child labour. More and more children are leaving school, and some families even encourage them to do so. They argue that the quality of rural education is poor and that it is better to save schooling expenses if children are not going to get opportunities to enter colleges or polytechnics; they may as well earn money.

Cost-benefit of Education for the Single Household. The benefit of education for a single household is low. The knowledge and technology obtained at great cost is not going to be applied on large tracts of land, and, with this reasoning, farmers desist from sending their children to school.

Rational Use of Natural Resources

Most farm households have two principal objectives : (i) to produce enough food for their own needs and (ii) to produce sufficient surplus to sell for a profit. The division of land into small plots is not conducive to a rational use of natural resources. Soil improvement measures are not pursued because of the intensive use of these small plots of farmland. On such a small-scale, it is not possible to make the best use of light, heat and water conditions, etc.

The "Household Contract" System has also hindered the rational use of bio-resources. Miyi County has a comprehensive category of land types suitable for vertical agriculture. Advanced varieties of plant species could be imported from outside and would prosper under these conditions. However, this would have to be pursued on a large scale.

On the other hand, farm households are gathering and digging up wild plants (medicinal) and hunting wild animals as subsidiary occupations. Monocultivation has resulted in the destruction of certain plant varieties. The use of bio-resources is greater than protective measures taken to make their use sustainable.

Finally, sources of energy are not used properly. Mountain areas are rich in water resources, but even small hydro-power stations need a great deal of investment. Single families cannot possibly make this kind of investment and water energy remains underutilised. Similarly with coal which is mined at random by individual families. They remove only the thin surface seams, destroying the thicker seams underneath. What they cannot mine they abandon, destroying the resource base and the land surface.