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JPRS 83357

28 April 1983

China Report

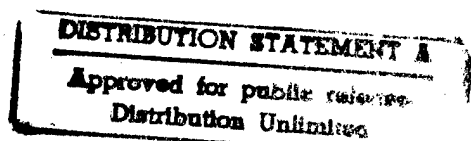
AGRICULTURE

No. 255

1981 AGRICULTURAL YEARBOOK

Ed. by

Luo Hanxian



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28 April 1983

CHINA REPORT

AGRICULTURE

No. 255

1981 AGRICULTURAL YEARBOOK

Beijing ZHONGGUO NONGYE NIANJIAN 1981 [China Agricultural Yearbook, 1981] in Chinese July 1982 pp 1-646

[Selections from book compiled by the China Agricultural Yearbook Editorial Board and edited by chief editor Luo Hanxian [5012 3211 0341] et al. Only the articles and tables listed below under "Contents" have been translated by JPRS.]

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Mechanized Chicken Raising	Provided by China Photo Agency
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NATIONAL AGRICULTURAL STATISTICS TABLES PUBLISHED

Beijing ZHONGGUO NONGYE NIANJIAN 1981 [CHINA AGRICULTURAL YEARBOOK, 1981] in Chinese Jul 1982 pp 1-70, 538, 539

[Text] Statistics on Basic Situation in National Economy; Major National Economic Indicators (Absolute figures)

Item	Units	1949	1952	1957	1965	1975	1979
1. National population figures	10,000 people	54,167	57,482	64,653	72,538	91,970	97,092
2. Social laborers including: staff and workers	" "		20,729	23,771	28,670	38,168	40,581
3. Gross output value of industry and agriculture	100 million yuan	466	827	1,241	1,984	4,504	6,175
--agriculture	" "	326	484	537	590	1,285	1,584
--industry	" "	140	343	704	1,394	3,219	4,591
light industry	" "	103	221	374	703	1,393	1,980
heavy industry	" "	37	122	330	691	1,826	2,611
4. National income	" "	358	589	908	1,387	2,505	3,350
5. Revenues	" "	65.2*	183.7	310.2	473.3	815.6	1,103.3
Expenditures	" "	68.1*	176.0	304.2	466.3	820.9	1,273.9
6. Total investment in capital construction	" "	11.3*	43.6	138.3	170.9	391.9	499.9
7. Volume of commodity circulation	100 million ton kilometers	255.4	762.3	1,809.6	3,461.3	7,285.9	10,897.7
8. Total retail sales of social goods	100 million yuan	140.5	276.8	474.2	670.3	1,271.1	1,800.0
9. Total imports and exports (Renminbi)	" "	41.5*	64.6	104.5	118.4	290.4	455.6
Total imports	" "	21.3*	37.5	50.0	55.3	147.4	243.9
Total exports	" "	20.2*	27.1	54.5	63.1	143.0	211.7
10. Output of major industrial and agricultural products							
Raw coal	100 million tons	0.32	0.66	1.31	2.32	4.82	6.35
Electric power	100 million kilowatt hours	43	73	193	676	1,958	2,820
Crude oil	10,000 tons	12	44	146	1,131	7,706	10,615
Steel	" "	15.8	135	535	1,223	2,890	3,448
Cotton cloth	100 million meters	18.9	38.3	50.5	62.8	94.0	121.5
Sugar	10,000 tons	20	45	86	146	74	250
Bicycles	10,000 sets	1.4	8.0	80.6	183.8	623.2	1,009.5
Sewing machines	" "		6.6	27.8	123.8	356.7	586.8
Wristwatches	" "			0.04	100.8	782.2	1,707.0
Grain	10,000 tons	11,320	16,390	19,505	19,455	28,450	33,212
Cotton	" "	44.5	130.4	164.0	209.8	238.1	220.7
Oil-bearing crops	" "	256.4	419.3	419.6	362.6	452.1	643.5
Pork, beef, mutton	" "		338.5	398.5	551.0	797.0	1,062.4
Aquatic products	" "	45	167	312	298	441	431

Note: 1. In this table, gross output value of industry and agriculture for 1949 and 1952 is figured at 1952 constant prices; for 1957 and 1965, it is figured at 1957 constant prices; for 1975 and 1979, it is figured at 1970 constant prices. All other sums of money are figured in terms of prices for the year given.

2. National income from the five material sectors of agriculture, industry, construction, communications and transportation, and commerce is net output value of production.

3. An "*" indicates 1950 figures.

4. Total retail sales of social goods includes peasant retail sales to nonagricultural residents.

Major National Economic Indicators
(Index and Average Rate of Increase)

Item	Index (Use Year 1952 as 100)			Percentage of average annual increase	
	1957	1965	1979	1953- 1979	1950- 1979
1. National population figures	112.5	126.2	168.9	2.0	2.0
2. Social laborers	114.7	138.3	195.8	2.5	
including: staff and workers	193.5	309.7	621.8	7.0	
3. Gross output value of industry and agriculture	167.8	268.3	845.2	8.2	9.4
--agriculture	124.8	137.1	249.4	3.4	4.5
--industry	228.6	452.6	17.3	11.1	13.3
light industry	183.2	344.5	10.6	9.1	11.0
heavy industry	310.7	650.6	29.9	13.4	16.5
4. National income	153.0	197.5	484.9	6.0	7.3
5. Revenues	168.9	257.7	600.6	6.9	10.2
Expenditures	172.8	264.9	723.8	7.6	10.6
6. Total investment in capital construction	317.2	392.0	1146.8	9.5	13.9*
7. Volume of commodity circulation	237.5	454.2	1429.6	10.4	13.3
8. Total retail sales of social goods	171.3	242.2	650.3	7.2	8.9
9. Total imports and exports (Renminbi)	161.8	183.3	705.3	7.5	8.6*
Total imports	133.3	147.5	650.4	7.2	8.8*
Total exports	201.1	232.8	781.2	7.9	8.1*
10. Output of major industrial and agricultural products					
Raw coal	198.5	351.5	962.1	8.8	10.5
Electric power	264.4	926.0	38.6	14.5	15.0
Crude oil	331.8	25.7	241	22.5	25.4
Steel	396.3	905.9	25.5	12.8	19.7
Cotton cloth	131.9	164.0	317.2	4.4	6.4
Sugar	191.1	324.4	555.6	6.6	8.8
Bicycles	10.1	23.0	126	19.6	24.5
Sewing machines	4.2	18.8	88.9	18.1	
Grain	119.0	118.7	202.6	2.6	3.7
Cotton	125.8	160.9	169.2	2.0	5.5
Oil-bearing crops	100.1	86.5	153.5	1.6	3.1
Pork, beef, mutton	117.7	162.8	313.9	4.3	
Aquatic products	186.8	178.4	258.1	3.6	7.8

Note: Gross output value of industry and agriculture and speed of increase in national income are figured in terms of constant prices. Figures with an "*" are average annual percent increases from 1951 to 1979.

National Income, Consumption, and Accumulation

Item	Units	1952	1957	1965	1975	1979
National income	100 million yuan	589	908	1,387	2,503	3,350
Index (Use year 1952 as 100)	percent	100	153.0	197.5	384.7	484.9
Average per capita national income	yuan per capita	104	142	194	274	347
National income used	100 million yuan	607	935	1,347	2,451	3,356
Amount consumed	" " "	477	702	982	1,621	2,195
Amount accumulated	" " "	130	233	365	830	1,161
Rate of accumulation	percent	21.4	24.9	27.1	33.9	34.6

Note: With the exception of the national income index, which has been calculated at constant prices, all else in this table has been figured at prices for the years indicated. National income used does not equal gross national income because of differences between imports and exports and statistical errors.

Amount of Retail Sales of Social Commodities in Cities and Countryside

		Units: 100 million				
Item		1952	1957	1965	1975	1979
Amount of retail sales of social goods		265.0	461.0	657.3	1,246.1	1,752.5
Cities and towns		113.8	225.2	325.9	581.9	767.7
Rural villages		151.2	235.8	331.4	664.2	984.8
A. Amount retail sales of consumption goods		250.9	428.4	577.1	1,021.4	1,428.5
1. Division between cities and countryside:						
Cities and towns		113.8	225.2	325.9	581.9	767.7
Rural villages		137.1	203.2	251.2	439.5	660.8
2. Division by user:						
Amount of sales of consumption goods to residents		226.1	382.1	524.1	897.8	1,264.2
Amount of sales of consumption goods to social groups		24.8	46.3	53.0	123.6	164.3
3. Division by kinds of goods:						
Food		136.5	227.8	314.5	530.8	717.5
Clothing		50.8	82.6	112.5	219.4	339.2
Necessities used in daily life		39.5	65.3	68.6	126.5	185.0
Cultural and educational articles		6.7	12.7	17.3	29.3	55.4
Books, newspapers, magazines		2.0	4.9	6.4	9.8	16.4
Chinese and Western medicines and medical materials		6.8	16.7	27.8	57.1	58.5
Fuels		8.6	18.4	30.0	48.5	56.5
B. Amount of retail sales of means of agricultural production		14.1	32.6	80.2	224.7	324.0

Note: This table does not include retail sales by peasants to nonagricultural residents. The same applies to subsequent tables.

Urban and Contryside Social Commodities Retail Volume Indices

Item	Index (Use year 1952 as 100)				1953-79 average annual percentage increase
	1957	1965	1975	1979	
Amount of retail sales of social goods	174.0	248.0	470.2	661.3	7.2
Cities and towns	197.9	286.4	511.3	674.6	7.3
Rural villages	156.0	219.2	439.3	651.3	7.2
A. Amount retail sales of consumption goods	170.7	230.0	407.1	569.4	6.7
1. Division between cities and countryside:					
Cities and towns	197.9	286.4	511.3	674.6	7.3
Rural villages	148.2	183.2	320.6	482.0	6.0
2. Division by user:					
Amount of sales by consumption goods to residents	169.0	231.8	397.1	559.1	6.6
Amount of sales of consumption goods to social groups	186.7	213.7	498.4	662.5	7.3
3. Division by kinds of goods:					
Food	166.9	230.4	388.9	525.6	6.3
Clothing	162.6	221.5	431.9	667.7	7.3
Necessities used in daily life	165.3	173.7	320.3	468.4	5.9
Cultural and educational articles	189.6	258.2	437.3	826.9	8.1
Books, newspapers, magazines	245.0	320.0	490.0	820.0	8.1
Chinese and Western medicines and medi- cal materials	245.6	408.8	839.7	860.3	8.3
Fuels	214.0	348.8	564.0	657.0	7.2
B. Amount of retail sales of means of agricultural production	231.2	568.8	1,593.6	2,297.9	12.3

Social Consumer Goods Retail Volume Indices
(Use Year 1952 as 100)

Item	1957	1965	1975	1979
Grain	125.8	124.3	141.7	157.0
Edible vegetable oil	134.6	96.7	108.5	130.7
Pork	103.6	163.0	249.9	336.3
Fresh eggs	196.2	256.8	226.5	461.4
Aquatic products	182.8	176.5	240.2	216.3
Sugar	186.6	238.2	423.4	707.0
Alcoholic beverages	134.2	145.0	308.8	447.7
Tea	164.9	116.2	259.5	375.7
Cotton cloth	134.0	137.0	215.7	267.9
Wool	195.6	674.0	1,566.2	2,923.1
Silks and satins	229.3	312.6	728.1	1,142.4
Knit underpants	698.3	799.9	2,078.5	3,135.0
Leather shoes	143.1	104.8	436.1	930.8
Rubber shoes	180.6	280.5	535.5	560.1
Firewood	134.8	155.1	199.9	237.5
Soap	184.9	215.4	511.8	583.5
Thermos bottles	329.9	390.1	547.0	1,084.8
Sewing machines	251.0	897.0	3,027.0	5,400.0
Wristwatches	279.5	491.2	2,129.6	5,050.4
Bicycles	252.8	526.0	1,657.8	2,849.3
Radios	1,320.0	4,180.0	357.2	819.8
Machine-made paper	152.5	110.0	169.9	211.0
Kerosene	246.1	361.7	529.5	492.2
Charcoal	229.3	317.6	396.0	448.9

Various Composite Price Indices
(Use 1950 Prices as 100)

Year	Overall retail price index	Staff and worker overall cost of living price index	Agricultural byproducts overall price index	Rural industrial products retail sale price index	Overall comprehensive price index for exchange of industrial and agricultural commodity goods	
					When overall procurement price index for agricultural byproducts is 100	When overall retail price index for rural industrial goods is 100
1952	111.8	115.5	121.6	109.7	90.2	110.8
1957	121.3	126.6	146.2	112.1	76.7	130.4
1965	134.6	139.0	187.9	118.4	63.0	158.7
1975	131.9	139.5	208.7	109.6	52.5	190.4
1979	138.6	147.4	265.5	109.9	41.4	241.6

Various Price Indices (Figured in Terms of State-owned Commercial Prices)
(Use Year 1950 as 100)

Year	Retail list price index			Staff and worker cost of living price index in terms of list prices	Agricultural by-products overall procurement price index	Rural industrial products retail sale price index	Overall comprehensive price index for exchange of industrial and agricultural commodity goods	
	National	Urban	Rural				When over-all procurement price index for agricultural byproducts is 100	When over-all retail price index for industrial goods is 100
1952	112.1	114.2	110.4	115.3	121.6	109.7	90.3	110.8
1957	121.4	124.1	118.9	126.1	146.2	112.1	76.7	130.4
1965	132.3	134.5	130.5	134.7	185.1	118.4	64.0	156.3
1975	128.4	133.7	125.1	133.3	201.3	109.6	54.4	183.7
1979	130.9	136.4	127.4	135.5	242.7	109.9	45.3	220.8

State-owned Enterprise Retail Price Indices
(Use 1950 Prices as 100)

Item	1952	1957	1965	1975	1979
Overall index	112.1	121.4	132.3	128.4	130.9
I. Consumption goods	112.3	122.2	134.1	132.6	135.1
1. Food	110.9	128.8	148.6	153.7	158.4
Grain	112.1	120.4	131.2	145.0	147.2
Fresh vegetables	116.7	149.4	136.7	173.9	188.5
Nonstaple foods	110.3	138.8	168.4	167.6	175.0
Tobacco, alcoholic beverages and tea	111.8	127.0	152.3	151.3	152.5
Other	111.9	114.5	126.4	125.5	131.0
2. Clothing	111.9	111.7	113.6	112.7	112.3
3. Items used in daily life	118.2	116.2	130.4	126.2	127.1
4. Items for cultural use	117.1	96.2	97.6	88.5	92.1
5. Medicines	122.9	114.8	99.3	63.5	65.4
6. Fuel	135.9	150.3	160.1	154.0	154.4
II. Means of agricultural production	108.2	110.8	114.7	100.0	100.5

State-Owned Commercial and Agricultural
Sideline Products Procurement Price Indices
(Use 1950 Prices as 100)

Item	1952	1957	1965	1975	1979
Overall Index	121.6	146.2	185.1	201.3	242.7
A. Food	121.4	141.4	190.9	222.8	271.3
B. Cash crops	113.0	126.4	152.8	165.1	200.4
1. Oil-bearing crops	108.2	167.9	246.7	307.8	398.1
2. Cotton	113.3	111.1	122.9	126.9	162.4
3. Hemp	131.0	139.9	170.3	184.3	197.0
4. Tobacco	116.5	124.0	174.0	175.7	177.1
5. Sugar	87.2	102.9	135.3	151.3	184.7
6. Tea	154.7	241.6	304.1	323.6	365.1
C. Animal products	105.7	145.5	192.1	200.6	247.4
1. Meat animals	102.7	142.9	193.2	199.4	248.6
2. Poultry eggs	104.7	152.5	188.5	213.6	261.5
3. Hides	136.8	150.2	163.1	179.5	204.0
4. Bristles	136.5	143.1	168.3	183.2	202.8
D. Other agricultural byproducts	160.6	210.2	251.4	267.0	302.5
1. Timber	115.1	105.9	141.7	171.0	199.3
2. Industrial paints	103.9	132.1	214.9	249.9	288.9
3. Silkworm cocoon silk	115.9	122.0	163.8	176.4	214.0
4. Dry, fresh fruits	130.7	160.2	183.1	184.8	209.6
5. Dry and fresh vegetables and condiments	179.0	237.2	235.0	251.5	282.9
6. Medicinal materials	136.7	222.3	297.2	263.1	276.1
7. Native byproducts	177.4	234.3	306.0	328.7	362.3
8. Aquatic products	105.0	145.0	175.2	178.3	214.6

Total National Revenue and Expenditure

Year	Amount (100 million yuan)		Difference between receipts and expenditures	Index (Use year 1952 as 100)	
	Total revenue	Total expenditures		Total revenue	Total expenditures
1952	183.72	175.99	7.73	100	100
1957	310.19	304.21	5.98	168.8	172.9
1965	473.32	466.33	6.99	257.6	265.0
1975	815.61	820.88	-5.27	443.9	466.4
1979	1,103.27	1,273.94	-170.67	600.5	723.9

National Urban and Rural Saving Deposits

Year	Grand total (100 million yuan)	City and town savings (100 million yuan)		Rural commune member savings (100 million yuan)	Average per capita savings (yuan)		
		Total	Including: time deposits		Total	Cities and towns	Rural commune members
1952	8.6	8.6	4.8		1.5	12.0	
1957	35.2	27.9	19.6	7.3	5.4	28.0	1.3
1965	65.2	52.3	43.4	12.9	9.0	51.4	2.1
1975	149.6	114.6	94.5	35.0	16.3	102.6	4.3
1979	281.0	202.6	166.4	78.4	28.9	157.5	9.3

Residents' Average Consumption Level

Year	Residents' consumption level (yuan, figured in terms of prices for the years given)			Index (figured in constant price terms using year 1952 as 100)		
	National residents	Peasants	Nonagricultural residents	National residents	Peasants	Nonagricultural residents
1952	76	62	148	100	100	100
1957	102	79	205	122.9	117.1	126.3
1965	125	100	237	126.4	116.0	136.5
1975	158	124	324	156.9	143.1	181.1
1979	197	152	406	184.9	165.2	214.5

1980 National Budget

	100 million yuan	Percent of total
Gross expenditures	1,212.7	100.0
Domestic financial expenditures	1,139.7	94.0
Major items:		
Appropriated for capital construction	346.4	28.6
Funds for tapping of potential and re- structuring of enterprises, and ex- penses for trial production of new products	80.5	6.6
Increased disbursement of circulating capital	36.7	3.0
Expenditures to support people's communes and for the expenses of agricultural enterprises	82.1	6.8
Expenses for cultural, education, health, and scientific undertakings	156.3	12.9
National defense and war preparation expenses	193.8	16.0
Administrative expenses	66.8	5.5
Other	177.1	14.6
Disbursements for capital construction using foreign loans	73.0	6.0
Gross revenues	1,085.2	100.0
Domestic revenues	1,042.2	96.0
Major revenues:		
Revenue from enterprises	435.2	40.1
Tax revenues	571.7	52.7
Other revenues	35.3	3.2
Foreign loan revenue	43.0	4.0
National financial deficit	127.5	
Compensation and supplement to deficits:		
Loans from banks	80.0	
Drawn on 1981 national treasury certifi- cate income	47.5	

1981 National Budgetary Estimate

	100 million yuan	Percentage compared to previous year
Total expenditures	1,085.8	89.5
Domestic government expenditures	1,005.8	88.3
Major items:		
Allotted for capital construction	250.6	72.3
Funds for tapping potential and restructuring enterprises, and for trial production of new products	58.3	72.4
Expenditures to support people's communes and expenses for agricultural enterprises	73.0	88.9
Expenses for cultural, educational, health, and scientific undertakings	170.0	108.8
National defense and war preparation expenses	168.7	87.0
Administrative expenses	72.4	108.4
Other	212.8	120.2
Disbursements for capital construction using foreign loans	80.0	109.6
Gross revenue	1,058.6	97.5
Domestic revenues	978.6	93.9
Major income:		
Income from enterprises	347.2	79.8
Tax revenues	609.0	106.5
Other income	22.4	63.5
Foreign loan income	80.0	186.0
Anticipated fiscal deficit	27.2	21.3

1982 Major Indicators of Economic Development

	Plan requirements
Rate increase of gross output value of industry and agriculture	+ 4 percent
Increase over previous year in national income	+ 4 percent
Distribution of national income	
Increase in consumption	+5.7 percent
Increase in total amount of retail sales of social goods	+8.0 percent
Increase in accumulations	+3.2 percent
Increase in investments directly provided for in the national budget	+5.7 percent
Increase in expenditures for educational, scientific, cultural, health and athletic activities	+5.9 percent

1982 National Budgetary Revenue and Expenditure Indicators

	100 million yuan	As compared with previous year's budget figure
Gross expenditures	1,130	+4 percent
Gross revenues	1,100	+3.9 percent
Fiscal deficit	30	

Agricultural Economic Statistics (1980)

Agricultural Population and Production Organization

Status of National Population and Rural People's Commune Organization

	Unit	1980	1979	Increase (+) or decrease (-) in 1980 from 1979
1. Total population	10,000 people	98,255	97,092.7	1,162.8
2. Rural people's communes	individual	54,183	53,348	835
Production brigades	"	709,820	698,613	11,207
Production teams	10,000 people	566.2	515.4	50.8
3. Basic accounting units				
Commune accounting	individual	41	54	-13
Production brigade accounting	"	42,429	51,767	-9,338
Production team accounting	10,000 people	538.9	501.4	37.5
4. Number of rural people's commune households	"	17,672.7	17,491.1	181.6
5. Rural people's commune population	"	81,096.0	80,738.7	357.3
6. Rural people's commune workforce	"	31,835.9	31,025.4	810.5
Other: Farming, forestry, animal husbandry, sideline occupation, and fishing industry workforce	"	29,808.4	29,071.4	737.0
Commune-operated industry workforce	"	916.3	897.7	18.6
Women workforce in the rural people's commune workforce	"	14,456.2		
7. Integrated agricultural, in- dustrial, and commercial enterprises in which rural people's communes are paramount	individual	342		

Information supplied by Planning Bureau of the Ministry of Agriculture

Status of Rural People's Commune Organization in All
Provinces, Municipalities, and Autonomous Regions (1)

Area	Numbers of communes	Numbers of produc- tion brigades	Numbers of produc- tion teams	Numbers of basic accounting units			Numbers of commune house- holds (per 10,000)	Commune popula- tion (per 10,000)
	(indi- vidual)	(indi- vidual)	(indi- vidual)	Commune account- ing (indi- vidual)	Production brigade accounting (indi- vidual)	Produc- tion team account- ing		
National total	54,183	709,820	566.2	41	42,429	538.9	17,672.7	81,096.0
Beijing	263	3,994	1.2	4	1,487	1.0	95.0	374.3
Tianjin	219	3,880	1.6	—	699	1.5	81.0	354.5
Hebei	3,644	50,218	27.3	1	4,471	26.8	1,075.1	4,537.8
Shanxi	1,889	31,422	12.0	—	7,582	10.8	495.5	2,036.4
Nei Monggol	1,382	12,286	6.6	1	1,627	6.3	282.5	1,320.4
Liaoning	1,145	15,534	9.5	6	575	9.4	496.6	2,202.6
Jilin	928	10,104	6.7	—	305	6.6	303.9	1,477.7
Heilongjiang	1,077	13,827	6.0	—	2,220	5.9	379.0	1,869.7
Shanghai	205	2,958	2.9	1	179	2.8	125.4	429.0
Jiangsu	1,885	34,996	32.5	2	664	32.1	1,252.2	5,052.3
Zhejiang	3,030	42,241	29.5	8	3,102	28.8	809.4	3,327.1
Anhui	3,316	29,514	42.1	—	302	41.8	919.5	4,316.7
Fujian	867	13,980	15.6	—	914	14.5	419.1	2,138.8
Jiangxi	1,643	22,948	23.5	—	72	23.4	517.1	2,719.8
Shandong	2,100	84,968	39.4	2	9,098	38.3	1,542.3	6,556.3
Henan	2,061	44,382	40.7	—	336	40.6	1,362.3	6,607.5
Hubei	1,262	31,019	25.5	2	2,443	23.4	800.6	3,856.0
Hunan	3,331	46,650	45.4	—	269	45.3	1,067.9	4,635.9
Guangdong	1,937	26,699	38.9	1	958	36.2	970.3	4,818.2
Guanxi	969	13,834	26.1	—	41	26.0	598.3	3,127.1
Sichuan	8,547	75,301	58.5	2	1,556	57.3	1,970.1	8,649.2
Guizhou	3,765	25,021	22.2	—	41	8.5	484.2	2,445.2
Yunnan	1,398	13,771	18.3	—	28	17.6	522.5	2,797.7
Tibet	2,067	—	1.0	—	—	1.0	31.3	154.2
Shaanxi	2,523	30,455	15.2	—	2,436	15.0	497.8	2,395.1
Gansu	1,460	16,696	11.2	11	86	11.2	304.8	1,630.8
Qinghai	403	3,692	1.8	—	91	1.8	47.7	271.7
Ningxia	251	2,285	1.7	—	28	1.7	52.9	289.9
Xinjiang	616	7,145	3.3	—	819	3.3	168.4	704.1

Status of Rural People's Commune Organization in
All Provinces, Municipalities, and Autonomous Regions (2)

Area	Commune work-force (per 10,000)	Including		Women work-force in the rural people's communes are paramount (individual)	Integrated agricultural, industrial, and commercial enterprises in which rural people's communes are paramount (individual)
		Farming, forestry, animal husbandry, sideline occupation, and fishing industry workforce	Workforce in commune-operated industries		
National total	31,835.9	29,808.4	916.3	14,456.2	342
Beijing	164.4	142.9	11.6	76.8	2
Tianjin	151.2	133.1	6.6	62.6	1
Hebei	1,766.6	1,631.4	47.6	728.8	2
Shanxi	702.6	645.4	23.0	294.4	4
Nei Monggol	443.0	414.3	10.2	166.8	10
Liaoning	678.0	585.5	52.3	254.7	3
Jilin	338.1	307.5	15.5	82.3	26
Heilongjiang	438.5	394.8	16.8	113.9	—
Shanghai	282.2	228.4	27.2	156.1	42
Jiangsu	2,264.5	1,952.6	164.2	1,148.6	4
Zhejiang	1,496.4	1,375.4	92.9	553.9	39
Anhui	1,670.5	1,620.8	24.3	773.9	18
Fujian	729.1	685.0	14.3	296.8	22
Jiangxi	929.3	887.5	19.8	424.5	25
Shandong	2,652.9	2,466.5	67.5	1,145.2	—
Henan	2,505.4	2,365.4	47.0	1,172.1	—
Hubei	1,500.6	1,393.7	34.9	714.6	27
Hunan	1,997.5	1,885.4	47.0	883.5	—
Guangdong	1,962.5	1,850.5	51.8	973.1	13
Guanxi	1,300.1	1,265.2	13.4	633.5	—
Sichuan	3,727.6	3,581.1	71.7	1,814.8	72
Guizhou	929.3	911.7	6.5	460.6	1
Yunnan	1,199.0	1,165.6	10.9	583.7	2
Tibet	81.8	80.1	0.8	43.1	—
Shaanxi	890.8	838.2	22.7	406.3	17
Gansu	574.0	557.6	6.2	274.4	10
Qinghai	103.6	101.5	1.3	52.1	—
Ningxia	99.4	94.8	1.9	49.4	—
Xinjiang	257.0	246.5	6.4	115.7	2

Status of State-Owned Forest Farms and Commune and Brigade Forest Farm Organizations in All Provinces, Municipalities and Autonomous Regions

Region	State-owned forest farms		Actual number of commune and brigade forest farms at year end (individual)
	Individual number of forest farms	Total number of staff & workers (individual)	
National total	3,870	507,793	223,326
Beijing	28	2,767	215
Tianjin	1	71	104
Hebei	160	13,183	4,896
Shanxi	129	7,061	5,378
Nei Monggol	287	34,128	10,559
Liaoning	163	21,206	5,079
Jilin	299	44,815	4,600
Heilongjiang	346	68,741	2,823
Shanghai	7	684	1
Jiangsu	66	24,251	4,279
Zhejiang	100	14,328	3,921
Anhui	113	14,135	9,716
Fujian	108	17,830	3,558
Jiangxi	87	15,380	8,691
Shandong	146	13,868	5,981
Henan	78	8,554	28,213
Hubei	218	17,696	23,646
Hunan	165	27,606	26,460
Guangdong	210	53,471	14,929
Guangxi	158	41,393	5,923
Sichuan	303	17,079	10,486
Guizhou	87	8,975	3,945
Yunnan	82	5,563	2,871
Tibet	—	—	—
Shaanxi	203	8,681	14,367
Gansu	203	15,611	19,612
Qinghai	50	1,322	2,200
Ningxia	31	3,542	784
Xinjiang	42	5,852	89

Status of State-Owned Farm Organizations in All Provinces, Municipalities, and Autonomous Regions

Area	Number of individual farms	Total population (per 10,000)	Number of staff & workers (per 10,000)	Area	Number of individual farms	Total population (per 10,000)	Number of staff & workers (per 10,000)
National total	2,093	1,136.93	492.14	Hubei	48	94.35	38.51
Beijing	16	36.64	4.36	Hunan	88	43.91	22.37
Tianjin	15	3.16	1.76	Guangdong	141	114.76	59.70
Hebei	33	33.69	12.33	Guangxi	49	15.45	8.09
Shanxi	34	1.55	0.90	Sichuan	140	4.33	2.68
Nei Monggol	127	43.98	16.39	Guizhou	41	2.47	1.30
Liaoning	124	78.01	29.02	Yunnan	35	24.39	13.04
Jilin	134	25.92	6.77	Tibet	9	4.49	2.20
Heilongjiang	103	164.68	71.93	Shaanxi	18	3.81	2.20
Shanghai	30	22.67	19.54	Gansu	26	8.18	4.18
Jiangsu	32	27.57	15.74	Qinghai (reclamation)	4	1.66	0.77
Zhejiang	70	5.78	4.18	Qinghai (livestock)	16	1.69	0.52
Anhui	25	14.73	7.91	Ningxia	14	8.53	4.15
Fujian	124	27.65	7.26	Xinjiang (reclamation)	169	220.08	89.75
Jiangxi	158	52.06	24.83	Xinjiang (farming)	33	10.33	3.64
Shandong	18	2.47	1.19	Xinjiang (livestock)	121	28.10	10.46
Henan	94	9.04	4.03	Tropical crops (two areas)	4	0.81	0.44

Draft provided by Planning Bureau, Ministry of State Farms and Land Reclamation

Status of Development of Commune- and Brigade-run Enterprises in All Provinces, Municipalities, and Autonomous Regions

Area	Enterprise units (10,000)	Number of persons in enterprises (10,000)	Area	Enterprise units (10,000)	Number of persons in enterprises (10,000)
National total	142.46	2,999.67	Shandong	18.75	334.34
Beijing	0.53	31.36	Henan	7.08	160.32
Tianjin	0.40	30.16	Hubei	11.18	152.70
Hebei	11.33	188.56	Hunan	12.60	199.40
Shanxi	7.51	88.34	Guangdong	8.64	200.84
Nei Monggol	1.62	26.48	Guangxi	3.13	59.31
Liaoning	3.32	111.74	Sichuan	11.93	172.97
Jilin	1.67	37.75	Guizhou	1.75	20.07
Heilongjiang	2.00	48.46	Yunnan	2.08	42.11
Shanghai	0.52	69.94	Tibet		
Jiangsu	7.56	388.62	Shaanxi	4.20	62.85
Zhejiang	7.80	234.95	Gansu	1.82	22.60
Anhui	4.35	86.37	Qinghai	0.33	3.76
Fujian	4.20	117.37	Ningxia	0.57	5.08
Jiangxi	4.38	83.84	Xinjiang	1.21	19.38

Draft provided by People's Commune-run Enterprise Administration, Ministry of Agriculture

Status of State-owned Fish Farms and Fishing Industry Commune and Brigade Organizations in All Provinces, Municipalities, and Autonomous Regions

Area	State-owned fishery		Fishing industry communes and brigades					
	No. of units (individual)	No. of staff and workers	Total			Including: Marine fishing industry		
			Fishing industry commune	Fishing industry production brigades	Fishing industry production teams	Fishing industry commune	Fishing industry production brigades	Fishing industry production teams
National total	922	83,603	316	4,132	19,039	260	2,429	13,853
Beijing	15	868						
Tianjin	4	162	6	27	50	5	23	50
Hebei	2	44	7	68	193	7	68	193
Shanxi	13	286						
Nei Monggol	25	4,116			1			
Liaoning	11	4,876	9	137	294	9	137	294
Jilin	108	4,548		3	10			
Heilongjiang	37	5,607	1	27	37			
Shanghai	4	375	2	206	125	1	30	14
Jiangsu	73	9,290	35	777	2,100	18	201	323
Zhejiang	27	2,646	103	1,005	2,904	102	780	2,824
Anhui	66	4,231	14	123	716			
Fujian	25	1,868	24	411	4,378	24	411	4,378
Jiangxi	40	5,698	2	113	728			
Shandong	24	3,562	23	345	1,540	17	280	1,269
Henan	22	1,124						
Hubei	161	10,972	5	129	390			
Hunan	63	10,896	3	109	454			
Guangdong	57	4,588	77	591	4,533	72	462	4,189
Guangxi	10	1,262	5	56	501	5	37	319
Sichuan	22	2,064			82			
Guizhou					1			
Yunnan	12	520		5	2			
Tibet								
Shaanxi	6	543						
Gansu	8	264						
Qinghai	1	160						
Ningxia	14	275						
Xinjiang	72	2,758						

Draft Provided by Planning and Financial Bureau of the State Aquatic Products Bureau

Status of Hydrology Stations in All Provinces,
Municipalities, and Autonomous Regions

Unit: Sites

Area	1979				1980			
	Hydrology stations	Water level station	Experimental station	Precipitation measuring station	Hydrology station	Water level station	Experimental station	Precipitation measuring station
National total	3,233	1,202	45	14,424	3,321	1,315	53	15,737
Beijing	37	23	—	122	38	1	1	143
Tianjin	21	5	—	26	21	6	—	30
Hebei	141	33	—	1,065	142	29	1	1,034
Shanxi	75	1	1	755	79	3	2	770
Nei Monggol	138	17	2	484	142	8	4	809
Liaoning	110	25	3	534	124	19	3	541
Jilin	123	26	3	312	146	28	—	349
Heilongjiang	138	62	2	419	140	62	3	432
Shanghai	7	30	—	8	7	14	—	8
Jiangsu	169	156	1	268	172	178	1	287
Zhejiang	146	137	3	643	146	154	3	651
Anhui	127	101	5	649	125	99	4	673
Fujian	78	64	2	784	77	63	2	769
Jiangxi	145	71	1	797	134	70	2	1,027
Shandong	151	28	1	813	148	31	1	815
Henan	139	8	—	949	136	23	—	944
Hubei	94	60	3	532	94	60	5	549
Hunan	155	25	2	492	147	19	1	513
Guangdong	106	122	1	870	109	118	1	1,022
Guangxi	107	25	—	585	116	21	—	588
Sichuan	167	63	5	632	169	69	5	721
Guizhou	68	16	—	336	68	11	—	326
Yunnan	164	12	—	650	189	21	2	847
Tibet	15	2	1	1	14	1	1	—
Shaanxi	89	5	—	489	95	8	2	532
Gansu	86	—	—	238	89	—	—	263
Qinghai	60	3	1	116	58	3	1	112
Ningxia	49	—	—	139	49	8	—	152
Xinjiang	112	1	—	81	131	4	—	96
Changjiang Basin Planning Office	65	43	6	3	65	146	6	3
Huang He Water Conservancy Commission	151	38	2	632	151	38	2	731

Draft Provided by Planning Bureau, Ministry of Water Conservancy

Status of Meteorology Observatories and Stations in
All Provinces, Municipalities, and Autonomous Regions

Area	Meteorology observatory	Meteorology stations	Area	Meteorology observatory	Meteorology stations
National total	14	116	Henan	294	2,374
Beijing	10	72	Hubei	1	20
Tianjin	12	98	Hunan	2	12
Hebei	11	95	Guangdong	13	158
Shanxi	13	111	Guangxi	10	107
Nei Monggol	18	187	Sichuan	11	144
Liaoning	10	80	Guizhou	14	59
Jilin	17	118	Yunnan	7	55
Heilongjiang	6	33	Tibet	9	77
Shanghai	9	96	Shaanxi	1	10
Jiangsu	12	76	Gansu	10	70
Zhejiang	7	47	Qinghai	10	68
Anhui	4	21	Ningxia	11	69
Fujian	17	118	Xinjiang	9	65
Jiangxi	1		Beijing Meteorology Center	11	80
Shandong				14	112

Draft provided by Planning and Finance Department, Central Meteorology Bureau

Agriculture

National Increase and Decrease of Gross Output Value in Agriculture

	1980				1979 (calculated at 1970 constant prices)		Increase (+) or decrease (-) in 1980 from 1979 (figured at 1970 constant prices)	
	Calculated at 1980 prevailing prices		Calculated at 1970 constant prices		Output value (100 million yuan) Ratio (Per-cent)		Absolute figure (100 million yuan)	Per-cent
	Output value (100 million yuan)	Ratio (per-cent)	Output value (100 million yuan)	Ratio (per-cent)				
Gross output value of agriculture	2,106.07	100.0	1,627.23	100.0	1,584.30	100.0	42.93	2.7
I. Divided among the five industries as follows:								
1. Farming	1,344.25	63.8	1,046.95	64.3	1,059.65	66.9	-12.70	-1.2
2. Forestry	79.78	3.8	49.73	3.1	44.99	2.8	4.74	10.5
3. Animal husbandry	346.73	16.5	230.96	14.2	221.19	14.0	9.77	4.4
4. Sideline occupations	303.16	14.4	278.55	17.1	238.92	15.1	39.63	16.6
including: Total figure for output value of brigade-operated industries	246.65	11.7	236.43	14.5	197.98	12.5	38.45	19.4
Production brigades	202.08	9.6	194.38	11.9	--	--	--	--
Production teams	44.57	2.1	42.05	2.6	--	--	--	--
5. Fishing industry	32.15	1.5	21.04	1.3	19.55	1.2	1.49	7.6
III. Divided in terms of ownership as follows:								
1. Ownership by all the people	81.68	3.9	60.97	3.8	57.81	3.7	3.16	5.5
2. Collective ownership	1,604.72	76.2	1,256.17	77.2	1,254.75	79.2	1.42	0.1
3. Commune household sideline occupations	417.06	19.8	308.16	18.9	271.61	17.1	36.55	13.5
4. Other	2.61	0.1	1.93	0.1	0.13	...	1.80	13.8

Draft provided by Planning Bureau, Ministry of Agriculture

Gross Output Value of Agriculture for All
Provinces, Municipalities, and Autonomous Regions (1)

(Figured at 1970 Constant Prices)

Units: 100 million yuan

Area	Gross output value of agri- cul- ture	Divided among the five industries					Divided in terms of ownership						
		Farming	Forestry	Animal husbandry	Sideline occupations	Including: Out- put value of brigade- and production team-operated industries	Fishing industry	Ownership by all the people	Collective ownership	Commune member household sideline occupations	Other		
National total	1,627.23	1,046.95	49.73	230.96	278.55	236.43	194.38	42.05	21.04	60.97	1,256.17	308.16	1.93
Beijing	13.91	6.52	0.19	2.53	4.65	4.19	3.45	0.74	0.02	0.69	11.32	1.90	-
Tianjin	14.99	4.66	0.05	1.23	8.92	8.89	6.71	2.18	0.13	0.21	13.47	1.31	-
Hebei	87.25	53.24	1.81	9.78	22.04	20.70	15.30	5.40	0.38	1.29	74.24	11.71	0.01
Shanxi	38.72	21.69	1.21	3.85	11.97	10.94	9.70	1.24	...	0.40	33.00	5.32	-
Nei Monggol	25.75	13.28	0.85	8.08	3.48	2.14	0.79	1.35	0.06	2.24	17.79	5.65	0.07
Liaoning	57.99	36.93	1.23	7.60	10.35	9.27	7.76	1.51	1.88	3.26	45.25	8.26	1.22
Jilin	37.87	25.88	1.49	5.11	5.34	3.32	3.03	0.29	0.05	1.46	28.25	7.78	0.38
Heilongjiang	64.49	49.12	2.56	7.05	5.64	4.76	4.31	0.45	0.12	14.83	43.21	6.45	-
Shanghai	24.73	8.69	0.10	3.48	11.62	11.46	11.46	-	0.84	1.32	21.22	2.19	-
Jiangsu	146.92	81.36	1.03	18.34	43.87	43.43	41.49	1.94	2.32	2.28	121.75	22.86	0.03
Zhejiang	85.07	46.99	2.21	13.64	19.08	17.14	16.15	0.99	3.15	1.00	66.17	17.90	-
Anhui	66.32	49.62	0.97	9.20	6.09	4.04	4.04	-	0.44	1.30	50.37	14.65	-
Fujian	41.33	25.53	2.26	4.01	7.66	5.68	5.04	0.64	1.87	1.07	31.42	8.81	0.03
Jiangxi	53.10	36.10	2.18	5.90	8.48	4.85	3.65	1.20	0.44	2.00	39.56	11.54	-
Shandong	134.66	95.56	1.75	16.10	17.76	17.60	13.47	4.13	3.49	1.48	110.83	22.35	-
Henan	110.78	77.64	1.92	10.28	20.77	18.92	13.48	5.44	0.17	0.88	93.43	16.46	0.01
Hubei	84.05	55.73	4.07	12.94	10.52	7.22	3.96	3.26	0.79	2.09	60.74	21.22	-
Hunan	93.13	62.96	3.61	14.36	11.26	8.30	7.95	0.35	0.94	2.00	70.95	20.14	0.04
Guangdong	88.10	53.30	8.75	11.03	12.04	8.70	6.96	1.74	2.98	7.17	67.66	13.27	-
Guangxi	50.16	35.48	2.28	5.53	6.40	3.75	1.72	2.03	0.47	0.88	39.20	10.04	0.04
Sichuan	138.64	95.36	2.73	29.54	10.70	8.89	6.38	2.51	0.31	0.97	95.10	42.52	0.05
Guizhou	29.28	18.69	1.13	5.31	4.11	1.17	0.61	0.56	0.04	0.46	19.14	9.68	-
Yunnan	40.96	26.36	2.61	6.70	5.20	3.50	1.51	1.99	0.09	1.80	29.79	9.32	0.05
Tibet	4.51	1.58	0.04	2.52	0.37	0.04	-	0.04	-	0.12	3.85	0.54	-
Shaanxi	35.56	24.72	1.41	4.38	5.04	3.89	2.78	1.11	0.01	0.47	27.97	7.12	-
Gansu	23.83	17.15	0.54	3.86	2.28	1.50	0.84	0.66	...	0.63	18.79	4.41	-
Qinghai	6.48	3.07	0.06	2.89	0.45	0.37	0.28	0.09	0.01	0.53	4.85	1.10	-
Ningxia	5.35	3.94	0.15	0.73	0.53	0.39	0.18	0.21	...	0.50	3.97	0.88	-
Xinjiang	23.30	15.80	0.54	4.99	1.93	1.38	1.38	-	0.04	7.64	12.88	2.78	-

Gross Output Value of Agriculture for All
Provinces, Municipalities, and Autonomous Regions (2)

(Figured at 1970 Constant Prices)

Units: 100 million yuan

Area	Gross output value of agriculture equals 100								As a percentage of gross output value of agriculture			
	Output value of farming	Output value of forestry	Output value of animal husbandry	Output value of sideline industries	Including: Output value of brigade- and production team-operated industries			Output value of fishing industry	Ownership by all people	Collective ownership	Commune member household sideline occupations	Other
					Total	Production brigades	Production teams					
National total	64.3	3.1	14.2	17.1	14.5	11.9	2.6	1.3	3.7	77.2	18.9	0.1
Beijing	46.9	1.4	18.2	33.4	30.1	24.8	5.3	0.1	5.0	81.4	13.6	-
Tianjin	31.1	0.3	8.2	59.5	59.3	44.8	14.5	0.9	1.4	89.9	8.7	-
Hebei	61.0	2.1	11.2	25.3	23.7	17.5	6.2	0.4	1.5	85.1	13.4	...
Shanxi	56.0	3.1	10.0	30.9	28.3	25.1	3.2		1.0	85.2	13.8	-
Nei Monggol	51.6	3.3	31.4	13.5	8.3	3.1	5.2	0.2	8.7	69.1	21.9	0.3
Liaoning	63.7	2.1	13.1	17.9	16.0	13.4	2.6	3.2	5.6	78.0	14.3	2.1
Jilin	68.4	3.9	13.5	14.1	8.8	8.0	0.8	0.1	3.9	74.6	20.5	1.0
Heilongjiang	76.2	4.0	10.9	8.7	7.4	6.7	0.7	0.2	23.0	67.0	10.0	-
Shanghai	35.1	0.4	14.1	47.0	46.3	46.3		3.4	5.3	85.8	8.9	-
Jiangsu	55.4	0.7	12.5	29.8	29.5	28.2	1.3	1.6	1.6	82.9	15.5	...
Zhejiang	55.3	2.6	16.0	22.4	20.2	19.0	1.2	3.7	1.2	77.8	21.0	-
Anhui	74.8	1.4	13.9	9.2	6.1	6.1		0.7	2.0	75.9	22.1	-
Fujian	61.8	5.5	9.7	18.5	13.7	12.2	1.5	4.5	2.6	76.0	21.3	0.1
Jiangxi	68.0	4.1	11.1	16.0	9.1	6.9	2.2	0.8	3.8	74.5	21.7	-
Shandong	71.0	1.3	11.9	13.2	13.1	10.0	3.1	2.6	1.1	82.3	16.6	-
Henan	70.1	1.7	9.3	18.7	17.1	12.2	4.9	0.2	0.8	84.3	14.9	...
Hubei	66.3	4.8	15.4	12.5	8.6	4.7	3.9	1.0	2.5	72.3	25.2	-
Hunan	67.6	3.9	15.4	12.1	8.9	8.5	0.4	1.0	2.2	76.2	21.6	...
Guangdong	60.5	9.9	12.5	13.7	9.9	7.9	2.0	3.4	8.1	76.8	15.1	-
Guangxi	70.7	4.6	11.0	12.8	7.5	3.4	4.1	0.9	1.8	78.1	20.0	0.1
Sichuan	68.8	2.0	21.3	7.7	6.4	4.6	1.8	0.2	0.7	68.6	30.7	...
Guizhou	63.8	3.9	18.2	14.0	4.0	2.1	1.9	0.1	1.6	65.4	33.0	-
Yunnan	64.4	6.4	16.3	12.7	8.5	3.7	4.8	0.2	4.4	72.7	22.8	0.1
Tibet	35.0	0.9	55.9	8.2	0.9	-	0.9		2.6	85.4	12.0	-
Shaanxi	69.5	4.0	12.3	14.2	10.9	7.8	3.1	...	1.3	78.7	20.0	-
Gansu	72.0	2.3	16.2	9.5	6.3	3.5	2.8		2.6	78.9	18.5	-
Qinghai	47.4	0.9	44.6	6.9	5.7	4.3	1.4	0.2	8.2	74.8	17.0	-
Ningxia	73.7	2.8	13.6	9.9	7.3	3.4	3.9		9.3	74.2	16.5	-
Xinjiang	67.8	2.3	21.4	8.3	5.9	5.9	-	0.2	32.8	55.3	11.9	-

Gross Output Value of Agriculture for All
Provinces, Municipalities, and Autonomous Regions (3)

(Figured at 1980 Prevailing Prices)

Units: 100 million yuan

Area	Gross output value of agriculture	Divided among the five industries as follows:					Divided in terms of ownership							
		Farming	Forestry	Animal husbandry	Sideline occupations	Including: Out- put value of production brigade- and production team operated industries	Total	Pro- duc- tion brig- ade	Pro- duc- tion team	Fishing industry	Ownership by all the people	Collective ownership	Commune member household side- line occupations	Other
National total	2,106.07	1,344.25	79.78	346.73	303.16	246.65	202.08	44.57	32.15	81.68	1,604.72	417.06	2.61	
Beijing	18.59	9.44	0.54	3.83	4.73	4.28	3.54	0.74	0.05	1.04	14.85	2.70	-	
Tianjin	17.89	6.93	0.06	1.86	8.67	8.64	6.46	2.18	0.37	0.36	15.50	2.03	-	
Hebei	115.97	74.73	3.10	13.96	23.35	21.68	15.87	5.81	0.83	1.75	98.29	15.92	0.01	
Shanxi	48.22	27.64	4.01	5.54	11.02	10.06	8.85	1.21	0.01	0.53	40.38	7.31	-	
Nei Monggol	33.02	18.13	1.35	9.52	3.94	2.38	0.94	1.44	0.08	2.53	22.73	7.67	0.09	
Liaoning	73.01	45.28	1.79	13.01	10.86	9.76	8.17	1.59	2.07	4.35	53.57	13.51	1.58	
Jilin	51.87	33.55	2.49	9.42	6.33	3.60	3.31	0.29	0.08	1.90	37.86	11.56	0.55	
Heilongjiang	91.21	67.86	3.48	12.20	7.40	5.60	5.00	0.60	0.27	20.98	60.20	10.03	-	
Shanghai	29.56	11.49	0.16	5.13	11.68	11.52	11.52		1.10	1.73	24.82	3.01	-	
Jiangsu	181.10	106.20	1.30	27.30	43.80	43.40	41.50	1.90	2.50	2.70	150.20	28.20	-	
Zhejiang	108.93	60.08	3.61	19.83	19.97	17.48	16.47	1.01	5.44	1.28	83.10	24.55	-	
Anhui	88.77	65.23	2.15	13.15	7.55	5.10	5.10		0.69	1.58	67.01	20.17	0.01	
Fujian	51.94	29.19	3.41	7.38	8.39	6.46	5.60	0.86	3.57	1.50	38.39	12.00	0.05	
Jiangxi	69.15	43.42	2.71	9.60	12.76	5.32	4.00	1.32	0.66	2.50	52.10	14.55	-	
Shandong	181.36	130.31	4.67	24.19	17.91	17.60	13.47	4.13	4.28	1.99	149.26	30.11	-	
Henan	153.54	107.97	3.88	17.20	24.20	20.64	14.61	6.03	0.29	1.26	128.49	23.77	0.02	
Hubei	102.17	64.70	7.28	17.29	11.44	7.22	3.96	3.26	1.46	2.54	73.83	25.79	0.01	
Hunan	119.45	80.01	5.67	21.30	11.20	8.30	7.95	0.35	1.27	2.57	91.00	25.83	0.05	
Guangdong	121.65	69.15	10.50	20.90	15.85	11.61	9.28	2.33	5.25	9.90	93.43	18.32	-	
Guangxi	66.06	40.49	4.39	13.55	6.76	3.75	1.72	2.03	0.87	1.68	44.69	19.59	0.10	
Sichuan	168.44	110.73	4.57	39.20	13.31	10.02	7.19	2.83	0.63	1.18	115.53	51.66	0.07	
Guizhou	37.10	24.01	2.11	6.73	4.16	1.03	0.53	0.50	0.09	0.58	24.25	12.27	-	
Yunnan	49.49	31.43	2.79	9.75	5.33	3.56	1.54	2.02	0.19	1.98	34.93	12.51	0.07	
Tibet	5.32	2.31	0.08	2.56	0.37	0.04		0.04	...	0.16	4.52	0.64	-	
Shaanxi	46.20	31.47	1.86	7.20	5.64	3.89	2.78	1.11	0.03	0.60	34.86	10.74	-	
Gansu	28.89	21.22	0.65	4.74	2.28	1.50	0.84	0.66	...	0.76	22.78	5.35	-	
Qinghai	8.14	4.72	0.07	2.87	0.47	0.38	0.29	0.09	0.01	0.67	6.09	1.38	-	
Ningxia	6.86	5.11	0.24	0.87	0.63	0.45	0.21	0.24	0.01	0.64	5.04	1.18	-	
Xinjiang	32.17	21.45	0.86	6.65	3.16	1.38	1.38		0.05	10.44	17.02	4.71	-	

Gross Output Value of Agriculture for All
Provinces, Municipalities, and Autonomous Regions (4)

(Figured at 1980 Prevailing Prices)

Units: 100 million yuan

Area	Gross output value of agriculture equals 100							As a percentage of gross output value of agriculture				
	Output value of farming	Output value of forestry	Output value of animal husbandry	Output value of sideline occupations	Including: Output value of production brigade- and production team-operated industries			Output value of fishing industry	Ownership of all the people	Collective ownership	Commune member household sideline occupations	Other
					Total	Production brigades	Production teams					
National total	63.8	3.8	16.5	14.4	11.7	9.6	2.1	1.5	3.9	76.2	19.8	0.1
Beijing	50.8	2.9	20.6	25.4	23.0	19.0	4.0	0.3	5.6	79.9	14.5	-
Tianjin	38.7	0.3	10.4	48.5	48.3	36.1	12.2	2.1	2.0	86.6	11.4	-
Hebei	64.4	2.7	12.1	20.1	18.7	13.7	5.0	0.7	1.5	84.8	13.7	...
Shanxi	57.3	8.3	11.5	22.9	20.9	18.4	2.5	...	1.1	83.7	15.2	-
Nei Monggol	54.9	4.1	28.8	11.9	7.2	2.8	4.4	0.3	7.7	68.8	23.2	0.3
Liaoning	62.0	2.5	17.8	14.9	13.4	11.2	2.2	2.8	6.0	73.4	18.5	2.1
Jilin	64.7	4.8	18.2	12.2	6.9	6.4	0.5	0.1	3.7	73.0	22.3	1.0
Heilongjiang	74.4	3.8	13.4	8.1	6.2	5.5	0.7	0.3	23.0	66.0	11.0	-
Shanghai	38.9	0.5	17.4	39.5	39.0	39.0		3.7	5.8	84.0	10.2	-
Jiangsu	58.6	0.7	15.1	24.2	24.0	22.9	1.1	1.4	1.5	83.0	15.5	-
Zhejiang	55.2	3.3	18.2	18.3	16.0	15.1	0.9	5.0	1.2	76.3	22.5	-
Anhui	73.5	2.4	14.8	8.5	5.8	5.8		0.8	1.8	75.5	22.7	...
Fujian	56.2	6.6	14.2	16.1	12.4	10.8	1.6	6.9	2.9	73.9	23.1	0.1
Jiangxi	62.8	3.9	13.9	18.4	7.7	5.8	1.9	1.0	3.6	75.3	21.1	-
Shandong	71.8	2.6	13.3	9.9	9.7	7.4	2.3	2.4	1.1	82.3	16.6	-
Henan	70.3	2.5	11.2	15.8	13.4	9.5	3.9	0.2	0.8	83.7	15.5	...
Hubei	63.4	7.1	16.9	11.2	7.1	3.9	3.2	1.4	2.5	72.3	25.2	...
Hunan	67.0	4.7	17.8	9.4	7.0	6.7	0.3	1.1	2.2	76.2	21.6	...
Guangdong	56.9	8.6	17.2	13.0	9.5	7.6	1.9	4.3	8.1	76.8	15.1	
Guangxi	61.3	6.7	20.5	10.2	5.7	2.6	3.1	1.3	2.5	67.6	29.7	0.2
Sichuan	65.7	2.7	23.3	7.9	6.0	4.3	1.7	0.4	0.7	68.6	30.7	...
Guizhou	64.7	5.7	18.1	11.2	2.8	1.4	1.4	0.3	1.5	65.4	33.1	
Yunnan	63.5	5.6	19.7	10.8	7.2	3.1	4.1	0.4	4.0	70.6	25.3	0.1
Tibet	43.4	1.5	48.1	7.0	0.8		0.8		3.0	85.0	12.0	-
Shaanxi	68.1	4.0	15.6	12.2	8.4	6.0	2.4	0.1	1.3	75.4	23.3	-
Gansu	73.4	2.3	16.4	7.9	5.2	2.9	2.3		2.6	78.9	18.5	-
Qinghai	58.0	0.9	35.2	5.8	4.7	3.6	1.1	0.1	8.2	74.8	17.0	-
Ningxia	74.5	3.5	12.7	9.2	6.6	3.1	3.5	0.1	9.3	73.5	17.2	-
Xinjiang	66.7	2.7	20.7	9.8	4.3	4.3		0.1	32.5	52.9	14.6	-

National Area and Output of Major Agricultural Crops

Units: Area: 10,000 mu; yields per unit of area: jin; gross output: grain: 100 million jin; cash crops: 10,000 dan

	1980			1979			Increase (+) or decrease (-) in 1980 from 1979	
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output
Total area sown to farm	218,426.7			222,715.3			-4,288.8	
1. Grain crops	174,708.5	364	6,364.4	178,893.9	371	6,642.3	-4,185.3	-277.9
(1) By season								
Summer	45,722.1	253	1,157.4	47,888.6	283	1,357.3	-2,166.5	-199.8
Early rice	16,665.2	590	982.8	17,132.6	607	1,039.6	-467.4	-56.7
(2) By variety								
Rice	50,633.0	550	2,785.1	50,809.0	566	2,875.0	-176.0	-89.8
Wheat	43,266.6	250	1,083.1	44,035.1	285	1,254.6	-768.5	-171.4
Tubers	14,832.1	376	556.9	16,428.2	347	569.2	-1,596.0	-12.3
Corn	30,131.1	410	1,234.6	31,099.4	398	1,200.7	-68.3	33.8
Gaoliang	4,039.2	336	135.5	4,758.7	321	152.5	-719.3	-17.0
Millet	5,808.3	187	108.9	6,258.8	196	122.5	-450.6	-13.6
Other miscellaneous grains	15,217.3	199	302.7	15,534.4	186	289.2	-317.3	13.4
Soybeans	10,781.0	146	157.6	10,870.2	137	149.2	-89.3	8.4
2. Cash crops	23,881.5			22,151.2			1,730.3	
Other: Cotton	7,380.4	73	5,413.4	6,767.7	65	4,414.7	612.8	998.7
Oil-bearing Crops	11,892.7	129	15,381.1	10,576.9	122	12,870.9	1,315.6	2,510.2
Peanuts	3,508.6	205	7,200.6	3,111.6	181	5,644.7	396.9	1,555.9
Rapeseed	4,266.1	112	4,767.4	4,141.3	116	4,804.1	124.9	-36.7
Sesame	1,164.2	44	517.1	1,264.8	66	834.3	-100.7	-317.2
Jute and ambari hemp	471.1	466	2,196.8	542.5	402	2,178.9	-71.4	17.9
Sugar crops	1,383.4	4,209	58,225.4	1,255.2	3,922	49,226.6	128.2	8,998.8
Sugar cane	719.3	6,342	45,614.8	767.6	5,604	43,015.0	-48.4	2,599.7
Sugar beets	664.1	1,899	12,610.6	487.5	1,274	6,211.6	176.5	6,399.1
Flue-cured tobacco								
3. Other crops	595.1	241	1,433.3	763.4	211	1,612.2	-168.3	-178.9
Including: green manure	19,836.4			21,670.2			-1,833.8	
	11,307.2			12,738.8			-1,431.7	

Draft provided by Planning Bureau, Ministry of Agriculture

Status of Grain Output in All Provinces,
Municipalities, and Autonomous Regions

Units: Area: 10,000 mu;
Yields per mu: jin;
Output: 100 million jin

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Sown area	Yields per mu	Gross output	Sown area	Yields per mu	Gross output	Sown area	Yields per mu	
								Absolute figures	%
National total	174,708.5	364	6,364.4	178,894.1	371	6,642.3	-4,185.3	-277.9	-4.2
Beijing	823.0	452	37.2	839.6	412	34.6	-16.6	2.6	7.5
Tianjin	845.3	326	27.6	877.7	316	27.7	-32.4	-0.1	-0.4
Hebei	11,230.8	271	304.5	11,643.7	306	355.9	-412.9	-51.4	-14.4
Shanxi	5,263.1	261	137.1	5,399.1	297	160.1	-136.0	-23.0	-14.4
Nei Monggol	5,823.5	136	79.3	6,063.4	168	102.0	-239.9	-22.7	-22.3
Liaoning	4,831.7	506	244.3	4,989.5	479	238.8	-157.8	5.5	2.3
Jilin	5,286.4	325	171.9	5,400.1	335	180.6	-113.7	-8.7	-4.8
Heilongjiang	10,976.9	267	292.5	11,075.4	264	292.5	-98.4	0	0
Shanghai	740.8	502	37.4	738.5	675	51.8	2.3	-14.4	-27.8
Jiangsu	9,562.4	493	471.5	9,272.2	524	502.8	290.2	-31.3	-6.2
Zhejiang	5,126.5	561	287.1	5,003.2	624	322.3	123.3	-35.2	-10.9
Anhui	9,038.9	322	290.8	9,431.7	341	321.9	-392.8	-31.1	-9.7
Fujian	3,263.3	491	160.4	3,224.3	471	152.5	39.0	7.9	5.2
Jiangxi	5,662.9	438	248.0	5,766.0	450	259.3	-103.1	-11.3	-4.4
Shandong	12,712.0	375	476.8	13,102.5	377	494.4	-390.5	-17.6	-3.6
Henan	13,288.4	323	429.7	13,600.4	314	426.9	-312.0	2.8	0.7
Hubei	8,028.1	383	307.3	8,233.8	449	369.9	-205.7	-62.6	-16.9
Hunan	8,177.0	520	424.9	8,556.3	518	443.7	-379.3	-18.8	-4.2
Guangdong	7,980.1	453	361.7	8,397.7	414	347.6	-417.6	14.1	4.1
Guangxi	5,935.7	401	238.1	6,141.6	382	234.6	-205.9	3.5	1.5
Sichuan	14,921.7	437	652.8	15,374.6	416	640.2	-452.9	12.6	2.0
Guizhou	3,627.7	357	129.6	3,826.9	326	124.6	-199.2	5.0	4.0
Yunnan	5,390.0	321	173.1	5,531.1	287	158.6	-141.1	14.5	9.1
Tibet	298.6	338	10.1	310.4	273	8.5	-11.7	1.6	18.8
Shaanxi	6,465.5	234	151.4	6,456.6	282	181.9	8.9	-30.5	-16.8
Gansu	4,409.9	223	98.5	4,452.5	207	92.3	-42.6	6.2	6.7
Qinghai	617.9	251	19.1	630.2	260	16.4	-12.2	2.7	16.5
Ningxia	1,113.5	216	24.0	1,149.6	184	21.2	-36.1	2.8	13.2
Xinjiang	3,266.9	238	77.7	3,405.5	231	78.7	-138.6	-1.0	-1.3

Draft provided by Planning Bureau, Ministry of Agriculture

Status of Summer-harvested Grain Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu
Yields per unit of
area: jin;
Output: 100 million jin

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	45.722.1	253	1,157.5	47.888.6	283	1,357.3	-2,166.5	-199.8	-14.7
Beijing	323.3	281	9.1	344.4	401	13.8	-21.1	-4.7	-34.1
Tianjin	296.3	188	5.6	327.2	306	10.0	-28.9	-4.4	-44.0
Hebei	4,055.7	191	77.6	4,372.9	298	130.2	-317.2	-52.7	-40.5
Shanxi	1,633.9	154	25.1	1,720.6	222	38.3	-86.7	-13.2	-34.5
Nei Monggol	-	-	-	-	-	-	-	-	-
Liaoning	82.2	195	1.6	110.5	232	2.6	-28.3	-1.0	-38.5
Jilin	-	-	-	-	-	-	-	-	-
Heilongjiang	-	-	-	-	-	-	-	-	-
Shanghai	234.3	481	11.3	229.0	522	11.9	5.3	-0.6	-5.0
Jiangsu	3,620.8	443	160.5	3,571.1	469	167.6	49.7	-7.1	-4.2
Zhejiang	915.5	327	30.0	849.8	365	31.1	-65.7	-1.1	-3.5
Anhui	3,055.1	236	72.2	3,157.2	264	83.5	-102.1	-11.3	-13.5
Fujian	264.3	207	5.5	306.2	167	5.1	-41.9	0.4	7.8
Jiangxi	206.7	93	1.9	244.7	132	3.2	-38.0	-1.3	-40.6
Shandong	5,545.8	278	154.0	5,632.3	342	192.7	-86.5	-38.7	-20.1
Henan	6,210.5	297	184.3	6,232.2	326	203.3	-21.7	-18.8	-9.3
Hubei	2,693.6	253	68.3	2,716.5	275	74.8	-22.9	-6.5	-8.7
Hunan	497.8	147	7.3	656.7	167	11.0	-158.9	-3.7	-33.6
Guangdong	741.1	174	12.9	1,017.6	161	16.3	-276.5	-3.4	-20.9
Guangxi	134.2	97	1.3	248.1	93	2.3	-113.9	-1.0	-43.5
Sichuan	4,793.5	261	125.2	5,257.1	260	136.4	-463.6	-11.2	-8.2
Guizhou	858.3	145	12.4	1,095.9	130	14.2	-237.6	-1.8	-12.7
Yunnan	1,410.8	179	25.3	1,557.1	137	21.4	-146.3	3.9	18.2
Tibet	-	-	-	-	-	-	-	-	-
Shaanxi	2,859.8	185	52.8	2,924.3	277	81.0	-64.5	-28.2	-34.8
Gansu	2,675.8	220	58.9	2,692.1	202	54.3	-16.3	4.6	8.5
Qinghai	-	-	-	-	-	-	-	-	-
Ningxia	530.4	207	11.0	542.4	164	9.2	-12.0	1.8	19.6
Xinjiang	2,080.4	208	43.3	2,082.7	207	43.1	-2.3	0.2	0.5

Draft provided by Planning Bureau, Ministry of Agriculture

Status of Paddy Rice Production in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu
Yields per mu: jin;
Output: 100 million jin

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	50,633.0	550	2,785.1	50,809.0	566	2,875.0	-176.0	-89.8	-3.1
Beijing	78.3	758	5.9	75.0	500	3.7	3.3	2.2	59.5
Tianjin	96.3	642	6.2	94.1	545	5.1	2.2	1.1	21.6
Hebei	217.9	763	16.6	185.5	681	12.6	32.4	4.0	31.7
Shanxi	18.3	756	1.4	18.0	645	1.2	0.3	0.2	16.7
Nei Monggol	22.3	366	0.8	23.5	306	0.7	-1.2	0.1	14.3
Liaoning	578.5	813	47.1	561.5	755	42.4	17.0	4.7	11.1
Jilin	379.0	567	21.5	391.6	520	20.4	-12.6	1.1	5.4
Heilongjiang	315.6	505	15.9	309.5	464	14.4	6.1	1.5	10.4
Shanghai	456.9	510	23.3	486.9	746	36.3	-30.0	-13.0	-35.8
Jiangsu	4,014.9	586	235.1	4,054.6	642	260.3	-39.7	-25.2	-9.7
Zhejiang	3,770.9	624	235.2	3,712.6	701	260.4	58.3	-25.2	-9.7
Anhui	3,357.4	460	154.6	3,291.8	540	177.8	65.6	-23.2	-13.0
Fujian	2,529.7	531	134.3	2,505.2	518	129.7	24.5	4.6	3.5
Jiangxi	5,075.6	468	237.6	5,080.2	486	247.0	-4.6	-9.4	-3.8
Shandong	258.8	570	14.8	258.2	506	13.1	0.6	1.7	13.0
Henan	625.3	569	35.6	602.6	535	32.2	22.7	3.4	10.6
Hubei	4,062.3	511	207.6	4,095.8	617	252.9	-33.5	-45.3	-17.9
Hunan	6,618.5	587	388.5	6,760.3	592	400.1	-141.8	-11.6	-2.9
Guangdong	6,245.6	520	324.6	6,377.9	484	308.4	-132.3	16.2	5.3
Guangxi	4,146.5	485	201.4	4,245.7	475	201.4	-99.2	0	0
Sichuan	4,592.8	669	307.4	4,508.0	637	287.0	84.8	20.4	7.1
Guizhou	1,161.8	560	65.0	1,132.7	576	65.2	29.1	-0.2	-0.3
Yunnan	1,541.9	503	77.5	1,564.0	489	76.5	-22.1	1.0	1.3
Tibet	0.9	496	0.1	0.9	452	0.1	0	0	0
Shaanxi	243.8	619	15.1	234.2	677	15.9	9.6	-0.8	-5.0
Gansu	6.0	667	0.4	6.0	445	0.3	-	0.1	33.3
Qinghai	-	-	-	-	-	-	-	-	-
Ningxia	69.6	945	6.6	71.6	699	5.0	-2.0	1.6	32.0
Xinjiang	147.6	347	5.1	161.1	303	4.9	-13.5	0.2	4.1

Draft Provided by Planning Bureau, Ministry of Agriculture

Status of Early Rice Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu

Yields per mu: jin

Output: 100 million jin

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	16,665.2	590	982.8	17,132.6	607	1,039.6	-467.4	-56.7	-5.5
Beijing	-	-	-	-	-	-	-	-	-
Tianjin	-	-	-	-	-	-	-	-	-
Hebei	-	-	-	-	-	-	-	-	-
Shanxi	-	-	-	-	-	-	-	-	-
Nei Monggol	-	-	-	-	-	-	-	-	-
Liaoning	-	-	-	-	-	-	-	-	-
Jilin	-	-	-	-	-	-	-	-	-
Heilongjiang	-	-	-	-	-	-	-	-	-
Shanghai	178.0	682	12.1	191.9	837	16.1	-13.9	-4.0	-24.8
Jiangsu	773.5	597	46.2	883.1	669	59.1	-109.6	-12.9	-21.8
Zhejiang	1,749.2	720	125.9	1,765.0	766	135.3	-15.8	-9.4	-7.0
Anhui	1,174.8	587	68.9	1,124.0	678	76.2	50.8	-7.3	-9.6
Fujian	1,114.4	565	63.0	1,138.9	561	63.9	-24.5	-0.9	-0.1
Jiangxi	2,460.0	527	129.7	2,487.9	547	136.0	-27.9	-6.3	-4.6
Shandong	-	-	-	-	-	-	-	-	-
Henan	-	-	-	-	-	-	-	-	-
Hubei	1,210.9	596	72.2	1,243.6	689	85.8	-32.7	-13.6	-15.9
Hunan	2,890.7	647	187.0	2,974.9	656	195.1	-84.2	-8.1	-4.2
Guangdong	2,962.8	549	162.6	3,043.8	518	157.8	-81.0	4.8	3.0
Guangxi	1,865.8	530	98.8	1,919.3	493	94.7	-53.5	4.2	4.4
Sichuan	198.9	598	11.9	243.6	568	13.8	-44.7	-1.9	-13.8
Guizhou	4.7	579	0.3	10.4	529	0.6	-5.7	-0.3	-50.0
Yunnan	81.5	515	4.2	106.2	490	5.2	-24.7	-1.0	-19.2
Tibet	-	-	-	-	-	-	-	-	-
Shaanxi	-	-	-	-	-	-	-	-	-
Gansu	-	-	-	-	-	-	-	-	-
Qinghai	-	-	-	-	-	-	-	-	-
Ningxia	-	-	-	-	-	-	-	-	-
Xinjiang	-	-	-	-	-	-	-	-	-

Draft provided by Planning Bureau, Ministry of Agriculture

Status of Wheat Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu;
Yields per mu: jin;
Output: 100 million jin

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	43,266.6	250	1,083.1	44,035.1	285	1,254.6	-768.5	-171.4	-13.7
Beijing	281.8	289	8.1	295.2	417	12.3	-13.4	-4.2	-34.1
Tianjin	292.0	188	5.5	319.4	307	9.8	-27.4	-4.3	-43.9
Hebei	4,140.3	185	76.8	4,266.0	298	126.8	-125.7	-50.0	-39.4
Shanxi	1,492.7	159	23.7	1,584.9	231	36.6	-92.2	-12.9	-35.2
Nei Monggol	1,435.9	115	16.5	1,428.0	152	21.7	7.9	-5.2	-23.9
Liaoning	61.4	179	1.1	75.4	232	1.7	-14.0	-0.6	-35.3
Jilin	206.3	163	3.3	252.6	141	3.5	-46.3	-0.2	-5.7
Heilongjiang	3,157.8	251	78.9	2,788.9	239	66.7	368.9	12.3	18.4
Shanghai	75.8	544	4.1	63.9	587	3.8	11.9	0.3	7.9
Jiangsu	2,324.2	437	101.6	2,244.4	476	106.9	79.8	-5.3	-4.9
Zhejiang	488.4	325	15.9	412.3	360	14.9	76.1	1.0	6.7
Anhui	2,874.2	237	68.1	2,925.4	267	78.0	-51.2	-9.9	-12.7
Fujian	221.2	204	4.5	254.5	167	4.3	-33.3	0.2	4.7
Jiangxi	182.0	96	1.8	204.1	139	2.8	-22.1	-1.0	-35.7
Shandong	5,502.7	278	153.2	5,581.8	343	191.4	-79.1	-38.2	-20.0
Henan	5,890.3	302	178.1	5,832.3	332	193.8	58.0	-15.7	-8.1
Hubei	1,938.4	275	53.3	1,882.0	301	56.7	56.4	-3.4	-6.0
Hunan	332.4	148	4.9	400.5	174	7.0	-68.1	-2.1	-30.0
Guangdong	354.1	135	4.8	606.9	116	7.1	-252.8	-2.3	-32.4
Guangxi	62.5	80	0.5	153.1	78	1.2	-90.6	-0.7	-58.3
Sichuan	3,247.4	290	94.3	3,428.3	301	103.3	-180.9	-9.0	-8.7
Guizhou	501.9	140	7.0	670.0	127	8.5	-168.1	-1.5	-17.6
Yunnan	883.1	178	15.7	996.5	141	14.1	-113.4	1.6	11.3
Tibet	88.3	410	3.6	99.6	310	3.1	-11.3	0.5	16.1
Shaanxi	2,385.5	193	46.0	2,395.6	300	71.9	-10.1	-25.9	-36.0
Gansu	2,075.4	231	48.0	2,101.4	221	46.5	-26.0	1.5	3.2
Qinghai	301.7	373	11.3	302.6	318	9.6	-0.9	1.7	17.7
Ningxia	436.7	226	9.9	448.9	187	8.4	-12.2	1.5	17.9
Xinjiang	2,032.2	210	42.6	2,020.6	209	42.2	11.6	0.4	0.9

Draft Provided by Planning Bureau, Ministry of Agriculture

Status of Tuber Crop Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu;
Yields per mu: jin;
Output: 100 million jin

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	14,832.0	376	556.9	16,428.2	346	569.2	-1,596.0	-12.3	-2.2
Beijing	14.4	328	0.5	17.8	341	0.6	-3.4	-0.1	-16.7
Tianjin	10.3	450	0.5	11.9	333	0.4	-1.6	0.1	25.0
Hebei	710.4	352	25.0	791.7	327	25.9	-81.3	-0.9	-3.5
Shanxi	379.5	277	10.5	401.3	266	10.7	-21.8	-0.2	-1.9
Nei Monggol	378.6	158	6.0	415.0	191	7.9	-36.4	-1.9	-24.1
Liaoning	63.7	330	2.1	92.7	292	2.7	-29.0	-0.6	-22.2
Jilin	127.9	312	4.0	136.0	328	4.4	-8.1	-0.4	-9.1
Heilongjiang	354.7	288	10.2	400.3	314	12.5	-45.6	-2.3	-18.4
Shanghai	0.3	1224	0.1	0.6	-	0.1	-0.3	0	0
Jiangsu	497.6	478	23.8	589.2	408	24.0	-91.6	-0.2	-0.8
Zhejiang	216.3	711	15.6	174.0	739	12.9	42.3	2.7	20.9
Anhui	1,083.3	392	42.5	1,272.6	279	35.5	-189.3	7.0	19.7
Fujian	379.9	507	19.3	335.3	487	16.3	44.6	3.0	18.4
Jiangxi	161.8	343	5.5	181.1	324	5.9	-19.3	-0.4	-6.8
Shandong	1,912.3	581	111.1	2,192.2	506	110.9	-279.9	0.2	0.2
Henan	1,690.8	417	70.5	1,911.3	332	63.5	-220.5	7.0	11.0
Hubei	581.2	302	17.5	631.5	302	19.1	-50.3	-1.6	-8.4
Hunan	558.2	386	21.5	596.8	386	23.0	-38.6	-1.5	-6.5
Guangdong	970.5	281	27.3	1,030.1	269	27.8	-59.6	-0.5	-1.8
Guangxi	246.3	138	3.4	281.0	125	3.5	-34.7	-0.1	-2.9
Sichuan	2,601.4	359	93.4	2,985.2	389	116.2	-383.8	-22.8	-19.6
Guizhou	422.4	240	10.1	458.0	218	10.0	-35.6	0.1	1.0
Yunnan	355.5	301	10.7	348.6	270	9.4	6.9	1.3	13.8
Tibet	0.2	225	...	0.1	-	-	0.2	-	-
Shaanxi	548.9	260	13.7	583.5	242	14.1	-34.6	-0.4	-2.8
Gansu	393.8	223	8.8	399.1	210	8.4	-5.3	0.4	4.8
Qinghai	54.6	281	1.5	55.1	258	1.4	-0.5	0.1	7.1
Ningxia	94.0	144	1.3	102.2	131	1.3	-8.2	0	0
Xinjiang	23.3	226	0.5	34.0	238	0.8	-10.7	-0.3	-37.5

Draft provided by Planning Bureau, Ministry of Agriculture

Status of Corn Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu;
Yields per mu: jin;
Output: 100 million jin

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	30,131.1	410	1,234.6	30,199.4	398	1,200.7	-68.3	33.8	2.8
Beijing	296.1	601	17.8	273.4	458	12.5	22.7	5.3	42.4
Tianjin	253.5	456	11.5	236.6	359	8.5	16.9	3.0	35.3
Hebei	3,511.4	378	132.6	3,459.6	364	125.6	51.8	7.0	5.5
Shanxi	1,113.5	472	52.6	1,145.8	509	58.4	-32.3	-5.8	-9.9
Nei Monggol	979.2	284	27.8	1,005.2	335	33.7	-26.0	-5.9	-17.5
Liaoning	2,124.3	615	130.7	2,087.6	602	125.7	36.7	5.0	4.0
Jilin	2,522.8	402	101.4	2,393.4	446	106.7	129.4	-5.3	-5.0
Heilongjiang	2,826.0	368	104.0	2,941.2	395	116.2	-115.2	-12.2	-10.5
Shanghai	14.5	552	0.8	19.3	635	1.2	-4.8	-0.4	-33.3
Jiangsu	579.3	424	24.6	615.0	433	26.6	-35.7	-2.0	-7.5
Zhejiang	98.3	314	3.1	147.4	358	5.3	-49.1	-2.2	-41.5
Anhui	245.8	313	7.7	297.5	306	9.1	-51.7	-1.4	-15.4
Fujian	2.4	88	...	3.3	93	...	-0.9	-	-
Jiangxi	11.9	153	0.2	13.2	207	0.3	-1.3	-0.1	-33.3
Shandong	3,214.1	514	165.1	3,204.3	456	146.0	9.8	19.1	13.1
Henan	2,520.2	423	106.6	2,546.5	376	95.7	-26.3	10.9	11.4
Hubei	610.4	283	17.2	618.2	356	22.0	-7.8	-4.8	-21.8
Hunan	221.8	191	4.3	234.7	232	5.4	-12.9	-1.1	-20.4
Guangdong	68.8	190	1.3	66.9	187	1.3	1.9	0	0
Guangxi	802.8	277	22.2	848.9	232	19.7	-46.1	2.5	12.7
Sichuan	2,401.0	451	108.2	2,469.2	395	97.5	-68.2	10.7	11.0
Guizhou	1,076.6	393	42.3	1,037.2	342	35.5	39.4	6.8	19.2
Yunnan	1,666.2	316	52.6	1,589.5	283	45.0	76.7	7.6	16.9
Tibet	2.3	424	0.1	-	-	-	2.3	0.1	-
Shaanxi	1,615.1	341	55.0	1,555.8	370	57.5	59.3	-2.5	-4.3
Gansu	477.3	373	17.8	463.8	389	18.0	13.5	-0.2	-1.1
Qinghai	-	-	-	-	-	-	-	-	-
Ningxia	41.8	408	1.7	31.0	437	1.4	10.8	0.3	21.4
Xinjiang	833.7	303	25.3	894.9	290	25.9	-61.2	-0.6	-2.3

Draft provided by Planning Bureau, Ministry of Agriculture

Status of Gaoliang Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu;
Yields per mu: jin;
Output: 100 million jin

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	4,039.2	335	135.5	4,758.8	320	152.5	-719.3	-17.0	-11.1
Beijing	19.1	292	0.6	31.9	238	0.8	-12.8	-0.2	-25.0
Tianjin	80.0	286	2.3	97.3	240	2.3	-17.3	0	0
Hebei	576.4	308	17.8	667.7	302	20.2	-91.3	-2.4	-11.9
Shanxi	351.8	436	15.3	401.2	500	20.1	-49.4	-4.8	-23.9
Nei Monggol	252.4	183	4.6	312.7	198	6.2	-60.3	-1.6	-25.8
Liaoning	837.4	541	45.3	932.8	517	48.2	-95.4	-2.9	-6.0
Jilin	351.0	385	13.5	422.8	340	14.4	-71.8	-0.9	-6.2
Heilongjiang	407.0	310	12.6	505.8	248	12.5	-98.7	0.1	0.8
Shanghai	...	322	...	-	-	-	-	-	-
Jiangsu	24.7	161	0.4	32.1	140	0.4	-7.4	0	0
Zhejiang	-	-	-	-	-	-	-	-	-
Anhui	158.6	125	2.0	205.3	151	3.1	-46.7	-1.1	35.5
Fujian	1.3	360	...	1.9	307	0.1	-0.6	-0.1	-
Jiangxi	0.9	228	...	1.3	213	...	-0.4	-	-
Shandong	351.5	178	6.3	398.9	171	6.8	-47.4	-0.5	-7.4
Henan	208.9	139	2.9	269.5	156	4.2	-60.6	-1.3	-31.0
Hubei	20.6	170	0.4	26.5	286	0.8	-5.9	-0.4	-50.0
Hunan	16.6	203	0.3	23.2	190	0.4	-6.6	-0.1	-25.0
Guangdong	1.9	101	...	3.5	58	...	-1.4	-	-
Guangxi	4.2	82	...	4.0	83	...	0.2	-	-
Sichuan	99.6	351	3.5	109.1	323	3.5	-9.5	0	0
Guizhou	10.3	146	0.2	10.6	153	0.2	-0.3	0	0
Yunnan	9.1	220	0.2	7.9	253	0.2	1.2	0	0
Tibet	-	-	-	-	-	-	-	-	-
Shaanxi	102.9	275	2.8	114.7	287	3.3	-11.8	-0.5	-15.2
Gansu	61.4	293	1.8	66.9	286	1.9	-5.5	-0.1	-5.3
Qinghai	-	-	-	-	-	-	-	-	-
Ningxia	11.2	514	0.6	13.4	447	0.6	-2.2	0	0
Xinjiang	80.4	261	2.1	97.8	233	2.3	-17.4	-0.2	-8.7

Draft provided by Planning Bureau, Ministry of Agriculture

Status of Millet Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu;
Yields per mu: jin;
Output: 100 million jin

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	5,808.3	188	108.9	6,258.8	196	122.5	-450.6	-13.6	-11.1
Beijing	18.0	257	0.5	21.0	237	0.5	-3.0	0	0
Tianjin	18.3	210	0.4	23.0	158	0.4	-4.7	0	0
Hebei	823.8	238	19.6	831.6	246	20.4	-7.8	-0.8	-3.9
Shanxi	826.6	232	19.2	835.8	223	18.6	-9.2	0.6	3.2
Nei Monggol	753.7	105	7.9	845.7	130	11.0	-92.1	-3.1	-28.2
Liaoning	285.1	164	4.7	307.3	163	5.0	-22.2	-0.3	-6.0
Jilin	623.8	179	11.2	685.6	207	14.2	-61.8	-3.0	-21.1
Heilongjiang	1,153.2	180	20.7	1,281.3	203	26.0	-128.1	-5.3	-20.4
Shanghai	-	-	-	-	-	-	-	-	-
Jiangsu	0.9	184	...	1.4	181	...	-0.5	-	-
Zhejiang	-	-	-	-	-	-	-	-	-
Anhui	14.2	180	0.3	17.4	185	0.3	-3.2	0	0
Fujian	0.7	56	-	0.7	55	...	-	-	-
Jiangxi	1.9	120	-	4.8	142	0.1	-2.9	-0.1	-100.0
Shandong	253.7	249	6.3	320.4	264	8.5	-66.7	-2.2	-25.9
Henan	395.9	209	8.3	448.6	206	9.2	-52.7	-0.9	-9.8
Hubei	12.7	121	0.2	17.5	269	0.5	-4.8	-0.3	-60.0
Hunan	-	-	-	-	-	-	-	-	-
Guangdong	7.8	115	0.1	8.5	82	0.1	-0.7	0	0
Guangxi	13.1	76	0.1	12.8	78	0.1	0.3	0	0
Sichuan	-	-	-	-	-	-	-	-	-
Guizhou	11.8	169	0.2	13.7	164	0.2	-1.9	0	0
Yunnan	-	-	-	-	-	-	-	-	-
Tibet	-	-	-	-	-	-	-	-	-
Shaanxi	372.0	153	5.7	363.4	124	4.5	8.6	1.2	26.7
Gansu	163.6	189	3.1	160.1	151	2.4	3.5	0.7	29.2
Qinghai	-	-	-	-	-	-	-	-	-
Ningxia	49.7	56	0.3	45.7	79	0.4	4.0	-0.1	-25.0
Xinjiang	7.8	76	0.1	12.5	71	0.1	-4.7	0	0

Draft provided by Planning Bureau, Ministry of Agriculture

Status of Output of Other Miscellaneous Grains in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu;

Yields per mu: jin;

Output: 100 million jin

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	15,217.3	199	302.6	15,534.4	186	289.2	-317.3	13.4	4.6
Beijing	103.3	344	3.5	113.8	338	3.9	-10.5	-0.4	-10.3
Tianjin	59.8	98	0.6	64.5	93	0.6	-4.7	0	0
Hebei	858.8	119	10.2	1,026.9	167	17.2	-168.1	-7.0	-40.7
Shanxi	872.9	136	11.8	817.9	143	11.7	55.0	0.1	0.9
Nei Monggol	1,744.4	75	13.2	1,759.0	103	18.2	-14.6	-5.0	-27.5
Liaoning	172.0	152	2.6	169.0	146	2.5	3.0	0.1	4.0
Jilin	240.9	203	4.9	253.3	197	5.0	-12.4	-0.1	-2.0
Heilongjiang	317.5	188	6.0	350.7	204	7.1	-33.2	-1.1	-15.5
Shanghai	191.2	471	9.0	165.1	498	8.2	26.1	0.8	9.8
Jiangsu	1,766.1	454	80.2	1,374.8	448	61.6	391.3	18.6	30.2
Zhejiang	447.2	333	14.9	459.7	366	16.8	-12.5	-1.9	-11.3
Anhui	389.0	147	5.7	442.2	179	7.9	-53.2	-2.2	-27.8
Fujian	41.4	206	0.9	47.8	149	0.7	-6.4	0.2	28.6
Jiangxi	56.9	103	0.6	92.5	94	0.8	-35.6	-0.2	-25.0
Shandong	176.3	185	3.2	195.6	177	3.4	-19.3	-0.2	-5.9
Henan	579.9	161	9.3	700.5	177	12.4	-120.6	-3.1	-25.0
Hubei	542.0	163	8.8	625.8	198	12.4	-83.8	-3.6	-29.0
Hunan	233.7	116	2.7	343.3	137	4.7	-109.6	-2.0	-42.6
Guangdong	122.4	106	1.3	108.8	83	0.9	13.5	0.4	44.4
Guangxi	400.8	212	8.5	366.9	185	6.8	33.9	1.7	25.0
Sichuan	1,723.0	243	41.9	1,589.0	110	28.5	134.0	13.4	47.0
Guizhou	279.2	115	3.2	342.1	148	3.6	-62.9	-0.4	-11.1
Yunnan	867.6	173	15.0	953.5	127	12.1	-85.9	2.9	24.0
Tibet	205.5	307	6.3	209.8	254	5.3	-4.4	1.0	18.9
Shaanxi	880.0	108	9.5	916.8	129	11.8	-36.8	-2.3	-19.5
Gansu	1,185.4	148	17.6	1,207.3	115	13.9	-21.9	3.7	26.6
Qinghai	261.7	242	6.3	272.5	198	5.4	-10.8	0.9	16.7
Ningxia	378.7	87	3.3	403.1	92	3.7	-24.4	-0.4	-10.8
Xinjiang	119.7	136	1.6	162.2	130	2.1	-42.5	-0.5	-23.8

Draft provided by Planning Bureau, Ministry of Agriculture

Status of Soybean Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu;
Yields per mu: jin;
Output: 100 million jin

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	10,781.0	146	157.6	10,870.2	137	149.2	-89.3	8.4	5.6
Beijing	12.0	234	0.3	11.5	229	0.3	0.5	0	0
Tianjin	35.1	173	0.6	30.9	196	0.6	4.2	0	0
Hebei	391.8	152	5.9	414.7	174	7.2	-22.9	-1.3	-18.1
Shanxi	207.8	126	2.6	194.2	146	2.8	13.6	-0.2	-7.1
Nei Monggol	257.0	96	2.5	274.1	96	2.6	-17.2	-0.1	-3.8
Liaoning	709.3	151	10.7	763.2	139	10.6	-53.9	0.1	0.9
Jilin	834.7	145	12.1	864.8	138	12.0	-30.1	0.1	0.8
Heilongjiang	2,445.1	180	44.1	2,497.7	149	37.1	-52.6	7.0	18.9
Shanghai	2.1	601	0.1	2.7	-	0.2	-0.6	-0.1	-50.0
Jiangsu	354.7	163	5.8	360.7	166	6.0	-6.0	-0.2	-3.3
Zhejiang	105.4	223	2.4	97.2	214	2.1	8.2	0.3	14.3
Anhui	916.4	108	9.9	979.5	104	10.2	-63.1	-0.3	-2.9
Fujian	86.7	164	1.4	75.6	122	0.9	11.1	0.5	55.6
Jiangxi	171.9	131	2.3	188.8	126	2.4	-16.9	-0.1	-4.2
Shandong	1,042.6	162	16.8	951.1	150	14.3	91.5	2.5	17.5
Henan	1,377.1	134	18.4	1,289.1	123	15.9	88.0	2.5	15.7
Hubei	260.5	90	2.3	336.5	164	5.5	-76.0	-3.2	-58.2
Hunan	195.8	138	2.7	197.5	155	3.1	-1.7	-0.4	-12.9
Guangdong	208.9	110	2.3	195.1	103	2.0	13.8	0.3	15.0
Guangxi	259.5	77	2.0	229.2	82	1.9	30.3	0.1	5.3
Sichuan	256.5	161	4.1	285.8	147	4.2	-29.3	-0.1	-2.4
Guizhou	163.7	97	1.6	162.6	86	1.4	1.1	0.2	14.3
Yunnan	66.6	210	1.4	71.1	183	1.3	-4.5	0.1	7.7
Tibet	1.5	161	...	-	-	-	1.5	...	...
Shaanxi	317.3	113	3.6	292.6	100	2.9	24.7	0.7	24.1
Gansu	47.0	213	1.0	47.9	190	0.9	-0.9	0.1	11.1
Qinghai	-	-	-	-	-	-	-	-	-
Ningxia	31.8	100	0.3	33.7	110	0.4	-1.9	-0.1	-25.0
Xinjiang	22.2	178	0.4	22.4	175	0.4	-0.2	0	0

Draft provided by Planning Bureau, Ministry of Agriculture

Status of Cotton Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu;
Yields per mu: jin;
Output: 10,000 dan

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute Figures	%
National total	7,380.4	73	5,413.4	6,767.7	65	4,414.7	612.8	998.7	22.6
Beijing	3.2	61	1.9	3.7	37	1.3	-0.5	0.6	46.2
Tianjin	12.5	26	3.2	15.2	14	2.2	-2.7	1.0	45.5
Hebei	823.1	60	494.4	836.1	28	231.2	-13.0	263.2	113.8
Shanxi	336.5	46	155.0	330.9	39	129.9	5.6	25.1	19.3
Nei Monggol	-	-	-	-	-	-	-	-	-
Liaoning	57.7	74	42.7	54.5	58	31.8	3.2	10.9	34.3
Jilin	-	-	-	-	-	-	-	-	-
Heilongjiang	-	-	-	-	-	-	-	-	-
Shanghai	155.6	98	152.5	140.7	127	178.8	14.9	-26.3	-14.7
Jiangsu	946.0	88	836.2	882.6	120	1,063.4	63.4	-227.2	-21.4
Zhejiang	160.7	103	165.8	129.6	103	139.2	31.1	26.6	19.1
Anhui	485.1	50	244.1	448.7	43	194.6	36.5	49.5	25.4
Fujian	-	-	-	-	-	-	-	-	-
Jiangxi	162.7	53	86.1	148.4	59	87.1	14.3	-1.0	-1.1
Shandong	1,105.4	97	1,074.6	814.4	41	333.6	291.0	741.0	222.1
Henan	940.0	86	812.4	832.7	48	396.7	107.3	415.7	104.8
Hubei	887.5	71	632.5	867.4	103	895.1	20.1	-262.6	-29.3
Hunan	269.4	71	192.5	241.2	78	187.4	28.2	5.1	2.7
Guangdong	-	-	-	-	-	-	-	-	-
Guangxi	4.1	34	1.4	3.3	33	1.1	0.8	0.3	27.3
Sichuan	377.8	50	189.2	380.0	59	222.5	-2.2	-33.3	-15.0
Guizhou	3.2	31	1.0	2.1	30	0.6	1.1	0.4	66.7
Yunnan	7.0	34	2.4	7.9	42	3.3	-0.9	-0.9	-27.3
Tibet	-	-	-	-	-	-	-	-	-
Shaanxi	362.7	45	161.7	375.6	55	204.9	-12.9	-43.2	-21.1
Gansu	8.4	64	5.4	10.5	39	4.0	-2.1	1.4	35.0
Qinghai	-	-	-	-	-	-	-	-	-
Ningxia	-	-	-	-	-	-	-	-	-
Xinjiang	271.8	58	158.4	242.2	44	106.0	29.6	52.4	49.4

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Status of Oil-bearing Crop Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu

Yields per mu: jin;

Output: 10,000 dan

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	11,892.7	129	15,381.1	10,576.9	122	12,870.7	1,315.6	2,510.2	19.5
Beijing	41.4	149	61.9	45.2	114	51.4	-3.8	10.5	20.4
Tianjin	44.9	124	55.8	36.8	82	30.2	8.1	25.6	84.8
Hebei	691.5	131	902.8	575.6	112	642.6	115.9	260.2	40.5
Shanxi	347.2	77	267.3	257.5	59	152.8	89.7	114.5	74.9
Nei Monggol	779.3	64	504.3	628.4	60	374.1	150.9	130.2	34.8
Liaoning	454.8	124	565.1	340.7	101	344.5	114.1	220.6	64.0
Jilin	279.5	190	532.1	178.4	159	284.4	101.1	247.7	87.1
Heilongjiang	365.9	144	526.7	136.0	151	137.4	229.9	389.3	283.3
Shanghai	78.3	242	192.0	76.4	310	237.4	1.9	-45.4	-19.1
Jiangsu	450.0	172	772.6	431.9	176	758.4	18.1	14.2	1.9
Zhejiang	368.4	157	577.1	289.2	163	540.5	79.2	36.6	6.8
Anhui	855.6	116	996.0	762.8	117	893.0	92.8	103.0	11.5
Fujian	195.4	138	269.5	189.6	142	268.7	5.8	0.8	0.3
Jiangxi	486.0	57	275.2	494.6	81	398.4	-8.6	-123.2	-30.9
Shandong	996.4	287	2,859.3	908.2	240	2,181.6	88.2	677.7	31.1
Henan	1,065.4	87	924.1	949.1	78	737.3	116.3	186.8	25.3
Hubei	496.1	83	411.6	532.5	120	640.9	-36.4	-229.3	-35.8
Hunan	468.9	82	385.5	556.2	103	574.6	-87.3	-189.1	-32.9
Guangdong	668.2	159	1,063.1	647.7	136	882.2	20.4	180.8	20.5
Guangxi	251.2	109	274.7	272.2	112	305.1	-21.0	-30.4	-10.0
Sichuan	817.1	175	1,437.8	768.2	170	1,304.5	48.9	133.3	10.2
Guizhou	325.5	96	311.8	311.1	70	218.0	14.4	93.8	43.0
Yunnan	165.7	78	129.6	169.2	54	92.2	-3.5	37.4	40.6
Tibet	17.4	124	21.6	15.5	103	15.9	1.9	5.7	35.8
Shaanxi	240.4	91	219.4	203.0	95	191.9	37.4	27.5	14.3
Gansu	290.3	96	279.1	241.3	70	169.3	49.0	109.8	64.9
Qinghai	118.2	119	141.3	109.6	106	116.6	8.6	24.7	21.2
Ningxia	129.5	56	72.0	103.9	42	43.6	25.6	28.4	65.1
Xinjiang	404.1	87	351.8	346.1	82	283.3	58.0	68.5	24.2

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Status of Peanut Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu;
Yields per mu: jin;
Output: 10,000 dan

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	3,508.6	205	7,200.6	3,111.6	181	5,644.7	396.9	1,555.9	27.6
Beijing	29.1	179	52.1	33.5	132	44.1	-4.4	8.0	18.1
Tianjin	11.2	156	17.4	12.8	102	13.0	-1.6	4.4	33.8
Hebei	355.6	201	715.4	293.3	157	461.5	62.3	253.0	55.0
Shanxi	5.4	185	10.0	2.7	114	3.1	2.7	6.9	222.6
Nei Monggol	-	-	-	-	-	-	-	-	-
Liaoning	146.3	188	274.9	124.7	140	174.9	21.6	100.0	57.2
Jilin	12.2	159	19.4	4.0	194	7.8	8.2	11.6	148.7
Heilongjiang	4.0	151	6.0	2.6	54	1.4	1.4	4.6	328.6
Shanghai	0.2	187	0.4	0.3	200	0.6	-0.1	-0.2	-33.3
Jiangsu	125.7	197	245.9	116.5	197	229.4	9.2	16.5	7.2
Zhejiang	13.3	200	26.6	8.5	246	24.6	4.8	2.0	8.1
Anhui	219.5	171	375.2	143.6	183	262.5	75.9	112.7	42.9
Fujian	120.9	185	223.5	119.4	196	234.2	1.5	-10.7	-4.6
Jiangxi	71.5	141	101.0	69.6	174	121.1	1.9	-20.1	-16.6
Shandong	936.0	300	2,808.6	843.6	251	2,120.2	92.4	688.4	32.5
Henan	311.2	159	495.2	210.6	127	267.8	100.6	227.4	84.9
Hubei	61.1	191	117.0	54.6	243	132.4	6.5	-15.4	-11.6
Hunan	67.3	127	86.1	65.8	132	86.7	1.5	-0.6	-0.7
Guangdong	607.0	171	1,039.0	580.0	148	857.3	27.0	181.8	21.2
Guangxi	212.3	121	257.5	230.8	126	289.6	-18.5	-32.1	-11.1
Sichuan	131.1	185	242.4	128.3	184	235.8	2.8	6.6	2.8
Guizhou	18.7	140	26.1	23.4	124	29.0	-4.7	-2.9	-10.0
Yunnan	35.0	104	36.5	33.6	97	32.5	1.4	3.9	12.0
Tibet	0.1	128	...	...	-	...	-	...	...
Shaanxi	13.1	176	23.1	8.6	166	14.3	4.5	8.8	61.5
Gansu	0.1	100	0.1	-	-	-	0.1	0.1	100.0
Qinghai	-	-	-	-	-	-	-	-	-
Ningxia	-	-	-	-	-	-	-	-	-
Xinjiang	0.7	166	1.2	0.8	110	0.9	-0.1	0.3	33.3

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Status of Rapeseed Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu;
Yields per mu: jin;
Output: 10,000 dan

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	4,266.1	112	4,767.4	4,141.3	116	4,804.1	124.9	-36.7	-0.8
Beijing	3.3	48	1.6	2.5	47	1.2	0.8	0.4	33.3
Tianjin	0.4	42	0.2	0.3	95	0.3	0.1	-0.1	-33.3
Hebei	23.6	74	17.4	25.2	100	25.1	-1.6	-7.7	-30.7
Shanxi	10.5	53	5.6	13.2	91	12.1	-2.7	-6.5	-53.7
Nei Monggol	117.7	31	36.3	106.3	46	49.5	11.4	-13.2	-26.7
Liaoning	17.3	45	7.9	37.2	53	19.8	-19.9	-11.9	-60.1
Jilin	-	-	-	-	-	-	-	-	-
Heilongjiang	6.0	51	3.1	6.3	29	1.8	-0.2	1.3	72.2
Shanghai	78.1	245	191.6	76.1	311	236.8	2.0	-45.2	-19.1
Jiangsu	254.3	160	406.3	299.0	174	519.1	-44.7	-112.8	-21.7
Zhejiang	346.1	157	544.1	275.0	162	508.6	71.1	35.5	7.0
Anhui	446.8	122	544.4	386.4	114	442.4	60.4	102.0	23.1
Fujian	68.2	59	40.2	65.2	47	30.8	3.0	9.4	30.5
Jiangxi	326.5	44	144.0	321.1	63	201.3	5.4	-57.3	-28.5
Shandong	15.4	91	13.9	27.7	132	36.6	-12.3	-22.7	-62.0
Henan	333.0	80	267.8	279.9	92	257.1	53.1	10.7	4.2
Hubei	263.6	88	231.7	284.5	105	297.6	-20.9	-65.9	-22.1
Hunan	380.7	75	287.2	459.1	100	457.4	-78.4	-170.2	-37.2
Guangdong	32.4	43	14.0	34.5	41	14.3	-2.1	-0.3	2.1
Guangxi	8.8	45	4.0	14.0	39	5.4	-5.2	-1.4	-25.9
Sichuan	646.2	180	1,163.2	600.3	174	1,043.2	45.9	120.0	11.5
Guizhou	284.5	95	269.1	272.0	65	177.1	12.5	92.0	51.9
Yunnan	118.2	71	83.5	127.2	43	54.9	-9.0	28.6	52.1
Tibet	17.4	124	21.6	15.5	103	15.9	1.9	5.7	35.8
Shaanxi	135.5	114	154.3	114.6	127	145.9	20.9	8.4	5.8
Gansu	55.7	117	65.3	52.1	83	43.5	3.6	21.8	50.1
Qinghai	112.6	121	136.2	102.9	108	111.3	9.7	24.9	22.4
Ningxia	2.1	55	1.2	0.8	29	0.2	1.3	1.0	500.0
Xinjiang	161.2	69	111.7	142.4	67	94.9	18.8	16.8	17.7

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Status of Sesame Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu;
Yields per mu: jin;
Output: 10,000 dan

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sow	Gross output	
								Absolute figures	%
National total	1,164.2	44	517.1	1,264.8	66	834.3	-100.7	-317.2	-38.0
Beijing	4.6	62	2.8	5.0	26	1.3	-0.4	1.5	115.4
Tianjin	8.1	71	5.7	9.6	28	2.7	-1.5	3.0	111.1
Hebei	78.5	82	64.6	59.6	58	34.8	18.9	29.8	85.6
Shanxi	8.3	54	4.4	6.0	45	2.7	2.3	1.7	63.0
Nei Monggol	-	-	-	-	-	-	-	-	-
Liaoning	18.4	44	8.1	14.9	36	5.4	3.5	2.7	50.0
Jilin	2.1	50	1.1	1.3	28	0.4	0.8	0.7	175.0
Heilongjiang	0.2	76	0.1	0.1	30	...	0.1	0.1	100.0
Shanghai	-	-	-	-	-	-	-	-	-
Jiangsu	6.9	34	2.4	16.2	60	9.5	-9.3	-7.1	-74.7
Zhejiang	9.0	71	6.4	5.7	102	7.3	3.3	-0.9	-12.3
Anhui	180.4	37	67.6	223.8	79	177.4	-43.4	-109.8	-61.9
Fujian	5.4	81	4.4	4.8	68	3.3	0.6	1.1	33.3
Jiangxi	88.0	34	30.2	103.9	73	76.0	-15.9	-45.8	-60.3
Shandong	41.1	81	33.2	35.1	62	21.9	6.0	11.3	51.6
Henan	419.8	38	159.9	456.9	46	211.2	-37.1	-51.3	-24.3
Hubei	170.3	36	61.5	192.3	109	209.0	-22.0	-147.5	-70.6
Hunan	16.3	48	7.9	23.8	92	22.0	-7.6	-14.1	-64.1
Guangdong	28.8	35	10.0	32.9	32	10.6	-4.1	-0.6	-5.7
Guangxi	24.9	36	9.0	22.5	34	7.6	2.4	1.4	18.4
Sichuan	31.4	87	27.2	31.3	66	20.8	0.1	6.4	30.8
Guizhou	1.3	63	0.8	0.9	41	0.4	0.4	0.4	100.0
Yunnan	2.3	74	1.7	1.2	33	0.4	1.1	1.3	325.0
Tibet	-	-	-	-	-	-	-	-	-
Shaanxi	15.5	41	6.4	14.5	56	8.1	1.0	-1.7	-21.0
Gansu	...	36	...	0.2	19	...	-0.2	...	...
Qinghai	-	-	-	-	-	-	-	-	-
Ningxia	-	-	-	-	-	-	-	-	-
Xinjiang	2.6	68	1.7	2.3	63	1.5	0.3	0.2	13.3

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Status of Sunflower Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu;
Yields per mu: jin;
Output: 10,000 dan

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	1,267.1	144	1,819.4	551.2	123	679.6	715.9	1,140.1	167.8
Beijing	2.6	121	3.2	2.8	114	3.2	-0.2	0	0
Tianjin	17.7	157	27.8	8.0	118	9.5	9.7	18.3	192.6
Hebei	49.4	110	54.3	10.2	133	13.5	39.2	40.8	302.2
Shanxi	48.8	129	62.9	12.2	120	14.7	36.6	48.2	327.9
Nei Monggol	244.4	135	329.9	85.8	119	102.1	158.6	228.0	223.7
Liaoning	254.4	103	262.8	132.4	100	132.6	122.0	130.2	98.2
Jilin	222.5	189	420.5	139.1	149	207.6	83.4	212.9	102.6
Heilongjiang	288.5	163	470.0	81.5	121	98.5	207.0	371.5	377.2
Shanghai	-	-	-	-	-	-	-	-	-
Jiangsu	-	-	-	-	-	-	-	-	-
Zhejiang	-	-	-	-	-	-	-	-	-
Anhui	0.1	101	0.1	-	-	-	0.1	0.1	0
Fujian	0.1	50	...	0.1	53	-	0	0.1	0
Jiangxi	-	-	-	-	-	-	-	-	-
Shandong	3.9	93	3.6	1.8	97	1.7	2.1	1.9	111.8
Henan	0.4	71	0.3	0.7	76	0.5	-0.3	-0.2	-40.0
Hubei	-	-	-	-	-	-	-	-	-
Hunan	1.9	86	1.7	2.3	74	1.7	-0.4	0	0
Guangdong	-	-	-	-	-	-	-	-	-
Guangxi	-	-	-	0.3	13	-	-0.3	-	-
Sichuan	2.6	122	3.1	2.5	107	2.6	0.1	0.5	19.2
Guizhou	14.8	88	12.9	10.0	94	9.4	4.8	3.5	37.2
Yunnan	1.8	194	3.5	1.2	167	2.0	0.6	1.5	75.0
Tibet	-	-	-	-	-	-	-	-	-
Shaanxi	-	-	-	-	-	-	-	-	-
Gansu	23.7	229	54.3	12.3	166	20.5	11.4	33.8	164.9
Qinghai	-	-	-	-	-	-	-	-	-
Ningxia	14.4	166	16.7	3.3	60	2.0	11.1	14.7	735.0
Xinjiang	75.1	122	91.8	44.7	128	57.5	30.4	34.3	59.7

Draft provided by Planning Bureau, Ministry of Agriculture

Status of Jute and Ambari Hemp Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu
Yields per mu: jin
Output: 10,000 dan

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	471.1	466	2,196.8	542.5	402	2,178.9	-71.4	17.9	0.8
Beijing	-	-	-	-	-	-	-	-	-
Tianjin	1.6	87	1.4	1.5	53	0.8	0.1	0.6	75.0
Hebei	17.1	113	19.4	17.9	96	17.1	-0.8	2.3	13.5
Shanxi	0.2	79	0.1	0.5	39	0.2	-0.3	-0.1	-50.0
Nei Monggol	-	-	-	-	-	-	-	-	-
Liaoning	3.8	128	4.8	9.6	164	15.7	-5.8	-10.9	-69.4
Jilin	-	-	-	-	-	-	-	-	-
Heilongjiang	0.1	94	0.1	-	-	-	0.1	0.1	-
Shanghai	-	-	-	-	-	-	-	-	-
Jiangsu	17.3	318	54.8	29.1	282	81.9	-11.8	-27.1	-33.1
Zhejiang	46.1	649	299.4	42.6	697	311.3	3.5	-12.0	-3.9
Anhui	55.1	592	326.1	46.4	594	275.5	8.7	50.6	18.4
Fujian	5.6	572	32.2	7.5	596	45.1	-1.9	-12.9	-28.0
Jiangxi	9.6	450	43.1	7.7	389	30.1	1.9	13.0	43.2
Shandong	96.2	298	286.3	120.5	248	299.4	-24.3	-13.1	-4.4
Henan	67.0	442	295.9	81.7	308	252.0	-14.7	43.9	17.4
Hubei	18.3	666	121.8	17.0	236	80.4	1.3	41.4	51.5
Hunan	11.4	731	83.2	14.1	716	100.7	-2.7	-17.4	-17.3
Guangdong	42.6	466	198.6	60.1	444	266.9	-17.5	-68.3	-25.6
Guangxi	41.4	495	205.0	44.1	478	210.9	-2.7	-5.9	-2.8
Sichuan	34.6	624	216.1	38.1	474	180.5	-3.5	35.6	19.7
Guizhou	2.8	269	7.5	2.4	242	5.9	0.4	1.6	27.1
Yunnan	-	-	-	-	-	-	-	-	-
Tibet	-	-	-	-	-	-	-	-	-
Shaanxi	0.3	333	1.0	1.6	271	4.4	-1.3	-3.4	-77.2
Gansu	-	-	-	-	-	-	-	-	-
Qinghai	-	-	-	-	-	-	-	-	-
Ningxia	-	-	-	-	-	-	-	-	-
Xinjiang	-	-	-	0.1	43	0.1	-0.1	-0.1	...

Draft provided by Planning Bureau, Ministry of Agriculture

Status of Tobacco Leaf Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu;
Yields per mu: jin;
Output: 10,000 jin

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	767.9	220	1,689.6	949.9	198	1,882.9	-182.0	-193.2	-10.3
Beijing	0.2	278	0.6	0.2	196	0.4	-	0.2	50.0
Tianjin	0.3	111	0.3	0.6	94	0.6	-0.3	-0.3	-50.0
Hebei	8.4	140	11.8	12.8	111	14.2	-4.4	-2.4	-16.9
Shanxi	1.3	149	2.0	1.6	138	2.2	-0.3	-0.2	-9.1
Nei Monggol	4.2	99	4.2	6.3	94	5.9	-2.1	-1.7	-28.8
Liaoning	14.4	327	47.2	17.7	274	48.4	-3.3	-1.2	-2.5
Jilin	11.6	266	30.8	12.1	282	34.0	-0.5	-3.2	-9.4
Heilongjiang	14.7	380	55.9	19.6	301	59.0	-4.9	-3.1	-5.3
Shanghai	-	-	-	-	-	-	-	-	-
Jiangsu	4.8	169	8.1	7.6	175	15.6	-2.8	-7.5	-48.1
Zhejiang	4.4	160	7.0	2.5	161	4.0	1.9	3.0	75.0
Anhui	25.1	203	50.9	31.0	146	45.4	-5.9	5.5	12.1
Fujian	19.0	157	29.3	22.1	160	35.4	-3.1	-6.1	-17.2
Jiangxi	6.4	116	7.4	8.9	113	10.0	-2.5	-2.6	-26.0
Shandong	111.9	292	327.0	134.0	245	328.4	-22.1	-1.4	-0.4
Henan	144.4	262	377.7	151.3	238	360.6	-6.9	17.1	4.7
Hubei	22.7	201	45.6	31.2	202	62.9	-8.5	-17.3	-27.5
Hunan	55.5	161	89.3	78.5	156	122.1	-23.0	-32.8	-26.9
Guangdong	39.0	140	54.7	59.8	134	80.0	-20.8	-25.3	-31.6
Guangxi	33.8	141	47.5	51.7	140	72.3	-17.9	-24.8	-34.3
Sichuan	56.6	187	105.9	70.2	164	115.2	-13.6	-9.3	-8.1
Guizhou	81.7	165	134.9	110.5	192	212.0	-28.8	-77.1	-36.4
Yunnan	92.4	234	221.0	103.0	218	224.6	-10.6	-3.5	-1.6
Tibet	-	-	-	-	-	-	-	-	-
Shaanxi	11.6	167	19.4	12.4	141	17.5	-0.8	1.9	10.9
Gansu	3.1	316	9.8	2.6	278	7.3	0.5	2.5	34.2
Qinghai	-	-	-	-	-	-	-	-	-
Ningxia	-	-	-	-	-	-	-	-	-
Xinjiang	0.4	299	1.3	1.7	299	4.9	-1.3	-3.6	-73.5

Draft provided by Planning Bureau, Ministry of Agriculture

Status of Flue-cured Tobacco Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu;
Yields per mu: jin;
Output: 10,000 dan

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	595.1	241	1,433.3	763.4	211	1,612.3	-168.3	-178.9	-11.1
Beijing	-	-	-	-	-	-	-	-	-
Tianjin	-	-	-	-	-	-	-	-	-
Hebei	1.6	197	3.1	4.7	81	3.8	-3.1	-0.7	-18.4
Shanxi	0.3	229	0.8	0.6	222	1.3	-0.3	-0.5	-38.5
Nei Monggol	0.2	96	0.2	0.2	202	0.4	-	-0.2	-50.0
Liaoning	13.1	342	44.7	16.0	287	45.9	-2.9	-1.2	-2.6
Jilin	9.0	285	25.6	10.0	278	27.9	-1.0	-2.3	-8.2
Heilongjiang	12.5	357	44.7	16.1	284	45.8	-3.6	-1.1	-2.4
Shanghai	-	-	-	-	-	-	-	-	-
Jiangsu	4.8	169	8.1	7.4	176	13.0	-2.6	-4.9	-37.7
Zhejiang	-	-	-	-	-	-	-	-	-
Anhui	23.3	207	48.3	29.3	146	42.7	-6.0	5.6	13.1
Fujian	16.2	158	25.9	18.7	166	31.1	-2.5	-5.2	-16.7
Jiangxi	1.7	113	1.9	3.2	109	3.5	-1.5	-1.6	-45.7
Shandong	106.0	296	313.9	125.6	250	313.4	-19.6	0.5	0.2
Henan	141.5	264	373.9	148.1	241	356.3	-6.6	17.6	4.9
Hubei	14.5	231	33.5	22.1	196	43.4	-7.6	-9.9	-22.8
Hunan	40.5	184	74.3	62.9	169	106.3	-22.4	-32.0	-30.1
Guangdong	16.8	125	20.9	33.8	126	42.8	-17.0	-21.9	-51.2
Guangxi	28.6	145	41.6	46.1	145	66.8	-17.5	-25.2	-37.7
Sichuan	22.0	187	41.1	32.4	172	55.9	-10.4	-14.8	-26.5
Guizhou	58.5	190	111.2	90.9	210	190.8	-32.4	-79.6	-41.7
Yunnan	79.0	262	207.5	90.0	235	211.9	-11.0	-4.3	-2.0
Tibet	-	-	-	-	-	-	-	-	-
Shaanxi	4.7	245	11.5	5.2	175	9.1	-0.5	2.4	26.4
Gansu	0.3	200	0.6	0.1	208	0.2	0.2	0.4	200.0
Qinghai	-	-	-	-	-	-	-	-	-
Ningxia	-	-	-	-	-	-	-	-	-
Xinjiang	-	-	-	-	-	-	-	-	-

Draft provided by Planning Bureau, Ministry of Agriculture

Status of Sugar Crop Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu;
Yields per mu: jin;
Output: 10,000 dan

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	11,383.4	4.209	58,225.4	1,255.1	3.922	49,226.6	128.2	8,998.8	18.3
Beijing	-	-	-	-	-	-	-	-	-
Tianjin	-	-	-	...	150	...	-	-	-
Hebei	15.1	1.251	188.9	17.5	900	157.8	-2.5	31.1	19.7
Shanxi	14.5	1.611	234.0	17.0	1,132	192.2	-2.5	41.8	21.7
Nei Monggol	83.9	1.935	1,623.2	67.7	1,447	979.4	16.2	643.8	65.7
Liaoning	16.6	1.534	254.5	14.2	994	141.3	2.4	113.2	80.1
Jilin	91.6	2.569	2,353.3	77.2	1,474	1,138.7	14.4	1,214.6	106.7
Heilongjiang	364.9	1.732	6,320.0	218.9	1,134	2,480.9	146.0	3,839.1	154.7
Shanghai	-	-	-	-	-	-	-	-	-
Jiangsu	9.2	1.117	102.6	10.1	1,227	123.7	-0.9	-21.1	-17.1
Zhejiang	16.1	7.275	1,176.0	16.1	7,044	1,329.9	0	-153.9	-11.6
Anhui	0.8	2.647	19.9	1.1	2,638	27.9	-0.3	-8.0	-28.7
Fujian	70.5	9.965	7,024.3	67.9	9,163	6,223.2	2.6	801.1	12.9
Jiangxi	28.6	6.000	1,714.7	28.2	5,607	1,581.6	0.4	133.1	8.4
Shandong	14.0	3.198	449.0	17.4	1,722	299.9	-3.4	149.1	49.7
Henan	4.1	3.441	139.9	2.7	3,926	106.0	1.4	33.9	32.0
Hubei	2.4	3.754	90.8	3.3	4,767	154.9	-0.9	-64.1	-41.4
Hunan	21.8	6.736	1,467.8	21.6	6,142	1,327.2	0.2	140.5	10.6
Guangdong	263.8	6.995	18,453.0	272.7	6,027	16,436.4	-8.9	2,016.6	12.3
Guangxi	167.6	4.796	8,038.5	191.6	3,977	7,620.0	-24.0	418.5	5.5
Sichuan	71.0	5.038	3,574.8	83.5	5,088	4,249.0	-12.5	-674.2	-15.9
Guizhou	5.8	3.800	222.0	8.1	3,368	272.6	-2.3	-50.6	-18.7
Yunnan	68.6	5.381	3,691.7	70.9	5,119	3,629.1	-2.3	62.6	1.7
Tibet	...	...	...	0.1	104	0.1	-0.1	0	0
Shaanxi	4.9	1.271	62.3	3.2	992	32.0	1.7	30.3	94.7
Gansu	6.9	1,829	126.2	8.4	1,055	88.4	-1.5	37.8	42.8
Qinghai	0.1	1,946	2.5	0.3	1,833	5.5	-0.2	-3.0	-54.5
Ningxia	4.2	2,987	125.0	2.4	1,465	35.7	1.8	89.3	250.1
Xinjiang	36.4	2,117	770.5	33.0	1,799	593.2	3.4	177.3	29.9

Draft provided by Planning Bureau, Ministry of Agriculture

Status of Sugar Cane Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu;
Yields per mu: jin;
Output: 10,000 dan

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	719.3	6.341	45,614.8	767.6	5.603	43,015.0	-48.4	2,599.7	6.0
Beijing	-	-	-	-	-	-	-	-	-
Tianjin	-	-	-	-	-	-	-	-	-
Hebei	-	-	-	-	-	-	-	-	-
Shanxi	-	-	-	-	-	-	-	-	-
Nei Monggol	-	-	-	-	-	-	-	-	-
Liaoning	-	-	-	-	-	-	-	-	-
Jilin	-	-	-	-	-	-	-	-	-
Heilongjiang	-	-	-	-	-	-	-	-	-
Shanghai	-	-	-	-	-	-	-	-	-
Jiangsu	0.5	4.142	21.5	1.2	4.235	50.4	-0.7	-28.9	-57.3
Zhejiang	16.1	7.275	1,176.0	16.1	7.044	1,329.9	-	-153.9	-11.6
Anhui	0.5	3.571	17.2	0.9	2.898	26.9	-0.5	-9.7	-36.1
Fujian	70.4	9.970	7,024.1	67.9	9.167	6,222.8	2.5	801.3	12.9
Jiangxi	28.6	6.000	1,714.7	28.2	5.607	1,581.6	0.4	133.1	8.4
Shandong	-	-	-	-	-	-	-	-	-
Henan	2.5	4.314	107.2	2.5	4.104	102.6	-	4.6	4.5
Hubei	2.2	3.988	89.3	3.0	5.086	152.0	-0.8	-62.7	-41.3
Hunan	21.8	6.735	1,467.6	21.5	6.203	1,326.5	0.3	141.0	10.6
Guangdong	263.8	6.995	18,453.0	272.7	6.027	16,436.4	-8.9	2,016.6	12.3
Guangxi	167.6	4.796	8,038.5	191.6	3.977	7,620.0	-24.0	418.5	5.5
Sichuan	69.8	5.112	3,566.5	82.6	5.139	4,244.6	-12.8	-678.1	-16.0
Guizhou	5.8	3.807	221.8	7.6	3.555	269.9	-1.8	-48.1	-17.8
Yunnan	68.4	5.393	3,688.9	70.9	5.118	3,628.9	-2.5	60.0	1.7
Tibet	-	-	-	-	-	-	-	-	-
Shaanxi	1.3	2.192	28.5	0.9	2.451	22.5	0.4	6.0	26.7
Gansu	-	-	-	-	-	-	-	-	-
Qinghai	-	-	-	-	-	-	-	-	-
Ningxia	-	-	-	-	-	-	-	-	-
Xinjiang	-	-	-	-	-	-	-	-	-

Draft provided by Planning Bureau, Ministry of Agriculture

Status of Sugar Beets Output in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu;
Yields per mu: jin;
Output: 10,000 dan

Area	1980			1979			Increase (+) or decrease (-) in 1980 from 1979		
	Area sown	Yields per mu	Gross output	Area sown	Yields per mu	Gross output	Area sown	Gross output	
								Absolute figures	%
National total	664.1	1.899	12,610.6	487.5	1,274	6,211.6	176.5	6,399.1	103.0
Beijing	-	-	-	-	-	-	-	-	-
Tianjin	-	-	-	...	150	...	...	...	-
Hebei	15.1	1,251	188.9	17.6	900	157.8	-2.5	31.1	19.7
Shanxi	14.5	1,611	234.0	17.0	1,132	192.2	-2.5	41.8	21.7
Nei Monggol	83.9	1,935	1,623.2	67.7	1,447	979.4	16.2	643.8	65.7
Liaoning	16.6	1,534	254.5	14.2	994	141.3	2.4	113.2	80.1
Jilin	91.6	2,569	2,353.3	77.2	1,474	1,138.7	14.4	1,214.6	106.7
Heilongjiang	364.9	1,732	6,320.0	218.9	1,134	2,480.9	146.0	3,839.1	154.7
Shanghai	-	-	-	-	-	-	-	-	-
Jiangsu	8.7	935	81.1	8.9	824	73.3	-0.2	7.8	10.6
Zhejiang	-	-	-	-	-	-	-	-	-
Anhui	0.3	1,013	2.7	0.1	777	1.0	0.2	1.7	170.0
Fujian	0.1	1,665	0.2	...	1,269	0.4	...	-0.2	-50.0
Jiangxi	-	-	-	-	-	-	-	-	-
Shandong	14.0	3,198	449.0	17.4	1,722	299.9	-3.4	149.1	49.7
Henan	1.6	2,069	32.7	0.2	1,700	3.4	1.4	29.3	861.8
Hubei	0.2	840	1.5	0.3	1,106	2.9	-0.1	-1.4	-48.3
Hunan	...	5,581	0.2	0.1	811	0.7	-0.1	0.5	-71.4
Guangdong	-	-	-	-	-	-	-	-	-
Guangxi	-	-	-	-	-	-	-	-	-
Sichuan	1.2	703	8.3	0.9	486	4.4	0.3	3.9	88.6
Guizhou	...	1,245	0.2	0.5	542	2.7	-0.5	-2.5	-92.6
Yunnan	0.2	1,400	2.8	...	1,181	0.2	0.2	2.6	1,300.0
Tibet	-	-	-	0.1	104	0.1	-0.1	0	0
Shaanxi	3.6	939	33.8	2.3	411	9.5	1.3	24.3	255.8
Gansu	6.9	1,829	126.2	8.4	1,055	88.4	-1.5	37.8	42.8
Qinghai	0.1	1,946	2.5	0.3	1,956	5.5	-0.2	-3.0	-54.5
Ningxia	4.2	2,987	125.0	2.4	1,465	35.7	1.8	89.3	250.1
Xinjiang	36.4	2,117	770.5	33.0	1,799	593.2	3.4	177.3	29.9

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National Increase and Decrease in Outputs
of Silkworm Cocoons, Tea and Fruit

	Units	1980	1979	Increase (+) or decrease (-) in 1980 from 1979	
				Absolute figures	Per- cent
1. Silkworm cocoon output	10,000	651.5	542.6	108.9	20.1
Including:	dan				
Mulberry silkworm cocoon	"	499.6	426.7	72.9	17.1
Tussah silkworm cocoons	"	151.3	114.8	36.5	31.8
2. Tea output	"	607.4	554.3	53.1	9.6
Unfired black tea	"	142.0	--	--	--
Unfired green tea	"	356.0	--	--	--
Oolong tea	"	17.7	--	--	--
Black tea	"	11.6	--	--	--
Other tea	"	80.1	--	--	--
3. Fruit output	"	13,585.1	14,029.1	-444.0	-3.2
Including:					
Bananas	"	122.6	148.9	-26.3	-17.7
Apples	"	4,726.2	5,737.6	-1,011.4	-17.6
Citrus fruit	"	1,425.2	1,163.3	261.9	22.5
Pears	"	2,932.6	2,875.9	56.7	2.0
Grapes	"	220.0	251.3	-31.3	-12.5
Pineapples	"	150.4	154.9	-4.5	-2.9
Red dates	"	743.2	677.8	65.4	9.6
Persimmons	"	1,120.8	1,013.0	107.8	10.6
Lichees	"	137.1	--	--	--
Longans	"	88.1	--	--	--
4. Mulberry grove area	10,000	430.5	408.6	21.9	5.4
Including:	mu				
Area added during the year	"	55.9	--	--	--
5. Oak slope area	"	1,283.2	1,178.1	105.1	8.9
Including:					
Area tended during the year	"	942.2	--	--	--
Area newly added during the year	"	44.1	--	--	--
6. Tea plantation area	"	1,561.2	1,575.9	-14.7	- .09
Including:					
Area picked this year	"	991.3			
Area newly added during the year	"	89.3			
7. Fruit orchard area	"	2,674.1	2,633.9	40.2	1.5
Including: Area newly added during the year	"	194.0			
Within the orchard area:					
Banana	"	7.9			
Including: Area newly added during the year	"	1.5			
Apple orchards	"	1,107.5			
Including: Area newly added during the year	"	54.0			
Citrus orchards	"	390.2			
Including: Area newly added during the year	"	61.3			
Pear orchards	"	449.0			
Including: Area newly added during the year	"	16.6			
Vineyards	"	47.4			
Including: Area newly added during the year	"	6.1			

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Status of Silkworm Cocoon Output in All
Provinces, Municipalities, and Autonomous Regions

Units: 10,000 dan

Area	Mulberry silkworm cocoons			Tussah silkworm cocoons		
	1980	1979	Increase (+) or decrease (-) in 1980 from 1979	1980	1979	Increase (+) or decrease (-) in 1980 from 1979
National total	499.6	426.7	73.0	151.3	114.8	36.4
Beijing	0.2	0.2	-	-	-	-
Tianjin	-	-	-	-	-	-
Hebei	1.5	1.4	0.1	0.6	0.4	0.2
Shanxi	3.8	3.0	0.8	-	-	-
Nei Monggol	0.1	-	0.1	0.8	1.0	-0.2
Liaoning	0.2	0.3	-0.1	113.3	85.5	27.8
Jilin	0.1	-	0.1	1.6	1.4	0.2
Heilongjiang	-	-	0.1	4.9	3.3	1.5
Shanghai	0.2	0.2	-	-	-	-
Jiangsu	76.4	64.6	11.8	-	-	-
Zhejiang	130.0	115.5	14.5	-	-	-
Anhui	9.0	7.3	1.7	-	-	-
Fujian	0.1	0.1	-	-	-	-
Jiangxi	0.4	0.3	0.1	-	-	-
Shandong	21.0	19.3	1.7	12.7	10.9	1.8
Henan	1.8	2.0	-0.2	13.3	8.1	5.2
Hubei	11.4	9.1	2.3	2.9	2.2	0.7
Hunan	4.2	3.3	0.9	-	-	-
Guangdong	43.3	41.5	1.8	-	0.1	-0.1
Guangxi	3.6	3.3	0.3	-	-	-
Sichuan	183.5	148.0	35.5	0.5	1.0	-0.5
Guizhou	0.3	0.3	-	0.6	0.8	-0.2
Yunnan	1.4	1.2	0.2	-	-	-
Tibet	-	-	-	-	-	-
Shaanxi	5.7	4.6	1.1	0.1	0.1	-
Gansu	-	-	-	-	-	-
Qinghai	-	-	-	-	-	-
Ningxia	-	-	-	-	-	-
Xinjiang	1.4	1.2	0.2	-	-	-

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Status of Tea and Fruit Output in All
Provinces, Municipalities, and Autonomous Regions

Units: 10,000 dan

Area	Tea			Fruit		
	1980	1979	Increase (+) or decrease (-) in 1980 from 1979	1980	1979	Increase (+) or decrease (-) in 1980 from 1979
National total	607.4	554.3	53.1	13,585.1	14,029.1	-444.0
Beijing	-	-	-	297.2	304.4	-7.2
Tianjin	-	-	-	67.2	53.4	13.8
Hebei	-	-	-	1,602.4	1,587.5	14.9
Shanxi	-	-	-	546.8	547.1	-0.3
Nei Monggol	-	-	-	62.0	59.0	3.0
Liaoning	-	-	-	1,565.4	2,048.0	-482.6
Jilin	-	-	-	89.1	89.5	-0.4
Heilongjiang	-	-	-	55.9	68.7	-12.8
Shanghai	-	-	-	73.9	68.9	5.0
Jiangsu	10.5	9.5	1.0	412.7	415.7	-3.0
Zhejiang	150.8	130.9	19.9	450.0	448.9	1.1
Anhui	64.0	59.9	4.1	200.5	208.7	-8.2
Fujian	51.7	45.6	6.1	253.2	247.9	5.3
Jiangxi	20.8	18.4	2.4	111.3	120.4	-9.1
Shandong	1.3	2.1	-0.8	3,029.4	3,530.8	-501.4
Henan	2.7	2.3	0.4	871.1	1,047.4	-176.3
Hubei	34.7	34.0	0.7	227.8	253.6	-25.8
Hunan	121.7	114.7	7.0	214.8	235.5	-20.7
Guangdong	23.7	21.1	2.7	644.7	571.1	73.6
Guangxi	14.5	14.1	0.4	418.1	312.1	106.0
Sichuan	58.2	56.7	1.5	863.5	561.2	302.3
Guizhou	14.1	12.5	1.6	99.4	93.5	5.9
Yunnan	35.7	29.7	6.0	237.7	194.9	42.8
Tibet	-	-	-	7.5	5.1	2.4
Shaanxi	2.9	2.7	0.2	559.9	474.5	85.4
Gansu	0.1	0.1	0.1	255.1	147.1	108.0
Qinghai	-	-	-	14.9	8.3	6.6
Ningxia	-	-	-	41.2	41.5	-0.3
Xinjiang	-	-	-	312.4	284.4	28.0

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Forestry

Area Afforested in All
Provinces, Municipalities, and Autonomous Regions

Area	Afforested area (10,000 mu)	Area	Afforested area (10,000 mu)
National total	6,828.0	Shandong	118.7
Beijing	36.5	Henan	240.0
Tianjin	1.9	Hubei	303.9
Hebei	278.9	Hunan	367.8
Shanxi	332.4	Guangdong	574.3
Nei Monggol	447.0	Guangxi	370.6
Liaoning	466.4	Sichuan	425.3
Jilin	256.3	Guizhou	335.0
Heilongjiang	347.2	Yunnan	277.7
Shanghai	0.2	Tibet	3.2
Jiangsu	42.7	Shaanxi	476.2
Zhejiang	206.1	Gansu	85.6
Anhui	156.3	Qinghai	11.3
Fujian	262.7	Ningxia	26.5
Jiangxi	338.8	Xinjiang	38.5

Output of Timber, Bamboo, and Sawed Lumber in All
Provinces, Municipalities, and Autonomous Regions

Area	Timber (10,000 cubic meters)	Bamboo (10,000 stalks)	Sawed lumber (10,000 cubic meters)	Area	Timber (10,000 cubic meters)	Bamboo (10,000 stalks)	Sawed lumber (10,000 cubic meters)
National total	5,359.45	9,618	1,368.71	Shandong	3.56	—	24.86
Beijing	—	—	54.70	Henan	15.51	24	25.07
Tianjin	—	—	26.42	Hubei	73.96	424	29.96
Hebei	13.75	—	26.44	Henan	238.34	1,591	12.10
Shanxi	14.89	—	6.79	Guangdong	341.26	566	36.61
Nei Monggol	414.55	—	47.45	Guangxi	178.52	1,041	11.60
Liaoning	50.90	—	66.86	Sichuan	415.68	98	92.78
Jilin	633.13	—	160.76	Guizhou	89.86	150	12.35
Heilongjiang	1,624.40	—	344.00	Yunnan	245.61	291	56.03
Shanghai	—	—	57.08	Tibet	23.60	—	10.56
Jiangsu	—	110	47.31	Shaanxi	55.14	—	20.20
Zhejiang	69.47	1,588	33.46	Gansu	61.03	—	18.47
Anhui	45.70	662	19.44	Qinghai	6.63	—	5.46
Fujian	383.12	1,110	86.62	Ningxia	0.66	—	—
Jiangxi	301.83	1,963	21.15	Xinjiang	58.75	—	14.18

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Output of Manmade Board in All
Provinces, Municipalities, and Autonomous Regions

Area	Plywood (10,000 cubic meters)	Fiber Board (10,000 cubic meters)	Particle board (10,000 cubic meters)	Area	Plywood (10,000 cubic meters)	Fiber board (10,000 cubic meters)	Particle board (10,000 cubic meters)
National total	32.99	50.62	7.82	Shandong	0.57	2.80	0.77
Beijing	2.61	2.19	1.20	Henan	0.01	1.03	0.02
Tianjin	1.01	1.28	—	Hubei	0.31	1.29	0.11
Hebei	0.88	0.92	0.15	Henan	0.48	1.34	0.05
Shanxi	—	1.29	—	Guangdong	1.39	3.39	0.31
Nei Monggol	0.11	1.55	—	Guangxi	0.49	0.78	0.25
Liaoning	0.49	3.48	0.41	Sichuan	0.54	1.25	1.06
Jilin	4.06	3.33	0.37	Guizhou	—	0.26	0.08
Heilongjiang	6.00	7.00	1.00	Yunnan	0.48	0.90	0.03
Shanghai	8.21	4.98	1.33	Tibet	—	—	—
Jiangsu	0.74	2.60	0.07	Shaanxi	0.30	1.16	0.05
Zhejiang	0.58	2.45	0.21	Gansu	0.07	0.24	0.02
Anhui	0.40	1.42	0.04	Qinghai	—	0.28	—
Fujian	1.54	2.20	0.26	Ningxia	—	0.08	0.02
Jiangxi	1.77	0.95	—	Xinjiang	—	0.21	0.01

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Output of Chemical Forest Products in All
Provinces, Municipalities, and Autonomous Regions

Area	Rosin (tons)	Tannin extract (tons)	Area	Rosin (tons)	Tannin extract (tons)
National total	327,283	36,314	Shandong	—	1,200
Beijing	—	—	Henan	—	1,598
Tianjin	—	—	Hubei	5	4,113
Hebei	—	1,293	Hunan	17,487	1,170
Shanxi	—	416	Guangdong	104,303	1,359
Nei Monggol	—	7,951	Guangxi	81,521	7,177
Liaoning	—	855	Sichuan	3,348	1,063
Jilin	863	—	Guizhou	1,992	527
Heilongjiang	—	—	Yunnan	6,531	1,427
Shanghai	—	—	Tibet	—	—
Jiangsu	—	—	Shaanxi	39	3,448
Zhejiang	4,433	1,713	Gansu	—	—
Anhui	2,031	402	Qinghai	—	—
Fujian	62,577	602	Ningxia	—	—
Jiangxi	42,153	—	Xinjiang	—	—

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Animal Husbandry Industry

National Increase or Decrease in
Animal Husbandry Industry Output

	Units	1980	1979	Increase (+) or decrease (-) in 1980 from 1979	
				Absolute figures	Per- cent
1. Output of livestock products					
(1) Output of meats					
1. Number of fattened hogs removed from inventory from year	10,000 head	19,860.7	18,767.5	1,093.2	5.8
Fattened hog removal from inventory rate	percent	62.1	62.3		
2. Beef cattle sold or slaughtered for per- sonal use during year	10,000 head	332.2	296.8	35.4	11.9
3. Mutton sheep sold or slaughtered for per- sonal use during year	"	4,241.9	3,543.4	698.5	19.7
4. Total output of pork, beef, and mutton	million	241.1	212.5	28.6	13.5
Output of pork	jin	226.8	200.3	26.5	13.2
Output of beef	"	5.4	4.6	0.8	17.4
Output of mutton	"	8.9	7.6	1.3	17.1
(2) Output of wool and goat hair	10,000 jin	35,145.6	30,633.9	4,511.7	14.7
Wool	jin	2,337.3	2,192.2	145.1	6.6
Goat hair	"	801.0	731.7	69.3	9.5
(3) Milk output					
Cow's milk	"	228,208.6	214,037.6	14,171.0	6.6
Goat's milk	"	45,168.1	47,313.5	-2,144.9	-4.5
2. Number of large livestock animals in inventory at year's end	10,000 head	9,524.6	9,459.1	65.5	0.7
Including: Draft animals used in farming	"	5,088.0	5,029.2	58.8	1.2
Fertile females	"	2,816.7			
Including: fertile cows	"	2,207.6			
1. Cattle	"	7,167.6	7,134.6	33.0	0.5
Oxen	"	5,251.5	5,241.2	10.3	0.2
Water buffaloes	"	1,852.0	1,837.7	14.3	0.8
Superior breed and improved breed milk cows	"	64.1	55.7	8.4	15.1
2. Horses	"	1,104.2	1,114.5	-10.3	-0.9
3. Donkeys	"	774.8	747.3	27.5	3.7
4. Mules	"	416.6	402.3	14.3	3.6
5. Camels	"	61.4	60.4	1.0	1.7
3. Number of hogs in inventory at year's end	"	30,543.1	31,970.5	-1,427.4	-4.5
Including: Hogs raised by all the people	"	493.5	598.8	-104.9	-17.5
Collectively raised hogs	"	2,245.7	3,891.3	-1,645.6	-42.3
Commune members raised hogs	"	27,634.4	27,256.6	377.8	1.4
Sows that can reproduce	"	2,162.0	2,594.8	-432.8	-16.7
4. Number of sheep and goats in inventory at year's end	"	18,731.1	18,314.2	416.9	2.3
1. Goats	"	8,068.4	8,057.4	11.0	0.1
2. Sheep	"	10,662.7	10,256.8	405.9	4.0
Including: Fine-haired sheep, semi-fine-haired sheep, and other improved variety sheep	"	3,642.9	3,368.0	274.9	8.2
Fine-haired sheep and im- proved fine-haired sheep	"	2,466.8	2,479.5	-12.7	-0.5
Semi-fine haired sheep and improved semi-haired sheep	"	1,176.1	888.5	287.6	32.4
3. Goats and sheep raised by all the people	"	927.5	--		
4. Collectively owned	"	9,154.6	10,178.3	-1,023.7	-10.1
5. Raised by commune members	"	8,600.5	7,109.9	1,490.6	21.0
5. Beekeeping	10,000 hives	588.8	529.8	59.0	11.1

Numbers of Hogs in Inventory at Year's End in All
Provinces, Municipalities, and Autonomous Regions

Units: 10,000 head

Area	Number of fattened hogs removed from inventory during year			Number of hogs in inventory at year's end			Number of sows that can repro- duce			Fat- tened hog remov- al from inven- tory rate %
	1980	1979	(1)	1980	1979	(1)	1980	1979	(1)	
National total	19,860.7	18,767.5	1,093.2	30,543.1	31,970.5	-1,427.4	2,162.0	2,594.8	-432.8	62.1
Beijing	229.0	199.6	29.4	232.5	246.8	-14.3	21.8	26.4	-4.6	92.8
Tianjin	89.4	77.4	12.0	100.9	100.8	0.1	6.4	9.7	-3.3	88.7
Hebei	716.9	676.7	40.2	1,293.4	1,352.2	-58.8	92.6	110.7	-18.1	53.0
Shanxi	277.3	261.5	15.8	531.2	558.6	-27.4	43.4	50.7	-7.3	49.6
Nei Monggol	257.0	256.5	0.5	518.5	554.6	-36.1	37.0	46.6	-9.6	46.3
Liaoning	656.3	592.9	63.4	1,057.5	1,188.9	-131.4	93.6	115.8	-22.2	55.2
Jilin	317.7	282.2	35.5	592.9	585.7	7.2	65.8	69.5	-3.7	54.2
Heilongjiang	446.0	472.1	-26.1	716.7	798.3	-81.6	73.9	97.4	-23.5	55.9
Shanghai	350.7	417.6	-66.9	260.9	342.4	-81.5	25.2	30.7	-5.5	102.4
Jiangsu	2,068.4	1,832.2	236.2	2,089.4	2,356.1	-266.7	165.9	220.6	-54.7	87.8
Zhejiang	1,423.8	1,271.7	152.1	1,403.8	1,550.0	-146.2	84.4	115.1	-30.7	91.9
Anhui	692.4	691.6	0.8	1,114.1	1,131.9	-17.8	58.5	62.8	-4.3	61.2
Fujian	401.5	373.8	27.7	687.0	698.8	-11.8	43.7	50.3	-6.6	57.5
Jiangxi	700.0	653.7	46.3	1,018.0	1,004.7	13.3	64.8	70.5	-5.7	69.7
Shandong	1,241.6	1,047.5	194.1	2,112.5	2,117.6	-5.1	133.4	160.6	-27.2	58.6
Henan	684.6	807.2	-122.6	1,474.2	1,592.3	-118.1	100.8	108.9	-8.1	43.0
Hubei	1,048.6	1,026.7	21.9	1,589.3	1,748.8	-159.5	106.7	127.4	-20.7	60.0
Henan	1,725.2	1,589.9	135.3	2,033.8	2,120.5	-86.7	120.2	161.5	-41.3	81.4
Guangdong	1,091.6	1,109.2	-17.6	1,914.6	2,009.5	-94.9	137.7	150.7	-13.0	54.3
Guangxi	564.7	683.2	-118.5	1,034.1	1,103.0	-68.9	59.4	57.0	2.4	51.2
Sichuan	3,127.3	2,736.0	391.3	5,146.3	5,092.2	54.1	347.0	431.1	-84.1	61.4
Guizhou	425.5	397.7	27.8	895.7	875.1	20.6	75.9	92.4	-16.5	48.6
Yunnan	524.0	520.9	3.1	1,313.0	1,309.8	3.2	116.6	116.6	—	40.0
Tibet	6.5	6.3	0.2	19.6	24.7	-5.1	5.2	4.5	0.7	26.3
Shaanxi	400.7	401.4	-0.7	760.5	822.3	-61.8	39.5	56.1	-16.6	48.7
Gansu	258.3	255.3	3.0	423.9	440.0	-16.1	26.6	27.5	-0.9	58.7
Qinghai	35.7	33.6	2.1	68.3	76.3	-8.0	5.1	6.6	-1.6	46.8
Ningxia	32.7	28.5	4.2	55.9	64.9	-9.0	2.7	4.5	-1.8	50.4
Xinjiang	67.3	64.6	2.7	84.6	103.7	-19.1	8.2	12.6	-4.4	64.9

Key: (1) Increase or decrease in 1980 from 1979.

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Numbers of Large Livestock Animals, Sheep, and Goats in Inventory at Year's
End in All Provinces, Municipalities, and Autonomous Regions

Area	Units: 10,000 head					
	Large livestock animals			Sheep and Goats		
	1980	1979	Increase or decrease in 1980 from 1979	1980	1979	Increase or decrease in 1980 from 1979
National total	9,524.6	9,459.1	65.5	18,731.1	18,314.2	416.9
Beijing	29.9	31.0	-1.1	56.0	57.3	-1.3
Tianjin	21.1	22.4	-1.3	36.3	26.6	9.7
Hebei	341.1	346.9	-5.8	814.8	728.8	86.0
Shanxi	224.0	222.5	1.5	909.9	920.8	-10.9
Nei Monggol	681.3	685.3	-4.0	2,553.4	2,632.3	-78.9
Liaoning	279.1	283.9	-4.8	194.7	167.1	27.6
Jilin	236.8	234.3	2.5	170.9	149.3	21.6
Heilongjiang	257.8	273.9	-16.1	303.0	245.7	57.3
Shanghai	6.0	6.1	-0.1	41.1	45.2	-4.1
Jiangsu	112.2	120.4	-8.2	545.8	615.7	-69.9
Zhejiang	83.0	84.8	-1.8	324.0	345.6	-21.6
Anhui	291.5	264.4	27.1	383.3	363.1	20.2
Fujian	99.4	99.5	-0.1	71.8	68.8	3.0
Jiangxi	209.3	212.1	-2.8	10.8	10.5	0.3
Shandong	343.5	344.1	-0.6	1,041.3	925.8	115.5
Henan	542.0	521.5	20.5	1,147.7	1,107.8	39.9
Hubei	320.0	336.8	-16.8	169.0	177.5	-8.5
Hunan	325.1	329.7	-4.6	84.9	87.7	-2.8
Guangdong	394.9	383.2	11.7	35.6	40.8	-5.2
Guangxi	429.4	433.2	-3.8	80.3	87.5	-7.2
Sichuan	954.1	947.7	6.4	1,088.6	1,092.1	-3.5
Guizhou	428.8	415.8	13.0	201.8	207.4	-5.6
Yunnan	678.9	654.8	24.1	746.8	702.1	44.7
Tibet	501.7	508.0	-6.3	1,825.3	1,816.5	8.8
Shaanxi	247.3	245.1	2.2	665.9	649.3	16.6
Gansu	392.4	372.6	19.8	1,187.5	1,112.6	74.9
Qinghai	553.9	556.5	-2.6	1,612.8	1,596.0	16.8
Ningxia	57.5	55.5	2.0	322.4	319.6	2.8
Xinjiang	482.6	467.1	15.5	2,105.4	2,014.7	90.7

Draft provided by Planning Bureau, Ministry of Agriculture

Meat Output in All Provinces, Municipalities, and Autonomous Regions

Area	(1)	(2)	(3)	Output of pork, beef, mutton and goat (10,000 jin)			
				Total	Pork	Beef	Mutton or goat
National total	19,860.7	332.2	4,241.9	2,410,831.1	2,268,140.4	53,740.0	88,950.7
Beijing	229.0	0.4	13.8	26,165.6	25,827.3	61.7	276.6
Tianjin	89.4	0.3	6.3	12,131.0	11,950.0	63.0	118.0
Hebei	716.9	5.4	174.9	84,229.7	80,797.8	809.0	2,622.9
Shanxi	277.3	2.1	100.4	34,672.2	32,377.9	314.5	1,979.8
Nei Monggol	257.0	50.6	768.6	47,608.3	23,131.0	9,104.5	15,372.8
Liaoning	656.3	5.3	21.0	85,880.2	84,516.8	926.4	437.0
Jilin	317.7	8.5	15.6	49,130.7	47,268.7	1,511.2	350.8
Heilongjiang	446.0	11.8	48.0	74,148.1	69,607.5	3,152.4	1,388.2
Shanghai	350.7	0.7	14.4	33,108.4	32,767.1	86.2	255.1
Jiangsu	2,068.4	4.5	354.0	213,858.5	207,541.2	829.8	5,487.5
Zhejiang	1,423.8	4.9	51.3	139,546.6	137,523.8	984.3	1,038.5
Anhui	692.4	7.8	228.1	103,684.5	98,859.0	1,192.5	3,633.0
Fujian	401.5	3.2	21.1	48,402.5	47,324.2	532.8	545.5
Jiangxi	700.0	11.0	4.1	74,117.6	72,450.1	1,573.0	94.5
Shandong	1,241.6	8.8	377.5	180,195.0	172,303.0	1,776.0	6,116.0
Henan	684.6	9.8	289.1	106,038.0	98,883.0	1,386.0	5,769.0
Hubei	1,048.6	7.5	58.7	110,801.0	108,248.0	973.3	1,579.7
Hunan	1,725.2	8.3	40.5	184,759.4	182,740.0	1,093.3	926.1
Guangdong	1,091.6	11.3	9.3	135,393.0	133,543.0	1,620.0	230.0
Guangxi	564.7	5.0	15.1	80,455.5	79,392.3	686.8	376.4
Sichuan	3,127.3	48.7	372.0	343,051.0	328,548.0	7,125.0	7,378.0
Guizhou	425.5	6.9	51.4	53,346.8	50,938.3	946.5	1,462.0
Yunnan	524.0	13.9	52.7	61,816.4	58,483.2	2,045.5	1,287.7
Tibet	6.5	23.3	225.0	9,503.1	474.4	4,181.1	4,847.6
Shaanxi	400.7	4.6	66.1	46,407.5	44,635.0	494.8	1,277.7
Gansu	258.3	7.3	94.1	27,904.3	24,527.0	933.8	2,443.5
Qinghai	35.7	35.6	248.1	16,850.2	3,927.0	4,984.0	7,939.2
Ningxia	32.7	0.5	42.9	3,793.8	2,971.3	58.0	764.5
Xinjiang	67.3	24.2	477.8	23,832.2	6,584.5	4,294.6	12,953.1

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- Key: (1) Numbers of fattened hogs removed from inventory during year (10,000 head)
 (2) Numbers of beef cattle sold or slaughtered for personal use during year (10,000 head)
 (3) Numbers of sheep and goats sold or slaughtered for personal use during year (10,000 head)

Commune- and Brigade-run Enterprises

National Gross Output Value and Ratio of
Commune-operated Industries by Sector

Kind of industry	Gross output value	
	100 million yuan	Percent
Grand total	286.04	100
(1) Metallurgical industries	6.58	2.30
(2) Electric power industries	1.73	0.60
(3) Coal and coking industries	13.18	4.61
(4) Petroleum industry	0.41	0.14
(5) Chemical industry	24.16	8.45
(6) Machine industry	83.28	29.12
(7) Construction materials industry	56.10	19.61
(8) Forestry industry	8.36	2.92
(9) Food industry	20.17	7.05
(10) Textile, sewing and leather industries	40.75	14.25
(11) Paper making industry and industries that produce products for cultural and educational use	10.28	3.59
(12) Other industries	21.04	7.36

Draft provided by General Management Bureau of People's Commune Enterprise,
Ministry of Agriculture

National Output of Major Products of Commune- and Brigade-run
Agricultural and Industrial Enterprises

Product	Accounting units	Output
Pig iron	10,000 tons	4.40
Iron ore	" "	576.62
Copper	" "	0.31
Unrefined copper	" "	0.15
Copper ore	" "	4.52
Lead	" "	0.71
Zinc	" "	0.07
Lead and Zinc ore	" "	22.12
Electric power	100 million kilowatt hours	33.96
Raw coal	10,000 tons	10,711
Sulfur	" "	10.99
Sulfuric iron ore	" "	128.46
Phosphatic iron ore	" "	279.40
Nitrogenous fertilizer	" "	2.77
Phosphate fertilizer	" "	86.13
Humace fertilizer	" "	524.82

[continued]

[continuation of p. 91 table]

Product	Accounting units	Output
Chemical fertilizer	10,000 tons	3.62
Metal-cutting machine tools	10,000	0.43
Farm machines	"	19.23
Automobile spare parts	10,000 yuan	29,838
Farm tractor spare parts	10,000	23,451
Tractor-drawn farm equipment	"	5.15
Iron farm implements	"	30,636
Wooden farm implements	"	5,390
Bamboo farm implements	"	4,927
Cement	10,000 tons	669.69
Limestone	" "	3,223.98
Bricks	100 million	1,104.27
Tiles	" "	201.48
Timber	10,000 cubic meters	439
Silk	10,000 tons	0.55
Silk textiles	10,000 meters	10,780
Machine-made paper and paper board	10,000 tons	80.46
Porcelain goods needed in daily life	10,000	94,791
Crude salt	10,000 tons	115.43
Sugar	" "	11.86
Edible vegetable oil	" "	84.94
Grain processing	100 million jin	1,003.38
Ginned cotton	10,000 dan	986.24
Bamboo and rattan, coir fiber, willow, and sunflower fiber manufactures	10,000 yuan	39,489
Arts and crafts products	" "	22,546
Grain	100 million jin	49.03
Tea	10,000 dan	203.46
Fruits	" "	4,074.45
Medicinal herbs	10,000 yuan	9,400
Numbers of live hogs in inventory	10,000 head	482.98
Numbers of fattened hogs removed from inventory	" "	270.63
Aquatic products	10,000 tons	73.72
Silkworm cocoons	10,000 dan	63.28

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Ministry of Agriculture.

Aquatic Products

Output of Freshwater Products in All Provinces, Municipalities, and Autonomous Regions

				Units: tons			
Area	Output of freshwater products			Area	Output of freshwater products		
	1980	1979	(1)		1980	1979	(1)
National total	1,239,947	1,115,875	11.1	Shandong	48,737	46,366	5.1
Beijing	4,037	2,761	46.2	Henan	29,135	22,960	26.9
Tianjin	7,385	6,503	13.6	Hebei	135,662	120,895	12.2
Hebei	11,130	11,201	-0.6	Hunan	159,131	130,305	22.1
Shanxi	796	579	37.5	Guangdong	220,648	209,965	5.1
Nei Monggol	11,356	11,605	-2.2	Guangxi	32,085	32,426	-1.1
Liaoning	8,436	7,089	19.0	Sichuan	52,363	47,367	10.6
Jilin	8,435	8,087	4.3	Guizhou	5,400	3,751	44.0
Heilongjiang	20,171	17,149	17.6	Yunnan	15,155	14,027	8.0
Shanghai	18,888	18,639	1.3	Tibet			
Jiangsu	205,616	190,901	7.7	Shaanxi	2,518	2,501	0.7
Zhejiang	67,095	63,563	5.6	Gansu	212	214	-0.9
Anhui	72,807	55,800	30.5	Qinghai	3,200	3,333	-4.0
Fujian	16,821	14,070	19.6	Ningxia	339	412	-17.7
Jiangxi	75,510	67,299	12.2	Xinjiang	6,879	6,107	12.6

Draft provided by Planning and Finance Bureau, General Bureau of Aquatic Products

Key: (1) Percent increase or decrease in 1980 from 1979

Output of Marine Products in All Provinces, Municipalities, and Autonomous Regions

				Units: tons			
Area	Output of marine products			Area	Output of marine products		
	1980	1979	(1)		1980	1979	(1)
National total	3,257,038	3,188,797	2.1	Shandong	570,854	581,165	-1.8
Beijing				Henan			
Tianjin	24,722	26,287	-6.0	Hebei			
Hebei	86,558	83,729	3.4	Hunan			
Shanxi				Guangdong	471,572	422,378	11.7
Nei Monggol				Guangxi	79,264	63,385	25.1
Liaoning	412,228	432,743	-4.7	Sichuan			
Jilin				Guizhou			
Heilongjiang				Yunnan			
Shanghai	185,570	194,293	-4.5	Tibet			
Jiangsu	221,465	198,285	11.7	Shaanxi			
Zhejiang	750,317	747,705	0.4	Gansu			
Anhui				Qinghai			
Fujian	454,488	438,827	3.6	Ningxia			
Jiangxi				Xinjiang			

Draft provided by Planning and Finance Bureau, General Bureau of Aquatic Products

Key: (1) Percent increase or decrease in 1980 from 1979

Output Value of State Farm and Land Reclamation in Industry and Agriculture
in All Provinces, Municipalities, and Autonomous Regions

Units: 10,000 yuan

Area	Gross out- put value of indus- try and agriculture	1. Indus- trial output value	2. Agricul- tural output value	Area	Gross out- put value of indus- try and agriculture	1. Indus- trial output value	2. Agricul- tural output value
National total	860.289	382.045	478.244	Hebei	42.905	18.830	24.075
Beijing	35.809	17.630	18.179	Hunan	26.566	11.187	15.379
Tianjin	6.908	4.801	2.107	Guangdong	85.045	15.347	69.698
Hebei	25.148	14.135	11.013	Guangxi	12.633	6.506	6.127
Shanxi	2.064	690	1.374	Sichuan	5.192	2.290	2.902
Nei Monggol	20.890	4.538	16.352	Guizhou	1.403	505	898
Liaoning	41.843	11.700	30.143	Yunnan	18.505	6.036	12.469
Jilin	12.465	3.527	8.938	Tibet	3.773	2.125	1.648
Heilongjiang	179.032	64.334	114.698	Shaanxi	6.108	4.121	1.987
Shanghai	60.786	53.917	6.869	Gansu	4.450	1.959	2.491
Jiangsu	37.572	19.319	18.253	Qinghai (Land)	270	207	63
Zhejiang	11.353	7.057	4.296	Reclamation)	1.263	43	1,220
Anhui	8.074	3.117	4.957	Qinghai	5.707	2.928	2,779
Fujian	11.343	4.102	7.241	(Livestock)	133.613	71.096	62.517
Jiangxi	41.254	26.849	14.405	Ningxia	2.844		2.844
Shandong	1.780	314	1.466	Xinjiang (Land)	5.606		5.606
Henan	7.745	2.836	4.909	Reclamation)	341		341
				Xinjiang			
				(Agriculture)			
				Xinjiang			
				(Livestock)			
				(1)			

Draft provided by Planning Bureau, Ministry of State Farms and Land
Reclamation

Key: (1) Tropical crops in two research institutes [3583 0155 0357 7108]

State Farm and Land Reclamation Cultivated Land Area in All
Provinces, Municipalities, and Autonomous Regions

Units: 10,000 mu

Area	Cultivated Land Area	Area	Cultivated Land Area
National total	6,684.25	Guangdong	85.37
Beijing	69.50	Guangxi	30.48
Tianjin	12.81	Sichuan	5.88
Hebei	155.68	Guizhou	3.58
Shanxi	13.05	Yunnan	22.68
Nei Monggol	614.74	Tibet	22.81
Liaoning	167.10	Shaanxi	33.17
Jilin	93.90	Gansu	58.64
Heilongjiang	2,922.60	Qinghai (Land reclamation)	7.56
Shanghai	28.32	Qinghai (Livestock)	24.22
Jiangsu	113.16	Ningxia	49.70
Zhejiang	16.99	Xinjiang (Land reclamation)	1,358.09
Anhui	58.45	Xinjiang (Agriculture)	93.28
Fujian	32.90	Xinjiang (Livestock)	108.47
Jiangxi	66.50	Tropical crops in two research institutes	0.30
Shandong	23.28		
Henan	41.31		
Hebei	247.27		
Hunan	102.46		

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Reclamation

Units: Area: 10,000 mu
Yields per mu: jin
Gross output: 10,000 jin

Status of Grain and Pulse Crop Output on State Farm and Land Reclamation Farms in All Provinces, Municipalities, and Autonomous Regions

Area	Grain and pulse crops			Including: Soybeans		
	Area	Yields per mu	Gross output	Area	Yields per mu	Gross output
National total	5,361.97	286	1,533,130.18	1,047.92	162	170,246.09
Beijing	79.40	495	39,300.60	1.00	233	227.40
Tianjin	9.52	327	3,122.31	0.50	85	42.18
Hebei	126.91	434	55,077.18	3.82	117	446.56
Shanxi	5.24	169	886.58	0.65	39	25.34
Nei Monggol	381.29	139	52,816.58	23.88	116	2,762.86
Liaoning	133.90	741	99,251.00	9.30	133	1,238.00
Jilin	72.30	319	23,072.70	6.70	130	844.90
Heilongjiang	2,793.20	241	674,430.00	949.70	168	159,148.00
Shanghai	28.83	472	13,612.70	0.56	296	165.60
Jiangsu	88.41	453	40,017.00	9.12	148	1,348.26
Zhejiang	18.68	470	8,781.74	0.49	130	63.81
Anhui	65.36	253	16,565.00	10.26	61	627.00
Fujian	50.56	510	25,800.45	1.07	121	129.94
Jiangxi	92.36	459	42,358.60	1.92	103	196.75
Shandong	21.02	204	4,296.62	3.22	111	356.18
Henan	42.99	337	14,483.71	5.62	117	658.50
Hubei	270.20	359	97,088.90	1.30	27	36.00
Hunan	92.75	450	41,709.74	1.38	74	102.75
Guangdong	76.74	324	24,899.25	1.84	74	136.52
Guangxi	15.44	350	5,411.08	0.47	54	25.14
Sichuan	1.33	231	306.46	0.05	85	4.15
Guizhou	1.61	362	611.89	0.05	95	4.79
Yunnan	14.16	403	5,703.74	1.97	78	153.29
Tibet	16.08	316	5,109.50			
Shaanxi	26.46	220	5,810.08	1.24	59	73.21
Gansu	36.40	245	8,927.74	0.27	87	23.57
Qinghai (Land reclamation)	2.00	111	221.27			
Qinghai (Livestock)	3.38	148	498.59			
Ningxia	27.07	452	12,233.00	0.26	95	24.00
Xinjiang (Land reclamation)	653.45	282	184,516.18	10.50	124	1,300.77
Xinjiang (Agriculture)	44.15	273	12,043.00	0.18	88	15.90
Xinjiang (Livestock)	70.61	199	14,083.06	0.60	108	64.72
Tropical crops in two research institutes	0.17	499	83.93			

Draft provided by Planning Bureau, Ministry of State Farms and Land Reclamation

Status of Cotton Output on State Farm and Land Reclamation Farms in All
Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu
Yields per mu: jin
Gross output: dan

Area	Cotton		
	Area	Yields per mu	Gross output
National total	244.91	72	1,771,119
Beijing	0.30	39	1,080
Tianjin			
Hebei	1.91	51	9,720
Shanxi	0.06	28	162
Nei Monggol		120	6
Liaoning			
Jilin			
Heilongjiang			
Shanghai	8.20	76	62,017
Jiangsu	31.90	70	224,861
Zhejiang	4.28	104	44,638
Anhui	5.90	51	29,831
Fujian			
Jiangxi	1.99	90	17,900
Shandong	0.28	36	984
Henan	1.60	122	19,594
Hubei	61.90	76	467,498
Hunan	24.96	72	178,477
Guangdong			
Guangxi			
Sichuan			14
Guizhou			
Yunnan			
Tibet			
Shaanxi	2.33	48	11,176
Gansu	0.01	7	7
Qinghai (Land reclamation)			
Qinghai (Livestock)			
Ningxia			
Xinjiang (Land reclamation)	97.63	71	695,785
Xinjiang (Agriculture)	1.41	43	6,030
Xinjiang (Livestock)	0.25	54	1,339
Tropical crops in two research institutes			

Draft provided by Planning, Ministry of State Farms and Land Reclamation

Status of Oil-Bearing Crop Output on State Farm and Land Reclamation Farms in
All Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu;
Yields per mu: jin;
Gross output: dan

Area	Oil-bearing crops		
	Area	Yields per mu	Gross output
National total	337.27	73	2,455,220
Beijing	3.10	86	26,430
Tianjin	0.19	79	1,514
Hebei	18.10	68	123,045
Shanxi	1.30	62	8,058
Nei Monggol	34.52	49	169,434
Liaoning	4.50	106	47,822
Jilin	3.30	118	38,789
Heilongjiang	11.50	72	82,501
Shanghai	1.30	138	17,883
Jiangsu	1.15	92	10,664
Zhejiang	2.53	148	37,354
Anhui	7.26	25	18,257
Fujian	3.56	157	55,761
Jiangxi	12.36	57	70,285
Shandong	3.11	75	23,428
Henan	2.52	72	18,257
Hubei	26.40	29	75,355
Hunan	10.68	54	57,340
Guangdong	19.61	94	186,129
Guangxi	2.70	90	24,200
Sichuan	0.81	72	5,856
Guizhou	0.46	76	3,583
Yunnan	4.04	106	42,973
Tibet	3.41	40	13,688
Shaanxi	2.02	68	13,783
Gansu	4.10	77	31,691
Qinghai (Land reclamation)	0.85	19	1,574
Qinghai (Livestock)	10.13	124	125,647
Ningxia	12.03	115	138,400
Xinjiang (Land reclamation)	104.84	77	809,962
Xinjiang (Agriculture)	12.09	62	74,327
Xinjiang (Livestock)	12.72	79	100,525
Tropical crops in two research institutes	0.08	88	705

Draft provided by Planning Bureau, Ministry of State Farms and Land
Reclamation

Status of Sugar, Rubber, Fruit, and Ginseng Output on State Farm and Land Reclamation Farms in All Provinces, Municipalities, and Autonomous Regions

Units: Area: 10,000 mu

Yields per mu: jin

Gross output: dan

Area	Sugar crops			Gross output of rubber (tons)	Total output of fruits (dan)	Gross output of ginseng (jin)	Sisal hemp (fibers) (tons)
	Land area	Yields per mu	Gross output				
National total	100.28	2.914	29,217.020	103,142.40	5,318,466	1,350,911	11.856
Beijing					471.970		
Tianjin					63.960		
Hebei					58.156		
Shanxi		232	70		116.279		
Nei Monggol	2.46	1.477	363.381		50.489		
Liaoning	0.20	2.357	47.148		1,116.500	119.988	
Jilin	2.00	1.873	374.694		257.688	1,219.249	
Heilongjiang	34.10	1.164	3,970.340		97.382	11.670	
Shanghai					132.082		
Jiangsu	0.31	1.587	49.774		87.680		
Zhejiang	0.53	8.383	446.493		85.025		
Anhui	0.01	2.074	2.655		177.344		
Fujian	2.08	6.707	1,392.927	359.52	147.913		515
Jiangxi	0.19	3.056	58.805		52.092		
Shandong		5.783	3.990		14.449		
Henan	0.05	1.062	5.310		374.693		
Hubei	1.42	3.949	561.350		257.608		
Hunan	10.26	7.800	8,002.652		133.450	4	
Guangdong	7.79	4.463	3,475.589	82,453.00	104.265		9.654
Guangxi	6.80	2.896	1,969.335	1,897.13	507.276		1.687
Sichuan	0.03	5.736	19.158		276.840		
Guizhou	0.11	3.321	36.527		5.283		
Yunnan	3.79	6.029	2,282.495	17,992.00	10,667		
Tibet					25,416		
Shaanxi		1.500	75		55.893		
Gansu	0.02	182	364		18,500		
Qinghai (Land reclamation)							
Qinghai (Livestock)							
Ningxia	0.48	1.394	66.100		52,100		
Xinjiang (Land reclamation)	27.16	2.210	6,001.178		510.146		
Xinjiang (Agriculture)	0.30	2.054	61.624		36,253		
Xinjiang (Livestock)	0.18	1.236	22.244		20,552		
Tropical crops in two research institutes	0.01	2.980	2,742	440.75	515		

Draft provided by Planning Bureau, Ministry of State Farms and Land Reclamation

Status of Output of Animal Husbandry and Aquatic Product Output on State Farm and Land Reclamation Farms in All Provinces, Municipalities, and Autonomous Regions

Area	(1)	(2)	(3)	Gross output of meat (10,000 jin)	Gross output of milk (10,000 jin)	Gross output of eggs (10,000 jin)	Gross output of pilose antlers (jin)	Gross output of aquatic products (tons)
National total	398.86	201.78	703.74	47,415.37	64,967.01	4,833.20	63,907.0	30,330
Beijing	20.14	3.45	2.39	2,640.80	12,877.70	198.40	611.5	736
Tianjin	0.46	0.83	0.19	174.45	4,326.95	123.25		
Hebei	8.45	3.07	8.07	1,149.95	1,813.80	120.39	60.0	503
Shanxi	0.15	0.78	0.27	21.57	2,325.63	1.31		
Nei Monggol	14.13	28.57	87.22	2,181.60	3,456.00	381.11	858.0	956
Liaoning	10.16	6.34	2.16	1,400.00	5,981.10	404.20	8,039.8	8,189
Jilin	7.31	4.05	4.18	638.94	623.90	33.40	37,578.7	7
Heilongjiang	65.90	10.68	15.34	7,250.00	3,952.00	216.00	11,636.0	1,817
Shanghai	8.62	1.62	0.03	2,691.84	10,246.00	346.85	27.4	1,027
Jiangsu	10.48	0.91	1.68	1,510.94	8.36	147.48		682
Zhejiang	5.03	0.55	0.07	709.88	2,254.94	54.02		209
Anhui	4.00	0.61	0.53	416.74	347.44	57.22		431
Fujian	12.24	2.11	0.37	860.82	189.41	81.54	4.0	957
Jiangxi	20.99	3.28	0.75	1,728.18	266.13	188.18	86.0	1,340
Shandong	0.92	0.18	0.73	141.02	46.94	17.52	41.2	35
Henan	2.74	1.07	0.83	240.68	204.35	15.82	131.0	966
Hubei	46.14	7.22	1.43	4,020.58	1,289.60	1,049.18	326.0	4,967
Hunan	30.97	2.79	0.13	3,181.87	579.03	752.24	136.0	3,588
Guangdong	47.41	17.60	0.93	4,147.16	477.87	91.37		465
Guangxi	9.96	1.83	0.28	926.65	124.38	28.88		138
Sichuan	1.33	16.28	15.86	517.28	5,420.37	1.11	28.0	91
Guizhou	0.82	0.41	0.20	77.93	869.74	0.02		21
Yunnan	11.96	2.56	0.15	878.47		7.03		376
Tibet	1.24	3.85	11.57	102.12	7.70	5.00		
Shaanxi	0.78	0.55	0.53	91.66	1,888.55	9.06	131.0	36
Gansu	1.96	1.60	7.57	203.07	66.75	3.87	85.0	21
Qinghai (Land reclamation)	0.10	0.21	0.91	14.35	5.39	0.04		
Qinghai (Livestock)	0.36	5.53	24.39	212.21	632.85	1.36	984.0	
Ningxia	3.45	0.55	6.30	432.30	454.50	8.90	125.0	51
Xinjiang (Land reclamation)	47.32	27.10	192.67	5,881.24	2,821.10	488.45	2,815.0	2,715
Xinjiang (Agriculture)	1.87	3.78	21.49	262.28	67.05		30.4	
Xinjiang (Livestock)	1.18	41.69	294.52	2,671.77	1,339.00		173.0	6
Tropical crops in two research institutes	0.29	0.13		37.02	2.48			

Draft provided by Planning Bureau, Ministry of State Farms and Land Reclamation

- Key: (1) Number of hogs in inventory at year's end (10,000 head)
 (2) Numbers of large livestock animals in inventory at year's end (10,000 head)
 (3) Numbers of sheep and goats in inventory at year's end (10,000 head)

Number of Farm Machines Owned and Level of Agricultural Modernization in State Farm and Land Reclamation Farms in All Provinces, Municipalities and Autonomous Regions

Area	Large and medium size tractors		Power machines for drainage, irrigation		Harvesting combines	
	Numbers	Horsepower (10,000)	Numbers	Horsepower (10,000)	Numbers	Horsepower (10,000)
National total	52,214	277.93	71,456	152.96	16,208	94.90
Beijing	953	5.22	9,671	12.38	236	0.73
Tianjin	219	1.07	669	1.64	38	0.17
Hebei	1,164	6.11	7,282	17.06	211	1.26
Shanxi	160	0.86	617	0.63	14	0.15
Nei Monggol	3,390	19.38	3,360	5.19	1,416	8.71
Liaoning	1,782	9.51	3,983	11.39	27	0.21
Jilin	884	4.65	1,582	1.60	63	0.37
Heilongjiang	19,051	111.52	4,871	14.79	9,804	60.16
Shanghai	848	3.92	1,210	1.65	146	0.12
Jiangsu	974	5.02	2,166	6.65	261	1.78
Zhejiang	358	1.35	1,179	1.41	51	0.16
Anhui	694	3.72	1,423	5.49	219	1.01
Fujian	383	1.49	2,423	1.82	155	0.06
Jiangxi	1,113	3.67	3,257	9.10	43	0.26
Shandong	309	1.69	368	0.69	116	0.62
Henan	702	3.87	3,462	3.13	243	1.32
Hebei	2,975	12.00	5,387	21.35	393	1.80
Hunan	1,222	5.99	5,697	9.81	137	0.04
Guangdong	2,554	12.08	1,223	2.62	98	0.19
Guangxi	1,051	4.94	817	2.49	135	
Sichuan	112	0.43	345	0.69	6	0.04
Guizhou	156	0.61	208	0.28	1	0.01
Yunnan	1,278	6.86	731	0.84	47	0.03
Tibet	210	1.22	238	0.27	62	0.45
Shaanxi	292	1.62	690	0.96	118	0.59
Gansu	464	2.84	891	2.00	142	0.75
Qinghai (Land reclamation)	95	0.52	96	0.08	5	0.03
Qinghai (Livestock)	125	0.78	5	0.01	68	0.35
Ningxia	456	2.59	409	2.06	108	0.54
Xinjiang (Land reclamation)	6,878	35.51	6,021	12.93	1,567	11.53
Xinjiang (Agriculture)	491	2.38	530	0.60	96	0.49
Xinjiang (Livestock)	840	4.35	626	1.30	179	0.96
Tropical crops in two research institutes	31	0.16	19	0.05	3	0.01

Number of Farm Machines Owned and Level of Agricultural Modernization in State Farms and Land Reclamation Farms (2)

Area	Motor vehicles		Including: trucks		Machine-plowed area (10,000 mu)	Machine-sown area (10,000 mu)	Machine-harvested area (10,000 mu)	Farm use of electricity (10,000 kilowatt)	Farm use of chemical fertilizer (10,000 tons)	Chemical fertilizer per mu of farm crops (jin)	Effectively irrigated area (10,000 mu)	Chemically de-weeded area (10,000 mu)
	Numbers	Horse-power (10,000)	Horse-power (10,000)	Numbers								
National total	20,000	186,80	18,173	164.32	5,732.86	4,940.31	3,744.54	183,704.98	146.11	38	2,407.35	1,965.12
Beijing	841	6.91	696	5.83	62.60	57.10	19.80	8,375.90	6.42	119	63.50	12.10
Tianjin	100	0.84	100	0.84	9.84	9.98	4.69	1,741.58	0.24	29	10.31	1.50
Hebei	269	2.43	269	2.43	133.31	99.87	37.56	11,640.00	5.08	63	61.88	37.72
Shanxi	65	0.58	65	0.58	11.40	8.32	2.55	412.00	0.13	20	3.65	0.14
Nei Monggol	1,131	10.70	1,102	10.40	419.91	383.03	308.97	4,712.37	2.16	10	70.65	128.20
Liaoning	614	5.51	549	5.21	124.70	31.90	0.03	15,474.00	10.32	123	98.10	7.60
Jilin	312	2.95	287	2.74	56.10	29.70	8.00	3,999.90	1.75	38	28.50	17.80
Heilongjiang	5,224	56.94	4,370	47.63	2,910.00	2,814.00	2,454.00	51,925.00	44.35	29	161.00	1,430.00
Shanghai	943	7.39	850	6.86	22.37	10.58	17.05	10,362.00	2.71	104	26.60	19.05
Jiangsu	263	2.18	263	2.18	98.60	91.61	54.83	4,400.00	6.68	75	86.59	42.48
Zhejiang	196	1.82	177	1.65	11.17	2.17	2.68	1,637.00	2.04	101	12.60	3.78
Anhui	272	2.78	269	2.76	51.46	14.27	36.20	2,692.00	2.12	42	31.24	22.98
Fujian	211	1.76	210	1.75	14.27	0.01	0.39	1,583.00	4.16	97	26.78	2.25
Jiangxi	606	5.18	604	3.59	36.78	3.27	3.76	6,407.00	2.97	47	45.34	4.73
Shandong	101	0.04	99	0.80	22.85	29.03	14.70	509.81	0.62	49	4.78	0.37
Henan	288	2.61	265	2.43	36.21	40.16	27.68	964.40	2.49	79	18.49	3.29
Hebei	749	6.56	680	6.04	172.80	89.80	57.70	9,137.90	9.75	43	172.80	53.70
Hunan	331	2.95	331	2.95	65.70	12.50	7.35	9,103.38	4.98	48	73.27	25.64
Guangdong	2,212	19.60	2,198	14.27	43.58	0.51	4.25	3,153.00	9.73	50	23.27	15.80
Guangxi	400	3.68	400	3.68	22.86	2.82	5.94	3,190.00	2.72	72	11.10	8.03
Sichuan	154	1.17	136	1.12	3.08	2.67	1.97	813.49	0.19	11	0.36	0.09
Guizhou	103	0.92	96	0.87	1.34	0.49	6.59	346.79	0.22	36	0.37	0.09
Yunnan	1,085	9.01	832	6.86	11.96	16.56	7.06	3,481.00	1.45	57	7.84	6.95
Tibet	130	1.24	130	1.24	19.80	33.20	23.85	175.16	0.20	18	19.00	2.42
Shaanxi	112	1.03	112	1.03	31.22	39.20	33.73	750.58	0.69	35	8.08	2.42
Gansu	205	1.79	172	1.53	48.89	39.20	33.73	2,577.00	1.73	73	50.32	10.73
Qinghai (Land reclamation)	47	0.41	47	0.41	2.99	2.91	0.46	158.74	0.08	55	7.04	0.54
Qinghai (Livestock)	119	1.11	119	1.11	14.08	13.86	10.94	111.47	0.19	26	0.99	2.00
Ningxia	147	1.37	147	1.37	40.60	41.70	17.00	2,540.00	1.92	80	41.60	8.90
Xinjiang (Land reclamation)	2,437	22.22	2,275	21.13	1,086.28	906.96	514.27	20,539.91	17.36	29	1,115.09	92.24
Xinjiang (Agriculture)	83	0.75	83	0.75	69.53	48.14	20.66	306.93	0.36	11	45.22	3.97
Xinjiang (Livestock)	239	2.27	229	2.18	76.31	66.45	39.56	395.47	0.26	4	80.91	0.26
Tropical crops in two research institutes	11	0.10	11	0.10	0.27	0.03	0.05	88.20	0.04	63	0.08	0.03

Draft provided by Planning Bureau, Ministry of State Farms and Land Reclamation

Farm Machines

Total Motive Power of Farm Machines in All Provinces, Municipalities, and Autonomous Regions

Area	Total farm machinery motive power (10,000 horsepower)	Total tractor horsepower (10,000 horsepower)	Area	Total farm machinery motive power (10,000 horsepower)	Total tractor horsepower (10,000 horsepower)
National total	20,048.6	5,417.8	Shandong	1,865.1	505.1
Beijing	319.0	68.3	Henan	1,602.0	446.2
Tianjin	290.2	59.9	Hubei	1,051.1	240.2
Hebei	1,705.9	331.0	Hunan	797.5	134.5
Shanxi	737.5	171.7	Guangdong	905.6	223.5
Nei Monggol	572.1	191.6	Guangxi	531.0	213.8
Liaoning	773.3	243.7	Sichuan	891.5	201.9
Jilin	499.7	160.3	Guizhou	179.9	37.0
Heilongjiang	964.4	408.9	Yunnan	437.7	127.5
Shanghai	292.1	65.4	Tibet	40.6	18.5
Jiangsu	1,515.4	382.2	Shaanxi	641.3	186.9
Zhejiang	727.0	140.5	Gansu	483.9	150.0
Anhui	903.7	225.4	Qinghai	94.7	48.4
Fujian	326.8	104.7	Ningxia	114.5	49.1
Jiangxi	447.1	122.6	Xinjiang	338.3	159.0

Draft provided by Management Bureau of Agriculture Mechanization, Ministry of Agricultural Machinery

Yearend Reserves of Major Farm Machines in All Provinces, Municipalities, and Autonomous Regions

Area	Large and medium tractors		Small and hand tractors		Area	Large and medium tractors		Small and hand tractors	
	Numbers	Horse power*	Numbers	Horse- power*		Numbers	Horse- power*	Numbers	Horse- power*
National total	744.865	3,221.3	187.4	2,196.5	Shandong	114,504	371.5	11.2	133.6
Beijing	7.705	43.1	2.5	25.2	Henan	59,666	295.1	12.8	151.1
Tianjin	12.819	50.7	0.9	9.2	Hubei	36,412	110.6	10.9	129.6
Hebei	42,133	202.0	11.1	129.0	Hunan	19,529	69.8	6.4	64.7
Shanxi	32,667	134.7	3.1	37.0	Guangdong	19,988	85.4	12.7	138.1
Nei Monggol	33,202	173.7	1.5	17.9	Guangxi	22,335	88.7	10.4	125.1
Liaoning	42,033	189.0	4.6	54.7	Sichuan	22,538	82.9	9.9	119.0
Jilin	25,961	129.4	2.6	30.9	Guizhou	8,519	27.4	0.9	9.6
Heilong- jiang	68,487	369.9	3.1	39.0	Yunnan	17,234	88.2	3.3	39.3
Shanghai	7,319	30.7	3.2	34.7	Tibet	1,983	12.3	0.5	6.2
Jiangsu	16,238	75.2	25.6	307.0	Shaanxi	20,352	104.6	6.9	82.3
Zhejiang	9,837	27.8	9.6	112.7	Gansu	17,126	84.7	5.5	65.3
Anhui	17,562	85.9	11.7	139.5	Qinghai	6,364	31.4	1.4	17.0
Fujian	7,527	28.7	6.5	76.0	Ningxia	5,811	29.5	1.6	19.6
Jiangxi	19,806	56.7	5.5	65.9	Xinjiang	29,208	141.7	1.5	17.3

*10,000

[continued]

(continuation)

Area	Combine harvesters (numbers)	Powered (windrower) harvesters (numbers)	Powered threshing machines (10,000)	Farm-use trucks (numbers)	Large and medium tractor- drawn implements (10,000)	Small and hand tractor- drawn farm implements (10,000)
National total	27,045	73,521	249.8	134,745	136.9	219.1
Beijing	535	4,896	2.8	4,581	1.4	4.1
Tianjin	108	885	2.0	2,253	2.1	1.2
Hebei	397	875	22.9	5,498	8.9	11.1
Shanxi	80	4,939	4.5	6,655	4.7	2.3
Nei Monggol	2,184	1,367	2.7	4,536	4.3	0.3
Liaoning	69	175	6.1	6,902	12.0	6.3
Jilin	145	116	6.1	2,766	5.9	2.7
Heilongjiang	14,081	781	0.4	9,837	24.6	0.8
Shanghai	182	6,019	8.6	1,665	1.2	0.9
Jiangsu	485	4,386	41.0	3,343	3.2	67.0
Zhejiang	200	2,807	33.2	2,004	2.1	9.8
Anhui	424	984	8.8	4,287	2.3	10.4
Fujian	67	216	2.5	3,029	1.4	3.8
Jiangxi	159	1,431	3.1	6,011	4.2	7.4
Shandong	344	18,736	20.8	7,084	17.2	11.2
Henan	799	5,547	11.9	6,631	7.4	4.8
Hubei	602	7,983	17.4	5,546	5.0	7.2
Hunan	270	92	3.1	8,023	2.6	7.7
Guangdong	343	669	13.4	13,395	3.3	14.6
Guangxi	906	278	7.7	3,129	3.6	11.7
Sichuan	51	420	12.5	5,743	3.7	15.2
Guizhou	—	321	0.4	2,016	1.1	0.3
Yunnan	184	690	5.4	3,464	2.1	3.0
Tibet	92	993	0.9	649	0.3	0.2
Shaanxi	167	3,444	7.4	3,484	3.2	8.7
Gansu	221	1,863	1.6	3,710	2.6	4.2
Qinghai	363	648	0.8	1,930	1.0	0.8
Ningxia	252	1,265	1.2	1,041	1.0	1.2
Xinjiang	3,335	695	0.6	5,533	4.5	0.2

[continued]

(continuation)

Area	Powered drainage & irrigation machines		Including: diesel engines		Electric generators	
	numbers (10,000)	Horse-power (10,000)	numbers (10,000)	Horse-power (10,000)	numbers (10,000)	Horse-power (10,000)
National total	563.0	7,464.5	289.9	3,697.5	258.3	3,688.4
Beijing	6.9	97.0	0.1	1.2	6.8	95.8
Tianjin	8.5	137.6	2.3	29.1	6.2	108.5
Hebei	94.0	1,082.4	47.1	606.6	46.5	470.3
Shanxi	15.3	247.5	3.7	61.6	11.6	185.8
Nei Monggol	8.7	124.6	3.3	47.9	4.3	67.1
Liaoning	13.6	222.7	4.5	69.2	9.1	153.5
Jilin	6.5	109.0	1.8	23.9	4.7	85.1
Heilongjiang	6.4	102.6	3.1	51.2	3.3	50.2
Shanghai	4.6	35.5	—	0.6	4.6	34.9
Jiangsu	35.5	602.2	17.9	274.0	17.6	327.4
Zhejiang	18.3	162.4	7.1	51.6	10.4	108.4
Anhui	37.7	495.8	18.0	256.9	16.4	231.2
Fujian	6.7	68.4	4.0	42.0	1.5	21.7
Jiangxi	12.3	209.4	6.5	115.6	5.4	93.4
Shandong	70.8	922.9	51.1	683.6	17.8	224.7
Henan	80.5	781.9	43.5	485.2	37.0	296.7
Hubei	10.8	286.4	6.9	108.1	3.9	177.8
Hunan	29.6	349.9	24.7	218.6	4.9	131.3
Guangdong	19.4	234.9	4.3	70.0	13.7	154.8
Guangxi	5.4	94.7	3.5	51.6	1.8	42.7
Sichuan	26.5	366.4	21.9	228.1	3.2	134.2
Guizhou	7.7	85.4	2.9	37.6	2.6	37.1
Yunnan	4.1	91.8	1.1	17.0	2.5	70.2
Tibet	0.7	11.4	0.5	7.2	0.2	4.1
Shaanxi	20.6	256.4	4.5	62.2	16.1	193.7
Gansu	7.1	198.3	3.1	50.5	3.9	147.3
Qinghai	0.5	11.5	0.1	2.1	0.4	9.4
Ningxia	1.2	18.8	0.4	6.5	0.8	12.2
Xinjiang	3.1	56.7	2.0	37.8	1.1	18.9

Draft provided by Management Bureau of Agricultural Mechanization, Ministry of Agriculture

Water Conservancy

Number of Reservoirs and Dammed Ponds in All Provinces, Municipalities, and Autonomous Regions

Area	1980 Number of reservoirs (numbers)	Total reser- voir capacity (100 million cubic meters) 1980	1980 Number of dammed ponds (10,000)	Dammed pond water storing capacity (100 million cubic meters) 1980
National total	86,822	4,130.31	636.69	273.36
Beijing	82	71.85	0.02	0.06
Tianjin	37	18.53	0.06	0.08
Hebei	1,230	108.90	1.94	2.45
Shanxi	909	42.68	0.89	1.30
Nei Monggol	657	58.64	0.36	1.70
Liaoning	1,030	289.45	0.47	1.08
Jilin	1,305	212.36	0.48	1.54
Heilongjiang	427	51.91	0.19	1.26
Shanghai	--	--	--	--
Jiangsu	1,188	185.95	31.13	7.99
Zhejiang	3,473	308.22	1.70	4.85
Anhui	4,257	170.82	89.24	39.02
Fujian	2,176	57.93	13.67	2.96
Jiangxi	9,900	227.00	31.27	18.35
Shandong	5,590	189.39	3.17	8.14
Henan	2,486	487.53	32.59	13.78
Hubei	6,280	472.11	118.82	28.98
Hunan	12,705	195.22	213.34	68.84
Guangdong	7,446	410.47	5.39	9.17
Guangxi	4,570	198.08	8.03	9.41
Sichuan	12,239	103.08	71.80	41.73
Guizhou	1,998	24.27	2.72	2.74
Yunnan	4,173	52.66	5.24	5.54
Tibet	--	--	--	--
Shaanxi	1,506	39.39	3.96	1.98
Gansu	336	84.22	0.12	0.21
Qinghai	113	1.26	0.03	0.05
Ningxia	195	17.04	0.04	0.10
Xinjiang	514	51.45	0.02	0.05

Draft provided by Planning Bureau, Ministry of Water Conservancy

Area of Waterlogging Elimination and Control of Alkalinity in All
Provinces, Municipalities, and Autonomous Regions

Area	Area of water-logging elimination (10,000 mu)		Improvement area in saline-alkaline soil (10,000 mu)		Area	Area of water-logging elimination (10,000 mu)		Improvement area in saline-alkaline soil (10,000 mu)	
	1979	1980	1979	1980		1979	1980	1979	1980
National total	26,622.71	26,770.85	6,198.01	6,353.58	Shandong	3,337.69	3,349.93	829.17	821.41
Beijing	233.63	236.53	56.06	62.30	Henan	2,435.22	2,247.15	864.91	863.03
Tianjin	652.00	654.36	313.00	323.71	Hubei	1,753.04	1,777.26	—	—
Hebei	2,311.83	2,352.29	831.40	904.10	Hunan	583.24	585.75	—	—
Shanxi	118.17	122.11	231.05	220.94	Guangdong	742.55	753.64	—	—
Nei Monggol	229.14	234.01	300.01	330.59	Guangxi	266.84	271.82	—	—
Liaoning	1,409.00	1,412.76	389.00	397.06	Sichuan	94.04	101.77	0.65	0.65
Jilin	1,446.74	1,446.94	190.97	197.27	Guizhou	46.64	47.52	—	—
Heilongjiang	2,660.60	2,704.94	285.56	288.64	Yunnan	219.95	230.81	2.46	1.72
Shanghai	87.38	87.40	39.80	40.12	Tibet	—	—	—	—
Jiangsu	3,946.92	4,011.63	837.78	866.37	Shaanxi	181.11	183.65	57.20	45.09
Zhejiang	572.84	571.72	—	—	Gansu	4.11	14.93	98.00	105.54
Anhui	2,657.97	2,696.76	139.31	139.56	Qinghai	—	—	9.81	12.59
Fujian	147.67	151.63	20.59	21.92	Ningxia	—	—	55.50	62.75
Jiangxi	471.18	474.54	—	—	Xinjiang	13.21	49.00	645.78	648.22

Draft provided by Planning Bureau, Ministry of Water Conservancy

Regular Drainage and Irrigation Stations and Water Wheel Pumping Stations in
All Provinces, Municipalities, and Autonomous Regions

Area	Permanent drainage and irrigation stations (individual sites)		Permanent stations containing electromechanical equipment (10,000 horse-power)		Water wheel pump stations (individual sites)		Water wheel pumps (numbers)	
	1979	1980	1979	1980	1979	1980	1979	1980
National total	431.730	524.426	2,243.20	2,444.56	40,337	35,298	58,953	53,385
Beijing	6.347	6.383	19.74	19.81	20	8	33	18
Tianjin	1.468	1.496	42.05	42.23	—	—	—	—
Hebei	742	1,007	37.61	41.15	494	454	649	635
Shanxi	21.548	20.841	93.08	93.28	154	123	265	223
Nei Monggol	2.316	2.681	19.13	20.33	1	1	26	26
Liaoning	6.580	6.515	77.00	78.02	22	14	34	43
Jilin	5.601	5.308	36.16	35.91	38	36	98	120
Heilongjiang	4.630	4.912	32.91	35.97	67	58	123	109
Shanghai	6.375	6.513	17.99	18.89	—	—	—	—
Jiangsu	49.877	53.761	279.00	298.88	6	6	44	44
Zhejiang	42.173	46.366	87.97	90.59	862	772	1,064	969
Anhui	10.243	10.358	151.50	161.52	580	601	682	703
Fujian	17.333	19.086	34.82	38.45	2,639	1,922	3,844	3,678
Jiangxi	16.209	17.038	75.05	81.61	2,074	1,983	2,643	2,459
Shandong	24.875	24.773	136.61	144.32	110	96	223	189
Henan	21.993	21.432	101.57	104.43	228	152	387	313
Hubei	14.414	14.672	189.51	198.39	288	292	403	413
Hunan	38.674	115.843	134.14	230.08	7,960	5,233	11,568	8,134
Guangdong	28.973	30,406	134.59	145.35	7,359	6,796	9,926	9,270
Guangxi	29.020	29,242	77.46	78.49	8,577	8,483	13,058	12,828
Sichuan	22,341	25,205	124.17	141.79	1,053	1,011	1,266	1,249
Guizhou	11.522	11,383	32.67	33.28	4,809	4,623	8,832	8,560
Yunnan	8,398	9,324	63.01	68.66	815	794	1,219	1,189
Tibet	—	—	—	—	—	—	—	—
Shaanxi	22.036	22.423	96.27	99.36	1,762	1,431	1,907	1,568
Gansu	14.974	14,220	124.95	117.69	378	376	574	573
Qinghai	704	759	9.11	9.57	21	25	39	49
Ningxia	1,510	1,498	12.21	12.91	1	4	4	13
Xinjiang	854	981	2.92	3.60	19	4	42	10

Draft provided by Planning Bureau, Ministry of Water Conservancy

Meteorology

Meteorological Operating Expenses and Investment in Capital Construction

	1980 meteorological operating expenses budget index (10,000 yuan)	1980 meteorological capi- tal construction invest- ment planning figures (10,000 yuan)
National total	16,194	6,475

- Note: 1) Actual meteorological operating expenses exceeded the budgeted index by about 8 to 10 percent
- 2) Capital construction investment planning figures do not include locally provided funds.

Level of Agricultural Modernization

Status of Agricultural Mechanization in All Provinces, Municipalities, and Autonomous Regions

Area	Actual machine-plowed area during the year (10,000 mu)	Actual machine-sown area during the year (10,000 mu)	Including: machine trans- planted area (10,000 mu)	Machine harvested area during the year (10,000 mu)
National total	61,485.7	22,467.7	235.4	6,542.9
Beijing	466.0	352.0	22.1	54.6
Tianjin	585.8	212.2	16.3	23.3
Hebei	5,729.3	2,588.4	14.0	356.0
Shanxi	2,666.6	541.4	1.3	68.3
Nei Monggol	2,446.0	1,127.0		469.4
Liaoning	3,125.6	1,111.0	13.1	1.8
Jilin	2,120.8	1,817.0	51.5	18.0
Heilongjiang	9,000.5	5,952.0	9.0	3,223.3
Shanghai	467.1	11.0	3.0	21.0
Jiangsu	4,350.3	598.2	27.4	125.5
Zhejiang	1,449.1	0.9	0.9	18.9
Anhui	1,557.2	113.6	5.2	63.2
Fujian	646.3	1.3	0.7	3.6
Jiangxi	1,028.1	3.9	3.4	8.9
Shandong	6,844.7	2,761.5	19.2	534.5
Henan	4,985.0	780.0	7.2	175.1
Hubei	1,789.8	315.9	29.4	129.7
Hunan	1,006.9	16.1	0.1	8.1
Guangdong	1,729.0	3.6	1.7	19.3
Guangxi	1,173.9	5.9	2.8	10.5
Sichuan	1,168.2	29.5		11.5
Guizhou	44.1	0.5	0.2	1.0
Yunnan	352.4	10.8	5.4	8.4
Tibet	92.8	54.7		12.6
Shaanxi	1,890.9	1,021.5	0.1	45.0
Gansu	975.5	294.7		61.8
Qinghai	250.5	235.8		63.6
Ningxia	473.4	175.7	0.8	30.1
Xinjiang	3,069.9	2,329.6	0.6	975.9

Draft provided by State Statistical Bureau

Status of Rural Electrification in All
Provinces, Municipalities, and Autonomous Regions

Area	Rural use of elec- tricity (100 million kilowatts)	Rural people's commune- operated hydropower stations		Rural production bri- gade and production team-operated hydro- power stations	
		Numbers (indivi- dual units)	Electricity generating capacity (10,000 kilowatts)	Numbers (indivi- dual units)	Electricity generating capacity (10,000 kilowatts)
National total	320.8	12,208	174.9	68,111	129.2
Beijing	7.7	42	1.2	25	0.3
Tianjin	6.7				
Hebei	32.2	60	0.9	536	1.4
Shanxi	13.6	62	1.3	345	1.0
Nei Monggol	4.6	8	0.1	24	0.1
Liaoning	23.8	44	0.9	13	0.1
Jilin	9.7	33	0.9	27	0.2
Heilongjiang	14.5	26	0.7	17	0.2
Shanghai	12.2				
Jiangsu	33.2	26	0.2	23	0.1
Zhejiang	17.5	989	15.6	4,804	10.3
Anhui	10.7	150	1.2	1,623	3.5
Fujian	6.4	826	18.9	7,348	21.9
Jiangxi	5.2	903	11.4	5,189	7.0
Shandong	20.1	88	1.6	155	0.3
Henan	17.2	191	3.4	1,099	4.3
Hubei	9.6	710	10.7	1,782	5.2
Hunan	9.7	1,310	19.3	8,049	12.1
Guangdong	13.1	1,535	29.9	10,279	16.5
Guangxi	4.8	533	6.8	9,020	9.1
Sichuan	12.8	2,238	26.0	5,765	10.8
Guizhou	2.9	866	8.9	3,975	6.8
Yunnan	6.1	458	7.7	6,279	13.8
Tibet	0.1	375	0.9	148	0.3
Shaanxi	12.1	276	1.8	995	1.4
Gansu	8.2	162	1.7	326	1.6
Qinghai	0.8	54	0.4	84	0.4
Ningxia	1.5	1		1	
Xinjiang	3.8	242	2.5	180	0.5

Draft provided by State Statistical Bureau

Status of Agricultural Application of Chemical Fertilizer in All
Provinces, Municipalities, and Autonomous Regions (1)

Area	Amount of chemical fertilizer used in agriculture (10,000 tons)	Nitrogenous fertilizer (10,000 tons)	Including ammonia water (10,000 tons)	Area	Amount of chemical fertilizer used in agriculture (10,000 tons)	Nitrogenous fertilizer (10,000 tons)	Including ammonia water (10,000 tons)
National total	5,864.9	4,037.3	596.0	Shandong	696.7	508.0	256.4
Beijing	58.8	44.2	10.6	Henan	386.2	302.6	16.4
Tianjin	27.6	22.6	1.0	Hubei	243.1	175.4	1.2
Hebei	342.8	249.9	21.5	Hunan	361.0	217.6	16.9
Shanxi	142.9	107.2	0.8	Guangdong	349.1	236.6	24.2
Nei Monggol	28.4	17.6	0.5	Guangxi	183.0	112.7	6.3
Liaoning	298.4	190.2	17.7	Sichuan	485.3	281.9	27.3
Jilin	120.2	90.2	10.2	Guizhou	77.2	49.4	2.7
Heilongjiang	106.9	46.8	0.5	Yunnan	114.3	70.8	4.9
Shanghai	103.6	87.9	43.9	Tibet	1.6	1.0	
Jiangsu	576.8	442.3	31.8	Shaanxi	123.3	97.0	14.9
Zhejiang	299.0	232.6	67.1	Gansu	60.4	33.5	4.4
Anhui	245.7	159.7	6.7	Qinghai	15.0	4.7	0.1
Fujian	180.6	117.4	3.8	Ningxia	17.7	11.7	0.8
Jiangxi	185.3	104.6	3.2	Xinjiang	34.0	21.2	0.2

Status of Agricultural Application of Chemical Fertilizer in All
Provinces, Municipalities, and Autonomous Regions (2)
(Actual Amounts)

Area	Phosphate fertilizer (10,000 tons)	Potash fertilizer (10,000 tons)	Compound fertilizer (10,000 tons)	Area	Phosphate fertilizer (10,000 tons)	Potash fertilizer (10,000 tons)	Compound fertilizer (10,000 tons)
National total	1,664.7	88.1	74.8	Shandong	177.0	3.6	8.1
Beijing	14.4	0.2		Henan	67.1	10.8	5.7
Tianjin	4.0	0.2	0.8	Hubei	58.6	5.1	4.0
Hebei	88.3	2.9	1.7	Hunan	127.9	12.8	2.7
Shanxi	34.3	0.7	0.7	Guangdong	92.3	16.4	3.8
Nei Monggol	6.2	1.0	3.6	Guangxi	63.2	5.6	1.5
Liaoning	105.2	0.7	2.3	Sichuan	197.6	2.8	3.0
Jilin	26.6	0.6	2.8	Guizhou	25.6	0.8	1.4
Heilongjiang	49.6	2.8	7.7	Yunnan	40.9	1.3	1.3
Shanghai	15.5		0.2	Tibet	0.1	0.1	0.4
Jiangsu	127.4	3.4	3.7	Shaanxi	21.7	2.3	2.3
Zhejiang	61.8	2.2	2.4	Gansu	24.0	1.2	1.7
Anhui	78.4	3.3	4.3	Qinghai	8.5	0.4	1.4
Fujian	57.2	4.5	1.5	Ningxia	4.9		1.1
Jiangxi	77.4	1.7	1.6	Xinjiang	9.0	0.7	3.1

Status of Agricultural Application of Chemical Fertilizer in All
Provinces, Municipalities, and Autonomous Regions (3)
(Converted to Net Weight)

Area	Quantity of fer- tilizer used in agriculture (10,000 tons)	Nitro- genous fertilizer (10,000 tons)	Including ammonia water (10,000 tons)	Area	Quantity of fer- tilizer used in agriculture (10,000 tons)	Nitro- genous fertilizer (10,000 tons)	Including ammonia water (10,000 tons)
National total	1,269.4	934.2	93.4	Shandong	135.4	103.2	41.9
Beijing	11.0	8.2	1.8	Henan	72.4	57.5	2.2
Tianjin	5.4	4.3	0.2	Hubei	55.8	44.0	0.1
Hebei	74.7	59.3	3.3	Hunan	79.7	50.6	2.8
Shanxi	30.3	25.3	0.1	Guangdong	82.8	58.0	2.5
Nei Monggol	3.6	3.0	0.1	Guangxi	39.7	25.1	0.9
Liaoning	61.8	43.5	1.8	Sichuan	109.5	75.7	3.9
Jilin	30.3	24.5	1.5	Guizhou	20.8	15.9	0.3
Heilongjiang	34.6	18.9	0.1	Yunnan	27.3	19.2	0.6
Shanghai	20.7	17.1	6.6	Tibet	0.3	0.2	
Jiangsu	118.2	92.0	4.6	Shaanxi	29.6	24.6	1.2
Zhejiang	61.8	49.7	13.9	Gansu	14.1	9.8	0.7
Anhui	54.9	40.1	1.2	Qinghai	3.8	1.6	
Fujian	37.0	26.2	0.4	Ningxia	4.6	3.0	0.2
Jiangxi	37.1	25.2	0.5	Xinjiang	12.2	8.5	

Draft provided by State Statistical Bureau

Status of Agricultural Application of Chemical Fertilizer in All
Provinces, Municipalities, and Autonomous Regions (4)
(Converted to Net Weight)

Area	Phos- phate fertil- izer (10,000 tons)	Potash fertil- izer (10,000 tons)	Compound fertil- izer (10,000 tons)	Area	Phos- phate fertil- izer (10,000 tons)	Potash fertil- izer (10,000 tons)	Compound fertil- izer (10,000 tons)
National total	273.3	34.6	27.3	Shandong	27.7	1.2	3.3
Beijing	2.8			Henan	9.4	2.4	3.1
Tianjin	0.8	0.1	0.2	Hubei	8.6	1.9	1.3
Hebei	13.8	1.0	0.6	Hunan	21.8	6.0	1.3
Shanxi	4.4	0.4	0.2	Guangdong	16.3	6.8	1.6
Nei Monggol	0.1	0.1	0.4	Guangxi	11.4	2.8	0.4
Liaoning	17.2	0.3	0.8	Sichuan	31.9	1.0	0.9
Jilin	4.2	0.3	1.3	Guizhou	4.4	0.2	0.3
Heilongjiang	11.7	1.5	2.5	Yunnan	7.3	0.5	0.3
Shanghai	3.5		0.1	Tibet			0.1
Jiangsu	23.4	1.5	1.3	Shaanxi	2.6	1.2	1.2
Zhejiang	10.9	0.6	0.6	Gansu	3.1	0.5	0.7
Anhui	11.8	1.3	1.7	Qinghai	1.5	0.1	0.6
Fujian	8.5	1.8	0.5	Ningxia	1.2		0.4
Jiangxi	10.4	0.9	0.6	Xinjiang	2.6	0.2	0.9

Draft provided by State Statistical Bureau

Status of Farmland Under Irrigation in All
Provinces, Municipalities, and Autonomous Regions (1)

Area	Including:			Spray irrigated area within the effectively irrigated area (10,000 mu)
	Effectively irrigated area (10,000 mu)	Machine irrigated area (10,000 mu)	Electrically irrigated area (10,000 mu)	
National total	67,332.1	16,739.7	21,232.1	1,019.1
Beijing	510.5	4.8	405.9	2.4
Tianjin	568.9	140.8	427.1	5.1
Hebei	5,433.4	2,397.6	2,550.8	47.8
Shanxi	1,072.7	144.6	1,018.3	22.1
Nei Monggol	1,656.1	175.2	385.4	14.0
Liaoning	1,139.6	186.2	708.4	20.4
Jilin	1,096.0	91.9	570.0	24.6
Heilongjiang	1,005.7	228.8	436.0	20.1
Shanghai	523.8		523.8	9.2
Jiangsu	5,119.2	1,662.2	3,019.6	136.8
Zhejiang	2,287.0	368.6	1,368.5	44.2
Anhui	3,657.0	1,031.2	1,506.8	21.3
Fujian	1,321.6	165.1	94.9	11.0
Jiangxi	2,504.4	406.6	338.1	16.4
Shandong	6,611.3	4,026.8	1,421.8	190.3
Henan	5,304.4	2,588.3	1,572.8	149.2
Hubei	3,517.5	1,391.5	604.2	31.2
Hunan	3,623.8	739.4	824.0	38.6
Guangdong	3,161.9	182.0	663.5	10.7
Guangxi	2,149.0	225.3	207.8	3.7
Sichuan	4,534.3	43.0	835.9	151.5
Guizhou	685.2	55.2	64.8	1.8
Yunnan	1,369.7	23.0	149.7	16.4
Tibet	222.7	5.4	1.2	0.5
Shaanxi	1,872.2	136.6	999.1	13.7
Gansu	1,280.3	114.8	356.5	9.1
Qinghai	239.4	7.7	21.5	3.7
Ningxia	348.7	8.3	32.1	1.4
Xinjiang	3,915.8	188.8	123.6	1.9

Status of Farmland Under Irrigation in All
Provinces, Municipalities, and Autonomous Regions (2)

Area	(1)	Number of electro- mechanical wells (10,000)	Includ- ing: Numbers already equipped (10,000)	Area	(1)	Number of electro- mechani- cal wells (10,000)	Includ- ing: Numbers already equipped (10,000)
National total	34,956.1	259.9	208.9	Shandong	4,072.0	50.5	40.8
Beijing	288.0	3.7	3.5	Henan	2,938.3	61.3	43.6
Tianjin	270.2	2.6	2.4	Hubei	1,465.1	0.6	0.5
Hebei	3,062.5	56.6	48.1	Hunan	2,335.5		
Shanxi	723.6	10.3	9.1	Guangdong	2,282.6	0.6	0.4
Nei Monggol	497.7	10.2	8.1	Guangxi	1,230.5	0.1	...
Liaoning	882.4	7.8	6.5	Sichuan	2,433.2	0.7	0.6
Jilin	684.7	6.0	5.3	Guizhou	441.4		
Heilongjiang	381.7	6.2	5.0	Yunnan	806.4	0.2	0.1
Shanghai	467.0			Tibet	52.8		
Jiangsu	3,132.8	4.8	3.1	Shaanxi	1,059.8	15.2	13.8
Zhejiang	973.5	0.3	0.2	Gansu	721.4	3.9	3.6
Anhui	1,335.7	13.9	11.0	Qinghai	108.2	0.1	0.1
Fujian	628.2	0.9	0.3	Ningxia	202.4	0.8	0.7
Jiangxi	1,108.3			Xinjiang	370.2	2.6	2.1

Draft provided by State Statistical Bureau

Key: (1) Area of assured harvests and consistently high yields despite drought or waterlogging (10,000 mu)

Finance

Status of National Credit Revenue and Expenditure

Units:
100 million
yuan

Subject	Surplus at end of 1979	Surplus at end of 1979
Various savings	1,340.04	1,658.64
Enterprise savings	468.91	573.09
Public finance savings	148.68	162.02
Capital construction savings	131.30	171.75
Government organization and group savings	184.88	229.45
City and town savings	202.56	282.49
Rural village savings	203.71	239.84
International financial organization transactions		34.27
Currency in circulation	267.71	346.20
Bank funds	427.88	477.33
Year's gain	49.45	27.19
Other	77.52	80.63
Total funds from all sources	2,162.60	2,624.26
Loans	2,039.63	2,414.30
Industrial production enterprise loans	363.09	431.58
Industrial supply and marketing enterprise and materials department loans	242.12	236.03
Commercial loans	1,232.25	1,437.02
Intermediate, short-term facilities loans	7.92	55.50
City, town collective and individual indus- trial and enterprise loans	57.51	78.29
Prepurchase deposit loans	6.98	7.88
State-operated farm enterprise loans	6.86	9.40
Rural commune brigade loans	122.90	158.60
Earnings in gold	12.16	12.16
Earnings in foreign exchange	20.58	-8.47
Capital of the International Monetary Fund Organizations		36.04
Financial loans	90.23	170.23
Total used funds	2,162.60	2,624.26

PEOPLE'S DAILY 4 July 1981

Status of Savings and Loans in Rural Credit Cooperatives

Units: 100 million yuan

Subject	1979 Year-end surplus	1980 Year-end surplus
Total of various savings	215.88	272.34
Commune and brigade collective savings	98.33	105.48
Commune and brigade enterprise savings	21.93	29.47
Individual commune member savings	78.43	117.03
Other savings	17.19	20.36
Total of loans of all kinds	47.54	81.64
Commune and brigade agricultural loans	22.54	34.54
Commune and brigade enterprise loans	14.15	31.11
Individual commune member loans	10.85	15.99

PEOPLE'S DAILY 4 July 1981

Status of Exchange Rates, Gold and Foreign Exchange Reserves

Subject	1979	1980
Exchange rate		
--RMB converted from special cashing privilege units (end of period figure)	1.9710	1.9517
--RMB converted from U.S. dollar (end of period figure)	1.4962	1.5303
--RMB converted from U.S. dollars (average figure)	1.5549	1.4984
Gold, foreign exchange savings: foreign exchange (\$100 million)	21.54	22.62
gold (10,000 ounces)	1,280	1,280

PEOPLE'S DAILY 4 July 1981

Commune Member Income

Status of National Profit Distributions by
Basic Accounting Units in Rural People's Communes
Average Per Capita Income From Collective Distributions

Units: yuan

	1980		1979
Distributed to commune members	85.93	Distributed to commune members	83.40
Including: cash	26.77	Including: cash	24.08

National Average Per Capita Collective Distributions
22 Counties Were Above 300 Yuan

Provinces, municipalities, and autonomous regions	Counties (municipalities, banners and districts)
Beijing	Haidian District, Fengtai District
Nei Monggol	Egina Banner, Xinbaerhu Right Banner, Eerguna Right Banner, Eerguna Left Banner
Liaoning	Changhai County
Shandong	Cangkou, Shinan, and Sifang Districts of Qingdao City
Guangdong	Nanhai County, Suburbs of Foshan City
Tibet	Zhada County, Chengguan District of Lhasa City, Geer County, and Ritu County
Gansu	Ganbei County. Akasai County
Qinghai	Geermu City, Qumalai County, Tianjun County, Maduo County

National Average Per Capita Collective Distributions
343 Counties Were Above 150 Yuan

Provinces, municipalities, and autonomous regions	Counties (municipalities, banners, and districts)
Beijing	Huairou County, Shunyi County, Tong County, Pinggu County, Fangshan County, Daxing County, Changping County, Mentougou District, Chaoyang District, Shijingshan District, Fengtai District, Haidian District
Tianjin	Southern Suburb, Dagang District, Northern Suburb, Eastern Suburb, Western Suburb, Tanggu District, Hangu District
Hebei	Gaoyi County, Guoyuan District of Tangshan City, Huanghua County, Handan City, Huolu County, Funing County, Xingtai City, Qinquangdao City, Baoding City, Lutai Farm, Shijiazhuang Suburbs, Hangu Farm
Shanxi	Zuoyun County, Northern Suburb of Taiyuan, Suburban Yangquan, Southern Suburb of Datong, Southern Suburb of Taiyuan
Nei Monggol	Zhengbai Banner, Arong Banner, Ranghuang Banner, Wushen Banner, Etuokehou Banner, Abahanaer Banner, Hailaer City, Sunite Right Banner, Alashan Left Banner, Chenbaerhu Banner, Xiguatu Banner, Wulatezhonghou United Banner, Ewenke Banner, Damao Banner, Abaga Banner, Alashan Right Banner, Siziwang Banner, Xiwuzhumuqin Banner, Xinbaerhu Right Banner, Manzhouli City, Sunite Left Banner, Eqina Banner, Xinbaerhu Right Banner, Eerguna Right Banner, Eerguna Left Banner
Liaoning	Xinchengzi District of Shenyang City, Suburbs of Fushun City, Xinjin County, Gai County, Suburbs of Liaoyang City, Panshan County, Suburbs of Jinzhou City, Donggou County, Jin County, Suburbs of Dandong City, Dawa County, Yingkou County, Lushunkou District of Luda Shi, Dongling District of Shenyang City, Yuhong District of Shenyang City, Suburban Yinkou City, Sujiadun District of Shenyang City, Tieling City, Ganjingzi District of Luda City, Changhai County.
Jilin	Jian County, Wangqing County, Changbai County, Siping City, Tumen City, Yanji City
Heilongjiang	Muling County, Suifenhe City, Tieli County, Baoqing County, Sunwu County, Yichun City, Ning'an County, Mengbei County, Fujin County, Raohe County, Dongning County, Tongjiang County, Mudanjiang City, Mishan County, Sunke County, Huylin County, Aihui County, Huma County

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Shanghai	Songjiang County, Jinshan County, Qingfu County, Fengxian County, Nanhui County, Chuansha County, Baoshan County, Shanghai County, Jiading County
Jiangsu	Shazhou County, Yangzhou City, Zhenjiang City, Wujiang County, Changzhou City, Wu County, Taizhou City, Nanjing Suburbs. Changshu County, Xuzhou City, Kunshan County, Suzhou City, Lianyungang City, Taicang County
Zhejiang	Changxing County, Ciqi County, Pinghu County, Xiaoshan County, Anji County, Linan County, Haimen Prefecture, Qin County, Shengsi County, Tongxiang County, Haiyan County, Yuhang County, Jiashan County, Ningbo City Suburbs, Zhenhai County, Haining County, Wuxing County, Deqing County, West Lake District of Hangzhou, Banshan District of Hangzhou, Jianggan District of Hangzhou
Fujian	Jianou County, Sanming City
Jiangxi	Fengxin County, Nanfeng County, Xingan County, Shanggao County
Shandong	Xinwen County, Gaotang County, Suburbs of Ji'nan City, Laixi County, Huangdao District of Qingdao, Haiyang County, Laiyang County, Central District of Zaozhuang City, Ye County, Fushan County, Xixia County, Weifang City, Zhangdian District of Zibo City, Zhaoyuan County, Laoshan County, Huang County, Penglai County, Mouping County, Jining City, Wendeng County, Rushan County, Rongcheng County, Changdao County, Weihai City, Yantai City, Cangkou District of Qingdao, Southern Suburb of Qingdao City, Sifang District of Qingdao City
Henan	Xiuwu County, Xuchang City, Fugou County, Xinxiang City, Huojia County, Xinxiang County
Hubei	Hongshan District of Wuhan City
Hunan	You County, Yueyang City, Chenzhou City, Suburbs of Changsha City
Guangdong	Gaoyao County, Shaoguan City Suburbs, Doumen County, Hua County, Jiangmen City Suburbs, Shenchuan City, Zhongshan County, Zhaoqing City Suburbs, Suburban Guangzhou, Zhuhai City, Panyu County, Sanshui County, Dongguan County, Shunde County, Nanhai County, Suburban Foshan
Guangxi	Nanning City

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Sichuan	Jinniu District, Chengdu City; Deyang County, Qingbaijiang District, Chengdu City, Guanghan County, Jiangbei District, Chongqing. Shifang County, Nan'an District, Chong-qing, Maerkang County, Jiulongpo District, Chongqing, Kuergai County, Shapingba District, Chongqing.
Yunnan	Xishan District, Kunming City; Wanding Zhen; Yuqi County; Guandu District, Kunming
Tibet	Jilong County, Jiacha County, Chayu County, Jiangbujiangda County, Dangxiong County, Dingri County, Nielami County, Naqu County, Bailang County, Xietongmen County, Nimu County, Gangba County, Cuona County, Gongga County, Kangma County, Langkazi County, Qiongjie County, Baqing County, Jiangzi County, Qusong County, Rikaze County, Sangri County, Qushui County, Nierong County, Saga County, Milin County Cuoqin County, Lang County, Bange County, Duilongdeqing County, Cuomei County, Longzi County, Anduo County, Wenbu Office, Bomi County, Dazi County, Chongba County, Laozha County, Shenzha County, Linchi County, Naidong County, Yadong County, Pulan County, Zhangmukouan, Shuanghu Office, Zhada County; Chengguan District, Lhasa, Geer County, Ritu County
Shaanxi	Jintai District, Baoji City; Weibin District, Baoji City; Yanta District, Xian City
Gansu	Jinta County, Yumen City, Dunhuang County, Jiuquan County, Luqu County, Maqu County, Su'nan County; Anding District, Lanzhou City; Chengguan District, Lanzhou City, Subei County, Akesai County.
Qinghai	Gonghe County, Xinghai County. Xining City Suburbs, Chengduo County, Dari County, Zaduo County, Tongde County, Gande County Jiuzhi County, Guinan County, Haiyan County, Gangcha County, Zeku County, Henan Mongolian Autonomous County, Dulan County, Wulan County, Qilian County, Maqin County, Zhiduo County, Geermu City, Qumalai County, Tianjun County, Maduo County
Ningxia	Lingwu County
Xinjiang	Mulei County, Heshuo County, Shanshan County, Shawan County, Yining City, Wusu County, Fuhai County, Yiwu County, Aletai County, Balikun County, Tacheng County, Miqan County, Huocheng County, Wulumuqi County, Jinghe County, Fuyun County, Jimunai County, Kelamayi County, Bole County, Hami City, Wenquan County, Tekesi County, Zhaosu County, Qinghe County, Shihezi City, Yumin County

Agricultural Resources

Soil Resources

Use of National Soil Resources

	Chinese system	Metric system
	(in 10,000 mu)	(in 10,000 hectares)
	Approximately	
Total national land area	1,440,000	96,000
1. Land area used for forestry	382,635	25,509
including: forest area	179,670	11,978
2. Grassland area (1)	478,620	31,908
including: usable area	336,510	22,434
3. Marine area usable for breeding (2)	738	49.2
4. Total freshwater area	24,960	1,664
including: usable area	7,544	503

Notes: (1) Grassland area and usable area are both 1979 figures
(2) Marine area usable for breeding and total freshwater area are 1974 figures; others are statistical figures from a 1973-1976 survey

Draft provided by State Statistical Bureau

Climatic Resources

Twenty-Nine Years of Cumulative Values for Beijing, Tianjin, Shanghai, and the Capital Cities of All Provinces, Municipalities, and Autonomous Regions

Name of station	(1)	(2)	(3)	(4)	(5)	(6)		(9)	(10)	(11)
						(7)	(8)			
Haerbin	45°41'	126°37'	171.7	3.6	520.6	2672.6	60	2766.2	140	1951-1979
Changchun	43°54'	125°13'	236.8	4.9	592.6	2651.8	60	2895.9	147	1951-1979
Shenyang	41°46'	123°26'	41.6	7.8	738.4	2573.7	58	3415.0	150	1951-1979
Wulumuqi	43°54'	87°28'	653.5	7.3	195.3	2813.4	63	3558.3	177	1961-1975
Xining	36°35'	101°55'	2261.2	5.7	371.8	2753.9	62	2038.1	131	1954-1979
Lanzhou	36°03'	103°53'	1517.2	9.1	332.4	2602.3	59	3253.1	167	1951-1979
Yinchuan	38°29'	106°13'	1111.5	8.5	206.4	3036.4	68	3295.1	169	1951-1979
Huhehaote	40°49'	111°41'	1063.0	5.8	421.4	2967.9	67	2805.7	130	1951-1979
Xian	34°18'	108°56'	396.9	13.4	582.5	2042.3	46	4344.2	207	1951-1979
Taiyuan	37°47'	112°33'	777.9	9.4	463.9	2672.2	60	3420.0	169	1951-1979
Beijing	39°48'	116°28'	31.2	11.5	653.6	2775.3	63	4139.7	177	1951-1979
Tianjin	39°06'	117°10'	3.3	12.3	573.9	2728.3	62	4324.3	201	1951-1979
Shijiazhuang	38°04'	114°26'	81.8	12.9	570.4	2735.9	62	4441.4	199	1951-1979
Ji'nan	36°41'	116°59'	51.6	14.3	684.3	2737.8	62	4770.5	218	1951-1979
Shanghai	31°10'	121°26'	4.5	15.7	1114.5	2018.6	46	4955.6	218	1951-1979
Nanjing	32°00'	118°48'	8.9	15.4	1031.6	2166.4	49	4930.7	226	1951-1979
Hefei	31°51'	117°17'	23.6	15.7	984.1	2178.9	49	5032.7	226	1951-1979
Hangzhou	30°19'	120°12'	7.2	16.2	1395.6	1911.5	43	5102.2	246	1951-1979
Nanchang	28°40'	115°58'	46.7	17.5	1588.3	1900.6	43	5565.2	227	1951-1979
Fuzhou	26°05'	119°17'	84.0	19.6	1352.1	1851.5	42	6476.7	325	1951-1979
Zhengzhou	34°43'	113°39'	110.4	14.2	642.9	2388.3	54	4670.8	214	1951-1979
Hankou	30°38'	114°04'	23.3	16.3	1189.7	2067.3	47	5220.9	229	1951-1979
Changsha	28°12'	113°04'	44.9	17.2	1388.3	1684.3	44	5456.2	273	1951-1979
Guangzhou	23°04'	113°19'	6.3	21.8	1701.1	1905.4	43	7588.1	342	1951-1979
Nanning	22°49'	108°21'	72.2	21.6	1300.4	1828.9	41	7454.3	334	1951-1979
Chengdu	30°40'	104°04'	505.9	16.2	949.0	1242.2	28	5118.7	282	1951-1979
Guiyang	26°35'	106°43'	1071.2	15.3	1177.8	1381.2	31	4624.1	268	1951-1979
Kunming	25°01'	102°41'	1891.4	14.7	1010.2	2477.2	56	4479.1	227	1951-1979
Lhasa	29°42'	91°08'	3658.0	7.6	443.1	3006.3	68	2267.9	139	1951-1979

Draft provided by Central Meteorology Bureau

Key: (1)	North latitude	(6)	Annual amount of sunshine
(2)	East longitude	(7)	Total number of hours
(3)	Elevation above sea level (meters)	(8)	Percent
(4)	Average annual atmospheric temperature (Centigrade)	(9)	Cumulative temperatures of over 10°C during the year
(5)	Total amount of precipitation (millimeters)	(10)	Frost-free period (days)
		(11)	Years of record

Water Resources

Water, Soil Resources and Average Per Capita Water, Region Distribution

Basin or Region	Annual amount of rainfall	Annual amount of run- off (100 million cubic meters)	Culti- vated land area (10,000 mu)	Popula- tion (10,000)	Average amount of water per mu (cubic meters/ per capita	Average per capita amount of water (cubic meters/ per capita
National		26,144			1,755	2,695
Pearl River Basin		3,070	7,808	7,411	3,932	4,142
Zhejiang and Fujian Rivers		2,001	4,689	6,280	4,267	3,186
Yantze River Basin		9,793	37,053	34,580	2,643	2,832
Huai River Basin		530	18,866	12,479	281	425
Yellow River Basin		560	19,561	8,167	286	685
Hai River Basin		284	15,108	8,836	188	321
Liao River Basin		151	7,054	2,833	214	533
Songhua River Basin		759	17,568	4,652	432	1,631
Tibet		3,590	344	183	104,000	196,000

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CSO: 4007/66

STATUS OF PRODUCTION RESPONSIBILITY SYSTEMS REPORTED

Beijing ZHONGGUO NONGYE NIANJIAN 1981 [CHINA AGRICULTURAL YEARBOOK 1981] in Chinese Jul 82 pp 74-76

[Text] Various Forms of Agricultural Production Responsibility Systems

Under the guidance of the 3d Plenary Session of the 11th Party Central Committee, rural villages everywhere throughout the country rushed to improve their systems of administration and management, and revived and developed various forms of production responsibility systems. This has stirred commune members' enthusiasm for production and advanced development of agricultural production. The status in 1980 of the production responsibility systems instituted everywhere in the country and the different methods used are briefly explained below.

1. Systems of Responsibility Not Linked to Output

These systems are generally termed either operational responsibility systems or work contracting systems. They take on various forms of contracting. For example, they undertake to perform work within a time limit, year round, or remunerate according to a fixed quota. Units undertaking the contracted work may be either teams or individuals. Operational responsibility systems originate from the operational planning system (i.e. the system whereby workpoints were given according to fixed quotas). This system stipulates that under unified planning and management by the production teams, production teams contract specific jobs or several kinds of jobs to operating teams or individuals for completion. Production teams specify that contractors must complete their number of operations within a time limit, that meets both quality and quantity requirements for which they receive workpoints. The contractors will be rewarded if they overfulfill their quotas. If quotas are not fulfilled or quality does not meet specifications, workpoint remuneration will be deducted. Under this system of responsibility, contractors are responsible only for one or several operations that they engage in; they have nothing to do with the ultimate result of production. Some operations teams are permanent all year round, while in other cases temporary operations teams or seasonal operations teams are organized to do one or several specific jobs. The following responsibility systems that have specific methods of application do not link to output:

(1) Jobs contracted to be done within a time limit are to be remunerated by fixed quotas. This form of responsibility system is used in temporary operations teams or seasonal operations teams. It may also be used in permanent year-round operations teams. Production teams assign operations teams the task of, all within a time limit, planning, contracting, inspecting upon delivery, and recording workpoints by a fixed quota. For tasks that are suitable for individual operation, production teams can also sign contracts directly with individual commune members for them to complete. Some production teams contract single-item farm work that is a continual operation. For example, during the period of summer hoeing, large field crops, will all need weeding over three to four times. In order to guarantee the quality of the farmwork done, and to facilitate the inspection upon completing the contract, production teams will contract all of this weeding work to operations teams. Some production teams contract several tasks that are related to each other. They contract to operations teams all at once a whole series of interrelated jobs that have an affect on each other, such as seed selection, leveling of land, fertilizing, and sowing at the time of spring plowing and planting. Rural villages in Liaoning Province practice just such a system whereby they "determine the number of teams needed based on how much to be plowed, and remunerate according to how the seedlings turn out." This system has the advantage of building up a sense of responsibility and assuring work quality. Some production teams divide up work in terms of farming, animal husbandry, sideline occupations, machinery, fertilizer, and forestry, assign jobs to specialized teams and practice contracting by fixed work quotas. In Henan Province, for example, some production teams assign tracts of land on the basis of available workforces for the growing of forestry seedlings, practicing the contracting of work to be completed within a certain period of time or seasonally.

(2) Year-round work contracting. Some production teams divide team workforces into several correspondingly permanent operations teams for year-round contracted work. Operations teams are responsible for completing one or several production operations. This responsibility system is suited to the specialized division of labor among operations teams of various kinds. In Henan Province, for example, some production teams practice a responsibility system of "four specializations" (specialized teams, specialized units, specialized households, and specialized individuals) and "four specifics" (specific personnel, specific tasks, specific remuneration, and specific rewards and penalties), with earnings and profits belong to the production team. Usually tracts of land are divided up with the responsibility for the work being assigned to teams or individuals, payment of remuneration made on the basis of recorded workpoint, inspections made periodically, and rewards and penalties given accordingly.

2. Production Responsibility Systems Linked to Output

This term is abbreviated as responsibility system linked to output or may also be called the production contract system. It is characterized by contractors being responsible for the final outcome of production, namely output (or output value). It closely links the personal interests of contractors to the final results of their labor. This makes commune members concerned with the

entire production process, and the quality and quantity of every task they perform. This also surmounts the shortcoming of caring only for quantity but not quality of the work contract system.

Production responsibility systems linked to output may be roughly divided into the following kinds:

(1) Specialized contracting with calculation of remuneration linked to output. This form of responsibility system is characterized by the organization of specialized labor in the practice of a contract system that is linked to output (or output value). Under the condition of unified leadership and management of the production team, and in accordance with the principles of what is convenient for production and helpful to the management and administration, the farming, forestry, animal husbandry, fishing industry, and sideline occupations production or cash crop production that required a great amount of work or high skills are contracted to commune member groups with such specialized skills (specialized teams, specialized households, or specialized workforces). The output (or output value) for which production was contracted will be centrally distributed by production teams with rewards for overfulfillment and penalties for underfulfillment. Once the contracted production in the various enterprises is set in contracts, it will remain unchanged for 1 or more years. This kind of responsibility system began to appear during the period when cooperatives were organized, and when numerous agricultural cooperatives contracted collective production projects such as livestock, fruit tree, fishpond, vegetable garden, or melon garden to individuals or teams, linking calculation of remuneration to output.

As a general rule, specialized contracting applies to specific plots of land, specific outputs (or output values), specific costs, and specific workpoints. Rewards and penalties sometimes proportional rewards and proportional penalties, or many rewards and few penalties. Sometimes rewards are in the form of actual goods and sometimes in the form of workpoints. In some cases the rewards may be in the form of money, or in other cases in the form of grain and money or grain and workpoints. In some cases, for example, some production teams contract the management of forest trees to specialized households (or individuals), then divide earnings proportionally to the households (or individuals) after the trees have reached maturity. In rural Henan Province, some production teams stipulated 600 workpoints for each mu of tung tree seedlings grown. For an output of 400 seedlings, each 3.5 meters tall, a bonus of 0.03 yuan per seedling would be given. For seedlings over 5 meters tall, the bonus was 0.10 yuan per seedling. A one workpoint per seedling penalty was levied for every seedling less than 400 per mu in tung tree nurseries. Some production teams apportioned livestock among households for feeding, dividing earnings proportionately. Some practiced the principle of "public ownership with private raising, offspring being divided between the two" or "offspring going entirely to those who raised the animals."

In the specialized contracting form of responsibility system in which calculation of remuneration is linked to output, some production teams have developed to the point where contractors had no set workpoints but deliver a fixed quota;

practicing the so-called large-scale contract assignment, taking total responsibility with full rewards and penalties. In Ninghai County in Zhejiang Province, some fishing industry production brigades divided themselves into different specialized teams on the basis of different jobs to be done (deep sea fishing teams, kelp raising teams, transportation teams, industrial plants, etc), setting "four fees" to be paid by teams (bank interest, property depreciation, public accumulation and public welfare funds, and production brigade management fees). Individual teams were themselves responsible for all production costs, and for distributing earnings among the teams after paying the production brigades.

(2) Contracting production to teams. This form of responsibility system is developed out of the year-round operations teams in numerous places. This system follows the principle of unified planning, management, and accounting by the production teams. The production teams will contract to teams agricultural production work of a set area, and implement the practice of linking remuneration to output. In other words, the production teams decide on an operation team's personnel, land, workpoints, output (or output value), production costs, and a specific reward and penalty system. The production teams will then centrally distribute the output for which production had been contracted.

In actual practice, production teams in individual localities can have numerous different methods. When organizing operations teams, the production teams can assign a specific number of draft animals, a specific amount of land, farm tools, and workforces, a method called the "four fixes." In other places, these are not all so specifically assigned. In some places, production teams will centrally plow and plant and then set fixed quotas for grain production according to cropland. Everything else from managing fields to harvesting and milling will be contracted to operations teams, linking their remuneration to their output. Still in other places, production teams will contract for completion of everything from preparations for plowing to harvesting and in the end reward or make pay on the basis of work contracted and specific output. Rewards are given when the quota is overfulfilled. Some places would link output to nonfixed quotas and give final rewards and penalties according to the actual output.

Within operations teams, the method of registering workpoints according to fixed quotas is generally used. Some operations teams contracted to households (or to individuals) production jobs that lent themselves to individual handling. Some use the method of contracting jobs to be done within a time limit, placing responsibility on individuals.

Some production teams have developed contracting production to teams into contracting teams to assume full responsibility for work completion. In such case, operations teams would contract from production teams and be responsible for fulfilling state purchase quotas, for paying public accumulations to the collective, for paying withholdings to the collective with all remaining products and income to be divided by operations teams themselves under the guidance of production teams' centralized distribution plan. Longxi County in Gansu Province instituted large-scale assignment of responsibilities.

While maintaining production teams as basic units, the county divided work assignment among different teams. Within individual operations teams, fixed quota management was instituted and four accounts were established for commune members accounts: for workpoints, product income, production expenses, and actual goods distributed. Production teams signed "fixed contract agreements" with operations teams, which communes and production brigades checked, ratified, and supervised in implementation.

(3) Contracting production to households. In some places this form of responsibility system is termed "responsibility fields." This system dictates that under production team's unified planning and management, specific farming areas be assigned to individual households and specific outputs, workpoints, and investment be set, and a fixed reward and penalty system that regulates excess output and reduced output. The contracted portion of output is centrally assigned by production teams, but production teams and individual contracting households sign contract agreements.

Such responsibility systems are implemented in various specific ways. One way is to contract field management work, linking calculation of remuneration to output. In rural Ningxia Province, for example, some production teams did the sowing centrally, then set specific quotas to be harvested according to crop land. Everything else from managing fields to harvesting and milling was then contracted to individual households. Calculation of remuneration in this case was linked to output with full rewards given for excess output and full penalties for reduced output. In addition to contracting responsibility for the aforesaid large-field crops, each commune member is also required by the production teams to put in a certain number of work days per month for the production team so that production teams can centrally plan out the use of labor for other farm tasks. Another method is to distribute land to households based on whether the field is good or bad, near or distant and then assign specific amounts of output and responsibility for harvesting to individual households. With this method, everything from sowing to harvesting is contracted out to individual households; calculation of remuneration linked to output, and full rewards or penalties is given on the basis of over- or under-fulfillment. In some cases cultivated land is distributed on the basis of per capita average. In other cases it is on the basis of the number of workers in a household, and in still other cases it is distributed proportionally in terms of population and numbers of workers. Finally, the work is assigned to individual households. These individual households are considered as the contract units in calculating cultivated land area. In distributing cultivated land, sometimes distribution is done once every year; sometimes it is done once for several years.

In carrying out these production responsibility systems, ownership of the means of production remains in the hands of production teams. After land is distributed to individual households, it cannot be bought or sold, rented out, or transferred. For the use of plow oxen and large farm implements, many production teams organize their individual teams around a single plow ox, with each household in the team using this common plow ox. During busy farm seasons, team members would help each other and discuss, in a democratic fashion, which household will plant and harvest first. This method not only

solved the problem of a shortage of large farm implements but also helped the small number of households with fewer workers to complete their farm work in a timely fashion. The raising and feeding of plow oxen is sometimes contracted to an individual household, but shared by all the households in each team. In other cases, each household will take turns feeding and using the animal. The Luliang mountain region of Shanxi Province set up a method whereby "production teams are accounting units, teams are formed around the number of plow oxen, outputs of the field are decided, responsibilities of the individuals are assigned, individual households are to manage, and full rewards and penalties are given." Within this method, plow oxen are turned over to teams at the beginning of the year, with an assigned fixed value for the teams to use. Specific persons are assigned to feed, care for, and work them. Operations teams are assigned responsibility for providing the necessary wherewithal for the plow oxen, for working out the order in which they would work the fields, for helping households who were not very adept at farming, and for organizing mutual aid activities. As for farm machinery, such as large farm implements, and warehouses and drying sheds, some production teams will assign specific individuals to manage them. Based on a mutually agreed contract, these items cannot be bought or sold, and divided up among individual households. In some cases, processing machinery is contracted to commune members skilled in operating it and a fixed sum requirement instituted (the commune members being responsible for turning over a certain sum of money to the production team annually). If the machinery became damaged, the contracting party would be responsible for making restitution. In some cases water conservancy facilities are also assigned to the care of specific individuals, the households receiving benefits from the facilities would vote for people to care for it and be responsible year round for providing water for use and for storing water. Each household will pay on the basis of how big an area is benefited. As for collective forest trees, some places adopt a system whereby "trees go along with the land," contracting both land and trees at the same time and divide up proportionately the income from the trees. In cases where production of the land had been contracted and where trees affect agricultural outputs, either the amount of cultivated land area or the output of farm crops will be deducted.

In Tibetan pastoral areas, some production teams contract milk animals or female animals on the basis of population and stud animals on the basis of workforce, or livestock to individual households on the basis of a combination of workforce and population. Contractors are required to turn over to production teams all butter, skimmed milk remaining, sheep wool and goat hair, as well as the total number of workpoints. In addition, a definite animal death rate was set. If the number of animals that died were fewer than regulated, individual households could keep the difference. Individual households are also allowed to keep the meat and hides of the dead animals. Where the number of dead animals was greater than regulated, not only the meat and hides became the property of the production team, but contractors would have to indemnify the production team for their value.

When contracting production to individual households, in order to solve the problem of hardships experienced by military's, revolutionary martyrs', and staff's and workers' households that have no work force, some production teams adopted active measures. In the process of instituting a production

responsibility system linking calculation of remuneration to wheat output in Xi County, Shanxi Province, either little contracting or no contracting was made with households lacking laborers or having few laborers, such as the families of military personnel, martyrs, cadres, and their staff and workers. In cases where such households wanted to contract for a certain amount of cultivated land, and when difficulties in farming cropped up, the production team would organize to help with the work. The portion of the work helped out by the commune members would be shared equally by them as special allowance to family members of the military personnel and martyrs, and families of staff and workers would have to pay wages to those doing the work for them. In addition, production teams would arrange for needy households to do the kind of farm work that they can do, helping them develop family sideline occupations, and provided real help to them in solving difficulties in production and in their daily lives.

Some commune members felt that figuring out remuneration in contracting production to individual households was a headache, and that they did not make much that way, so they decided to contract everything to the households and made individual households solely responsible for completion of their tasks. Under this responsibility system, the production teams would centrally distribute the land and assigned work according to land area. Under the leadership of production teams, the households would sign contracts with the production team and turn over to the team a certain quota of various projects (state purchase quotas of grain, and assigned procurement quotas for various farm products). The production brigades would deduct a percentage from the subsidy and necessary expenses in caring for the dependents of military personnel, martyrs, and households enjoying the five guarantees [childless and infirm old persons who are guaranteed food, clothing, medical care, housing and burial expenses by the people's communes]. Production teams owing debts also must guarantee to repay the debt and give the remaining to commune members. In rural Anhui, the masses called this "guaranteeing what belongs to the state, withholding what belongs to the collective, and all the remains belong to oneself."

Within the foregoing responsibility systems of contracting production to teams or to individual households (as well as the system of contracting sole responsibility for work completion), some production teams would contract out responsibility for individual crops or certain production tasks (such as in the livestock industry, forestry, or industrial sideline occupations). This is in the very characteristic of the previously-mentioned specialized contracting. In some cases responsibility for several kinds of crops was contracted. In Guzhen County in Anhui Province, crops not requiring milling were contracted to individual households, while the three crops requiring "the turning of stone rollers," (i.e. those requiring the turning of stone rollers to thresh them) namely rice, wheat, and pulses, were centrally managed by production teams. Corn, sweet potatoes, cotton, peanuts, and such crops not requiring "the turning of stone rollers" (not requiring threshing) were contracted to individual households. In some cases production of all crops was contracted. In some cases, land in fringe areas, odd bits and pieces of land not readily farmed by the collective, infertile land, or raised paths between fields were contracted to individual households, large cultivated land areas belonging to the production team would continue to be managed by the team. Some individual households in

distant places would adopt the system of contracting of production or the system of contracting responsibility for work completion to individual households. Other households would adopt production team's collective farming method. In some cases, several different forms of responsibility systems existed within a single production team.

In addition, when practicing "assignment of sole responsibility for task completion to individual households," commune members in some production teams would fulfill only state purchase quotas and keep all other products to themselves. Some production teams have set aside some cultivated land for the growing of commune members' grain rations and assigned such fields to individual households. In such case, the portion contracted for output would take place of the households' grain rations; any excess production would revert to the producing household with all other land being collectively farmed. Some people lump these methods together and call them the different forms of the contracting of production to individual households.

(4) Contracting of production to individual workers. When the contracting of production to individual households was instituted, some households having few laborers had experienced definite hardships. As a result, some production teams adopted the method of "contracting production to individual." This meant that production teams assigned quotas not in terms of the number of people in each household, but in terms of how many laborers were in each household. They assigned a certain amount of cultivated land according to the number of laborers available to work it and set specific yields, specific numbers of work points, and specific rewards and penalties in each case.

Some production teams assigned some good land to skilled commune members and put into effect a full reward and penalty measure. In Xindu County in Sichuan Province, for example, quite a few communes and production brigades set aside some land, and contracted to commune members who could work hard and were highly skilled in the practice of economically "outstanding fields."

Some commune members' contractors would have to pay production brigades 400 yuan per mu, have 200 work days in records and pay 50 yuan of production cost. The county had contracted a total of more than 12,000 mu of "outstanding fields," and collected an average income of 500 to 600 yuan per mu. Some production teams, after contracting production to individual households would keep some cultivated land in reserve to be distributed when population increases (for example, when there are demobilized soldiers, and when people get married, etc). These production teams would temporarily contract such land to commune members, who have strong working ability and are willing to sign contracts for plowing and planting.

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CSO: 4007/66

PROBLEMS, PROSPECTS IN MAJOR GRAIN GROWING AREAS IDENTIFIED

Beijing ZHONGGUO NONGYE NIANJIAN 1981 [CHINA AGRICULTURAL YEARBOOK, 1981] in Chinese Jul 82 pp 85-87

[Text] Step Up Construction of Commodity Grain Bases

Since the 5th National People's Congress, the central government has proposed the building of 13 large-area commodity grain bases in 31 countries (or municipalities) of Heilongjiang Province, in the central part of Jilin Province, in the central part of Liaoning Province, in the northern part of Jiangsu Province, in the northern part of Anhui Province, on the Jiang and Han River plains in Hubei Province, in the Dongting Lake area of Hunan Province, in the Boyang Lake region of Jiangxi Province, in the Pearl River Delta in Guangdong Province, in the Yangtze River Delta of Jiangsu and Zhejiang Provinces (the Tai Lake region of Jiangsu and the Hangzhou-Jiaxing lake region of Zhejiang), the Western Yellow River Corridor in Gansu Province, at the bend of the Yellow River in Nei Monggol, and at the bend of the Yellow River in Ningxia Province. These 13 commodity grain bases contain a total of 247 countries (or municipalities), an agricultural population numbering 113.22 million, and a cultivated land area of 246.71 million mu or 2.2 mu of cultivated land per capita of rural population. In 1979, grain output totaled 120.5 billion jin or 18.1 percent of the nation's total grain output. This was an average of 1,064 jin of grain output per capita of the agricultural population, about 248 jin more per capita of agricultural population than the national average. It amounted to an average of 688 jin per mu of cultivated land. The commodity grain rate was 27.6 percent. Commune members' income from collective distributions was an average of 102.90 yuan per capita versus an average of slightly more than 18.70 yuan per capita for commune members in the country as a whole.

At the present time development is very uneven among the 13 commodity grain bases; however, from an overall standpoint, both the level of their grain production and their commodity rates are relatively high. Hastening the building of these bases can provide the country with more commodity grain, advance development of the national economy, and promote progress in China's four modernizations. Thus, good performance in the building of commodity grain bases ramifies into the overall situation in China's agriculture, and is a strategic measure in national economic development. It is also of major importance for making the broad masses of peasants become prosperous with all possible speed. In building commodity grain bases, individual regions are paramount. Insofar as its financial and material resources permit, the state

will select in a planned, step-by-step way, by stage and in groups, those bases that possess great potential for increased yields, that have a high commodity rate, and bases where little investment will produce visible results quickly, and give priority planning and support to these bases. In 1980, acting in accordance with the requirements of agricultural distribution for the country as a whole, the central government focused on the development of advantages that China's northeastern region possesses, and decided to accelerate building of commodity grain bases in the northeast first of all. It made specific provisions and gave major help with funds, materials, and machines. Each province also did preliminary planning on other commodity grain bases, and made specific arrangements for and construction of bases as the province's financial and material conditions permitted. The 13 commodity grain bases may be classified into five general regions.

1. The 31 Counties (or Municipalities) of Heilongjiang Province, and the Central Regions of Jilin and Liaoning Provinces

These three bases consisted of a total of 73 counties (or municipalities), banners, and districts, an agricultural population of 22.54 million, and a cultivated land area of 99.1 million mu, of which the grain field area occupies 73,697,000 mu of 74 percent of the cultivated land area.

The main characteristics of these bases are: a comparatively short frost-free season, basically only one grain crop per year, and a small population relative to available land; the cultivated land averages 4.4 mu per capita of agricultural population. This region also has large tracts of wasteland suitable for agriculture that can be developed. The soil is fertile, and the terrain is flat, an advantage for bringing about the mechanization of agriculture. In 1979 the machine-cultivated area was 59,974,000 mu or 61 percent of the cultivated land area. The commodity grain rate was comparatively high, being 35 percent in 1979; a fairly high rate among the 13 commodity grain bases. Commune member incomes were also fairly high. In 1979 commune member income from collective distributions was an average of 68.6 percent higher per capita than for the country as a whole.

Major problems include relatively poor water conservancy conditions. The current 11.628 million mu of irrigated area in Heilongjiang Province amounts to only 12 percent of its total cultivated land area, is 33.2 percent less than the country as a whole which has a 45.2 percent irrigated area out of the total cultivated land area. In addition, some low-lying easily waterlogged areas should be brought under control as quickly as possible. In the 8 million mu of cultivated land in the counties of the river plains of the Mudan Jiang, Songhua Jiang and Nen Jiang in Heilongjiang Province that have been reclaimed for agriculture, prevention of waterlogging is particularly necessary. Seven million mu of low-lying easily waterlogged wasteland has to be controlled in a rudimentary fashion before it can be reclaimed for agriculture. These land areas have been very underfertilized, resulting in very low grain yields per mu. On average, application of chemical fertilizer in these areas has been 36.2 jin per mu, with an average yield of only 432 jin per mu of cultivated land. The ability to withstand disasters is slight, and grain production is very inconsistent. Particularly whenever there is an early frost or freeze, grain yields would fall tremendously.

In the future capital construction of farmland, major effort will have to go into water drainage in order to eliminate waterlogging, and into actively developing irrigation in an effort to increase capabilities to withstand and resist natural disasters. In addition to taking full advantage of mechanization where population is small relative to available land, practicing scientific farming, and increasing fertilization to increase yields per unit area, proper reclamation of wastelands to expand the cultivated area can bring about tremendous increases in grain output and provide the country ever increasing amounts of commodity grain.

2. The Western Yellow River Corridor of Gansu, the Bend of the Yellow River in Ningxia, and the Bend of the Yellow River in Nei Monggol

These three bases have a total of 33 counties (or municipalities) and banners, an agricultural population of 5.32 million, and a cultivated land area of 16,837,000 mu. Grain fields account for 13,688,000 mu or 81.3 percent of the cultivated land area.

Major characteristics are: a fairly short frost-free period, fairly sharp differences between daytime and nighttime temperatures, fairly long hours of sunshine, generally one grain crop per year, and the growing of some winter wheat in a portion of the area. Population is small relative to land, cultivated land averages 3.2 mu per capita of agricultural population. Water conservancy conditions are fairly good. In 1979, the irrigated area amounted to 13,217,000 mu of 78.5 percent of the cultivated land area; 33.3 percent more than the national ratio of irrigated land to cultivated land area. Some wasteland suitable for agriculture remains to be reclaimed.

Major problems are insufficient maintenance, equipping, and management of existing water conservancy projects, with serious waste of water conservancy resources; fairly low levels of fertilization with chemical fertilizer, averaging 69.3 jin per mu in 1979; and relatively little rural use of electricity, averaging 18.2 kilowatt hours per mu of cultivated land. The soil is infertile and heavily saline and alkaline. Grain yields are fairly low averaging 378 jin per mu of cultivated land. The commodity grain rate is not high, being 22.2 percent in 1979. Commune members' standards of living are not high, particularly in the area around the bend of the Yellow River in Nei Monggol where commune distributions from the collective are 10.20 yuan less than the national average.

Future efforts will have to be made to change production conditions. At the bend of the Yellow River in Nei Monggol, a first problem to be solved is drainage of water. There must be a firm policy on maintaining and equipping the existing water conservancy facilities, and management will have to be strengthened to improve the water resources utilization rate. Control and prevent soil from salinization and improve soil content, speed up the building of shelter forests so as to break the winds and stabilize the sands, conserve moisture, and to regulate the climate to help crop growth. There will have to be increased use of chemical fertilizer, scientific farming of the fields, steady increase in grain yields, increase in commune member incomes, and increase in the commodity grain rate.

3. Northern Jiangsu Region and Northern Anhui Region

These two bases have a total of 42 counties, an agricultural population of 32,272,000, and a 57,807,000 mu of cultivated land area; 42,315,000 mu or 73.2 percent of which is grain fields.

Major characteristics are: comparatively good natural conditions, a frost-free season of about 200 days, fairly high cumulative temperatures, fairly copious rainfall, and usually three grain crops every 2 years or 2 grain crops every year. The terrain is flat, making it suitable for agricultural mechanization. Historically, flood and waterlogging disasters have been severe in these two regions. After many years of harnessing efforts following Liberation, water conservancy conditions have greatly improved. In 1979 the effectively irrigated area was 26,111,000 mu or 45.2 percent of the cultivated land area. In recent years, drylands have been converted to wetlands. The farming system has been changed, and the area in which waterlogging has been eliminated to grow rice and alkalinity washed away has expanded very quickly. This has promoted increases in agricultural output. In the North Jiangsu region, in 1978 the paddy rice area was more than 9.4 million mu or 80 percent of the low-lying area that is prone to waterlogging.

Major problems are: continued weakness in ability to withstand disasters. Flood prevention and waterlogging drainage standards are not high, and water conservancy projects have not been sufficiently equipped. The area that is prone to waterlogging, that is saline and alkaline, and that has gravel soil is fairly large. Little fertilization is done and the soil's organic content is low. In 1979, fertilization with chemical fertilizer averaged 64.9 jin per mu; and grain yields per mu were relatively low, averaging 541 jin per mu of cultivated land. In the northern part of Anhui Province, in particular, yields averaged only 385 jin per mu of cultivated land. The commodity rate was not high, amounting to 21.4 percent in 1979. Rural villages are relatively poor and commune member income very small. In 1979 commune member income from collective distributions was 34 percent less than the national average, the lowest of any of the 13 commodity bases.

In future, it will be necessary to build more water conservancy projects, to buttress capacity to withstand natural disasters, to actively improve low-lying areas prone to waterlogging, to improve low yield saline-alkaline and gravel fields, to farm scientifically, to increase fertilization with chemical fertilizer, to steadily increase grain output, and to increase the commodity rate. In addition to devoting attention to grain production, it will also be necessary to adapt general methods to local situations to enhance development of cash crops and of forestry, livestock raising, sideline occupations, and the fishing industry, and to increase commune member income so that rural villages will become prosperous with all possible speed.

4. The Yangtze River Delta and the Pearl River Delta Regions

These two bases have a total of 46 counties, an agricultural population numbering 22,841,000, and a cultivated land area of 28,553,000 mu, of which 22,147,000 mu, or 77.6 percent, is grain fields.

Major characteristics of these areas are: a long frost-free season, 240-280 days in the Yangtze River Delta and more than 360 days in the Pearl River Delta. Annual amount of rainfall is fairly high. Two or three grain crops may be grown each year; and population is large relative to available land, cultivated land averaging 1.2 mu per capita of agricultural population, making these areas the ones with the smallest average amount of cultivated land per capita in the country. Production levels are very high. In 1979, the irrigated area covered 24,263,000 mu or 85 percent of the cultivated land area. Fertilization with chemical fertilizer averages 186.9 jin per mu and use of electricity averages 65.5 kilowatt hours per mu of cultivated land. The machine-farmed area is 18,927,000 mu or 66.3 percent of the cultivated land area. Grain output in these areas is the country's highest averaging 1,211 jin per mu of cultivated land. The commodity grain rate is also high. In 1979, it was 30.6 percent. Commune member income levels are high. In 1979 commune member income derived from collective distributions was 71.6 percent higher than the national average.

Major problems are inadequate water conservancy construction standards and equipping of projects. The areas have a fairly large number of rivers and lakes and the ground water table is fairly high making for a fairly serious threat from flood and waterlogging disasters. Grain production remains inconsistent.

In future it will be necessary to strengthen water conservancy construction standards and do a good job of equipping projects. Also necessary is increased fertilization to improve the soil, lowering the ground water table, and a continued increase in the level of scientific farming so that grain output will become higher and higher.

5. The Jiang and Han River Plains, the Dongting Lake Region, and the Boyang Lake Region

These three bases have a total of 57 counties (or municipalities), an agricultural population numbering 30,247,000, and a cultivated land area of 44,415,000 mu, 351,480 mu or 79.1 percent of which is grain fields.

Major characteristics are a fairly long frost-free period and a generally two grain crops per year. The land is a river and lake alluvial plain with fertile soil. Population is large relative to available land, cultivated land averaging 1.47 mu per capita of agricultural population. Water conservancy conditions are fairly good. In 1979 the irrigated area was 34,331,000 mu, which was 77.3 percent of the total cultivated land area. Grain yields are fairly high, averaging 961 jin per mu of cultivated land.

Major problems are that there is not a very good solution to water drainage problems. This plus the fact of low-lying terrain and a fairly high ground water table makes flooding, waterlogging, and water stagnation serious threats. In the Dongting Lake region, for example, in 1977, the area of water stagnation covered 3.35 million mu, and the disaster stricken area was 1.1 million mu. Some hilly regions are still threatened by drought, and grain yields are very inconsistent. In addition, some low yield fields hurt

balanced increases in grain production. The Jiang and Han river plains, for example, have more than 4 million mu and the Dongting Lake area has more than 3 million mu of such land. In the Boyang Lake region of Jiangxi Province, the soil is acidic red earth that is very clayey, has a large structure, lacks organic matter, and is yet to be very well improved. The commodity rate is not high, amounting to 22.8 percent in 1979.

In future it will be necessary to continue capital construction of farmlands with the emphasis going to soil improvement and control of water, intensification of maintenance and equipping of existing water conservancy projects, and finding ways to solve drainage problems with all possible speed. Efforts will have to be made to improve low yield fields, accelerate soil surveys, improve the soil, expand fertilizer sources, increase fertilization, the levels of scientific farming, the output, and the commodity grain rate.

As the national economy develops, the country must take more effective action in a planned, step-by-step way to hasten the building of commodity grain bases so that commodity grain bases will more rapidly provide the country with more commodity grain.

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CSO: 4007/66

DEVELOPMENT OF LIVESTOCK INDUSTRY IN 1980 SURVEYED

Beijing ZHONGGUO NONGYE NIANJIAN 1981 [CHINA AGRICULTURAL YEARBOOK 1981] in Chinese Jul 82 pp 104-105

[Text] Animal Husbandry Industry

1980 Animal Husbandry Industry

Under the leadership of the CPC Central Committee, the State Council and CPC Committees at all levels, and the People's Government, and in carrying out conscientiously the spirit of the 3d Plenary Session of the 11th Party Central Committee and the two documents on agriculture by implementing the party's various policies, and by readjusting positive factors in all quarters, the livestock industry's economy has proceeded from developing during the previous 2 years to new growth in 1980. In 1980, output of all major livestock products increased and, except for hogs, the number of livestock animals in inventory at the end of the year increased. Output of pork, beef, and mutton reached 12.05 million tons for a 13.5 percent increase over 1979. This included 11.34 million tons of pork, a 13.3 percent increase over 1979; 1.14 million tons of cows milk, 6.6 percent more than in 1979, 225,000 tons of goats milk, 4.2 percent more than in 1979; 176,000 tons of wool, 15 percent more than in 1979; 92,000 tons of honey, 19.5 percent more than in 1979, and removal from inventory of 198.61 million fattened hogs, 5.8 percent more than in 1979.

As of the end of 1980, large livestock animals in inventory numbered 95.25 million head, 0.7 percent more than in 1979; sheep in inventory numbered 187.31 million head, 2.3 percent more than in 1979, hogs in inventory numbered 305.43 million head, 4.5 percent more than in 1979; and honey bee colonies numbered 5.89 million, 11.1 percent more than in 1979.

Except for individual places, in all the country's large cities and towns supplies of pork were unlimited in 1980, and the supply of fresh eggs also increased fairly greatly to solve a shortage in supply of pork and eggs of many years standing.

During 1980, the country's exports of livestock and livestock products also increased tremendously; exports totaling \$1.85 billion, 21.4 percent more than in 1979 and accounting for about 10 percent of the country's total exports. Rabbit fur, goat hair, feathers, hog bristles, hog casings, and

honey held first place in the world's commodity trade. Some products became much sought-after goods in great demand in international markets, and were rather well received by foreign consumers.

Gross output value of the livestock industry increased 4.4 percent over 1979 (figured in terms of 1970 constant prices), rising as a proportion of the gross output value of agriculture from 14 percent in 1979 to 14.2 percent.

Three major events took place in livestock industry production in 1980 as follows: one was the further perfection and implementation of production responsibility system; the second was tremendous growth in the number of specialized households and key household; and third was that operation of integrated livestock, industrial, and commercial enterprises began to show results.

1. Specialized Contracting and Livestock Industry Production Responsibility Systems Linking Calculation of Remuneration to Output Demonstrated Great Strength

In the wake of the 3d Plenary Session of the 11th Party Central Committee, what would happen to the livestock raising industry without steady perfection of various forms of production responsibility systems in backward agriculture? This was a great problem that confronted the livestock industry. Livestock farm production responsibility systems further developed from the initial "five fixeds and one reward" to "linking of production to calculation of remuneration," and finally developing into "specialized contracting" (specialized individuals) and the practice of dividing profits or large-scale assignment of sole responsibility for tasks. Practice has shown "specialized contracting" to be a powerful force.

In 1980 the state-owned Haerbin Municipal Songhuajiang Dairy Farm abolished its monthly wage system, and under otherwise substantially identical conditions it fulfilled its total annual production quota within the first three quarters of the year. Milk output increased by 33.1 percent over the same period in 1979, and 10 percent economies in production expenses were realized for the first time after 9 years of losses. A survey of 10 specialized Beijing households that had contracted collective hog farms showed an average 11.2 surviving hogs from each sow in 1980, which was 3.1 head more than in 1979. Fattened hogs sold to the state during the first three quarters of the year increased 60.9 percent over the same period in 1979. In 1979 losses for 10 hog farms amounted to 15,593 yuan, but 1980 saw profits of 20,620 yuan. In 1980 after specialized teams at the Xinyantou Production Brigade chicken farm in Mulin Commune, Shunyi County, Beijing started contracting, each hen produced an average of 24.67 jin of eggs and the farm realized profits of 16,905 yuan; 1.1 times more than planned.

In the beginning, specialized contracting livestock farms were limited to collective pasturelands, only later moving into state-owned animal farms. They began with hog and chicken farms, but have now expanded to cattle, sheep, rabbit, and bee farms. In Hunan Province, in Changsha County alone there are more than 1,480 specialized household livestock farms and at Dae Commune in

Pengshui County, Sichuan Province, 24 of 34 collective hog farms practice specialized contracting. There has been no instance in which a specialized contracting livestock farm has not turned losses into profits.

Practice of specialized contracting requires attention to the following points: 1. Proper selection of contractors. Those having experience in raising livestock, who have good production techniques, who work hard, and who work selflessly for the public interest should be selected for contracting. When making selection, it is wise to use self-assessment and public discussion and to obtain approval of leaders. 2. Preparation of contracts. Contracts should stipulate the production conditions to be provided by production brigades or production teams and farms, and spell out the obligations and rights of contractors. The signed written agreement should be reviewed by the masses and by higher authority. Contracts may be made for 1 year or for several years. 3. Forms of contracts should be flexible. Conditions vary from place to place, whatever forms and methods suit the circumstances of a local area should be used; there should be no "arbitrary uniformity." 4. Contracts should be honored in the current year. All contracts signed should be honored within the current year as stipulated; contracts cannot be scrapped at will, and those who act in bad faith should bear economic responsibilities.

2. Rapid Development of Key Households and Proprietary Households for Chicken and Hog Raising

After abolition of policies limiting and forbidding commune members from raising hogs as a commune member family sideline occupation, the number of household raising livestock increased very rapidly. Development progressed gradually from livestock raising as a household sideline occupation toward specialized and socialized production. In 1980 in the four Heilongjiang cities of Haerbin, Qiqihaer, Jiamusi, and Hegang, specialized households grew to 13,700 in number or 1.7 percent of all households. They raised a total of 910,000 laying hens, each household averaging 66 hens and providing 846 jin of eggs. In Qiqihaer City, 6,000 chicken raising key households and specialized households raised 410,000 laying hens, which provided 7 million jin of eggs, each family providing an average of somewhat more than 1,160 jin. In Shenyang City, the number of key households and specialized households has grown to more than 10,000, most of which are key households and specialized households for the raising of hogs.

A survey done in Qiqihaer City shows advantages from the growth of individual hog raising households to be as follows: 1. Small investment. In 1980 individual chicken raising households sold to the state 7 million jin of fresh eggs. To produce 7 million fresh eggs, a mechanized chicken farm had to invest 15 million jin. 2. Large returns. Individual households raising laying hens made an annual profit of about 10 yuan per hen. By raising 100 hens, their profits were 1,000 yuan. By developing individual chicken raising households, the more than 4,000 needy households in Qiqihaer that depended on social relief and subsidies became prosperous households. 3. Residents were able to eat fresh eggs all year round. Today the city produces 30,000 fresh eggs daily, and chicken raising households regularly have 100,000 jin of fresh

eggs on hand. There is an even flow of eggs to markets all year round with no slack season or busy season for eggs. 4. Food departments have also turned losses into profits in dealings in fresh eggs. Where formerly they lost a little more than 0.20 yuan on every jin of eggs they took in, now they can make a profit of 0.01 yuan on each jin of eggs.

Principal experiences of Qiqihaer in development of individual chicken raising households were as follows: 1. Support in every way to individual households raising chickens. They instituted supply of feeds to raise chicken and exchange of eggs for feed. For each jin of eggs, they supplied 5 jin of feed, and for each mature hen, they provided 18.8 jin of feed a month. For stud cocks, they provided 7 jin of feed per month. People in cities and towns awaiting employment who raised chickens at home received the same consideration in being hired for work, in attending school, and in going into military service. 2. Attention to providing superior chicken breeds, feed supply, and a communicable disease prevention and control system. The city operated a stock breed chicken farm, three stud cock farms, and four hatching stations that were able to supply 2 million superior breed chicks annually. Feed companies set up 12 network outlets to supply feed. They carried a complete line of good quality feeds, which were never out of stock. Animal husbandry departments established an immunization network that provided immunization for every household and immunized every chicken. 3. Intensification of technical guidance. The municipal animal husbandry bureau set up technical guidance stations for poultry raising and used radio stations, technical discussion meetings, training classes, and printed technical handbooks to popularize chicken raising techniques. 4. Strengthening of leadership. From the grassroots residents' committees upward, at every level management organizations were established. The city had chicken raising production leadership teams, a municipal planning commission, banks, and materials bureaus, which rendered active support with financial and material resources. In 1980, they arranged for 650 cubic meters of lumber, 100 tons of cement, and 100 cases of glass, while banks made loans totaling more than 700,000 yuan.

3. Results Begin To Show in the Operation of Integrated Animal Husbandry, Industrial, and Commercial Enterprises

Operation of integrated animal husbandry, industrial, and commercial enterprises is a major organizational method for hastening development of the livestock industry, and for improving the existing system. The Ruorgai Integrated Animal Husbandry, Industrial, and Commercial Enterprise in Sichuan Province was one of the country's earliest trial-operated integrated enterprises. Beijing set up the Huadu Company, an integrated animal husbandry, industrial, and commercial enterprise centering around a poultry stud farm. In Hebei Province, 17 state-owned livestock farms in Chengde Prefecture jointly established integrated animal husbandry, industrial, and commercial enterprises. During 2 years of operation, the Ruorgai integrated enterprise built 83,000 mu of pasturelands. They successfully fattened lambs in the year of their birth, removing more than 65,000 from inventory the following year. Through a continuous production, supply, and marketing process, they realized net profits of more than 3 million yuan in 1980, and commune members in the livestock industry received an average of 250 yuan per capita, 41.4 percent more than in 1979.

In 1980 the China Stud Livestock Import and Export Company was established and started work. They imported a group of stud livestock, which will provide better conditions for future imports and exports of stud livestock, for improving stud livestock, and for development of the livestock industry.

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CSO: 4007/66

FODDER, PRICING SEEN AS KEYS IN LIVESTOCK DEVELOPMENT

Beijing. ZHONGGUO NONGYE NIANJIAN 1981 [CHINA AGRICULTURAL YEARBOOK, 1981] in Chinese Jul 82 pp 107-109

[Text] Active Development of the Livestock Feed Industry To Serve Animal Husbandry Enterprise

In December 1978 the Ministry of Commerce (and Ministry of Food) issued "Notice on Vigorous Development of Livestock Feed Work"; in March and April 1979, the Livestock Feed Bureau of the Ministry of Food convened three separate forums on livestock feed work in Chongqing, Shanghai, and Beijing; in July 1980, the Ministry of Food convened a national conference in Beijing for the exchange of experiences in the building of the livestock feed industry. All this increased people's understanding of the importance of the livestock feed and the livestock feed industry, and promoted development of the livestock feed industry.

At the present time, the country annually pays out more than 13 billion jin of grain specifically for use in making livestock feed or as award sales grain for the purchase of livestock and poultry products. It also annually supplies 12 billion jin of bran and byproducts from the processing of grain. In addition, rural villages throughout the country annually keep 60 billion jin of grain for livestock feed. Under present circumstances, it is not easy to allocate such a large amount of grain for use as livestock feed. Obviously it is very important that precious livestock feed grain be used well.

China's livestock industry is still substantially in a situation of feeding what is available and of using only a single concentrated feed for livestock. Consequently, the amount of grain that is wasted is high; feeding periods are long, and the number of animals removed from inventory is low. One effective way to reverse this poor situation is to build a livestock feed industry.

Formerly China's livestock feed industry had neither livestock feed raw materials industries (minerals, vitamins, amino acids) nor livestock feed processing industries. In recent years, with the development of hog raising and chicken raising, and particularly with development of mechanized and semi-mechanized hog raising and chicken raising industries, China's livestock feed industries have also developed and begun to show results. Statistics show that as of the end of 1980, a total of 143 livestock feed processing plants

with an annual output of more than 3,000 tons each had been built and put into production for an annual production capacity of 1 million tons. Statistics from the Ministry of Food show that in 1980, 18 provinces and municipalities produced a total of 2.491 billion jin of mixed livestock feed and marketed 2.231 billion jin. One-third of the total amount marketed went to nonagricultural customers and two-thirds went to agricultural customers (sold to communes, brigades, and individual commune members). Beijing, Shanghai, and Liaoning, which got started relatively early, have already begun to set up a livestock feed processing network that combines large, medium and small plants. Tianjin, Sichuan, Jiangsu, Zhejiang, Fujian, Heilongjiang, Hunan, Hubei, Henan, and Hebei are in processing of developing livestock feed processing industries and achievements are evident. In addition to grain departments, animal husbandry and foreign trade departments have also established quite a few livestock feed processing plants. Since the country's foundation for livestock feed raw materials is weak, it is unable to provide the livestock feed raw materials needed for full value feed blends, so today an overwhelming majority of the livestock feed produced in China is simple mixed feed.

Blended livestock feeds are of two major kinds. One kind is basic feed, principally energy feed (which accounts for 60-70 percent of total output) and protein feed (which accounts for 25-35 percent of total output). The other kind is livestock feed additives (which account for less than 5 percent of total output). Energy livestock feeds consist primarily of various kinds of grain and byproducts from the process of grain. Protein feeds consist principally of various kinds of cake residues [e.g., residues from pressing of soybeans or rapeseeds], as well as livestock feeds of animal origin (such as fish meal, bone meal, powdered blood, pulverized feathers and hair, and silk-worm chrysalides). Additives consist primarily of vitamins, antibiotics, amino acids, and minerals.

In order to develop China's livestock feed industry, the better to serve development of the livestock industry, the following actions must be taken:

(1) Genuine strengthening of leadership and coordination of policies. The livestock feed industry touches on the grain, animal husbandry, aquatic products, commercial, chemical industry, pharmaceutical, machine, and transportation sectors. Planning commissions have a responsibility they cannot shirk, and should strengthen leadership. Right now the livestock feed industry is mostly a part of the grain system since blended (or mixed) feeds are composed largely of grain and since grain management and administration is concentrated in grain departments. Therefore grain departments have a direct interest in development of the livestock feed industry, and have an objective responsibility for coordinating and giving impetus to it. Overall planning and coordination is very important and can avoid individual components being a law unto themselves with overlapping of work for improved results in the macro-economy. Grain departments are responsible for the grain systems' construction and management of blended (and mixed) feed plants (or workshops); commune and brigade industrial departments are responsible for commune and brigade establishment of livestock feed processing plants (or sites); planning commissions and all departments in charge are responsible for sites that

produce various additives; farming and forestry departments are responsible for producing and providing vegetation for livestock feeds; commercial departments are responsible for production and marketing of livestock feeds of animal origin, such as from abattoirs. Each sector, having its own individual responsibility, helps the development of the livestock feed industry.

(2) Plant operation must proceed from realities, and plant operation must also proceed from market requirements and the state of resources, keeping in mind economic results. Today, as a general rule large plants should not be built. Large plants require large investment; technological requirements are high, and large markets are required. To proceed from the realities of the state of China's livestock industry, it would be better to build more medium size and small plants. Technology can develop from the simple to the complex; plant distribution can expand from single sides to wide areas; product quality can advance from low to high; and product varieties can increase from few to many. There should be a combination of renovation, expansion, and new construction with the emphasis on renovation and expansion to make use of existing processing plants in the grain system. While assuring technological rationality, every effort should be made to do things simply and thriftily in order to save investment. Today's tasks are, first of all, to make use of the byproducts of grain and oil-bearing crop processing, and to solve the problem of coordinated processing of award sale grain and grain allocated specifically for livestock feed in order to change the backward situation of feeding whatever is available.

(3) Intensification of livestock feed research and improvement in product quality. Livestock feed technology is still a new field in China and a weak link extremely in need of strengthening. First, emphasis should be directed to research in rational use of existing livestock feed resources, for example, the processing for use of rapeseed cake and cotton seed cake and livestock feeds of animal origin. Secondly, new livestock feed resources should be developed to meet livestock industry needs, and research should be intensified on the processing for use of industrial and agricultural wastes. In addition, production quality should be improved, particularly the quality of blended (and mixed) feeds. At the present time such products are mixed unevenly, and the use of single raw materials is a problem that should be given attention for genuine solution.

(4) Active development of livestock feed additive production. Additives are of major significance in improving the payoff from livestock feeds. Livestock feed additives are ingredients added to improve benefits derived from the feeding of basic rations. Generally they use a man-made synthesis of modern biological techniques and chemical methods. For example, amino acid, vitamin, antibiotic, and pharmaceutical additives are all artificially synthesized. Requirements are fairly high for biological skill, and investment required to build plants is fairly large. The role of additives is very great. Take the major amino acid required, methionine, for example. One jin of methionine does the job of 50 jin of fish meal, and 1 ton of methionine can save 100 tons of blended livestock feed for an economic benefit derived from 200 mu of livestock feed land. So, from a long range point of view, problems in production of additives must be solved. This requires, first of all, making

full use of the potential of the existing pharmaceutical industry, and making full use of its byproducts.

Promotion of Development of the Animal Husbandry Industry by Raising the Procurement Price of Livestock Products

Since 1979, acting in the spirit of the directive passed by the 3d Plenary Session of the 11th Party Central Committee titled, "CPC Central Committee Resolutions on Various Problems in Hastening the Development of Agriculture" the government has commensurately increased the procurement prices it pays for major livestock products. For example, the average procurement price for live hogs was increased from 49.46 yuan per 100 jin in 1978 to 62.53 yuan in 1979, a 26.43 percent increase. The average procurement price for beef cattle rose from 66.30 jin per 100 jin to 92.42 yuan, a 39.40 percent increase. The average procurement price for mutton increased from 76.51 yuan per 100 jin to 102.54 yuan, a 34.02 percent increase. The average procurement price of hen's eggs increased from 49.46 yuan per 100 jin to 62.53 yuan, a 26.43 percent increase.

Formerly, because of the overly low procurement prices paid, first, peasants frequently lost money or made very little profit from the raising of hogs, cattle, sheep, and chickens. This hurt ability to maintain a simple reproduction or to expand reproduction. In many places a situation existed in which costs could not be recovered from the sale of beef, mutton, or eggs. Second, the low prices did not help gradually improve the livelihood of peasants and herdsmen. The overly low procurement prices paid for livestock products is a reflection of the price scissors that has historically existed in China between industrial and agricultural products. Because of the existence of a price scissors between industrial and agricultural products, peasants have had to pay a fairly large amount of farm or livestock products in exchange for industrial products of a certain value. As industrial and agricultural production develop, unless commensurate increases are made in the procurement prices paid for livestock products, inevitably gradual improvement in the livelihood of peasants and herdsmen will be impaired. Therefore, the decision of the party and government on increasing the procurement prices paid for livestock products was a necessity for hastening development of China's livestock industry, and was also demanded by the laws of value.

As a result of increase in procurement prices, the material benefits to be derived promoted further peasant and herdsmen concern for development of the livestock industry. A representative sampling showed that after the price rise, peasants could derive a net income (including wages) of 30 yuan from the raising of a single fattened hog. For example, in Jinzhu County in Sichuan Province, in 1980 it took a payment of 81.20 yuan per fattened hog to get an income of 117.60 yuan for a net profit of 36.40 yuan. In Dongtai County, Jiangsu Province, in 1980 each fattened hog required an average expenditure of 78.95 yuan for an income of 112.60 yuan, a net profit of 33.65 yuan. In Yuncheng County in Shandong Province, it took 81.26 yuan to fatten a hog which brought an income of 111.04 yuan, a net profit of 29.78 yuan.

China's livestock industry production is one of the sectors that is fairly sensitive to price. This is because China's livestock industry ownership system is primarily one of commune member private ownership and collective ownership. The proportion of ownership by all the people is relatively small. For example, in 1980 hogs in inventory at year's end throughout the country numbered 305,431,000, 90.5 percent of which had been privately raised by commune members; those owned by collectives numbered only 9.4 percent, and those owned by all the people were only 2.1 percent. In 1979, sheep in inventory throughout the country at the end of the year numbered 183,142,000, 38.8 percent of which had been raised by commune members. Commune collectives raised 55.5 percent, and sheep raised in the system of ownership by all the people numbered 5.7 percent. Among industries in a system of ownership by all the people, if one sector loses money, distributions can be made from national revenues, other sectors being used to subsidize it, the distributions being used to maintain simple reproduction and to expand reproduction. But in the collectively owned livestock industry, and particularly in the family livestock raising industry, such subsidization cannot be obtained. Consequently the regulatory role of price laws is revealed most clearly in China's livestock industry production. When prices rise, production increases at once. Because producers are concerned about material benefits, they are always most interested in products with a high price that produce great profit. The tremendous 1979 increase in procurement prices paid for livestock products advanced development of the country's livestock industry. In 1980, there were 4.7 percent more hogs in inventory than in 1977, and fattened hogs removed from inventory numbered 198,607,000, 18.3 percent more than in 1977. Large livestock animals in inventory at the end of 1980 numbered 95.25 million, 1.5 percent more than in 1978. In 1980, sheep in inventory at the end of the year numbered 191.54 million head, 12.7 percent more than in 1978. In 1980, pork, beef, and mutton output reached 24.11 billion jin, 15.61 billion jin or 54.4 percent more than in 1977. Meat output per capita averaged 24 jin, 45.4 percent more than in 1977. In recent years, China's livestock industry has been able to develop fairly rapidly, and increase in procurement prices has been one of the major reasons why.

In the process of increasing procurement prices for livestock products, as a result of fairly substantial differences in natural and economic conditions between one place and another, plus the seasonal nature of the livestock production and the price system's lack of different prices for different quality (the difference in price being relatively small), regional differences in price, and seasonal differences in price, after procurement prices were raised some places that produced large numbers of live hogs, poultry eggs, and sheep experienced difficulties in selling them. This situation will require further improvements in the livestock pricing system and in marketing channels, as well as in commercial facilities. Departments concerned in China are in process of studying these new problems that have appeared so as to be able to take effective action to promote further development of the livestock industry.

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CSO: 4007/66

BENEFICIAL ROLE OF COUNTRY FAIR MARKETS DISCUSSED

Beijing ZHONGGUO NONGYE NIANJIAN 1981 [CHINA AGRICULTURAL YEARBOOK, 1981] in Chinese Jul 82 pp 141-142

[Article by Market Management Bureau, Industrial and Commercial Administration]

[Text] Rural Economy and Commune Member Life

Enlivening Country Fair Trade and Making the Rural Economy Flourish

With the gradual implementation of a series of rural economic policies formulated in the wake of the 3d Plenary Session of the 11th Party Central Committee, and the universal rural promotion of various forms of production responsibility systems, agricultural production, and particularly commune and brigade economic diversification and commune member family sideline occupations, have developed very quickly. The flourishing of the rural economy has brought about a liveliness in rural country fair trade. Country fair trade saw new development during 1980; the number of country fair sites increased; goods coming into markets were more abundant; trading was lively; and prices were fundamentally stable.

Increase in country fair sites. By 1980, there were a total of 37,890 country fair sites, 890 more than the 37,000 of 1965. In addition to reviving the former country fair sites, some new ones were added. In addition, all jurisdictions revived traditional market days, mixed markets, early morning markets, night markets, temple markets, mule and horse markets, and goods exchange fairs.

Goods arriving in markets increased, and the volume of business rose. By 1980, goods arriving in markets had grown to between 200 and 300 varieties. Goods of every description were available in markets to fill every need. Some local specialties that had vanished from markets or that which had been rarely seen reappeared, and traditional goods returned to markets. All sorts of goods needed by the masses in their daily lives and for production could be bought freely in markets. With the increase of goods in markets, the volume of business rose to 21.16 billion yuan in 1980. This was the highest level since the "three major transformations" [the socialist transformation of agriculture, handicrafts, and capitalist industry and commerce, which was basically completed by the end of 1956]. It was 16.4 billion yuan, or 29 percent, more than in 1962, and 17.1, or 24 percent, more than in 1979, the year of

tremendous growth. Figured in list price terms, volume of country fair trade business in 1980 amounted to 7.6 percent of the volume of retail sales of social commodities.

Comparison of volume of transactions for 15 goods showed an increase for 13, only agricultural means of production and small livestock animals and poultry declining. Business volume increased by more than 30 percent for fats and oils, tobacco and hemp, aquatic products, and firewood. Industrial product business volume rose most, by 1.8 times. Second was plow oxen, by 54 percent.

Market prices remained basically stable with slight increase, and the gap between list prices and market prices narrowed. Comparison of the end of 1980 with the end of 1979 showed an overall 1.17 percent rise in market prices. The gap between prices of goods in country markets and list prices for state-owned goods narrowed to 0.5 percent from the 35 percent of 1979.

Comparison with 1979 of market prices for 25 different goods showed a decrease of 8, namely, wheat, rice, corn, edible oil, pork, rush mats, partially grown hogs, and piglets. Prices of vegetables, brooms, and firewood remained steady. Prices of 14 goods rose, namely, chickens, chicken eggs, fresh fish, radishes, apples, sugar cane, citrus fruit, tobacco, hemp, willow bough and bamboo baskets, manure baskets, carrying poles, and plow oxen.

In 1980 many parts of the country experienced uncommon natural disasters, but in some disaster-stricken provinces, municipalities, and autonomous regions such as Beijing, Tianjin, Hebei, Shanxi, Liaoning, Jilin, and Shanghai, average market prices fell. Nationally, the market price of things of great consequence in the lives of the people such as grain, edible oil, and pork remained stable and declined. Such has rarely happened before. Of special note is that grain prices continued their trend of recent years toward gradual decline in sharp contrast to the straight line rise during the rampage of the "gang of four." Take rice, for example. At the end of 1955, it sold at an average of 0.269 yuan per jin, but had risen to 0.481 yuan per jin by the end of 1976, a 78 percent rise, and 2.17 times as high as list price. In recent years, however, the price of rice has fallen in a straight line. In 1978 and 1979, it fell by 13 and 2 percent respectively, and in 1980 it fell another 3.4 percent from the 1979 price. Even in March and in April when the new crop was still in the fields while the old crops were approaching exhaustion, it declined. At the end of March 1980, the price of rice averaged 0.379 yuan per jin, 0.061 yuan less than the 0.44 yuan of the end of March 1979.

The fine situation in rural country fair trade reflected the putting into place of rural policies in the wake of the 3d Plenary Session of the 11th Party Central Committee, and the fine situation in economic development. It was a series of correct rural economic policies from the party that aroused the enthusiasm for production and for combat against disaster among the broad masses of rural cadres and commune members to achieve a fairly good harvest even in a disaster year. The vitality of country fair trade also played a positive role in promoting development of the rural economy. By way of doing a good job of country fair trade and making use of its positive role, in 1980 all jurisdictions continued resolute implementation of the principle of

"control without stifling and vitality without chaos" toward country fair trade. They put the emphasis on "vitality," and intensified control from a foundation of vitality. While protecting legal dealings, putting a halt to illegal activities, and attacking profiteering, they took firm grip on the following tasks.

They continued to purge the influence of "leftist" ideology, to emancipate thinking, to liberalize policies, and to further readjust market control policies. For example, they changed the erroneous regulation whereby hauling of goods from a distance to offer it for sale was regarded as profiteering to permit individual commune members and commune and brigade collectives to transport their own goods from a distance for sale. They also permitted them to sell agricultural sideline products. So long as commune members obtained the approval of their production team and did not hurt fulfillment of state procurement quotas, they could engage to the limit of their abilities in the sale of agricultural sideline products. Commune and brigade collectives could deal in category II and category III agricultural sideline products from their own commune and brigade or from neighboring communes and brigades that remained after fulfillment of state procurement quotas and prevailing negotiated procurement contracts. So long as their activities satisfied these policy regulations, there was no restriction on the distance they transported goods. This destroyed regional isolation, further cleared marketing channels, and advanced the exchange of goods with the result that commune and brigade collectives and individual commune members could sell the agricultural sideline products that they produced thereby increasing both collective and individual income. By 1979 income derived from the sale of agricultural sideline products at country fairs averaged 21.40 yuan per capita of the agricultural population. In 1980, it climbed to 27 yuan, a 26 percent increase. This stirred the enthusiasm of peasants to develop economically diversified family sideline occupations. As another example, so long as state procurement quotas and prevailing contracts were fulfilled, state-owned farms, forests, livestock farms, and fisheries were permitted to sell all remaining products. Economic diversification appeared in markets; various forms of economic diversification competed with and advanced each other; markets became enlivened, and production was promoted.

Second, strengthening of market control and providing better market services were linked. While strengthening market control, the party, the government, and industrial and commercial administrative departments everywhere placed the building of markets and providing market services on their agendas. Incomplete statistics from 20 provinces, municipalities, and autonomous regions showed an investment of more than 33 million yuan in market construction, including construction of urban agricultural sideline markets, and the building of numbers of covered markets, sales rooms, and sales stands. The former practice whereby peasants laid out their merchandise on the ground, which was both chaotic and dirty, and whereby customers suffered blowing winds, scorching sunshine, and drenching rains began to improve. All jurisdictions established market service departments (business offices), increased the number of their services, and improved quality of service. For example, numerous markets put in toilets, pig pens, duck and chicken cages, butchering tables, meat racks, honest-weight scales, checkout counters, drinking water containers, medicines, needles and thread, and various things used in trade for the convenience of

both sellers and buyers. In many places the service departments (business offices) thoroughly investigated and studied rural production situations in order to understand changes in market buying and selling. They launched work to "bring in things in short supply and get rid of things in oversupply," forming links and bridges with other places to bring in things locally in short supply that the masses urgently needed, while helping promote the sale of things locally in oversupply that moved slowly. They also acted as purchasing agents, sales agents, storage agents, and transportation agents. This played a very good role in keeping market channels open, in regulating supply and demand, in holding down prices, and in supporting production, and was well received by the masses.

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CSO: 4007/66

READJUSTING CROP PATTERNS EXAMINED

Beijing ZHONGGUO NONGYE NIANJIAN 1981 [CHINA AGRICULTURAL YEARBOOK, 1981] in Chinese Jul 82 pp 292-293

[Article by Zheng Zhong [6774 6850]

[Text] Survey Report on Readjustment of Agricultural Crop Patterns

1. Agricultural Readjustment Has Already Achieved Results

As a result of the influence of erroneous "leftist" ideology, agricultural production in Jingmen and Puqi counties in Hubei Province had long directed attention solely to grain production while limiting economic diversification. Agricultural crop patterns became distorted to the detriment of the development of agriculture. Following the 3d Plenary Session of the 11th Party Central Committee, with the guidance of the Provincial CPC Committee, the erroneous "leftist" ideology was criticized, the ideological and political line rectified, and agricultural crop patterns somewhat readjusted. For example, double rice crop "drag down" fields* were cut back and the area planted to intermediate rice revived. Rape, pulses, and sesame were either developed or revived. Tea, fruit, Chinese fir, and bamboo were developed somewhat, and attention began to be given the use of grassy mountains for development of animal husbandry. Much development of poultry eggs took place. A small amount of reclaimed land was removed from agricultural production and allowed to revert to forests, to pasturage, or to fisheries. Readjustment of agricultural crop patterns has shown results.

2. Need To Deal Differently With Different Circumstances

The agricultural crop patterns surveyed in these counties may be divided into two categories as follows:

(1) Places where the leaders' thinking was fairly clear, where state purchase quotas were light, and where progress in readjustment had been fairly rapid. For example, with the support of the Xianing Prefecture CPC Committee, Puqi County put an end to heedless direction to begin a readjustment of its

*Meaning two rice crop fields from which second crop yields were low and undependable

agricultural crop patterns in 1974 for tremendous increase in its grain output. Since this was a newly developed grain producing area, its state procurement quotas were fairly light. In 1979 grain output averaged 1,257 jin per capita (average per capita of rural population, the same applying subsequently in this article), a net of 327 jin per capita being turned over to the state leaving an average per capita 945 jin of grain in the villages. Increased grain output guaranteed development of economic diversification and an increase in income. Economic diversification provided 67 percent of production expenses for agriculture, and promoted grain production. Comparison of averages for the 2 years, 1979 and 1980, with the 5-year period 1969-1973 showed a 73.2 percent increase in the output value of agriculture of which the increase in the output value of grain was 62.2 percent, and output value of economic diversification (including that from forestry, animal husbandry, sideline occupations, the fishing industry and cash crops, the same applying below) increased by 85.8 percent. Output value of grain as a portion of the gross output value of agriculture fell from 52.7 to 49.4 percent, and the output value of economic diversification rose from 47.3 to 50.6 percent. A change had taken place in the structure of agricultural production.

(2) Where yields per unit of area were medium and state procurement quotas heavy, difficulties in readjustment were fairly great. Jingmen County, for example, is an old commodity grain production base where grain output averaged 1,422 jin per capita in 1979, 533 jin per capita being surrendered to the state leaving 889 jin per capita in the villages. Because of the heavy state grain procurement quotas, for many years land had been reclaimed from lakes to make farmland; high hills had been made into wetlands, and forests had been cut down and cleared for agriculture over an area totaling more than 400,000 mu. In 1979 the output value of grain amounted to 67.2 percent of the gross output value of agriculture, and the output value of economic diversification was 32.8 percent. During the past 2 years some readjustment has been made in the area that was irrationally multiple cropped, but fairly extensive readjustment will be required, particularly in removing grain fields from cultivation or in changing to the growing of cash crops. Since, however, the effect on the gross output of grain will be substantial, this will take time.

Puqing and Chongyang are neighboring counties, but in Puqing, ramie, tea, and even some Chinese fir trees are grown on the flat tops of hills, while in Chongyang County, grain crops are grown on many slopes that should grow forests. This situation is closely related to the different positions that the two counties hold in growing grain crops. Puqing County has 1.8 mu of cultivated land per capita of agricultural population, while Chongyang County has 1.2 mu. In 1979 the amount of grain left in the rural villages of Puqing County was 945 jin per capita while it was only 750 jin in Chongyang County.

Some Characteristics of the Readjustment of Recent Years:

(1) Cash crops that did not compete with grain for land developed fairly rapidly, but where there was competition with grain for land, development was difficult. In Puqing County, for example, tea and ramie have been grown on more than 40,000 mu ever since 1974, but Jingzhou Prefecture, which wanted to expand its cotton growing area by 300,000 mu this year, was unable to do so since it could not meet the provisions of grain policies.

(2) Readjustment of low-yield areas was fairly easy but readjustment of high-yield areas was fairly difficult. Since the potential for increased production was fairly great in low-yield communes and brigades while use of land and nurture of land was very tight in high-yield communes and brigades, some places had to rely on plundering the soil's fertility to maintain high yields temporarily, and were it not for added outside elements, readjustment would have been relatively difficult.

(3) Readjustment of the irrationally multiple-cropped area was fairly easy in low-yield areas but fairly difficult in high-yield areas. In 1975, the multiple-cropped area in Jingmen County was 174 percent. In 1977, readjustment began. By 1979, yield had dropped to 142 percent. The growing of two crops of rice fell from 550,000 mu to 160,000 mu, but grain yields increased year after year. On the other hand, in high-yield communes and brigades, yields per unit of area from the growing of three grain crops in a single year were fairly high, but readjustment would mean a decline in output.

(4) The situation in the removal of reclaimed land from cultivation was fairly complex. In the case of fields used to "supplement the Program for National Development of Agriculture," where yields were low and inconsistent, removal of land from agriculture was fairly easy. Some cultivated land had to be removed from agricultural use or used for the growing of other crops since it was either too high- or too low-lying. But where grain yields per unit of area were high, or where new villages had already been built in the reclaimed area, removal of the land from agriculture was difficult. Some lake areas were brought under full control and cultivated land reclaimed from them. Harvests from them could be assured in most years, and their reclamation helped wipe out snails. This reclamation made sense and the land ought not be removed from cultivation.

Steps Taken and Speed of Readjustment:

A look at practice in all places shows that readjustment of crop patterns should be done in two steps as follows: The first step is to identify prominent conflicts in the pattern of agriculture, and to do a good job of laying out crop patterns. For example, in order to protect natural resources, basically general methods have to be adapted to specific situations to change situations in which wetlands are irrationally used in hilly areas, and to establish a fairly sensible farming system so that yields per unit of area can be steadily increased. Commensurate development of economic diversification in forestry, animal husbandry, sideline occupations, and fisheries should be done to obtain better economic results. The second step is to use agricultural zoning to establish a fine agricultural ecological system. This includes things such as rational use of soil and climate resources, across-the-board development of farming and the raising of livestock, and increase in the proportion of economic diversification in agriculture. It entails compatibility with the overall national economy to satisfy society's demands on agriculture. It requires continued readjustment of every rational part of the farming industry.

As for the speed of readjustment, the general view is that grain is the foundation for economic diversification, and the pace of readjustment of

agricultural patterns is determined by the speed of increase in total grain output. Since readjustment requires cutting back on some grain that should not sensibly be planted to grain as was the case in Jingmen with a cutback of about 15 percent, in Honghu with a cutback of about 10 percent, in Puqi with a cutback of 3 percent, and in Shangyao with a cutback of more than 2 percent (not including the land needed for capital construction in all cases), increase in the total output of grain is decided, in turn, by increases in grain yields per unit of area. Rural grassroots level cadres also believe that in readjusting agricultural patterns, the correct principle to be followed is that the "direction must be firm and the steps, steady." One must feel the way as one goes along, and population growth has to be controlled too.

3. Readjustment of Agricultural Patterns Requires Reliance on Policies and Science

(1) Enhancement and perfection of production responsibility systems is a major guarantee for doing a good job in the readjustment of agriculture. Cadre thinking has gradually become emancipated, and the Honghu County CPC Committee conscientiously summarized experiences of production teams during 1980 in putting into effect the linking of output to individual workers. It also organized commune CPC committee secretaries throughout the county to participate in study. However, results were very uneven, and even today many are laden with anxieties. We witnessed that in many production brigades and teams where output had been linked to individual workers or contracted to individual households that even though disasters were very serious during 1980, output was higher than in 1979, that relations between cadres and masses were rather close, and that results were striking. A look at the results of our testing of Jingzhou Prefecture CPC Committee secretaries in Jingshan County, and of popular opinion in Puqing County showed that the future trend in responsibility systems is toward "centralized administration, with the linking of output to individual workers." Today most counties are practicing the contracting of jobs to be completed within a certain period of time and the calculation of remuneration for fixed quotas as a system of responsibility; however, in field management, the general practice is the "stake marker" system,¹ which is used as the basis for linking rewards and penalties to output. Development of systems of responsibility linking output to individual workers is like driving a light carriage on a familiar road, i.e. something that can be easily accomplished. With regard to the question of whether paddy rice production can employ a system that links output to individual workers in view of the method used to thresh rice, the answer is affirmative. We understand that the masses use five or six different threshing or production methods.

(2) The key to smooth agricultural readjustment lies in the fact that there is respect for the self-determination of production teams. The masses have reported that since the Third Plenary sessions, the production teams have in

¹This refers to a field crop care method whereby individual field assignments are indicated by driven stakes.

eight different ways, such as in the development of economic diversification, the purchase of means of production, i.e., farm machines, the formulation of distribution plans, and commune member families engaging in sideline occupations, all had some degree of self-determination. But the production teams demand complete respect for self-determination in the building of production, in administration and management, in the distribution of earnings, and in the exchange of goods. As part of showing full respect for production team self-determination, the masses demand earliest possible stabilization, for several years without change, of assigned grain procurement quotas including purchases at negotiated prices. During this survey we came to understand the situation in Puqi County's trial industrial and commercial tea enterprises. In 1980 the industrial and commercial tea enterprises overfulfilled state assigned purchase quotas for tea and handled all the remaining tea themselves. This was a good form of organization in which, under the guidance of the state plan, a combination of planned regulation and market adjustment were implemented, and the process of production, processing, and marketing were all coordinated so as to promote tea production, to increase varieties, and to meet market requirements. This form of organization took account of the interests of the country, the collective, and commune members. As a result, state revenues increased over the previous year, and collectives increased their ability to expand agricultural reproduction. Despite shortcomings requiring steady improvement, this method has already shown that such an agroeconomic system can break through the "shortlegged" limitations of country fair trade, and has the possibility of forming an organized collective commercial channel, which is a new avenue in the building of the country's economy.

(3) Making the most of an areas technological advantages to improve economic results. The agricultural zoning done in Jingmen County that used the results of a natural resources survey, and the soil survey done in Puqi County have played a guiding role in the adaptation of farming to local conditions, and in the afforestation of mountains as conditions dictate. Now that production responsibility systems in agriculture have been strengthened, agricultural departments will have to change their workstyles to face different circumstances, devote to checking, studying, and popularizing farming techniques the energies and efforts that they formerly used in cut-back areas, on arbitrary actions,² and on urging peasants to harvest or to plant. Some real problems requiring solution also exist in the promotion of techniques. Honghu County reported that the county had commercial schools, grain schools, and financial schools for cadres, but did not operate a single farming school. In Daqiao Commune in Jingmen County, in 1980 cadre earnings (including bonuses) averaged the following per capita: agricultural cadres made 632 yuan; commune cadres made 669 yuan; cultural and education cadres made 681 yuan; and finance and trade cadres made 780 yuan (or as much as 792 yuan in supply and marketing cooperatives), with agricultural cadres making the least. In scientific farming, all that it took was arousal of the enthusiasm of the masses and things like increased accumulations of barnyard manure, and intensive and meticulous farming could be achieved.

²This refers to higher echelon cadre practice of making rules and regulations pertaining to the area to be sown and field care measures to be used without any discussion with production units concerned and then insisting that the production units carry them out.

In some cases, all that was necessary was to improve techniques used by the masses and economic benefits derived from existing materials and energy could be increased. However, for such measures such as proportional fertilization with nitrogenous, phosphate, and potash chemical fertilizers, the use of plastic sheeting in the growing of seedlings, the adding of a layer of soil to fields to improve soil condition, the prevention and control of diseases and insect pests, and such expense saving and highly beneficial actions required material back-up as well. In addition, it was necessary to do more capital construction of farmlands to insure that measures taken to increase output would be fully effective.

(4) Doing a solid job is the only way to solve real problems. Once ideas about economic diversification had been clarified, some real problems in policies, organization, investment, and techniques had to be solved. In forestry production, for instance, after Puqi County established a program of taking forestry as the key link for some communes and brigades, it instituted a policy of reduction or exemption from grain or hog quotas, provided support funds or loans for afforestation and the tending of trees, no longer transferred mountain area workers to jobs off the mountains, strengthened technical direction, and improved the fire prevention system for forest protection, etc. Yushan Production Brigade in Chongyang County had grass covered mountains, traditionally a cattle-raising county with a demand for raising cattle. The province had designated it as a pilot brigade for development of cattle raising. However, because insufficient work was done and because of a shortage of veterinarians, since the beginning of 1980, 14 percent of its cattle had died to the detriment of mass enthusiasm for cattle raising. In fishing industry production, many large lakes that straddled administrative areas had become waste lakes. An example was Hong Lake. Originally the (Yangtze) River and (Hong) Lake had been connected. Fish naturally returned to the lake for spawning and resources were abundant. But with construction of the large embankment in the Dongjing River, the river and the lake were separated. This solved the problem in agriculture of a "silted lake flooding the land of Chongyang County causing no harvests in 9 years out of 10," but it required the fishing industry to release fry into the lake artificially to increase the breeding of resources. This posed problems for investment and in providing feed for the propagation of fish fry. In addition, administrative intervention was not coordinated with the result that some people fished but no one stocked the lake, so the lake became a waste, each mu of water surface annually producing only several jin of fish. Now the province plans to try to operate an industrial and commercial fishery in Hong Lake.

(5) Study of problems in the development of strategy to build a Chinese style modernized agriculture. Not only is China's population large relative to the amount of cultivated land, but its land area averages only one-third that of the world's population as a whole. This means that the amount of land area that China must use to clothe, feed, and shelter its population is greater than in countries where population is small relative to cultivated land. The Agricultural Modernization Research Commission of the Chinese Academy of Sciences has posed a fundamental problem for China's agriculture, namely the problem in the material cycle within agriculture and in the conversion of energy of abiding the laws of the indestructability of matter and

the laws of conservation of energy. Unless the problem of imbalance between "input" and "output" in China's agricultural production is solved, i.e. the problem of using little of the land that is available, and not studying how to proceed from the country's circumstances to solve the problem of material and energy resources needed in agriculture and increase economic benefits, not only can there be no fundamental change in agriculture, but it will also be impossible to maintain the natural ecological balance. This is a formidable task to face on the agricultural front.

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CSO: 4007/66

SURVEY OF HEILONGJIANG'S RURAL ECONOMY

Beijing ZHONGGUO NONGYE NIANJIAN 1981 [CHINA AGRICULTURAL YEARBOOK, 1981] in Chinese Jul 82 pp 296-298

[Text] Survey Report on Agricultural Situation in Heilongjiang Province

Acting on instructions from the State Agricultural Commission, the Ministry of State Farms and Land Reclamation organized the Heilongjiang Rural Survey Team composed of 10 comrades to carry out a survey in 21 production teams, 25 production brigades, 12 communes, and the 5 counties of Keshan, Baiquan, Suihua, Jixian, and Baoqing in Nenjiang, Suihua, and Hejiang Prefectures.

On the basis of what we saw in the places to which we went, remarkable progress has been made in rural work in Heilongjiang Province since the 3d Plenary Session of the 11th Party Central Committee. Uneven development exists, but the large number of typical examples that have emerged gave us great inspiration. Today the agricultural production situation is very good; the political situation is stable; economic development is rapid; a new trend has occurred in the development of the commodity economy, and farming, forestry, animal husbandry, sideline occupations, and the fishing industry are all flourishing.

1. Healthy Development of Agricultural Production Responsibility Systems

Following the 3d Plenary Session of the 11th Party Central Committee, Heilongjiang Province conscientiously put into effect the two Central Committee documents on agriculture, strove to eradicate "leftist" influences, and gradually surmounted egalitarianism whereby "everybody clamored," and "ate out of a large common pot." They promoted production responsibility systems, the main form of which was "division into teams to do jobs, placement of responsibility on individuals, recording of workpoints against fixed quotas, and handing out rewards and penalties on the basis of quality." At the same time, everywhere a small number of diverse forms of production responsibility systems of "specialized contracting linking remuneration to output" came into being.

Proceeding from a foundation of conscientious summarization of experiences during the previous stage, in 1980 Heilongjiang Province set about in a planned and steady way to strengthen and improve production responsibility systems. They proceeded from the realities of a comparatively large average amount of land per capita and a fairly high degree of agricultural mechanization to carry out large-area regional development in farming, forestry, animal husbandry,

sideline occupations, the fishing industry, and industry. Strengthening of production responsibility systems must inevitably benefit the consolidation and development of the collective economy, and production relationships must inevitably be geared to levels of productivity and help give impetus to requirements for development of productivity. They held to collective ownership and centralized allocation of farm machines, wagons, horses, and large farm implements, and adapted general methods to local situations in the adoption of different forms of production responsibility systems. They turned in a good performance both on manual operation production responsibility systems and in emphasizing a fuller use of the farm machinery. By so doing, they implemented step-by-step the farm machinery production responsibility system that encompassed both manual and machine operations. In each production team, one form of the responsibility system was paramount, but several other forms were used at the same time. Statistics from 3,254 basic accounting units in Keshan, Suihua, and Jixian Counties show that production responsibility systems have been instituted in more than 95 percent of them.

(1) Those practicing specialized contracting linking remuneration to output grew from 320 production teams in 1980 to 1,726 or 53 percent. The crop production process has been mechanized, such as wheat and soybeans is partly and independently contracted by farm machinery teams. The contracting methods used were divided up into a fixed number of workers having fixed production quotas and being paid in grain in exchange for workpoints; a fixed number of workers with fixed production quotas and fixed expenses receiving a net income in exchange for workpoints; and a fixed number of workers having fixed production quotas and allowed to take a certain percentage of production in excess of quotas. For the crop production process, that requires both machine and manual labor operations, then farm machinery teams and farm brigades and teams will make contracts jointly linking remuneration to output, with remuneration being proportionally divided as agreed. For crops requiring mostly manual operation, contracting with teams would be done for a specific crop or for specific plots of land. Sometimes the contracting was done with individual workers, with the brigade doing the plowing and sowing and field care being assigned to individual teams (or individual workers) in a system that was called for short, "centralized planting and decentralized management" linking rewards and penalties to output.

In forestry, animal husbandry, sideline occupations, the fishing industry, and industry, mostly "four specializations and one link" was practiced, i.e., specialized teams, specialized units, specialized households, specialized contracting of work, and calculation of compensation linked to production.

(2) The production teams that carried out team operations with assignment of responsibility to individuals, recording of workpoints against fixed quotas, and handing out rewards and penalties according to quality declined from 2,270 in 1980 to 1,300, or 40 percent. This is a responsibility system linking quality to production, which has been promoted for 2 years.

(3) The production teams that practiced the contracting of the "four fixes": fixed land, fixed number of wagons and horses, fixed farm implements, and fixed workers declined, from 150 in 1980 to 73, or 2.3 percent.

Those farm machinery teams that did not practice linking remuneration to production were all practicing "independent accounting, collecting of fees by fixed quotas, and registering workpoints by the mu."

In every production team there were odd bits and pieces of land and a small number of cash crops that were individually contracted to workers or households as circumstances required, mostly in a system of large-scale assignment of sole responsibility. Some production teams also engaged in "helping fields that are impoverished,"¹ and in "grain ratio fields."² These are auxiliary forms of production responsibility systems within the consolidation and development of the collective economy.

The abovementioned implementation of the various forms of production responsibility systems shows that specialized contracting with calculation of compensation linked to output has become the dominant form. Overall development of production responsibility systems has been good; they substantially fit in with production relationships, and they meet the requirements of productivity levels and production characteristics. Problems deserving of attention are as follows:

2. Production responsibility systems of specialized contracting linking remuneration to output have increased from about 10 percent in 1980 to more than half. This form of responsibility system was developed quickly, and sufficient experience has not been gained. Some methods are fairly complicated, and the masses demand that "the simpler the methods the better, and the more direct the benefits the better." These methods must be continually improved through practice.

2. Responsibility systems in which jobs are distributed among teams, responsibilities are assigned to individuals, workpoints are recorded against fixed quotas, and rewards and penalties are handed out on the basis of quality and are proportionately very large. Most production teams that practice these forms of responsibility systems have stronger leadership, better production, and higher commune member earnings. These teams feel that after using these methods for the past 2 years that production has gone along pretty well, and they do not want any changes for the time being. However, leadership has to be strengthened in order to continually improve the system and develop step-by-step in the direction of specialized contracting linking remuneration to output.

¹A small amount of land is given to debt-ridden, needy families according to the number of people in the family, so that they can plant cash crops that will produce more income. This will help them increase their incomes, escape poverty as soon as possible, and repay their debts.

²In some impoverished production teams, total grain output is figured out on the basis of the number of people in each household and the grain rations they need. Then grain ration fields are parceled out according to grain output contracting standards in the practice of large-scale contracting of sole responsibility for grain rations. The more the households harvest, the more they get to eat. This helps stir commune members' enthusiasm for production.

3. In every jurisdiction there are needy production teams, a general 15 to 20 percent. In Keshan County, two communes out of 17 are "empty shell" communes³ that owe the country more than 7 million yuan in loans, which is more than the total wealth in them, and averages more than 800 yuan per worker. Income averages less than 70 yuan, and in some communes, income averages only about 40 yuan per capita. Production teams have to be very concerned about these communes and teams, liberalize policies, and take effective action to change their situation quickly.

2. Rapid Development of Economic Diversification

As a result of the readjustment of the structure of agricultural production, income from economic diversification as a ratio of gross income from agriculture has risen rather remarkably. While assuring steady increase in total grain output, these areas have made full use of advantages for growing cash crops. In 1980 the area sown to cash crops in Suihua County rose to 13 percent from the 8 percent of 1979, and income from cash crops was 37 percent more than in 1979.

Making use of its natural advantages, Baoqing County proposed a policy measure in which it could "develop farming industry, tackle the breeding industry, expand gathering and collecting industry, and make a breakthrough in the processing industry." The county planned to "march on the five mountains and the one water to seek wealth from mountain forests and the grasslands." It formulated a measure to do well in "10 large farming industries, 10 large breeding industries, 10 large gathering and collecting industries, and 10 large processing industries," so that there will be a burgeoning of new developments in economic diversification production. In 1980, total income derived from economic diversification in the county amounted to 33.08 million yuan, 43.1 percent more than in 1978, or 46 percent of the total agricultural income.

In the development of animal husbandry production, new progress was made in carrying out a program of "simultaneous public and private livestock raising." A new method of "one specialization and two households" (specialized contracting, specialized households, and key households) came into being. In Liangang Commune in Suihua County, ever since 1979 commune and production brigade livestock farms have universally operated farms independently, have done independent accounting, and have been responsible for their own profits and losses. Internally the farms have practiced specialized contracting to teams and individuals. In the raising of livestock, the production teams have universally contracted to households, and have practiced "production teams providing the conditions, households being responsible for tasks, accumulations being paid to higher authority, and each household being responsible for its own profits and losses." This has resulted in a reversal of a longstanding loss situation in collective hog raising. As a result, both the collective and individual livestock industries have grown rapidly. In 1980 there was one hog and one sheep for every household, and one ox for every three households throughout the commune. Suihua Prefecture promoted Liangang Commune's experiences of

³"Empty shell communes" are those whose entire wealth is insufficient to offset loans owed the state.

collective livestock raising, practicing "specialized contracting" and of individual livestock raising, thereby developing the "specialized households," and "key households." As of now, 4,531 production teams, or 76.3 percent of all the teams in the prefecture collectively raising hogs have adopted specialized contracting in the raising of hogs. Specialized contracting in the raising of sheep has been instituted in 4,065 production teams, or 75.7 percent of all production teams collectively raising sheep; and 6,808 production teams in the prefecture, or 67 percent, were practicing specialized contracting in raising cattle.

New growth has occurred in family sideline occupations. Hongqi Commune in Suihua County was formerly a rather weak commune, but during the past 2 years, in addition to actively guiding the peasants in development of the collective economy, the commune CPC committee has enthusiastically supported family sideline occupation production with very good results. In 1980 income for the commune from family sideline occupations amounted to 1.7 million yuan, an average of 100 yuan per capita of the agricultural population. The number of needy households in the commune declined to 210 from the 930 of 1978, a 70 percent drop. Triangular debts⁴ greatly decreased. In 1980 alone, after commune members repaid money owed for that year, they paid off an additional 130,000 yuan on old debts. According to Suihua County government statistics, 9,831 households in the county had earnings of more than 1,000 yuan from household sideline occupations.

The foregoing representative examples demonstrate that there are many ways in which to develop economic diversification, and that the potential is very great. With the liberalization of policies, prospects are broad. Most products resulting from economic diversification are commodity production. In this regard, a problem that stands out right now is no free flow of commodities. This is because of the following reasons:

First, there is great output, but little state procurement, and there is no timely state procurement. In 1979, there were "10 large stinks"⁵ and in 1980, there surfaced "five major difficulties."⁶ One was "difficulty in selling hogs," which affected live hog production. Second was "difficulty in selling eggs." Up until 1979, when eggs had been scarce, there had always been "assigned purchase quotas." But in 1980, supply and marketing cooperatives would not buy a single egg, as a result, it was difficult to sell eggs, to the impairment of commune enthusiasm in raising chickens. Third was "difficulty in selling potatoes." In 1978, Xianghua Commune in Keshan County collectively

⁴When commune members owe production teams money, production teams owe the state money, and production teams owe commune members money (i.e. failure to distribute), the term triangular debts is used.

⁵Economically diversified goods that cannot be sold are called stinking goods, and 10 large stinks means 10 unsaleable kinds of goods.

⁶The term refers to the five hard-to-sell goods: hogs, eggs, sugar beets, flax, and potatoes.

planted 3,500 mu of potatoes. It reduced the amount to 1,500 mu in 1979, and to 1,200 mu in 1980. The commune members' family growing area was also reduced. There were also difficulties in selling sugar beets, and sunflower seeds. The peasant masses said angrily: "Business is nothing more than a tiger that blocks the road; it makes people poor and does not allow them to get rich."

Second, there are problems in promotion of the contract system. The commercial departments in Suihua Prefecture instituted a contract system for 34 major agricultural sideline products. This was a very good beginning. However, it was discovered in the course of this survey that when local procurement departments signed agreements with peasants, they required only that peasants be responsible to the procurement departments, but the procurement departments have no responsibilities whatsoever to the peasants. Peasant resentment ran high, and they said: "State businesses take precedence over the collectives; talking policies but not reasons."

Third, there is a lack of domestic and overseas market forecasting, which is used to guide peasant production. Slack sales of flax may be attributed largely to failure to understand international market conditions, and were caused by a reduction in exports. Suihua Prefecture has more than 11,500 tons of flax on hand. Therefore, study of market situations and the laws of change in supply and demand relationships should be put on the agenda.

Fourth, there is the problem of insufficient network facilities to process, store, transport, and procure. Slack sales and accumulation in inventory of sunflower seeds, for example, cause problems in commodity circulation as well as in processing. Suihua Prefecture annually purchases 90 million jin of sunflower seeds, yet it has a processing capacity of only 70 million tons, so annually more than 20 million jin accumulate in storage. Since 1975, the prefecture has overstocked a total of 130 million jin. The 1979 "difficulties in selling sugar beets" resulted mainly from too few purchasing points and from instances in which individual purchasing points reduced grades and prices, putting the bite on the peasants. The masses said, "When there's a shortage of radishes, they can be sold with the dirt on them; but when there are a lot of radishes, the buyers want to peel them before buying." Another problem is the lack of processing capabilities. Construction of sugar crop bases and distribution of sugar refineries are matters that have to be placed on the agenda. Problems in the storage of livestock and poultry products are also very large. For example, in 15 counties and municipalities in Hejiang Prefecture, there are only 7 small cold storage facilities with a capacity totaling only 3,000 tons. The prefecture could really use cold storage of 25,000-ton capacity to satisfy its needs.

Fifth, price policies should be relatively stable and honored in a timely fashion. For example, state procurement policies, price policies, and aware sales policies for various agricultural sideline products should be relatively stable. There should be no "lashing with a whip when goods are in

short supply and hacking with a broadsword when there is a glut."⁷ The production cycle for peasants is a year, so if policies change frequently, many uncertainties are created for production and losses are very great, stifling the enthusiasm of the peasants.

These problems are the problems in state price policies for farm products, problems in investment in facilities, problems in the state commercial management system, and problems in the way in which commerce departments do business. Solution to these problems requires all-around consideration so that it suits the development of the rural commodity economy. This is the only way that full use can be made of local advantages and the enthusiasm of peasants for development of economic diversification brought into play.

3. Agricultural Mechanization Has Produced Great Effects

For many years Heilongjiang Province has put a lot of effort into the mechanization of agriculture. Today it has a substantial amount of farm machinery and the degree of agricultural mechanization is high. Only 570 of the province's 13,827 production brigades, or only 4.3 percent, were not mechanized. Take Keshan and Suihua counties, for example. They now have a total of 2,673 large and medium size tractors with a total of 156,000 horsepower, or an average 1 horsepower per mu of cultivated land. They also have a substantial number of harvesting combines, farm implements, and other equipment. Investment in farm machines totals 85.73 million yuan. Farm machines have become a major tool in agricultural production. They do key farm jobs such as deep plowing, deep loosening of the soil, leveling fields, and cultivating. They also take over the sowing and planting of most of the crops and the harvesting of wheat, making possible a basic mechanization. Many non-field operations have also been mechanized. In this survey, we paid a lot of attention to the most mechanized commune in the province, Qinjia Commune in Suihua County.

Qinjia Commune has 10 production brigades, 65 production teams, 23,000 people, 7,300 male and female workers, and 92,000 mu of collectively farmed land. They started mechanizing farming in 1974, and now they have 120 large and medium size tractors, and 77 hand tractors. Their tractors total 5,950 horsepower, or 1 horsepower per 15.5 mu of cultivated land. In this commune, the soil content is mostly heavy clay. Formerly, "on rainy days water lay everywhere, and on clear days the soil was hard as a brick; hoes could not penetrate the soil, and it took a plow to cultivate because a hoe could not do the job." In good years, grain yields were no more than 200 to 300 jin per mu. After mechanization, however, as a result of the use of machines to do deep plowing and loosening of the soil, the large amount of labor that

⁷In the development of economic diversification, for the goods that are in short supply at one time or another, the state should issue directive-oriented tasks. For example, in procuring products, the state should lay down stiff procurement quotas so as to expedite procurement. This approach is called "lashing with a whip when there is a shortage." For those diversified economic items and products that are in excessive supply at one time or another, the state should practice mandatory reduction. This approach is called "cutting with a broadsword when there is a glut."

was freed from working the soil was teamed up with the machines for large-scale drainage and control of waterlogging. The soil was improved and fields made fertile. Trees were planted for afforestation, and great improvements were made in basic agricultural production conditions. In addition, intensive mechanized farming was practiced; more chemical fertilizer was applied, and tremendous increase in output and earnings was achieved. Comparison of 1980 with 1973, the year just before mechanization began, showed the following: increase in grain and pulse crop yields from 378 to 676 jin per mu, a 78.8 percent increase. Total grain and pulse crop output increased to 48.21 million jin from 31.55 million jin, a 53.8 percent increase. Commodity grain provided increased from 16.16 million jin to 25.87 million jin, a 60 percent increase. Average per capita distribution of earnings rose from 105 yuan to 163 yuan, a 55.2 percent increase.

Such great changes brought about by mechanization encouraged people greatly. Nevertheless, they encountered some problems in farm mechanization that merit attention as follows:

1. The problem of effectiveness of investment in mechanization. Mechanization of agriculture in Qinjia Commune has proceeded for many years from the commune's own realities. It has relied on collective economic power for gradual development. As of the end of 1978, investment in farm machinery had been 23.60 yuan per mu, and tractors could farm 38 mu of cultivated land per horsepower. At that time farm machines substantially satisfied needs, and economic results were very good. However, at the end of 1978 "across-the-board" mechanization of agriculture before 1980 was proposed, so that "farming would be done without pulling weeds; harvesting could be done without using a sickle, and the 'three stoops' would be a thing of the past." Thus, in a period of slightly more than a year, from 1979 to the first half of 1980, another 1.63 million yuan worth of farm machines was bought and resulted in an instant 71.8 percent increase. This increase far exceeded the demand and thereby reduced economic effectiveness.
2. Problems in a rational balance between machines and draft animals. Qinjia Commune is in an area that produces miscellaneous grains other than rice and wheat, field care and harvesting of which cannot presently be done through mechanization. It is still necessary to depend on both labor and animal power to do the job. In 1979 the commune bought 50 medium-size caterpillar tractors with the intention of using them to replace animal power. But in reality, these machines not only could not take the place of animal power, but their usefulness was reduced in being used for sideline hauling. Therefore, benefit from them was slight. In some cases, it was entirely possible that they earned less than what was spent on them. They consumed a lot of fuel. During the current fuel shortage, this is a matter that deserves study.
3. The problem of technical forces. In 1979, the number of large- and medium-size tractors suddenly increased from 46 to 117, an increase of one and one-half times. Tractor operators were in extremely short supply, so large numbers of new hands who had received no training ran the tractors. Care of machines was not kept up, increasing the cost of sowing by machine. For example, in 1980, the Qinjia Production Brigade's mechanized farming costs were 95.1 percent higher than standards set by the province.

4. The problem of what to do with surplus labor. As agricultural mechanization increased and natural increase took place in the workforce, about 40 percent of the total workforce became surplus. Development of economic diversification, capital construction of farmland, and the operation of commune and brigade enterprises took care of two-thirds the surplus. Though workers found jobs on some projects, economic effectiveness did not amount to much. Even so, many workers could not be given jobs.

4. Huge Potential for Increase in Yields Per Unit of Area

Wherever production has been mechanized, there was a full use of the displaced workforce, stringent efforts in the capital construction of farmland, correct policies, and scientific farming were also implemented. All these have enabled a tremendous increase in yields per unit of area. While mechanizing its agriculture, Jianshe Production Brigade in Beilian Commune, Keshan County took advantage of the production team's self-determination to change the crop structure by cutting back on the growing of corn and increasing the growing of wheat and pulse crops instead so as to make the most of the area's excellent conditions for growing wheat and pulses. As a result, yields increased from 340 jin per mu in 1978 to 435 jin in 1980, a 28 percent increase. With the change from corn to wheat and pulse growing, output value increased greatly, gross income also increased 83.4 percent, with the average per capita distributed income doubling from 145 to 290 yuan. On the basis of this mechanized farming, the Qinjia Production Brigade in Qinjia Commune, Suihua County adapted general methods to the local situation, putting a large amount of labor to work on meticulous and intensive farming. For major crops such as corn and millet, care of individual plants was assigned. In the 7-year period from 1974 to 1980, average yields for the brigade's 4,000 mu of grain and pulse crops reached 669 jin per mu. In 1980, the Third Production Team's 900 mu of grain and pulse crops produced yields of 1,019 jin per mu.

Lianmin Production Brigade in Xihe Commune, Keshan County used economic methods to stir mass enthusiasm for raising hogs and collecting manure to build fields that produced consistently high yields. They gained increased yields year after year, which was a very great inspiration. This production brigade had 13,000 mu of cultivated land and 454 workers, each worker farming 28 mu. Seventy percent of the cultivated land in the production brigade was loess hills and 20 percent was shifting sandy soil that had been severely eroded by wind and water. The more it was farmed the less fertile it became. For many years yields of grain and pulses had only been between 100 and 200 jin per mu. Commune members said that "the loess hills are like a broken Chinese opera; every year they are planted but produce no grain. When one looks at the land, he cannot help but feel pathetic." In order to change the situation, they concentrated efforts on four comprehensive managements and controls. First, to invest 4 years and more than 85,000 laborers to renovate the farmland and to bring soil erosion under control, so that "water did not run down mountains, or soil come up out of rivers." Second, they invested 6 years and more than 27,000 laborers in building 46 farmland shelter forests, covering 1,675 mu or 12 percent of the farmland area. Third, they invested almost 3 years and more than 79,000 laborers to sink 33 electromechanical wells and to construct irrigation projects for some of the fields, bringing the

irrigated area to more than 7,000 mu. Fourth, use high number of workpoints and high compensation to encourage the masses to raise their hogs in pens and collect their manure. In 1980, 558,000 workpoints, or 11 percent of the total number of workpoints, were awarded as compensation for raising hogs in pens and collecting their commune, and assistance was given with 176,000 jin of feed grain. The large numbers of livestock meant large amounts of manure, and annually more than 2,000 cubic meters of organic fertilizer were applied. Recent chemical testing of the soil shows a more than doubling of both the organic content and the fertility of the soil. Now a benevolent cycle has come about in which the more the soil is farmed the more fertile it becomes, and yield became ever higher. In recent years, grain yields have increased greatly. During the 3-year period between 1978 and 1980, grain and pulse yields increased to 356 jin from the average 144 jin per mu of the 3-year period 1975 to 1977, a 1.47 fold increase. In 1980, per capita income distribution averaged 260 yuan. This, plus income derived from commune member family sideline occupations, meant an average per capita income of 405 yuan. Commune members said, "The soil's potential is great; sideline occupation potential is great, and people's potential is even greater." Such heartening results could not likely have been realized before mechanization. (State Agricultural Commission)

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CSO: 4007/66

SURVEY OF RURAL ECONOMY IN JIANGSU, ZHEJIANG, SICHUAN, SHAANXI

Beijing ZHONGGUO NONGYE NIANJIAN 1981 [CHINA AGRICULTURAL YEARBOOK, 1981] in Chinese Jul 82 pp 306-310

[Article by Survey Section, Planning Bureau, State Agricultural Commission]

[Text] Survey of Grain Production and Economic Diversification in the four provinces of Jiangsu, Zhejiang, Sichuan, and Shaanxi

1

Grain production has increased fairly rapidly and the situation is very good, but this is not sufficient.

Grain increases for 4 years since 1976 for Jiangsu, Zhejiang, Sichuan, and Shaanxi Provinces (total figures) are shown in the following table:

Province	Total annual grain output (100 million jin)			Average percentage rate of increase		Average percentage rate of increase	
	1976	1979	1980	1979	1980	1979	1980
						compared with 1976	compared with 1976
Jiangsu	424	503	472	18	11	5.7	2.6
Zhejiang	234	322	287	37	22	11.2	5.2
Sichuan	497	640	653	28	31	8.8	7.0
Shaanxi	155	182	151	17	-3	5.4	-1

The foregoing table shows that 1979 was a bumper harvest year, with grain output in all four provinces having reached or surpassed all-time high levels. In 1980, Jiangsu, Zhejiang, and Shaanxi sustained severe drought and water-logging disasters, which decreased yields. In 1980, Shaanxi Province had serious disasters resulting in substantial decrease in yields. Only in Sichuan did a steady climb take place with increases year after year.

Overall, grain increase in the four provinces was fairly rapid. The rise in grain production promoted development of a very fine rural situation. This was manifested in the following ways: (1) Increase in peasant grain rations.

In Sichuan Province, commune member grain ration distributions averaged 369 jin in 1976; in 1980, they reached 527 jin, a 158 jin increase. In Shanxi Province, grain ration distributions averaged 347 jin in 1976; in 1979, they reached 465 jin; 1980 was a disaster year, yet grain rations averaged 407 jin, 60 jin more than in 1976. In Jiangsu and Zhejiang Provinces, grain rations went from slightly more than 400 jin to more than 500 jin. In 1980, some provinces sustained disasters, but in rural villages grain prices remained steady. (2) Both collective economic diversification and peasant family sideline occupations saw great growth, and peasant income increased. Comparison of per capita income from collective distributions in 1979 and 1976 shows a rise from 71.49 to 99.16 yuan in Jiangsu Province, a 38.7 percent increase. In Zhejiang Province it increased from 74.34 to 104.37 yuan, a 40.4 percent increase. In Sichuan Province, it went from 45.28 to 69.23 yuan, a 52.9 percent increase. In Shanxi Province, it went from 57.18 to 79.59 yuan, a 39.2 percent increase. Proportional increase in income from commune family member sideline occupations was even greater. (3) As a result of the upturn in the grain situation, both Sichuan and Zhejiang Provinces allocated more than 300 million jin of grain in 1980 for use in mountain regions, so that grain-short production teams could cut back purchases, increase sales, and use lumber and grain as rewards. This promoted readjustment of the irrational structure of grain production in mountain regions.

Why did Sichuan Province's grain output increase rapidly in recent years? The main reasons were as follows:

(1) Except Jiangsu, Sichuan, Zhejiang, and Shanxi Provinces, all are capable of recovering. Sichuan Province's grain output in 1976 was lower than in 1973, 1974, and 1975. In 1976, the province brought in 1.2 billion jin of grain from other provinces. Great damage was also done in Zhejiang Province during the 10 years of turmoil, so its rise in grain output took place after a fall. (2) After the smashing of the "gang of four," and particularly following the 3d Plenary Session of the 11th Party Central Committee, the CPC Central Committee put forward a series of programs, policies, and measures for development of agriculture, issued two documents on agricultural problems, gave instructions on the liberalization of policies in places like Tibet, corrected the "leftist" errors of the learning from Dazhai movement, supported development of economic diversification, particularly increased prices paid by the state for purchases of grain, respected the autonomy of production teams, and put into effect various forms of production responsibility systems, which greatly increased peasant enthusiasm for production. (3) Use of chemical fertilizer increased greatly. Comparison of chemical fertilizer use in 1979 with 1975 showed a 1.67 fold increase in Jiangsu, a 2.1 fold increase in Zhejiang, a 1.38 fold increase in Sichuan, and a 1.46 fold increase in Shaanxi. (4) Promotion of superior varieties. Zhejiang Province, for example, began to promote hybrid paddy rice in 1977. By 1979, 6.32 million mu of hybrid paddy rice were planted. Yield increases for such superior varieties were 100 to 150 jin per mu. This variety alone accounted for a 600 to 900 million jin increase in grain output. All other provinces likewise had vigorously promoted superior hybrid paddy rice, hybrid corn and hybrid wheat varieties, which played a very great role in increased grain outputs. (5) The growth of commune- and brigade-run enterprises and economic

diversification had contributed directly to the supply of fertilizer, farm implements, and funds for grain production, and affected grain production tremendously. In Qianzhou Commune in Wuxi, for example, during the past several years, more than 5 million yuan has been allocated to water conservancy, and more than 2 million to the development of farm machines. This has greatly changed conditions for agricultural production. In addition, drainage and irrigation pumping expenses, expenses for machine farming, and purchase of plastic sheeting used in farming has been partially or completely paid for by communes, and cash bonuses have been given to communes and brigades that increased output of grain. This has increased benefits from grain farming, so that some of the workforce can settle down to produce grain free from worry. The number of communes and brigades in Jiangsu and Zhejiang Provinces that supported agriculture in this way are numerous, and they have made outstanding contributions. (6) Water conservancy construction and capital construction of farmland have also played a role. During the 1970's, agriculture grew rapidly in Jiangsu Province on three main areas. One was water conservancy, the second was chemical fertilizer, and the third was commune- and brigade-run enterprises. The Bayi Commune in Liuhe County and the Qianzhou Commune in Wuxi County that we visited had both gone in big for farmland water conservancy construction. They were able to drain and irrigate, thereby increasing grain production tremendously.

Despite the fairly rapid development of grain production in recent years, the overall situation in production, supply, and marketing still shows problems of instability, financial insufficiency, and managerial inflexibility.

In 1980, Jiangsu, Zhejiang, and Shaanxi Provinces sustained disasters occasioning a 9.6 billion jin drop in output. Though Sichuan Province sustained increased output, more than half of its cultivated land was without water conservancy facilities, and relied basically on mother nature for food.

In Jiangsu Province, grain was also in short supply and the masses said that agricultural production is "hard to be certain, hard to increase, and hard to change." By this they meant that a high multiple crop index had crowded out the growing of green manure, that the land was used more than it was nurtured, as a result, fertility was reduced and that it was hard to ascertain yields. In the short run there can be no great improvement in the soil, in fertilizer, water, seeds, machines, and such basic production conditions, so that it will be hard to increase yields further. Grain quotas are heavy; development of economic diversification has its limits, and the structure of agricultural production is difficult to change. Leaders at all levels in the province feel that state procurement quotas are heavy and that the pressures are great.

Yet another problem deserving of attention is increase in grain shipments into the provinces and decrease in shipments out of the provinces. In 1976, Jiangsu Province sent 1.4 billion jin of grain out of the province, and in 1980 it sent out 1.2 billion jin. In 1979, Zhejiang Province sent out 650 million jin; in 1980 it sent out 570 million jin. In 1976, Shanxi Province sent out 200 million jin; in 1980, it brought in 600 million jin.

The future trend in grain production, according to comrades attending a symposium, will be a very great increase in enthusiasm for production on the

part of the broad masses of peasants in the way of further implementation in rural areas of the party's policies, particularly the further implementation of various forms of production responsibility systems. Rational readjustment of overall agricultural arrangements and further promotion of achievements in agricultural science and technology, such as hybrid paddy rice, as well as the steady strengthening of farm capital construction and the development of economic diversification still hold considerable potential for production, in their estimation. However, it must be realized that there are also some disadvantages factors, principally the following: some land has to be withdrawn from agriculture and returned to the fields of forestry, animal husbandry and fishing industry, and the growing of cash crops and green manure has to be revived. It is estimated that during the period of readjustment, there will be no increase in supplies of chemical fertilizer or diesel fuel for agriculture. In fact, there may be less. Water conservancy construction and farmland capital construction will be maintained substantially at its present level, and there will be no substantial improvements in water conservancy conditions. It will be necessary in the future to take into account needs for grain rations rising out of population increase. Sichuan and Shanxi are also taking under advisement the need to raise standards suitable for communes and brigades that have extremely low grain rations and distribution. They are also considering to maintain at a current level the stored grain used as seeds and fodder, as well as allocations of grain. All this requires steady increase in grain output. However, the speed of increase is inhibited because of the various restricting factors.

How can grain output be increased steadily? Studies have shown that the main way to increase grain production is to rely on policies and science. It is necessary to continue to put into practice the party's series of programs and policies on the development of agricultural production, to carry into effect, and steadfastly perfect, the various forms of responsibility systems; and to continue to take firmly in hand promotion of superior varieties and other effective experiences in scientific farming. In addition, comrades everywhere have brought the following ideas and suggestions:

1. Encourage enthusiasm among the peasants to grow more grain to make a contribution to the country. In Jiangsu and Zhejiang Provinces today, it is more profitable to work in industry, in sideline occupations, or in planting cash crops than in growing grain. The masses say, "There are 360 lines of work and everyone of them makes more money than growing grain." As a result, communes and brigades that have enough grain for their own consumption have no desire to produce more grain. In addition, cadres at every level feel that there is no way to justify oneself to the party and the state if they do not fulfill grain procurement quotas. Therefore, they devote great attention to grain production and try to think of ways to stimulate the peasants' enthusiasm to grow grain. In many communes and brigades in southern Jiangsu, for each jin of increase in grain production a subsidy of several fen is given, or 0.20 yuan at maximum. Because of the feeling that "there is no economic advantage" and "no sense of political honor" in growing grain, lower levels have recommended creating a popular opinion that "greater contribution of grain is an honor." During the period of readjustments, there is a limit to the nation's financial resources; it cannot greatly increase grain prices

once again. The state has to strengthen ideological and political work. When the state recently reduced the procurement quota base figures in major commodity grain growing areas, the peasants' and cadres' spirits rose. They said, "The state knows the hardships in grain growing areas, and it cares about us."

Some comrades proposed that henceforth critiques of "economic results" in periodicals should be analyses that seek truth from facts. Nowadays the state's purchase price for farm products is different from the price for industrial goods. For industrial goods, production cost is calculated, profits are projected and subsidies are made when there is a loss. For farm products, production cost is not figured in, and the price of grain is also low. Besides, it is not permitted to sell to the state less than required. In such a situation, to make an across-the-board criticism of "no concern for economic effectiveness in the growing of grain," would scarcely convince anyone. Everyone recognizes the need for vigorously spreading the spirit of the program put forward by the central authorities of "positively no relaxation in grain production while actively launching economic diversification," "positively not taking lightly the grain problem," and the need to continue to take grain production firmly in hand, and not shuffle grain aside while developing economic diversification. In propaganda work, it must be made certain that it is honorable and glorious for prefectures and peasants to have made a contribution in turning grain over to the state.

2. Readjustment of the farming system requires adaptation of general methods to local situations, handling matters differently in different places. With regard to the matter of expansion of the double cropping of rice during the past several years, survey has shown the following three circumstances. The first one is the unsuitable climatic conditions that reduce double cropped rice yields. Readjustments should be made. The second is that climatic conditions are all right, but the growing area is too large for available labor to work. During the "double rush" period [rush to harvest one crop while preparing to plant a succeeding one], transplanting cannot be done on time and there is not sufficient fertilizer available for the fields. In some cases, output is not as great as from a single rice crop, so cutbacks should be made in the double cropped rice area. The third circumstance is that climatic conditions are all right and a certain area is double cropped to rice. Transplanting can be done on time, and there is enough fertilizer for the area plants. The second crop can increase yields by 150 to 200 jin per mu. Nevertheless, because production expenses are greater than from the growing of a single crop, peasant income is less than from growing a single crop of rice. As regards these circumstances, comrades everywhere felt that, what with the steady increase in population, the need to fulfill state procurement quotas, and to assure steady increase in total grain output. Although the growing of two crops of rice was not economically worthwhile, still a certain amount of it should continue to be done. Readjustment of the farming system requires sure steps, and should be done only while increasing yields per unit of area and assuring a total output. The proportional amount of second cropping should be decided on the basis of local climates, and the availability of local workforces and fertilizer. Suzhou Prefecture feels that the double cropped rice area should be no lower than 30 percent of the total rice growing area, and in

counties such as Wuxi, where population is large relative to fields, it should be no less than 40 percent.

3. All jurisdictions must strive to increase per unit of area grain yields, from single crop lower production costs, and increase earning standards of grain growing. Today costs of agricultural production are increasing steadily, and this problem should be watched. In Wuxi County, the cost (exclusive of human labor) of producing 1 jin of grain averaged 0.039 yuan in 1963. It rose to 0.068 yuan in 1979, and to 0.088 yuan in 1980. The rate of increase in production expenses has far outpaced the rate of increase in yields. In 1965, net income was 93.3 yuan per mu, but in the 6-year period from 1975 to 1979, net income was from 53.20 to 88.30 yuan, lower than in 1965. During the great bumper harvest year of 1979, total grain output was 40.2 million jin more than in 1978. Production expenses increased 6.32 million yuan, the value of materials consumed increased to 0.157 yuan per jin, which was more than state procurement price paid for grain. This failure to realize any real benefits is one of the very major reasons why peasants do not want to produce more grain.

For the agricultural sector itself, the most important thing to do is to strengthen management, increase yields per unit of area while lowering consumption. In some places today quite a bit of waste occurs in use of chemical fertilizer. In Wuxi County use of standard fertilizer averaged 300 jin, and ran as high as 360 jin per mu. An overwhelming majority was nitrogenous fertilizer. In a comparison experiment with Dangkou Commune in the same county under identical conditions, on fairly fertile eel blood yellow agrilla soil, the maximum amount of standard nitrogenous fertilizer used was 40 jin per mu per crop. For fairly poor quality leathery yellow agrilla and yellow belozem, 40 to 60 jin per mu were used. For poor quality black loose soil, 80 jin was about right. For three crops a year, between 120 to 240 jin of fertilizer was used; more of it would have caused a drop in yields. Nowadays, the organic content of soil is generally insufficient.

In soil use and soil nurture, the fundamental way in which to increase soil fertility should be an increase in organic material. As far as industry is concerned, China's agriculture cannot take a future course of large-scale use of chemical fertilizer and high energy consumption.

Overly high prices of the means of agricultural production has also been a major element in the increase in farm production costs in recent years. Nanhu Commune in Jiaxing City reported that the current price for quite a few goods used in agriculture is a "negotiated price." Small tools are an example. A carrying pole that formerly sold for 0.38 yuan and now one cannot even buy it for 0.61 yuan. To buy one at a negotiated price costs 1.10 yuan. The price of a wicker basket has gone up from 3.80 yuan to 5.40 yuan. A winnowing basket that used to sell for 1.16 yuan now costs 2.14 yuan. Plastic sheeting used in farming cost 2,600 yuan per ton in 1980. Jiaxing City figures that price rises for small farm implements during 1980 added a total of 1.56 million yuan to farming expenses. When taken together with price rises for other agricultural means of production, the increased cost was 6,754,000 yuan, or an average increase of 13.26 yuan per capita of rural

population in the entire city. The masses say, "The benefits the peasants got following the Third Plenary Session have been all taken back." Both peasants and cadres call for implementation of policies that will gradually be the price of the means of agricultural production.

4. Strengthening of land management to put a halt to indiscriminate occupation of cultivated land. Today a serious situation exists in the taking over of cultivated land. During the past several years, cultivated land in Sichuan and Shanxi provinces has decreased by between 300,000 to 400,000 mu, and in Jiangsu and Zhejiang Provinces, the annual loss is between 100,000 and 200,000 mu. Some land taken over by communes, brigades, and peasants for the construction of houses has not yet been included in the statistics. One major problem encountered in the planning of agriculture in Shanxi Province is the steady increase in population and a steady reduction in the amount of cultivated land. Today, the average amount of cultivated land in the province has fallen to 2.02 mu per capita from the 4.7 mu per capita of 1950. Since Liberation, total grain output has increased 1.7 fold, the average per capita grain output is less than in 1953. The peasants used to regard the soil as their "life-blood," which some units now take over, making peasants urban residents, and say ostensibly in summarizing experiences, that "work has been done well, and everybody is satisfied." Everybody knows that it is no use simply to issue appeals to conserve the land, but that there has to be government organizations at every level, from top to bottom, to manage the land, to work out laws, standards, and policies, and to take responsibility for managing the use of all soil, bringing the indiscriminate occupation of land to a halt.

5. Readjustment of crop patterns requires adaptation of general methods to specific situations, doing things individually on the basis of circumstances. The direction has to be adhered to and steps must be steady and appropriate. The survey showed that as a result of the previous emphasis on grain only, there was serious imbalance in the growing of crops; forests were destroyed when reclaiming land, grasslands were ravaged, and lakes were filled and enclosed when creating fields. This caused serious soil erosion and destruction of the ecological balance. Crop patterns have been readjusted during the past 2 years, and it will be necessary to resolve to continue to carry out readjustments based on agricultural zoning in the future. However, it is realized at the lower levels that cultivated land averages only about 1 mu or less than 1 mu per capita, and that for development of economic diversification in places having large population relative to available land, consideration will have to be given, first of all, to projects that would take little or no cultivated land but include a great number of workforces. In Sichuan and Shaanxi Provinces, for example, mulberry trees were planted on the footpaths between fields. The time to vigorously develop mulberry crop is the period when the growing crops in the fields require light happens to coincide with the time when large numbers of leaves are gathered from the mulberry trees. This way the growing crops in the fields will not be in the shade. Any project that takes cultivated land should be "acted on deliberately," gradually adjusting under the condition of preserving grain so as to enable its steady increase, facilitating mutual promotion of grain and economic diversification for an all around development.

6. The survey showed that in Jiangsu and Zhejiang Provinces, commune- and brigade-run enterprises played a major role in promoting grain production. Take Wuxi County, for example. In 1980, commune member distributions averaged 140 yuan per capita, with income from farming amounting to 8.78 yuan or only 6 percent. Income from sideline occupations amounted to 45.39 yuan or 31.1 percent. Income from commune- and brigade-run enterprises turned over to production teams as wages and return of profits for distribution amounted to 91 yuan or 65.3 percent. Therefore, operation of commune- and brigade-run enterprises, and continuously putting into effect specific policies advantageous for the development of commune- and brigade-run enterprises is very important. Without stability in commune- and brigade-run enterprises, in some places (such as the southern part of Jiangsu Province), grain output would be seriously impaired.

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To summarize, the burgeoning of economic diversification has been extremely heartening. Comparison of specific circumstances in these four provinces in 1980 with 1976 is as follows:

Cotton: Cotton yields fell in the three provinces of Jiangsu, Sichuan, and Shaanxi Provinces during 1980 as a result of disasters, but total output for the four provinces was 9.25 percent greater than in 1976, averaging an annual incremental increase of 2.2 percent per year. Over the 4-year period, the increase was 53.4 percent in Zhejiang Province for an 11.3 percent average annual incremental increase.

Rapeseed: Rapeseed developed quickly. In 1980 output for the four provinces totaled 22.68 million dan, 11.14 million dan more than in 1976 for a 103.6 percent increase and an average annual 19.4 percent incremental increase. In Zhejiang Province, the increase was 148.1 percent over the 4 years, an average incremental annual increase of 25.5 percent. In Sichuan Province in 1980, output totaled 11.63 million dan, 6.14 million dan more than in 1976 for a 111.8 percent increase, an annual incremental increase of 20.6 percent.

Sugar Cane: In 1980, sugar cane output in Sichuan Province totaled 35.66 million jin, 67.6 percent more than in 1976 for an average annual 13.8 percent incremental increase. In Zhejiang Province output totaled 11.76 million dan in 1980, 114.4 percent more than in 1976 for an average incremental increase of 21 percent.

Mulberry Silkworm Cocoons: In 1980 the four provinces produced 3.96 million dan of mulberry silkworm cocoons, 62.1 percent more than in 1976, for an incremental annual increase averaging 12.8 percent. Production developed most rapidly in Sichuan Province, which surpassed Zhejiang Province's output beginning in 1978 to take first place in the country. In 1980 output totaled 1,835,000 dan, 134 percent more than in 1976 in an incremental increase averaging 23.7 percent annually.

Tea: In 1980, the four provinces produced a total of 2,224,000 dan of tea, 53.9 percent more than in 1976, averaging an 11.4 percent incremental increase

annually. In Zhejiang Province, where development was quickest, output in 1980 totaled 1,508,000 dan, one-fourth the total for the country, for a 60.4 percent increase during the 4 years and an average annual incremental increase of 12.5 percent. Second was Sichuan with an output totaling 582,000 dan in 1980, a 53.1 percent increase during the 4 years, and an average annual incremental increase of 11.2 percent.

Fruit. In 1980, the four provinces produced a total of 22.86 million dan of fruit, 81.3 percent more than in 1976 for an average annual incremental increase of 16 percent. Sichuan Province, where development was most rapid, had an output totaling 8.63 million dan in 1978, 207 percent more than in 1976 for an average annual 32.4 percent incremental increase. Second was Zhejiang Province with an output totaling 4.5 million dan in 1980, 82.6 percent more than in 1976 for an average annual incremental increase of 16.2 percent.

Hogs: Despite a fall in hog production during 1980 in the three provinces of Jiangsu, Zhejiang, and Shaanxi, at the end of the year there were 26.4 percent more hogs in inventory than in 1976. The incremental annual increase averaged 6 percent. In Sichuan, hog production rose steadily during the 4 years, and in 1980 there were 48.3 percent more hogs in inventory than in 1976 for an annual incremental increase averaging 10.36 percent. In 1980 the four provinces produced a total of 7.18 billion jin of pork, 960 million jin or 15.5 percent more than in 1979.

In addition, very great development also took place in output of poultry eggs, long-haired rabbits, water chestnuts and lotus root, fresh fish, and in commune and brigade industrial sideline occupations. In recent years, both Jiangsu and Zhejiang Provinces have also developed some new sideline occupations such as the growing of pearls and mushrooms. In 1978 the country's pearl output totaled only 11.9 tons; in 1980, Jiangsu alone produced 31 tons.

As a result of great development of economically diversified production, state procurement of agricultural sideline products has also increased tremendously in order to provide numerous raw materials to light industry, the textile industry, and the food industry, to enliven markets, and to make the economy flourish. The overall situation in state procurement is also very good.

During the past 3 years, all jurisdictions have accumulated quite a bit of experience in the field of economic diversification, notably as follows:

First has been to put on a scientific foundation survey of agricultural resources, the zoning of agriculture, making the most of strengths and downplaying weaknesses, and adaptation of general methods to local situations. Jiangsu Province got a fairly early start on such matters and results there are comparatively striking. They used widespread investigation and research to propose the following: The climate and soil of Jiangsu Province is that of a transitional zone between north and south. Overall the province possesses strengths of both the south and the north and is able to grow anything, but only in certain regions and within certain limits. They proposed that each area emphasize certain things. For example, in future, cotton should be grown

mainly in Xuzhou and Huaiyin Prefectures, and that silkworm mulberry be gradually developed in northern Jiangsu. Every prefecture, every county, and every commune should adapt general methods to their own local situations, give tailored guidance, and propose emphasis on only certain crops. Guangfu Commune in Wu County in Suzhou Prefecture, for example, formulated economic measures commensurate with the development of mostly cassia flowers, green plums, and mulberry trees. For each cassia flower tree planted that survived, a bonus of 6 yuan would be given; for each plum tree a bonus of 4 yuan; and for each mulberry tree a bonus of 120 yuan. Xiangxue Brigade in the same commune had grown only somewhat more than 8,000 plum trees over a period of more than 10 years, but now it planted more than 10,000 in a single winter and spring.

Second has been to strengthen leadership, and to support economic diversification with policies, funds, and materials. In Jiangsu, prefectures and counties set up economic diversification administrations, and Yangzhou Prefecture set up economic diversification leadership teams whose members included a member of the Standing Committee of the prefectural CPC committee, an assistant deputy director acting as leader of a team, and commercial, supply and marketing, foreign trade, and materials departments concerned, who regularly studied and solved relevant problems. This was a change from the former situation of "mobilizing an army of soldiers and horses for grain, putting men and horses in harness together for industry, but working sideline occupations with only a single horse." Zhejiang and Sichuan Provinces instituted base figures for assigned quotas of agricultural sideline products, guaranteeing no change in them for several years, communes and brigades being permitted to transport, sell, or process all or some of the amount in excess of quotas. These two provinces also individually allocated more than 300 million jin of grain for use in mountain areas and needy areas for bonuses to link reduced purchases and increased sales to economically diversified production. Zhejiang Province also allocated chemical fertilizer (a total of 264,000 tons in 1979 and more in 1980) for use in award sales for agricultural sideline products, which greatly increased enthusiasm for production among the broad masses of the peasants.

Third was institution of various forms of responsibility systems linking remuneration to output suited to the different nature of production in various projects. Since 1979, Shengang Commune in Jiangyin County, Jiangsu Province has in general practiced having households raise production team-owned hogs. In such practice, production teams together with households that had contracted to raise hogs would decide how much the feed grain, fodder land, burned straw and manure for the fodder land per hog would be. Together these teams and households will also decide on workpoints, and a net amount of cash to be turned over to the production team, with everything else in excess of quotas reverting to the hog-raising household. This practice has very rapidly reversed the previous situation of few shoats being produced, slow growth, much consumption of grain, and large losses in collective hog raising. Live hog production has since been greatly developed, and both the collectives and individual commune members have increased earnings. During 1979, 17 production teams in two brigades in that commune collectively raised six sows and nine porkers. Over a 5-month period, they ate 6,400 jin of grain, used more than 30,000 jin of fuel grass, and earned an income of only 300 yuan from the sale

of piglets, losing 5,100 yuan. In 1980, the brigade instituted household raising of hogs owned by the brigade. They had 17 sows and 36 porkers; making 9,680 yuan for the year. After deducting 5,350 yuan in expenses, their net income was 4,330 yuan, and they increased the amount of hog dung by 10,660 dan. In the No 13 Production Team of the Fourth Production Brigade, commune member Zhou Yaoxing [0719 5069 5281] raised a single sow in 1980, which produced two litters totaling 31 piglets during the year. After raising them to a total weight of 1,550 jin, he sold them for 1,308 yuan. After deducting 400 yuan to be turned over to the production team and 408 yuan for an extra 1,300 jin of fodder they had eaten, he cleared his debts and had a net return of 500 yuan. In Zhejiang Province, Tonglu County distributed footpaths between fields to households in proportion to the numbers of workers in them for the growing of soybeans, fixing a certain output to be turned over to production teams, all else going to the growers. Formerly when one production team collectively grew soybeans in this way, it harvested only 60 jin, but after contracting sole responsibility for the work to households, the production team got more than 1,200 jin, and every commune member household got 50 to 60 jin. In Jiangsu Province, the Liuzhuang Production Team in Zhuyu Production Brigade, Hongxing Commune, Liuhe County had 60 mu of water surfaces, for which no one had formerly been responsible and for which virtually no income had been derived. In 1980 they contracted the water surfaces to commune members for the raising of fish realizing 11 million yuan in income as a result. Examples of this kind are numerous. Wherever production responsibility systems linked to output have been instituted, great growth in production has occurred, and earnings of both collectives and commune members have greatly increased.

After the spirit of the CPC Central Committee's policy of positively no relaxation of grain production while actively developing economic diversification was handed down, the broad masses of peasants and cadres were elated. They said this was a document "for getting rich," a policy that was realistic and that met their desires. CPC committees at all levels immediately organized study and implementation of the document, and now plans are being worked out for further development of economic diversification. The four provinces' preliminary plans are as follows:

In farming, so long as there is no competition for land to grow grain, a free hand will be given for development. For crops that need cultivated land, a comrade in Zhejiang Province said, "both grain crops and cash crops have their place, and should not crowd each other." A comrade in Suzhou Prefecture said, "We must be sure not to compete with grain for land." They also acknowledge the need to strive for steady increase in yields while developing economic diversification at the same time, the need for adaptation of general methods to specific situations, and for equitable readjustment.

Cotton: Jiangsu Province in preparing to develop cotton growing to a suitable extent in Xuzhou and Huaiyin Prefectures. In 1981, 9.86 million mu were planted to cotton, and estimates say that this may increase to between 10 and 11 million mu by 1985. Both Zhejiang and Shaanxi Provinces intend to keep the area presently devoted to cotton, and increase yields per unit of area. In 1980, Sichuan Province grew 3.77 million mu, which it will cut back to 3 million mu.

Rapeseed: Earnings from the growing of rapeseed are high and cake residues after pressing oil may be used either for livestock feed or fertilizer. Some places have also instituted award sales of grain for rapeseed or permit it to be substituted in state procurement grain quotas. Mass enthusiasm for growing rapeseed runs high. Sichuan Province plans to boost acreage from the 6.46 million mu of 1980 to 8 million mu. Jiangsu Province feels that mass enthusiasm cannot be thwarted, but yet not too much should be grown. Zhejiang Province intends to cut back somewhat the growing of rapeseed. In Shaanxi Province, rape is grown mostly in southern and central prefectures, and the province has stipulated that 1 jin of rapeseed oil may be substituted for 8 jin of grain in state procurement purchase quotas. This has already reduced the quantity of rice handed to the state, so the province is considering some control on the regulation.

Silkworm Mulberry: In 1931 Jiangsu Province had a 1.1 million mu area of mulberry groves, which produced 636,500 dan of silkworm cocoons. In 1980, the silkworm grove area was 760,000 mu, and it produced 764,000 dan. In 1931, Zhejiang Province's mulberry grove area was 2.5 million mu, producing 1.36 million dan; in 1980 it was 1.25 million mu producing 1.3 million dan. The two provinces' silkworm cocoon output is now greater than or close to the all-time high, yet the mulberry grove area has not been restored to the all-time high. In Jiangsu and Zhejiang Provinces, mulberry groves occupy cultivated land, so there are no plans for major expansion of growing mulberries (though Jiangsu is planning slight increase in the northern part of the province). The main efforts in these two provinces are to increase single crop yields per unit of area. In Sichuan and Shaanxi Provinces, the trend in development of mulberry trees will be to grow them principally on footpaths between fields and on small plots of land by the side of ponds, roads and houses where they take up no cultivated land. Sichuan Province is apprehensive about marketing of the mulberry products.

Tea: Zhejiang Province stands first in the country in tea production, and more of it can be grown in mountain and hilly areas. However, tea growing is in conflict with forest cultivation. The firing of tea requires 4 to 5 jin of firewood or 1.5 of coal for each jin fired. Since coal is in short supply, mostly firewood is used for firing tea, so for each mu of tea grove will require several mu of firewood forest, expansion of the growing thus being restricted. Sichuan stands third in the country in the growing, but has great potential. Tea groves there now cover 1.8 million mu, of which 1 million mu is for production. In 1980, a total of 582,000 dan was produced. The province still has a long way to go to realize its preliminary plans for producing 900,000 dan.

Fruits: Potential for increasing fruit output is great. Because of the fairly high prices they command, in recent years development of citrus fruit growing has been particularly rapid. In 1976, Zhejiang Province had only 237,600 mu of citrus; by 1980 the area doubled to more than 481,600 mu, most of which has not yet reached the fruit bearing stage. Sichuan Province now has 100 million citrus trees, only slightly more than 20 million of which are now producing fruits. In both provinces the orchard area may be expanded somewhat, and a more than doubling of output by 1985 is entirely possible. Shaanxi Province

now has slightly more than 2.2 million mu of orchards, a considerable portion of which have not yet reached the fruit-bearing stage. The province plans to keep the area at what it is and increase single crop yields per unit of area. In Jiangsu Province, the emphasis is mostly on gradual readjustment of the distribution of varieties, with each area producing the fruits for which it is famous.

Hogs: In recent years, bonus policies have been adopted everywhere to encourage hog raising. In Zhejiang Province, for example, Yuexin Production Brigade in Haiyan County ruled that for each hog a commune member raised, the state and the production team would each sell to the commune member 50 jin of grain. In addition, they would give him 0.50 to 0.55 yuan and 3 to 3.3 jin of grain for each dan of pig dung. Since a hog produces 40 dan of dung a year, the commune member would make 20 to 22 yuan and 120 to 132 jin of grain. In addition, the state would reward 10 jin of chemical fertilizer for the commune member to buy at state prices. The state would turn over the fertilizer to a production team. The production team would then provide a commune member with 30 jin of grain. The total of all the foregoing amounted to about 250 jin of grain per hog. As a result, peasants liked to raise hogs, but from the production teams' standpoint, hog raising constituted a burden on resources. For each hog sold to the state, a production team stood to fork over between 170 and 180 jin of grain. Jiaxing City's standards were even slightly higher; commune members getting between 300 to 350 jin of grain for each hog they sold. In Jiangsu Province too, usually a peasant could get 250 to 260 jin of grain for each hog sold. During the period of the Sixth Five-Year Plan, the province has preliminarily estimated that livestock fodder grain withholdings will be able to maintain only the number of hogs being presently raised. If there is to be any increase in live hog production, it will require development of the livestock feed industry and increase in livestock feed utilization rates.

Expansion of hog production currently faces another conspicuous problem in finding markets. In Zhejiang Province, Jiaxing Prefecture limited its procurement during the summer of 1980 by using coupons issued by the food company. The Jiangsu Provincial Agricultural Commission estimates that 12 to 13 million head will supply the province's markets adequately, and that each hog being shipped out of the province equals shipping between 200 and 300 jin of grain out of the province. The province does not plan to increase any outgoing shipments of hogs. Instead, it intends to plan hog raising and to maintain numbers of hogs procured at around 16 million head (in 1980, the number was 19.31 million head). Sichuan Province believes that because of the restricted purchasing power resulting from decreased procurement, peasants should use their increased income to solve housing problems first of all, using it for clothing and food second. During the past 2 years, they have not only encouraged the eating of pork by levying no taxes on hogs that the masses slaughtered for their own consumption, but also provided a 3-yuan-per-head subsidy. In 1980, per capita pork consumption averaged 33 jin, the highest rural consumption in the country. Yet, not all that was available was consumed. The province wanted to ship pork outside the province, but had no takers. As a result, there will be only deliberate growth in future.

On the basis of the foregoing circumstances, live pig production will not likely develop very rapidly in the future, and in some places it may remain stable at present levels for quite some time before any further increase takes place.

Development of herbivorous livestock has also run into the livestock feed problem. Not only is there presently a shortage of grain, but of hay as well. In Jiangsu, Zhejiang, Sichuan, and Shaanxi Provinces, wherever we went, the hills and mountains near villages had been cleared for the growing of crops or for expansion of forestry. In Zhejiang, Sichuan and Shaanxi Provinces, some grassy slopes may be found in the faraway mountains, but the quality of the grass is poor. In order to develop it for cattle raising, the variety of grass would have to be changed at great expense in labor and money. In areas even further removed from villages, development cannot occur very quickly. Right now, everywhere calculations are being made as to what livestock should be raised given limited hay resources. Jiangsu and Zhejiang have decided that cattle and sheep eat too much hay, so they cannot afford to raise them. The famed Hu sheep in the area around Lake Tai formerly ate mulberry leaves during the season when silkworm cocoon trays were empty, but now that the raising of silkworms has been increased from the previous one crop a year to two, three, and four crops a year, there are no mulberry leaves for the sheep to eat. As a result, no great development of sheep raising is possible. Rabbits do not eat much grass; they breed rapidly; little labor is required to raise them. Therefore, costs are low and earnings are high, and rabbit dung makes fine fertilizer. Long-haired rabbits are particularly attractive since more than 10 yuan a year can be earned from the growing of a single rabbit. Long-haired West German rabbits earn more than 20 yuan. The masses say, "One rabbit provides oil, salt, soy sauce, and vinegar; two rabbits provide a pair of trousers; and 10 rabbits make a family rich." This is a trend for major development.

Beekeeping: Beekeeping can be greatly developed. Zhejiang Province had 710,000 hives in 1980, and according to provincial figures, were superior varieties to be developed, a single hive of Italian bees could produce 150 jin of honey each year; four hives could produce 600 jin, and this would equal the sugar production of 1 mu of sugar cane. Seven hundred thousand beehives could produce an output equivalent to more than 100,000 mu of sugar cane. Right now, honey does not sell very well, but if this problem could be solved beekeeping would develop very rapidly.

Fish Raising: Quite a few water surfaces in Suzhou Prefecture remain unused, but in the view of the Prefecture Aquatic Products Bureau, the key to raising freshwater fish lies in the supply of fish food. Previously, natural feed was used for freshwater fish, but now with the filling in of 400,000 mu of lakes to make fields, and with the raising of fish on 700,000 mu of ponds, streams, and gullies, more than 1 million mu of bases for production of natural fish food was taken up, and there is no choice but to use food that people provide. The Suzhou Aquatic Products Bureau believes that the artificially provided food not only cannot keep up with the demand, but its output may even decline. Were artificially provided food available, even with no expansion in area, fish output could be much increased. Right now, Suzhou

and Wuxi are giving one-half jin of grain for each jin of fish, and fish output has risen tremendously as a result, virtually solving the two cities' problems of having fish to eat. However, in the counties of Suzhou Prefecture, not only is there no supply of grain in exchange for mature fish, but there is the problem of finding food to raise fish fry. Actually the only food needed for raising fish is the residue remaining from the pressing of rapeseeds. When rapeseed residue is used to raise fish, the mud from fishponds may be used to fertilize the fields to recycle growing for more rapeseed. Now, however, rapeseed residues are not reaching fish raising units, and departments concerned must plan this matter in an overall way.

Forestry: Outside of the mountain regions, a very great potential exists for the planting of forest networks around farmlands, and for planting trees on the four sides. In these areas the soil layer is thick, water and fertilizer are ample, and labor is abundant. Trees can mature rapidly and produce much. A survey done in Jiangsu showed that the timber reserves from 1 hectare of trees growing in a single row equals the timber reserves of 1 hectare of timber forest. A rationally laid out farmland forest network could improve the field microclimate, and promote increases in farm crop yields. After Shuyang County in Jiangsu Province had substantially carried out planting of farmland forest networks, timber reserves averaged 0.5 cubic meters per capita for initial self-sufficiency in timber for use in agriculture, in daily life, and for firewood. The key to planting trees for afforestation lies in production responsibility systems, solution to the problem of sapling supply, and enthusiasm of the masses. Unless the responsibility system problem is solved, there can be not only no development of afforestation, but existing forests will be destroyed. Comrades in the Sichuan Provincial Forestry Department reported that following the contracting of farm production to individual households, because there was no similar responsibility system for forestry, collectively owned forests were ravaged. Of 830 commune and brigade forest farms in Daxian Prefecture, 447 were completely destroyed and 159 semidestroyed; only 24 remained fairly unscathed. In those that had been destroyed, trees were cut down because no one looked after them. In Zizhong County, even saplings that had been planted were dug up over a 1,000 mu area.

An obvious problem at present in economic diversification is the lack of coordination among production, supply, and marketing, which is manifested in the following two ways:

1. Extraordinarily sharp contradictions between agriculture and commerce.

In the procurement of agricultural sideline products, cadres, staff, and workers in commercial, supply and marketing, and foreign trade departments have labored hard and have achieved very much. The overall situation in procurement is good. However, because of a tendency to look at matters only from a commercial standpoint and not give sufficient consideration to what helps develop production of the interests and hardships of the peasants, failure to change the old "bureaucratic business" workstyle and methods, plus insufficient storage, transportation, and cold storage capacity, compulsory total procurement has been done everywhere in times of need with some category III goods being made category II goods, and some category II goods being even

more tightly controlled than category I goods. In addition, peasants have not been permitted to handle their own surplus after fulfilling the quotas. There have also been instances in which products that peasants have produced using raw materials purchased at negotiated prices were forced to be procured at list prices. When the products are not needed, the concerned departments have refused to purchase these products, imposed limits on the amount of purchases, downgraded and reduced the price of these products, and abolished award sales, thereby inflicting on the peasants severe damages and losses. The numerous instances that local cadres and masses have reported provide much food for thought.

2. There is need for a department to manage economically diversified production, supply, and marketing in an overall way, to strengthen planned direction, and to prevent bungling.

During the 10 years of turmoil, leaders at all levels could do nothing. Later on, in order to meet export and market needs, foreign trade, business, and supply and marketing departments did things with their own concerns in mind. Now when the need to develop economic diversification in an active way arises, many places still do not have a department that can study problems in an overall way. Foreign trade, business, and supply and marketing units do things in terms of their own organizations. Those in lower echelons have the idea that there is no agreement between the various ministries and commissions of the State Council and provincial authorities. Take animal husbandry, for example. Both foreign trade and commercial departments have their own individual superior variety breeding systems. Strength is dissipated, and there is no mutual coordination. Right now numerous contradictions exist in livestock feed, but there is not even a unit that is now responsible for considering in an overall way just how to use limited livestock feed to get maximum results. Previously, if one were a "registered resident," feed would be available for the raising of hogs, and a little could be provided for the raising of cattle, fish, or even breeding geese and rabbits. If one were not a registered resident, no solution to the livestock feed problem could be found. Possibly either the unit under the jurisdiction of a foreign trade department could solve the problem, or the unit under the jurisdiction of agricultural departments could not. Even in the raising of hogs, one had to be a registered resident to get feed to fatten hogs, but there were no standards on how much livestock feed should be used for breeding hogs.

Within agricultural departments, too, there is a lack of across-the-board thinking and planning guidance. At lower levels, each person does whatever is thought best, and there is a lot of blundering. Prices paid for pearls and ground beetles [*Eupolyphage sinensis*, used in Chinese medicine] are high, so everybody wants to raise them. Some comrades already worried about future markets for the large number produced. Economic diversification bureaus in Suzhou Prefecture, and in Wu County have begun to pay attention to this question. They have begun a comprehensive analysis of conditions and market requirements in the prefecture and county, and worked out development projects to put individual communes in an unassailable position. They have formulated corresponding measures for encouragement and support, and they have channeled communes, brigades, and individual commune members into planned development.

However, there are many problems that are very difficult for agricultural departments acting individually to solve, and that also require working out in terms of production, supply, marketing and even pricing. Comprehensive planning is the only way to solve them.

At the survey symposium, individual comrades made the following suggestions:

1. The need for systematic and thoroughgoing education of all cadres, staff and workers in financial and trade departments in the nature of socialist business, duties, and basic standpoint and attitudes, summarization of work, carrying forward of achievements, overcoming shortcomings, improving ideological understanding, and establishment of fundamental concepts of the need for socialist business to serve production and the masses, and to carry out loyally the party's policies. Common concern for urban needs and peasant interests, for supply and development of production, and for responsibilities to upper and lower echelons should be brought to bear and considered as a strategic duty, mindful of the problems of livelihood and prosperity for the 800 million peasants. Some comrades also suggested that in making monetary awards to commercial departments, profits should not be the only factor taken into consideration. The profits relative to how well the production is developed should also be taken into consideration when giving awards.
2. The need to actively and steadily solve organization problems in the multi-layered commercial and economic structure. Socialist business under ownership of all the people is a principal and a collective business, and is likewise socialist. Its development must be actively supported. Country fairs and individual businesses must also vigorously support it. In so doing, all the people, the collectives, country fairs, and individual businesses will all rise together. There will be concurrent concern for all; goods will flow smoothly and the economy will become more lively. Management of collective and individual business should be intensified, but they should not be overcontrolled or stifled. State plans and the self-determination of communes and brigades should be linked for concurrent concern for the interests of the country, collectives, and individual commune members. After fulfilling state procurement quotas, peasants should be allowed to handle agricultural sideline products that they have produced as they see fit.
3. Pilot projects and summarization of experiences should be used for active and steady promotion of various forms of economic agreement systems. Economic discipline must be rigorously observed, and agreements followed to the letter.
4. It was proposed that all levels above the county should set up centralized leadership organizations for economic diversification, and do a good job of market forecasting and guidance of the development of production. Overall provisions should be made for production, supply, and marketing, and a good job done in dovetailing production with the flow of goods. Domestic markets and international markets as well as exports and internal supply should be coordinated. Matters at lower levels must be understood, policies mastered, disjointedness and mutual restrictive things eliminated, and unified leadership and management strengthened.

5. Supply and marketing business should, by way of implementing pilot projects or spot experiments, gradually revive and establish new collective and cooperative commercial systems. Active support should be given to the small number of existing pilot projects for the integration of agriculture, industry, and commerce, so that they can steadily and systematically develop. In strengthening leadership and coordinate relations between agriculture and commerce, it was recommended that under the central leadership of both party and government, the business of supply and marketing should be guided by finance and trade units.

7. [as published] Insofar as financial resources permit, the commercial system's facilities for storage, for maintaining freshness, and for transportation should be improved to help the flow of goods and to promote development of production.

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CSO: 4007/66

PRODUCTION RESPONSIBILITY SYSTEMS IN ANHUI SURVEYED

Beijing ZHONGGUO NONGYE NINAJIAN 1981 [CHINA AGRICULTURAL YEARBOOK, 1981] in Chinese Jul 82 pp 310-313

[Text] Survey Report on the Status of Agricultural Production Responsibility Systems in Anhui

Thirteen counties (and municipalities) including Feixi, Shucheng, Lujiang, Zhao, Wuhu, Xuancheng, Dangtu, Fengyang, Jiashan, Huojiu, Huoshan, Jinzhai, and Shou in Liuan, Zhaouhu, Xuancheng, and Chuxian Prefectures in Anhui Province have a good record in promotion of agricultural responsibility systems. The overall impression they convey is one of economic vitality, development of production, fairly flourishing markets, high morale among the peasants, great exuberance in all rural villages, and the appearance of an unprecedentedly fine situation. Why is the situation so good? This is an outgrowth of the carrying into effect of the spirit of the 3d Plenary Session of the 11th Party Central Committee, and an important aspect of the practice of production responsibility systems.

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Some of these 13 counties (or municipalities) are in the river and lake region south of the Yangtze River; some lie between the Yangtze and the Huai Rivers; some are on plains and in mountain regions, some are old "three dependent" areas that "have for many years depended on "state resale of grain to eat, state loans to produce, and relief for their daily lives. Though natural conditions and production levels vary from place to place, in most places not only the "three dependent" communes and brigades, but some communes and brigades in an intermediate state with fairly ample incomes also practice production responsibility systems under which they contract production to individual households or contract sole responsibility to individual households for production tasks. Except for Dangtu County, in the 12 other counties (or municipalities), more than 90 percent of the total production teams practice contracting of production or contracting sole responsibility for work tasks to individual households, with most of these teams practicing the latter. Feixi County initially proposed the practice of "three contracts, one reward and one compensation, and five centralizations" in the contracting of production to individual households (contracting of production, contracting of work, contracting of expenses; rewards or penalties for overfulfillment or

underfulfillment of contracted quotas; centralized planning, centralized water conservancy, centralized management and use of plow oxen and farm implements, centralized distributions). However, actually practicing the contracting of production to individual households was less than 40 percent, whereas the majority of the county practiced the contracting of sole responsibility by the individual households for task completion. Dangchu County was the latest in contracting production to individual households, having started only in March and April 1981. When we visited the county, the production teams were still working on the task of putting into effect the contracting of production to individual households which numbered 57 percent. County CPC committees believed that the way to implement the practice is the "centralized administration in contracting of production to individual households," which requires centralized planning, centralized planting, centralized raising of seedlings, and centralized use of water, machines, and plow oxen. Nevertheless we also saw, in the county, some cases of contracting sole responsibility for task completion to individual households.

What is meant by contracting of sole responsibility for task completion to individual households? Simply put, it is the contracting to households of plots of land, with all surplus belonging to those who farmed the land after having satisfied state quotas and provided sufficient withholdings for the collective. In most places today, the practice of contracting sole responsibility for task completion to individual households has been developed more rapidly and pervasively than the practice of contracting production to individual households. The main reason for this is the popular feeling that the method is simpler and benefits more direct. They say, "sole responsibility contracting, sole responsibility contracting; it is straightforward with no twists and turns. What has to be taken is taken in plain view, and one has a good idea of what one is to get. Cadres have less to worry about and the masses are at ease. Everybody is happy."

Judging from what we saw and heard, many of the original "three dependent" communes and brigades turned into "three increase" communes and brigades after 1 or 2 years or practicing contracting production (or sole responsibility for work task completion) to individual households, with increased output, earnings, and their contributions to the community, achieving genuinely remarkable economic results. Some communes and brigades in an intermediate state and those that had always been fairly well off, were far better off after implementing the contracting of production (or work tasks) to individual households, than during the period of the "great hullabaloo."

Jiashan County and Fengyang County in Chuxian Prefecture are adjacent to each other, and had formerly been notorious as "three dependent" counties in Anhui Province. For only 9 years out of the 26-year period between 1953 and 1978, they had shipped grain totaling 208.35 million jin out of the province. For the other 17 years they needed to bring in from outside grain totaling 334.67 million jin. After balancing off shipments in against shipments out, they ate a net total of 126.32 million jin of grain supplied by the state. In the 10-year period between 1969 and 1978, the state invested 8.5 million yuan without compensation, and in the period 1957-1978, the state provided them 9.9 million yuan in relief funds. State investment and relief fund totaled 18.4

million yuan, or 205 yuan for every farm household. In the 30-year period between 1949-1978, the state also issued agricultural loans to Jiashan County totaling 29.82 million yuan, with a recall of only 16.13 million yuan. Even with two exemptions of 2.03 million yuan, Jiashan County still owed the state 11.66 million yuan of loan. As the masses said, during previous years it was a case of "peasants farmed the land and the state lent a hand; when food and clothing were short, the state provided support." But after Jiashan County instituted contracting of production to teams in 1979, its grain output reached a total of 350.7 million jin, 137.5 percent more than in 1978. In 1980, when contracting production to individual households was instituted, despite fairly severe disasters in parts of the prefecture, total grain output reached 406.14 million jin, or 15.8 percent more than in 1979 for an all-time high. Eleven communes located among barren and infertile hills have long had low yields and been backward, but in 1980, every commune increased yields for a more than 40 percent increase in output. Forty-seven production teams in the counties had households that produced 10,000 jin of grain. Among 89,600 peasant households, 5,887 produced 10,000 jin of grain, and 74 households produced more than 20,000 jin. Two households produced more than 30,000 jin. The counties had a state procurement quota of 58 million jin, which it overfulfilled by 15 percent with 66.93 million jin of grain. Its state procurement quota for edible oil was 800,000 jin, of which it fulfilled 749,000 jin at uniform prices, and 990,000 jin at negotiated prices for a total of 1,739,000 jin, or a more than double overfulfillment. Commune members in the county have distributed 274.54 million jin of grain, 22 percent more than in 1979. Average per capita grain rations increased to 632 jin from 525 jin in 1979. Previously, some commune members "could get no rice to eat, and not enough of any other grain." Now, problems of sufficient clothing and food have been solved, and "both rice and other grains are available; there is no need to worry about food; one can kill a fat hog or eat all the oil one can stand, feeding sweet potato stalks to the livestock instead of eating them oneself."

The practice of contracting production (or responsibility for work) to individual households changed the "big hullabaloo in doing work and going to work like a swarm of bees." It overcame egalitarianism in figuring compensation for labor, and stirred enthusiasm for work. "Formerly three people could not do the work of one, but now one person can do the work of three." Accompanying the increase in grain production have been advances in commune members' family sideline occupations and development of economic diversification. Commune members' income has increased and life has improved. Rough calculation shows commune member distributions in the counties during 1980 to have been 42.12 million yuan, 39 percent more than in 1979. Average per capita distributions rose from 70.30 yuan in 1979 to 97 yuan. This plus earnings from family sideline occupations (which averaged 67 yuan) has meant an average per capita income of 164 yuan. Peasant households in the counties that have an income of more than 5,000 yuan numbered 114; four of these households had incomes of more than 10,000 yuan. Statistics as of the end of November 1980 show commune member savings in the county at 2.11 million yuan, an unprecedented amount. During the year 2,144 houses with a total of 6,786 rooms were built in the rural villages, and another 1,930 households are getting materials ready to build. Commune members have bought 6 television sets, 19,989 radios, 7,062 wristwatches, 1,415 bicycles, and 3,217 sewing machines.

Now construction materials and the "three big items" in daily life [wrist-watches, bicycles, and sewing machines] are completely out of stock, supply being unable to keep up with demand. In some places, the following is being passed around: "Surplus grain in 1 year; surplus cash in 2 years; living in a tile-roofed house in 3 years; and great changes in the village in another 4 or 5 years."

Shannan Commune in Feixi County was the first commune in the province to practice the contracting of production to individual households. This commune is located in the hilly region between the Yangtze and the Huai Rivers. It is part of the Shibihang irrigation area where conditions are rather good. However, up until the time of contracting production to individual households, production never got any better, and "three dependents" production teams numbered one-third of the total. Very great changes have taken place after practicing contracting of production to individual households for 2 years.

In 1980, despite serious disasters, grain output totaled 36,442,000 jin, 5.4 percent more than in 1979 and 8.4 percent more than in 1976, the all-time high year up until the practice of contracting of production to individual households. Oil-bearing crop output reached 1,524,300 jin, a twofold increase over 1976. The commune fulfilled its state grain procurement quota of 5.8 million jin, and this plus overfulfillment brought the total to 10,234,000 jin, 44.5 percent more than in 1979 and 80 percent more than in 1978. It fulfilled fats and oils sales quotas of 256,000 jin, which was just about the total amount formerly sold to the state in 5 years. In 1980, distribution in the commune averaged 101 yuan per capita, versus 82 yuan in 1978 or 23 percent more. Households that had overspent and gone into debt numbered 923 versus 1,849 in 1978, a 50 percent reduction. Representative sampling of 100 commune member households in 5 production teams with varying production levels showed that average incomes, figured in terms of prices before the price rises, reached 153 yuan per capita, or 40.4 percent higher than in 1977, the year of maximum income. Before contracting of production to individual households, "every production team was in debt and unable to make repayment year after year." In 1980, however, in addition to clearing up debts for the current year amounting to 140,000 yuan, it paid off 85,000 yuan in old debts. Of 239 production teams, 144 or 60 percent were debt-free, and an additional two production brigades were debt-free.

With the practice of contracting of production (or work responsibility) to individual households, labor efficiency rose greatly and much more work was done than during the period of the "great hullabaloo." This also provided advantageous conditions for development of commune- and brigade-run enterprises. Up until 1978, there were only a farm machine repair shop, a construction team, and several grain and oil processing plants with an annual output value of about 250,000 yuan. After contracting production to individual households, in addition to making these enterprises larger, two kilns and several processing plants were built. Commune- and brigade-run enterprises then had an annual output value of more than 1 million yuan, three times more than before 1978.

Communes and brigades that practiced the contracting of production (or work responsibility) to individual households, and particularly some communes and

brigades that had formerly been impoverished and backward, underwent similar changes for the most part. Of course, since they all started from a different basis, the amount of change and the degree of prosperity differed in each case.

Facts have shown that the contracting of production (or work responsibility) holds very great attraction. For a long time in the past, as a result of the influence of erroneous "leftist" ideology, subjectivism in production, blind direction, "big hullabaloo" about work management, "eating out of a large common pot, and working in a slapdash way," more work without earning more benefits, and failure to make good on distributions, peasant enthusiasm was seriously dampened. "When going to work, one person waited for another; when doing work, one watched another; and when getting off from work, each one rushed ahead of the other." "When you arrive, I'll arrive; playing cards on the job; when you leave, I'll leave too; not worrying about workpoints." This "loafing on the job" slowed down the development of production. But since the institution of contracting production (and work responsibility) to individual households, the big hullabaloo in production, and egalitarianism in distributions was overcome. The approach of "linking remuneration to output linked the heart (of people), and linking with others linked concern," had widely tapped the labor potential. Peasants could see the bottom line of accounts very clearly, and their enthusiasm increased greatly; the economy came alive, peoples' lives improved, and a heartfelt joy came about among the peasants. They said happily: Contracting production to individual households is good; the grain harvested is too much to eat. Collectives have grains; commune members are rich; and the country has to build granaries.

2

In the process of contracting reduction (or work responsibility, some problems also appeared.

(1) In the process of parceling out plots of land, situations occurred in which public structures were razed, accumulations distributed, hog farms dispersed, machinery (tractors) taken apart and sold, and trees cut down with the destruction of forests. The fixed assets of some production teams were virtually entirely divided up until they no longer existed. After contracting land, instances occurred in which peasants built houses or placed graves on the land without authorization, and fights over water and plow oxen were common everywhere. In the case of water, mostly it was a case of everyone vying with each other to use it, but with no one looking after the ponds and dams. When the electric irrigation station in Sijing Commune in Feixi County released water in 1980, everyone went out to dig holes in the dikes, but no one took charge. In 1980, water ran freely out of 146 of the 406 dammed ponds in Jiaxiang Commune in Jiashan County. Water was not stored when it could be stored, so there was a general shortage of water for the transplanting of seedlings in 1981. At Jiaogang Production Brigade in the same commune, 69 of the 70 dammed ponds leaked water. As a result, though 25,000 jin of paddy rice seeds should have been soaked for planting, only 7,000 jin were soaked because of a shortage of water. Comrades everywhere also reported that large numbers of oxen died during 1980. In Chuxian Prefecture, more than 10,000 died, and in Xuancheng Prefecture more than 8,000 died, half as many died as

in previous years. In Liuan Prefecture 25,000 head died, and in Zhaohu Prefecture more than 9,000 died, which was also quite a number more than had died in former years. Reasons for the large number of dead oxen included low temperatures with much rain that caused molding of rice straw and poisoning of the animals. In addition, however, oxen management teams "boarded out" the oxen to different peasant families who did not feed them properly and overworked them. Right now every jurisdiction is strengthening leadership, summarizing experiences, and gradually solving these problems. Some places have taken firmly in hand the inventorying of collectively owned property, and have established and perfected economic agreements. They have formulated "village regulations and peasant contracts" for use of water, oxen and machinery, which have been definitely effective.

(2) In instituting the contracting of production (or work responsibility) to individual households, in some places "production team leaders had no authority, production teams were penniless, and the wherewithal to take care of things was lacking." Commune members looked after themselves alone, and getting people to work on public projects was very difficult. Feixi County started the contracting of production to individual households fairly early, and has done quite a bit to improve and perfect them. However, there are still some things that cannot be done. In 1980, the superior authority had allocated 230,000 of investment funds to them to repair dangerous reservoirs. Such repairs were something that would have had to be done in the past, but the actual amount of work completed this year is still less than 10 percent. An investment of 27,000 yuan was provided for the county's Tangchong Reservoir, but not a cent of it was spent all year. The main reason has been inability to get workers to do the work. The county Education Bureau reported that among the 10,000 school buildings in more than 500 primary schools throughout the county, 1,700 rooms and more were dangerous and could not be used. Formerly, when school buildings needed repairs, either voluntary laborers or assigned workers would be sent by the production brigade. Today, there are no longer any voluntary laborers, and the production brigades cannot centrally assign workers. Neither can the schools hire anyone to make repairs because of lack of funds. As a result, these school buildings continue in a dangerous state. In Zhao County, a 390 meter long dike in Wujia Production Brigade of Huancheng Commune needs strengthening since it has been weakened by the scouring of flood waters, but no workers have been sent to do the job. When we held a discussion meeting, the party branch secretary of this production brigade said, "Things that we can see with our own eyes cannot be done." But some places have done a good job. Some have used economic methods, contracting out sole work responsibility for certain sections of water conservancy projects. In other cases, commune member households have joined together of their own accord to repair pond dams. For example, when a pond dam was washed away in Jingwang Brigade, Qiaotou Commune, in Jiashan County, the 80 households of commune members who had directly benefited from it joined together to organize a workforce of 200 people and assigned so many cubic meters of earthworks to be built by each household on the basis of the number of mu benefited. Within 4 days the job was finished. However, in the majority of circumstances, following the practice of contracting responsibility for production (or work) to individual households, it became difficult to get workers out and difficult to collect money. How to run public utilities well remains a problem requiring centralized study and solution.

(3) In instituting the contracting of production (or work) to individual households, except for a small number of cases in which fields were contracted in proportion to the number of people in a household able to work them, most were contracted on the basis of a certain average number of people in each household. As a result, households having large numbers of people but few able to work the fields could not farm the fields assigned them, and households with few people most of whom were able to work did not get enough land to work. In this connection, every jurisdiction had some "three shortage households," i.e., those short of manpower, short of funds, and short on skills. In one case or another, these households found it difficult to cope with production. In general, there were three kinds of such households:

(1) Large households with few people who are able to work, with workers who were weak, and who lacked capital. These were "soft-leg households."

(2) Households with an able-bodied worker but who was unfamiliar with farming, and who had formerly done "odd jobs" in the production team. Now that he had to work the fields alone, he faced many difficulties.

(3) Some households who lacked manpower because their members were rural cadres or workers and staff in nonfarming enterprises. Land was contracted to them, but they could farm it. For these "three shortage households," making a living was usually a considerable problem, and their greatest difficulty was in not being able to be productive. At Licun Production Team in Songxiang Production Brigade, Shiwei Commune, in Wuhu City, commune member Li Sike [2621 0934 2688] is a 49-year-old man with bad eyesight who has a family of six. His old mother is 70, and his wife is sick and unable to work. He has three children, the oldest of whom is 16 and the youngest of whom is 10. No one in the family can do heavy work. The 16-year-old eldest daughter is engaged to be married, and her husband-to-be helps them farm. Song Renquan [1345 0117 3123], commune member in the Huangtugang Production Brigade of Baoji Commune in Jiashan County, does not know how to take care of oxen, and he worked his own ox to death. He then borrowed a relative's ox to plow his fields, but it died from something it ate, and the whole family cried with anguish. Reportedly, credit cooperatives will not make loans to households such as these, because they lack the ability to repay them. They have to depend on their own resources, so it is very difficult for them to shake off their difficult situation very quickly. Dependents of cadres, and dependents of staff and workers in nonfarming jobs are unable to farm land contracted to them for lack of workers. In some cases relatives or neighbors help them, and if they did not get such help, they hire it. Some turn the land over to others on contract, the contracting party providing them with grain rations at parity price following autumn harvest. Others contract the farming for money, paying 20 to 30 yuan per mu. Li Henian [2621 0735 1628], an employee of the Lujiang Motor Vehicle Station, his mother, wife, and three children are all registered rural residents, but the household has nonfarmers. When 6 mu of land was contracted, except for a plot near the house, the farming of all of it was contracted to others at 30 yuan per mu. Li Henian figured that at a yield of 1,000 jin per mu, after paying expenses he might expect to get a grain ratio if all went well, but "in a disaster year he would be up against it." The appearance of "three shortage households" in rural village has aroused people's concern. Both cadres and the masses feel they "should help along." In some places, party and Youth League cadres have taken the lead to help each household. Some have organized highly skilled veteran peasants to give guidance, and both methods have worked well. It seems that

for some "three shortage households" that really cannot produce, how to help them in ways other than by mutual help from the masses, making them loans, and providing them the means of production is a problem that deserves much study.

(4) After the contracting of production (or work) to individual households, the leadership of a good number of production teams, was greatly weakened or became an empty shell. In some situations, contracting of production (or work) to individual households brought about certain changes in production relationships requiring new methods to take the place of inappropriate old methods. Quite a few cadres were suddenly unable to meet these new circumstances. They could not handle the situation nor did they want to handle it. At Dahe Commune in Shucheng County, 32 of 88 production team leaders wanted to throw in the towel. As a matter of fact, two of them requested to do so. Eight of them refused to work. Many production team leaders and bookkeepers were in name, but actually did not work, played no role, and did none of the things their positions required. Another situation in some places was that production team leaders were "doing conscientious work day after day, but changed overnight"; rushing headlong into mass action, running hither and yon, their morale gone, and not acting like team leaders. In such places, the contracting of production (or work) to individual households was in a virtual state of anarchy. Leadership teams could not lend support, work could not be done; even meetings could not be held, and problems were fairly numerous. Facts have shown that after contracting production (or work) to individual households, stabilizing and improving the leading bodies of the production teams, continuing to strengthen the leadership of production teams, and grasping political and ideological work, were extremely important questions. Those places in which contracting of production (or work) to individual households had been done fairly early and that had forceful leaders began to shift the emphasis of work from solution of various problems in ideological understanding to study and solution of problems that had emerged from practicing the contracting of production (or work) to individual households. These places have actively set up and perfected production team leading bodies, trained grassroots cadres, helped the masses to summarize experiences, and formulated measures for the completion and improvement of responsibility systems of contracting production (or work) to individual households in order to score preliminary successes. However, the real solution to the problem of strengthening production team leadership will still require a great deal of work.

(5) Following contracting of production (or work) to individual households, discussions were numerous on the issue of cadre compensation and the burden they placed on commune members. Reports we heard in the course of our travels were largely that the masses felt there were now too many production brigade and production team cadres, that they received too much compensation, and that the "burden was too great to bear." A look at the actual situation shows this to be a genuine problem. Most production brigades have between 10 and 20 cadres, 4 of whom receive fixed subsidies (the party branch secretary, the brigade commander, the militia commander, and the accountant, the others receiving subsidies for work time lost from farming). In general, they get about 300 yuan or as much as 400 yuan per person per year. In addition, they are all on contract to farm a piece of land, so their real income is higher

than the average for similar workers. Their fixed remuneration is somewhat high. The production team leader and the accountant each make 60 to 70 yuan, or at most 100 yuan, a year (while other cadres being paid a subsidy for time lost from other work). This is not high by any means. The problem is that in most places, when contracting of production to individual work teams was practiced in 1979, for the most part it was a case of work groups appeared to be doing the work for the production teams. As a result, production teams went from large to small and suddenly their numbers greatly increased. Take Lujiang County, for example. Up until 1978, a production team had always consisted of about 7,000 groups, but in the winter of 1979 the number of groups increased to more than 9,000, and now it is 11,639, 66 percent more than in 1978. Circumstances differed from one county to another. Consequently, after contracting production (or work) to individual households, the masses felt there were too many production teams, too many cadres, and too heavy a burden. They wanted production teams to merge. Without damaging the previously signed contract agreements, some places acted on the desires of the masses by merging small production teams into large ones. Weigang Village in Weigang Brigade, Qiaotou Commune, Jiashan County has slightly more than 90 households with a population of somewhat more than 460. Formerly it had been divided into 4 production teams, 4 cadres in each production team, or a total of 16 people, drawing fixed subsidies, each person averaging 50 yuan annually for a total of 800 yuan. These subsidies alone meant a burden of more than 8 yuan per household per year. Now, in response to demands from the masses, and under the direction of the production brigade, the four production teams have been merged into a single Weigang Joint Production Team. A commune member meeting democratically elected four cadres (a production team leader, a leader of the women's team, a militia platoon commander, and an accountant). This has both strengthened leadership of the production team and suddenly reduced by three-fourths the burden on commune members. This may become a trend. However, the desires of the masses must be respected, actions adroitly guided according to circumstances, general methods adapted to local situations, and "no arbitrary actions" taken. (State Agricultural Commission)

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CSO: 4007/66

PROBLEMS WITH RURAL FINANCIAL MANAGEMENT EXPLORED

Beijing ZHONGGUO NONGYE NIANJIAN 1981 [CHINA AGRICULTURAL YEARBOOK, 1981] in Chinese Jul 82 pp 324-326

[Article by Survey Unit, Agricultural Finance Department, Ministry of Finance]

[Text] Need for Strengthening People's Commune Financial Management

Genuine strengthening of financial management in commune- and brigade-run enterprise and people's communes' basic accounting units is an important matter that should arouse a high degree of serious attention. As a result of visits to some places in rural Jiangsu, Zhejiang, and Shanghai, we have vivid impressions in this regard.

1. Why Do Some Communes and Brigades Report Being "Millionaires With Both Hands Totally Empty?"

We heard this phrase, "millionaires with both hands totally empty" more than once in fairly economically advanced Wuxi and Jiading Counties. Though a certain amount of hyberbole is involved, it also reflects a certain reality. In recent years Wuxi County's commune and brigade enterprises have grown very rapidly. In 1978 their annual output value was 430 million yuan, and net profits set a new record of 130 million yuan. However, this county's commune and brigade enterprises incurred debts totaling 26.8 million yuan, including wages and other sums to be paid to production teams. This is 2.2 million yuan more than the total 24.6 million yuan collective withholdings by rural basic accounting units throughout the county in 1978 (including accumulation funds, production expense funds, and public welfare funds). Most of these debts resulted from production teams advancing their own collective withholdings to commune members. As a result, collective withholdings amount to nothing more than figures on a ledger. In many production teams funds are short, and as bank and credit cooperative savings decline, loans increase. A comrade in the Wuxi County Bank reported that production team year end savings totaled 13.72 million yuan in 1970; in 1978 they were 12.17 million yuan, the 1978 figure being 11.3 percent less than in 1979. Loans amounted to 2.1 million yuan in 1970 and 8.13 million yuan in 1978, a 2.87 fold increase in 1978 compared to 1970. Quite a few production teams virtually require loans in order to maintain simple reproduction.

Our survey of Hongsheng Commune in Wuxi County showed this situation to be real. At the end of 1978, the commune and its production brigades owed production teams 642,000 yuan in wages and other funds to be turned over to them. This was more than 1.1 times the 586,000 yuan of the collective withholdings by basic accounting units for the current year. As of the end of February 1979, the Chengjieli Production Team in Shuguang Production Brigade in this commune had, in addition to its fixed assets, accumulation funds, production expense funds, and public welfare funds totaling 13,499.34 yuan on its books, when it had, in fact, only 2,064.74 yuan or only 15.3 percent of the amount in its coffers. Of the outstanding 11,434.60 yuan, 8,284.54 yuan or 72.5 percent was owing by production brigade enterprises, and 2,339.38 yuan or 25.5 percent was cadre and commune member arrears.

Funds in default to production teams by Wuxi County communes and brigades are overwhelmingly owed by the brigades. Comrades in departments concerned said that production brigade defaulted debts are now tending to increase at the rate of 5 million yuan per year, and this is a problem that very much bears watching. In addition to some enterprises having spent too much in capital construction and no ready markets for products, the reason for the arrears is the several conspicuous problems in fiscal management listed below:

(1) Spending beyond means, revenues being less than expenditures. One prominent contradiction in the financial income and expenditures of quite a few communes and brigades today is that production, supply, and marketing by enterprises is not well established; production and profits are inconsistent; expenses of all kinds become increasingly great and frequent. For example, since it began to operate enterprises in 1974, Shuguang Production Brigade in Hongsheng Commune has made a total net profit of 112,000 yuan. This included a profit of 60,000 yuan in 1977. Because production did not go forward in 1978, net profits plummeted to 16,000 yuan, yet costs of all kinds could not be held down. That year losses were more than 4,000 yuan. In addition, for several years previously, much money had been spent on capital construction of enterprises, and in building offices for the production brigade. By early 1979, the production brigades red ink figures amounted to more than 70,000 yuan, including more than 48,000 yuan in accumulated debt to production teams, and more than 20,000 yuan owed on bank loans.

(2) Unplanned nonproductive construction with serious waste. In suburban Shanghai, we heard some cadres and people say that banknotes in commune and brigade enterprises "come like mountains, and go like the seas." By this they meant that commune and brigade enterprises make a lot of money, but they do not plan expenditures and spend money without any system for doing so. Cadres approve chits as they please, thus incurring a lot of wasteful expense. Comrades in units concerned in the city said that it has become the order of the day for some communes and brigades in the suburbs to build auditoriums and office buildings. For example, Ping'an Commune in Fengxian County built a large auditorium in which a production brigade set up a conference hall. Not only were the commune's accumulations exhausted, but it had to borrow 300,000 yuan from outside sources.

(3) Increasingly great nonproductive expenses without control. There is a saying making the rounds among peasants in Wuxi that goes as follows: "All

you have to do is put one foot into a brigade, and you will no longer be bare-foot." Nowadays an ever increasing number of commune members are being exempted from production, and the scope and number of those receiving subsidies is becoming ever larger, posing a real problem. One example was Fangqian Commune in Wuxi County, which had more than 70 cadres in 1978, 18 of whom had been authorized by the state, another 55 being paid for out of the profits of commune-operated enterprises. Yet another 17 people in a literature and art propaganda team were also paid salaries by commune and brigade enterprises. In the commune's 13 brigades, cadres authorized to receive fixed subsidies numbered only 43, or an average 3.3 people per brigade. In actuality, 269 people were receiving subsidies, or an average of 21 people per brigade. These subsidies were paid for out of the profits of brigade-operated enterprises. Why were there so many commune and brigade cadres? Grassroots level comrades said the main reason was finer and finer division of government organization at higher levels requiring counterparts at lower levels, so the number of those exempted or semi-exempted from production became increasingly large.

Some communes and brigades have become such big businesses that go in for ostentatious display, and an unhealthy trend of competition and display of wealth has developed. In some counties, when meetings are held at lower levels each commune tries to outdo every other in the quality of food served. Money for this comes out of profits of commune-operated enterprises. Some communes that are not very well off and economize somewhat in their spending, eating a little less well than others, are held up to ridicule. In some brigades, between 1,000 and 2,000 yuan is spent annually on entertaining guests and giving gifts. When people criticize them, some cadres tellingly retort, "Doesn't the government hold banquets!" Today rural villages everywhere report that Secretary "Money" is much sought after. This problem provides food for thought.

One of the major reasons for development of commune- and brigade-run enterprises is to hasten the development of agriculture, and to accumulate capital to bring about the gradual modernization of agriculture. In the process of further development of commune and brigade enterprises, how to establish and perfect systems for genuine strengthening of financial management, to accelerate the turnover of capital, to increase the labor productivity rate and the rate of accumulation, and to assure that the profits of enterprises are not squandered or wasted is a task in urgent need of solution.

2. Unless People's Commune Basic Accounting Units Come to Grips With the State of Economic Accounting, They Cannot Continue To Operate

Today production expenses in rural basic accounting units are becoming higher and higher, and in some places the degree of rise in expenses far outstrips the degree of rise in agricultural income. This is a problem that must be studied and solved. In Wuxi, we investigated a commune whose agricultural production is representative. In 1978, this commune's income from agriculture amounted to 3.84 million yuan, 670,000 yuan more than the 3.17 million yuan of 1966 for a 21 percent increase. However, in 1978, production expenses reached 2.2 million yuan versus the 1.12 million yuan of 1966 for a 1.08

million yuan or 96 percent increase. In 1966, agricultural expenses had amounted to 35.5 percent of income from agriculture, but in 1978 they climbed to 57.3 percent (actual production expenses would be higher were various commune subsidies to production teams added in). The result was that net income from agriculture dropped; the peasants increased output, but received reduced income. The only reasons for average per capita income in this commune's production teams being 33.38 yuan more in 1978 than in 1966 was income that commune members earned from working commune and brigade enterprises and other income that communes and brigades paid to production teams. If these earnings were deducted, average per capita income in 1978 would have been about 20 yuan less than in 1966. In this sense, the contradictions within agricultural production per se have been covered up by the development of commune and brigade enterprises.

Many reasons account for the steady rise in production costs during the past several years. Some places have changed to a "double and triple system" of farming. They have expanded the multiple cropping index, increased farm mechanization, the use of chemical fertilizer, pesticide, and seeds, and have greatly increased machinery repair and fuel expenses, and expenses for electricity. All these things have been major reasons for a rapid jump in production costs. But poor administration and management is, without doubt, also a reason that should not be overlooked. A CPC committee secretary at the Qianzhou Commune in Wuxi County said that there is much potential for reduction in agricultural production costs today. In management of farm machinery, for example, some production teams annually spend as much as 1,208 yuan on hand tractor repairs while others spend only 238 yuan. Some production teams annually spend an average of more than 5 yuan per mu of cultivated land on purchase and repair of farm equipment, while for others the cost is less than 0.50 yuan. Statistics for the commune show losses for more than 110 of the more than 200 collective hog raising farms, yet more than 90 make a profit, the main reason being differences in the number of shoats produced per sow. He believed that the key lies in energetic publicizing of the major significance of good administration and management in increasing output and earnings, and genuine strengthening of management.

Inasmuch as good administration and management, including fiscal management, is of such major significance in increasing commune and brigade output and earnings, why is it that it has not received the serious attention it deserves? The main reason, according to comrades everywhere, is that leaders are still prone to emphasize output while slighting management.

Financial work in rural basic accounting units today is usually nothing more than recording income and expenditures in day-to-day accounts, making a total accounting during the year-end settlement to find out how much was earned, spent, and remains as surplus for the year, whatever surplus remains being distributed. In most places no one devotes any attention to analysis of costs, to study of ways in which to improve administration and management, to increasing output while reducing costs, or to cutting back on expenses to increase income. When we surveyed Qu County in Zhejiang Province, we tried to find out costs per mu of grain fields, and the cost of producing each 100 jin of grain. When we inquired about basic changes that had taken place in recent

years in the structure of agricultural production costs, both county and commune comrades responsible for management of agriculture said they were not sure; they would have to have accountants in production teams to go through the ledgers to find the statistics. Basic accounting units today cannot be said to have set up economic accounting systems for their financial work. In some communes and brigades, management personnel and accountants are very unhappy about this. They said that for a time following establishment of advanced agricultural producers' cooperatives and communes, considerable attention was devoted from top to bottom to financial management work in rural communes and brigades, but virtually no one has given any attention to it during the past 10 or more years. They believe that this situation has been largely an evil consequence of the disruption caused by the "gang of four," but they also acknowledge that it is related to the incorrect ideas of leaders. Leadership comrades in some provinces have openly said that they did not care about costs, but wanted to work with might and main to increase grain production. Guided by such ideas, advanced representative assemblies on agriculture production showed only how grain production could be made to rise quickly, but not how to take administration and management firmly in hand. When commune and cadres are in charge of production, their focus is likewise only on output with no calculation of costs. The views that accounting personnel express about financial expenditures usually do not receive the support they merit. "When accountants and party secretaries conflict, the accountants not the party secretaries have to be changed," accurately reflects real life's objective situation.

3. Establishment of Commune Public Finance Has Played a Fine Role in Commune and Brigade Financial Work

Strengthening of commune and brigade financial work is of extreme importance in the accumulation of capital for the modernization of agriculture, for guaranteeing increases in commune and brigade output and earnings, and for accelerating the development of agriculture. This work requires both leaders' serious attention and coordination with all departments concerned if it to be done well. Administration and management in rural people's commune basic accounting units today is usually under the care of agricultural departments with banks giving guidance to accountants. An overwhelming majority of communes do not yet have any organization or personnel responsible for managing and using well funds provided by the state for the support of communes and brigade, for strengthening fiscal management of commune and brigade enterprises, or for making best use of commune and brigade funds. Today leaders in some places are gradually coming to appreciate the need and urgency of solution to these problems and have taken corresponding organizational actions. Both Suzhou Prefecture and Jiaxing Prefecture have had great success with their trials of commune public financial institutions. For example, the communes in Wu County in Suzhou Prefecture formerly spent money without any plan. Any leader could approve chits. In 1977, county and commune enterprises showed profits of more than 21 million yuan, but expenses were 2.98 million yuan more than income. Virtually every commune was in the red. In 1978, the county CPC committee decided that each commune should establish a public finance management office under leadership of the commune CPC committee to be responsible for managing nationally budgeted receipts and expenditures and

receipts and expenditures of the communes' own funds, for leading and supervising the financial activities of commune and brigade enterprises and entrepreneurial units, for establishing collective discussion among leaders, and for designating people to be responsible for examination and approval of expenses. They set up a budget at the beginning of the year and made expenditures according to plan, giving attention to results obtained and making a final year-end accounting. Income generally covered outgo with a slight surplus at year's end. The masses were generally pleased.

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CSO: 4007/66

COST, PRICE SYSTEM IN RURAL ECONOMY SURVEYED

Beijing ZHONGGUO NONGYE NIANJIAN 1981 [CHINA AGRICULTURAL YEARBOOK, 1981] in Chinese Jul 82 pp 364-373

[Article by Special Unit on Farm Product Costs and Prices, Agricultural Economy Survey Team, State Agricultural Commission]

[Text] Production Cost and Price Problems of Agricultural Products

1. Trend Toward Increase in Farm Product Costs

Farm product costs are an all-around indicator for judging the state of production by agricultural enterprises, and they also provide an important basis for the state's formulation of farm product price and agricultural technology policies as well as for a rational pattern of agricultural production. Therefore, conscientious study and analysis of farm product costs holds extremely important significance in setting equitable price ratios between industrial and agricultural products and among farm products, in improving administration and management, in conserving consumption of embodied labor and living labor, in increasing economic effectiveness, and in increasing both output and earnings.

Farm product production costs include the means of production that production units consume to produce the farm products (i.e., material expenses), and payment of compensation to labor. A look at the situation in all points surveyed shows a general increase in farm product costs during the past 20 years or more.

(1) Manifold increase in cost of materials. First of all, the cost of materials per mu of cultivated land has risen tremendously. In Jiading County in Shanghai, in 1957 the cost of materials was 21.70 yuan per mu. By 1979, it had climbed to 89.58 yuan, a 3.1 fold increase. Comparison of 1979 and 1957 costs of materials per mu for various crops in county shows a 2.2 fold increase for rice, a 1.6 fold increase for cotton, and a 1.33 fold increase for rapeseed. Over a period of 22 years, grain output has increased 2.2 fold, but cost of materials has increased 7.6 fold.

National representative sampling data on more than 3,000 production teams throughout the country collected by 7 units including the State Price Bureau (referred to hereafter as national representative sampling data) showed that

average costs of materials used to grow six different grains rose from 11.41 yuan per mu in 1965 to 22.50 yuan per mu in 1979, a 97.19 percent increase. For three oil-bearing crops, average cost of materials rose from 12.12 yuan per mu to 20.22 yuan, a 66.83 yuan increase. Average cost of materials to grow cash crops increased from 2.59 yuan per mu to 45.90 yuan per mu, a 103.19 percent increase.

Second, cost of materials also generally increased in proportion to gross agricultural income. In Wuxi County, cost of materials in proportion to income derived from agriculture amounted to 30.55 percent in 1965, climbing to 55.27 percent in 1979. In Boluo County, costs of materials per mu for the Gangxia Production Team in Longqi Commune as a proportion of output value in 1979 amounted to 43.4 percent for rice, 46.77 percent for peanuts, and 50.47 percent for soybeans. The national representative sampling data showed that in 1979 the cost of materials per mu as a proportion of output value per mu amounted to 41.08 percent for grains, 32.69 percent for oil-bearing crops, and 34.58 percent for cash crops.

Because the speed of increase in cost of materials was greater than the speed of increase in yields per mu, the cost per 100 jin for primary products rose rapidly. Data from four survey points in Shaozhai No 5 Production Team in Jiading County showed the cost of materials per 100 jin of seven primary farm products averaged a 68 percent increase in 1979 versus 1957. A look at the national representative sampling data shows that for 11 out of 13 primary products, the cost of materials per 100 jin rose considerably. For details, see the following table:

National Representative Sampling Team Cost of Materials per 100 Jin of Primary Products (yuan)

Item	1965	1976	1978	1979	Comparison of 1979 with 1965	
					*	± Per- cent
Grain average	4.15	4.87	5.08	5.40	1.25	30.12
Including: rice	3.88	4.41	4.72	4.70	0.82	21.13
wheat	5.81	6.86	7.06	8.09	2.28	39.24
millet	3.63	3.96	4.00	4.42	0.79	21.76
corn	3.52	4.34	4.22	4.63	1.11	31.53
gaoliang	3.81	4.38	4.45	4.75	0.94	24.67
soybeans	4.82	6.12	7.62	8.43	3.61	74.90
Oil-bearing crops average	9.36	11.69	11.37	12.81	3.45	36.86
Including: rapeseed	9.57	12.76	13.01	13.74	4.17	43.57
sesame seed	13.78	10.27	12.58	10.59	-3.19	-23.15
peanuts	7.34	11.50	9.97	13.05	5.71	77.79
Cash crops						
Including: cotton	24.7	47.32	44.14	46.03	21.33	86.36
tobacco	10.10	19.09	19.89	21.59	11.49	113.76
hemp	11.58	12.45	12.43	9.57	-2.01	-17.36
sugar		0.76	0.64	0.89	0.13	17.11
(in comparison with 1976)						

*Increase or decrease in amount of money

The foregoing table shows that except for sesame and hemp, for which the cost of materials per 100 jin of output decreased by about 20 percent, for 13 other products the price increased. For tobacco, the price of materials per 100 jin of output more than doubled, and for cotton, peanuts, and soybeans it rose 70 to 80 percent.

(2) Substantial increase in amount of work and expenses for labor. In Guanghan County in Sichuan Province, both the amount of labor used and the expense for human labor per 100 jin of output per mu of crops increased generally. For extent of increase, please see the following tables:

Amount of Labor Used Per Mu of Crops in Guanghan County, Sichuan Province
(laborers)

Crop	1965	1976	1977	1978	1979
Rice	24.7	35.7	36.5	41.4	40.1
Corn	28.6	34.3	44.1	58.3	46.9
Wheat	27	44.1	43.9	46.3	42.3
Rape	25	49.8	49.7	57.8	45

Cost of Labor Per 100 Jin of Primary Products in Guanghan County, Sichuan Province (yuan)

Crop	1965	1976	1977	1978	1979
Rice	3.35	3.69	3.82	4.71	5.86
Corn	5.09	4.17	7.87	7.65	8.08
Wheat	8.76	8.93	5.68	7.02	7.69
Rape	11.42	13.44	16	17.52	16.43

The foregoing tables show that except for wheat, for which the labor cost per 100 jin declined slightly, for all other crops both the amount of labor and the cost of labor, including the amount of labor used for wheat, generally rose. This included a 74.9 percent increase between 1965 and 1979 in the cost of labor per 100 jin of rice.

In Jiading County in Shanghai, average amount of labor used per mu in the county (figured on the basis of standard workdays) rose from 36 in 1957 to 79 in 1979, more than double. Representative sampling of four production teams in the Shaozhai No 5 Production Team in Jiading County showed a 57 percent average per mu increase in the use of labor for seven major farm products in 1979 as compared with 1957. For three crops the amount of labor used increased by 21 percent per 100 jin of primary products.

The national representative sampling data show a 22.7 percent increase in the amount of labor used per mu of grain in 1979 versus 1965, and a 17.4 percent increase in the amount of labor used per mu of oil-bearing crops. The amount of labor used per 100 jin of primary products also showed a rising trend.

National Representative Sampling Team Amount of Labor Used Per 100 Jin of Primary Product

Item	1965	1976	1977	1978	Comparison of amount of labor used in 1978 versus 1965	
					*	± Percent
Grains average	7.98	8.87	7.92	8.32	0.34	4.3
Including: rice	8.24	7.55	6.59	6.84	- 1.40	-17
wheat	9.22	9.97	11.52	9.79	0.57	6.2
millet	7.83	10.57	9.48	9.15	1.32	16.9
corn	6.76	7.03	7.24	6.81	0.05	0.7
gaoliang	7.95	9.41	6.09	8.55	0.60	7.5
soybeans	8.19	13.39	10.63	12.74	4.55	55.6
Oil-bearing crops average	18.62	19.51	22.17	19.97	1.35	7.3
rapeseed	24.65	23.24	31.02	22.42	- 2.23	- 9
peanuts	15.74	15.98	16.66	15.87	0.13	0.8
sesame	14.24	21.32	25.57	27.03	12.79	89.8
Cash crops						
cotton	54.60	84.74	86.19	78.67	24.07	44.1
tobacco	43.94	29.07	32.39	29.81	-14.13	-32.2
hemp	24.51	30.47	25.69	22.83	- 1.68	- 6.9
sugar		0.96	1.03	0.93	- 0.03	- 3.1
					As compared with 1976	

*Increase or decrease in use of labor (laborers)

The foregoing table shows an average 4.3 percent increase in the amount of laborers used per 100 jin of primary product; in the case of grain, and a 7.3 percent rise for oil-bearing crops. A breakdown of individual items shows a rise for 8 of 13 items, sesame, soybeans, and cotton showing the greatest rise.

As a result of the increase in cost of materials and cost of human labor, farm product costs per mu and per unit costs increased substantially, and overall cost of farm products rose universally. A compilation of survey data from the four counties of Taoyuan in Hunan, Boluo in Guangdong, Guanghan in Sichuan, and Jiading in Shanghai appears in the following table:

Item	Production cost per mu (yuan)				Cost per 100 jin (yuan)			
	1965	1976	1978	1979	1965	1976	1978	1979
Rice	43.05	53.87	62.51	72.86	8.45	10.62	10.22	11.40
Wheat	42.55	64.10	70.51	77.61	13.84	12.64	12.69	12.77
Cotton	67.46	91.65	99.12	104.84	81.97	106.08	98.53	108.47
Rape	40.16	50.87	66.30	73.69	24.30	34.16	29.47	33.08

The foregoing table shows a general increase in production costs per mu for four major crops in the four counties, and an increase in costs per 100 jin except for a slight decline for wheat as a result of fairly rapid increase in yields.

The national representative sampling data show that since 1965, the trend has been toward a rise in costs per 100 jin.

National Representative Sampling Team Product Costs Per 100 Jin

Item	Price of labor figured in terms of an 0.80 yuan cost per 100 jin				Price of labor figured in terms of a 1.39 yuan cost per 100 jin	
	1965	1976	1978	1979	1979	*
Grains average	9.55	10.89	10.58	9.76	12.98	+ 35.9
Including: rice	9.68	9.82	9.51	8.52	11.23	+ 16
wheat	12.36	14.02	13.95	13.35	17.93	+ 45.1
millet	7.89	9.37	8.34	7.89	10.48	+ 32.8
corn	8.33	9.33	8.87	8.50	11.36	+ 36.4
gaoliang	8.61	10.25	9.77	8.49	11.26	+ 30.8
soybeans	10.69	15.88	16.99	17.09	23.48	+119.6
Oil-bearing crop average	23.19	26.32	26.36	26.13	35.97	+ 55.1
Including: rapeseed	27.83	30.42	29.89	28.50	39.79	+ 43
sesame	24.68	26.42	32.68	28.75	42.14	+ 70.7
peanuts	18.79	23.29	21.97	23.47	31.16	+ 65.8
Cash crops						
Including: cotton	62.44	108.10	100.99	95.54	132.06	+111.5
tobacco	43.98	41.95	43.47	46.11	64.19	+ 46
hemps	29.87	34.48	29.73	21.43	30.18	+ 1
sugar		1.49	1.33	1.47	1.90	+ 27.5
						As compared with 1976

*Increase or decrease between 1965 and 1979

Analysis of the foregoing table shows that even figured in terms of 0.80 yuan in 1965, the cost of labor per 100 jin of most farm products still rose. Comparison of 1979 with 1965 showed an average 2 percent rise for grains, an average 12.7 percent rise for oil-bearing crops, and a 53 percent rise for cotton. However, during the past more than 10 years peasant living costs have increased appreciably, so the 0.80 yuan labor cost is unable to reflect the actual situation. Figured on the basis of Ministry of Agriculture standards for calculating compensation to labor (labor cost of 1.39 yuan) set at farm product cost accounting pilot projects throughout the country, comparison of 1979 with 1965 shows that the degree of increase in costs per 100 jin to have been an average 35.9 percent for grains, an average 55.1 percent for oil-bearing crops, and among cash crops a 111.5 percent rise for cotton, a 46 percent rise for tobacco, and a 1 percent rise for hemps [jute and ambari hemp].

Many reasons account for the rise in farm product costs, the main ones being the following according to survey data from all over:

(1) Increase in the degree of intensivity of agriculture. As the organic structure of the agricultural sector increased, consumption of embodied labor increased, absolute expenditures for materials as well as their relative amount in costs increased. All jurisdictions have reported substantial increase in expenditures for chemical fertilizer, pesticides, and farm machines. A survey of 312 production brigades throughout the country showed payments for chemical fertilizer and farm machines to have been 47 percent of total costs, and the increase in amount of chemical fertilizer used was particularly conspicuous. Take 1979, for example, when the amount of fertilizer used per mu of cultivated land was as follows: Wuxi County, 368 jin; Jiading County, 304 jin; Guanghan County, 254 jin; Wu County, 240 jin; and Tong County 239 jin. Quantity of chemical fertilizer used in Taoyuan County was 32 times greater than in 1957. Expenses for fertilizer per 100 jin of primary products also increased strikingly. A survey done in Guanghan County showed that between 1965 and 1979, fertilizer expenses for rice, corn, wheat, and rapeseed were as shown in the following table:

	Rice (yuan)	Corn (yuan)	Wheat (yuan)	Rape (yuan)
1965	1.26	2.10	2.67	4.54
1976	3.29	3.25	3.28	7.81
1977	2.23	3.37	2.23	7.62
1979	2.55	3.27	2.55	7.93
1979	2.65	3.25	2.63	10.29

Except for wheat, for which expenses declined somewhat, fertilizer expenses per 100 jin of the foregoing four farm products increased by more than 50 percent for corn, and more than doubled for rice and rapeseed.

The national representative sampling showed tremendous increase in expenses per mu for chemical fertilizer for 12 crops, the rise averaging 90.5 percent for grain, 73.9 percent for oil-bearing crops, and 72.1 percent for cash crops.

As a result of changes in the farming of crops, which increased the multiple cropping index, it became easier for diseases and insect pests to proliferate. In addition, use of substantially the same kinds of pesticides over a long period of time had increased disease and insect pest resistance to them, so it became necessary to increase the dosage, leading to a dramatic increase in pesticide expenses. In 1957, Taoyuan County used 0.07 jin of pesticide per mu of cultivated land, but in 1979 it used 4.5 jin, a 64.3 fold increase. Comparison of 1979 with 1965 shows a pesticide expense per 100 jin of primary products to have increased from 0.01 yuan to 0.23 yuan for rice; from 0.00 yuan to 0.09 yuan for corn, from 0.04 yuan to 0.11 yuan for wheat, and from 0.07 yuan to 0.20 yuan for rape, a manifold increase in every case.

In addition, as agricultural mechanization increased, depreciation expenses for fixed assets such as farm machines increased correspondingly. A survey done in Jiading County showed depreciation to have averaged 6.38 yuan per mu in 1979, more than three times that of 1965. The use of farm machines meant corresponding decrease in the amount of living labor used. However, because various models did not meet needs, because some equipment was not properly meshed with tractors, because of poor performance, and because of the large amount of laborers that crowded into farming, it was like three sets of gongs and drums playing at the same time as tractors, oxen, and workers vied with each other, only to add to the operating expenses. The Guanghan County survey showed the following picture of increase in expenses for various crops, including expenses for both machines and draft animals in 1979 as compared with 1965. Expenses for rice increased 50.4 percent; for corn 3.1 percent; for wheat more than double; and for rape 39.5 percent.

(2) For some industrial goods used in agriculture, quality was poor and prices high, and there were shortages which made production expenses rise. For example, locally produced ammonium carbonate had a low nitrogen content and high volatility content; more than half of its effectiveness was lost through packaging, transportation, and storage. Sometimes 50 jin bags of ammonium carbonate produced in Taoyuan County were 2 jin short. In 1978, the county's peasants lost 50,000 yuan in this way. Some farm machines such as transplanters were of poor quality. They were blindly promoted for use, thereby causing great losses.

Overly high prices for the means of agricultural production also increased costs. In the Shanghai suburbs, for example, every year 29.50 yuan per mu had to be allocated for the purchase of agricultural plastic sheeting for the early rice crop. This amounted to 30 percent of the output value of each mu of early rice. For each mu of cotton, 17.65 yuan had to be allocated, and this was 11 percent of the output value of the cotton. Commune members said, "A roll of plastic is as light as can be, but it takes a boat to move the rice or to be exchanged for four large bales." The Wuxi County S-195 diesel engine cost 800 yuan apiece, requiring more than 6,000 jin of rice to pay for one. At the same time materials used in agriculture were in short supply. Supplies of moso bamboo, wood, chemical fertilizer, and pesticides were insufficient, so counties, communes, and brigades had to go elsewhere to buy them at negotiated prices, thereby increasing costs. In Wuxi County, subsidies for price differences for chemical fertilizers, pesticides and plastic sheeting alone increased production expenses by 4 yuan per mu in 1979.

(3) Inept administration and management, incomplete organization of labor and production responsibility systems, lack of attention to economic accounting, and poor results from investment were also major reasons for increase in costs. Failure to calculate production costs, unconcern about economic effectiveness, rash use of chemical fertilizer, pesticides, and seeds, and poor care of farm machines caused great waste in many communes and brigades. In the scientific forecasting of disease and insect pests outbreaks, for example, forecasts were poor. Frequently only after the outbreak of disease on a plot did full mobilization take place, every plot being sprayed for an increase in costs for pesticide. Fertilization was done without study of the soil content;

there was no adaptation of general methods to specific situations, but rather arbitrary fertilization that did not use the fertilizer's full effectiveness. Survey done at Shuguang Production Brigade in Hongsheng Commune, Wuxi County showed an unnecessary loss of more than 10 yuan per mu for 10 items including chemical fertilizer, pesticides, seeds, barnyard manure, water and electricity fees, and fees for machine plowing. Lack of quotas for workers and consequent serious work stoppages also meant waste. A survey of Yaohe Commune in Taoyuan showed work stoppages in agricultural production took up 15.9 percent of workers' time in agriculture.

(4) Lack of self-determination for production teams, and crop patterns and planting that violated natural laws to some extent or were divorced from production conditions also caused sharp increases in costs. This was manifested in three ways in particular as follows: (1) changing cash crop area to grain fields without regard for realities, thereby reducing income, increasing farming costs, and hurting income derived from economic diversification. (2) Changing drylands to wetlands without calculating the costs, and blindly expanding the wetland area, which increased investment. (3) Arbitrarily enlarging the multiple cropping index without regard for concrete conditions such as climate, causing a decline in investment effectiveness. When some areas did too much three-crop farming, costs rose sharply. The Wuxi County survey showed that as a result of expansion of the three-crop system, chemical fertilizer use increased 169 percent; seed consumption increased 171 percent, and the amount of pesticide used increased 275 percent. This greater consumption of goods tremendously increased the cost of the increased output. Gross output of grain increased by 40.2 million jin in 1979 as compared with 1978, and production expenses increased 6.32 million yuan, the price of goods consumed for the increase amounting to 0.157 yuan per jin of grain, which was more than the state procurement price. During the past 5 years cost of materials has averaged 0.064 yuan per jin of grain, half again as much as in 1965.

2. Overly Low Prices for Farm Goods

Several times since founding of the People's Republic, state procurement prices for farm goods have been raised several times. With the fairly tremendous increase in state procurement prices for farm goods of 1979, the gap between prices and costs was narrowed. However, survey data from 11 counties show that price levels for farm goods overall still tend to be low and profit slight. For some farm goods, procurement prices mean a loss. Proper readjustments will have to continue to be made in the future.

By way of accurately reflecting the situation, it is necessary, first of all, to stipulate clearly here the basis for farm goods prices.

(1) Farm goods prices must be based on their value. Price is a manifestation of value in currency terms, and value is the basis for price. The value of farm products is determined by the amount of time it takes for the producing unit to produce the goods. In order for the price of farm products to be as close as possible to their value, it is necessary to figure out diligently the consumption of living labor and embodied labor in the production process.

Looked at from the angle of the value structure of farm produce, their value may be divided into three component parts: (1) The value of means of production consumed, i.e., payment for materials. (2) The value that the farm workers create through their own labor, i.e., compensation for their labor. (3) The value that farm workers create for society and collective labor, i.e., gain including profits and taxes. The sum of the first two parts constitutes the cost of the farm products. In order to use value as a basis for formulating the price of farm products, it is necessary to include all three of the foregoing parts, that is to say, after communes and brigades sell farm products at state specified purchase prices, not only should they be able to recoup their costs, but make a certain profit as well. This is an objective requirement of the laws of value. If the price of farm products remains much lower than costs for a long period of time, and farm workers do not obtain the material benefits they deserve, the farm workers' enthusiasm must inevitably be dampened. This will hurt commune and brigade accumulations, inhibit development of agricultural production, and bring down the penalties of the laws of value.

1. Cost of producing farm products are the principal basis for formulating the price of farm products. In order to make the price of farm products relatively accurately reflect their value, it is necessary to use the cost of producing the products as the main basis for setting prices. Under normal circumstances, income that communes and brigades derive from the sale of farm products should at least recover expenditures for materials and compensate laborers. Marx pointed out that "The lowest price at which a product can be sold is determined by the cost of producing the product. If goods are sold at less than their cost, the integral part of the means of production that have been used cannot be fully recouped from the sale price. If this process continues, the value of prepaid capital will disappear."* Since the agricultural taxes for which communes and brigades are responsible are fixed, the procurement prices that the state sets for products should not be lower than costs including taxes. Cost inclusive of taxes should determine the lowest price of farm products. If prices are lower than this limit, simple reproduction cannot be sustained. Either the communes and production brigades will be unable to recoup the means of production that have been expended, or else they will lower compensation paid labor with agricultural productivity thereby being maintained only in a shriveled state.

Changes in the cost of producing farm products determine to a very large extent, changes in prices of farm products. Samplings at 11 sites show that as a result of the gradual spread throughout the country of scientific farming techniques and agricultural mechanization, increase in payments for commodity goods, plus rise in peasants' living expenses, there has been a clear trend toward rise in the cost of producing farm products, and a corresponding rise in the per unit price of farm products.

*"Collected Works of Marx and Engles," Vol 25, pp 45-46.

2. Correct accounting for compensation paid to laborers. How to figure compensation to farm workers in the cost of producing farm goods is a problem that has provoked a considerable amount of argument in the country and on which there is no complete agreement. Currently the calculation methods most frequently used in the country are two: One is to figure on the basis of value per workday. Though this method is able to reflect actual payments made in any given year, it cannot reflect the actual consumption of human labor, and it also lacks comparability. The other method is the one set in 1965 by the State Price Bureau, which assigns a value of 0.80 yuan to each workday. Though this method permits comparability, it cannot reflect the expenditure of labor or actual payments by communes and brigades. Thus, neither is a scientific method.

As a result of this survey, we believe that accounting for compensation to labor in the collective economy should be done on the basis of labor expense for reproduction, i.e., the lowest limit of expenses for workers to maintain their own and their dependents' means of livelihood. In order for people to engage in production, they must have the necessary means of livelihood in order to maintain life and carry on production. If it is lower than this limit, labor's simple reproduction will be damaged. In a socialist system, the labor expense for reproduction should also include expenses for improving material and cultural standards of living and for achieving all-around development. Marxist principles hold that in figuring the funds needed to recompense labor, labor's reproduction expenses should be used as an objective basis. This both accords with realities and possesses comparability; thus it is scientific.

Inasmuch as productivity and living standards vary from place to place, in order to figure accurately payments to labor for reproduction it is necessary to select various representative households at cost sampling sites everywhere from which data can be gathered about necessary means of livelihood expenses, and to figure accurately the number of standard workdays in order to derive the average value of a standard workday. The formula used is as follows:

$$\text{Value per standard workday} = \frac{\text{Needed Expenses Per Household Per Year}}{(365 - \text{Number of Legal Holidays}) \times \text{Number of Workers Per Household}}$$

The national average value of a standard workday derived from the foregoing formula when applied to Ministry of Agriculture national farm products accounting pilot projects was 1.39 yuan. In view of differences in natural conditions, productivity, and living expenses in different places, different economic zones may be drawn throughout the country in formulating different values for workdays.

3. Sensible earnings rates must be set. Whether agricultural earnings levels should be set according to an earnings rate for capital as it is related to costs, or according to an earnings rate for wages is another problem requiring further study. Since it is currently difficult to set a profit rate for capital in agriculture, and since other industries in the country use a profit rate

based on costs to figure prices, we believe that for the time being a profit rate related to costs should be used as the basis for setting the price of farm products.

Earnings include both taxes and profits. The lowest agricultural profit can be no less than agricultural taxes plus total accumulations that collectives should withhold. If it is lower, communes and brigades will be unable to pay agricultural taxes, or else they will be unable to expand reproduction.

Calculations based on data for rural distributions of earnings nationally during 1978, 1979, and 1980 show actual commune and brigade agricultural tax payments to the state to have averaged 3.23 percent of gross income. Collective withholdings averaged 9.05 percent of gross income, and the rate of earnings was 14.41 percent of costs.

Since prices for farm products are low, these earnings rates have clearly been kept down. Following the principle of equal profit from equal capital, we believe that profits based on agricultural costs should approach earnings levels in industry (in 1978 the national rate of profit relative to costs in industrial enterprises nationally was 20 percent), for only in this way can agricultural production be assured of increasing in step with industrial production.

(2) A state procurement price for farm products that is lower than value. On the basis of the foregoing principle, in view of China's realities, what extent of deviation should there be between prevailing state procurement prices for farm products and their value?

Using data from four sampling points in Jiading County, for seven or eight major farm products, garlic excluded because its state procurement price was 10.8 percent higher than its calculated value, procurement prices (for wheat, barley, naked barley, xian rice, geng rice, rapeseed, and cotton) were lower than calculated value, and the weighted average was 25.4 percent lower than value.

Trial computations using data from seven unit cost sampling points collated by the State Price Bureau (material costs and amount of labor used being average figures for 1977, 1978 and 1979; the value of a workday being 1.39 yuan; and earnings rate based on costs being 14.41 to 20 percent), shows a divergence between prices and value of farm products as provided in the following table:

Comparison of State Procurement Prices and Calculated Value Per 100 Jin of Major Farm Products

Item	Six kinds of grain	Including: rice	Wheat	Three kinds of oil-bearing crops	Cotton	Live hogs
Prevailing price	12.86	11.50	15.72	47.39	147.80	62.53
Cost of materials (yuan)	5.19	4.71	8.03	12.10	44.36	41.26
Labor expenses						
Standard workdays	6.33	6.24	9.75	18.69	69.76	15.65
Set price	8.80	8.67	13.55	25.98	96.97	21.75
Cost per 100 jin (yuan)	13.99	13.38	21.58	38.08	141.33	63.01
Earnings rates based on costs figured at 14.41 percent						
Average profit and taxes	2.02	1.93	3.11	5.49	20.37	9.08
Calculated value	16.01	15.31	24.69	43.57	161.70	72.09
Comparison of price and value $\pm$ (yuan)	-3.15	-3.81	-8.97	3.82	-13.90	-9.56
percent	-19.68	-24.09	-36.33	8.77	- 8.60	-13.26
Earnings rate based on costs figured at 20 percent						
Average profit and taxes	2.80	2.68	4.32	7.62	28.27	12.60
Calculated value	16.79	16.06	25.90	45.70	169.60	75.61
Comparison of price and value $\pm$ (yuan)	-3.93	-4.56	-10.18	1.69	-21.80	-13.08
percent	-23.41	-28.39	-39.31	3.70	-12.85	-17.30

The foregoing table shows that following tremendous increase in procurement prices for farm products in 1979, except for the price of oil-bearing crops which was higher than calculated value, in all other cases the price paid for farm products was clearly lower than calculated value. The degree of variance was as follows: For the six kinds of grain, the average price was between 19.68 and 23.41 percent lower than calculated value. This included rice, which was lower by 24.87 to 28.39 percent; wheat, which was lower by 36.33 to 39.31 percent; and cotton, the price of which was 8.59 to 12.85 percent of calculated value. Comparison with production costs shows a price lower than costs for all except oil-bearing crops and cotton. This is to say that if production costs are figured, when peasants grow grain they lose money.

The value of farm products changes as a result of production levels and agricultural costs. It must be recognized that because of past factors such as inept administration and management, the amount of embodied labor and living

labor used in agriculture increased to an irrational extent. Following further implementation of production responsibility systems in recent years, this situation has changed. The foregoing average figures for cost of materials and the amount of labor that have been used to figure farm product value for the 3-year period 1977-1979 are somewhat unfair, but even if this unfairness is removed, as a result of improvement in the structure of the agricultural sector, and the increased use in agricultural production of commodity and means of production provided by industry and their overly high cost, costs of producing farm products have still risen. This is an objective fact. Furthermore, we must also realize that the foregoing calculations are based on average production costs while the amount of living labor and embodied labor used in products per unit of area has declined relatively.

In thinking about differential income factors, production costs for poor grade land should be used to fix prices. In that case, the disparity between the prevailing price of farm products and their value would be actually much greater.

3. Inequitable Comparative Prices of Farm Products and the Comparative Price of Industrial and Farm Products

Equitable comparative prices for industrial and agricultural products, and equitable comparative prices of agricultural products can cause communes and brigades to want to plan agricultural sideline production on the basis of state plans, and to exchange goods in conformity with state and market requirements. It would arouse the enthusiasm for production of the laboring masses, and promote both industrial and agricultural production and coordinated development of the internal structure of agriculture.

(1) The problem of comparative prices of farm products. By comparative prices of farm products is meant the proportional price relationships of different farm products in the same market at the same time. This embodies the proportional value of all kinds of farm products. The price structure affects the production structure. When comparative prices are rational, the economic benefits of the production structure will be regulated, planned and proportional, and coordinated development of all production sectors will be advanced.

Comparative prices of China's farm products have always centered around the price of grain. This is because grain is the staple farm product and the principal means of livelihood of China's people. It is also the material foundation for development of agricultural production. As a result, of this pricing of various farm products in comparison with grain, a whole comparative price relationship has come into being, e.g., the comparative price of grain and cotton, the comparative price of grain and edible oil, the comparative price of grain and tobacco, the comparative price of grain and hemp, the comparative price of grain and hogs, etc. In some places, an actual amount of grain is used directly as a major technique in exchange; it has become a kind of special equivalent.

Accurate handling of the comparative price of grain and other farm products must be founded on the laws of value proportionally. That is to say that in

order to consider their costs and levels of earnings, so that producers of all kinds of farm products get generally equal benefits, it is necessary both to consider the relationship between supply and demand and the needs of society. Unless this is done, comparative prices within agriculture will lose their scientific basis.

As a result of differences in the degree of rise in costs to produce various farm products during the past 20 years, changes have also taken place in their proportional value. Comparison of 1978 with 1959 shows an 86.86 percent increase in the production cost per 100 jin of three major grains (rice, wheat, and corn). For cotton, the production cost per 100 jin has increased 94.8 percent; for peanuts, rape, and sesame--the three kinds of oil-bearing crops--production costs have risen 96.2 percent per 100 jin. Correspondingly, in the comparative price of grain and cotton, an increase in the price of cotton was required; in the comparative price of grain and edible oil, a comparative increase in the price of oil-bearing crops was required.

In 1979, following increase in prices paid for 18 major farm products, new changes occurred in the comparative price of all categories of farm products. Comparison with 1978 showed a 21.4 percent increase in the purchase price of grain, a 25 percent increase for cotton, a 27.1 percent increase for peanuts, a 27.5 percent increase for rapeseed, and a 16.3 percent increase for sesame. Inasmuch as the degree of price increase for cotton, and oil-bearing crops was greater than the degree of price increase for grain, the comparative price of grain became lower. This produced a new dip. In 1970, 10.5 jin of paddy traded for 1 jin of cotton; in 1978, it took 12.11 jin; and in 1980, it took 12.79 jin. In 1970, 2.32 jin of paddy could be exchanged for 1 jin of rapeseed; in 1979, it took 3.09 jin of paddy to get 1 jin of rapeseed. Comparison of cotton and double-crop paddy in Jiading County in 1979 showed that though gross output value per mu were close, the cost of producing double crops of paddy were 49.38 percent higher than the cost of producing the cotton, and the net output value was 44.28 percent less than for cotton. A peasant could make net earnings of 47.60 yuan per mu from the growing of cotton, while losing 6.37 yuan per mu on the growing of two crops of paddy. Consequently, certain readjustments in the prices of grain will have to be made over a period of time so that grain-growing peasants can make some profit.

Yet another new development in the wake of the price increase was a lowering of the price of sugar cane, flue-cured tobacco, silkworm cocoons, tea, and tung oil, which hurt development of production of these crops. In 1979, for example, the comparative price of sugar cane and paddy was 1:0.183. Before the price rise, it had been 1:0.176. Despite a slight rise in the comparative price of sugar cane and paddy, costs of producing 100 jin of sugar cane rose faster than the cost of producing paddy. As a result, the price of sugar cane went down. Sampling in Boluo County in Guangdong Province showed that a peasant made 6.33 yuan per mu less from the farming of sugar cane than from the farming of paddy in 1979. Because of the inequitable comparative price of grain and sugar cane, the sugar cane growing area declined year after year. In 1979, the sugar cane growing area in Boluo County was 59,800 mu, 35.7 percent smaller than the 93,000 mu of 1976. The masses said, "An entire sugar cane stalk is less valuable than a blade of grass." Flue-cured tobacco did

not increase in price between 1973 and 1979, and its price was proportionally out of balance with that of other cash crops. As a result, tobacco-growing peasants destroyed it or composted it for use as fertilizer and switched to the growing of other crops. This caused a reduction in the flue-cured tobacco growing area in 1980 and a 600,000 dan decline in gross output.

Changes in the value of farm products and changes in the relationship between supply and demand for them necessitated constant readjustment of their prices relative to each other, with the result that the structure of agricultural production gradually became more rational. This conformed with requirements of the laws of value. The sampling data show among comparative prices for grain and cotton, grain and oil, grain and hemp, and grain and eggs, the comparative price of grain was low requiring increase in the price of grain. Among comparative prices for grain and sugar, grain and tobacco, grain and silkworm cocoons, and grain and tea, the price of sugar, tobacco, tea, and silkworm cocoons was low requiring increase in their prices in order to promote planned, proportional development of their production.

China is a vast land with very great differences in soil and climate. Economic development is uneven, and production costs of various farm products varies from place to place. As a result, their value also differs from place to place. Were prices throughout the country to be the same, though the comparative prices of farm products might appear rational in overall national terms, in individual economic areas inequitable situations would be produced. Consideration should be given as to whether or not there should be a gradual fixing of prices for farm products by zone throughout the country, with the country being divided into various price zones so that prices would help produce equitable production patterns.

(2) The problem of comparative prices of industrial and agricultural products. By comparative prices of industrial and agricultural products is meant the proportional relationship of prices; at which industrial and agricultural prices are exchanged in the same market during the same period of time. Ordinarily, the comparative prices at which industrial and agricultural products are exchanged should be in terms of their value. The exchange of industrial and agricultural products at unequal value started in the old society as expressed in curve lines to indicate the price situation. The curve formed the shape of a pair of scissors. This came to be known as the price scissors between industrial and agricultural products.

Up until the time of Liberation, the difference in the price scissors between industrial and farm products steadily increased. Comparison of 1949 with the 1930-1936 period showed a 31.8 percent increase in the price scissors difference. After Liberation, the country raised the procurement price for farm products in a planned way, and lowered the rural retail sale price of industrial goods for a gradual reduction in the price scissors. As a result of readjustments, in 1957 comparative prices in the exchange of industrial and agricultural products throughout the country substantially approached the comparative prices of the period before the war of resistance to Japan of 1930-1936. After 1957, further decrease in the price scissors occurred. For details, please see the following table:

National Price Indices for Various Goods

(1950 being 100)

Year	Agricultural sideline products purchase price index	Rural industrial goods retail price index	Overall comparative price index for exchange of agricultural and indus- trial goods	
			When the pur- chase price for farm goods is 100	When the re- tail price of rural in- dustrial goods is 100
1952	121.6	109.7	90.2	110.8
1957	146.2	112.1	79.7	130.4
1962	200.1	126.6	63.3	158.1
1965	187.9	118.4	63.3	158.7
1970	195.1	111.9	57.4	174.4
1975	208.7	109.6	52.5	190.4
1976	209.7	109.7	52.3	191.2
1977	209.2	109.8	52.5	190.5
1978	217.4	109.8	50.5	198.0
1979	265.5	109.8	41.4	241.6
1980	284.4	110.8	39.0	256.7

Taking 1950 prices as 100, a comparison of purchase prices for agricultural sideline products shows a 184.4 percent increase between 1980 and 1950, and a 10.8 percent increase in the rural retail price of industrial goods, the difference in the exchange price of industrial and agricultural goods having shrunk by 61 percent. That is to say that to get the same amount of industrial products, in 1980 a peasant would have had to provide 39 percent fewer farm products than in 1950. Stated in another way, that meant that for the same amount of farm products, a peasant could get 61 percent more industrial goods in exchange.

A look at price situation in the 30 years since Liberation shows a reduction in the price scissors between industrial and agricultural products. However, price is only a manifestation of value. Study of the price difference between industrial and agricultural products requires a look at the development of value of industrial and agricultural products in order to see the true price scissors.

Today, figuring the value of industrial and agricultural products is a fairly complicated task, because it is not possible to compute accurately the size of the price scissors. We have tried out the principle of an equal amount of labors to create equal value, using total amount of labor as being equivalent to a total amount of value. We have compared increases in industrial and agricultural labor productivity rates, and a comparison for the year 1952 showed that the coefficient of increase in the agricultural productivity rate was 57.7 percent that of the coefficient of increase in the industrial

productivity rate. The labor productivity rate in agriculture increased 42.3 percent more slowly than the industrial labor productivity rate, i.e., in value terms, the difference in exchange value of industrial and agricultural goods had increased 42.3 percent.

The main factors giving rise to this situation were as follows: (1) More rapid increase in the industrial labor productivity rate than in the agricultural labor productivity rate. This means that accompanying rapid increase in the industrial labors productivity rate, the value of industrial goods greatly declined. However, in actuality, the extent of decline in the prices of industrial products did not correspond with the speed of increase in the labor productivity rate. As a result, industrial goods were overpriced. This was a major reason for increase in the price scissors. (2) The speed of increase in the costs of agricultural production was greater than the speed of increase in the price of farm products. The national representative sampling data show a 103.81 percent per 100 jin increase in the cost of producing paddy rice between 1959 and 1979, while the increase in state purchase price was only 80.81 percent. Cost of producing cotton increased by 130.02 percent per 100 jin, while the state purchase price increased only 72.86 percent. As a result of increase in the per unit production costs of farm products during the past 20 years, and a rise in prices paid for farm products that was slower than increase in costs, the gap between price and value of farm products has widened. (3) A price for agricultural products lower than their value and a price for industrial goods higher than their value has been a direct reason for widening of the price scissors.

For the above reasons, today, not only does a price scissors exist between industrial and agricultural goods, but it is a large one. Absolute value is high, but state accumulations obtained from peasants through agricultural taxes are by no means high. However, as a result of the price scissors between industrial and agricultural products, the accumulations that peasants provide are very large. Take 1978, for example. Accumulations that the state received through purchase prices paid for farm products amounted to about 16.5 billion yuan on the purchase of 46 billion yuan work of farm products at a price that was 35.88 percent lower than the value of the farm products. This means that the state realized accumulations as a result of pricing of the farm products it purchased. Furthermore, peasant purchases of 81 billion yuan worth of the means of production, and consumption goods at a price 19.9 percent greater than their value meant a 16.1 billion difference between price paid and value. The two together meant that as a result of the price scissors between industrial and agricultural products, the state was provided with about 32.6 billion yuan in accumulations. In 1979 following that state's tremendous increase in procurement prices paid for farm products, the difference between prices paid for farm goods and their actual value fell to 27.25 percent in 1980, while the retail price of industrial goods became 14.56 percent higher than their value. Taking total state purchases of 67.7 billion yuan worth of farm products in 1980, plus 119 billion yuan in peasant purchases of the means of production and of consumption goods, the state realized accumulations of 18.448 billion and 17.326 yuan respectively for a total of 35.774 billion yuan. This amounted to one-third of national revenues.

Expenses for goods used to produce farm products are figured from actual consumption, and compensation for peasant labor is distributed at the year-end settlement of accounts following harvest of the products. As a result, compensation to labor fluctuates. A result of a price for farm products that is lower than their value is pressure on communes and brigades to lower compensation paid labor and a lowering of accumulations, which impairs expansion of agricultural reproduction and seriously dampens peasant enthusiasm for undertaking agricultural production, or even causes them to abandon agriculture or leave agriculture. Some peasants have said, "It is bad enough to get the dirty end of the stick by farming, but it is even worse to get a dirtier end of the stick by raising grain." In recent years, great changes have taken place in labor investment and the composition of peasant income in rural villages. In Jiading County in 1979, both the agricultural economy and commune members got their income mostly from highly profitable industrial sideline occupations. In that year, only 38.6 percent of the total workforce worked in industrial sideline occupations, but income derived from industrial sideline occupations amounted to 76.8 percent of gross income. Though 61.4 percent of the total workforce was engaged in agriculture, income from agriculture amounted to only 23.2 percent of gross income. In an average per capita income of 320.56 yuan, industrial sideline occupations provided 172.76 yuan or 53.8 percent; only 147.80 yuan or 46.2 percent came from agriculture. Comparison with 1965 shows commune member distributions of income from farming to have increased by only 19 yuan, or an average increase of 1.35 yuan per capita per year. Therefore, numerous cadres and commune members vied with each other for transfers to nonagricultural sectors in which work conditions were good and income high. This created a trend away from farming expressed in the couplet, "Commune cadres want to change their occupations; brigade cadres think of industry; commune members want to go into enterprises; and farmers do not want to farm." This posed a sharp contradiction with the development of the national economy on a foundation of agriculture.

In short, since founding of the Chinese People's Republic, the price difference between industrial and agricultural products in China has narrowed in price terms, but has widened when figured in value terms, and for some time to come this price difference in exchange will continue to exist. Therefore, we believe that continued gradual narrowing of the price scissors between industrial and agricultural products will continue a major program requiring further implementation.

4. Several Suggestions

Farm product costs and prices are complex economic problems that bear on the welfare of the country, the collective, and commune members individually. Stalin said, "It must be understood that the alliance between the proletariat and the peasantry is an alliance based on the abacus; it is an alliance of the interests of both classes; it is a class alliance in which the goal of the workers and the basic peasant masses is mutual benefit. Very clearly, if we throttle or nearly throttle peasant economic incentives and deprive peasants of an economy future, we can have no unity and no alliance between the proletariat and the peasantry."* Correct application of the laws of value

*"Collected Works of Stalin," Vol 11, p 229

relates to practice to the consolidation of the alliance between workers and peasants, and to the unit of the peasants for building of the four modernizations. In order to understand problems such as the existing low prices paid for farm products and the large price scissors between industrial and farm products, we believe that, in an overall sense, it is necessary to obey objective economic laws, proceed from the overall situation, do all around planning with consideration for all factors concerned, plan rationally, and work steadily. It is necessary, on the one hand, to strive to increase the agricultural labor productivity rate in order to lower the per unit value of farm products. On the other, it is necessary to act in accordance with the state of development of the national economy to lower industrial prices in a planned step-by-step way, and suitably raise prices paid for farm products so that prices will gradually come to be in line with value. Specific recommendations are as follows:

(1) Effort to raise the level of scientific farming and of administration and management, to increase the labor productivity rate, to lower farm production costs, and to be concerned with economic effectiveness. For long, the prices of farm products have been at variance with their value. The overly low purchase price paid for them and the overly large price scissors between them and industrial goods has resulted in the following: a close link to a not very high labor productivity rate in agriculture, particularly not very adept administration and management, great waste, and high costs. In consequence, the agricultural sector requires, first of all, that scientific farming be taken firmly in hand, that appropriate technical action be actively taken, that superior varieties be energetically promoted, that yields per unit of area be increased, and that the per unit value of products be reduced. For example, in 1980 Shandong Province promoted the superior cotton variety, "Lumian No 1," and ginned cotton yields increased by 25-30 percent per mu. This greatly reduced the per unit value of ginned cotton. Second, strong attention must be given management. Various forms of production responsibility systems must be assiduously instituted, economic accounting strengthened, economic analysis done, economic effectiveness increased, and efforts made to lower costs. A look at the situation at all farms' cost accounting points shows the potential is very great in this regard. With diligent attention, it will be possible to see results quickly. For example, after 10 farm cost accounting pilot project production teams in suburban Shanghai improved management and strengthened their accounting, costs of materials were 13.4 percent less in 1980 than in 1979, and amount of labor used dropped 15 percent. Proportional extrapolation of this decline could mean a drop from 16.79 to 14.36 yuan per 100 jin in the average price of the six grain crops. By way of comparison, the disparity between their present price and value would fall from 23.41 to 10.45 percent. In order to do an effective job of lowering costs, leaders at all levels in the agricultural sector and in counties, communes, and production brigades, will have to place economic effectiveness in a paramount position. While putting into effect measures to increase yields, they will have to take firm hold of both accounting for and conserving both embodied labor and living labor, analyze costs at least once or twice each year, plan costs during the previous year, check costs in the middle of the year, and compare, appraise, and summarize costs at the end of the year to find weak links and to take effective action to improve administration and management.

Farm cost accounting pilot projects will have to be gradually improved and developed. We recommend a gradual expansion of existing farm cost accounting points. The first step should be for every country and commune to set up farm cost accounting points. Second, each production brigade should have a farm cost accounting point. Third, each and every production team should do farm cost accounting. For convenience in pooling experiences, it is recommended that farm cost accounting points in the Price Bureau, the Ministry of Commerce, the National Supply and Marketing Cooperative and the Ministry of Agriculture be centralized and improved. A group of theoreticians and practical workers may be organized for joint study of new problems that arise in farm cost accounting. For example, following promotion of production responsibility systems, how should farm cost accounting work be done? How can production team accounting systems be combined with cost accounting, and how can cost management be made an important and integral part of fiscal management, etc. In addition, certain actions have to be taken to strengthen farm cost accounting in production teams over wide areas. At the present time, administration and management is poor in quite a few production teams. Accountants and bookkeepers do not know their jobs, and the financial management system is a mess. Therefore, work has to be done from the ground up. Efforts have to be invested in the selection and training of finance and accounting personnel and a system of specializing in accounting has to be promoted. All sorts of consumption quotas have to be formulated, and firsthand records of consumption and results must be kept to provide good conditions for the promotion of farm cost accounting.

(2) Application, under guidance of the planned economy, of the laws of value, rational readjustment of the prices of farm products, further narrowing of the price scissors between industrial and agricultural products, and implementation of the principle of exchange at equal price or nearly equal price.

During the period immediately following the founding of the People's Republic, China's industrial base was rather weak. State, therefore, use the price scissors to accumulate a little capital from agriculture, to support the development of industry. Today, the country's industry rests on a certain material foundation and should mostly make the most of existing potential, and devote efforts to increasing economic effectiveness and bringing about expansion of reproduction from within. No longer is it necessary to rely on excessive accumulations of capital from agriculture for the capital construction of industry. On the contrary, industrial accumulations should be used to support agriculture and promote development of agriculture. We believe that from a long range point of view, a program to reduce the prices of industrial goods used in agriculture and the retail price of industrial consumer goods is most important, with increase in the price of farm goods being ancillary to narrow the price scissors between industrial and agricultural products gradually, so that the price of agricultural products approach their value, and so that income that communes and brigades derive from the sale of farm products will not only offset costs, but also provide profits that are basically equal to those derived from the industrial and commercial sectors. In this way, the agricultural sector would have the capability of expanding reproduction by itself, the standards of living of peasants and workers thereby gradually becoming closer. In order to attain this overall objective, the following is suggested:

1. Proceeding from efforts to lower the cost of industrial goods, the price of the means of production used in agriculture and of industrial consumer goods should also be lowered appropriately. The state should take action whereby the industrial and commercial sectors would provide larger amounts of industrial goods used in agriculture that are of good quality and in an array of varieties, to put an end to the rise in agricultural costs resultant from inequitable increases in the cost of commodity goods. The price of high profit items such as plastic sheeting and pesticides used in agriculture should be among the first to be reduced. In the case of farm machines on which the rate of profit is low and for which no lowering of production costs can be made for the time being, the state should provide subsidies, allowing no change in the ex-factory price, lower sale prices insofar as possible, making up the difference of the state investment in agriculture.

2. Insofar as the development of social production and state's financial resources permit, methods should be adopted for step-by-step increase in the price paid for farm products. The first step should be, under the premise of keeping the basic prices stable, to adopt flexible measures for readjustment of the prices paid for individual farm products for which the price is overly low. In addition, in places having a high grain commodity rate and assigned base procurement figures, base figures for centralized procurement should be suitably reviewed and reduced and the ratio of purchases at an additional price of quantities in overfulfillment of quotas should also be increased. As a second step, the difference between the price paid in centralized purchases of grain and oil and the price paid for the portion above quota should be narrowed first for a gradual transition to the price paid for output in excess of quota. The third step, is to increase the portion that was purchased at negotiated prices, carry out agreed prices, and gradually eliminate centralized procurement, assigned procurement, and set up economic agreement system. The state and individual producers should annually decide prices by agreement to achieve a basic congruence between prices and value.

3. Establishment of different price zones on the basis of an appraisal of the farm economy and natural economic conditions in each economic zone with institution of necessary price subsidy policies, whereby prices would help production patterns and help planned, proportional development of agriculture.

(3) Bringing about integrated agricultural, industrial, and commercial operations and permitting trial internal adjustment of prices of category I and category II agricultural sideline products. So long as they do not compete with the state for raw materials, and do not build duplicatory plants, communes and brigades should be allowed to adapt general methods to local situations for development of agricultural sideline product processing industries, and to operate businesses for a change in single product economy and sale of agricultural sideline product raw materials, gradually achieving direct linkage of production, processing, and marketing. Today, all excess remaining after fulfillment of state production plans may be processed by commune and brigade enterprises themselves or processed jointly with state-owned enterprises with a return and sharing of profits being practiced. A portion of commune and brigade industrial and commercial profits may be applied against internal final accounting prices, using internal price adjustments to

compensate some of the losses sustained as a result of the price scissors, the interests of all categories of producers within communes thereby being made generally equal.

(4) Restructuring of the price management system and the state procurement system, giving local areas and enterprises certain rights to set prices. Today the central government excessively controls and stifles the price management system for farm products in China. Local areas, particularly agricultural departments, have virtually no say in setting prices. Whether or not prices for farm products are fair has a lot to do with production patterns, speed of development, and scale of development. Agricultural departments directly manage agricultural production, so they should have the right to participate in, formulate, and manage farm product prices. It is recommended that the part of price commissions in charge of farm product prices organize, in accord with agricultural departments, commercial departments, farm management theoreticians, and peasant representatives, farm product price discussion committees that annually set the cost of production of major farm products and arrive at equitable procurement prices for farm products on the basis of these production costs, how good a crop was harvested, and the supply and demand situation for coordination of the economic welfare of all concerned.

Ever since 1954 the state has exercised a centralized procurement and centralized marketing policy for category I and category II farm products, which has played a major role in advancing socialist transformation, in guaranteeing the basic needs of the people's livelihood, in stabilizing prices, and in promoting development of agricultural production. This was necessary in view of the historical circumstances at the time. However, during the past 30 years very great changes have taken place in the rural economic structure, and the single administrative methods of the past no longer meet the new situation in many places. Single supply and marketing channels are overly restrictive and stifling. This damages the interests of the peasants and dampens peasant enthusiasm for production. For this reason, we recommend gradual promotion of a system of economic agreements for the purchase of agricultural sideline products. Existing planned quotas of the centralized and assigned procurement should adopt the agreements between the state and communes and brigades that remain in force for several years or for a single year without change. Agreements should include production, supply, and marketing as part of a whole; they should not simply provide for procurement, but also insure the supply of the means of production. After agreements have been signed, both parties should bear economic responsibility. Should either party violate the agreement, he should have to pay indemnities. Concomitant economic laws will have to be formulated to provide guarantees under the law.

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CSO: 4007/66

PERVASIVE CHANGES IN FARM CROP PROCUREMENT PROPOSED

Beijing ZHONGGUO NONGYE NIANJIAN 1981 [CHINA AGRICULTURAL YEARBOOK, 1981] in Chinese Jul 82 pp 377-380

[Article by Farm Product Procurement Unit, Agricultural Economy Survey Team, State Agricultural Commission]

[Text] Problems in Agricultural Products Procurement System

China is a nation with a population of 1 billion, of whom 800 million are peasants, in which the farm product procurement system has a tremendous effect on agricultural production and building of the entire national economy as well as on urban and country life and relations in the alliance between workers and peasants. By way of linking theory and practice in a summarization of experience in farm product procurement work in China during the past 30 years, and for further readjustment and improvement of the country's farm product procurement system, we have preliminarily analyzed and studied the situation in procurement of farm products and other pertinent data in 11 counties including Wu County. Some preliminary ideas are discussed here.

Since the founding of the People's Republic, the main form used in the circulation of farm products in China has been state procurement. This means that through the appointed commercial organizations and in accordance with the state plan the state would make planned procurement thereby placing most commodity farm products in the hands of the state before it distributes and markets them in a planned way. The country's farm products procurement system today categorizes all farm products as categories I, II or III on the basis of how important they are to the national economy, people's livelihood and the amount of supply and demand, and purchases these products through centralized procurement, assigned procurement, and negotiated procurement. Category I of the centrally procured products include grain, cotton, and oil-bearing crops. Category II of the assigned procurement products are live hogs, cattle and sheep [or goats] in pastoral regions, and some major cash crops (such as tobacco, hemp, silk, tea, and sugar cane) in major growing areas, and timber, and aquatic products. Category III of the negotiated procurement products consist principally of nonstaple agricultural sideline products are small commodities other than Category I's centralized procurement and Category II's assigned procurement products. Varieties are numerous, fragmentary and scattered, and their production and marketing changes greatly. Of the three foregoing categories of farm product procurement, centralized procurement and

assigned procurement are state planned procurement and are administratively compulsory, i.e. farm products sales quotas that the state has set must be fulfilled on time, in proper quality, and in proper amounts for purchase on time, in proper quality, and in proper amounts for purchase at stipulated prices. Today, centralized procurement and assigned procurement constitutes about 80 percent of total procurement of farm products.

Any farm product procurement system is interrelated with specific socioeconomic conditions. China's prevailing principal farm product procurement system, be it centralized or assigned, results from historical reasons, and have undergone an evolutionary process.

During the period immediately following the founding of the People's Republic, i.e., during the 1949-1952 period of national economic recovery, five economic components existed in China. In agriculture, individual peasants held the major position, and large numbers of private capitalist industries and businesses also existed. Corresponding with this situation, a laissez-faire policy was followed in trade under centralized planning, and farm products were bought and sold freely in markets.

Centralized procurement of farm products began in China in 1953, and assigned procurement began in 1955. Beginning in 1953, China entered the period of socialist transformation and the building of socialism. Since the country's agricultural foundation was weak and the conflict between supply and demand in farm products became increasingly nagging, in order to assure equitable distribution of farm products, the state instituted centralized procurement and assigned procurement of major farm products bearing on the national economy and the people's livelihood. This procurement system played an active role at the time. The most important was: First, the state control of grain, cotton, oil, and such principal farm products stabilized market prices, struck down capitalist profiteering and speculation, and guaranteed the basic needs of the people's livelihood and national construction. Second, it severed the links between urban capitalist industry and commerce and the rural economy and promoted the transformation to socialism. Third, using its price leverage, the state redistributed national income, accumulating from agriculture the required construction capital. It should be said that given the special circumstances of the time in China, the centralized procurement and assigned procurement systems were completely necessary. For the sake of the long-range interests of the country, for a definite period of time and within definite limits, the need for the peasants to make certain sacrifices of their interests was also acceptable.

The problem is that in the 20 years following completion of the transformation to socialism, we have not only not properly readjusted and changed this procurement system, but also have expanded the amount of items and the scope of centralized procurement and assigned procurement, exercising even more stringent control than originally over farm products. It must be realized that at the present stage, China's socialist economy is a commodity economy guided by the state plans. A prolonged use of the administratively compulsory centralized procurement and assigned procurement systems cannot help but produce a negative influence safeguarding the collective economy and the

self-determination by the peasants on their families' sideline occupational economy. It would also produce a negative influence on peasants' adaptation of general methods to local situations to develop agricultural production and to rationally readjust the structure of agricultural production, on hastening the development of agricultural production and the improvement of the peasants' livelihood, and on strengthening the alliance between workers and peasants.

According to Marxist principles for social reproduction, production and circulation are closely related. Production determines the circulation, but circulation either advances or inhibits production; therefore, farm product procurement systems that function as a circulation link have a tremendous negative reaction on agricultural production.

The production of China's farm product may be characterized in the following ways: First, most farm products are produced by the collective economy, which is responsible for its own profits and losses, or by commune members' sideline occupations. Apart from farm taxes in kind that the state requires, collectives and commune members should have the right to dispose of products that they produce. State procurement of farm products from peasants should be exchanged at equal value, in a relationship of commodity exchange on the basis of equality and mutual benefit. Second, present production of farm products in the collective economy and by commune member families is a combination of production for self-sufficiency and commodity production, and the portion produced to meet the producer's own needs is of considerable proportion of farm products. Only the portion that is in excess of the producers' own needs forms the commodity portion. This characteristic determines the need for concern about the interests of both the state and the peasants, and the need for correct handling of the ratio between procurement and storage of the farm products. Third, not only are farm products and commodities clearly seasonal, but also regional, and spread out. They also possess natural characteristics, such as large quantity, large size, being fresh and alive, and proneness to spoilage. For these reasons, circulation channels must remain open and storage and transportation conditions must improve. The products have to be purchased promptly, transported promptly, and supplied promptly. The foregoing economic characteristics of farm product and commodity production inevitably poses difficulties and complexities for farm product procurement in China in situations where conflicts between supply and demand for major farm products are relatively pronounced.

In view of the "excess procurement," the tendency to pay low prices, and the excessive burden on the peasants that have occurred in centralized and assigned procurement process during the past 20 some years, the state has continually taken corresponding actions. In 1955, for example, in the procurement of grain, the state instituted the "three fixeds" method: fixed output, fixed procurement, and fixed marketing. Subsequently, by way of correcting "high quotas, and high state procurement," it adopted the method of "no change for 3 years." In 1971, it again formulated a policy in state grain procurement of "no change for 5 years." The state also made tremendous readjustments several times in the purchase price of major farm products.

During 1961 and 1962, the 2 years of hardship in the national economy, it adjusted downward state grain procurement quotas by 22.1 billion jin, while at the same time advocating that economic methods, rather than administrative methods, should be used to obtain farm products. It required that when purchasing various agricultural sideline products from collective economic units that discussions should be held with them on individual products so as to set a proper ratio between the products to be purchased and to be stored, and to set equitable procurement quotas. Following the 3d Plenary Session of the 11th Party Central Committee, in particular, the longstanding "leftist" errors came under criticism, and the importance of commodity exchange was stressed. Beginning in 1979, the state raised the prices on 18 major farm products by 24.8 percent, including a price rise for grain of 20 percent, plus an added 50 percent for portions in excess of procurement quotas, and an added 30 percent for cotton production in excess of quota. It also instituted a policy for stabilization of base figures for state grain procurement for a period of several years without change, and excess procurement quotas guaranteed for 1 year without change. At the same time it revived and liberalized farm product country fairs. After fulfillment of centralized procurement quotas for grain and oil (including excess procurement quotas), all remaining could be sold in country fair markets. As a result of the institution of the foregoing series of policies, particularly the practice of various forms of production responsibility systems, agricultural production developed fairly rapidly. Conflicts existing in the farm products procurement process were ameliorated in varying degrees. At Wu County in Jiangsu Province, for example, in the 10-year period between 1971 and 1980, the peasant grain ration during the first 7 years had been less than 600 jin per capita. From 1978 onward, it was more than 600 jin, reaching 651 jin per capita in 1979. The proportion of grain retained in rural villages clearly increased. At Wu County in Jiangsu Province, under the "three fixeds" the proportion of grain retained in 1971 was 64.9 percent. It had averaged only about 63 percent during the previous 6 years, but was more than 65 percent during the last 4 years and averaged more than 70 percent. Nationally output of an overwhelming majority of farm products set all-time records in 1980. The situation in state procurement of farm products was also very good; markets began to flourish; major farm products overfulfilled procurement plants, and they also exceeded procurement during the great bumper harvest year of 1979.

For a long time farm product procurement work in the country has been influenced by "leftist" errors, manifested specifically in not regarding peasants' sales of farm products to the state as a commodity exchange relationship between peasants and the state on the basis of economic equality and mutual interest, but rather regarding it as peasants' obligation to the state, and even looking upon peasants, to a certain extent, as payers of tribute. As with the payment of agricultural taxes in grain, peasants had to turn farm products over to the state at a price far lower than actual value in accordance with various state regulations. This placed the peasants in a powerless position in circulation channels, and as a result peasant enthusiasm for production could not be stirred in any fundamental way. Major problems existing today are as follows:

(1) Excessive centralization and overcontrol, which is bad for development of all-around farming in rural villages and enlivening of the urban and rural economies. For many years, the state has controlled funds through economic departments and banks having dealings with grain, commerce, supply and marketing and foreign trade, adopted various forms of procurement (principally the centralized and assigned procurement), so as to take into its own hands an overwhelmingly large portion of the commodity and agricultural products. In state procurement of farm products, "the more the centralization, the greater the centralization." No matter whether necessary or not, everything was centralized in the hands of the state to the greatest extent possible. There was virtually nothing that it did not control, and certain Category II products were controlled even more stringently than Category I products. In some cases, quotas were handed down in state plans while in others quotas were handed down by department plans. Still in some cases no quotas were handed down directly, but because of the "monopoly" of the state-run commercial enterprise, although there was no "centralized" procurement in name, the enterprises were actually state controlled. The masses said, "Whatever flies in the skies, grows on the land, or breeds in the water, belongs to the state." Peasants had duties only to produce and sell products to the state; they had no right to process or market products themselves. As a result, centralization became ever more restrictive, which was bad for the development of agricultural production and enlivening of the urban and rural economy. It produced a disjointedness between production and marketing, and the relationship between supply and demand was hectic. In Taoyuan County, Hunan Province, Qushi Town had the most active country fair, but survey revealed that between 1976 and 1979 annual volume of transactions in agricultural sideline products in the market amounted to only 345,700 yuan, or only 2 percent of total local purchases by state businesses. This included 35,900 yuan worth of grain and oil, 98,600 yuan worth of meat and aquatic products, and 211,200 yuan worth of vegetables, sundry products, dry and fresh fruits, which amounted to 0.05, 0.25, and 4.02 percent respectively of the total state procurement of the same commodities. Beginning in 1980, the Hunan Provincial Government made a regulation liberalizing procurement policies for some farm products. No change was made for Category I products, but the former 56 Category II products were re-adjusted to 28, assigned procurement quotas applying to 25 of them and centralized procurement and sales quotas applying to three. All else became Category III products for which the state set no procurement quotas but allowed free sale in markets, free buying and selling, and freedom in negotiating prices. These regulations were greatly welcomed by the peasants. However, a look at the situation in Taoyuan County showed that the advantages these regulations provided the peasants were still fairly limited. Rough calculation of total amount of purchases of agricultural sideline products in the county during 1979 disclosed that free marketing of Category III agricultural sideline products as permitted by the new regulations amounted to 17,174,000 yuan or 15.4 percent of total purchases. Except for wild growing fibers, starch, oil-bearing crops, and small assorted kinds of bamboo, which communes and brigades could use as raw materials for processing, this including mostly vegetables, fruits, poultry and eggs, fresh commodities not easily handled otherwise. The peasants said, "We can't deal in what makes money, and in what we deal in we do not make money." In some major grain and cotton growing areas, in particular, communes and brigades had virtually "no work that could

be processed and no goods that could be sold." Although central authorities pointed out several times that to the maximum extent possible farm products should be processed in rural villages, because of state's overcentralization and overcontrol, the peasants had very little room for maneuver in the development of economic diversification.

(2) Monopolizing business, local insulation, clogged circulation, and a bureaucratic style of doing business were serious. The prevailing farm product procurement system provided, first of all, that state-owned business have sole rights, and second that administrative methods of centralized procurement and assigned procurement would be the paramount forms of procurement used. "Cutting when there was too much, and taking when there was too little," the masses termed a "knife and whip policy." State procurement of farm products should embody a relationship of equality and mutual benefit in exchange of commodities by both parties. In economic relationships between the state and the peasants, in particular, the state-owned economy should be concerned with providing support to development of the collective economy and the commune member family economy. The circulation of products should be rooted in production and to help production. However, because of the monopolization of dealings, the clogging of circulation, and the effect of "leftist" errors over a long period of time, procurement work was seriously divorced from the masses or even hurt the interests of the peasant masses. Following the smashing of the "gang of four," in some places a system of assigned procurement quotas for live hogs and poultry eggs came into being, and in some cases peasants who did not raise poultry had to buy eggs in the market so to sell to the state. Fines for payment of money or grain were also levied on the peasants. Though the state increased the procurement price for some farm products in 1979, some procurement departments practiced a bonus system whereby they arbitrarily increased procurement standards, and downgraded the quality in order to drive down the prices they paid for products. Representative sampling of departments concerned showed that in only 70 percent of cases did peasants derive any benefit from the increase in prices paid for farm products. In 30 percent of cases, the benefits were canceled out because of the low-grade quality that had driven down the prices. As a result, the commercial or other departments derived the benefits. The masses felt very strongly about this. In addition, the country's procurement departments are partly bureaucratic and partly commercial and have a "large common pot" system of operation. They feel responsible only to upper echelons but not to the peasants, and when they make agreements, they do not keep them. When certain farm products were scarce, they might promise the peasants, "We will buy whatever you produce!" But once output of the farm product had been increased and procurement departments felt it might be difficult to transport and sell it, they would not keep their word and would completely shirk their responsibility, not only causing peasants very great economic losses, but also causing extremely great waste of society's material wealth. In 1979, Yuexi County, in the Dabie Mountain region of Anhui Province produced 800,000 jin or tuckahoe [poris cocos], only 400,000 jin of which was purchased by the state. The same thing happened with mushrooms. In 1978, the procurement department said it would buy all that was available, so the peasants produced a lot. But the following year procurement units changed their mind, "using magnifying glasses to look at this and saying they did not want it and to look at that and saying they did not want it either." As a

result, peasants had no choice but to sell off large quantities of mushrooms in markets cheaply at prices ranging from 0.30 to 0.40 yuan per jin (when the contracted price had been 1.90 yuan per jin). In 1965, the medicinal herb department in Yuexi County introduced the growing of donghua [0392 5363] and arranged for peasants to plant it; its output reaching 800 dan in 1979. But the medicinal department did not buy it, and all of it was cut down in 1980 with attendants suffering very great losses.

Because procurement of farm products lies solely within a certain jurisdiction; the number of links in the circulation of goods are numerous, and because circulation is organized by administrative region, the clearing of channels is extraordinarily difficult. When supply of a certain farm product is greater than demand in any given area, local procurement departments do not arrange actively for sales elsewhere, but rather frequently stand in the way of production units and do not permit circulation of products elsewhere. In 1979, when difficulties occurred in the selling of grain that had been produced in overfulfillment of quotas in Feixi County, Anhui Province, places outside the province wanted to make an exchange for some rice, but the county stood in the way and would not allow any to be transported outside its borders. The masses call this way of doing things, "partitioning an area into prisons," and "staying in one's own cocoon."

In the present farm product procurement system whereby commodity flow of farm products is organized by administrative zoning, certain conflicts exist among the economic interests of all parties. In the process of readjustment and restructuring of the economic system, the economic interests of one area and another and one sector and another have begun to become sensitive. In 1979, following the fairly substantial increase in prices for farm products, the "price scissors" was narrowed, but not eliminated. This was manifested specifically between one sector and another in small profits in agriculture and large profits in industry and commerce, and between one area and another in small profits from shipments of farm goods outside the province, but large profits from shipments into the province. Shipment of farm products outside the province in the prevailing centralized and assigned procurement system meant relatively slow economic development. These conflicts of economic interests among the agricultural, industrial and commercial sectors, and between industrial and agricultural areas began to become prominent.

(3) In numerous areas, base grain procurement figures continue to be overly high, and this seriously dampens peasants' enthusiasm for production. State procurement of agricultural sideline products should carry into effect overall planning that takes into account the desires of all; it should both help bring to reality policy decisions in the macro-economy and fit in with the need of the micro-economy to enliven the rural economy and increase peasant income. Frequently we only emphasize the former while ignoring the latter, often using political slogans or administrative measures to substitute economic methods, with the result that production loses its internal economic dynamism. The slogan, "country first, collective next, and individuals next still" is an inappropriate one that overlooks a peasant's personal needs and that can easily bring about "high state procurement" of grain. Grain is the

product most needed for self-sufficiency; the country needs it and the peasants need it. The center of state procurement quotas lies in the correct handling of the question of ratio between procurement and retention. Since the institution of centralized procurement and centralized marketing, several times "high state procurement" has occurred throughout the country; however, some "high state procurement" has still not stopped, particularly in some high and low production areas. In high production areas, state grain procurement quotas only rise but never fall, adding up year after year, "the boats rising as the water rises, but the boats not falling as the water falls." In areas of low production, when levies sometimes cannot be met, procurement quotas still have to be fulfilled or else after the grain has been purchased, it is sold back to producers. During the past 2 years, despite downward adjustments in grain procurement quotas for low production areas that lack grain; nevertheless, in areas of high production the base procurement figures continue fairly high. Eleven counties surveyed show most to be high output counties that make a great contribution to the country, but who feel too little grain is left them. Though base figures are set for grain procurement, every year requisition procurement, excess procurement, and negotiated procurement quotas are sent down at the same time, and in actual fact the "three procurements" become one procurement. In 1971, during the period of the "three fixeds," Wu County in Jiangsu Province had a 380 million jin base procurement figure when, in fact, during the 10-year period 1971-1980, it sent an average of 454 million jin of commodity grain to the state (including procurement, excess procurement, and negotiated procurement). This was 19.5 percent more than the "three fixeds" figure and including sale to the state in 1979 of 521 million jin, or 37.1 percent more than the "three fixeds" figure. Meanwhile, during the 10-year period, the commune member average grain ration was 595 jin, only 38 jin more, or a 7 percent increase, over the 557 jin average per capita ration for the 5 years previous to the "three fixeds" of 1971.

Heavy grain procurement quotas or, worse yet, excessively heavy quotas bring in their wake "those who farm the fields not getting enough to eat," which must inevitably seriously dampen peasant enthusiasm for production. Furthermore, looked at in terms of the relationship in agricultural production of the product needed to meet one's own needs and commodities, the grain that meets needs is the material foundation for maintenance of reproduction in agriculture. The amount of state procurement of farm products (grain in particular) has its limits. These limits are set by the amount produced, and the amount that goes directly to producers to satisfy their needs (for grain rations, seeds, and livestock feed) cannot be less than the amount needed to maintain simple reproduction levels. If it is, agricultural productivity will deteriorate, thereby weakening the foundation of agriculture. In addition, when centralized grain procurement quotas are heavy, inevitably grain will receive undue attention in agricultural production. This will hurt the adaptation of general methods to local situations for development of economic diversification, and the all-around development of farming, forestry, animal husbandry, sideline occupations, and the fishing industry. It will damage the rational structure of agriculture and the ecological balance of agriculture. Furthermore, sole attention to grain production will impair the overall economic effectiveness of agriculture and society's manifold requirements from agriculture.

Right now two great changes are taking place in China's rural economy. One is the emergence of various forms of agricultural production responsibility systems linking output to individual workers, and contracting production to individual households in the further development and improvement of diversified forms of responsibility systems. Peasant enthusiasm for production is very high, and rural villages are undergoing unprecedented transformations. The second is rapid development of economic diversification. The unitary agricultural production structure is beginning to change into an agricultural production structure in which both grain and cash crops are simultaneously developed, and in which farming, forestry, animal husbandry, sideline occupations, and the fishing industry are developing in an all-around way. The farm product commodity rate will also gradually rise. Under these new circumstances, how the flow of goods will be meshed with production and promote production assumes particular prominence and importance. A look at some conflicts that have arisen in the prevailing farm product procurement system shows that restructuring of the procurement system that is characterized largely by centralized procurement and assigned procurement (including use of administrative methods, exchange at unequal value, monopolization of transactions) has been placed on daily agendas. There is no inevitable connection between the prevailing farm product procurement system and the socialist system. Formerly the centralized procurement and assigned procurement forms were commensurate with historical conditions at the time, but as conditions have changed, restructuring has become completely necessary. The farm product procurement system has to proceed from the realities of socioeconomic conditions, and respect objective economic laws so that commodity flow will help advance development of production. We believe that major farm products are important goods affecting the national economy and the people's livelihood whose production and distribution should be under the guidance and regulation of state plans. However, in addition, the main producers of farm products are peasants (both in collectives and working as individuals) who work independently and are responsible for their own profits and losses. These peasants must have corresponding self-determination in production and control over products. In exchanges of industrial and agricultural goods the principles of equality and mutual benefit, and exchange of equal value must be honored.

Consequently, in the restructuring of farm product procurement systems, the overall goals must be: Gradual reduction of centralized procurement and assigned procurement figures, and reduction of the scope of centralized procurement and assigned procurement leading to complete abolition of the system of centralized procurement and assigned procurement, with substitution of methods that use economic leverage in a regular farm products procurement system in which exchanges at equal value take place between agriculture and commerce and between industry and agriculture on the basis of equality and mutual benefit, and peasants will have self-determination in control over products.

Of course, the prevailing centralized procurement and assigned procurement systems have existed for a long time, and restructuring of the product procurement system will require a gradual adjustment process in terms of national

financial resources, restructuring of the commercial system, and people's thinking. Our specific views are as follows:

(1) Gradual reduction in the quantity and scope of centralized and assigned procurement of farm products and an expansion in the quantity and scope of agreed-upon procurement for gradual changes in the situation of overcentralization and stifling control.

For the prevailing Category I farm products that are centrally procured, there should be an equitable readjustment among areas of the base procurement figures. This should be followed, in principle, by only decreases but no increases. Insofar as national and local financial resources and development of agricultural production will permit, there should be a gradual reduction in base procurement figures (area by area with no "arbitrary uniformity"), leading to abolition of the centralized procurement system. Category I products not centrally procured should be procured by signing of economic contracts in advance of production, with both buyers and sellers agreeing upon negotiated procurement.

After base figures have been readjusted and set for the existing centrally procured Category I products, there should be reciprocal signing of contracts for exchanges of industrial and agricultural goods. These should designate provinces (municipalities and regions), and counties that should ship them in, ship them out, and that are self-sufficient, and contracting responsibility for work should be instituted within a definite period of time. Provinces shipping goods in should consider giving provinces shipping goods out some appropriate economic subsidy. The central government (or provinces) could institute organizational cooperation among the provinces (or counties) in order to solve problems with the economic interests of one area and another or among agriculture, industry, and commerce (a similar method could also be adopted for the procurement and allocation of Category I farm products outside the centralized procurement base figures). For procurement and transfers outside of plan, and in cases of surplus and shortage of different products, adjustments should be made between areas without exercising tight control.

For Category II farm products for which currently there are assigned quotas, while carefully designating the goods to be included in this category, the scope and quantity of assigned procurement should be reduced over the years, and the scope and quantity of exchange at equal value should be increased until the assigned procurement system has been abolished. In the future, direct links may be forged with major producing areas and procurement departments or with processing areas, with agreed signing of economic contracts on the principle of equality and mutual interest. Plans from higher echelons and price departments should coordinate economic interests among agriculture, industry and commerce.

(2) In view of the state of the country's financial resources, for now great increase in the procurement price of farm products cannot be used to solve the problem of a price scissors between agricultural and industrial products. However, restructuring of the farm product procurement system can be linked to "doing things little by little" and "moving one's boat with the stream."

By this is meant gradual reduction of the scope and amounts (base figures) of centralized procurement, expansion of the scope and amount of extra prices paid for excess procurement, and negotiated procurement prices. This would constitute a readjustment of benefits among areas (those shipping out and those shipping in) and among agriculture, industry, and commerce, the economic benefits peasants thus gain thereby approaching the value they create for a gradual change in the situation in which the price gap between industrial and agricultural goods continues to increase. Thus the ability of the state to procure needed quantities of farm products could be assured and economic capacity of agriculture to expand reproduction could also be assured. A corresponding method should also be studied as a solution to problems between sale prices of farm goods and wage levels of urban staff and workers.

Gradual, equitable readjustments will have to be made in comparative prices of farm products within agriculture by adapting general methods to specific situations, so as to help an equitable pattern of agricultural production and make the most of the agricultural strengths of each area. It will also help to maintain a balance between the supply of various farm products and society's consumption needs in order that the economic benefits received by those peasants engaged in farming (including both the growing of grain and cash crops), in forestry, animal husbandry, sideline occupations, and the fishing industry will be largely the same. Particular attention should be given to solving the current problem that in major commodity grain-producing areas, the net earnings by peasants growing grain is significantly lower than those growing cash crops. In this way, we can encourage the peasants to provide more commodity grain in order to help readjust the entire structure of agricultural production and gradually bring about coordinated development of agriculture in the country as a whole.

(3) Change the "monopolizing" nature of the farm product procurement system by instituting numerous forms and many channels for flow of commodities in rural areas. In both commodity production and commodity exchange, competition is necessary. Monopolizing is bad for production and bad for advancing development of the commodity economy. The farm product procurement system has to be in concert with the gradual restructuring of the farm product's centralized procurement and assigned procurement system, and with the diversification of the rural economic structure. Not only do state farm commercial departments (including supply and marketing cooperatives) require improvement in their ways of doing business, but rural collective businesses (including joint businesses) and individual businesses should also be developed; with all three being treated equally and without discrimination. While reviving and liberalizing urban and rural agricultural sideline product country trade fairs and permitting individuals to haul products any distances they can to sell them, the rural collective economy should also be permitted to buy and sell all farm products remaining after fulfilling the state procurement plans. A certain amount of those farm products that enjoy quick sales and provide big profits, in particular, should be left for rural collective businesses. Under certain conditions, the state can also commission rural collective businesses to buy certain agricultural sideline products, which would both increase the circulation of commodities within planned procurement and make up for the insufficiency of network points among state-owned commercial departments. State-owned

businesses, credit, and transportation departments should give support to collective and individual businesses in their purchase and sales activities.

In the development of rural collective businesses today, different organizational forms may be used. The former grassroots level supply and marketing cooperatives can be turned over to peasant collectives for operation, or they can be combined with those newly built or organized by peasants. Each area can link up with restructuring of the commune system to solve problems by adapting general methods to local situations, with no need to use one particular form.

China's communications and transportations are backward, and its ability to store and process farm products is weak. In the country's mountain regions, in particular, where the area is large, the economy backward, and where necessities cannot be bought, open channels for the circulation of goods are an important prerequisite for development of special mountain region products. Among all the various forms of business, special attention and support should be given to individual business (carrying of goods on shoulder poles or pushing them in wheelbarrows), and the visiting of households from village to village, to enliven the rural economy (particularly that of mountain region rural villages).

(4) Farm product procurement must be closely linked with the supply of industrial goods so that the flow really plays a key role in connecting production and consumption, the cities and the countryside, and industry and agriculture. Departments concerned have the right to buy farm products from peasants and they also have the responsibility for providing peasants with industrial goods used in agriculture and with technical direction of agriculture. Peasants have the responsibility under the guidance of state plans to sell farm products to the state. They also have the right to demand that departments concerned provide industrial goods for use in agriculture, and technical agricultural direction.

(5) Gradual promotion of contract systems. Contract systems per se are not the goal; they are only a method. The goal of contract systems is to eliminate various longstanding abuses from the farm product procurement process. State purchases of farm products from communes and brigades reflect a relationship of equality and mutual benefit among all the people, collectives and individual commune members, whereby state plan requirements and the self-determination of the collective economy are fairly well dovetailed. Contracts should explicitly state the economic responsibilities and legal responsibilities of both parties. Contracts should not only include the kinds of farm products that production units are to sell to the state, their specifications, the amounts, and prices, but should also include the necessary means of production that procurement departments are to supply production units, and all arrangements for production, supply, and marketing. Turning contracts into documents guaranteeing only that peasants will fulfill farm product sales quotas is positively prohibited. The solemnity of contracts must be guaranteed so that contracts will play the role they should. Economic laws have to be established to guarantee the interests of the country, collectives, and commune members, and to advance the development of production.