

V. TREMENDOUS GROWTH OF SOCIALIST AGRICULTURE

As a result of the basic changes in the relations of production in agriculture which have taken place during the past ten years, and the heightened enthusiasm for labour and creativeness on the part of the broad masses of the peasants, China has made tremendous progress in agricultural production. The big leap in agriculture in 1958 was an achievement unmatched in Chinese history.

The reform of feudal ownership of the land was completed in the short time of three years after the founding of the People's Republic of China. This in turn released the productive forces in the countryside and hastened the recovery and development of agricultural production. By 1952 the output of grain, cotton, and several other principal crops caught up with and surpassed the pre-liberation peak levels. During the First Five-Year Plan, along with the successful completion of agricultural co-operation, fresh progress was achieved in agricultural production. In 1957, grain output totalled 370,000 million catties, an increase of 20 per cent over 1952. The cotton output in 1957 reached 32.8 million tan, an increase of 26 per cent over 1952. Remarkable increases were also achieved in the output of other crops in comparison with 1952.

In 1958 the Chinese peasants created a new form of social organization--the people's commune--and agricultural output rose to new heights. The gross output value of agriculture in 1958 reached 67,100 million yuan, exceeding that of 1957 by 25 per cent, or 2.3 times the 1949 gross output value, an average annual rate of increase of 9.8 per cent. The total output of grain was 500,000 million catties, an increase of 35 per cent over 1957, or 2.3 times the 1949 figure, an average annual rate of increase of 9.8 per cent. The total output of cotton reached 42 million tan, representing an increase of 28 per cent over 1957, or 4.7 times the 1949 output of cotton, an average annual rate of increase of 18.8 per cent. In comparison with 1949 the increases in output of other principal crops in 1958 were as follows: soya beans, 110 per cent; ground-nuts, 120 per cent; rapeseed, 50 per cent; sugar beet, 1,420 per cent; sugar-cane, 410 per cent; cured tobacco, 780 per cent; jute and ambary hemp, 740 per cent.

Such a rapid rate of increase in agricultural production was not only unknown in old China, but was never attained and cannot be attained in capitalist countries. In comparison with 1949, the grain output in China in 1958 increased 131.3 per cent. In the corresponding period the grain output in the United States increased

only 25.2 per cent, while in Britain the grain output did not increase, but declined 6.5 per cent. In comparison with 1949, the cotton output in the United States declined 28.1 per cent in the same period.

In the past decade China also made tremendous progress in livestock-breeding. In 1958 the total number of draught animals (i.e. oxen, horses, mules, donkeys, etc.) reached more than 85 million head, an increase of 42 per cent over 1949. At that time there were 160 million pigs, and 108,860,000 goats and sheep, representing increases of 180 per cent and 160 per cent respectively over 1949.

Great achievements have also been made in afforestation. In response to the Government's call to make China green, the broad masses of people have carried out a nation-wide movement to plant trees. During the nine years between 1950 and 1958 the Chinese people afforested close to 500 million mou of land. In 1958 alone they planted 260 million mou of trees, more than the aggregate area afforested in the previous eight years.

In the past decade the government authorities and the peasants have undertaken large-scale water conservancy and irrigation works. These projects have not only greatly increased the flood-control facilities and lessened the threat of flood disasters, but also played a significant role in the fight against drought and extended the irrigated areas, which, in turn, ensured a rapid growth of agricultural production. By the end of 1958 the total irrigated area of China reached 1,000 million mou, or 60 per cent of the total area of arable land. During the nine years between 1950 and 1958 the newly irrigated area amounted to 780 million mou, three times more than the total area brought under irrigation in the thousands of years before liberation. In 1958 alone the irrigated land throughout the country increased by 480 million mou, more than the total area irrigated during the previous eight years.

The rapid growth of agricultural production is inseparable from the tremendous assistance given the peasants by the Government. During the past ten years the Government made heavy investments in water conservancy works, agriculture and forestry, supplied large quantities of farm tools and fertilizers, loaned large sums of money for agricultural purposes and set up a number of rural enterprises and public services. During the nine years between 1950 and 1958 the Government granted close to 12,600 million yuan in farm loans. By the end of 1957 the state had founded 390 agricultural machine and tractor stations with 12,176 tractors in terms of 15 h.p. units, over 13,600 agricultural technical stations, more than 800 breeding stations, over 2,900 veterinary stations, and over 150 centres for promoting improved farm implements. During the big leap of 1958 there was a tremendous increase in the number of

agricultural technical stations and other public services.

The same period also witnessed a tremendous improvement in agricultural productive know-how. The valuable experiences accumulated by peasants over the years in increasing per mou yields were summed up by Chairman Mao Tse-tung and became a guide of practical measures to increase production. This is known as the "Eight-Point Charter of Agriculture" which covers soil improvement, increased application of fertilizer, water conservancy and irrigation, seed selection, rational close planting, plant protection, field management and tools reform.

During the past decade remarkable achievements have been made in agricultural production, especially during the big leap forward of 1958 when great efforts were made to implement thoroughly the "Eight-Point Charter of Agriculture." In the case of soil improvement, a large amount of work was done on deep ploughing, soil amelioration and levelling the fields. During the autumn and winter of 1957 and the spring of 1959, 800 million mou of land, nearly half of the total land under cultivation, was deep-ploughed.

In the case of fertilizer, the Government organized the peasants to tap bigger resources of fertilizer by accumulating compost and various other kinds of manure. At the same time, energetic efforts were made to develop the production of chemical fertilizers to meet the peasants' increasing needs. During the seven years between 1952 and 1958 the state supplied the peasants with 9,230,000 tons of chemical fertilizers.

In the field of water conservancy, fundamental control of some of the rivers which caused recurrent floods in the past has been accomplished. In addition, large-scale water conservancy and irrigation works have been undertaken in rural areas. Thanks to these efforts, great strides have been made in fighting floods and drought. Seed selection has also received attention. In 1952 improved varieties of rice and wheat seeds were sown only to over 41 million mou, a little more than 5 per cent of the total area devoted to rice and wheat crops. Again in 1952, improved cotton seeds were sown to 42 million mou, or half the total area devoted to cotton crops that year. In 1958, improved seeds were used practically everywhere for such major crops as rice, wheat and cotton. Close planting in varying degrees was practiced extensively throughout the country in 1958 and much valuable experience was gained in experiments with rational close planting. Plant protection, prevention and elimination of plant diseases and insect pests, and field management received close attention and consequently played a decisive role in ensuring increased production. Tools reform has also made considerable progress. The broad masses of peasants have shown creativeness in reforming many of the existing farm tools. At the same time they have invented and popularized many types of new farm

tools. The movement launched in 1958 to replace shoulder-poles with vehicles and popularize ball-bearings was warmly welcomed by the peasants. The adoption and promotion of the foregoing measures to increase agricultural production effectively boosted the development of agriculture.

China's meteorological service has shown marked development in the past ten years. The extreme backwardness of meteorological work which was true of old China has undergone a fundamental change. In 1958 there were over 2,700 meteorological observatories and stations and weather forecasting stations, or 27 times the number existing in 1959. A network of meteorological observatories and stations and weather forecasting stations is, in the main, completed in China. The rapid growth of the meteorological service has not only played a significant role in preventing natural calamities, helping plan farm work and ensuring increased agricultural yields, but has also had a considerable influence on the smooth progress of industrial production, capital construction, transport and communications.

As a result of the rapid growth of agricultural production, especially the big leap in 1958, the National Programme for Agricultural Development which was originally planned for realization in 1957, will be carried out far ahead of schedule. By 1958 many counties and municipalities throughout the country reached the production targets laid down for them in the 12-year National Programme for Agricultural Development i.e. that the per mou yield of grain in the three regions of the country should reach the targets of 400, 500, and 800 catties per mou respectively, and in the case of cotton, 60, 80, and 100 catties per mou respectively.

GROWTH OF GROSS OUTPUT VALUE OF AGRICULTURE

	<u>Absolute figures</u> (million yuan)	<u>Index numbers</u>		
		<u>1949=100</u>	<u>1952=100</u>	<u>Preceding year=100</u>
At 1952 prices				
1949	32,590	100	-	-
1950	38,360	117.7	-	117.7
1951	41,970	128.8	-	109.4
1952	48,390	148.5	100	115.3
1953	49,910	153.1	103.1	103.1
1954	51,570	158.2	106.6	103.3
1955	55,540	170.4	114.8	107.7
1956	58,290	178.8	120.4	104.9
1957	60,350	185.1	124.7	103.5
At 1957 prices				
1957	53,700	-	-	-
1958	67,100	231.4	155.9	125.0

OUTPUT OF GRAIN CROPS AND COTTON (I)
(absolute figures)

	<u>Grain crops</u> (million catties)	<u>Of which:</u>				<u>Cotton</u> (thousand tan)
		<u>Rice</u> (unhusked)	<u>Wheat</u>	<u>Coarse grains</u>	<u>Potatoes</u>	
Pre-libera- tion peak year	277,400	114,700	46,600	103,400	12,700	16,980
1949	216,200	97,300	27,600	71,600	19,700	8,890
1950	249,400	110,200	29,000	85,400	24,800	13,850
1951	270,100	121,100	34,500	86,500	28,000	20,610
1952	308,800	136,900	36,200	103,000	32,700	26,070
1953	313,800	142,500	36,600	101,400	33,300	23,490
1954	320,900	141,700	46,700	98,500	34,000	21,300
1955	349,600	156,000	45,900	109,900	37,800	30,370
1956	365,000	164,900	49,600	106,800	43,700	28,900
1957	370,000	173,600	47,300	105,300	43,800	32,800
1958	500,000	227,400	57,900	123,900	90,800	42,000

Note: In calculating the output of grain crops, potatoes are converted into grain-equivalent at the ratio of four catties to one. Cotton: ginned cotton.

OUTPUT OF GRAIN CROPS AND COTTON (II)
(index numbers)

	Of which:					
	<u>Grain</u> <u>crops</u>	<u>Rice</u> (unhusked)	<u>Wheat</u>	<u>Coarse</u> <u>grains</u>	<u>Potatoes</u>	<u>Cotton</u>
(Pre-liberation peak year=100)						
1949	77.9	84.8	59.3	69.2	155.5	52.4
1952	111.3	119.3	77.8	99.6	257.9	153.6
1957	133.4	151.3	101.5	101.8	346.2	193.2
1958	180.2	198.3	124.2	119.8	715.0	247.3
(1949=100)						
1952	142.8	140.7	131.2	143.9	165.9	293.4
1957	171.1	178.4	171.2	147.1	222.7	369.0
1958	231.3	233.7	209.8	173.0	460.9	472.4
(1952=100)						
1957	119.8	126.8	130.4	102.2	134.3	125.8
1958	161.9	166.1	159.9	120.3	277.7	161.1
(1957=100)						
1958	135.1	131.0	122.4	117.7	207.3	128.0
Average annual rate of increase (%)						
1950-1952	12.6	12.1	9.5	12.9	18.4	43.2
1953-1957	3.7	4.9	5.5	0.4	6.1	4.7
1950-1958	9.8	9.9	8.6	6.3	18.5	18.8

PER MOU YIELD OF GRAIN CROPS AND COTTON
(catties)

	Of which:					
	<u>Grain crops</u>	<u>Rice (unhusked)</u>	<u>Wheat</u>	<u>Coarse grains</u>	<u>Potatoes</u>	<u>Cotton</u>
1949	142	252	86	101	187	22
1950	159	281	85	118	215	24
1951	168	300	100	118	225	25
1952	183	321	98	136	251	31
1953	183	336	95	132	246	30
1954	184	329	115	129	231	26
1955	197	357	115	140	251	35
1956	196	330	121	135	265	31
1957	204	359	114	139	278	38
1958	275	463	145	181	372	49

Note: The per mou yield is calculated on the basis of the sown areas. Potatoes are converted into grain-equivalent at the ratio of four catties to one.

COMPARATIVE STATISTICS ON GRAIN OUTPUT BETWEEN CHINA
AND MAJOR CAPITALIST COUNTRIES

	<u>China</u>	<u>U.S.A.</u>	<u>Britain</u>	<u>West Ger- many</u>	<u>France</u>	<u>Japan</u>
Output (million catties)						
1949	216,200	303,500	21,400	31,100	33,300	35,600
1952	308,800	300,000	21,100	35,000	35,900	39,200
1957	370,000	323,900	20,300	40,000	47,000	42,200
1958	500,000	379,900	20,000	37,300	44,300	43,300
1958 (1949=100)	231.3	125.2	93.5	120.0	133.0	121.6
Average annual rate of increase from 1950 to 1958 (%)	9.8	2.5	decline	2.0	3.2	2.2

COMPARATIVE STATISTICS ON COTTON OUTPUT BETWEEN
CHINA AND THE UNITED STATES

	<u>China</u>	<u>U.S.A.</u>
Output (thousand <u>tan</u>)		
1949	8,890	70,160
1952	26,070	65,640
1957	32,800	47,740
1958	42,000	50,420
1958 (1949=100)	472.4	71.9
Average annual rate of increase from 1950 to 1958 (%)	18.8	decline

OUTPUT OF SOYA BEANS AND PRINCIPAL INDUSTRIAL CROPS

	<u>Soya beans</u> (million catties)	<u>Ground- nuts</u> (thou- sand <u>tan</u>)	<u>Rape- seed</u> (thou- sand <u>tan</u>)	<u>Sugar- beet</u> (thou- sand <u>tan</u>)	<u>Sugar- cane</u> (thou- sand <u>tan</u>)	<u>Cured tobacco</u> (thou- sand <u>tan</u>)
1. Absolute figures						
1949	10,200	25,360	14,680	3,810	52,840	860
1952	19,000	46,320	18,640	9,570	142,320	4,430
1957	20,100	51,420	17,750	30,020	207,850	5,120
1958	21,000	56,000	22,000	58,000	270,500	7,600
2. Index numbers (1949=100)						
1952	187.2	182.6	127.0	251.2	269.3	516.8
1957	197.5	202.7	120.9	787.9	393.3	597.1
1958	205.9	220.8	149.9	1,520.0	511.9	883.7
(1952=100)						
1957	105.5	111.0	95.2	313.7	146.0	115.5
1958	110.5	120.9	118.0	606.1	190.1	171.6
(1957=100)						
1958	104.5	108.9	123.9	193.2	130.1	148.4

OUTPUT OF TEA AND COCOONS (I)
(thousand tan)

	<u>Tea</u>	<u>Cocoons of cultivated silkworms</u>	<u>Tussah coons</u>
1949	820	620	240
1950	1,300	670	500
1951	1,570	940	530
1952	1,650	1,240	1,220
1953	1,690	1,190	250
1954	1,840	1,300	510
1955	2,160	1,340	1,280
1956	2,410	1,450	1,240
1957	2,230	1,360	890
1958	2,800	1,690	1,140

OUTPUT OF TEA AND COCOONS (II)
(index numbers)

	<u>Tea</u>	<u>Cocoons of cultivated silkworms</u>	<u>Tussah cocoons</u>
(1949=100)			
1952	200.7	201.3	513.5
1957	271.8	219.5	373.7
1958	341.5	272.6	475.0
(1952=100)			
1957	135.5	109.0	72.8
1958	169.7	136.3	93.4
(1957=100)			
1958	125.6	124.3	128.1

OUTPUT OF FRUIT (I)
(thousand tan)

	<u>Total Output</u>	<u>Of which:</u>				
		<u>Oranges</u>	<u>Apples</u>	<u>Pears</u>	<u>Bananas</u>	<u>Grapes</u>
1952	48,860	4,130	2,360	7,870	2,200	970
1953	59,380	5,100	2,780	10,610	2,310	1,330
1954	59,550	6,580	3,470	4,820	2,890	1,520
1955	51,000	5,690	4,050	8,190	1,930	1,290
1956	62,100	6,320	4,410	10,510	1,970	1,600
1957	64,950	6,440	4,430	10,070	1,460	1,710
1958	78,000	8,240	5,950	15,930	3,170	2,230

OUTPUT OF FRUIT (II)
(index numbers)

	<u>Total</u> <u>Output</u>	<u>Of which:</u>				
		<u>Oranges</u>	<u>Apples</u>	<u>Pears</u>	<u>Bananas</u>	<u>Grapes</u>
(1952=100)						
1957	132.9	155.8	187.6	127.9	66.6	176.5
1958	159.6	199.5	252.1	202.4	144.1	229.9
(1957=100)						
1958	120.1	128.0	134.3	158.2	217.1	130.4

CULTIVATED AREA, SOWN AREA AND RATIO
OF MULTIPLE CROP AREA

	<u>Cultivated area</u> (thousand mou)	<u>Sown area</u> (thousand mou)	<u>Ratio of multiple</u> <u>crop area</u>
1949	1,468,220	-	-
1950	1,505,340	-	-
1951	1,555,070	-	-
1952	1,618,780	2,118,840	130.9
1953	1,627,930	2,160,530	132.7
1954	1,640,320	2,218,880	135.3
1955	1,652,350	2,266,220	137.2
1956	1,677,370	2,387,590	142.3
1957	1,677,450	2,358,660	140.6
1958	1,616,800	2,344,020	145.0

Note: Ratio of multiple crop area is the percentage of sown area to the cultivated area. An area may be sown more than once in a year, and each sowing is counted separately, therefore the sown area can be much larger than the cultivated area.

AREA SOWN TO GRAIN CROPS AND COTTON
(thousand mou)

<u>Grain Crops</u>						
	<u>Total</u>	<u>Rice</u>	<u>Wheat</u>	<u>Coarse grains</u>	<u>Potatoes</u>	<u>Cotton</u>
1949	1,524,600	385,630	322,730	711,080	105,160	41,550
1950	1,572,050	392,240	342,000	722,370	115,440	56,790
1951	1,604,520	404,000	345,820	730,410	124,290	82,270
1952	1,684,490	425,730	371,700	756,740	130,320	83,640
1953	1,714,120	424,820	384,540	769,520	135,240	77,700
1954	1,745,120	430,830	404,510	763,060	146,720	81,930
1955	1,775,960	437,600	401,080	786,470	150,810	86,590
1956	1,864,390	499,680	409,080	790,760	164,870	93,830
1957	1,813,270	483,620	413,120	759,110	157,420	86,630
1958	1,819,490	491,170	399,350	684,780	244,190	85,840

EXPANSION OF IRRIGATION AND CONSERVATION OF
WATER AND SOIL

	<u>Existing irri- gated area (million <u>mou</u>)</u>	<u>Increase in irrigated area (thousand <u>mou</u>)</u>	<u>Area of trans- formed water- logged, low- lying land (thousand <u>mou</u>)</u>	<u>Area under preliminary water and soil conservation (sq. km.)</u>
1949	240	-	-	-
1950	250	12,040	-	-
1951	280	27,960	-	-
1952	320	40,180	-	-
1953	330	18,020		
1954	350	16,020	58,090	78,310
1955	370	22,260		
1956	480	118,700	84,640	73,650
1957	520	43,090	51,730	51,543
1958	1,000	480,430	206,830	318,720

PERCENTAGE OF AREA SOWN TO IMPROVED SEEDS
OF STAPLE CROPS

(total area sown to a crop = 100)

Of which:

	<u>Grain Crops</u>	<u>Rice</u>	<u>Wheat</u>	<u>Coarse grains</u>	<u>Potatoes</u>	<u>Cotton</u>	<u>Oil- bearing crops</u>
1952	4.7	5.4	5.1	5.0	0.4	50.2	1.9
1953	7.4	7.9	7.4	8.0	2.2	61.4	2.4
1954	14.9	12.0	23.5	12.9	9.9	67.7	2.9
1955	20.6	19.0	32.7	16.5	13.8	70.5	4.0
1956	36.4	41.3	58.7	21.4	38.3	89.5	31.5
1957	55.2	62.9	68.7	42.5	56.5	93.9	47.7
1958	77.5	81.9	86.1	67.9	81.5	97.0	61.6

LIVESTOCK

	<u>Big draught animals</u>	<u>Sheep and goats</u>	<u>Pigs</u>
1. Absolute figures (thousand head)			
Pre-liberation			
peak year	71,510	62,520	78,530
1949	60,020	42,350	57,750
1952	76,460	61,780	89,770
1957	83,820	98,580	145,900
1958	85,060	108,860	160,000
2. Index numbers (Pre-liberation peak year=100)			
1949	83.6	67.7	73.5
1952	106.5	98.8	114.3
1958	118.4	174.1	203.7
(1949=100)			
1952	127.4	145.9	155.4
1958	141.7	257.0	277.1
(1952=100)			
1957	109.6	159.6	162.5
(1957=100)			
1958	101.5	110.4	109.7

AFFORESTED AREA
(thousand mou)

<u>Afforested area</u>					
<u>Of which:</u>					
	<u>Total</u>	<u>Shelter belts</u>	<u>Timber</u>	<u>Area devoted to seedlings</u>	<u>Area devoted to saplings</u>
Total	497,860	115,780	188,190	7,720	183,640
1950	1,900	1,010	210	30	-
1951	6,760	3,790	1,150	70	-
1952	16,280	8,540	3,310	180	1,230
1953	16,690	6,250	6,710	210	1,840
1954	17,490	5,080	9,540	150	3,730
1955	25,660	5,900	14,210	250	10,230
1956	85,850	20,270	36,810	1,150	29,880
1957	65,330	14,920	26,020	1,060	31,730
1958	261,900	50,020	90,230	4,620	105,000

GROWTH OF STATE FARMS AND LIVESTOCK FARMS

	<u>Unit</u>	<u>1949</u>	<u>1952</u>	<u>1957</u>	<u>1958</u>
Farms	Number	18	404	710	1,442
Tractors	do	401	1,792	10,177	16,955
Combine harvesters	do	13	283	1,537	1,982
Lorries	do	28	229	3,444	4,284
Area used for production	thousand mou	460	8,480	17,990	39,820
Cultivated area	do	460	3,820	15,380	34,080
Reclaimed area	do	-	2,240	4,060	12,430
No. of workers and other employees	thousands	4	390	500	990

Note: Data include only the state farms and livestock farms under the Ministry of State Farms and Reclamation. The number of tractors is calculated on the basis of standard makes with 15-h.p.

INCREASING NUMBER OF TRACTORS USED FOR FARMING

	<u>Number</u>	<u>Index numbers</u>	
		<u>1949=100</u>	<u>1952=100</u>
1949	401	100	-
1950	1,286	320.7	-
1951	1,410	351.6	-
1952	2,006	500.2	100
1953	2,719	678.1	135.5
1954	5,061	1,260.0	252.3
1955	8,094	2,020.0	403.5
1956	19,367	4,830.0	965.5
1957	24,629	6,140.0	1,230.0
1958	45,330	11,300.0	2,260.0

Note: The tractors referred to here are of standard makes with 15-h.p.

GROWTH OF AGRICULTURAL SERVICES
(number of units)

	<u>Agricultural technical stations</u>	<u>Livestock- breeding stations</u>	<u>Veterinary stations</u>	<u>Steppe development stations</u>
1950	10	148	251	-
1951	43	274	576	-
1952	232	389	1,005	1
1953	3,632	578	1,734	7
1954	4,549	308	1,343	5
1955	7,997	454	1,266	4
1956	14,230	545	2,257	9
1957	13,669	821	2,930	23

GROWTH OF METEOROLOGICAL SERVICES

	<u>Total</u>	<u>Meteorological observatories</u>	<u>Meteorological stations and weather forecasting stations</u>
1949	101	5	96
1950	158	18	140
1951	191	19	172
1952	317	34	283
1953	357	43	314
1954	511	55	456
1955	715	67	648
1956	1,377	99	1,278
1957	1,647	110	1,537
1958	2,755	230	2,525

DEVELOPMENT OF AGRICULTURE AND LIVESTOCK BREEDING
IN NATIONAL MINORITY AREAS

	<u>Grain production (million catties)</u>	<u>Number of livestock in pastoral regions (thousand head)</u>
1949	23,110	32,170
1952	31,630	-
1957	37,650	-
1958	53,090	65,640
(1949=100)		
1958	229.7	204.0