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THE RURAL ECONOMY OF YANBEI PREFECTURE :  
THE EMERGENCE OF SPECIALIZED PRODUCTION

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## 1. INTRODUCTION

Since the third plenary session of the 11th CCPCC in 1978, Chinese attitudes towards rural production have undergone a distinct change. The re-introduction of production responsibility systems in 1978 followed by the introduction of the all-round contract system of production responsibility has done much to enliven the rural economy following a decade of Maoist excesses in the countryside.

The 1978 reforms prompted numerous production management forms to emerge throughout China. These included a variety of specialized production units, agricultural-industrial-commercial complexes, commodity production bases and so forth. Within the prefecture many production management forms are said to have developed in the current phase. However, it is possible to distinguish in the literature from Yanbei one management form which, it is claimed, is emerging to have a dominant influence both upon the shape of the prefecture's rural economy and also upon the direction in which it is headed. The development and influence of this particular management form, the grain producing specialized household, will therefore form the heart of this discussion upon the rural economy of Yanbei prefecture.

Such a discussion is important when considering the dramatic emergence of the grain producing specialized household as a real force in the Chinese rural economy. In the *People's Daily* 21.3.1983 only a "few" such households had been established. By September of the same year, *Xinhua* 24.9.1983 announced that 34.2% of all specialized households were now grain producing specialized households. That is to say, about 3.1% or over 5.3 million households throughout China were specializing in grain production. This figure is undoubtedly still rising (Lie Bang).

## 2. YANBEI PREFECTURE : THE SETTING

Yanbei prefecture is situated on the Suiwei plateau in the north of Shanxi province (see Figure 1). The prefecture is made up of 13 counties - Tianzhen, Yanggao, Guangling, Lingqiu, Hunyuan, Datong, Huairou, Ying, Shanyin, Zuoyun, Youyu, Pinglu and Shuo - and also includes the industrial city of Datong (see Figure 2).

Yanbei has traditionally been a backward area. As Lin Zili *et al* comment (p.71) "for a long time in the past, the per unit yield was low, and the life of the masses difficult". Average annual temperatures are low, the frost-free period is short, severe wind storms are frequent, annual rainfall is only about 400 mm, vegetation cover is lacking, and ecological conditions are considered poor (Lin Zili *et al*).

Much of Yanbei consists of an unbroken chain of undulating mountains. Yan Zanyao *et al* estimate that 74.7% of the prefecture's total land area - 25.51 million mu - is mountainous. As Figure 3 illustrates, much of the prefecture lies between 1000 and 2000 metres above sea level. The only significant area of lowland (land below 1000 metres above sea level) is the plain of the Sanggan river (see Figure 4).

Against these inhospitable physical conditions, Yanbei can boast two aspects of superiority : the first, the wealth of coal resources, ten of the counties possessing significant coal reserves (Huo Shilian *et al*); and secondly, the relative abundance of land. Consider the following table:

TABLE 1. YANBEI PREFECTURE : POPULATION AND LAND RESOURCES

Total land area (million mu)	34.132
"Mountain" area (million mu)	25.51
Total population (millions)	2.387
Average amount of land per capita (including non-agricultural population) (mu)	14.3
Average amount of cultivable land per capita of agricultural population (mu)	4.37 <sup>1</sup>

<sup>1</sup> Lin Zili *et al* put this figure at 4.5 mu per capita.  
Some figures deduced.

Compiled from materials in Yan Zanyao *et al*, p.14  
Huo Shilian *et al*, p.3

The figure of 4.37 mu of cultivable land per capita of agricultural population is considerably lower than the figure of 8.0 mu for Shanxi as a whole, but it compares favourably with that for most other provinces (see Leeming and Powell - Table 2.3).

Despite this relative abundance of land and the existence of excellent

coal reserves, before 1978 Yanbei remained backward. However, in the current phase, much progress has been reported from Yanbei. As Lin Zili *et al* note (p.71) "in recent years, agricultural production has made giant strides in this place which lacks good natural conditions". How this progress has been achieved is the main concern of this paper.

### 3. TOWARDS A SOLUTION OF THE GRAIN PROBLEM : GRAIN PRODUCING SPECIALIZED HOUSEHOLDS

The most important aspect of the development of Yanbei's agricultural production in the current phase has been its ability to increase grain production. For many years the province of Shanxi had to depend upon grain deliveries from the state. According to figures used by Zhao Mingzhu *et al*, during the 26 years between 1953 and 1978, the province showed small net exports of grain in only five years and in the other years was a net grain importer, averaging 1 billion jin per annum. It would not be unreasonable to suppose that in the same period Yanbei was at best only marginally self-sufficient in grain.

Production problems were numerous, Liang Tongfang *et al*, when referring to wheat production in Yanbei - the dominant grain foodstuff - note that (p.63) "the principal longstanding common problems have been drought, infertile soil, careless ploughing and planting, and a lack of drought-resistant varieties".

This inability consistently to produce sufficient quantities of grain was seen as a major stumbling-block to the all-round development of the economy of Yanbei as well as that of Shanxi. Li Xiuren, again referring to Shanxi but equally applicable to Yanbei, makes the point that (p.68):

"In the future, concomitant with the speeding up of the pace of construction of base areas for coal, energy, heavy industry and the chemical industry, there will be a sharp increase in the non-agricultural population. Shanxi's ability or inability to produce more grain has become a factor which is related to whether or not key state construction projects develop smoothly."

Since 1978, grain production in Yanbei has undoubtedly improved. While Li Xiuren's comments emphasise the need to maintain this improvement, there appears much cause for cautious optimism:

TABLE 2. YANBEI PREFECTURE. TOTAL GRAIN PRODUCTION AND COMMODITY  
GRAIN SALES, "RECENT YEARS", 1982 (million jin)

	"Recent years"	1982
Total grain production	1500 (1978)	2000+
Total commodity grain sales	209	520

Compiled from materials in Shanxi Ribao 28.10.1982, p.72  
Lin Zili et al, p.71

Much of this improvement in grain production has been attributed to the success of the production responsibility systems in improving peasant incentives for grain production, ninety per cent of production brigades in Yanbei implementing some form of responsibility system in 1982 (Shanxi Ribao 28.10.1982). The Shanxi Ribao 28.10.1982, in a discussion of the abundant harvest of 1982, claims (p.73) "the universal implementation of joint production contract systems of responsibility, with large contracts being the rule, was a major factor". While there is undoubtedly much truth in this, other factors also come into play.

The Shanxi Ribao 28.10.1982 (p.73) also comments that "the overall abundant harvest obtained in Yanbei prefecture this year is naturally due in part to the relatively normal weather and fairly regular precipitation". A similar point was made by Liang Tongfang *et al* referring, in much greater detail, to the advantageous climatic conditions which promoted wheat production throughout Shanxi in 1981 and 1982.

Furthermore, crop rotations have been rationalized, fertilizer applications have improved both in quantity and quality, and many aspects of production are now subject to the use of advanced agricultural techniques. All these factors have considerably aided grain producers in recent years.

Despite recent improvements two important reservations remain. First, numerous problems still exist in production. Liang Tongfang *et al* point out two in Yanbei's wheat production, for example: many spring wheat varieties are predominantly planted on dry land where wheat production is essentially,

from planting through to harvest, a chancy proposition. Where rotten and diseased roots occur, output is seriously reduced. Furthermore, extensive cultivation is the norm, and per mu yields often do not exceed 100 jin.

The second reservation is that in spite of the improvements fostered by the introduction of production responsibility systems into agriculture, all too often merely fulfilling state grain quotas is only sufficient to meet the basic demands of the state for grain. Li Xiuren makes this point very clearly in the following revealing passage (p.73) :

"For the past few years the responsibility system has greatly motivated the productive energies of the masses. At the same time, the state has adopted various measures to aid grain production, and brought about outstanding results in both grain production and purchase. But the grain sold by the vast majority of peasant households was still only the remainder left after satisfying their own needs. Although the commodity rate has gradually risen, due to the influence of various factors such as amount of land managed and productivity, generally speaking the commodity rate for grain is still quite low, and basically we still do not have commercialized production. Consequently sales to the state of commercial grain are still not very secure, and the quantity level is not stable either. Moreover, in recent years some areas have squeezed out cultivated land by blindly expanding cash crops and large-scale construction of homes etc., so that the grain-growing area has shrunk".

In many ways such a state of affairs is not unexpected. Yanbei's natural conditions as outlined above mean that agricultural production is always difficult and much long-term as well as short-term investment is needed before yields can substantially increase. Given that in 1978, per capita incomes in the mountain areas which make up the bulk of Yanbei were only 30.4 yuan, it is not surprising to discover that such investment has not been great up to the present (Yan Zanyao *et al*). Furthermore, the mass of the rural population has still to be convinced that current policies are stable and investment in the land from household incomes is a worthwhile proposition. Again, state prices for grain remain low in comparison to those for other agricultural produce, further reducing incentives to produce grain above the set quotas and increasing the attractiveness of cash crop production.

To overcome these varied problems, many commentators advocate the widespread use of grain-producing specialized households. Li Xiuren, for example, in reply to the problems he himself outlines states (p.73) : "one strong measure for solving this problem is for households to concentrate their energies on specializing in commodity grain." Indeed, Huo Shilian *et al* go further by stating that (p.5) : "Yanbei prefecture is planning gradually

to come to rely on specialized grain production households to fulfil the state grain purchase quota of the whole prefecture."

The advantages of such a development are said to be numerous. The most significant is that such a move helps to guarantee that the state obtains a sufficient supply of commodity grain. This is because of the high marketing rates claimed for such grain producing specialized households as Table 3 illustrates:

TABLE 3. YANBEI PREFECTURE : GRAIN PRODUCING SPECIALIZED HOUSEHOLDS<sup>1</sup> - NUMBERS, MARKETING RATES, 1983

Total number	22000
As a % of the total number of households	3.92
Total amount of commodity grain supplied (mill jin)	340
Commodity grain supplies as a % of total amount supplied by Yanbei prefecture	65.4
Commodity rate	75.7

<sup>1</sup> Grain producing specialists are apparently defined as those households which supply over 10000 jin of commodity grain (Lin Zili et al; and Zhou Qiren et al). Some figures deduced.

Compiled from materials in : Zhou Qiren et al, p.54; Zhao Mingzhu et al, p.89; Lin Zili et al, p.72; Shanxi provincial government research office, p.3.

Table 3 illustrates how a small number of grain producing specialized households produced 65.4% of the commodity grain supply by Yanbei. Even more significantly, the 340 million jin of commodity grain produced by these households represents an amount twice that of the prefecture's basic grain requisition amount of 170 million jin. Furthermore, the 75.7% commodity rate of such households is 22.7% higher than the prefectural average for all grain producing households.

At a local level, the difference in output and commodity rate between a grain producing specialized and non-specialized household can be seen in Table 4:

TABLE 4. DATONG COUNTY. A COMPARISON OF THE GRAIN OUTPUT  
CHARACTERISTICS OF GRAIN PRODUCING SPECIALIZED AND  
NON-SPECIALIZED HOUSEHOLDS, 1983

	Specialized households	Non-specialized households
Commodity grain supplies:		
1. Amount (million jin)	27.91	13.07
2. As a % of total amount supplied from the county	68.1	31.9
Average per capita sales of grain (jin)	1688	104

Compiled from materials in : Datong county party committee and people's government, p.50.

This obvious superiority in the grain output characteristics of grain producing specialized households, so the argument runs, make a reliance upon such households for commodity grain supplies an attractive proposition to the state. Not only, it is claimed, will grain supplies be stable, but also the grain producing specialized households are themselves more able to be placed under the state planning system. As Lin Zili et al state (p.73/4) :

"... because the households which supply a large amount of commodity grain are a very small proportion of the total number of peasant households, this is not only even better for the implementation and supervision of commodity grain sales contracts, but it is also even better for linking commodity grain purchase with state measures, thus enabling even clearer relationships of responsibilities and benefits, and duties and rights between the state and commercial grain sellers."

There can be little doubt that the state views the possibility of keeping grain production under the state planning system through the use of such specialized households in an entirely favourable light - though, as of yet, relationships between grain producing specialized households and the state remain unclear.

Indeed, several questions must be raised about a grain production strategy based upon a small number of specialist producers as envisaged above. First, there is the problem of dependance upon a small number of households responsible for producing the bulk of Yanbei's commodity grain requirements. If too much reliance is placed upon these grain producing specialized households, any shortfall in their production from adverse weather conditions for instance - not improbable in this part of China - could have significant

repercussions.

Again, there is the matter of insisting that grain producing specialized households adhere to contracts. If grain producing specialized households do not fulfil quotas agreed upon in their production contracts then the system will falter. Han Jianmin notes that some such households in Yanbei have only partially fulfilled output quotas. This is considered a most unwelcome tendency and the state clearly cannot continue to allow it and must impress what authority it has upon grain producing specialized households to ensure that output quotas are fulfilled according to contract (although, of course, sometimes contracts are unrealistic).

Nevertheless, such doubts, in the minds of most commentators, are outweighed by other advantages. It is claimed, for example, that such households are beneficial in the promotion of diversified undertakings and increased specialization of production (Lin Zili *et al*; Wang Tingdong). The principal argument used is their ability to supply Yanbei with much of its commodity grain requirements. This allows other households to either reduce their grain output or even to stop grain production altogether. Thus, with reduced grain commitments, diversification can occur, some households eventually specializing in another form of agricultural production or even "leaving the land" to specialize in undertakings other than farming.

Zhou Qiren *et al* note, for example, that by 1983, Ying county numbered 4060 households as having freed themselves from the land, accounting for 6.9% of the total number of peasant households in the county (survey data collected by Wang Xiyu and Yuan Chongfa as used in the *Agricultural Economic Journal* 1983 (20)).

The households which either leave farming or diversify from grain production can in turn assist grain producing specialized households. Zhang Licai notes for example that households which turn to concentrate on livestock-breeding can supply fertilizer in return for fodder grain; households which develop a specialist knowledge of certain agricultural techniques can help increase grain yields; households which concentrate on commercial activities can assist in the marketing of grain and so forth. Zhang Licai is noting here the potential development of numerous interactions between a wide range of households. This represents a distinct change in attitude from the "small but complete" Maoist household models which previously prevailed, whereby each individual household was responsible for producing a certain

amount of grain foodstuffs.

In neighbouring Xinxian prefecture, immediately to the South of Yanbei, Zhao Mingzhu *et al* give the example of Hengshan brigade in Dingxiang county where specialization of production has developed to a marked degree throughout the whole brigade upon a basis of grain producing specialized households:

TABLE 5. HENGSHAN BRIGADE, XINXIAN PREFECTURE: HOUSEHOLD SPECIALIZATION, 1983

Undertaking	Number of households	As a % of the total number of households
Grain production	319	31.8
Diversified farming	272	27.0
Industry, forestry, herding and sideline occupations	108	10.8
"Self-operating" households	164	16.4
Service households - engaged in irrigation, commerce, transport, etc.	39	3.9
Others including non-specialized households	101	10.1

Compiled from materials in Zhao Mingzhu *et al*, p.90

Many commentators see Hengshan brigade as the model for development which Yanbei should adopt - that is, a small number of grain producing specialized households, with other households specializing in certain other agricultural and non-agricultural production tasks and yet more households catering for the service needs of those households involved in production. Although the common arguments put forward to justify such interaction are economic, political interests are not ignored. As Lin Zili *et al* suggest optimistically (p.75-6) :

"In addition, the development of specialized social service also has an important role. Households that specialize in commodity grain turn over the links in the production chain that they cannot handle on their own to technical service companies. The relationship between them is one of exchanging goods and labour. And this, then, can prevent the development of the phenomenon of hired labour brought about by the expansion of the scale of farming".

Clearly then, it should not be thought that the relationship between the growth of grain producing specialized households and other specialized forms, in particular the specialized household, is a one-way affair. Indeed, initially the stimulus necessary for the expansion of the grain producing specialized household took the form of a response to the greatly increased needs of other types of specialized households for food and fodder grains. It is only more recently that a reciprocal relationship has begun to emerge.

A further advantage claimed for grain producing specialized households is that they can promote the use of advanced agricultural techniques and so increase yields (Wang Tingdong). This is borne out in the example given by Zhao Mingzhu *et al* of a specialist grain producer Wang Xueshi of Namazhuang brigade in Ying county. He steadily improved soil conditions, changed the crop rotation systems, employed organic and non-organic fertilizers and utilised improved seed varieties, linking "meticulous cultivation with modern science and technology and thus steadily increased his grain output" (Zhao Mingzhu *et al*, p.91). The extent of Wang's output is illustrated in Table 6:

TABLE 6. WANG XUESHI, YING COUNTY : GRAIN OUTPUT CHARACTERISTICS.  
INCOME, 1981, 1982

	1981	1982
Total amount of land (mu)	40	43
Total grain output (jin)	30000	35000
Average per unit yields (jin/mu)	750	811
Total commodity grain sales (jin)	20000	24000
Commodity rate (%)	66.6	68.57
Per capita household income (yuan)	1000	1100

Some figures are deduced.

Compiled from materials in Zhao Mingzhu *et al*, p.91

There is little doubt that grain producing specialized households do indeed use more advanced agricultural production materials and techniques in grain production than non-specialized households:

TABLE 7. DATONG COUNTY. A COMPARISON OF THE GRAIN PRODUCTION  
TECHNIQUES OF GRAIN PRODUCING SPECIALIZED AND NON-  
SPECIALIZED HOUSEHOLDS, 1983

	Specialized households	Non-specialized households
Land holdings (mu)	11	c 8.33
Investment (yuan/mu)	34.5	c 16.0
Fertiliser application (jin/mu)	130	c 58.0
Use of fine seed strains (as a % above usage by non-specialized households)	23.6	
Prevention of disease (as a % above prevention by non-specialized households)	10.4	

Some figures are deduced.

Compiled from materials in Datong county party committee and people's government, p.50

The motivation for using such techniques is increased yield and higher incomes to offset the higher investment costs. The grain producing specialized household often contracts out many of the production tasks involving modern agricultural techniques to specialized service households. This is the case in Datong county for example, where detailed contracts are drawn up between grain producing specialized households and the county technical service departments. As Lin Zili *et al* note (p.76) :

"Based on a set amount agreed upon by both parties, if the specialized household strictly follow the technical plan and still produce less than the set amount, the technical department will compensate them by 50% of the shortfall. If they go over the set amount, the technical department will collect 20% of the extra amount".

A final advantage claimed for grain production by specialized households is the economic benefit to be gained from the utilisation of such households. Consider the following table based on data from Datong county:

TABLE 8(a). DATONG COUNTY. A COMPARISON OF INCOME AND YIELD DATA FOR GRAIN PRODUCTION BY GRAIN PRODUCING SPECIALIZED AND NON-SPECIALIZED HOUSEHOLDS, 1983

	Specialized households	Non-specialized households
Average per unit yields (jin/mu)	371	256.4
Average per unit net incomes (yuan/mu)	37.1	29.07
Average workday values (yuan)	3.37	2.9
		(County average)
Average net per capita income (yuan)	407	350

Compiled from materials in : Datong county party committee and people's government, p.50

A more detailed example of the potential economic benefits for an individual grain producing specialized household is exemplified by Fan Chengzhong, a grain specialist of Luozhenying brigade, Datong county:

TABLE 8(b). DATONG COUNTY. LUOZHENYING BRIGADE. FAN CHENGZHONG. INCOME, OUTPUT AND YIELD DATA, 1983

	Fan Chengzhong's household	Brigade average for a non-specialized household
Average per unit yield (jin/mu)	860	c 570
Average per unit net income (yuan/mu)	89.6	c 51
Commodity grain sales (jin)	169000	n.a.
Gross income from grain (yuan)	27500	n.a.
Gross household income (yuan)	28532	n.a.
Total production costs (yuan)	7812	n.a.
Net household income (yuan)	20720	n.a.
		(Brigade average)
Net per capita income (yuan)	2590	440
Average work-day value (yuan)	12.35	c 4

Some figures are deduced.

Compiled from materials in : Datong county party committee and people's government, p.50

It must be said that the production conditions found in Datong county are comparatively favourable : soils are fertile; there is a comparative abundance of water; and a relatively good infrastructure. Nevertheless, while production and income levels may be above average for Yanbei as a whole, there is no reason to doubt that the comparative benefits of producing grain by specialized households are found consistently throughout the prefecture.

Before any of the advantages claimed above can come into play certain other conditions must be met. The most important condition seems to be satisfying the grain producing specialized households' demands for land (Zhao Mingzhu *et al*). As already illustrated in Table 7, average land holdings of grain producing specialized households are greater than those of non-specialized households. Thus, they are able to reap economies of scale and fully utilise their expertise in grain production. Given the longstanding problem of land shortage in China, where is this land likely to be found?

The Datong county party committee and people's government, when faced with the need to increase the contracted area allotted to grain producing specialized households by 11000 mu, utilised six different sources of land:

TABLE 9. DATONG COUNTY : SOURCES OF ADDITIONAL LAND AVAILABLE TO GRAIN PRODUCING SPECIALIZED HOUSEHOLDS, 1984 (mu)

Reserve land	4200
Collective transfer of land from other specialized households	1500
Land recalled from "4 category" households	2800
Land recalled from ordinary contract responsibility households	800
Private transfer of land from other specialized households	c 1200
Wasteland	500

Compiled from materials in : Datong county party committee and people's government, p.52

A number of points emerge from Table 9. First, is the importance of holdings of reserve land as a source of land for grain producing specialized households. Yanbei is fortunate in this respect that land is comparatively

abundant. In other more densely populated areas it must be questioned if such large reserves of land are available. How such large reserves of land actually came into being is, however, open to much speculation.

Secondly, there is the recall of land, both from "4 category" households and households who sign responsibility contracts, where there is insufficient labouring ability to effectively carry on cultivation. When this recall takes place, numerous guarantees including the maintenance of the quantity and quality of the grain ration have to be made and effectively kept.

Finally, the importance of land transfers from other specialized households - both privately and through the collective - is also apparent. As Lin Zili *et al* state (p.76-7) :

"Further development of households specializing in commodity grain depends on the extent of specialization and socialization of all agriculture. If there is no further development of specialized production outside of farming, the land cannot be further concentrated, and it would be difficult for households specializing in commodity grain to further expand the scale of farming, and they might even find it difficult to maintain stability in the scale of their present farming".

Clearly, in less developed areas, the utilisation of grain producing specialized households to develop commodity grain production will be hindered by - amongst other things - the limits put on the scale of production of limited landholdings.

Further to the actual amount of land allotted to such households, the Shanxi provincial government research office also make it clear that the quality of land to be allotted to grain producing specialized households is superior both in terms of soil fertility and also accessibility. It would appear that grain producing specialized households are to be highly favoured in the distribution of land.

Furthermore, it would appear that the land holdings of the specialist grain producers are to be concentrated wherever possible. Normally a household would expect a number of small parcels of land of varying fertility. Such dispersed land holdings are inconvenient and unsuitable for the type of production envisaged for grain producing specialized households. The authorities in Yanbei have therefore taken steps to ensure that grain

producing specialized households have relatively concentrated holdings of land. Using the slogan "those with a lot of capacity, contract a lot; those with a little capacity, contract a little; and to those with no labour capacity, contract nothing" (Lin Zili *et al.*, p.78), land has been concentrated. Such a slogan relates to the amount of labour power usually found in a grain producing specialized household (Zhou Qiren *et al.*).

The key measure adopted in Yanbei to consolidate land holdings has been to encourage households to transfer land through the collective and not to undertake private transfers. Not only does this enable the collective to ensure that land is distributed to those grain producing specialized households who need it and to maintain some level of concentration in such a distribution, it also reduces the practise of illegal "rent payments" for the use of land. Little is said, however, about the precise nature of such "encouragement".

There is little doubt that the land holdings of some grain producing specialized households are becoming very large indeed. Wang Tingdong gives the example of grain specialist Wang Fuzhen of Shuimo brigade, Ying county. At the beginning of 1983, 37 households of Shuimo brigade returned 350 mu of contracted land back to the brigade. In addition, a further 200 mu of reserve land was also available for contract. Since other households were reluctant to take up this land, Wang Fuzhen added all 550 mu to his original contract land of 50 mu to farm a total of 600 mu. Given such land holdings, it is not surprising to discover that in 1983, 16 grain specialists in Yanbei were each able to produce more than 100000 jin of commodity grain (Li Ligong). Small wonder that much is expected from the development of grain producing specialized households.

As already noted, a key motivation behind the use of grain producing specialized households is to stabilize commodity grain supplies. Given the imbalance between population and land resources in China, an imbalance which will only become worse in the near future, the key to grain self-sufficiency in the current phase has been the emphasis upon increased per-unit yields rather than the Maoist stress upon extensive grain cultivation. Indeed, many commentators note that, in the current phase, the land area sown with grain is actually falling, making the need to increase per unit yields even more imperative, and justifying the policy itself.

In the light of this situation the importance of claims concerning the ability of grain producing specialized households to adopt advanced agricultural methods is understandable. However, as noted in Table 7, the application of such advanced methods requires a relatively high level of investment and the availability of the fertilisers, agricultural chemicals and so forth which are to be used. Zhou Qiren *et al* for example, point out that a considerable number of grain producing specialized households in Datong county in 1983 spent over 5000 yuan in production costs. With state prices for quota and above-quota grain being low in comparison to that of other agricultural produce such investment might be surprising were it not for the claimed level of economic benefits for grain specialists. However, it must be said that such economic benefits hide within them the significant amount of priorities, rewards and subsidies which are available to grain producing specialized households. As Huo Shilian *et al* acknowledge (p.5) :

"In solving the problem of the irrational price relations between grain and economic crops, consideration may be given to specialized grain production households, in the form of compensation or reward through policy stipulations".

There are a variety of priorities to be considered. It has already been shown that grain producing specialized households receive priorities in the distribution and quality of land. They also receive priority when applying for loans for capital investment. Such loans have three sources : agricultural banks; commune or brigade funds; and grain departments who can advance up to 30% of the basic quota sum that is expected to be paid according to signed contracts (Shanxi provincial government research office).

Of greater significance are the priorities noted by Zhao Mingzhu *et al*: prior claim to the means of production, that is supplies of fertiliser, diesel oil and so forth; priority in the allocation of technical services, that is irrigation, drainage, mechanical repair and so forth; and finally, priority in the marketing of grain in such areas as grain inspection, bagging materials, transport and so forth.

There appear to be two principle forms of reward in operation in Yanbei. The first form is a reduction in the price of producer goods if a grain producing specialized household exceeds quota rates, the reductions increasing as excess quantities grow larger. The second form involves a more straightforward reciprocal approach whereby an amount of supplied commodity

grain in any one year is rewarded by the prefecture, county or commune authorities with a particular item. In Datong county for example, the rewards are arranged as follows:

TABLE 10. DATONG COUNTY. REWARDS FOR COMMODITY GRAIN SUPPLIES

Amount of commodity grain supplied	Nature of reward
1000 jin	1000 jin of ammonium carbonate
2000 jin and for each 10000 jin thereafter	1 ton of ammonium carbonate
100000 jin	A half-price small four-wheeled tractor

Compiled from materials in : Lin Zili *et al*, p.72

A wide range of subsidies are also available. First, the means of production - fertiliser, agricultural chemicals, fine quality seed varieties, agricultural machinery, water, electricity and so forth - may be available to the grain producing specialized households at lower prices irrespective of total production. This could amount to a considerable overall saving in total production costs.

Secondly, there is subsidized capital investment to improve the agricultural resource base available to grain producing specialized households. In Liaohuozhuang brigade, Zuoyun county for example, 60000 yuan of the 200000 yuan brigade income from industrial and sideline occupations in 1982 was used as supplemental aid in the building of 6000 metres of irrigation ditches, 3 irrigation stations and the leveling of 6000 mu of land primarily intended for utilisation by grain specialists (Lin Zili *et al*).

Thirdly, there is a system of equalizing income operating within Yanbei. Under this system, it is intended that an equal amount of labour expended by different occupations within a given collective unit will receive financial rewards that are approximately equal. This basically "amounts to giving supplemental help to grain production from the relatively high income obtained by diversified elements in the economy" (Lin Zili *et al*, p.80).

In 1984, according to Lin Zili *et al*, Yanbei intended to use 2 to 3 million yuan from the financial resources of the prefecture, county and commune, to subsidize grain producing specialized households in a variety

of ways. No doubt when brigade and team subsidies are also taken into account - as argued below - the actual level of subsidy is much higher, a point which worries some commentators. As Wang Tingdong notes (p.84) "attention must be paid to not leading farmers to put all their sights on the need for an increase in the selling price of grain and expansion of fiscal subsidies", and later (p.85) "small-scale material incentives are feasible, but there should be no unmerited investment or excessive incentives". Some production units, it would appear, award material incentives to grain producing specialized households in addition to lowering state quotas and required accumulation contributions. Wang Tingdong feels this is excessive.

Whether the combination of these various incentives to grain production actually represent an excess or otherwise is open to debate. Nevertheless, the need for them not only reflects low state purchase prices for grain, it also casts a different light upon the benefits claimed for this mode of production. However, if after the utilisation of a variety of incentives grain production becomes an attractive proposition, prompting the emergence of specialist grain producers who can both amply fulfil state grain quotas as well as free other producers from the need to grow grain, the state will allow such incentives to continue.

While Wang Tingdong still fears excessive incentives, other commentators are concerned that adverse income differentials continue to exist, preventing the spread of grain producing specialized households. Lin Zili for example, notes the existence of income differentials between grain production and industrial and sideline occupations. Similarly, the Shanxi provincial government research office notes that in more diversified areas the income of grain producing specialized households remains comparatively low.

Wang Tingdong also expresses fears concerning the development of "unhealthy tendencies" associated with the preferential treatment accorded to grain producing specialized households. On this point, at least, his view is shared by others. He accuses such households of "deceit, rigging together of large households and fraudulent taking of preferential treatment and awards". Furthermore, the distribution of land is often prejudiced towards friends and relatives of local cadres. Indeed, given the system of subsidies, priorities and so forth, local cadres inevitably have much opportunity for corruption.

These households are also accused of selling at higher prices, the subsidised fertiliser supplies given to them and so forth. Again, as already noted, some of the grain produced is also sold before quotas have been fulfilled. It seems, however, that the state will not - unofficially at least - be overconcerned about such practices as long as supplies of commodity grain are maintained.

Despite some reservations expressed above, it is clear that the combination of incentives provided by production units to grain producing specialized households does play a key role in stimulating grain production. It therefore is of considerable importance to understand how production units can finance such incentives.

Lin Zili *et al* have already partially answered this question through the example of Liaohuozhuang brigade, Zuoyun county where brigade income from industry and sideline occupations subsidized agricultural capital construction. The dominant industry in Yanbei is in fact coal mining and it is income from coal mining which provides the bulk of funds for the financing of subsidies to grain producing specialized households. The natural resource base of Yanbei is such that funds for the necessary capital investment, subsidies and so forth would not be immediately forthcoming were it not for the abundance of coal reserves and the income generated by extraction of coal.

In other more favourable areas, Southern Jiangsu for example, there is less dependance upon a single sector of the economy to provide funds for agricultural development, income being derived from a whole range of undertakings, industrial and agricultural (for a further discussion on the use of grain producing specialized households in Southern Jiangsu, see Powell). In Yanbei, however, this is not the case. In Huairen county for example, coal is noted as being the "chief economic mainstay of the county" providing 1.7 million yuan for collective investment funds (Xiu Liding *et al*). Similarly in Zuoyun county in 1983, county, commune- and brigade-run mines produced over 3 million tons of coal with an output value of 62.6 million yuan of which commune- and brigade-run mines contributed 26.87 million yuan. Of this 26.87 million yuan - 39.4% of the county's gross agricultural income - 5.8 million yuan was retained for agricultural capital investment funds (Yan Zanyao *et al*). Throughout the prefecture, it would not be unreasonable to expect that commune- and brigade-run coal

mines contribute as much as 50 million yuan per annum to collective investment funds, a significant amount of this total undoubtedly used to promote specialized grain production.

The stability which income from coal provides the rural economy of Zuoyun is illustrated in Table 11:

TABLE 11. ZUOYUN COUNTY : DOMESTIC SUPPLIES OF COMMODITY GRAIN, OIL-BEARING CROPS AND COAL. TOTAL REVENUE, 1980-1983

	Commodity grain (million jin)	Oil-bearing crops (million jin)	Coal (million tons)	Total net revenue (million yuan)
1980	1.12	2.0	0.726	5.555
1981	0.53	0.59	1.018	3.102
1982	10.47	2.41	1.31	11.473
1983	27.75	11.13	1.4	12.542

Source : Yan Zanyao et al, p.16

Table 11 shows that, while in 1981 the supplies of commodity grain and oil-bearing crops was much reduced compared to 1980, total revenue was maintained by income from coal.

At the same time as stabilising total revenue, the income from coal production in Zuoyun provided investment funds for the construction of 137000 mu of stable high-yield agricultural land. The availability of this land is reflected in the commodity grain and oil-bearing crop figures for 1982 and 1983. Indeed, the significant rise in commodity grain supplies must in part be attributed to local subsidies for specialist producers, subsidies provided for mainly from the income of coal sales.

To sum up this section, Yanbei prefecture seems to be adopting the use of grain producing specialized households to solve its grain problem. Some authors move beyond the level of individual specialist households to comment upon "integrated production networks" (Wang Ze) or county-level commodity grain bases (Han Jianmin) both consisting of larger numbers of grain producing specialized households and the corresponding service households and so forth. However, little detail is given and in the current phase it is the grain producing specialized household and its ability to produce commodity grain around which the rural economy of Yanbei is being shaped.

#### 4. SPECIALIZED PRODUCTION : THE WAY FORWARD IN YANBEI PREFECTURE

"In brief, it is necessary to develop socialized production and promote the exchange of commodities on the basis of specialized division of labour; and turn the separate management activities of specialized households on to the track of the national plan, and promote the close link of production, supply and sale of the whole rural economy, and the comprehensive development of agricultural, industry and commerce".

Huo Shilian et al, p.5

It is envisaged that Yanbei, having freed itself from the traditional limitations of small-scale grain production through the development of grain producing specialized households, can go on to further develop all aspects of production. In such a development new specialized production management forms will obviously play an important role, in particular the specialized household. A model of all-round specialization of a local economy - in this case at the brigade level - has already been noted in Hengshan brigade, Xinxian prefecture, with the important production management form being the specialized household. Yanbei authorities, again with the specialized household as the main building-block, envisage such all-round specialization at the prefectoral level.

Aside from grain production, the variety of produce in which producers might specialize is large. In the mountain areas of Yanbei for example, Yan Zanyao et al point out that 10 categories of produce exist with 110 products in all. Similarly, Jin Xin et al report that in Yanggao county over thirty different undertakings are carried on. The area of land sown with diversified crops, for example, reaching 130000 mu. Under the Maoists, the variety of produce was much reduced, but the 1978 reforms including the decision to re-expand private plots undoubtedly helped to widen production possibilities and sow the seeds for widespread specialization in production.

Certainly the proportion of specialized households, for example, in Yanbei is far greater than that for China as a whole:

TABLE 12. YANBEI PREFECTURE : SPECIALIZED HOUSEHOLDS, 1983

Total number of households	c 561224
Specialized households <sup>1</sup> :	
1. Total number	119000
2. As a % of total households	31.8
Grain producing specialized households:	
1. Total number	22000
2. As a % of total households	3.92
3. As a % of specialized households	18.49

<sup>1</sup> The figures for specialized households includes "key" households.  
The distinction between the two is one of degree rather than substance.

Some figures deduced.

Compiled from materials in Zhang Xikui et al., p.1  
Lin Zili et al., p.72

If Table 12 is to be believed, 31.8% of the households in Yanbei are specialized producers which compares to a national average of about 10% of total households (Lie Bang).

This is surprising given the relatively poor natural conditions which are said to exist in Yanbei. Yet in some instances, the harshness of terrain itself stimulates specialization of production. Nanyulin commune for example, is a remote mountainous production unit in Shuo county, South-West Yanbei. It has 34000 mu of cultivable land, most of which is dry slope-land. Even after the introduction of production responsibility systems, although some improvement occurred in output and income, the scale of this improvement was small. Grain production was limited by low temperatures, limited rainfall and sandy soils. Taking the advice of an agronomist it was decided that the commune should specialize in the production of Chinese yams using the slogan "greatly expanding the growth of Chinese yams is the path for the mountain peasants", the production of yams being more suitable to the natural conditions than other forms of grain crops. Initially there was much resistance to this move. Commercial and processing problems remained. However, with the purchase of processing machinery by the commune, most peasants began to specialize in yam production and incomes rose (*Shanxi Ribao*, 15.7.1983).

Thus, it would seem that specialization of production can occur in areas of inhospitable as well as hospitable terrain. Certainly in Yanbei, the

number of specialized households in particular, alongside other specialized production management forms such as commodity production bases (Yan Zanyao *et al*), combination of specialized households such as the "Sanjiacun" (Xing Zhiqiang), and specialized villages (Tong Xunzu), all indicate a significant degree of specialization.

However, if this numerical abundance of specialized production management forms in Yanbei, is to be translated into a functioning specialized economy a number of conditions must be met : first, commodity grain supplies must be guaranteed. As already discussed, it is hoped that grain producing specialized households can fulfil this condition. Secondly, the use of specialized production management forms must be rational. Thirdly, adequate service levels - assisting in the application of advanced agricultural techniques - must be achieved. Fourthly, processing industries and all aspects of the commercial system must be relatively efficient. Specialization of production implies increased commodity relationships between numerous production units over a wide spatial area. Such relationships can only occur if the commercial system is effective. If it is not, specialization will be limited. Finally, some amount of capital investment in the agricultural resource base must take place.

Turning first to the question of rationality in the use of specialized production management forms, it would appear that in Yanbei there are some examples of households being called "specialized households" before they had established themselves as specialist producers. No exact details are available from the Yanbei materials as to what requirements are necessary before specialized households are recognised as such. However, from a wider review of materials concerned with the development of such households, it is likely that the requirements will include the ability to supply a large proportion of output as commodity produce; the dominant contribution to net household income by the production of one product; stability of output and so forth (Lin Zili; Wu Xiang *et al*; *Anhui Radio* 3.6.1983).

In Yanbei, whilst claiming that the vast majority of specialized households are rationally based, Zhao Xingzhong *et al* admit that in Ying county for example, some specialized households pay little attention to economic results. Similar concern is expressed for households in Huairen county by Shou Xiang *et al*, and for those in Shiyu county by Lu Sheng *et al*.

There are really two main areas of concern. The first is that many so-called specialists are by no means experts in their chosen fields of production. Zhao Xiangzhong *et al* make a whole series of accusations against some specialized households including that they pay no attention to product quality, have little idea of cost, engage in blind investment and production, have limited managerial expertise and do not understand market information. It is difficult to see how some so-called specialist households can be considered specialized given these complaints.

In a number of cases it would appear that in the wave of enthusiasm for production and willingness to adopt new production management forms which followed the 1978 reforms, local cadres - partly no doubt in an effort to promote personal political ambitions - blindly pushed specialized households irrespective of local conditions and experience.

Xu Liding *et al* note the case of the household of Ma Daxiang, Xinpu brigade, Libazhuang commune, Huairou county. The commune lent Ma Daxiang 1060 yuan to buy 1000 chicks in order that he might establish the county's first poultry-breeding specialized household. Neither Ma Daxiang or any of his household had any knowledge of the techniques involved in poultry-breeding, and after three weeks 550 of the chicks were "half-dead".

The second area of concern involves subsidies to specialized households. The granting of subsidies and loans to specialized production management forms appears to be common-place. Usually, such loans and subsidies are accompanied by measures to ensure as far as possible effective utilisation and a reasonable rate of return. In Zuoyun county, Hangeta brigade for example, a forestry specialized household contracted 3500 mu of responsibility land for 10 years. In the contract the household had to give 2000 yuan per annum to the brigade for collective accumulation funds, however, in the first year there was a shortfall of 1000 yuan. The brigade decided to subsidize the household for five years, with 800 yuan being given to them from collective accumulation funds every year. This subsidy was conditional upon the household improving its production record, especially timber survival rates. Given the subsidy of the brigade in this example, the household increased survival rates and prospered (Zuoyun county CPC).

The exercise of similar control is also well illustrated in Shiyu county. Shiyu has a large fodder capacity and is considered to have excellent characteristics for the development of animal husbandry. However, when the

county initially encouraged specialization in animal husbandry, households in Houzhuangwang brigade, Xihuangjiayao commune for example, were more concerned with the employment of surplus labour capacity than with the economics of livestock breeding. Thus, when Shiyu county authorities invested 150000 yuan in the purchasing of cattle to develop specialization in cattle breeding, they laid down precise guidelines as to the characteristics of households which were to become specialized producers. These guidelines included the number of cattle to be held; the quality of enclosure facilities; accessibility to fodder supplies and so forth. It was hoped that this would ensure successful breeding and a worthwhile utilisation of county investment funds (Lu Sheng *et al*).

However, despite the controls over subsidies and loans which are illustrated above, on some occasions such funds are undoubtedly misused. Shou Xiang *et al* for instance, claim that subsidies are allocated with vested interests in mind. Again, the Zuoyun county CPC claim that on occasion the subsidy given to the household exceeds the value of the final product.

Furthermore, in Zuoyun county it would seem that many specialized households are established to utilise what were previously collectively-run undertakings (Zuoyun county CPC). Not only is this an area in which the personal interests of local cadres can often shape the actual distribution of such undertakings, but it is also seen by some as being detrimental to the general collective interest as undertakings which previously benefitted all now appear to benefit only a number of individual households. (This is almost inevitable although Lin Zili, when commenting upon the development of specialized households based upon previously collective undertakings, did not foresee such problems).

In Yanbei it would appear that in some cases the swift emergence of specialized households may have been a little too hasty. Some reassessment must take place and in the meantime efforts are being made to firmly control the development of specialized households in order to reassure the state that any problems are short-lived. As Shou Xiang *et al* comment, with some alarm, state policy concerning specialized production forms must not be changed because of a minority of ill-conceived ventures. There is much at stake here.

A further condition for the full development of a specialized rural economy in Yanbei is an effective agricultural service sector, that is the efficient provision of advanced agricultural production methods. Numerous examples of the development of such a service industry are found in the Yanbei material including Xiaopingyi commune, Shuo county (Shanxi Ribao 13.8.1983) and Liuhezhuang brigade, Ying county (Zhao Xingzhong et al).

It is difficult to find much detail in the materials concerning the comprehensive nature of the services offered throughout Yanbei. In numerical terms, technical contract agreements between agricultural technicians and peasant households are said to number between 356850 households (Wan He et al) and 400000 households (Shanxi Ribao 7.3.1983) in 1983. Both figures represent a significant proportion - c 64.5 to c 71.5 per cent - of the total number of households within Yanbei let alone simply the number of specialized households (see Table 12).

Against the figures for contracts signed are contrasted much lower figures for the actual number of technical personnel working in Yanbei in 1983. Estimates range from 731 (Wan He) to over 6739 (Shanxi Ribao 7.3.1983). In some senses, the discrepancies in the available figures make any conclusions tentative if not meaningless. They offer a spread of 1 : 53 to 1 : 547 in terms of the ratio between agricultural technicians and those households signing contracts for technical work. The first figure of 1 : 53 is clearly quite a reasonable ratio, while the latter would indicate that the level of technical services for many households is at best superficial. The truth is probably somewhere between the two.

The development of a specialized economy also requires the existence of effective processing industries and commercial channels. For the most part, commentators throughout China appear typically confused on this issue. Much praise is heaped upon the effectiveness of the processing industries and the commercial system yet, at the same time, the need for substantial improvements is also noted. The material from Yanbei is no different in this respect.

The availability of market information is obviously of importance in the development of a specialized economy. Responsiveness to market demand is important in order to avoid over-supply of produce - although in China agricultural produce supplies seem always to be insufficient to meet market demand, somewhat devaluing the importance of market information. Liu Weimin

*et al* for example, note the case of vegetable growers from Chengnei brigade, Huairen county who found people willing to drive out from nearby towns in order to purchase vegetables, market supplies being insufficient.

Yanbei claims to supply a number of goods for export - including Huangqi (a root); a wide range of frozen meats; medicinal ingredients; coal; basketwork (especially from Lingqiu county) and so forth (Yan Zanyao *et al*) - and here the availability of market information could be important. However, as already stated above, the availability of market information does not guarantee it is understood although Jin Xin *et al* illustrate that when market information is available the peasants are able to respond to it.

In 1982, for example, Yanggao county sent 1.26 million jin of green peppers to be sold in Beijing. This was an insufficient amount. In 1983 it was planned to produce 3 million jin but the county supply and marketing co-operative noticed that consumer preferences had shifted to red peppers and reduced the area sown with green peppers to 1.76 million jin, while red peppers were increased from 330000 jin to 2 million jin.

There are numerous examples of the need to improve processing facilities in Yanbei. In Shiyu county in 1982, for example, 100 million jin of potatoes were produced. Only 95 million jin were needed to fulfill quotas, satisfy seed, fodder and foodstuff requirements and so forth. Of the surplus of 5 million jin only 4 million jin was taken up and processed by households because they lacked sufficient processing capacity, 1 million jin going to waste. Furthermore, of the original 95 million jin, 6 million jin of potatoes ultimately went to waste because processing facilities were insufficient to meet the demands placed upon them and potatoes began sprouting and rotting. As a result of these problems, the county invested over 97000 yuan in processing machinery to establish 150 processing specialized households. Although this satisfied demands for processing facilities, commercial difficulties still remained (Liang Fengwu *et al*).

Indeed it would appear that commercial problems are quite widespread in Yanbei and could provide a major obstacle to future development. Commercial problems can be divided into two broad categories : organisational, and infrastructural. The problem of organisation is essentially that of inefficiency within the commercial bureaucracy. Even with the implementation of managerial responsibility systems, the work of commercial departments, supply and marketing co-operatives and so forth has remained a block on

development. Pei Qiuheng, for example, notes such practices as arbitrarily increasing grain sales prices, the use of inferior materials, short weight and so forth in Yanggao county. Furthermore, there are complaints that consumer and producer goods are all too often not available in the countryside (Ma Dianfu *et al*).

The infrastructural problems primarily consist of the lack of road accessibility within the prefecture. Although most of the county towns are reasonably connected, off the major road routes communication is very inconvenient. This is not surprising given the nature of the terrain (see Figure 4). Yan Zanyao *et al* amongst others, comment upon the problems of transport in Yanbei and point out that 40% of the mountain brigades are still dependent upon carrying goods upon their backs to reach markets. There is clearly a need to construct new roads as well as to repair the established routes to ensure convenient traffic flows (Feng Qinxiue *et al*).

Storage facilities are also inadequate in parts of Yanbei. In Lingqiu county for example, Yan Zanyao *et al* note that the foodstuffs department procured 18 million jin of grain and oil crops in excess of the existing storage capacity of that county. Although no figures are given, presumably much waste occurred.

These are all problems which are found throughout the Chinese countryside and which do much to limit economic development. In the current phase, the supply and marketing co-operatives have been emphasised as a solution to such problems. It seems quite clear that most commentators including Yan Zanyao *et al*, Pei Qiuheng and Jin Xin *et al*, see the role of the supply and marketing co-operatives as crucial in the future development of Yanbei.

Yan Zanyao *et al* make much out of the growth of supply and marketing co-operative organisations throughout Yanbei in recent years. In 1983 for example, 178 communes - probably about two-thirds of the total number of communes in Yanbei<sup>1</sup> - have some form of supply and marketing co-operative

<sup>1</sup>No exact figures appear in the material. However, Wen Ren *et al* do provide a detailed breakdown of collective organization in Guangling county whereby c 2500 households make up a commune. Using this figure and that for total number of households in Table 12, a very "rough-and-ready" calculation gives a figure of c 225 communes for Yanbei as a whole. Whatever the pitfalls of such calculations, it does indicate that a significant proportion of communes in Yanbei have some form of supply and marketing co-operative organisation.

organisation although no details is given. Furthermore, it is claimed that seven counties have some form of integrated commercial system. Lingqiu county supply and marketing co-operative for example, has four key services: first, solving producer marketing difficulties; secondly, solving problems in the purchase of producer goods; thirdly, encouraging integrated management between households, that is linking production, processing, marketing and transport functions; and finally, making available market information.

While accepting that the mere existence of such supply and marketing co-operative organisations may not be translated into solutions on the ground, such an organisation is said to offer some hope for the future (Yan Zanyao *et al*). Indeed, the success or failure of such organisations may hold the key to the extent of specialized development which is possible in the rural economy of Yanbei.

Finally, something must be said about the need to improve the agricultural resource base and establish a significant amount of high stable-yield land. The rural economy of Yanbei cannot develop fully unless agricultural production is stable. The apparent inability of the state to invest to any significant extent in agricultural capital construction means the burden falls upon collective investment funds and the individual households themselves.

As already noted, Yanbei is fortunate to possess considerable coal reserves and income from coal production together with that derived from the diversified economy, sideline undertakings and so forth are without doubt crucial in the improvement of the agricultural resource base as well as providing processing machinery, means of transport and so forth. Furthermore, Huo Wen notes that the coal industry itself promotes further development of industry at all levels. If developed sensibly, such industrial undertakings could then make a significant contribution to agricultural development through contributions to collective investment funds.

Collective investment funds in themselves are not sufficient, especially given the level of incentives and priorities for such incentives which appear to be given to grain producing specialized households. Individual households must be expected to invest in the land. While per capita incomes are much increased in the current phase - 323.4 yuan being the average in the mountain area of Yanbei (Yan Zanyao *et al*) - for much individual investment to occur, the state must convince the peasants that current policies are stable and that contractors will continue to be responsible for their contract land in

the foreseeable future. This is especially true for those households which are developing the "four wastes" - wasteland on hills, slopes, in gullies and unused water surfaces - where returns on investment will not be immediately forthcoming.

With contracts now being signed for periods of up to 15 years, it is hoped that peasants will feel confident enough to invest in the land. Certainly this has been the case in Tiantou commune, Yanggao county, for example, although almost inevitably given past fluctuations in policy, gaining the confidence of the peasants will take time (Wang Guichen *et al.*).

The Yanbei authorities wish to develop the rural economy along the path of increasing specialization upon a basis of stable commodity grain supplies provided by a small number of grain producing specialized households. Clearly though, numerous problems exist to place limitations upon such development and the future is by no means assured. Only if such problems can be overcome can specialized production, as envisaged by the Yanbei authorities, be considered plausible.

##### 5. CONCLUSIONS

There can be little doubt that much improvement has occurred in Yanbei since the 1978 reforms. Grain production has increased, the economy has diversified and to some extent specialized. Yet, Yanbei's economy is still a rural economy in transition and it remains to be seen if this improvement will in reality presage the specialized economy envisaged by the authorities.

Furthermore, given the priorities adopted for the development of the rural economy in Yanbei since the 1978 reforms, other questions will come to the fore. One such question for example, will be how much flexibility the state is prepared to allow the local authorities in order to enliven the rural economy. At some stage, wider political concerns can be expected to bring pressure upon too much liberalization in the countryside. Concern has already been expressed over illegal rent payments and the hiring of labour, yet such phenomenon arise out of the need to increase land holdings and make optimal use of them. That is to say, economic rationale is encouraging unwelcome phenomena but it is also providing the state with supplies of commodity grain in particular and agricultural produce in general. For the moment the state is prepared to put political concerns aside in

pursuit of economic prosperity, at some stage however, it may try to reinforce them.

Again there is the question of differential development and the possibility of income differentials which might also arise. This is particularly true when focussing attention on larger spatial areas such as counties and prefectures. At this level, local physical characteristics are likely to have much influence on economic development. Amidst the general development of Yanbei, backwardness can still be found (Bai Yulong *et al*).

In many cases, such backwardness results from poor natural conditions and the inability of such production units to generate investment funds to improve the agricultural resource base. While the prefecture as a whole may develop and prosper, this is no guarantee that the necessary investment funds will reach backward units. Indeed, increased prosperity through specialization, which seems necessarily to involve widespread incentives being made available to specialist producers appears to keep investment funds within the control of local production units, especially production brigades and teams.

In the current phase at least, there is little hope of a more equitable distribution of investment funds throughout a large spatial administrative unit such as the prefecture. Indeed, at present, when conflict over investment funds is evident between grain producing specialized households and other types of specialized household, it is almost inevitable that the ordinary households will suffer (Han Jianmin). This is potentially a destabilising situation and one which may cause the prefectoral authorities to modify their current development path.

What is clear is that the 1978 reforms in agriculture have promoted development in the rural economy which has brought some prosperity to the peasants. Specialization of production and the development of a commodity economy, even if somewhat limited, has begun to occur. However, if further development is to take place, not only are more reforms needed but also a careful balance between economic and political objectives has to be maintained.

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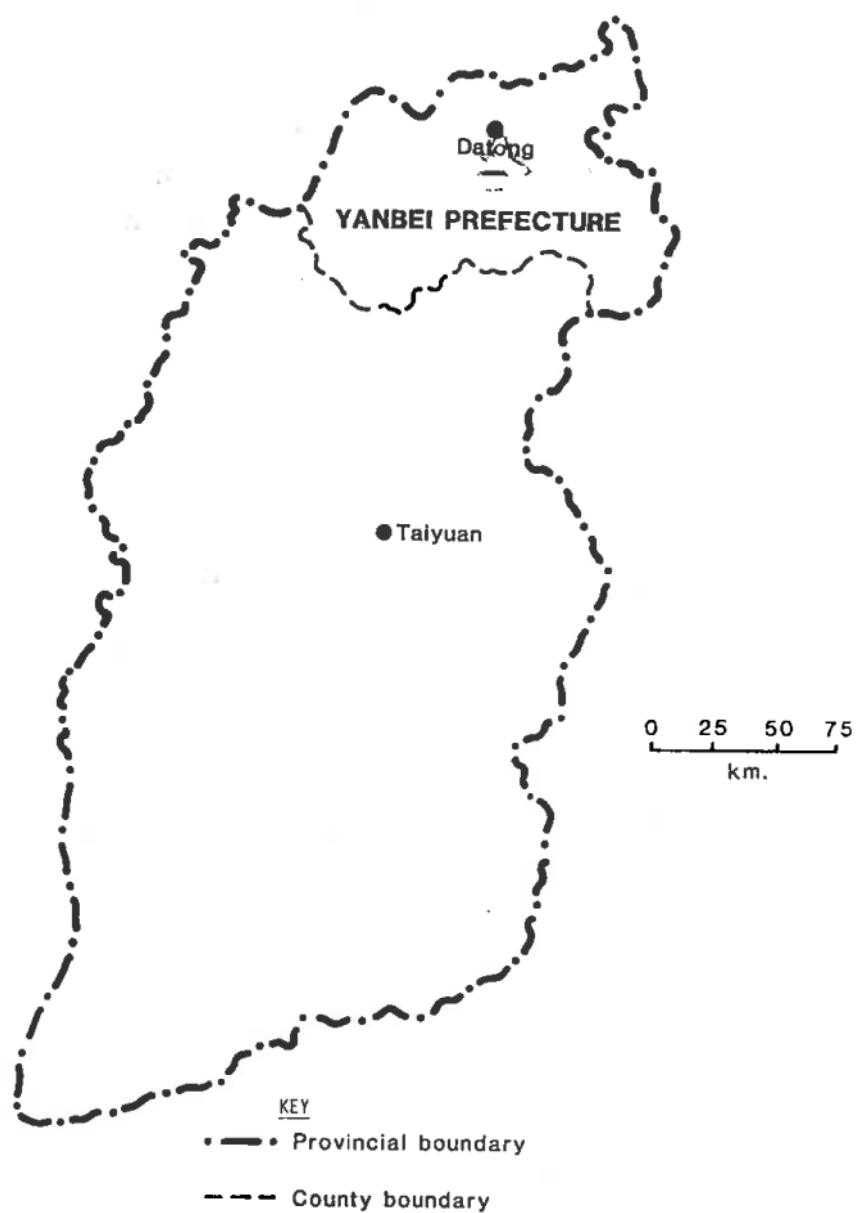


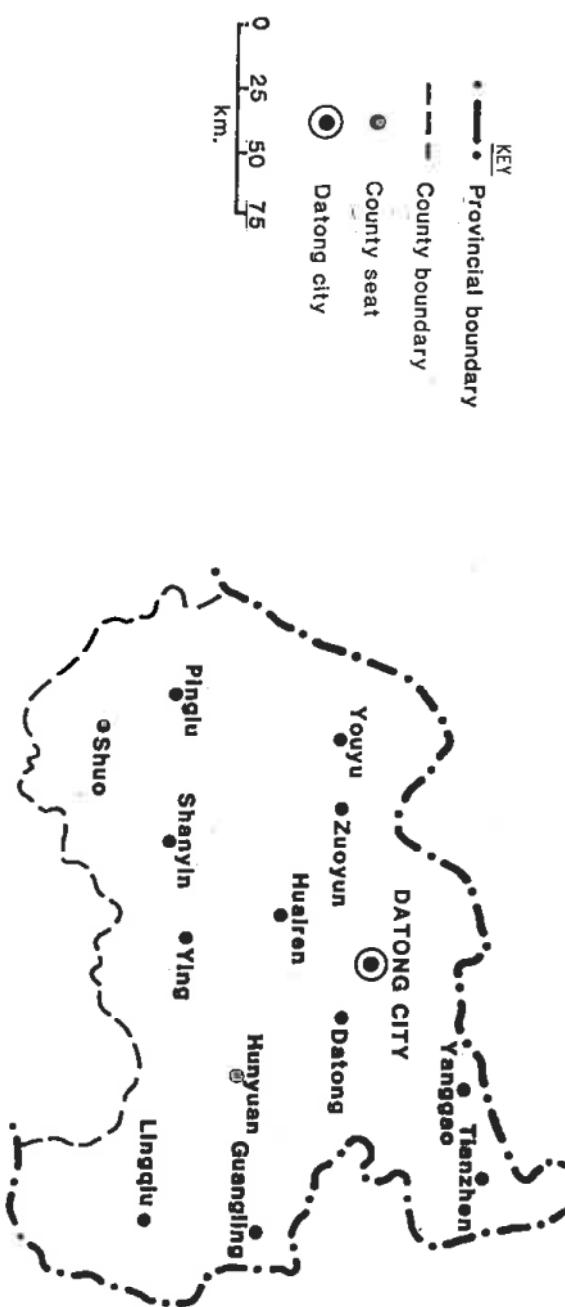
FIGURE 1. Yanbei Prefecture. Shanxi province

Materials source: Zhonghua Renmin Gongheguo Fensheng Dituji, p.5.

FIGURE 2.

Yanbei prefecture

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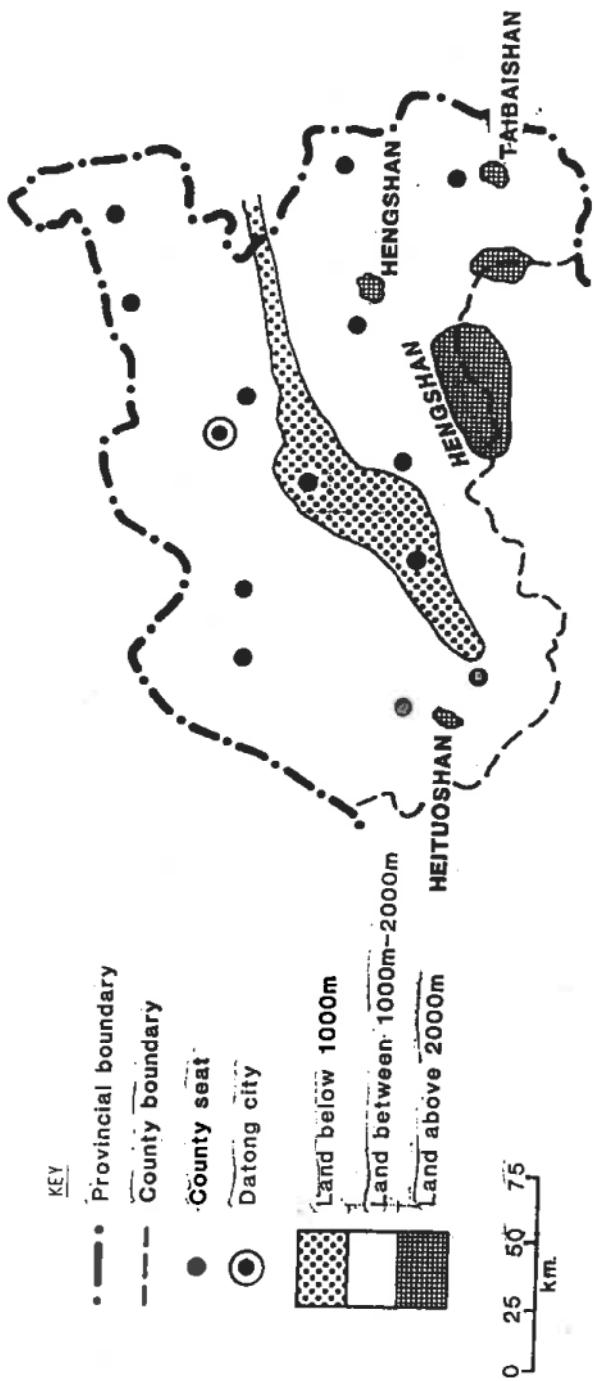


FIGURE 3. Yanbei Prefecture : sketch map of relief

Materials source: Zhonghua Renmin Gongheguo Fensheng Dituji, p.5, 36.

