AGRICULTURE IN A TURBULENT WORLD ECONOMY

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Gower
It is an honour for me, a Chinese agricultural economist, to have the opportunity to make a presentation about rural economic reform in China to my colleagues from different countries. This reform, which started several years ago, has attracted wide attention from people in various circles all over the world.

China began the reform of its rural economy in 1978. The basic goal was to transform China’s subsistence agriculture into a planned commodity economy, and traditional agricultural technology into a modern one, and thus to develop agricultural productivity.

For a long time before 1978, a series of leftist policies, including those policies with regard to the rural economy, were dominant in China. The outstanding characteristics of these leftist policies consisted in deliberately overstepping the stage of a commodity economy and attempting to distribute social goods directly. As experience has proved, the stage of commodity economy cannot be overstepped. In fact, it was with the development of a planned commodity economy that China began the reform of its rural economy, thus promoting comprehensive rural development. In general, the reform has been in four stages, as follows:

I REFORMING THE RURAL ECONOMIC SYSTEM AND INTRODUCING THE RESPONSIBILITY SYSTEM

For more than 30 years, the system of the people’s commune was exercised in China’s rural areas. Under this system, the means of production were owned collectively, farm work was done together, and returns were distributed in a unified way. Communes accumulated funds for agricultural development, trained a good deal of qualified managerial personnel, and they represented more powerful productive forces. While positive results were achieved, communes as an economic system had many drawbacks; namely, this system suffered from undue unification and over-concentration. By ‘undue unification’ I mean that we had a single model for all China. This prevented peasants from using various means to develop commodity production in the light of their specialities and advantages. ‘Overconcentration’ refers to the excessive decision-making power of communes in matters of enterprise management and
labour allocation. This hampered efficient co-operation of labour and well-co-ordinated work, thus discouraging peasants' initiative and attentiveness to the results of production.

The Chinese government called for a new policy in 1978 to invigorate the national economy and to open China to the world. The Chinese peasants in their hundred millions, based on their own experience, found at last a new economic system – the production responsibility system, which is effective in overcoming the above-mentioned drawbacks caused by the communes.

In the collective economy under the production responsibility system, the household acts as the basic production unit. The household signs contracts with the collective, assuming the agricultural tax quota for the collective and the quota of farm products to be sold to the government. The household also contributes a percentage of funds for the collective's production accumulation and public welfare, while the remainder (both products and cash) belongs to the peasant household.

The principal features of this system can be summed up as follows:

1. It is founded on the collective ownership of the basic means of production, including land. Production is managed on the basis of separate households, each assuming sole responsibility for its own profits or losses.
2. The household is linked with the collective by contracts, the family economy of the household representing a level of management of the collective economy.
3. The collective supervises land use in a unified way and co-ordinates the use of large-scale farm machinery and drainage-irrigation facilities. In accordance with state plans, the collective deducts funds for production accumulation and public welfare and carries out agricultural capital construction according to unified planning. The peasants have the authority to choose desirable jobs on condition that they will fulfil the quotas fixed by contracts.
4. The collective regulates the distribution of returns on the basis of household contract quotas, guaranteeing to distribute the gains on the socialist principle of 'equal pay for equal work'.

As we see from the above four aspects, the responsibility system in agricultural production did not change the nature of socialist collective ownership. The thing that has altered is merely the management system.

Great changes have taken place in China's rural economy since the introduction of the responsibility system:

1. The unitary economic structure in the countryside has been replaced by a new one with varied elements, forms, and levels. The peasants are allowed to use their surplus production resources, such as funds, labour, equipment, and skills, to engage in new production activities, shifting from one enterprise to another or co-operating with others, on condition that they complete their contracts. The unitary rural economy has also
given way to a multiple rural economy embodying several elements, forms and levels. That is to say, apart from the collective-run and state-run economies, we have now the partnership economy formed on a voluntary basis, the individual economy (e.g. some specialised households), the economy of small proprietors and big contractors. There are, in turn, several different management forms within each of these economies. The collective economy, for example, in addition to the existing co-operatives, includes partnerships, corporations, and the like. These economies embrace various levels in the process of development, for instance, individual undertakings, economic combinations of new types, agricultural-industrial-commercial associations, and so on.

2. The household, as the basic production unit, has been given more decision-making power under the guidance of the state plan. The household has the authority to choose economic undertakings and arrange production according to local conditions. Egalitarianism has been rejected; the principle 'more pay for more work' is carried out instead of the previous one when everybody was equally paid regardless of his real performance. From now on, if a peasant improves his management, offers more products, and lowers the cost, he increases his income and gets more material benefits. This is a new form of economic management which creates inherent economic incentives, capable of stimulating greatly the producers' enthusiasm. Consequently, agricultural production, as well as peasants' income, has expanded at an unprecedented rate.

Initially, the responsibility system was implemented only in crop cultivation, which was therefore entitled 'land contract system'. Later, following its essential advantageous aspects, the peasants extended similar contract responsibility systems to other economic activities, including collective-owned forests, livestock, fisheries, sideline occupations, and rural industrial enterprises. A great number of specialised households have come out in rural China. Crop farming became a burden for some of the specialised households, preventing them from concentrating all resources on contracted specialities. They wanted their fields to be transferred to other peasants who were skilled at crop production. The rural economy has become more specialised. This is characterised by two opposite trends: large numbers of peasants, having left farmland, are engaged in other undertakings, such as forestry, animal husbandry, fishery, sideline occupations, rural industries and service trades; on the other hand, the land is being concentrated in the households that are more skilled in crop cultivation.

As agricultural production becomes more specialised, it is important for the peasants to have pre-production services (input supply, etc.), production services, and post-production services (marketing, processing, etc.). The peasants, however, are unable to undertake such services individually. As a result, beyond the existing co-operatives that were set up on a geographical (village) basis, the peasants have established
Economic reform in rural China

II READJUSTING RURAL ECONOMIC STRUCTURE

For a long time, the Chinese government carried out an agricultural policy which paid consistent attention to grain production, but neglected other diversified undertakings. That policy was unfavourable for the development of industrial crops, forestry, animal husbandry, fishery, rural industry, and other sideline occupations; furthermore, it hampered improvement of environmental conditions for agriculture taken as a whole. It also impeded rural trade and the prosperity of rural towns. The commodity economy could hardly develop smoothly in such circumstances. The peasants' income could not increase significantly.

The ultimate purpose of the adjustment of China's rural economic structure was to transform a unitary emphasis on grain production into comprehensive development of agriculture, forestry, animal husbandry, fishery, sideline occupations, rural industry and trade. This can be understood at the following levels:

1. **Readjustment of the crop mix.** The area under industrial crops, vegetables, and feed crops should be expanded, reducing accordingly the acreage of grain crops. Meanwhile, per unit area yields should be raised.

2. **Readjustment of agriculture as a whole.** Forestry, animal husbandry, fishery, and sideline occupations should be developed vigorously, diminishing the share of crop production in the rural economy.

3. **Development of rural industry.** As rural industry grows, it supplements the market with a portion of industrial goods. Surplus manpower can be absorbed into these rural industrial enterprises, which accumulate the funds necessary for the adjustment of the rural economic structure. Rural industry provides processing facilities and pushes forward the technical transformation of the rural areas. Peasants' income thus can be increased by a great margin.

4. **Development of tertiary industry.** This includes transportation, commerce, catering trade, tourism, culture and education, science and technology, and health care.

The adjustment of the rural economic structure is to be implemented mainly in two ways: (1) Increasing the yields of grain crops per unit area and restoring a portion of cropland to its original use; because some forestry land, grassland and even lakes were reclaimed for grain...
production in the past. 12 million hectares of land have been withdrawn from grain production and are now used for industrial crops, trees, pasture, fishery, and other purposes. (2) Making use of wasteland, hills, waters or grassland to develop diversified undertakings.

Practice has proved in recent years that the following policies are effective in promoting rural adjustment:

Encouraging the flow of peasants' surplus manpower, capital, equipment, and technical personnel from one region to another, and from rural to urban areas. The peasants can engage in new economic activities of various forms. They are allowed to buy equipment for processing farm products, big or medium-size tractors and trucks. They are permitted to run transportation and small mining sites as well.

Supporting specialised co-operatives. The peasants can set up and manage co-operatives specialised in pre-production, production, and post-production services, because it is difficult for individual peasants to acquire new technology, input supply, and facilities for processing, storage, transport and marketing of agricultural products.

Favouring diversified undertakings. In addition to land contracts, the peasants are encouraged to sign contracts to reclaim waste and hilly land, grassland, ponds or lakes, and build up specialised households. The term of validity of the contracts is usually 15 years, and can be prolonged.

Granting preferential tax rates, loans and input supplies to newly established larger rural industries.

Developing rural market towns and small- and medium-sized cities. The peasants are permitted to move and settle there to work in the secondary and tertiary industries, urbanizing the rural areas.

<table>
<thead>
<tr>
<th>Crops</th>
<th>1953–78 per cent</th>
<th>1979–83 per cent</th>
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</thead>
<tbody>
<tr>
<td>Grain</td>
<td>2.4</td>
<td>4.9</td>
</tr>
<tr>
<td>Oilseeds</td>
<td>0.8</td>
<td>15.1</td>
</tr>
<tr>
<td>Sugar beet</td>
<td>6.9</td>
<td>27.7</td>
</tr>
<tr>
<td>Timber</td>
<td>5.6</td>
<td>7.1</td>
</tr>
<tr>
<td>Fruits</td>
<td>3.9</td>
<td>7.6</td>
</tr>
<tr>
<td>Tea</td>
<td>4.6</td>
<td>8.4</td>
</tr>
<tr>
<td>Meat</td>
<td>3.6</td>
<td>10.4</td>
</tr>
<tr>
<td>Aquatic products</td>
<td>4.0</td>
<td>3.2</td>
</tr>
<tr>
<td>Silkworm cocoons</td>
<td>4.0</td>
<td>9.1</td>
</tr>
</tbody>
</table>

The diversified economy in rural China has recently developed at high speed. The average growth rates of selected crops are shown in Table 1. The gross output of rural industry grew from 38.5 billion yuan in 1978 to 103.5 billion yuan in 1984, or a 2.7-fold increase. The total value of farm and sideline products purchased by the government increased from 71.36 billion yuan in 1979 to 126.5 billion yuan, registering an average growth
of 15.4 per cent annually. The commodity economy has entered into a new stage.

III REFORMING AGRICULTURAL PLANNING AND RURAL COMMERCIAL SYSTEMS

The shortcomings of agricultural planning and the rural commercial system have been revealed as the commodity economy develops in rural areas. As regards the management system of agricultural planning, the major problems were overconcentration, undue control and inflexibility and a failure to bring into play the law of value. Here are some examples:

1. The production quotas were assigned from the very top to the grass-roots production units. There were many orders issued as mandatory – what and how much to produce, which production measures to be taken, and so on. As a result, these orders tended to go against local conditions. The peasants entitled them ironically 'blind commands', 'severing everything at one blow'.

2. A state monopoly for purchase and marketing of farm produce represented the basic form of the planned purchasing system. At first, in 1953, the monopoly was confined to grain, cotton, and oilseeds, but it was extended to other farm products later on. In 1961, all farm products were classified into three categories: The first category referred to grain, cotton, and oilseeds, which were under state monopoly for purchase and marketing; nobody other than state-run enterprises could market these commodities. The second category referred to pigs, poultry and eggs, which were also under the government control, but they might be delivered to market on condition that the quotas had been met. Farm products of the third category were to be sold on a negotiated basis. Generally, farm products of the first and second categories made up 80 to 85 per cent of the total amount of farm and sideline products purchased in rural areas. It was very clear that the peasants had little decision-making power in marketing their products. That certainly dampened their willingness and enthusiasm for developing the commodity economy.

In order to vitalise the economy, the government has recently abolished mandatory quotas in agriculture. The new agricultural plans are ones of guidance and serve as tools for the leaders at various levels in their macroeconomic regulation. The state carries out a planned market economy, exercising its leadership in agricultural production by means of economic levers, such as contracts, prices, taxes, credits, and through government-run enterprises and co-operatives as regulative organisations. Agricultural enterprises have the right, under guidance of the state plans, to decide their farming patterns according to local conditions and on measures for increasing production, the right to determine their methods of management and operation, and the right to distribute their products and cash. The government guarantees and respects the
decision-making power of grass roots units of production.

Beginning in 1985, the system for purchasing farm products is to be reformed. The State does not issue any mandatory quotas to peasants. While offering fixed prices for grain and cotton by contract purchasing, other products are allowed to float at free prices and are handled on the open market.

As for the reform of the rural commercial system, the goal is to unclog channels of circulation and promote development of commodity production. There was too much unified control of the commercial system in the past. Monopoly prevailed and channels of circulation were under strict control. That phenomenon has been changed. There are various forms of economy and management now and we have opened several channels of circulation. Ensuring the leading role of state-run commercial enterprises, we nevertheless support supply and marketing co-operatives and other collective trade enterprises. Also, individual commerce is allowed to develop in a proper way. It is necessary to break down the barriers between the urban and rural areas, raise the blockade among regions, and actively open more channels of circulation.

The responsibility system applied to the business sector, with contracts as its key point, is now vigorously implemented in the state-run trade enterprises and the supply and marketing co-operatives, linking performance with the economic interests of staff and workers. There are different types of the responsibility system. As a rule, small retail shops, restaurants, repair shops, and the like, are contracted to groups, occasionally to individuals. Some facilities also can be leased to groups or individuals to favour the development of planned commodity production.

IV PROMOTING TECHNICAL TRANSFORMATION OF AGRICULTURE

The progress of science and technology is the key to the success of rural commodity production. It decides whether the new enterprises can withstand market competition and become mature. Thanks to the introduction of the production responsibility system in agriculture, the millions of peasants are anxious to equip themselves with modern inputs and technology. China's countryside is experiencing a technical revolution which is to transform traditional agriculture into a modern one. During the period between 1978 and 1983, the number of large- and medium-scale tractors in China increased from 557,000 to 841,000, walking tractors from 1.373 million to 2.75 million, trucks from 73,000 to 275,000, chemical fertilizers from 8.84 million tons to 16.6 million tons, and electricity used in rural areas from 25.3 billion kilowatt-hours to 43.5 billion. The peasants are eager to study new techniques and put them into practice. Improved crop and animal varieties, compound feeds, the technique of covering fields with polyvinyl film, the techniques of greenhouse cultivation, and other scientific methods of cultivation and breeding have been extended very quickly.
The technical transformation of China's agriculture depends, first of all, upon an appropriate system of agricultural science and technology with Chinese characteristics. At present, China's agricultural science and technology have a relatively short history of development and a poor foundation. There is a huge population with scarce arable land per caput, agricultural techniques of different levels exist at the same time, and traditional agriculture still plays a dominant role. The cultural level of the peasants remains low, but they can hardly raise enough finance to make the intellectual investment. In a word, the technical transformation is carried out in a complicated setting, which requires that China's specific features be considered. The newest technology should be combined with the best traditional measures; machinery should be united with biological techniques, with focus on the latter. The techniques of intensive agriculture imply a three-dimensional use of natural resources. First, good economic performance should be viewed in the light of ecological balance and favourable circulation of nutrients. Second, we should strengthen international exchange of agricultural techniques and promote international trade of farm products. Third, the traditional agricultural technology of China traces its history back several thousand years. Some techniques, for instance dry farming, multiple cropping, pest control, by biological methods, acupuncture treatment in veterinary practice, as well as a great number of famous and rare plant germ plasm and animal resources, have attracted world-wide attention. On the other hand, it is necessary for China to adopt modern agricultural technology in its modernization drive. Exchange of agricultural techniques between China and other countries benefits both modernisation of China's agriculture and development of agricultural science and technology in the world.

In order to introduce fine varieties, advanced technology and equipment, and attract foreign investment, it is necessary to export agricultural products, raw and processed, and develop the world market-oriented agriculture which will enable us to increase foreign exchange earnings. Today, 14 coastal cities along with the special economic zones are open to the world, which play a dual role: open windows for attracting foreign capital and bases for linking the interior with the outside world. Consequently, the adjacent provinces should shift agriculture to meet export demands; in other words, they should develop the farm produce processing industry and promote agricultural production in accordance with the requirements of processing plants. In this way, agriculture is likely to provide more marketable commodities and accelerate the process of modernisation.

Next, attention should be paid to scale economies. The scale of land management by a household should be enlarged as more and more peasants cease land farming to undertake secondary and tertiary industries in rural areas. Moreover, there is a tendency for specialised production in rural China to advance from households to specialised towns, or even specialised zones. Naturally, the process of specialisation and combination in agriculture will take a long time, but this process
might be speeded up, because it is possible to push forward agricultural technology only on condition that the scale of management be enlarged, and specialisation and combination of agriculture be realised.

Finally, it is very important to strengthen the development of agricultural science and technology, extension services, and intellectual investment.

The reform of China's rural economy is proceeding in an orderly fashion, step by step. The reform of the economic system in rural areas has been basically finished. The reform of the economic structure and commercial system is in full swing. The transformation of agricultural technology is just under way. Initial results have been admirable since the reform began: the total value of agriculture was 145.88 billion yuan in 1978, that went up to 288.18 billion yuan in 1983; the net income per caput of peasant households was 133.57 yuan in 1978, while it reached 355 yuan in 1984. The peasant masses are striving for realisation of the great goal of quadrupling the total value of industry and agriculture by the year 2000.