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**FIRST FIVE-YEAR PLAN
FOR DEVELOPMENT
OF THE NATIONAL ECONOMY
OF THE
PEOPLE'S REPUBLIC OF CHINA
IN 1953-1957**

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RESOLUTION ON THE FIRST FIVE-YEAR PLAN FOR DEVELOPMENT OF THE NATIONAL ECONOMY OF THE PEOPLE'S REPUBLIC OF CHINA

*Adopted on July 30, 1955 by the First National
People's Congress at Its Second Session*

Having heard the Report on the First Five-Year Plan for Development of the National Economy by Li Fu-chun, Vice-Premier of the State Council and Chairman of the State Planning Commission and having discussed the draft First Five-Year Plan for Development of the National Economy, the Second Session of the First National People's Congress is unanimously of the opinion that the First Five-Year Plan, drawn up under the direction of the Central Committee of the Communist Party of China and Chairman Mao Tse-tung, is a programme of decisive importance for our whole people in their effort to carry out the fundamental task of the transition period; it is a plan for peaceful economic construction and cultural development. All the principles, tasks and policies outlined in the Plan are correct and the distribution of investments and targets set are rational and in line with actual conditions. The fulfilment of this Plan will lay a sound preliminary groundwork for the socialist construction and socialist transformation of our country and will thus further the prosperity of our country and the happiness of our people.

Therefore, Congress resolves:

1. That the First Five-Year Plan for Development of the National Economy of the People's Republic of China be adopted and Vice-Premier Li Fu-chun's Report on it be approved;
2. That the State Council of the People's Republic of China and government organizations at all levels be directed to take effective measures and see to it that all personnel rely on the masses in their work and make great efforts to guarantee the

fulfilment and overfulfilment of the First Five-Year Plan and the various annual plans;

3. That government organizations at all levels and all our people must continue to show spirit and tenacity in struggling to overcome difficulties, make every effort to increase production, practise strict economy and eliminate waste of every kind in the use of manpower, material resources and funds. In the field of capital construction in particular, while ensuring that the proper progress and quality of productive and technical projects is maintained, efforts should be made to improve on the economy measures outlined in the Plan to effect economies in our investments and the various items of expenditure;

4. That government organizations at all levels and all our people must greatly heighten their revolutionary vigilance in order to uproot all counter-revolutionaries, open or undercover, and smash all subversive activities directed by enemies both inside and outside the country against our cause of socialist construction and transformation; and

5. That government organizations at all levels and all our people, following the leadership of the Communist Party of China and Chairman Mao Tse-tung, must further consolidate the people's democratic dictatorship and strengthen the people's democratic united front, led by the working class, based on the worker-peasant alliance and comprising all the nationalities, democratic classes, democratic parties and people's organizations. They must win the support of all international friends, earnestly learn from the experience of the peoples of the Soviet Union and the People's Democracies in building socialism and strive for the successful fulfilment of our First Five-Year Plan.

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**FIRST FIVE-YEAR PLAN
FOR DEVELOPMENT OF THE
NATIONAL ECONOMY OF THE
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at Its Second Session*

PREFACE

In 1953 the People's Republic of China embarked on its great First Five-Year Plan for Development of the National Economy.

The founding of the People's Republic of China, led by the working class, and control by the state of key branches of the national economy have made it possible for us, in accordance with our aim of building socialism, to develop and transform our national economy in a planned way, so as to convert China, step by step, from a backward, agricultural country into an advanced, socialist, industrial state.

By the end of 1952, China completed restoration of her national economy and, with few exceptions, the output of all major industrial and agricultural products surpassed peak pre-liberation levels. Transport and posts and telecommunications were restored and expanded to an appropriate extent. We did this by relying on the splendid initiative and creative spirit of the working class and the masses of the people in the front line of labour. We did this by relying on the victories of the whole nation on various fronts, such as in the reform of the agrarian system, the movement to resist American aggression and aid Korea, the suppression of counter-revolutionaries, and the *san fan* campaign (the movement against corruption, waste and bureaucratism) and *wu fan* campaign (the movement against bribery of government workers, tax evasion, theft of state property, cheating on government contracts, and stealing economic in-

formation for speculation). We did this by relying for guidance on the economic policy correctly laid down by the Communist Party of China and the Central People's Government in the light of the Common Programme. We did this with the support of the great Soviet Union and the People's Democracies. The tremendous achievements of the state in balancing revenue and expenditure and stabilizing commodity prices had a marked influence on the rapid rehabilitation of the national economy and improvement of the people's life.

In 1952, the total value of China's industrial and agricultural production (all values here and below being calculated in terms of constant prices of 1952) registered a 77.5 per cent increase compared with 1949. Modern industry showed an increase of 178.6 per cent, and agriculture (including subsidiary rural production) an increase of 48.5 per cent. In the total value of output of industry and agriculture, the proportion of modern industry, which is the main indicator of the level of development of a nation's economy, went up from 17 per cent in 1949 to 26.7 per cent in 1952. In the total value of industrial output (including that of modern industry and handicraft workshops but excluding that of handicraft co-operatives, individual handicraftsmen and handicrafts as a subsidiary rural production), the ratio between the value of output of means of production and that of consumer goods changed from 29:71 in 1949 to 39.7:60.3 in 1952. The share of state, co-operative¹ and joint state-private industrial enterprises rose from 36.7 per cent of the total industrial production in

¹The reference to co-operative industrial enterprises in this document includes those run by supply and marketing co-operatives, but not handicraft producers' co-operatives.

1949 to 61 per cent in 1952; the absolute value of output of private capitalist industrial enterprises increased, but its share of total industrial production dropped from 63.3 per cent in 1949 to 39 per cent in 1952. In agriculture, 40 per cent of the nation's peasant households had joined mutual-aid teams by 1952, while 3,644 agricultural producers' co-operatives were organized. State concerns and co-operatives handled 63.2 per cent of domestic wholesale trade and 34 per cent of retail sales. Foreign trade was brought under state control. In general, during the period of rehabilitation, following the steady consolidation of our people's democratic dictatorship, the socialist sector greatly strengthened its leading role and position in the national economy. This provided us with the possibility of introducing a planned economy in our country, and confronted us with the task of drawing up a long-term plan for development of the national economy.

Our country was a colonial, semi-colonial and semi-feudal state dominated by imperialism; it had a backward economy. Before liberation, the highest annual output of pig iron was only something over 1,800,000 tons, and of steel, slightly more than 900,000 tons.¹ There was no machine-building industry to make the essential means of production. In 1952 when China completed her economic recovery, the output of pig iron was only 1,900,000 tons, and of steel, 1,350,000 tons. These figures surpass those of pre-liberation years, nevertheless. Because of this extremely backward state of our national economy,

¹These figures refer to 1943 which include the output of pig iron and steel in Northeast China then occupied by the Japanese imperialists. In Kuomintang-controlled areas, the output of pig iron was actually only about 200,000 tons, and of steel, a little over 40,000 tons.

industrialization in order to raise the level of the productive forces of our country. As Comrade Mao Tse-tung has said: "Without industry, there can be no solid national defence, no people's welfare and no national prosperity and power." The purpose of adopting a positive policy of industrialization, that is, a policy which gives priority to the growth of heavy industry, is to provide a material basis on which to strengthen our national defence, meet the needs of the people and bring about the socialist transformation of our national economy. That is why, in drawing up the First Five-Year Plan for Development of the National Economy, we emphasize heavy industrial capital construction and centre our efforts in the first place on building the 156 projects which the Soviet Union is helping us to design;¹ it is on this main groundwork that we shall continue to use, restrict and transform the capitalist sector of the national economy, and ensure the progressive consolidation and expansion of the socialist sector.

At the present time, the situation in our country is as follows:

Firstly, small-peasant economy still constitutes the overwhelming proportion of our agricultural economy. Since small-peasant economy restricts the growth of productive forces in agriculture and is incompatible with socialist industrialization, scattered, individual, small-scale farming must be replaced step by step by co-operative farming. At the same time, individual handicrafts, playing an important role in

¹The 156 projects which the Soviet Union is helping us to design include the principal water conservancy project at Sanmen Gorge on the Yellow River. During the First Five-Year Plan, 145 of these 156 projects will be started, the other 11 projects will be started during the Second Five-Year Plan.

the national economy and involving a large number of people, must be guided gradually onto the path of co-operation.

Secondly, the capitalist sector still occupies a fairly large proportion of the national economy. Since the contradiction between the capitalist relations of production and the growth of our productive forces is becoming increasingly manifest, and since the anarchy of capitalist economy runs counter to the planned development of socialist economy, capitalist ownership must be replaced step by step by ownership by the whole people.

That is why our First Five-Year Plan for Development of the National Economy must include the gradual socialist transformation of agriculture, handicrafts and capitalist industry and commerce, that is why, while giving priority to the development of the socialist sector of the economy, we must adopt a policy of unified planning and give consideration to all other sectors. In order to put the First Five-Year Plan on a firm basis, while it was being drawn up, we took account of both the actual conditions of our country and the experience of the Soviet Union and the People's Democracies, and paid special attention to the following points:

Firstly, while giving priority to the development of heavy industry, it was laid down that efforts should be made to maintain a proper ratio of development between the various branches of the economy—particularly between industry and agriculture, and between heavy industry and light industry, thus preventing their development being thrown out of balance.

Secondly, efforts should be made to adapt construction plans to the available funds, that is, to our investment capacity, and to give proper consideration to the question of technical personnel.

Thirdly, local plans should be co-ordinated with those of the various ministries, and, with the central authorities co-ordinating and leading the work, ensure in the first place that major projects be built and at the same time bring the local initiative and creativeness into full play.

Fourthly, measures should be taken in the course of construction to combine the rational utilization of the existing industrial bases with the energetic construction of new bases, so that the originally uneven economic development of our country can be corrected step by step and the geographical distribution of economic construction is gradually brought to suit the security needs of national defences.

Fifthly, consideration should be given to both the accumulation of funds and improvement of the people's livelihood. That is, on the one hand, we should pay due attention to increasing the rate of accumulation of funds for national construction so as to lay the material basis for a steady rise in the level of the people's standard of living; and, on the other hand, on the basis of increased production and productivity of labour, we should gradually improve the material well-being and cultural standard of the people and reduce unemployment.

Since our original productive forces were so weak, it is inevitable that we should come up against difficulties in carrying out our large-scale construction in the First Five-Year Plan period. Our work will be going ahead at a very intense pace. Because of our technical backwardness in the past, we must be ready to cope with any difficulties arising from shortages of technical personnel or supplies of equipment lagging behind the needs of construction. And because the socialist transformation of agriculture is a complex task requiring a long period of time, we must be ready to

cope with any difficulties caused by agriculture lagging behind the rapid development of industry. We must overcome these difficulties by using our manpower and material and financial resources in the most rational and effective way, and by adopting whatever measures are appropriate. At the same time, our lack of experience in planning and the incompleteness of our statistical data are bound to affect the accuracy of our plans. In executing our plans, therefore, we must be constantly on the alert to bring them into line with actual developments, iron out their imperfections and make them more accurate by learning from practical work and the creative experience of the masses. We will make fewer mistakes if we conscientiously study the pioneering experience of the Soviet Union in building socialism. The support given us by the Soviet Union and the People's Democracies is an important factor favouring the success of our planned economic construction.

The carrying out of the Five-Year Plan under present conditions involves the waging of a special form of class struggle. The enemies of the people will invariably attempt to undermine the Five-Year Plan in various ways. The people everywhere must constantly maintain the keenest political vigilance, wipe out all undercover counter-revolutionaries and defeat every kind of sabotage directed against the Five-Year Plan by enemies both at home and abroad.

The worker-peasant alliance led by the working class and its party, the Communist Party of China provided the basis for the great victory of the people's revolution and the establishment of the people's democratic dictatorship; it is also on this basis that we shall advance to the victory of socialism in our country. In order to strengthen and use the state power of the people's democratic dictatorship for the planned de-

velopment and transformation of the national economy and for the building of a socialist society, we must continue to consolidate the worker-peasant alliance and strengthen the people's democratic united front which, with the worker-peasant alliance as its basis, embraces the people of all our various nationalities, all the democratic classes and parties and people's organizations.

CHAPTER ONE

THE TASKS OF THE FIRST FIVE-YEAR PLAN

The Constitution of the People's Republic of China states: "From the founding of the People's Republic of China to the attainment of a socialist society is a period of transition. During the transition the fundamental task of the state is, step by step, to bring about the socialist industrialization of the country and, step by step, to accomplish the socialist transformation of agriculture, handicrafts and capitalist industry and commerce." It will take a fairly long time to complete this fundamental task of the transition period—approximately fifteen years, or three five-year plans, in addition to the three years of rehabilitation.

The general task to be fulfilled by the First Five-Year Plan was determined in the light of the fundamental task of the state during the transition period. It may be summarized as follows: We must centre our main efforts on 694 above-norm¹ industrial con-

¹To facilitate management and supervision of major capital construction projects, the state has, in the light of actual conditions in China, set an "investment norm" for every category of capital construction. Any construction project, whether it is new, rebuilt or restored, is classified as "above-norm" or "below-norm" according to whether its invested capital is above or below the "normal" figure. In industry, for example, the investment norm for the iron and steel, motor vehicle, tractor, shipbuilding, and rolling stock manufacturing industries is ten million yuan. For the non-ferrous metals, chemical and cement

struction projects, the core of which are the 156 projects to be designed with the help of the Soviet Union and which will lay the preliminary groundwork for China's socialist industrialization; we must foster the growth of agricultural producers' co-operatives, whose system of ownership is partially collective, and handicraft producers' co-operatives, thus laying the preliminary groundwork for the socialist transformation of agriculture and handicrafts; and we must incorporate a greater part of capitalist industry and commerce into various forms of state capitalism, laying the groundwork for the socialist transformation of private industry and commerce. This is a programme of decisive importance with which the Communist Party of China and the state organs of the People's Republic of China guide the whole nation in working to fulfil the fundamental task of the transition period.

The various concrete assignments of the First Five-Year Plan in relation to its general task are as follows:

1. We must establish and expand power, coal and oil industries; establish and expand modern iron and steel, non-ferrous metals and basic chemical industries; establish machine-building industries for the manufacture of large metal-cutting machine tools, power-generating, metallurgical and mining equip-

industries, it is six million yuan. For power stations, power transmission lines and sub-stations, the coal-mining, oil-extracting, oil-refining and machine-building (not including communications equipment) industries, motor vehicle and ship maintenance works, and textiles (including printing and dyeing), it is five million yuan. For the rubber, paper-manufacturing, sugar-refining, cigarette-making and pharmaceutical industries, it is four million yuan. For the ceramics, food-processing (except for sugar-refining) and other light industries, it is three million yuan.

ment, motor vehicles, tractors and aircraft. These will represent a new development of heavy industry in China, which, when completed stage by stage, will change the face of our national economy on the material basis of a large-scale socialist industry.

2. In line with the growth of heavy industry, we must develop to an appropriate extent textile and other light industries, as well as new small and medium industrial enterprises serving agriculture, in order to supply the ever growing needs of the people in town and countryside for daily necessities and agricultural means of production.

3. Simultaneously with the establishment of new industries, we must utilize existing industrial enterprises in the fullest and most suitable way and develop their productive potential. During the First Five-Year Plan period, the fulfilment of production quotas in heavy and light industry mainly depends on existing enterprises.

4. We must promote the co-operative movement in agricultural production by relying on the poor peasants (including all new middle peasants who were formerly poor peasants) and firmly uniting with the middle peasants, and by using the methods of persuasion, providing good examples and giving state assistance. We must bring about the initial transformation of small-peasant economy by adopting the agricultural producers' co-operative as the main form of organization, in which ownership is partially collective. This will be the basis for carrying through elementary technical improvements in agriculture and raising the yield per unit area. At the same time, the productive potentialities of individual peasants should also be developed. Energetic use will be made of every possible means to reclaim wasteland and to enable the state farms to play a bigger role as models.

All this will ensure a further increase in the output of farm produce and especially that of grain and cotton, and thus gradually remedy the anomalous situation in which agriculture lags behind industry.

We must attend to water conservancy and afforestation work and take extensive measures for water and soil conservation.

We must develop animal husbandry and fisheries and raise the output of special farm products.

5. We must develop transport and post and telecommunication services in keeping with the expansion of the national economy, railway construction being of the first importance, side by side with the development of inland and sea-going shipping, as well as highways, civil aviation and posts and telecommunications.

6. We must organize individual handicrafts, individual transport enterprises and independent small businesses stage by stage under the state's over-all plan into various forms of co-operatives according to the different conditions in their respective trades, so that they will effectively serve the needs of the state and society.

7. We must continue to consolidate and extend the leadership of socialist economy over capitalist economy; to make correct use of the positive sides of capitalist economy which are beneficial to national

welfare and the people's livelihood, and restrict their negative sides which are not beneficial to national welfare and the people's livelihood, and thus gradually bring about their socialist transformation. Whenever possible and necessary, the number of joint state-private enterprises is to be gradually increased. We must also increase the number of government contracts awarded to private industries for the manufacture and processing of goods and increase state

purchases of the output of private enterprises. Private commercial enterprises will be drawn in one after the other to act as distributors working on a commission basis on behalf of state trading concerns or co-operatives, or purchasing commodities from them and retailing these commodities at fixed prices.

8. To ensure stability of the market: we must continue to balance revenue and expenditure and to increase reserves of financial and material resources; we must increase the exchange of goods between town and countryside, between home and abroad, and expand the circulation of commodities in step with the growth of industrial and agricultural production; and we must implement step by step, on the basis of a vigorous effort to increase production, the policy of planned purchase and supply of certain principal industrial and agricultural products the output of which lags behind demand.

9. We must develop cultural, educational and scientific research work, raise our scientific and technological level and actively train personnel needed for national construction, particularly for industrial construction.

10. We must practise strict economy, eliminate waste and increase the rate of accumulation of capital for national construction.

11. We must steadily improve the material well-being and cultural standard of the working people on the basis of development of production and a rise in labour productivity.

12. We must continue to strengthen economic and cultural mutual aid and co-operation between the various nationalities in China, and accelerate the development of economic and cultural work among the national minorities.

The successful attainment of the various targets set by the above-mentioned tasks under the First Five-Year Plan will not only bring about a tremendous development of our national economy and a marked rise in the share of modern industries in the total value of industrial and agricultural output, but will also change the relations between the different sectors of our national economy, that is, the socialist sector will greatly increase while other sectors will decrease in proportion, compared with the positions they formerly occupied in the national economy. Our people's state power and our worker-peasant alliance led by the working class will be further consolidated as a result of the increasing strength of our socialist economy.

CHAPTER TWO

DISTRIBUTION OF INVESTMENTS AND PRODUCTION TARGETS OF THE FIRST FIVE-YEAR PLAN

In the light of the tasks mentioned in the preceding chapter, the First Five-Year Plan provides for the following distribution of investments in capital construction and sets the following basic targets for raising production and developing transport and increasing the circulation of commodities.

SECTION I. DISTRIBUTION OF INVEST- MENTS IN CAPITAL CONSTRUCTION

To guarantee implementation of the First Five-Year Plan, the state will provide 76,640 million yuan for economic construction and cultural and educational development during this five-year period. Of this total, 74,130 million yuan are direct state appropriations while 2,510 million yuan will be furnished by various economic departments under the central authorities and the provincial and municipal administrations themselves.

This sum of 76,640 million yuan for investments is distributed as follows:

**Distribution of Investments in the
First Five-Year Plan**
(in millions of yuan)

		Percentage of Total
Industrial departments	31,320	40.9
Agricultural, water conservancy and forestry departments	6,100	8.0
Transport, post and telecom- munication departments	8,990	11.7
Trade, banking and stockpiling departments	2,160	2.8
Cultural, educational and public health departments	14,270	18.6
Urban public utilities	2,120	2.8
Circulating capital for economic departments	6,900	9.0
Overhaul of equipment in economic departments	3,600	4.7
Other economic items	1,180	1.5

Various departments will receive 42,740 million yuan (55.8 per cent) for capital construction out of the above total expenditure for economic construction and cultural and educational development. An additional 5,300 million yuan will be invested in capital construction by various departments according to the needs of their yearly plans for construction. This sum will be divided as follows: 1,640 million yuan will be spent on geological prospecting; 700 million yuan on prospecting and designing; 1,120 million yuan on stockpiling equipment and materials for 1958 and 1959; 1,540 million yuan will form a reserve fund for the economic departments; 300 million yuan will be used by the army to reclaim wasteland.

If this sum of 5,300 million yuan is added to the 42,740 million yuan for capital construction mentioned above, the total investments of the state under the five-year capital construction programme¹ will con-

¹Investments in capital construction refer to capital invested to increase the fixed assets of our national economy. They include funds (1) for building expenses; (2) for the purchase of equipment, tools and instruments; (3) for in-

stitute 62.7 per cent of the total national expenditure on economic construction and cultural and educational development. Part of the remaining 37.3 per cent of this expenditure will be used by various economic departments as circulating capital and for overhaul of equipment. Part will be spent on trial manufacture of new products, technical and organizational improvements in production, and purchase of miscellaneous fixed assets. Another part will be allocated for maintenance of secondary vocational schools, and the training of specialized personnel. Still another part will be assigned to economic, cultural and educational departments as operating expenses and used for maintenance of urban public utilities.

The sum of 42,740 million yuan for investments in capital construction is distributed as follows:

**Distribution of Investments in Capital
Construction**

(in millions of yuan)

		Percentage of Total
Industrial departments	24,850	58.2
Agricultural, water conservancy and forestry departments	3,260	7.6
Transport, post and telecom- munication departments	8,210	19.2
Trade, banking and stockpiling departments	1,280	3.0
Cultural, educational and public health departments	3,080	7.2
Urban public utilities	1,600	3.7
Other items	460	1.1

The percentage distribution of the country's total expenditure on economic, cultural and educational

stallation of equipment; (4) for activities directly related to engineering work in capital construction (such as geological reconnaissance, designing and scientific experiments and research), for the training of the necessary personnel after completion of construction projects, and for compensation and removal expenses for people resident on sites earmarked for new construction, etc.

undertakings, and investments in capital construction given in the above tables show the emphasis on industry; this is particularly true with investments in capital construction where industry takes the largest share of the total. If the sum of 1,770 million yuan to be invested in industrial capital construction by ministries other than the ministries in charge of industry is added to the sum of investments in capital construction by industrial departments as given above, the total investment in industrial capital construction in this five-year period will be 26,620 million yuan. In addition to this, part of the reserve funds of joint state-private industrial enterprises and part of the capital of private industrial enterprises will also go to capital construction in industry.

So far as the various departments are concerned, the sum of 26,620 million yuan to be invested in industrial capital construction is distributed as follows:

**Distribution of Investments in Industrial
Capital Construction Among Various
Departments**
(in millions of yuan)

		Percentage of Total
Ministry of Heavy Industry	6,490	24.4
Ministries of fuel industry	6,790	25.5
Ministries of machine-building industry	6,930	26.0
Ministry of Textile Industry	1,160	4.4
Ministry of Light Industry	690	2.6
Ministry of Geology	200	0.8
Ministry of Building Industry (including local building enterprises)	690	2.6
Local industry	1,900	7.1
Industrial investments by ministries other than those in charge of industry ¹	1,770	6.6

¹This refers to the capital invested by the Ministry of Forestry in lumber industry, by the ministries of commerce and food in the processing industry, by the ministries of railways and communications in enterprises for maintenance of locomotives.

Industries manufacturing means of production will receive 88.8 per cent of the capital to be invested in industrial capital construction,¹ while consumer goods industries will receive 11.2 per cent.

The ratio between investments in these two kinds of industry must be fixed according to the principle that priority be given to that manufacturing means of production; and that in each period of economic development, the specific percentages are fixed in the light of the actual conditions of the time. The percentage of investments allocated to heavy industry under the First Five-Year Plan is especially high. This is so because China must rapidly expand her heavy industrial base in order to promote an all-round development of her national economy. It is also because our light industry, operated either by the state or private concerns, still has considerable unused capacity while the huge productive forces represented by our handicraft industry is also able to serve as an important auxiliary to it. It can therefore be taken that the percentages of capital investments allocated under the First Five-Year Plan to heavy and light industry are appropriate.

State investments in agriculture, water conservancy and forestry only amount to 2.680 million yuan.²

tives, vehicles and ships and in their building projects, by the Ministry of Cultural Affairs in the film industry, etc.

¹This only includes investments allocated for building and installing work in industrial construction and for the purchase of machinery, tools and instruments, directly used in or serving production. Non-industrial investments as for afforestation, flood-prevention, building of special railway lines, scientific experiments and research, cultural and welfare work, etc. are not included.

²This total is arrived at as follows: 3,260 million yuan which will be invested in capital construction by agricultural, water conservancy and forestry departments minus the 800

because agriculture cannot yet be extensively mechanized and it is not yet possible to undertake bigger projects in water conservancy and forestry in this five-year period. But this sum does not include the following items: 2,840 million yuan¹ in miscellaneous expenditure allocated by the state to agricultural, water conservancy, and forestry departments; 300 million yuan for the army to reclaim wasteland; 1,060 million yuan in relief funds for rural areas; and 1,520 million yuan to be granted by the state for additional agricultural loans, which will be suitably increased to keep pace with the growth of agricultural producers' co-operatives. If these items are taken into account, the capital invested directly or indirectly by the state in agriculture in this five-year period will total 8,400 million yuan. Furthermore, according to preliminary estimates, about 10,000 million yuan² will be invested

million yuan which will be invested in the lumber industry by the Ministry of Forestry, plus 220 million yuan which will be invested by industrial and other ministries of agriculture, water conservancy and forestry.

¹This total is arrived at as follows: 6,100 million yuan, which is the total expenditure for agricultural, water conservancy and forestry departments, minus 3,260 million yuan which will be invested by these departments in capital construction.

²We can make an estimate of the amount the peasants will spend on purchasing means of production (including farm tools, draught animals, building materials, seed, fertilizer, fodder and insecticide), on the basis of the rate of increase of the total value of agricultural output in the period of the First Five-Year Plan and the rate of the resulting growth of the peasants' power to purchase means of production. If we subtract from this sum the depreciation value of their farm tools, draught animals and houses, and the value of seed, fertilizer, fodder and insecticide that they will use to plough back into production, then the resultant sum will be 10,000 million yuan which represents the total amount of capital the peasants

by the peasants themselves for expanded reproduction in this period. If this sum is also taken into account, the total amount of capital will be raised to approximately 18,400 million yuan. In addition, the development of agricultural credit co-operatives will make it possible to draw a huge amount of idle capital into agricultural production.

The country's economic, cultural and educational departments will build 1,600 above-norm and over 6,000 below-norm construction projects in the current five-year period.

In these five years the 31 economic, cultural and educational ministries will put into operation new fixed assets valued at 29,808 million yuan, or 84.5 per cent of the total investments made by these ministries during the period. Of these new fixed assets, 56.4 per cent will be used for production, 25.8 per cent will serve circulation of commodities and 17.8 per cent will directly serve the needs of consumers.¹

will invest to increase production in the period of the First Five-Year Plan. Of this total, some 6,000 million yuan will be used to increase fixed assets while about 4,000 million yuan will be used as circulating capital.

¹Fixed assets of the national economy can be divided, according to their economic uses, into three categories. Those related to production include fixed assets belonging to industries manufacturing means of production and consumer goods, agriculture and the building industry. Those related to circulation include fixed assets belonging to transport and commercial enterprises and other establishments handling the circulation of commodities. Those related to consumption include dwelling houses and other fixed assets belonging to public utilities, cultural, educational, art and literary institutions, public health services and government organizations.

SECTION II. BASIC TARGETS FOR PRODUCTION, TRANSPORT AND COMMODITY CIRCULATION

The rate of increase in production under the First Five-Year Plan is not the same for all branches of the economy. We list below the increases in value of output of the various branches of the national economy in 1957 as compared with 1952.

The total value of industrial output (including that of modern industry and handicraft workshops, but not that of handicraft co-operatives, individual handicraftsmen and handicrafts as a subsidiary rural production) will increase from 27,010 million yuan in 1952 to 53,560 million yuan in 1957. This means an increase of 98.3 per cent in 1957 as compared with 1952, giving an average annual increase of 14.7 per cent. The value of output of industry manufacturing means of production will register an average annual increase of 17.8 per cent and that of industry producing consumer goods, 12.4 per cent.

The total value of handicraft output (including the value of output of handicraft co-operatives and individual handicraftsmen, but not that of handicrafts as a subsidiary rural production) will increase from 7,310 million yuan in 1952 to 11,770 million yuan in 1957. This means an increase of 60.9 per cent in 1957 as compared with 1952, giving an average annual increase of 9.9 per cent. The value of output of handicraft producers' co-operatives will increase from 250 million yuan in 1952 to 3,190 million yuan in 1957. This means an increase of 11.9 times in 1957 as compared with 1952, giving an average annual increase of 67 per cent.

The total value of output of agriculture and subsidiary rural production will increase from 48,390

million yuan in 1952 to 59,660 million yuan in 1957. This means an increase of 23.3 per cent in 1957 as compared with 1952, giving an average annual increase of 4.3 per cent.

The output of grain will increase from 327,830 million catties¹ in 1952 to 385,620 million catties in 1957. This means an increase of 17.6 per cent in 1957 as compared with 1952, giving an average annual increase of 3.3 per cent.

The output of cotton will increase from 2,610 million catties in 1952 to 3,270 million catties in 1957. This means an increase of 25.4 per cent in 1957 as compared with 1952, giving an average annual increase of 4.6 per cent.

The total value of output of the country's industry and agriculture (including that of handicrafts) in 1957 will amount to 124,990 million yuan. Compared to the sum of 82,710 million yuan in 1952, this means an increase of 51.1 per cent, giving an average annual increase of 8.6 per cent.

Development of production in this five-year period will bring about important changes in the role of modern industry in the national economy as a whole. The share taken by modern industry in the total value of output of industry and agriculture will rise from 26.7 per cent in 1952 to 36 per cent in 1957. At the same time a definite change will also take place in the respective shares taken by industries manufacturing means of production and consumer goods in the total value of industrial output. The share of the former will increase from 39.7 per cent in 1952 to 45.4 per cent in 1957, while the share of the latter will drop from 60.3 per cent in 1952 to 54.6 per cent in 1957.

¹One catty = 0.5 kilogramme or 1.1023 lb.

State industry (including state-owned modern industry and handicraft workshops) will develop at a greater speed than other sectors of industrial production. The value of output of state industry in 1957 will increase 130.1 per cent as compared with 1952, giving an average annual increase of 18.1 per cent. Compared with 1952, the year 1957 will see the following changes in the shares taken by state, co-operative, joint state-private and private industries in the total value of the country's industrial output: the share of state industry will rise from 52.8 to 61.3 per cent, that of co-operative industry from 3.2 to 4.4 per cent, that of joint state-private industry from 5 to 22.1 per cent: the total of the three from 61 to 87.8 per cent.

On the other hand, in 1952 the value of output of private industry was 10,530 million yuan. If from this we subtract the value of output of those private industrial enterprises that will be turned into joint state-private enterprises during this five-year period—a sum of 5,150 million yuan—that still leaves 5,380 million yuan as the share of private industry. By 1957, the estimated value of output of private industry will be 6,560 million yuan, an increase of 22 per cent over the above-mentioned 5,380 million yuan. The share taken by private industry in the total value of the country's industrial output, however, will drop from 39 to 12.2 per cent.

Transport, posts and telecommunications will also be developed to meet the needs of increasing industrial and agricultural production. In this five-year period, railway freight mileage will increase 101 per cent; railway passenger mileage, 59.5 per cent; freight mileage of inland shipping, 321.5 per cent; freight mileage of coastwise shipping, 190.5 per cent; motor freight mileage, 373.5 per cent; passenger mileage of

civil airlines, 278.5 per cent; and the mileage covered by postal services, 45.2 per cent.

As industrial and agricultural production grows and the above-mentioned changes take place in the various aspects of the national economy, the total volume of retail sales throughout the country will register a rise of some 80 per cent between 1952 and 1957. The volume of state retail trade will increase 133.2 per cent and of co-operative retail trade, 239.5 per cent. In these five years of socialist transformation, a part of private trade will be converted into various types of state-capitalist trade, another part into small co-operative trade handled by organized pedlars, while the rest will remain in the original state. All these three types of trade will increase their volume of retail sales in this five-year period. By 1957, state and co-operative trade will account for 54.9 per cent of the total volume of retail sales in the country; state-capitalist trade and small co-operative trade conducted by organized pedlars will account for 24 per cent; and private trade, 21.1 per cent.

CHAPTER THREE

INDUSTRY

SECTION I. CAPITAL CONSTRUCTION IN INDUSTRY

A. The Industrial Capital Construction Plan Is the Core of the Five-Year Plan Our industrial capital construction plan which puts the main emphasis on heavy industry is designed to set our technically very backward national economy onto the road of modern technology and lay an up-to-date technical foundation for our industry, agriculture and transport. To achieve this aim our plan of industrial capital construction provides for the establishment of new industries equipped with the most up-to-date technique, and for the similar re-equipment of existing industries, step by step. This plan is the core of our Five-Year Plan, while the 156 projects which the Soviet Union is helping us to build are in their turn the core of our industrial construction plan. This plan of capital construction represents the long-term interests of our people.

On the industrial side, the First Five-Year Plan provides for 694 above-norm construction projects. These include 145 projects designed with the help of the Soviet Union. Work will begin on these during the First Five-Year Plan. Of these 694 projects, 573 will be under the ministries in charge of industry, 39 under other ministries, and 82 under local authori-

ties. Of a total number of about 2,300 below-norm projects to be undertaken in the five years, approximately 900 will be under the ministries and 1,400 under local authorities.

Of the 694 above-norm projects, 455 will be completed within the period of the First Five-Year Plan and these include 45 projects designed with the help of the Soviet Union; the other 239 will be completed within the period of the Second Five-Year Plan and these will include 100 projects designed with Soviet help. (This latter group however includes 18 projects partially completed and put into production in the period of the First Five-Year Plan.) Most of the below-norm projects will be completed within the period of the First Five-Year Plan.

Our investments in construction projects designed with the help of the Soviet Union will amount to 11,000 million yuan in the five years of the Plan; this accounts for 44.3 per cent of the 24,850 million yuan which will be spent on all capital construction in the various branches of industry. At the same time, there are another 143 above-norm construction projects which will directly support and assist these projects; investments during the five years in these supplementary projects will amount to 1,800 million yuan or 7.2 per cent of the total outlay on capital construction in the various branches of industry. Investments in these two groups of projects will take up 51.5 per cent of the total; that is to say, we are concentrating the major part of our investments during the first five years to ensure the building of major projects designed with Soviet help, and supplementary projects.

While we concentrate our efforts on building the two above-mentioned groups of projects, ministries in charge of industry and local authorities will also devote appropriate sums to reconstructing a number

of small and medium factories and mines and building a great number of new small and medium enterprise such as coal mines, power plants and fertilizer factories, etc. Such enterprises can be built or reconstructed and put into production in a comparatively short time, bringing quick returns on investments and adding to our productive capacity. They not only play an important role in meeting the needs of society but are also an indispensable factor in increasing accumulation of capital and in supporting and assisting construction of major projects. The tendency to devote all attention to the building of big enterprises and ignore the importance of utilizing and building small and medium factories and mines is quite misguided. Naturally, construction of these small and medium enterprises must follow a definite plan and should not be blindly pushed ahead. Ministries in charge of industry should give assistance to local authorities in building such factories and mines.

B. Geographical Distribution of Industry and Establishment of New Industrial Bases The abnormal concentration of our industry in a few areas and in the coastal cities is irrational both from the economic point of view and in respect to national defence. The geographical distribution of our new industrial capital construction must conform to the long-term interests of the state, and take account of conditions at different stages of our development. It must follow the principle of appropriately distributing our industrial productive forces over various parts of the country, locating industries close to sources of raw materials and fuel and areas of consumption, and complying with the need to strengthen national defence, so as to change gradually the irrational distribution of industry and develop the economy of backward areas.

In order to change the irrational distribution of industry, we must build up new industrial bases, but the utilization, reconstruction and extension of existing industrial bases is a prerequisite for the establishment of new industrial bases.

Whether we are reconstructing and extending existing industrial bases or building new ones, we must avoid over-concentration; a suitable distance should separate enterprises one from the other. A proper relationship should also be observed in the building of large, medium and small enterprises.

The First Five-Year Plan makes the following basic arrangements for the geographical distribution of industrial capital construction:

1. The industrial foundation already established in the Northeast, in Shanghai and other cities must be rationally utilized and full use made of it in order to accelerate our industrial construction. The most important thing is to complete the major part of our industrial base in the Northeast centred on the integrated iron and steel works in Anshan so that it will be better able to give technical support to the building of new industrial areas.

In addition to the important reconstruction of the integrated iron and steel works in Anshan, reconstruction work will also be undertaken at other existing industrial enterprises in the Northeast such as the coal mines in Fushun, Fushin and Hokang, the iron and steel works in Penhsi, the machine-building works in Shenyang, and the power installations in Kirin.

2. The building of new industrial areas like those in North, Northwest and Central China must be actively pushed ahead so that two new industrial bases centred on the integrated iron and steel works in Paotow and Wuhan can be established during the period of the Second Five-Year Plan.

3. A start must be made with part of the industrial construction scheduled for Southwest China along with active preparation of conditions for the building of a new industrial base there.

According as these basic arrangements for industrial capital construction are carried out, by the time the Second Five-Year Plan is fulfilled on the basis of the completion of the First Five-Year Plan, our country will have giant industrial bases in the Northeast, North, Northwest and Central China. This will greatly transform the economic life of a vast area of our country, and since this new geographical distribution of industry is based on the growth of heavy industry, it will eventually transform the whole nature of the original distribution of industry in China.

Besides the arrangements for the location of heavy industry outlined above, the First Five-Year Plan also makes new and more rational arrangements for the location of new light industrial enterprises (mainly textile enterprises). This will to a certain extent remedy the former concentration of light industry in the coastal cities and transfer it to the interior where it will be near to sources of raw materials and areas of consumption.

To satisfy the needs of the interior, gradual steps should be taken to move certain transportable industrial enterprises from the coastal cities to the interior.

C. Geological Work Prospecting of mineral resources, the rate of progress achieved in this work, and an assurance of a supply of raw materials are decisive factors in planning the rational distribution of our productive forces, in building new industrial bases, and drawing up a correct plan for industrial construction. We must greatly improve and expand

geological work to meet the needs of industrial construction.

During the period of the First Five-Year Plan the tasks of geological work are:

1. To ensure supplies of mineral resources specified in the designs of new enterprises started during the First Five-Year Plan.

2. To strengthen reconnaissance and prospecting work for certain resources hitherto undiscovered or found only in small quantities, but which are in particularly short supply at present (such as petroleum), and resources which are geographically unevenly distributed.

3. To start a planned reconnaissance of the country's mineral resources and carry out regional geological surveys in certain areas in order to ensure supplies of raw materials required in the Second Five-Year Plan and prepare the ground for the exploitation of raw materials required in the Third Five-Year Plan.

4. To put greater efforts into the work of geological surveying to exploit water resources and plan the multiple-purpose development of river basins; to guarantee the supply of geological data needed by the major water conservancy projects and hydro-electric stations to be built during the First Five-Year Plan and prepare the ground for exploiting water resources during the Second Five-Year Plan.

During this five-year period deposits of 20,270 million tons of coal and 2,470 million tons of iron ore must be prospected and surveyed for planned exploitation.

A total of 9,230,000 metres of drilling work must be completed in geological prospecting throughout the country under the First Five-Year Plan.

In order to fulfil the tasks outlined above in a

practical way and according to schedule, it is necessary to improve the organization and planning of geological work, clarify the division of labour, increase co-operation among all concerned and encourage the people to report the discoveries of mineral deposits. We must make appropriate use of all available technical personnel and help them improve their qualifications, intensify our efforts in training new personnel for geological and prospecting and surveying work, expand scientific research work in geology, develop geophysical prospecting, and unify such work as topographical surveying.

D. Measures Needed for Realization of the Industrial Capital Construction Plan Our industrial capital construction, and especially our major construction projects, are planned on a large scale, the speed of building is high and involves the use of complex techniques. But we still do not have all the skill and experience needed to carry them through. Although we are being provided with good conditions to guarantee fulfilment of our plan as a result of the help which the Soviet Union is giving us in designing 156 projects and supplying them with complete sets of equipment, we are still confronted by many difficulties. We must therefore strengthen our leadership in industrial capital construction, study and popularize the advanced experience of the Soviet Union in this respect, adopt effective measures and devote our utmost efforts to guaranteeing the quality of engineering work, reduce costs and fulfil our construction tasks on time.

1. We must improve planning and organization in capital construction.

While observing the principle of first ensuring construction of major projects with due consideration for supplementary projects and those which bring quick

returns on investment and add to our productive capacity, and increasing the proportion of productive fixed assets as far as possible, we should make detailed arrangements for each kind of project, look after the amount of work to be done and control the rate of building, carefully study the norms set and see to it that balance and co-ordination is maintained between the work of geological prospecting, designing, building and supplies of raw materials and equipment. In this way we shall avoid the mistakes of either going ahead blindly or finding ourselves overtaken by events.

2. Guided by the principle of specialization and division of labour, we must readjust and continue to improve our designing institutions, train new personnel for designing, strengthen political and ideological leadership in designing work, adopt advanced technical methods on a large scale, raise the quality of designing work and gradually establish the various norms, standards and systems needed in designing work.

3. While working according to the principle of practicability and economy, raising the quality of designing work and guaranteeing the quality of engineering work, we must reduce building costs of projects as much as possible. As for non-productive projects attached to our enterprises, it is necessary to lower their standards of construction and building costs to a level commensurate with the living standards of the people.

4. We must improve planning and construction work in new industrial cities.

Standards of city planning and construction must conform to the level of development of the country's productive forces. The construction of urban public

utilities should be closely co-ordinated with the building of new industrial enterprises.

5. We must establish comprehensive building enterprises in important new industrial cities. At the same time we must co-ordinate and improve existing specialized building enterprises so that they can shoulder the tasks of building.

6. We must see to it that the workers and staff in the building trade have good political records; we must educate them constantly so that their level of political consciousness and vocational and technical level is raised still higher.

7. In building major projects, we must promote the use of prefabricated units, use steel and concrete structures and prefabricated parts whenever possible, try to speed up construction and economize building materials.

8. We must improve management in industrial capital construction:

a. In building enterprises and on construction projects, in order to correct mistakes due to lack of personal responsibility, we must adopt a system of unified leadership under one head, with management responsible for a definite area of production.

b. We must gradually introduce planned management and work schedules; we must introduce mechanization and year-round work on certain selected construction sites according to need and possibilities; we must make rational use of manpower, materials and machinery; avoid enforced idleness of workers and eliminate violations of labour discipline; and pay attention to safety measures at work on construction sites.

c. We must increase technical guidance in construction, actively promote all advanced methods of

work devised by workers or staff and proved to be effective, encourage rationalization proposals and constantly raise productivity of labour and the quality of engineering work.

9. We must gradually perfect and implement the system of business accounting, practise strict economy, and fight against waste of every description. Supervise the payment of funds to capital construction projects, gradually establish a system of budgetary control over the designs of projects and perfect the system of checking construction according to specifications.

10. We must increase co-ordination between industrial capital construction and departments handling transport, foreign trade and industrial production.

11. We must improve our systematic examination of the way the industrial capital construction plan is being fulfilled so as to overcome shortcomings and improve work on the projects concerned.

We must establish and carry through a regular system of checking the quality of engineering work.

SECTION II. INDUSTRIAL PRODUCTION

A. Output of Main Industrial Products Ts a result of the yearly increase in output of old enterprises and of enterprises newly built and reconstructed under the Five-Year Plan, the total value of industrial output will rise from 27,010 million yuan in 1952 to 53,560 million yuan in 1957.

The output of main industrial products will increase as follows during the five years:

Product	Output in 1952	Target for 1957	Percentage Increase (1952=100)
Electricity	7,260 million KWH	15,900 million KWH	219
Coal	63,528,000 tons	112,985,000 tons	178
Crude oil	436,000 tons	2,012,000 tons	462
Pig iron	1,900,000 tons	4,674,000 tons	246
Steel	1,350,000 tons	4,120,000 tons	306
Steel products	1,110,000 tons	3,045,000 tons	275
Coke	2,860,000 tons	6,685,000 tons	233
Caustic soda (100% pure)	79,000 tons	154,000 tons	194
Soda ash	192,000 tons	476,000 tons	248
Ammonium sulphate	181,000 tons	504,000 tons	278
Ammonium nitrate	7,486 tons	44,000 tons	588
Sulphur black	16,000 tons	18,000 tons	111
Penicillin	153,000 vials	29,000,000 vials	18,929
Chloromycetin		6,000 kg	
Various kinds of sulpha-drugs	80,617 kg	844,000 kg	1,047
Motor car tires	417,000	760,000	182
Rubber shoes	61,690,000 pairs	108,310,000 pairs	176
Steam boilers	1,222 ton- hours (steam output)	2,734 ton- hours	224
Steam turbines		84,500 kw	
Hydraulic turbines	6,664 kw	79,500 kw	1,193
Internal combustion engines	1,528 (27,600 h p)	10,630 (260,200 h p)	696 942
Generators	746 (29,700 kw)	2,938 (227,000 kw)	394 765
Electric motors	91,147 (639,000 kw)	135,515 (1,048,000 kw)	149 164
Transformers	1,167,000 kva	2,610,000 kva	224
Metal-cutting machine tools ¹	13,734 16,298 tons	12,720 29,292 tons	93 180

¹Although the planned figure of metal-cutting machine tools for 1957 is slightly below that of 1952, there will actually be an 80 per cent increase in terms of tonnage. They will, in addition, be of higher technical standards and more diversified in type. There will be fewer ordinary, small lathes but more modern, large ones. Their cutting capacity will also be improved.

Product	Output in 1952	Target for 1957	Percentage Increase (1952=100)
Two-wheeled ploughs	5 000	689,000	13,611
Grain sowers	344	35,350	10,276
Locomotives	20	200	1,000
Railway passenger carriages	6	300	5,000
Railway goods wagons	5,792	8,500	147
Ships (merchant marine)	84	1,347	1,604
	with a displacement of 21 485 tons	with a displacement of 179,111 tons	834
Lorries		4 000	
Bicycles	80 000	555 000	694
Timber	10,020,000 cubic metres	20,000 000 cubic metres	200
Matches	9 110 000 units (1 unit=1,000 boxes)	12,700 000 units	139
Machine-made paper	372 000 tons	655 000 tons	176
Cement	2 860 000 tons	6 000,000 tons	210
Sheet glass	21,320,000 sq metres	40 000,000 sq metres	188
Cotton yarn	3 618,000 bales	5,000,000 bales	138
Cotton piece-goods ¹	111,634,000 bolts	163,721,000 bolts	147
Gunny sacks	67,350,000	68 000,000	101
Edible vegetable oil	724,000 tons	1,552,000 tons	214
Sugar	249,000 tons	686,000 tons	276
Flour	2,990,000 tons	4 670,000 tons	156
Salt	3,460,000 tons	5,932,000 tons	171
Cigarettes	2,650,000 crates	4 700,000 crates	177

Cotton yarn, cotton piece-goods and paper produced by individual handicraftsmen and handicraft

¹Cotton piece-goods produced by individual handicraftsmen and handicraft co-operatives wholly or partially from machine-spun cotton yarn are included in the output of cotton piece-goods in 1952 and output planned for 1957. Homespun cotton cloth is excluded.

co-operatives by local methods are not included in the figures for cotton yarn, cotton piece-goods and machine-made paper given in the above table. Nor are edible vegetable oil, sugar and salt produced by them in the table. Changes in the output of cotton piece-goods, paper, sugar and salt manufactured by handicraftsmen are as follows:

Cotton piece-goods: about 26,270,000 bolts in 1952 to about 15,000,000 bolts in 1957.

Paper: about 167,000 tons in 1952 to about 237,000 tons in 1957.

Sugar: about 202,000 tons in 1952 to about 414,000 tons in 1957.

Salt: about 1,485,000 tons in 1952 to 1,622,000 tons in 1957.

The planned output of 46 industrial products given in the foregoing table shows that means of production will be turned out at a faster rate than consumer goods. This meets the requirements of expanded reproduction of our national economy.

The various relevant ministries in charge of industry will, during these five years, try out and manufacture large numbers of new types of products. Over 3,350 important new types of products will be manufactured by enterprises under the ministries of heavy and light industry, fuel, and machine-building alone. The trial manufacture and turning out of new types of products will raise to a certain extent our technological level and manufacturing capacity.

B. Measures Needed to Fulfil Our Industrial Production Plan The Five-Year Plan provides for an average annual increase of 14.7 per cent every year in the total value of industrial output. Such a rate of advance is forward looking and entirely feasible. We must do our best to realize it and try to surpass it.

The 455 above-norm industrial projects which are being built or are undergoing major reconstruction will, when completed, play an important part during the period of the First Five-Year Plan in increasing our industrial production capacity, ensuring the planned rate of growth of our industry and increasing the output of certain important products. However, a rough estimate of the total value of industrial output of the country shows that about 70 per cent of the increase in value of output between 1952 and 1957 will come from existing enterprises, while about 30 per cent will come from newly-built enterprises and those which will have undergone major reconstruction. In addition to supplying newly-built enterprises with equipment and materials and the people with articles of daily use, the existing enterprises also shoulder the important tasks of accumulating capital and training personnel. Therefore, we must pay attention to production in existing enterprises, and fully utilize their latent capacity in our efforts to overfulfil their production plans. At the same time, while guaranteeing the quality of engineering work, we must do all we can to complete newly-built and reconstructed enterprises according to plan and, by making all necessary preparations well ahead, start production at the earliest possible moment.

We must take the following measures to fulfil the targets of industrial production:

1. We must make strenuous efforts to raise the technological level of workers and technical personnel, further improve the quality of products and increase their output, and take practical measures to improve organizations responsible for their designing; we must also actively engage in the designing, trial manufacture and turning out of new types of products so as to increase those items needed by the national economy,

particularly equipment needed for national economic construction.

The designing, trial manufacture and turning out of new types of products must be included in annual plans; strict control and inspection should be effected to ensure fulfilment of such plans.

2. To improve industrial products and ensure that they are of high quality, we must, step by step, set up advanced technical standards applicable to the whole country.

a. State bodies must be established to supervise the requisite technical standards.

b. Responsible departments under the central authorities must set standards for products which fall within the province of their trade, and pass gradually to adoption of national standards.

c. Weights and measures throughout the country must be unified. A system must be introduced whereby weighing and measuring instruments are adjusted at stated periods. There must also be a unified system of product inspection.

3. We must strengthen co-operation between productive enterprises, make rational use of and reallocate the equipment of existing enterprises; we must also introduce on a broad scale the system of concluding contracts between enterprises and within enterprises so that industrial departments and enterprises can effectively co-ordinate and dovetail their operations to improve industrial organization.

4. We must constantly study the needs of national construction and of society, and, step by step, make over-all arrangements for production in industries belonging to different sectors of the economy, so that production can be carried on in a planned way to meet growing demands.

5. We must strengthen co-ordination between

production, the supply of raw materials and marketing of products, and strike a balance between them, taking account of the various types and specifications of the products concerned and the places where they are produced; we must make efforts to overcome the dislocation existing to a certain extent between the supply of raw materials, production and marketing of products.

a. We must improve the way the state carries out planned allotment of raw materials for production, and better the work of supplying materials to the various branches of industry so as to ensure timely supply of raw materials for the manufacture of important products. We must make rational and economical use of raw materials, put rejects and scraps back to use, and intensify research in the use of substitutes.

b. Every enterprise must abide by the state's disciplinary regulations and the terms of contracts entered into, improve inspection of products, and regularly supply goods to specification.

c. We must strengthen state organizations responsible for distribution of manufactured goods, and, step by step, enlarge the scope of unified allocation of products by the state. Production departments should co-ordinate with trading departments to improve marketing and introduce on a wide scale the system of concluding contracts between the production side and the marketing side.

6. We must further improve standards of management in enterprises.

a. We must put various systems of personal responsibility on a sound basis. An end must be put to the state of affairs in production in which responsibility cannot be pinned down.

b. We must strengthen planned management, in-

troduce the system of work schedules and, step by step, overcome unevenness in production.

c. We must improve guidance given to technical work, unify regulations for technical operations and enforce their observance so as to reduce the amount of rejects and low-quality output and to improve the quality of output.

d. We must improve supervision of technical-economic norms and introduce advanced norms.

e. We must improve the maintenance and overhaul of equipment as well as safety devices in production. We must make great efforts to avoid accidents leading to injury to persons or damage to equipment.

f. We must improve financial management and the work concerning production costs, reinforce financial discipline, make efforts to carry out business accounting, practise strict economy, get rid of all those things which lead to waste of manpower, materials and money, and constantly reduce production costs.

g. We must spur those enterprises whose managements are backward to keep pace with the more advanced.

7. We must pay constant attention to raising the level of political consciousness of the broad mass of workers and staff, give full play to the initiative and creativeness of the masses, strengthen labour discipline, develop labour emulation campaigns, learn and popularize advanced Soviet experience, and sum up and spread the experience of technical improvements that we have gained in our own country. We must encourage rationalization proposals connected with technical improvements, better labour organization and methods of work so that the cardinal questions relating to production in industrial enterprises—the three interlinked questions of raising productivity of

labour, improving the quality of output and reducing costs—can be solved.

SECTION III. HEAVY INDUSTRY

A. Iron and Steel Before liberation, China's iron and steel industry was monopolized by the imperialists; they plundered our resources, shipping ore and pig iron abroad in large quantities. As a result, our iron and steel industry was left in an extremely backward state. Our iron and steel output was low; our steel-making capacity lagged behind our capacity to smelt ore and our smelting capacity lagged behind our mining output. Production suffered from backward steel-making techniques, out-dated rolling mill equipment and very few types of steel products.

Since liberation, our iron and steel industry has made some advances, but it is still far from being able to meet our needs. There are many important types of steel products which we are still unable to produce. The First Five-Year Plan, therefore, requires that we concentrate large resources and more manpower on building our iron and steel industry, so as to lay the foundation for industrialization of the country in a relatively short time.

Work will start in this five-year period on 15 above-norm construction projects for the iron and steel industry. These include the Anshan Iron and Steel Works, Wuhan Iron and Steel Works and Paotow Iron and Steel Works, which the Soviet Union is helping us to design. In addition there will be 23 below-norm construction projects including steel works in Tientsin and Tangshan.

The following are details of the main construction programme:

Anshan used to be China's largest iron and steel base. There are rich deposits in its vicinity of iron ores, coking coal, materials for the manufacture of firebricks and the principal fluxes. Anshan can be proud of its transport facilities. In accordance with our policy of accelerating national economic construction by utilizing, in the first place, already existing industrial bases, we can and must expand the Anshan Iron and Steel Works on a considerable scale. In 1949, therefore, we embarked on the restoration and reconstruction of these works. The First Five-Year Plan lays it down that in the eight years between 1953 and 1960 we shall do the maximum possible to build or reconstruct, by relying on the up-to-date technique of the Soviet Union, all the principal components of this integrated iron and steel works.

Construction will start under the First Five-Year Plan on the Wuhan and Paotow integrated iron and steel works—two new metallurgical bases in Central China and the Inner Mongolian Autonomous Region respectively. The Plan provides that they will both be equipped with the most modern types of large blast-furnaces and open-hearth furnaces. The first stage of the construction work will be completed in 1961 and 1962 respectively.

In addition to these three iron and steel bases in Anshan, Wuhan and Paotow, four works for producing high-grade steel will be built or reconstructed in this five-year period. A number of small and medium iron and steel works, mainly the Chungking Steel Works, Tientsin Steel Works and Tangshan Steel Works, will be reconstructed in part. In the meantime restoration and reconstruction will proceed on blast-furnaces at the Penhsi Iron and Steel Works, Maanshan Iron Works and Lungyen Iron Works. All these projects will be completed before 1957.

The growth of the iron and steel industry calls for increased production of refractory materials. In this five-year period, four refractory material works will be built and two reconstructed in Northeast, Central-South and North China.

We must do our best to establish new bases of raw materials to ensure the growth of productive capacity of our iron and steel industry. In this five-year period, energetic efforts will be made in the Northeast to exploit iron-ore mines on a larger scale and increase production of limestone, dolomite, and the raw components for making refractory materials. The exploitation of iron-ore mines in Central-South and North China will be undertaken to support the establishment of the two new iron and steel bases in Wuhan and Paotow. By 1957, the output of iron ores will be 268 per cent more than in 1952. Two manganese mining enterprises will be set up in this five-year period to supply the iron and steel industry.

The three key integrated iron and steel works in Anshan, Wuhan and Paotow, which the Soviet Union is helping us to build, and the various other above- or below-norm construction and reconstruction projects will be completed during the First or Second Five-Year Plans. By that time—1962—China will be producing approximately ten million tons of steel a year, while the output of steel products will be greatly increased with a greater variety of types. The above-mentioned enterprises will also provide the main supplies of the various types of shaped steel, steel plates and tubes needed to manufacture locomotives, ships, motor vehicles, tractors and aircraft. These same enterprises will be producing enough rails of the 38 to 65 kilogrammes per metre type to lay 7,000 kilometres of railways a year.

During this five-year period the afore-mentioned

above- and below-norm construction projects will increase our metallurgical capacity as follows: pig iron by 2,800,000 tons, steel by 2,530,000 tons, and steel products by 1,830,000 tons.

A greater variety of metallurgical products will be produced and their quality improved.

In reference to the production of iron and steel, the First Five-Year Plan requires that:

1. We must make energetic efforts to increase the number of new types of steel and steel products;

2. We must raise the proportion of high-grade steel in the total output of steel;

3. We must improve and expand experimental and research work to raise the quality of products to the required standards; and

4. We must increase the output of raw materials needed for production of iron and steel, fluxes and refractory materials and pay special attention to production of metallurgical coke, to meet the needs of the iron and steel industry.

The following figures show the estimated output of iron and steel in 1957 and the share produced by enterprises in the different sectors of the national economy:

Of the total of 4,674,000 tons of iron, state enterprises directly under the central authorities will produce 4,294,000 tons, or 91.9 per cent; state enterprises under local authorities, 251,000 tons, or 5.4 per cent; co-operatives, 13,000 tons of native-made iron, or 0.3 per cent; joint state-private enterprises, 96,000 tons, or 2 per cent; while the output of private enterprises will be reduced to 20,000 tons, or 0.4 per cent.

Of the total of 4,120,000 tons of steel, state enterprises directly under the central authorities will produce 3,719,000 tons, or 90.3 per cent; state enterprises under local authorities, 24,000 tons, or 0.6 per cent;

joint state-private enterprises, 376,000 tons, or 9.1 per cent; while the output of private enterprises will be reduced to 1,000 tons.

Of the total of 3,045,000 tons of steel products, state enterprises directly under the central authorities will produce 2,564,000 tons, or 84.2 per cent; state enterprises under local authorities, 35,000 tons, or 1.2 per cent; joint state-private enterprises, 430,000 tons, or 14.1 per cent; while the output of private enterprises will be reduced to 16,000 tons, or 0.5 per cent.

B. Non-Ferrous Metals Industrial development calls for increased production of various non-ferrous metals. Since it is still a weak link in our heavy industry, the expansion of the non-ferrous metals industry is one of the important tasks of industrial construction under the First Five-Year Plan.

The following are details of the main construction programme of the non-ferrous metals industry in this five-year period:

In respect of copper, our main tasks are to complete the mining and ore-dressing works at the Shouwang-fen Copper Mine in Jehol, and the mining, ore-dressing and refining works at the Tungkuanshan Copper Mine in Anhwei; to press forward energetically with construction of two new copper production bases, one in the Northwest and the other in the Southwest; and to build another new copper and copper alloy works. When completed, the above-mentioned enterprises will lay the foundation for our copper-refining industry, and step by step supply the needs of our growing machine-building industry for electrolytic and rolling capacity.

In respect of lead and zinc, we shall fully exploit existing mines by increasing their mining and ore-dressing capacity. We are prepared to open new lead and zinc mines in the Southwest.

Aluminium is indispensable to modern industry, but we still lack a basis for an aluminium industry. We must make sure that the Fushun Aluminium Works which the Soviet Union is helping us to design is completed in this five-year period.

So far as concerns the tungsten mines in Central-South China, we will install equipment for mechanized mining and ore-dressing there in the first place in those mines which have the most promising deposits. Small mines operated by local people will undergo a steady process of socialist transformation and gradually introduce mechanized production methods.

The reconstruction of the Kochiu Tin Mines in Yunnan will begin in this five-year period.

Construction will continue at the Sinkiang Non-Ferrous Metals Company.

Serious consideration must be given to the following points regarding the non-ferrous metals industry:

1. Prospecting work must be energetically prosecuted and we must see to it that it is efficiently done so that the most favourable conditions are created for the growth of our new non-ferrous metals bases.

2. Experimental and research work must be improved and expanded; we must improve our methods of mining, ore-dressing and refining; raise the rate of recovery and study how to make use of associated useful minerals.

3. We must see to it that non-ferrous metals are properly allocated; introduce systems for enforcing strict economy and methods for putting rejects and scrap back to use; try to find substitutes and encourage their use; and pay attention to problems of extracting and utilizing rare metals.

4. In order to meet the needs of the machine-building industry, we must extend unified planning gradually to the operations of non-ferrous metals pro-

cessing enterprises run by local authorities and by private capital.

5. We must improve techniques of production and increase the output of all non-ferrous metals mines operated by local authorities, and see to it that no resources of the country are neglected.

In this five-year period we will bring about a considerable increase in output by fully developing the potential capacity of existing non-ferrous metals plants and mines and by bringing new plants and mines into production. In 1957, compared with 1952, we will be producing 70 per cent more copper, 230 per cent more lead, 210 per cent more zinc, 50 per cent more tungsten ore concentrate, and 80 per cent more tin. In the meantime we will add an important new metal—aluminium—to the list of non-ferrous metals we produce.

By 1957 state enterprises under the central and local authorities will be producing almost all the principal non-ferrous metals used in the country.

C. Power To supply the power needs of industrial development, and especially needs arising out of construction of new industrial areas, we must make efforts to expand the power industry, build new power stations and reconstruct old ones.

In the first five-year period, our work will centre on the building of thermal power stations (including heat and power stations which supply electricity, steam and hot water); at the same time, utilizing available resources, we will undertake construction of some hydro-electric power stations and make great efforts to prospect and survey our water power resources, so as to prepare for large-scale construction of hydro-electric power stations in the future.

The construction of 107 above-norm power projects will begin in this five-year period; 92 of these are

power stations, the other 15 are power transmission projects with their associated transformer stations. The power stations include 24 which are designed with the help of the Soviet Union.

Sixty-nine of the 92 power stations are central power stations; 22 are local stations and one is a mobile power station. They will have a combined projected capacity of 3,760,000 kilowatts. If to this is added the projected capacity of below-norm projects, the total projected new capacity will be 4,060,000 kilowatts which is double the capacity of all power stations in the country at the end of 1952.

Fifty-four power stations, nine of which are designed with Soviet help, are scheduled for completion within this five-year period; they will increase our power capacity by 1,740,000 kilowatts in that time. The total increase in capacity, including that of below-norm projects, will be 2,050,000 kilowatts, equivalent to the capacity of all power stations in the country at the end of 1952.

The 92 projected power stations include 76 thermal power stations which will be built in accordance with the needs of proper geographical distribution of industrial areas and in proximity to the centre of the power load or fuel base. These thermal power stations will be in the main designed with the help of the Soviet Union and the People's Democracies, in accordance with the most modern and advanced techniques; they will be highly mechanized and automatized. A number of these stations will be installed with large, high-temperature, high-pressure boilers. The projected capacity of such stations will be equivalent to 32 per cent of the total capacity of all thermal power stations.

The Plan provides for 19 heat and power stations which supply electricity, steam and hot water; their projected capacity will be equivalent to 47 per cent

of the total capacity of all thermal power stations. The building of such heat and power stations will not only ensure a sufficient supply of electricity to factories; they will also supply huge amounts of steam and hot water in a centralized way to factories and residents in their vicinity. They will reduce expenditure for the building of boiler rooms in industrial enterprises and effect great economies in management costs and fuel consumption.

The 92 projected power stations include 16 hydro-electric power stations. Hydro-electric power plants economize on fuel, provide huge quantities of cheap electricity; some of them are built for the multiple-purpose utilization of water resources for power generation, flood prevention, irrigation and navigation. The master plan for the multiple-purpose utilization of the water resources of the Yellow River will be completed in this five-year period. Construction of the giant hydro-electric power station at Sanmen Gorge will be started in co-ordination with the first-phase plan for the permanent control of the Yellow River. Electricity provided by this and other hydro-electric power stations on the Yellow River, when they are completed, will satisfy the power needs of Kansu, Chinghai, Shensi, Shansi and Honan Provinces.

With the help of the Soviet Union the Fengman Hydro-electric Power Station—the biggest in China at present—will be radically reconstructed under the Five-Year Plan according to the most up-to-date standards. The inferior quality of its dam and the consequent grave situation will be changed, and its power-generating sets will be automatized.

In addition to all this, seven hydro-electric power stations with a capacity of more than 10,000 kilowatts each and eight other small-scale hydro-electric power stations will be built where water power is available

and in accordance with the principle of multiple purpose utilization of water power resources. As a result, the capacity of our hydro-electric power stations will be greatly increased in these five years, and their share in the total power capacity of the country will grow from 9.3 per cent in 1952 to 17.1 per cent in 1957.

The First Five-Year Plan provides for the formation of 10 high-tension power-transmission grids of various sizes, centring round the fairly large regional power stations—mainly hydro-electric power stations or large-scale heat and power plants. These projects will serve to improve load-dispatching between power stations, strengthen the economic co-ordination between hydro-electric power stations and thermal power stations, extend the area over which electricity is supplied, and improve safety devices in power generation and supply.

The building of the above-mentioned power stations and the creation of power grids will provide necessary conditions for the building of power bases in the principal economic areas, gradually enable industries in these areas to secure a cheap, safe and sufficient supply of electricity and provide a reserve of power for the further economic development of the country.

In this five-year period, power industry projects are distributed as follows:

1. Northeast China: nine power stations will be built or reconstructed in the provinces of Northeast China; eight of these are thermal power stations and one is a hydro-electric power station. By the end of this five-year period these provinces will have increased their original power capacity in 1952 by 112 per cent. The Fengman Hydro-electric Power Station, on completion of its reconstruction in 1959, will have a capacity of 567,000 kilowatts. Thermal power stations to

be built in Fuhsin, Fushun and Dairen will be completed in the first or second five-year periods.

2. North China: fourteen power stations will be built or reconstructed in the provinces of North China; 13 of these are thermal power stations and one is a hydro-electric power station. By the end of this five-year period these provinces will have increased their original power capacity in 1952 by 85 per cent. The Kuanting Hydro-electric Power Station on the Yungting River in Hopei Province will be completed in 1956, and the thermal power stations to be built in Tangshan, Shihchiachuang and Taiyuan will be completed in the first or second five-year periods.

3. Inner Mongolian Autonomous Region: seven thermal power stations will be built or reconstructed in Paotow, Ulanhot and other places in Inner Mongolian Autonomous Region. By the end of this five-year period the region will have increased its original power capacity in 1952 by 264 per cent.

4. East China: seventeen power stations will be built or reconstructed in the provinces of East China; 14 of these (including those in Shanghai and Nanking) are thermal power stations, and three (including that at Futseling in Anhwei Province) are hydro-electric power stations. By the end of this five-year period these provinces will have increased their original power capacity in 1952 by 32 per cent.

5. Central-South China: fifteen power stations will be built or reconstructed in the provinces of Central-South China; 14 of these (including those in Chengchow and Wuhan) are thermal power stations, and one is a hydro-electric power station. By the end of this five-year period these provinces will have increased their original power capacity in 1952 by 90 per cent.

6. Northwest China: fifteen power stations will be

built or reconstructed in the provinces of Northwest China; 13 of these (including those in Sian and Lanchow) are thermal power stations, and two are hydro-electric power stations in Sinkiang Province. By the end of this five-year period these provinces will have increased their original power capacity in 1952 by 563 per cent.

7. Southwest China: fourteen power stations will be built or reconstructed in the provinces of Southwest China; six of these (including that in Chungking) are thermal power stations, and eight (including that in Shihtsetan in Szechuan Province) are hydro-electric power stations. By the end of this five-year period these provinces will have increased their original power capacity in 1952 by 138 per cent.

8. Five sets of mobile power-generating equipment will be purchased and mounted on railway cars. These will be equivalent to the building of a complete power station.

The 92 power stations mentioned above, plus six other power stations operated by coal mines, make up a total of 98 above-norm power stations scheduled to be built in this five-year period. In addition to these, there are also nine factory-owned power stations which have already been included in construction projects for industrial enterprises. Special appropriation will be allocated for the designing and construction of two power stations in Tibet. This work will start in the first five-year period.

Under the First Five-Year Plan the necessary preparatory work will be undertaken to utilize the water resources of the Yangtse River and its principal tributaries, and of rivers in the Lhasa region.

By 1957, China will be generating 15,900 million KWH of electricity, 119 per cent more than in 1952. State-owned power plants under the central authori-

ties will be generating 87.72 per cent of this total; state-owned plants under local authorities 3.12 per cent; joint state-private plants 9.14 per cent; plants owned by co-operatives 0.01 per cent; while private plants will account for 0.01 per cent. The Plan also provides that industry and transport will consume 129 per cent more of electricity in 1957 than 1952 and public utilities and domestic users 79 per cent more.

In order to satisfy the growing demand for electricity and ensure safety in its generation and supply, and, in particular, to relieve the critical situation that has arisen in regard to the power supply of certain areas, attention must be drawn to the following points:

1. We must improve our work in capital construction, see that the question of equipment for our power stations is attended to in time, ensure that all power stations are completed on schedule.

2. We must observe the regulations for technical operations, improve our work in carrying out regular overhaul of equipment and protection and maintenance of the power-supply system.

3. We must make use of the latent capacity of electric-power installations, and, wherever possible, repair old power-generating equipment so as to increase the output of electricity.

4. We must practise unified dispatching and regulating of load; and economize on electricity.

5. We must economize on coal, and utilize low-quality coal as far as possible for power generating.

D. Coal The growth of the coal-mining industry must be adapted to needs arising out of the development of industry and transport; at the same time domestic needs must be properly taken care of.

In this five-year period, construction will start on 194 above-norm projects in the coal-mining industry. These include 179 coal-mining projects, 13 coal-washing

plants, and two construction projects for shale-oil extraction. Twenty-seven of these 194 projects (including 20 coal-mining projects) are designed with Soviet help. Of the 179 above-mentioned coal-mining projects, 168 come under the Ministry of Coal and 11 belong to local coal-mining departments.

Of the 179 coal-mining projects construction of which will start during this five-year period, 57 are old shafts which will be restored or reconstructed, while 122 will be newly built. Smaller investments are needed for the former type of project; they will start production at an earlier date; and will play an important part in satisfying the growing need for coal caused by industrial developments in the first five-year period. In the case of the new shafts, a few of the relatively smaller ones can be built within this five-year period, but the construction of most of them can only be completed and put into full-scale production during the second five-year period. During these first five years, we will complete the construction of 115 above-norm projects (including those restored, reconstructed and newly built) giving us an additional capacity of 45,890,000 tons. If the capacity of below-norm projects is included, our total additional capacity will be 53,850,000 tons. This is approximately 68 per cent of the nation's coal-mining capacity at the end of 1952.

The First Five-Year Plan provides for a fairly rational balance in the types of coal mined and in production and distribution of coal in different areas, according to the natural resources available and the requirements of industry and transport. By this means coal can be produced near areas of main consumption and irrationally long distance hauls of coal can be reduced. This will involve full utilization of existing coal bases and their proper reconstruction and

expansion on the one hand, and on the other, the energetic construction of new coal bases. In accordance with this policy the 179 coal-mining projects whose construction will start in this five-year period in various parts of our vast country will be organized under 53 separate mining administrations. Forty-one of these administrations will be old enterprises enlarged, 12 will be newly organized: all will have charge of a larger or smaller number of construction projects. The Fushun, Fuhsin, Kailan, Tatung and Huainan mining administrations will become coal-mining enterprises of exceptional size, whose mines will be installed with new or even the most up-to-date equipment.

Coal-mining construction projects are distributed as follows:

1. Northeast China: of the 53 above-norm construction projects organized under 13 mining administrations in the provinces of Northeast China 37 will be completed in this five-year period. New capacity created up to 1957 will amount to 66 per cent of the original capacity of all collieries in Northeast China at the end of 1952. By 1957 Fushun Mining Administration will have a capacity of 9,300,000 tons, Fuhsin Mining Administration will have a capacity of 8,450,000 tons.

2. North China: of the 43 above-norm construction projects organized under 13 mining administrations in the provinces of North China 27 will be completed in this five-year period. New capacity created up to 1957 will amount to 53 per cent of the original capacity of all collieries in North China at the end of 1952. By 1957 Kailan Mining Administration in Hopei Province will have a capacity of 9,680,000 tons; Tatung Mining Administration in Shansi Province will have a capacity of 6,450,000 tons.

3. Inner Mongolian Autonomous Region: of the 4 above-norm construction projects organized under a single mining administration in the Inner Mongolian Autonomous Region one will be completed by 1957. New capacity created up to 1957 will amount to 40 per cent of the original capacity of all collieries in the region at the end of 1952.

4. East China: of the 31 above-norm construction projects organized under five mining administrations in the provinces of East China 23 will be completed in this five-year period. New capacity created up to 1957 will amount to 86 per cent of the original capacity of all collieries in East China at the end of 1952. By 1957 Huainan Mining Administration in Anhwei Province will have a capacity of 6,850,000 tons; Tao-chuang Mining Administration in Shantung Province will have a capacity of 1,750,000 tons.

5. Central-South China: of the 24 above-norm construction projects organized under nine mining administrations in the provinces of Central-South China 14 will be completed in this five-year period. New capacity created up to 1957 will amount to 45 per cent of the original capacity of all collieries in Central-South China at the end of 1952. By 1957 Chiaotso Mining Administration in Honan Province will have a capacity of 2,300,000 tons.

6. Northwest China: of the 13 above-norm construction projects organized under four mining administrations in the provinces in Northwest China eight will be completed in this five-year period. New capacity created up to 1957 will amount to 68 per cent of the original capacity of all collieries in Northwest China at the end of 1952.

7. Southwest China: of the 11 above-norm construction projects organized under eight mining administrations in the provinces of Southwest China

five will be completed in this five-year period. New capacity created up to 1957 will amount to 9 per cent of the original capacity of all collieries in Southwest China at the end of 1952.

Some of the bigger shafts to be built in this five-year period are being designed with Soviet help. The Haichow open-cast mine of the Fuhsin Mining Administration, the Chungyang vertical shaft of Liaoyuan Mining Administration and the Tungshan vertical shaft of the Hokang Mining Administration, for example, are installed with the latest Soviet equipment. Shafts with an annual capacity below 600,000 tons are as a general rule designed and equipped by ourselves.

In order to increase the supply of coking coal for the metallurgical industry, we will, in addition to reconstructing existing collieries which produce coking coal, build new bases for the production of coking coal. In this first five-year period, we will reconstruct two coal washeries, and build 11 new ones, six of which will be designed with Soviet help. These 11 coal washeries will have a projected annual capacity of 17,000,000 tons.

To supply the growing needs of national economic construction and of domestic users, the Ministry of Coal and all provinces and cities must, in order to increase our coal output, not only reconstruct and build relatively big shafts and try to put them into production at an early date, but also give attention to the building of small and medium shafts, the restoration and maintenance of more old shafts, and the reconstruction of more existing shafts that promise quick returns. At the same time, we must remedy the backward condition of our geological work and designing and speed up the building of new shafts. In building

small shafts care should be taken to protect national resources in their locality.

Of the 112,985,000 tons of coal to be produced in 1957 throughout the country, 71.6 per cent will be produced by state-owned collieries under the central authorities, 20 per cent by state-owned collieries under local authorities, 0.1 per cent by co-operative-owned collieries, 4.2 per cent by joint state-private collieries, and 4.1 per cent by private collieries.

To speed up the increase of production in the coal industry, attention must be drawn to the following points:

1. We must bring into play the latent capacity of existing shafts, speed up the reconstruction of old shafts and extend their useful life.

2. We must see to it that a radical change is brought about in the present situation when geological surveying lags behind digging which in turn lags behind extraction.

3. We must improve our methods of working thick and medium seams, pay attention to the working of thin seams, raise the extraction rate and minimize wastage of resources.

4. We must promote mechanized mining and minimize hand labour, pay attention to the protection of machinery and equipment and raise the utilization rate of machinery.

5. We must raise productivity of labour. Output per worker in enterprises under the Ministry of Coal should be 1.197 tons per work-day, 0.405 tons more than in 1952.

6. We must energetically enforce the use of safety devices and promote safety education among workers and staff, improve the work of supervision, reduce the number of accidents and guarantee safety in production.

7. We must lower the proportion of ash in coal, improve coal-washing methods and guarantee the quality of coking coal.

E. Oil Our oil industry is in a particularly backward state. The capacity of its equipment and actual output are very low and we still lack knowledge of our resources. This makes it imperative for us to make a big effort to prospect our natural oil resources while at the same time increasing production of synthetic oil and making an intensive, long-term effort to expand the oil industry as a whole.

The oil industry will start 13 construction projects in this five-year period. Two of these will be designed with the help of the Soviet Union and nine of them can be completed in this period. At the same time the productive capacity of crude oil will be increased by 1,520,000 tons.

The following are details of the main construction programme:

Geological surveying and drilling will be energetically pushed forward in Kansu, Sinkiang, Szechuan and Chinghai Provinces in order to enlarge our known reserves there as much as possible. By 1957 the rate of drilling will be 7.3 times as great as in 1952. In this five-year period we will prospect oil reserves totalling 55,180,000 tons which is 2.8 times the total figure of 1952.

The productive capacity of existing oil wells in the Northwest, especially at Yumen, will be rapidly increased; the output of crude oil in the oilfields of Sinkiang Province will also be increased, and we will start exploiting new oilfields. By 1957, the productive capacity of crude oil throughout the country will be 4.2 times the 1952 figure.

Existing equipment for extracting oil from shales and coal at Fushun and other places will be fully

utilized. The productive capacity of synthetic crude oil in 1957 will be 2.6 times that of 1952.

Attention will be paid to prospecting and utilizing natural gas resources.

We will take steps to raise our oil-refining capacity to keep pace with the rise in the output of crude oil. A huge modern oil refinery will be built in this five-year period and existing oil refineries will be restored or reconstructed. By 1957, China's total oil-refining capacity will be 2.5 times that of 1952.

In this five-year period, the output of crude oil will show an average annual increase of 35.8 per cent; in 1957 we will be producing 4.6 times as much oil as in 1952. The output of gasoline will show an average annual increase of 30.6 per cent; in 1957 we will be producing 3.8 times as much gasoline as in 1952. This refers only to oil and oil products to be produced by enterprises under the Ministry of Oil.

The following necessary steps will be taken to speed up the development of the oil industry:

1. In prospecting new oil resources we will utilize new techniques as much as possible, make air surveys, expand and improve our work in making comprehensive geological research, geophysical prospecting and drilling. We will, at the same time, put energetic effort into prospecting deposits of shale and coal from which oil can be extracted.

2. We will increase the number of technical personnel employed in the oil industry. We will expand and improve research and experimental work.

3. We will increase oil production by improving our methods of oil extraction.

4. We will improve refining techniques, reduce waste, economize on oil resources and improve the quality of oil products.

5. We will put energetic efforts to the trial manu-

facture and production of new types of oil products, particularly various kinds of high-grade lubricants.

While making energetic efforts to develop the oil industry, the state must initiate measures to effect economy in the use of oil and to encourage the use of its substitutes, and these must be strictly enforced throughout the country.

Even after attaining the construction targets set out in the First Five-Year Plan, China's oil industry will still be backward and far from being able to supply the needs of the national economy; we will have to make continued efforts to strengthen this especially weak link in our national industry.

F. Machine-building The machine-building industry of old China was only able to manufacture accessories, do assembly and repair work or produce some small and simple machines. There were no enterprises for the manufacture of metallurgical, mining, or power-generating equipment nor for the production of aircraft, motor vehicles, or tractors. Since liberation, great improvements have been made in the machine-building industry, but it was not possible during the short period of rehabilitation to build up all these various new enterprises. Before the First Five-Year Plan started, China still could not manufacture large precision machinery or complete sets of industrial equipment.

The machine-building industry is the key to the technological transformation of our national economy. During the course of our First Five-Year Plan, we must develop our machine-building industry on the basis of the growth of our iron and steel and non-ferrous metals industries.

In this five-year period, the construction programme of the machine-building industry puts special emphasis on increasing the production of metallur-

gical, power-generating, and mining equipment and transport and agricultural machinery; manufacture of oil-refining and chemical engineering equipment, metal-cutting machine tools and electric instruments will also be suitably expanded.

The First Five-Year Plan makes provision for many construction projects, both above-norm and below-norm, for the machine-building industry. Over eighty of these are major projects. These projects and especially the modern machine-building plants designed with the help of the Soviet Union will lay the preliminary groundwork for the establishment of an independent, modern machine-building industry in China.

The following are details of the construction programme:

1. Major machine-building construction projects connected with the metallurgical and mining industry:

Two new heavy machinery plants, one mining-machinery works, one petroleum-mining machinery works, one pneumatic tools factory; two reconstructed heavy machinery plants and five reconstructed mining-machinery works. These will all be completed between 1954 and 1960.

When completed, their planned capacity for production of metallurgical equipment will be large enough to manufacture annually 75,000 tons of equipment for iron-smelting and steel-making enterprises, rolling mills and coking plants. They will be able to produce a complete set of equipment for an iron and steel works with an annual capacity of 1,600,000 tons of steel. This latter will include a complete set of blast-furnace equipment of 1,300 cubic metres, 370 tons of open-hearth furnace equipment and a set of 1,000-millimetre blooming mills.

Their planned capacity for the production of mining machinery will be large enough to manufacture annually 81,000 tons of mining and ore-dressing equipment, which will provide a complete set of coal-mining equipment with an annual output of 25,000,000 tons of coal together with a complete set of equipment for coal washing and dressing with an annual capacity of 10,000,000 tons of coal. This will include hoisting machinery with a drum four metres in diameter, and excavators each with a three-cubic-metre grab.

Their planned capacity for the production of petroleum-mining machinery will be large enough to turn out 15,000 tons of drilling equipment able to drill 300,000 to 400,000 metres a year. This will include 3,200-metre drilling machines.

2. Major construction projects connected with the power industry:

Two new boiler works, two steam-turbine works, and two generator works and one electric motor factory, one wire and cable factory, one electrical instruments and apparatus works, and a carbon-brush factory, one reconstructed electric motor factory, a low-voltage switchgear works, and a transformer factory. These projects will all be completed between 1955 and 1961.

When completed, their planned capacity will be large enough to produce annually thermal and hydro-electric power equipment with a capacity of 800,000 kilowatts; this will include complete power-generating units with capacities of 12,000, 25,000 and 50,000 kilowatts.

3. Major construction projects connected with transport:

Two new motor-vehicle works, one motor-vehicle spare-parts factory, one new locomotive works and one passenger-carriage works; two reconstructed rolling-

stock plants. In addition to this, five locomotive maintenance and repair works will be newly built or reconstructed and one rolling-stock maintenance and repair works will be built and one will be reconstructed in this five-year period. These projects will all be completed between 1955 and 1960.

When completed, their planned capacity will be large enough to produce annually 90,000 lorries, 930 locomotives, 1,500 passenger carriages and 9,000 goods wagons.

4. Technical equipment for agriculture:

A tractor plant to be built in this five-year period will be completed in 1959. It will have an annual capacity of turning out 15,000 54-h.p. tractors, enough to plough an estimated 45,000,000 *mou* of land. The Plan also provides for preparatory work for another tractor plant and a combine-harvester plant.

5. Construction projects connected with the chemical industry:

One oil-refining and chemical engineering equipment works and one chemical engineering equipment repair works. When these two works are completed, China will be able to manufacture her own chemical engineering and oil-refining equipment.

6. Major construction projects connected with the machine-building industry itself:

Four new and reconstructed machine-tool works, three ball-bearing works, one new measuring instruments and cutting-tools plant, one tool factory and one emery-wheel factory. These projects will all be completed between 1954 and 1960.

When these projects are completed they will, together with the already existing machine-tool manufacturing enterprises, have an annual production of about 30,000 units of machine-tools. These will include five-metre vertical lathes, 8.5-metre plane-milling

machines and other automatic and semi-automatic precision machine-tools.

Several machine-building factories will be built or reconstructed for the textile industry, the building industry and other branches of industry. These will mainly include a textile machinery works, a metal-structure works, a radio-equipment factory and a weights and measures factory. When the textile machinery works goes into full production, China will be able to produce complete sets of textile, printing and dyeing equipment.

A heavy responsibility rests on our existing machine-building factories during the period of the First Five-Year Plan. We will ourselves manufacture from 30 to 50 per cent of the equipment needed for the 156 projects which are being designed with the help of the Soviet Union; at the same time the machine-building industry is faced with many demands from various branches of the national economy. It is therefore necessary, on the basis of a higher technical level, to fully utilize and expand the productive capacity of existing machine-building works and to increase their production of new types of products. In this five-year period, we must rely on our original enterprises as well as new and reconstructed enterprises that come into production to produce equipment for iron-smelting and steel-making, equipment for small and medium hydro-electric and thermal power plants and other electrical equipment needed by the power industry; accessories and complete sets of equipment for the coal, non-ferrous metals, and cement industries; drilling machines together with accessories for the oil industry; various metal-cutting machine-tools; rolling stock and vessels needed for transport; and complete sets of equipment for textile,

printing and dyeing, sugar-making, paper-making and food industries.

The rapid growth of agricultural co-operation makes it essential to produce two-wheeled ploughs and other improved farm tools on a large scale. Bicycles, sewing machines, clocks, radio sets, medical instruments, typewriters, electric fans, etc., will be produced to satisfy the daily needs of the people.

In this five-year period, the machine-building industry will initiate the trial manufacture and full-scale production of new types of products. The most important of these are: blast furnaces each with a capacity of 1,000 cubic metres together with auxiliary equipment, able to produce 350,000 tons of pig iron annually; equipment for 185-ton open-hearth furnaces; coke-oven equipment with batteries of 55 retorts and with an annual capacity of 300,000 tons of coke; 675-h.p. Diesel engines; equipment for 3,000-12,500 kilowatt hydro-electric power stations; a complete set of equipment for 2,500-6,000 kilowatt thermal power plants; a 1,800-h.p. electric motor for a rolling mill; 154,000-volt, 30,000-kva high-tension transformers; four-ton lorries; modern freight locomotives; coastwise cargo ships of 7,450-ton displacement; 37-h.p. tractors; combine-harvesters; excavators with a three-cubic-metre grab; 100-ton overhead travelling cranes; equipment for a cement factory with an annual capacity of 300,000 tons; a complete set of equipment for a shaft with an annual capacity of 900,000 tons of coal; equipment for a printing and dyeing mill with an annual capacity of 3,000,000 bolts of cloth; sugar-making machinery able to process 2,000 tons of sugar-cane a day; microscopes with a magnifying power of 1,500 times; X-ray machines for medical use and 142 new types of metal-cutting machine-tools.

By 1957, the total value of the output of the nation's machine-building industry will be 2.5 times that of 1952. State enterprises will account for 77.7 per cent of this, joint state-private enterprises for 15.9 per cent, and private enterprises for 6.4 per cent.

In order to fulfil the above-listed production targets, to fully utilize our original enterprises and put an end to the haphazard way of production, the following points should be noted:

1. We must make a thorough study of conditions of production in machine-building enterprises under the ministries, local authorities, joint state-private control and in private hands, as well as the needs of various branches of industry and markets; we must gradually bring about an over-all arrangement, let all play their proper part and improve co-ordination between them.

2. We must gradually implement a uniform plan for the manufacture of engineering products, continuously enlarge the sphere of planned distribution of products, and introduce a system of centralized inspection of orders placed with foreign countries. We must improve the supply of materials and maintain a balance between production, supplies and market demands so that the needs of the country are met.

3. We must utilize the potential capacity of existing machine-making factories in a reasonable way; greatly improve our manufacturing techniques; improve the design of products and get a wider collection of designs; increase our possibilities for trial manufacture of products; see that each year we can fulfil the plan for the trial manufacture and production of new types of products; increase the range of new products and improve their quality.

4. We must improve the co-operation between various enterprises; we must strictly observe the con-

tract system, and organize the production and supply of complete sets of equipment and accessories.

G. Chemicals The chemical industry is an important factor in promoting the growth of agriculture and other industries. Our policy of developing the chemical industry during the period of the First Five-Year Plan is to foster the rapid growth of the chemical fertilizer industry and ensure an adequate expansion of industries producing acids, alkalis, rubber and dyes.

To meet the needs of agriculture, five nitrogenous-fertilizer plants will be built or reconstructed in Northeast, East, Northwest and Southwest China during this five-year period. Two of these are modern plants designed with the help of the Soviet Union and they will go into production in 1958 and 1960 respectively. When both of these plants are working to capacity, they will produce 210,000 tons of nitrogenous fertilizer a year; this is as much as all the chemical fertilizer produced in our country in 1952. In addition, two phosphate-fertilizer plants will be built in North and East China with a planned capacity of 300,000 tons.

In order to supply our motor-vehicle and other industries with the rubber goods they need, we shall in this five-year period reconstruct four rubber-goods factories in Northeast, North and East China and build one new assorted rubber-goods factory. In association with this development of the rubber industry, two carbon-black plants will be built, one in the Northeast and one in the Southwest.

A plastic materials plant will be reconstructed in East China in order to supply the needs of the machine-building industry.

The Soviet Union is helping us design two modern dyestuff plants which will be built in this five-year

period. When completed, these two plants will increase the output of dyestuffs considerably and also produce many new dyes which are popular among our people, such as indanthrene, variamine blue, indigo, as well as many intermediates. Imports of dyestuffs will at the same time be gradually decreased.

A new cinematographic film plant will be built, which Czechoslovakia is helping us to design. When completed in 1960, it will have an annual production of 65,000,000 metres of film.

In addition, in this five-year period we will build one calcium-carbide and calcium-cyanamide plant which is being designed with Soviet help, and build one soda plant and reconstruct another. One paint factory will be reconstructed. A plant will be built to develop, fix and print cinematographic films.

The output of principal products in the chemical industry will show a marked increase in the First Five-Year Plan period. (See Section II of this Chapter.) At the same time, the range of new products will be enlarged and the quality of products improved.

Attention must be paid to the following points in the chemical industry:

1. We must expand and improve our work in the study, trial manufacture and production of new products, paying special attention to various types of plastic materials, special paints and high-quality dyestuffs.

2. We must see to it that new technical achievements are introduced on a wide scale, raise the conversion rate of synthetic ammonia and the factor of utilization of specific volume in the equipment of sulphuric acid to secure an increased production of chemical fertilizer.

3. We must expand and improve the co-operation between the chemical industry and the coke-making,

oil and non-ferrous metals industries so as to utilize the by-products of these industries to the fullest extent.

4. We must make a thorough consideration of the conditions of production of and needs for the chemical industry in our country, unify planning step by step and strengthen co-ordination and co-operation in production so as to increase output and reduce imports of raw materials for the chemical industry.

H. Building Materials Factories related to the building-materials industry should be built or reconstructed according to the needs of national construction and so distributed as to maintain a geographical balance.

Twenty-one above-norm construction projects will be built for this industry in this five-year period.

To keep pace with industrial construction in North, Northwest, Northeast and Southwest China, ten above-norm cement plants will be built or reconstructed; they will be completed between 1953 and 1959, and will have a planned capacity of 3,080,000 tons. The total productive capacity of this industry will be increased by 1,920,000 tons in this five-year period and if the capacity of below-norm construction projects is added, the total rise in productive capacity will be 2,360,000 tons. At the same time, three prefabricated concrete plants will be built. They will all be completed by 1956 and will have a planned annual capacity of producing units totalling 90,000 cubic metres.

The reconstruction of an asbestos mine in Sikang and a glass factory in North China will be completed within this five-year period.

The building-materials industry must pay particular attention to the production of high-quality Portland cement, increase the output and raise the quality of

pottery, asbestos tiles and sheet glass used for building construction. Where new industrial cities are being constructed, local enterprises will increase the production of bricks and tiles according to plan; attention must be paid to improving the quality of products and unifying standards.

By 1957 state enterprises will provide 68 per cent of the total national output of cement; while 32 per cent will come from joint state-private enterprises. All privately-owned cement works will be transformed into joint state-private enterprises.

I. Lumber Production of lumber must be expanded according to plan to meet the needs of national construction.

In this five-year period, 13 lumbering enterprises will be built in Northeast China and the Inner Mongolian Autonomous Region, and one in Northwest China. By 1957, there will be a total of fifty lumbering enterprises in the country; 32 of these will be located in Northeast China, eight in the Inner Mongolian Autonomous Region, five in Southwest China and five in Northwest China, three of which will come under local authorities.

To meet the needs of the lumbering industry, 3,049 kilometres of forest-railway lines will be laid by 1957 in Northeast China and the Inner Mongolian Autonomous Region.

In this five-year period the following new production equipment will be provided for state lumbering enterprises:

41 forest-railway locomotives; 67 transport tractors; 988 tractors for hauling logs; 536 loading machines; 830 lorries; 84 winches; 133 mobile power stations and 283 electric and power-driven saws.

By 1957, China will have an annual production of 20,000,000 cubic metres of timber; this is double the

1952 figure. State enterprises will produce 13,929,000 cubic metres of this, while 6,071,000 cubic metres will be felled by private initiative and purchased by the state.

Six above-norm construction projects will be started for the timber-processing industry in this five-year period: three factories for the preservation of railway ties with an annual capacity of 5,100,000 ties, to be completed between 1955 and 1956; one saw mill with a capacity of 100,000 cubic metres, to be completed in 1956; and two plywood factories, to be completed in 1957.

Attention must be paid to the following points in the lumbering industry:

1. We must carefully implement a policy for rational felling, and to protect our forest resources, associate our felling plans with measures of preservation and afforestation; we must make full use of our forest resources, both of trees which have economic values and those suitable for felling.

2. We must make an intensive effort to investigate our forest resources, exploit new forest areas according to plan, improve our over-all planning and designing, expand and improve the prospecting, surveying and designing of capital construction projects and management on construction sites, and do our best to raise the quality of our engineering work; reduce construction costs and ensure the fulfilment of timber production plans.

3. We must improve the administration and management of lumbering enterprises, improve our organization for the management of production, use equipment to full capacity, popularize the most modern experience in production, raise the productivity of labour and lower costs. We must step by step promote mechanization in the felling and transport of

timber and organize year-round work in Northeast China and the Inner Mongolian Autonomous Region.

4. We must improve our methods of conversion, raise the output of timber and its quality, and gradually unify standards in sawing.

5. We must improve our leadership and control of lumbering work undertaken by individuals.

6. Because of the inadequacy of our available timber resources, we must adopt various measures to ensure strict economy in the use of timber.

SECTION IV. LIGHT INDUSTRY

A. Textiles The cotton-textile industry occupies an important place in China's textile industry. In 1952 cotton piece-goods made up 98.8 per cent of the total national output of textile goods of all kinds; silk, woollen and linen fabrics made up the other 1.2 per cent.

China's cotton-textile industry had a relatively sound foundation, nevertheless it had only 5,660,000 spindles in 1952 and 38.2 per cent of these belonged to private enterprises. The output of cotton yarn and piece-goods could not keep pace with the growing needs of the people. The majority of these enterprises were concentrated in Shanghai, Tsingtao, Tientsin, Dairen and their neighbouring cities, far from the sources of raw materials and the hinterland markets for finished products. The geographical distribution of these enterprises was quite irrational.

Steps for development of the textile industry under the Five-Year Plan:

1. We shall, in the first place, utilize and make rearrangements for all existing equipment in our cotton mills and bring its capacity to full play.

2. We shall gradually transform all private textile mills using power-driven machinery into joint state-private enterprises and finally bring them wholly within the scope of the state plan.

3. We shall build new mills according to plan in cotton-producing areas where conditions are suitable, and expand our cotton-textile industry in the hinterland to keep up with the increase in the output of cotton and the growing needs of the people.

4. We shall take energetic steps to restore and develop the silk, woollen and linen-textile industries on the basis of the restoration and expansion of production of silk, wool and flax, and establish an artificial fibre industry so as to lay the necessary foundation for the future, many-sided development of the textile industry.

Fifty-three above-norm construction projects will be built for the textile industry in this five-year period; 29 of these come under the Ministry of Textile Industry, nine are state-owned textile mills run by industrial departments of local authorities, and 15 will be built with reserve funds by joint state-private enterprises.

1. Construction for the cotton textile industry.

We shall have 1,890,000 more spindles and 54,500 more looms when all the new cotton mills to be built in this five-year period are completed. Of this number, 1,340,000 spindles and 46,000 looms will belong to enterprises under the Ministry of Textile Industry (including joint state-private enterprises under the central authorities); 240,000 spindles and 4,500 looms will belong to state-owned enterprises run by local industrial departments; and 310,000 spindles and 4,000 looms will belong to joint state-private enterprises under local authorities. By 1957, these various enter-

prises will already have 1,650,000 spindles and 47,100 looms of this total in operation.

The following are details of the main construction programme:

The Ministry of Textile Industry will provide funds for the building of 19 mills. Seven of these will be built in North China with a total of 538,000 spindles and 18,700 looms; six will be built or reconstructed in Northwest China with a total of 381,700 spindles and 14,800 looms; four will be built in Central-South China with a total of 259,000 spindles and 7,700 looms; and two will be built or reconstructed in Northeast China with a total of 78,600 more spindles and 107 more looms.

Six mills will be built by local authorities. Two of these will be built in North China, three in Central-South China and one in Northeast China, with a total of 216,000 spindles and 3,500 looms. A knit-goods factory will also be built in North China.

Joint state-private enterprises will provide investments for the building of 13 mills. Three of these will be in North China, three in Northwest China, three in East China, and four in Southwest China, with a total of 288,000 spindles and 7,300 looms.

2. Construction for the printing and dyeing industries.

In association with the building of cotton mills, the Ministry of Textile Industry will build one printing and dyeing factory in North China, one in Central-South China and two in Northwest China, with a total annual capacity of 9,600,000 bolts of cloth. Another printing and dyeing factory will be built by the local authorities in North China and one each in Northwest and Central-South China by joint state-private enterprises.

3. Construction for the silk and linen industries.

The Ministry of Textile Industry will build a silk filature in Southwest China, a jute mill in East China, two flax-processing factories and one linen mill in Northeast China. A pongee silk factory will be built by the local authorities in Northeast China.

4. Construction for the artificial fibre industry.

The Ministry of Textile Industry will build a rayon mill in Heilungkiang Province.

Five million bales of cotton yarn (exclusive of homespun yarn) will be produced by our mills in 1957. This is an increase of 38 per cent over 1952; the output of cloth (exclusive of 15,000,000 bolts of hand-woven cloth) will be 163,721,000 bolts, an increase of 47 per cent over 1952.

State-owned mills will produce 51.4 per cent of the total output of cotton yarn in 1957; joint state-private mills will produce the remaining 48.6 per cent.

In 1957, the national output of woollen fabrics will be 7,500,000 metres, an increase of 103 per cent over 1952; the output of linen, 18,300,000 metres, 64.6 times as much as in 1952; the output of gunny sacks, 68,000,000, an increase of 1 per cent; the output of silk goods (exclusive of homespun silk) of various kinds, 69,294,000 metres, an increase of 78.5 per cent.

In these five years, special attention must be paid to increasing the number of types and designs of textile goods as well as improving their quality. This refers especially to cotton piece-goods. We must increase the output and improve the quality of silk, woollen and linen fabrics, and prepare energetically to increase the output of artificial fibres, so as to satisfy all the varied needs of the people. We must also pay attention to economizing on raw materials, especially cotton.

B. Food Flour, fats and oils, sugar, salt, wine and spirits, canned food, processed meat and milk

products are among the principal products of the food industry. Cigarettes are also placed under this head. During this five-year period the main emphasis on construction for the food industry will be on sugar refining; but the meat-processing industry will also be suitably developed. There will be a rearrangement of the geographical distribution of enterprises in the fat and oil industry to achieve a more rational use of its resources.

Twelve of the 34 above-norm construction projects in the food industry come under the Ministry of Light Industry; 12 under local industrial departments; nine under commercial departments; and one under the Ministry of Food. These 34 construction projects include: 18 sugar refineries, nine meat-processing plants, one oil-extraction factory, three salt refineries, one winery, one malt-house and one flour mill. All these factories will be completed in this five-year period with the exception of the sugar refineries in Kwangsi Province, Peichieh in Kwangtung Province and Changchow in Fukien Province, which will be completed in 1958.

Output of principal food industry products in 1957: flour, 4,670,000 tons, an increase of 56 per cent over 1952; processed meat and fish, 921,000 tons, an increase of 166.4 per cent; edible vegetable oil, 1,794,000 tons, an increase of 82.5 per cent; sugar, 1,100,000 tons, an increase of 144 per cent; salt, 7,554,000 tons, an increase of 52.8 per cent; and cigarettes, 4,700,000 crates, an increase of 77 per cent. (The production of edible vegetable oil, sugar and salt by handicraft co-operatives and individual handicraftsmen is included.)

In 1957, state-owned enterprises under the central authorities and state-owned enterprises run by local authorities will account for 64.7 per cent of the value

of output of the above-mentioned six principal products; co-operative enterprises for 6.9 per cent; joint state-private enterprises for 17.2 per cent; private enterprises for 4.2 per cent; and handicrafts for 7 per cent.

Attention must be paid to the following points in the food industry:

1. We must promote the use of new oil-bearing crops, and popularize knowledge of advanced methods of extraction so as to raise the average rate of extraction.

2. We must systematically improve the technique of sugar refining and oil extraction in handicraft workshops and raise their output.

3. We must make better use of the by-products of the food industry (the residue of sugar-cane and edible oil, cotton bolls and exhausted molasses, for example) and thus raise their economic value.

4. We must, in order to economize on grain, gradually use more potatoes and fruits to replace rice, wheat and coarse grains for making alcoholic drinks.

C. Drugs and Medical Supplies The medical supplies industry, a new industry in China, has developed considerably during the past few years. The number of private enterprise, however, has outstripped that of state-owned enterprise. In most cases, production techniques in this field are still very backward, and quality is low. There are many factories but they are mostly small and the majority of them are merely processing plants.

The main emphasis in construction for the medical supplies industry in this five-year period will be on facilities for the manufacture of antibiotics, synthetic antibiotics and chemical intermediates which play an important part in protecting the health of the people. Meanwhile, attention must be paid to research and

experiment on the traditional Chinese pharmaceuticals and the cultivation and processing of Chinese herbs.

There are four above-norm construction projects for the medical supplies industry, two of which are designed with Soviet aid. Their construction programme is as follows:

Two pharmaceutical works will be built in North China to produce various kinds of antibiotics, sulpha-drugs, glucose and other principal drugs.

Two pharmaceutical works will be built in North-east China to produce sulpha-drugs, chloromycetin and biologicals.

Output of principal drugs in 1957: penicillin, 29,000,000 vials (300,000 units per vial); chloromycetin, 6,000 kilogrammes; sulpha-drugs, 844,000 kilogrammes.

Private factories manufacturing important drugs will, in this five-year period, be transformed into joint state-private enterprises, and the production of the principal raw materials used for medical purposes will be gradually turned over to state-owned medical supplies factories.

The necessary technical personnel for the medical supplies industry will be gathered together and trained; research and trial manufacture of new products will be improved and expanded; the quality of products will be raised.

Health administration authorities must improve the inspection of drugs, prohibit production of sub-standard drugs, and other inferior products that impair the health of the people.

D. Paper Part of the capacity of China's paper industry was not fully utilized in the past because the types of paper produced did not meet public needs. The present situation is that there is stockpiling of one-side glazed paper, but there is not enough news-

print, book paper or paper bags for cement, and the greater part of special papers used for industrial purposes comes from abroad.

In developing the paper industry in this five-year period, the main emphasis will be on laying a technical foundation for the manufacture of paper for industrial purposes, ensuring a regular supply of newsprint and book paper and increasing the production of pulp so as to keep pace with the demand of the paper industry.

The paper industry will have 10 above-norm construction projects, one of which is designed with Soviet aid. Eight of these projects come under the Ministry of Light Industry and two belong to local industrial departments.

The following are the principal construction projects:

An integrated plant to make pulp and paper will be built in Northeast China. It will also produce paper bags for cement, cable paper, copper screen needed in the making of paper, as well as other products.

A bagasse-pulp plant will be built and a paper mill reconstructed in Central-South China to increase our productive capacity in newsprint and chemical pulp.

A cigarette-paper mill will be built in East China.

A high-quality paper mill will be built in North China.

Seven of these 10 above-norm construction projects will be completed in the five-year period, and will increase our production capacity as follows:

Pulp: 85,000 tons (including chemical pulp: 29,000 tons; mechanical pulp: 48,000 tons);

Paper: 66,000 tons (including paper for industrial purpose: 2,000 tons; newsprint: 55,000 tons).

By 1957, the national output of machine-made paper

will be 655,000 tons, of which 154,000 tons will be newsprint.

When the above-mentioned state-owned pulp and paper-making plants go into production and with the conversion of a large number of private mills into joint state-private enterprises, the output of the paper industry in 1957 will be as follows:

State-owned enterprises both under the central and local authorities, 61.6 per cent; joint state-private enterprises, 37.3 per cent; co-operative enterprises, 0.1 per cent; and private enterprises, 1 per cent.

We must pay special attention to the following points in the paper industry:

1. To conduct active research on grass fibres as raw materials for paper-making; try to utilize reject and waste as raw material, economize on wood as raw material;

2. To improve and expand the trial manufacture and production of new types of paper for industrial purpose; and

3. To systematically learn and master new production techniques (chloridization in pulp-making, for example) so as to raise the quality of pulp.

E. Other Light Industries The light industries referred to here include printing, enamel ware, pottery and porcelain, leather, furs and hides, matches, articles and apparatus for use in the fields of culture, education, science and the fine arts, soaps, cosmetics, etc. These industries have a wide range of products and are scattered in many areas. Their existing equipment has a considerable latent capacity. During this five-year period this should be brought into play on a rational basis and the necessary capital construction in these fields should be carried out according to the needs of society, maintaining a proper balance of production throughout the country. With regard to pot-

tery and porcelain, we must endeavour to widen the range of products as well as improve their quality.

These light industries will have seven above-norm construction projects in this five-year period—five printing works, one stamp-printing works, one pottery and porcelain factory.

In addition to these above-norm construction projects scheduled, we should also organize a considerable number of below-norm construction projects for these industries, making an over-all arrangement for them according to the needs of society and the principle of balance in national production.

In addition to the above, arrangements should be made for the following important industries in accordance with the specific conditions pertaining to them in this five-year period:

1. The existing productive capacity of the match, fountain pen and pencil industry is considerable. The leather industry also has unused capacity. So these industries need no factories either newly built or reconstructed. What is needed is that production in these industries should be properly reorganized according to the needs of society so that quality is improved and costs lowered. Attention should be paid in the match industry to the need for economy in the consumption of timber; attention should be paid in the leather industry to utilization of skins other than ox-hide. In regard to the fountain pen and pencil industries, the many small, scattered factories should be gradually brought together where conditions are suitable to form relatively large, self-contained factories.

2. In regard to enterprises producing thermos-flasks, enamel ware and other goods, attention should be paid to regulating the proportions in which various types of products are turned out, energetically increas-

ing the proportion of the output of products suited to consumers in the rural areas, industrial equipment accessories and medical equipment.

The number of private enterprises in the above-mentioned light industries is considerable; and a majority of these private factories are small or handicraft workshops. It is therefore necessary to carry out step by step their socialist transformation through various forms over a longer period of time, and at the same time popularizing suitable technical innovations so that the output of these enterprises can gradually come to satisfy the many-sided needs of the people.

SECTION V. LOCAL INDUSTRIES

A. Policy for the Development of Local Industries

The planned development of local industries relying on initiative and creativeness of the local authorities and people is an essential part of our Five-Year Plan.

Industrial establishments belonging to various sectors of the national economy (state-owned, co-operative, joint state-private and private) under local management account, at the present time, for a large proportion of the total value of the country's industrial output. In 1952, these local industries produced goods to a value of 16,090 million yuan. This was 59.6 per cent of the total value of industrial output in the country. In 1957 the corresponding figures will be 30,160 million yuan, or 56.3 per cent.

Industrial establishments under local management can now be divided into two groups according to the scale on which their supplies of raw materials, production and marketing operations are co-ordinated (so as to achieve a balanced economy). The first group

includes establishments whose operations need to be brought into balance and co-ordinated on a national scale; most of these are concentrated in the old industrial cities like Shanghai, Tientsin, etc. The second group is made up of establishments whose operations need to be co-ordinated on a local scale; these are scattered all over the country. The primary task of the first group of enterprises is to co-ordinate their operations with other state enterprises under the central authorities so as to serve national construction and the daily needs of the people in a consistent way on the basis of existing conditions of supplies of raw materials, production and marketing. The task of the second group is primarily to serve the needs of agricultural production and the rural population.

During this five-year period, therefore, we should do all we can to enable Shanghai, Tientsin and other industrial cities to reorganize and make more rational use of their industrial equipment and technical personnel and play their proper part in the economy. At the same time, in those vast areas which still lack an industrial foundation, we should devise measures suited to local conditions to develop local industries and handicrafts for the production of manufactured goods to meet local or national needs—goods which state enterprises under the central authorities and the older industrial cities cannot supply. In doing this we must place reliance on local authorities and consider both local economic characteristics and over-all national needs for a balanced and co-ordinated industry. In areas inhabited by national minorities, we should foster industries and handicrafts needed by their people, taking into account available local resources, transport facilities and the general level of economic development in those areas. In order to avoid blind expansion with consequent conflict of goals or lack of co-

ordination between local and central departments or between different areas, the state must make whatever adjustments are necessary both in regard to capital investments in industries in the different economic sectors of the various areas and in regard to specific projects to be built or reconstructed. The State Planning Commission must examine the capital construction plans of the various provinces and cities in the light of the above conditions.

The state must make reasonable arrangements for industrial enterprises belonging to different sectors of the economy under local management in matters relating to production quotas, supplies of raw materials and marketing, in accordance with the policy of unified planning which, under the guidance of the state sector of the economy, gives due consideration to the interests of all parties concerned. The purpose of such arrangements is to enable each of the enterprises concerned to play its full role and gradually incorporate them all into the state plan. No matter where they are located or to what sector of the national economy they belong, industrial enterprises whose operations, either in production, supply or marketing, range over the whole country or several provinces should all be brought under a system of control covering industrial production according to types of products. This will enable us to gradually incorporate the production of all industries of the various sectors of the national economy into the unified state plan, and also into the local plans. The various provinces or cities will be assisted by the central industrial departments concerned to organize and inspect the implementation of these plans. Taking a whole province or city as a unit, we should gradually incorporate the operations of industrial enterprises whose production, supply or marketing is limited to one province or one area, into

the provincial or municipal plans and co-ordinate these with the unified state plan. The province or city concerned should organize and check execution of such plans. At the same time, the state, working through the Ministry of Commerce and the Ministry of Local Industry or through the local authorities concerned in the province or city, must exercise control over plans for placing government contracts with private enterprises for the manufacture and processing of goods, so as to prevent this work from developing blindly and put the operations of the industries concerned on a more regular and systematic basis.

The state should give energetic encouragement to local industries belonging to the different economic sectors in raising their technical level, reducing costs, increasing their assortment of goods and improving quality. It should help the expansion of those branches of industry which benefit social production and the people's livelihood, and enterprises which produce good-quality goods. It should support and give due consideration to those branches of industry which prove somewhat beneficial to social production and the people's livelihood and enterprises owning a certain amount of technical equipment. It should restrict or eliminate those branches of industry or enterprises which are privately owned and are harmful to social production and the people's livelihood, while, of course, providing suitable work for the workers and staff employed there and for the managerial personnel representing the interests of the capitalists concerned.

Implementing the policy of serving and working in close co-ordination with the rural economy, local industries which need to be co-ordinated within one area should adapt their products and construction plans to meet the new demands of agriculture and handicrafts which are in the midst of a process of gradual trans-

formation into co-operatives. They should manufacture such means of production as farm implements and machinery, fertilizers, rural transport equipment and handicraft tools. Attention should also be paid to developing repair services for farm tools and the processing of fodder. They should produce a wide range of good-quality daily necessities. At the same time, in areas where many capital construction projects are situated, local industries should, depending on the needs of construction, ensure a supply of building materials such as bricks, tiles, lime, sand, gravel, etc. Some of the local industrial enterprises should produce a certain amount of supplementary materials and spare parts, and should also take up a certain amount of repair work as required by, and under the guidance of state industries under the central authorities located in their areas.

Local industrial enterprises should, whenever possible, make productive use of scrap material from state industries under the central authorities located in their areas. They should also do their best to exploit new sources of raw material and substitutes. State industries under the central authorities should make it their duty to supply scrap to local industries.

The State Planning Commission, the Ministry of Commerce, the Ministry of Local Industry and the All-China Federation of Co-operatives should all intensify their investigation and study of the state of local industries. Meanwhile, information concerning the state of these industries should be regularly exchanged between the authorities at various levels and between areas in order to help these industries improve their plans and make their planning more efficient.

B. State Industries Under Local Authorities The First Five-Year Plan provides for 64 above-norm and

approximately 870 below-norm construction projects for state industries under local authorities.¹

During these five years the 64 above-norm construction projects for state industries under local authorities will bring about the following increases in productive capacity:

Power: 22 projects, increase in capacity during these five years, 30,824 kilowatts.

Coal: 9 projects, increase in capacity during these five years, 5,410,000 tons.

Non-ferrous metals: 1 project, increase in capacity during these five years, tungsten concentrate 7,900 tons, tin concentrate 6,730 tons.

Chemicals: 3 projects, increase in capacity during these five years, potassium chlorate 2,230 tons, caustic soda 10,000 tons.

Building materials: 9 projects—6 brick and tile works, increase in capacity during these five years, 1,300 million bricks a year; 2 cement works, increase in capacity during these five years, 76,000 tons a year; 1 asbestos mine, increase in capacity during these five years, 8,000 tons a year.

Textiles: 9 projects—6 cotton mills equipped with 216,000 spindles and 3,515 looms; 1 silk textile mill; 1 knit goods mill; 1 dyeing and printing works.

Other light industries: 11 projects—8 sugar refineries, increase in capacity during these five years, 195,700 tons a year; 2 paper mills, increase in capac-

¹Of the 82 above-norm construction projects for local industries, 64 are state enterprises under local authorities and 18 are joint state-private enterprises under local authorities. Of the 1,400 below-norm construction projects for local industries, approximately 870 are state enterprises under local authorities while the rest belong to non-industrial local departments and joint state-private enterprises under local authorities.

ity during these five years, 13,400 tons a year; 1 household pottery works.

The above-mentioned 64 construction projects will be distributed as follows:

North China	11
Inner Mongolian Autonomous Region	6
Northeast	14
Northwest	8
East China	6
Central-South China	12
Southwest	7

All but two of these 64 projects will be completed during these five years.

The approximately 870 below-norm construction projects scheduled for state industries under local authorities will mainly serve the needs of agricultural production and the rural population.

There will be a huge increase in the total value of the production of state industries under local authorities during these five years. In 1957 it will be 10,880 million yuan which is 2.8 times the 1952 figure (3,920 million yuan), an average increase of 22.6 per cent a year.

The principal branches of state industries under local authorities are food and textile industries. In 1957, enterprises in the food and textile industries will produce 34 per cent and 15 per cent respectively of the total value of production of state industries under local authorities.

To ensure completion of the above-mentioned plan for state industries under local authorities, the following must be done:

1. We must exert great efforts to improve business management in state industrial enterprises under local authorities; we must improve their technical organization and equipment, ensure increased production, higher quality and lower costs.

2. Enterprises which are under the direct control of the authorities of a province, municipality, administrative region, autonomous region or autonomous *chou*¹ should, while following the leadership of the respective local authorities, be gradually put under the management of the authorities concerned with that particular branch of industry. In these enterprises systems of fixed responsibility should be established and faithfully observed, production plans should be implemented systematically, and all necessary technical regulations should be introduced.

We should consolidate all county enterprises and other small locally managed enterprises. They should work out and draft annual and seasonal production plans, improve their organization of labour and make rational use of their labour power to enable production going on regularly.

3. Capital construction for state industries under local authorities must be carried out on sound lines. While enterprises are being built or reconstructed, we must see to it that the procedures governing capital construction are strictly observed. Designing, building and preparatory work for production should be well co-ordinated to ensure a high standard of engineering quality and the start of production on schedule.

C. Processing Enterprises of the Supply and Marketing Co-operatives In 1957 the total value of production of processing enterprises belonging to the supply and marketing co-operatives will be 2,360 million yuan. This is 2.7 times the 1952 figure (860

¹Both are administrative units in which regional autonomy for national minorities is exercised. The status of an autonomous region corresponds to that of a province while the status of an autonomous *chou* is halfway between a province and a county.

million yuan), an average increase of 22.3 per cent a year.

The chief task of processing enterprises of the supply and marketing co-operatives is to serve agricultural production. Basing themselves on the needs of society, they should undertake the processing of agricultural, subsidiary and local products, repairing, assembling and making small farm implements and increasing the production of daily necessities.

SECTION VI. UTILIZATION, RESTRICTION AND TRANSFORMATION OF CAPITALIST INDUSTRY

In 1952, the value of goods produced by private industry (including modern industrial enterprises owned by private interests and handicraft workshops) was 10,530 million yuan or 39 per cent of the total value of our national industrial output. The value of goods produced by privately-owned modern industrial enterprises was 7,750 million yuan or 35.2 per cent of the total value of goods produced by China's modern industry. Privately-owned enterprises producing consumer goods, such as those concerned with cotton textiles, printing and dyeing, knit goods, rubber, paper, foodstuffs, matches, articles for cultural activities and educational equipment and other daily necessities, play an important part in their respective trades in China. Privately-owned enterprises manufacturing means of production such as those concerned with machine-building, metal fabrication, chemical processing and building materials also have a definite role to play in their respective trades.

The first step in the transformation of capitalist industry by the state is to transform capitalist enter-

prises into various forms of state-capitalist enterprises. The second step is to transform state-capitalist enterprises into socialist enterprises. In accordance with the policy of the state, it is expected that by the end of the First Five-Year Plan the greater part of private industrial enterprises will be transformed into various forms of state-capitalist economy, while the greater part of modern industrial enterprises owned by private interests will be transformed into the higher form of state-capitalist economy—joint state-private enterprises.

A. Joint State-Private Industry It is estimated that by the end of the First Five-Year Plan capitalist industrial enterprises with an output valued at approximately 5,150 million yuan in 1952 will be gradually transformed into joint state-private enterprises. By 1957 there will be about 8,000 joint state-private industrial enterprises (both old and new) with a total output valued at 11,830 million yuan. Their share in the total value of industrial production will go up from 5 per cent in 1952 to 22.1 per cent.

We should increase the number of joint state-private industrial enterprises according to the needs of the state, taking into account the co-ordination of production within each branch and trade of private industry and giving priority to important enterprises where the need for transformation is urgent. During the period of the First Five-Year Plan, we will carry out mergers of state and private capital mostly in comparatively large modern industrial enterprises which are necessary to the state and ripe for such mergers. But there will be a small number of industrial enterprises among those so transformed which will be relatively small in scale and not so well equipped.

To develop joint state-private industry the state

will invest the necessary capital and provide the necessary personnel. It will thus be able to make full use of the capital, personnel and technical equipment of existing enterprises to carry through the transformation of capitalist industry and so as to bring about general expansion of our productive capacity.

In these five years, the state will allocate 200 million yuan for investment in joint state-private industrial enterprises. We must strictly control the use of capital invested, ensure that such investments play as full a part as possible in our national production, and eliminate waste.

The reserve funds of joint state-private enterprises should be allocated and used in a systematic way. They may be invested partly in new joint state-private enterprises as well as for reconstruction and expansion of the enterprises themselves.

In joint state-private enterprises it is necessary to rely on the workers as a whole and to re-educate and rally together the old technical and managerial personnel, and members of the staff who represent the interests of private capital. They must be encouraged to take an active part in production and to improve management. At the same time, suitable and reasonable arrangements should be made for the capitalist owners.

As the number of joint state-private enterprises increases day by day, the central and local state organizations concerned should co-ordinate their activities and make a clear-cut division of responsibility in regard to the supplies of raw materials, production, marketing and business management of these enterprises, and so strengthen their leadership.

The unified state plan should include the plans for production and capital construction of all those joint state-private industrial concerns whose supplies of raw

materials, production and marketing need to be co-ordinated according to an over-all, nation-wide arrangement. At the same time the plans of those under the management of local authorities must be included in plans of the area. The plans for production and capital construction of those concerns whose supplies of raw materials, production and marketing need to be co-ordinated on the scale of a single area, must also be brought under the plan of their area.

B. Private Industry In 1952, private industrial concerns produced 10,530 million yuan worth of goods. Under the First Five-Year Plan a number of them producing goods to a total value of 5,150 million yuan will become joint state-private concerns. The remainder, producing 5,380 million yuan worth of goods in 1952, will increase their value of production by an average of 4.1 per cent a year, so that by 1957 the value of production in private industries will be approximately 6,560 million yuan. Their share in the total value of industrial production will however drop from 39 per cent in 1952 to 12.2 per cent in 1957.

During these five years, we must do all we can to fulfil the plan for increased production in private industrial enterprises. For this purpose, the responsible central industrial departments and state commercial departments concerned must co-operate and, in accordance with the state's policy of unified planning which gives consideration to all parties concerned, make over-all arrangements trade by trade covering production, supplies of raw materials and marketing in all the major branches of private industry. They must also improve planning in awarding government contracts for manufacture and processing of goods by private firms, and state purchase and distribution of the finished products of private firms. By so doing, they will be able to make use of the positive

sides of capitalist industry which are beneficial to national welfare and the people's livelihood, and restrict their negative sides which are not beneficial to national welfare and the people's livelihood.

Step by step our unified state plan as well as our local plans must include the plans for production and capital construction of those private industrial enterprises whose supplies of raw materials, production and marketing must be co-ordinated as part of an overall nation-wide arrangement. As for those private industrial concerns whose supplies of raw materials, production and marketing need to be co-ordinated on the scale of a single province or an area smaller than a province, their plans for production and capital construction should be gradually brought under the local plans and also co-ordinated with the unified state plan.

Workers must exercise increased supervision over those private industrial enterprises in which they work. This will supplement the control of state administrative organs and the leadership of the state sector of the national economy. They will see to it that private concerns abide by the laws and regulations of the state and improve the management of their enterprises. This will help prepare conditions for medium and small private industrial enterprises to be transformed into joint state-private enterprises.

At the same time as we carry out the socialist transformation of private concerns, we should encourage capitalists to make a great effort to familiarize themselves with the fundamental task of the state during the transition period and other policies, to remould themselves, abide by the laws of the state and actively support the socialist transformation of the country.

SECTION VII. HANDICRAFTS

China's handicrafts play an important part in meeting the needs of the people in town and countryside, and especially in meeting the peasants' demands for farm tools and daily necessities. They also play a very definite role in meeting the needs of our export trade. Working on the principle of achieving a proper balance and co-ordination both on a national scale and locally, we should guide handicraft production according to plan, see that the necessary materials are available, encourage initiative in serving agricultural production and the daily needs of the rural and urban population. At the same time, we must protect handicrafts involving special skills, and improve and raise the level of specialized handicraft production.

We should, in accordance with the fundamental task of the state during the transition period, gradually lead handicraftsmen by persuasion on to the road of co-operation in the first five years and by giving them practical examples and state aid so that the handicraft producers' co-operatives will become able assistants of state industry.

Co-operation in handicraft production should develop gradually through the various lower forms to the relatively higher forms on the basis of the voluntary desire of the handicraftsmen and according to the extent to which they can accept these changes.

In developing handicraft producers' co-operatives we must consistently follow the policy of "giving active leadership and maintaining a steady advance" and we must improve our planning so as to avoid any blind advance. As we expand handicraft producers' co-operatives, we must also give consideration to the handicraftsmen working on their own so that both

co-operative and individual handicrafts are included in a unified and reasonable arrangement.

Handicraft producers' co-operatives should produce means of production needed by the rural and urban population, especially those needed by the peasants like tools of wood and metal, bamboo and leather goods as well as household articles and daily necessities. They should sign regular supply and marketing contracts with state trading organizations and supply and marketing co-operatives. For this purpose, both handicraft producers' co-operatives and supply and marketing co-operatives must make thorough, regular and prompt investigations and studies of the types, quantities and specifications of handicraft products needed by the local people, especially the peasants, and find out when such products will be needed, so that they can systematically organize production in the co-operatives and place contracts for the manufacture and processing of goods.

Every handicraft producers' co-operative should, according to its own specific conditions, pay attention to improving management and technique in order to raise the level of production. Drawing on their practical experience, they should do all they can to improve their organization of labour and working processes, rationalize the division of labour and introduce a system of personal responsibility for the finished product, so as to raise quality, and reduce costs and the number of rejects.

In these five years, there will be a big increase in the total value of production of handicrafts—from 7,310 million yuan in 1952 to 11,770 million yuan in 1957, that is, an increase of 60.9 per cent or an average increase of 9.9 per cent a year.

The value of production of co-operative handicrafts will rise from 250 million yuan of this total in 1952 to 4,550 million yuan in 1957, that is, an increase of 18 times. Of this, the value of production of handicraft producers' co-operatives will rise from 250 million yuan in 1952 to 3,190 million yuan in 1957, 12.9 times the old figure, while the value of production of supply and marketing producers' co-operatives and production teams will amount to 1,360 million yuan.

The value of production of individual handicraft producers accounted for 7,060 million yuan of the total value of production of handicrafts in 1952. In spite of the fact that a great number of handicraftsmen will join handicraft producers' co-operatives or production teams during the five years of the Plan, the value of output of individual handicraft producers will rise to 7,220 million yuan in 1957, an increase of 2.2 per cent.

In 1952, handicraft producers' co-operatives had 218,000 members; it is planned to increase their membership to 2,100,000 in 1957, that is, an increase of approximately 9.6 times.

CHAPTER FOUR

AGRICULTURE

SECTION I. AGRICULTURE

A. The Expansion of Agriculture Is a Basic Condition for Ensuring the Development of Our Industry and Fulfilment of Our Economic Plan as a Whole Industry and agriculture are the two most important component parts of the national economy. It is agriculture that provides conditions for the growth of industry. Comrade Mao Tse-tung said in his report *On Coalition Government*: "The peasants—the mainstay of the market for China's industry. Only the peasants can supply an abundance of food-stuffs and raw materials and consume manufactured goods in huge amounts." We are determined to develop industry, but we must on no account overlook the importance of developing our agriculture. Practical life has, in fact, brought home to us the tremendous importance of agriculture to the growth of industry. We cannot industrialize our country without adequately developing our agriculture. If the growth of agriculture fails to keep pace with the needs of the growth of industry, if an imbalance or an ever-widening gap is allowed to occur between industrial

and agricultural production, enormous difficulties are bound to arise, which will seriously affect the worker-peasant alliance and upset the whole national construction plan.

The First Five-Year Plan lays it down that we must strive to overcome the danger of such a gap as would occur in the development of agriculture and industry, strengthen the worker-peasant alliance, promote the economic exchange between town and countryside, bring about a new upsurge in our agricultural economy, and ensure a definite increase each year in the output of food crops, cotton, oil-bearing crops and other industrial crops. We must in particular ensure an increase in the output of food crops, which are the most essential of all agricultural products. Bigger food crops will make it more possible to bring about an increase in the output of other crops.

State investments in capital construction for the Ministries of Agriculture, Water Conservancy and Forestry will amount to 3,260 million yuan during these five years. This sum is distributed as follows:

Ministry of Agriculture	1,035 million yuan
Ministry of Water Conservancy	1,400 million yuan
Ministry of Forestry	789 million yuan
Meteorological Bureau	36 million yuan

B. Output of Staple Farm Products By 1957 the total value of production of agriculture and subsidiary rural production will amount to 59,660 million yuan, an increase of 23.3 per cent over the 1952 figure.

The First Five-Year Plan lays down the following increases in the output of staple farm products:

(The sown area is given in units of 1,000 *mou*,¹ the yield per *mou* in catties, and the total output in millions of catties.)

Products	1952			1957			Ratio of 1957 to 1952 (per cent)		
	Sown area	Yield per <i>mou</i>	Total output	Sown area	Yield per <i>mou</i>	Total output	Sown area	Yield per <i>mou</i>	Total output
Food crops	1,859,683	176.3	327,830	1,914,792	201.4	385,620	103.0	114.2	117.6
Rice	425,734	321.5	136,850	444,864	367.6	163,540	104.5	114.3	119.5
Wheat	371,698	97.5	36,250	400,257	118.6	47,450	107.7	121.6	130.9
Soya bean	175,190	108.7	19,040	190,236	118.0	22,440	108.6	108.6	117.9
Coarse grain	756,743	136.2	103,040	732,240	149.7	109,590	96.8	109.9	106.4
Potato crops	130,318	250.5	32,650	147,195	239.4	42,600	113.0	115.5	130.5
Industrial crops	178,446			226,858			127.1		
Cotton	83,636	31.2	2,610	95,000	34.4	3,270	113.6	110.3	125.4
Jute and ambary hemp	2,372	257.6	610	2,078	351.8	730	87.6	136.6	119.7
Cured tobacco	2,791	158.8	440	4,185	187.0	780	150.0	117.8	176.6
Sugar-cane	2,737	5,200.4	14,230	4,054	6,499.7	26,350	148.1	125.0	185.1
Sugar-beet	526	1,819.1	960	2,130	2,005.9	4,270	404.9	110.3	446.4
Oil-bearing crops	85,710			118,077			137.8		
Other products	80,708			132,121			163.7		

¹One *mou* = one-fifteenth of a hectare or 0.1647 acre.

By 1957 the area sown to all crops throughout the country will amount to 2,273,771,000 *mou*, an increase of 154,934,000 *mou* compared with 1952. The area sown to food crops will increase 55,109,000 *mou*, and that to industrial crops 48,412,000 *mou*.

The acreage of food and industrial crops shown in the above table is determined in accordance with the needs of the state. We must increase the output of food crops to meet the needs of our growing urban population and satisfy the demands of the people in town and countryside whose living standards are steadily improving. At the same time we must increase the output of industrial crops in order to ensure supplies of industrial raw materials and meet the needs of export. The total cultivated area cannot, however, be expanded by a great deal in this five-year period. Therefore we must suitably expand the acreage of industrial crops by utilizing the varying conditions in different parts of the country while ensuring that the increase in the output of food crops shall not be affected in any way. As we carry out the Five-Year Plan we should make a careful examination of the situations each year to see to it that a reasonable proportion is maintained between the acreage of food and industrial crops, thus averting critical situations likely to arise out of their unsuitable proportions.

The planned figures for food and industrial crops shown in the above table represent the exact requirements of the state in respect of certain staple farm products; we must do all we can to reach these targets and try to surpass them.

While raising the output of food and industrial crops, however, we should learn how to utilize the special geographical features of various parts of the country and make vigorous efforts to increase the output of non-staple foods and special farm products to

meet the needs of our urban and rural population and of our export trade.

On the outskirts of major cities, industrial areas, and particularly new industrial towns, we should plan the cultivation of more vegetables to satisfy the needs of the urban population.

Tea and silk occupy an important position in our agricultural production, in the life of the people and in our export trade. Before liberation, the ravages and destruction wrought by the Japanese imperialists and the Kuomintang reactionaries, sharply reduced the output of tea and cocoons. Even now since liberation, despite intensive efforts, the output of tea and cocoons is still far below the peak levels reached in the past. We need to make greater efforts to increase the output of tea and cocoons in these five years. The First Five-Year Plan lays down that in 1957 the output of unprocessed tea will amount to 2,237,000 *tan*,¹ an increase of 35.8 per cent over 1952; the output of cocoons of mulberry-fed silkworms will be 1,868,000 *tan*, an increase of 50.1 per cent, and of cocoons of tussah silkworms, 1,235,000 *tan*, an increase of 1.1 per cent.

While increasing the output of jute and ambary hemp, we should also grow more ramie, flax, etc., and also devote attention to the study and cultivation of various kinds of wild hemp.

In raising the output of fruit we should in particular grow more oranges and other sub-tropical fruits in South China, and grow more apples, grapes and pears in Central and North China. Constant attention should be paid to improving the varieties of fruit grown and wipe out insect pests in order to satisfy the needs of the people and export specifications.

¹One *tan*=0.05 metric ton, or 0.0492 long ton.

To make up for the shortage of oil-bearing crops we should increase the production of walnuts, Chinese pepper, sunflower and tea seeds which can be used for extracting oil.

To increase the supply of vegetable oils for industrial purposes we should plant large numbers of tung-oil trees, oil palms, tallow trees and castor-oil plants in suitable areas.

To increase our medical supplies and meet the needs of export we should restore, promote and increase the output of medicinal drugs, and encourage people to gather medicinal herbs.

C. How Agriculture Will Grow To overcome the backwardness of a scattered individual peasant economy and increase our agricultural output we must energetically and systematically unite the poor and middle peasants on a voluntary and mutually beneficial basis to promote co-operation in agriculture.

In this five-year period we can only experiment with agricultural mechanization in individual cases and on a limited scale. We must sum up the various experiences we have gained with regard to reclaiming wasteland, organizing emigration and expanding the cultivated area; we must utilize every available means as we devote greater efforts in these fields. To increase agricultural output under the First Five-Year Plan we must pay special attention to the question of relying on the existing agricultural producers' co-operatives characterized by the pooling of land and unified management; we must introduce suitable, initial technical improvements to bring the latent possibilities of agriculture into play and raise the yield per unit area.

Information gathered from various parts of the country shows that an agricultural producers' co-operative can generally raise output from 10 to 20

per cent within one or two years of its establishment; and thereafter it can maintain an annual rate of increase higher than that of the mutual-aid team and much higher than that of individual peasants. The path to the uninterrupted growth of agricultural production in China lies in a gradual advance from an elementary form of co-operation with its initial and partial technical improvements to a higher form of co-operation with mechanization of agriculture and other technical reforms.

Taking account of the experience gained in the movement for agricultural mutual aid and co-operation in the past few years and the successes already achieved in this field in various parts of the country, the First Five-Year Plan states that by 1957, about one third of all the peasant households in the country will have joined the present agricultural producers' co-operatives of elementary form. In Northeast China, in Shansi, Hopei, Shantung and Honan Provinces and in other older liberated areas, about half of all peasant households will have joined co-operatives. We should work for a more rapid pace of co-operation in areas growing industrial crops and on the outskirts of cities.

The plan for co-operation in agriculture is an important component part of the First Five-Year Plan. It is of vital importance in fostering the growth of agriculture and ensuring fulfilment of the whole economic plan. It is of decisive significance in restricting and gradually eliminating the rich-peasant economy. It will enable us, during the Second Five-Year Plan, to organize a majority of peasant households in the elementary form of co-operation in agriculture in all the principal agricultural areas in the country. It will also pave the way for us to bring about the mechanization of agriculture and other

technical improvements, step by step and on a broad scale, under the Second and Third Five-Year Plans.

Under the First Five-Year Plan we must further develop and improve agricultural mutual-aid organizations in their various forms and thus pave the way for the rapid expansion of agricultural producers' co-operatives.

The First Five-Year Plan also takes account of the fact that the individual peasant economy still possesses a certain amount of latent productive power which should in suitable ways be brought into play as fully as possible to raise the yield per unit area.

State farms will be expanded wherever possible in the period covered by the Plan. State investments will provide 3,038 state farms by 1957 with 16,872,000 *mou* of cultivated land—11,932,000 *mou* more than 1952; 141 of these state farms will be mechanized (including those already established in 1952 and those which will be established during this five-year period) with 5,146 tractors (averaging 15 h.p. each) and with 7,580,000 *mou* of cultivated land, an increase of 272.4 per cent over 1952.

D. Measures for Fulfilling the Agricultural Production Plan State investments in agricultural capital construction during the period of the First Five-Year Plan are listed in Section I of this Chapter; state agricultural loans are described in Chapter Two, and, as stated in Chapter Three, state plans for developing industrial production will, as far as possible, give consideration to the peasants' needs for means of production and consumer goods.

In granting agricultural loans and technical assistance, the state will give priority to agricultural producers' co-operatives but it must also give consideration to peasants organized in mutual-aid teams and to individual peasants.

Special attention must be given to the importance of taking measures in accordance with local conditions when developing agricultural production and introducing new techniques.

The following are the principal measures which should be taken under the First Five-Year Plan to promote agricultural co-operation, improve farming techniques and ensure fulfilment of our agricultural production plans:

1. Vigorous efforts should be made to promote the widespread use of two-wheeled, single- and double-shared ploughs and other improved animal-drawn ploughs, particularly on the plains of North China where development of agricultural co-operation will be fastest during the First Five-Year Plan period. This is an extremely important step in improving farming techniques before tractors can be produced in large numbers.

It is planned, during these five years, to supply the peasants with about 1,800,000 two-wheeled, single- and double-shared ploughs, and 500,000 other improved animal-drawn ploughs. Vigorous efforts should be made to improve ploughs used on uplands and in paddy fields, and after being tested in suitable experiments, to systematically popularize their use.

While we promote the widespread use of new and improved types of farm tools we must instruct the peasants in their use and help them to overcome any difficulties they may run into in repairing and in replacing damaged parts; we must also take vigorous steps to breed more draught animals, and devote attention to the task of transferring and making draught animals available by sale in areas where they are needed.

2. In accordance with the actual needs of the various localities and the principle of voluntariness

on the part of the masses, agricultural producers' co-operatives and the peasant masses should be organized on a wide scale to build and expand small irrigation works, these to be undertaken by the people themselves with their own resources or by the people with government financial aid. In the various provinces in North, Northeast, East, and Central China where floods frequently occur, such irrigation schemes should be co-ordinated with the work of harnessing rivers which cause serious floods. We should harness small and medium-sized rivers, build ditches and flood-diversion canals, strengthen dikes and embankments, and take other measures to prevent flood and drain off flood-waters so as to reduce the damage done by floods and waterlogging. In provinces south of the Yangtse, ponds and dams must be built; facilities for lifting water, such as treadle water-wheels, wind-driven water-wheels and bamboo water-wheels, and water pumps should be increased; and administration of irrigation should be improved. In arid regions in North and Northwest China and in the Inner Mongolian Autonomous Region, we should, where conditions permit, build small reservoirs and irrigation canals, sink wells and tap springs, and make widespread use of water-wheels to extend the irrigated area and increase our ability to combat drought.

During these five years, it is planned to supply the peasants with 681,000 water-wheels, and the state will set up water-pumping stations with a total capacity of 57,000 h.p.

3. The peasants must be persuaded to make vigorous efforts to collect and prepare manure, and properly apply fertilizers. The rearing of pigs and sheep, which not only increases the supply of meat but provides an important source for increasing the supply of manure, must also be vigorously promoted.

In provinces south of the Yangtse, the peasants should be encouraged to grow such green-manure crops as *Astragalus* and *Vicia*; during these five years the acreage of green-manure crops will be increased by about 35,430,000 *mou*. In the various provinces of North China, the peasants should be encouraged to make compost of straw, leaves and grass; the planting of common medick should be encouraged to improve the soil in provinces in the Northwest.

The supply of mineral, chemical and bean-cake fertilizers should be increased. During this five-year period, the peasants will be supplied with 277,000 tons of rock-phosphate, 18,600 tons of superphosphate, 4,860,000 tons of ammonium sulphate and ammonium nitrate, and 14,570,000 tons of bean-cake fertilizers. At the same time, the supply of fertilizer should be increased by collecting animal bones everywhere on a wide scale to make bone meal. In supplying chemical and bean-cake fertilizers, priority must be given to the needs of areas growing industrial crops, areas growing high-yield food crops and areas growing vegetables and fruit.

The peasants should be given guidance in the rational and economical use of fertilizers; they should be instructed in the use of different kinds of fertilizers needed by different crops and soils, and encouraged to apply fertilizers periodically; the random application of fertilizers should be gradually done away with.

4. We must make more effective use of the land.

Taking account of the natural conditions of various areas, we should, on the basis of improved water conservancy work and the increased use of fertilizers, suitably enlarge the area of land harvesting several crops a year.

During these five years, we will bring an additional 38,680,000 *mou* of land under cultivation, this will in-

crease the total cultivated area to 1,657,450,000 *mou* in 1957. Expansion of the cultivated areas will be effected mainly by organizing the peasants to reclaim small patches of wasteland, but at the same time wasteland will be reclaimed by machine; new land will be opened up by pioneering emigrants; and the work of opening up wastelands by state mechanized farms, by farms operated by the army and by state farms under local authorities will be improved and expanded. The state will do its best to economize on funds by reducing expenditure on non-productive construction and expenditure of administrative organs, and it will use the funds thus saved to increase investments in agriculture and to open up more wasteland.

Taking account of existing conditions in the various areas, out-of-date farming methods should step by step be replaced wherever possible. In low-lying areas, efforts should be made to switch to the planting of crops which are resistant to water-rot; in areas subject to waterlogging from autumn rains, there should be a switch to the planting of early-ripening crops and the area under crops harvested in summer should be enlarged. The area under rice, maize, potatoes and other high-yield crops should also be systematically enlarged.

In hilly areas, there should be a unified plan of production, and a comprehensive development of agriculture, forestry and animal husbandry.

5. We must promote intensive cultivation and improve planting techniques.

The best methods of cultivation devised by peasant households or agricultural producers' co-operatives which have gained fame as producers of record harvests should be studied everywhere throughout the countryside and popularized locally. At the same time, the best methods of cultivation used in other

regions should be studied and mastered, and after being confirmed by successful experiments, popularized on an ever wider scale.

Suitable methods of close-planting wheat, paddy rice and cotton should be systematically popularized.

6. We must make vigorous efforts to promote the widespread use of improved seeds, and give the peasants more guidance and help in selecting seeds.

A popular and effective way of promoting the widespread use of improved seeds is to organize the peasants to select improved seeds themselves both for their own use or to exchange them among themselves. Before promoting the widespread use of improved seeds which have proved their worth in a certain area, or which have been successfully grown by scientific institutions or imported from abroad, a certain amount of preparatory work such as expert appraisal, experimental planting and demonstrations to the peasants should be carried out first.

Special attention should be paid to keeping improved cotton seeds clean; agricultural departments should take practical steps to bring cotton-ginning shops for improved cotton seeds under proper management.

7. Efforts to combat plant diseases and insect pests must be continued. Preventive measures which have proved effective among the masses should be popularized; guidance should be given to the peasants in the use of insecticides and equipment for the control of plant diseases and insect pests, so that vigorous measures can be taken to check and exterminate locusts, rice-borers, aphids and red spiders as well as smuts, nematode, anthracnose and other plant diseases.

Under the First Five-Year Plan the peasants will

be supplied with 139,000 tons of insecticides and 1,436,000 sprinklers and atomizers.

8. We must persuade and organize the masses to bank the edges of cultivated fields, build dikes and dams, and plant grass and trees on a broad scale, so as to improve the conservation of soil and water. At the same time, attention should be given to improving methods of cultivation in upland areas, strictly prohibiting the firing of scrub on hills, preventing the unplanned felling of trees, and forbidding the digging up of steeper slopes, so as to reduce losses of water and soil.

9. In order to accumulate experience in mechanized farming, train personnel in such work and help the peasants to cultivate their land, the state will, during these five years, operate 194 tractor stations on an experimental basis in suitable places in various provinces. They will have a total of 2,897 tractors (averaging 15 h.p. each), and serve an area of 3,540,000 *mou*.

We must improve and extend the work of agro-technical stations and give the peasants more guidance in improving farming methods.

10. We must enable state farms under local authorities to play a more effective role as pioneers in agricultural production.

While consolidating their position, state farms under local authorities must make serious efforts to improve management, engage in varied productive activities, and introduce business accounting in accordance with the special features of agricultural production, thereby increasing agricultural output, reducing costs and eliminating waste.

Locally managed state farms must co-ordinate their work with agricultural research institutes and agro-technical stations so as to integrate advanced

agricultural techniques and experience in their localities with research work in scientific agricultural techniques, and experimental work in increasing production with popularization of the results thus achieved; they must promote widespread use of the effective and advanced methods and experience among the local peasants.

11. Expansion of the area sown to industrial crops must first be carried out in those places where the people have experience in cultivating such crops and where conditions are favourable; but it should not be over-concentrated in a few areas to avoid difficulties in the supply of foodstuffs, fuel and fodder. Vigorous efforts should be made to systematically expand the area of cultivation of mulberry, kapok and other trees on suitable slopes and uplands.

Vigorous efforts should be made to plant tropical and sub-tropical industrial crops in Kwangtung, Kwangsi, Fukien and Yunnan Provinces.

In addition to expanding the area sown to oil-bearing crops to a suitable extent in areas already under cultivation, efforts should be made to persuade the broad mass of the people to plant oil-bearing crops suitable to the soil near their houses, by the sides of cultivated fields, on slopes and uplands. This will increase the amount of oils to meet the needs of the country and society, and gradually make the local inhabitants self-sufficient in oil.

12. In accordance with the characteristics of the economy of the national minorities in autonomous regions and autonomous *chou*, efforts should be made to help the local peasants improve their farm tools and methods of cultivation so as to raise their agricultural productive forces.

13. During the period of the First Five-Year Plan, vigorous efforts should be made to investigate

and survey wastelands. It is planned to complete the survey of 100 million *mou* of wasteland and an overall plan for the reclamation of 40 to 50 million *mou* of wasteland, thus paving the way for the large-scale reclamation of wasteland during the Second Five-Year Plan period.

SECTION II. LIVESTOCK BREEDING AND FISHERIES

A. Increase of Livestock A rapid increase of livestock has an important role to play in developing agricultural production and light industry, in supplying the market with meat and in raising the incomes of peasants and herdsmen. The First Five-Year Plan sets the following targets for increasing livestock:

	1952 Output (millions of head)	1957 Planned Output (millions of head)	Ratio of 1957 to 1952 (per cent)
Horses	6 13	8 34	136
Oxen	56 60	73 61	130
Mules	1 64	1 97	121
Donkeys	11.81	13.95	118
Sheep	36 88	68.72	186
Goats	24 90	44 32	178
Pigs	89.77	138 34	154

We must also greatly increase the number of poultry. The number of dairy cows must be suitably increased in suburban areas and in the vicinity of industrial areas.

In developing livestock breeding special attention must be paid to the following points:

1. All possible financial and technical aid must be given to peasants and herdsmen, especially among the national minorities, to develop livestock farming. We must improve our leadership of work in pastoral areas.

2. We must encourage the concluding of forward purchasing contracts and set reasonable prices for cattle so as to ensure that peasants and herdsmen derive definite material benefits from livestock farming.

3. We must improve our methods of feeding cattle, improve the work of preventing animal diseases and conduct mass campaigns against them. We must popularize effective methods of treatment developed by native veterinary surgeons.

4. We must improve cattle breeding by selecting good breeding stocks and propagating them. At the same time we must foster the growth of the stocks already owned by the people and make the most effective use of the services of private cattle breeders.

5. We must see to it that an adequate supply of fodder and grass is available for the increased livestock.

6. We must make state livestock farms a success and establish fifty more such farms by the end of this five-year period.

In order to promote a rapid development of livestock breeding in areas inhabited by national minorities, efforts must be made to carry out the following practical measures according to the points mentioned above and actual conditions in pastoral areas:

1. We must establish, wherever possible, grass-mowing stations and working centres in the grasslands and gradually extend the use of horse-drawn mowing machines and rakes. We must help the herdsmen store grass. We must cultivate grass and

fodder in a number of selected places and try to build regular fodder bases.

In order to preserve the pastures, we must introduce the system of grazing cattle on different pastures in rotation.

We must help herdsmen to build more enclosures and sheepfolds to protect their cattle from wind and snow.

2. We must expand the work of sinking wells, tapping springs, digging irrigation ditches, and other irrigation work in the grassland. At the same time the use of new types of water-wheels and power-driven pumps should be popularized in selected districts to solve the problem of water supplies in pastoral areas.

3. We must gradually establish veterinary stations and veterinary medical co-operatives.

4. We must establish and improve stud farms in a planned way.

5. We must develop mutual aid and co-operation step by step among herdsmen on a voluntary basis and in forms acceptable to them.

B. Increase of Aquatic Products We must take vigorous measures to expand fisheries. The present Plan provides for an increase of 68.5 per cent in the output of aquatic products between 1952 and 1957, that means a total output of 2,807,000 tons in 1957.

We must steadily develop state-owned fishing enterprises. By 1957 the output of such enterprises will amount to 10.1 per cent of the country's total output of aquatic products. We must gradually organize individual fishermen into co-operatives and draw capitalist fishing enterprises into various forms of state capitalism.

In marine fishing we must see to it that the equipment is repaired and increased and safety measures

improved so that marine fishing can be systematically developed and carried on all the year round. As regards fresh-water fishing, measures should be taken to develop fish-culture, make more fry available and prevent fish diseases.

SECTION III. WATER CONSERVANCY

We must vigorously proceed with water-conservancy projects in order to ensure the growth of agricultural production.

Based on a policy of combining measures of a permanent character with those of a temporary character and taking account of the prevention of flood and drought as well as waterlogging, the main task set by the First Five-Year Plan is to continue the work undertaken at selected points to control rivers liable to cause serious damage, strengthen the dikes on the principal rivers, devote great efforts to flood prevention, and energetically construct irrigation works.

The following water-conservancy projects will be undertaken under the First Five-Year Plan:

Work will continue for the permanent control of the Huai River. Four huge reservoirs—at Nanwan, Poshan, Futseling and Meishan—will be completed during this five-year period. The work of building or improving flood-detention basins will continue in lake regions and lowlands, and dikes along the main course will be repaired so that they can withstand floods on the 1921 scale and give absolute protection against floods on the 1950 scale. To reduce damage caused by waterlogging, works for flood prevention and drainage will be built on the main tributaries such as the Hungho, Juho, Suiho and Peifei Rivers.

The multiple-purpose plan for permanently controlling the Yellow River and exploiting its water resources will be launched. We must proceed actively with the work of prospecting, surveying and planning of the Yellow River project and work out a comprehensive plan of the whole of its basin. We must vigorously muster and organize the forces needed for the construction of a water-conservancy and power-generation project at Sanmen Gorge so that it will be able to check floods in 1960, supply electricity in 1961, and develop irrigation and navigation on the lower reaches. Thus the centuries-old flood menace of the Yellow River will be removed once and for all.

In areas suffering heavy losses of water and soil we shall, relying on the initiative of the masses, energetically press forward the work of water and soil conservation to control silt so that agricultural production can be increased. Until the permanent works for controlling the Yellow River are completed, we must continue to consolidate the dikes along its course so as to increase their capacity to hold back floods, and build new waste-weirs and strengthen temporary flood-prevention works such as dikes in flood-retarding and flood-detention areas in Honan Province. These measures will be taken to ensure that there will be no serious breachings of the dikes or change in the course of the river in case the flow at Chinchang reaches 29,000 cubic metres per second, this being the greatest flow of flood water that has been wont to occur once in two centuries.

The dikes on the Yangtse River will be strengthened. We will take measures, in co-ordination with the Chingkiang flood-diversion project, to ensure that the Chingkiang Diike will not break nor will the river change its course as a result of flood waters reaching the 1931 level.

We will repair dikes on the Han River and proceed with temporary flood-diversion works on the lower reaches of the Yangtse River so as to reduce damage caused by breaks in the dike. We will study the situation and carry out part of the flood-detention and land-reclamation project on the Tungting Lake and other lakes and ponds on the middle and lower reaches of the Yangtse River. In the meantime we will make vigorous efforts to map out a plan for the whole Yangtse River basin and initiate preparations for permanent control of the Han River.

A plan will be worked out to control the Haiho River and its tributaries. In the meantime we will press ahead with works for permanently controlling and exploiting the Yungting River and complete construction of the Kuanting Reservoir so that the menace of flood will be largely removed from the lower reaches of that river. A start will be made on works for permanently controlling the Tseya River and construction of the reservoir on the Huto River. Suitable measures will be taken to regulate and dredge the southern section of the Grand Canal and Taching River so as to gradually reduce the serious menace of flood in those areas.

A plan will be worked out for the whole Liao River basin; the Tahofang Reservoir will be built on the Hunho River so as to gradually reduce the flood menace of the Liao River.

We must mobilize the resources of local government organizations and the mass of the people for the energetic construction of small-scale irrigation works, improve old irrigation works and water-control measures, proceed with the building of large and medium irrigation projects at a number of key points, vigorously undertake water and soil conservation work in co-ordination with the agricultural and forestry de-

partments, and build on a trial basis small-scale hydro-electric power stations in rural areas.

In this five-year period, the total irrigated area will increase 72 million *mou*, of which about four million *mou* belong to state farms. In 1957, the country will have 503,130,000 *mou* of paddy fields and irrigated land.

During this five-year period we should improve our basic hydrological and surveying work on the principal rivers of the country, and, in preparation for the Second Five-Year Plan, vigorously work out comprehensive plans for these river basins and carry out research work for a long-range water-conservancy plan.

Water-conservancy projects should be closely coordinated with industrial and agricultural construction and development of communications. We should pay attention to the multiple-purpose utilization of water resources, taking into consideration the needs of flood prevention, irrigation, power generation and development of navigation.

SECTION IV. FORESTRY

We must energetically develop forestry in order to make up for our lack of forest resources, ensure timber supplies needed for national construction, conserve soil and water, retain flood water, protect irrigation works and reduce natural calamities.

The First Five-Year Plan sets down the following tasks and practical measures for the development of forestry:

We must plant 66,740,000 *mou* of forests for economic value, of which 53,270,000 *mou* will be timber forests to be planted mainly in the hilly areas of Kiangsu, Anhwei, Chekiang, Fukien, Hunan,

Hupei, Kiangsi, Kwangtung, Kwangsi, Szechuan, Kweichow, Yunnan and Sikang Provinces where trees grow relatively fast. Of the timber trees to be planted there, 20 per cent will be Japan cedars and 80 per cent pines, cypresses and eucalypts.

Shelter belts will be planted on 23,430,000 *mou* of land. These are distributed as follows: 4,300,000 *mou* of shelter belts in the western part of the Northeast, 240,000 *mou* of water-conservation forests along the Jaoyang River in Liaoning, 500,000 *mou* of water-conservation forests around Sunghua Lake in Kirin, 660,000 *mou* of shelter belts in the eastern part of Inner Mongolia, 2,150,000 *mou* of water-conservation forests on the upper and middle reaches of the Yellow River, 440,000 *mou* of forests to hold back shifting sands in northern Shensi, 660,000 *mou* of water-conservation forests on the upper reaches of the Yungting River, 370,000 *mou* of water-conservation forests on the upper and middle reaches of the Huai River, 450,000 *mou* of water-conservation forests along the Han River, 330,000 *mou* of forests to hold back shifting sands in eastern Honan, and 150,000 *mou* of shelter belts along the Shantung coast. The remaining 13,180,000 *mou* will be devoted to the planting of forests for water conservation along smaller rivers and shelter belts on small areas of farm land, in various parts of the country.

Denuded lands in state forests will be replanted. These will amount to 4,220,000 *mou*, of which 3,000,000 *mou* are in the provinces of the Northeast, 280,000 *mou* in the Inner Mongolian Autonomous Region, 490,000 *mou* in the provinces of the Southwest and 450,000 *mou* in the provinces of the North and Northwest.

In order to complete the above-mentioned tasks of afforestation and protect existing forests, we must—

1. Work energetically and steadily to draw up production plans for the forest and upland areas. We must set aside certain areas for afforestation within each province, autonomous region or autonomous *chou*. We must decide which counties will engage primarily in afforestation and which will engage partly in afforestation and partly in agricultural production and also decide what kind of forests and trees should be cultivated in the various areas.

2. Improve surveying and planning.

We must improve our work in investigating and surveying areas suitable for afforestation and in making plans for such afforestation. We must overcome the mistake of lack of co-ordination between our work of surveying and actual afforestation in those areas.

We must improve our work of surveying forests and planning for exploitation of our forest resources. We must try to draft working plans for several of the large state-owned forests and by 1957 gain a clear picture of the country's forest resources.

We must improve the leadership given to survey groups, and try to raise the political and vocational level of their members so as to improve the quality of their surveying and planning work.

3. Designate key afforestation projects and establish working bases.

A number of key afforestation areas must be designated. Wherever necessary and possible, we must plant according to plan forests for water conservation, timber production and to hold sand dunes in check; these should cover a considerable area and conform to the required standards.

As regards the large state forests, we should immediately decide what will be our key projects after surveying and planning has been completed and a

working plan drawn up. We must establish administrative offices, improve management of existing forests, especially re-afforestation of denuded areas, and restore and extend afforested areas.

4. Continue to mobilize the masses for better protection of forests and prevention of forest fires on a broad scale. We must carry through an energetic campaign of planting trees and nursing saplings by relying upon mutual-aid and co-operative organizations in the rural areas.

Production plans of all agricultural producers' co-operatives and mutual-aid teams located within key afforestation areas or in the vicinity of forest areas should contain provisions for growing and protecting forests. In agricultural areas in general, the masses should be encouraged to plant trees on uplands, along roads and rivers, in front of and behind their dwelling houses and at both ends of their villages. Their interests in this respect must be protected.

5. Improve our afforestation techniques and pay attention to nursing saplings so as to increase the rate of survival.

6. Improve scientific research work in forestry, see to it that existing forestry research institutes are well run, establish research stations in a planned way, sum up and popularize whatever experience the masses have gained in planting forests, learn from advanced Soviet experience, formulate and enforce various regulations concerning technical operations, and educate and train rank-and-file cadres in forestry work so as to ensure improvements in all aspects of forestry work and prepare conditions for the future development of forestry.

7. Improve supplies of saplings, investigate and cultivate trees for seeds and saplings, and improve the testing and storing of seeds. We must improve

the management of state forests and state-owned tree nurseries and fully develop their potentialities. To meet the growing needs of afforestation, state-owned tree nurseries should be enlarged as much as are needed and the masses actively encouraged to secure seeds and nurse saplings.

In addition, attention should be paid to extending bamboo forests in the provinces of South China. The uses of bamboo must also be studied and popularized.

SECTION V. METEOROLOGICAL SERVICES

To meet the need of national construction and to prevent and reduce, as far as possible, the damage caused to agriculture by natural calamities, we must make great efforts to develop our meteorological services—build an extensive network of weather stations, provide the people with timely and correct weather forecasts that alert them to danger, and accumulate and provide meteorological data to those who need them.

By the end of 1957, there will be 1,083 more observatories, weather stations and weather posts in China, so that we will be able to collect meteorological data to better serve the needs of navigation, water-conservancy work, hydro-electric power generation, agriculture, livestock breeding, fisheries, the salt industry and key industrial areas.

CHAPTER FIVE

TRANSPORT, POSTS AND TELECOMMUNICATIONS

SECTION I. PLANS FOR THE DEVELOPMENT OF TRANSPORT, POSTS AND TELECOMMUNICATIONS

A. Distribution of Investments in Transport, Posts and Telecommunications The transport services are a branch of production. Through them production is continued in the form of circulation. Under the First Five-Year Plan the state will invest 8,210 million yuan in capital construction for the transport, postal and telecommunication services. This will expand the transport services, especially the railways, enabling them to keep pace with the national economic construction, the growth of industry and agriculture, the increasing circulation of commodities and to meet the people's growing need for communication facilities; it will also develop postal and telecommunication services in line with the requirements of the people and the state. The sum of 8,210 million yuan for investment is distributed as follows:

Ministry of Railways	5,670 million yuan
Ministry of Communications	1,339 million yuan
Ministry of Posts and Telecommunications	361 million yuan
Civil Aviation Bureau	101 million yuan
Investment in local transport services	739 million yuan

B. Volume of Traffic Carried by Principal Branches of Transport The volume of traffic and

traffic mileage of the principal branches of transport will increase as follows between 1952 and 1957:

Railway freightage will be 245,500,000 tons, an 85.9 per cent increase over the 1952 figure; freight mileage will be 120,900 million ton-kilometres, a 101 per cent increase. The railways will carry 247 million passengers, a 51.3 per cent increase; passenger mileage will be 31,966 million passenger-kilometres, a 59.5 per cent increase.

Inland shipping (excluding junk cargoes) will handle 36,864,000 tons of freight, a 294.6 per cent increase; freight mileage will be 15,292 million ton-kilometres, a 321.5 per cent increase. Inland shipping will carry 56,040,000 passengers, a 93.8 per cent increase; passenger mileage will be 3,408 million passenger-kilometres, a 78.7 per cent increase.

Coastwise shipping will handle 11,461,000 tons of freight, a 195.1 per cent increase; freight mileage will be 5,751 million ton-nautical miles, a 190.5 per cent increase. Coastwise shipping will carry 1,470,000 passengers, a 110 per cent increase; passenger mileage will be 237 million passenger-nautical miles, a 137 per cent increase.

Motor-lorry transport will handle 67,493,000 tons of freight, a 225.8 per cent increase; freight mileage will be 3,211 million ton-kilometres, a 373.5 per cent increase. Motor-bus transport will carry 114,146,000 passengers, a 159.1 per cent increase; passenger mileage will be 5,732 million passenger-kilometres, a 193.7 per cent increase.

Civil airlines will handle 5,600 tons of freight (including mails), a 175 per cent increase; freight mileage (including mails) will be 8,050,000 ton-kilometres, a 231.3 per cent increase. They will carry 54,400 passengers, a 145.6 per cent increase; passenger mile-

age will be 91 million passenger-kilometres, a 278.5 per cent increase.

C. Key Measures for Ensuring Fulfilment of the Transport Plan While co-ordinating production and marketing according to zones, we must gradually introduce and expand a rational system of transport for such important materials as coal, grain and timber; we must also gradually introduce a system whereby these important commodities are to be delivered by production or supply organizations according to a centralized plan, and establish a system of fixed responsibility whereby senders and transport departments undertake to carry out the transport plan of the state. This will enable production, supply, transport and marketing to be integrated into a comprehensive plan, and prevent such ridiculous things as the simultaneous transportation of the same kind of goods in opposite directions, the unloading and re-loading of goods halfway through their journey and excessively long hauls.

We must make more rational use of water and highway transport; organize through-shipping by river and sea, and gradually organize through-transport by land and water to speed up the circulation of goods and relieve our overburdened rail transport to an appropriate extent.

We must make full use of the possibilities of existing transport equipment, speed up the turn-round of transport vehicles and ships, increase the tonnage of freight carried and reduce the number of vehicles and ships which travel unloaded. At the same time, to ensure safety in transport we must improve the work of maintenance and repair of transport facilities and equipment, and give safety training to the workers and staff.

Guided by the unified plan of the central authori-

ties the building of national transport services should be combined with development of local transport services. Effective use should be made of means of transportation commonly used in the countryside—animal-drawn carts, junks and pack animals.

We must strengthen our leadership of capitalist transport enterprises and transport services run by small individual owners. We should develop their possibilities in accordance with the policy of unified management, gradually transform capitalist transport services into joint state-private enterprises, and step by step guide small-scale individually run transport services (mainly junk and cart) towards co-operation.

SECTION II. RAILWAYS

The railways are a key sector of national transport. A study of freight mileage shows that the railways account for more than 80 per cent of all freight carried by modern means of transport. With the growth of national economic construction and of industry and agriculture, inability of the railways to satisfy the needs of the state and the people will become an ever more serious problem, so the two urgent tasks in railway construction in the First Five-Year Plan will be the improving and reconstruction of existing railways and the building of new lines.

Improving and reconstructing existing railways will take 32.7 per cent of investments in railway construction; 21.5 per cent will be devoted to increasing the amount of rolling-stock and 41.7 per cent to building new railway lines; the rest will go to the designing and construction departments. New rolling-stock acquired during these five years will be used mostly

to raise the traffic capacity of existing lines. So, if we include this figure, more than half the total investment in capital construction of railways will go to improving and reconstructing existing lines.

A. Improving and Reconstructing Existing Railway Lines As the increasing volume of traffic in the period of the First Five-Year Plan will mostly be handled by existing railway lines, we must make a big effort to improve and reconstruct the technical equipment of these railways in order to satisfy the transport needs of the state. The plan for these five years will be as follows:

We will build 1,514 kilometres of double-track railways. Added to our existing double-track mileage—1,457 kilometres—this will make a total of 2,971 kilometres. The proportion of double-track railways to the total length of lines in operation will increase from 6.5 per cent in 1952 to 10.8 per cent in 1957. By 1957, the railways from Harbin via Shenyang to Dairen, and from Shenyang via Shanhaikuan to Peking will all be double-tracked. Sections of the railway lines which at present have a low traffic capacity, such as between Peking and Chengchow, Shihchiachuang and Yangchuan, Chengchow and Loyang, and Chengchow and Hankow, will also be double-tracked. At the same time, the automatic block system will be installed on the double-track lines from Peking to Shenyang and from Szeiping to Changchun, totalling 775 kilometres.

Construction will begin on the double-decker Yangtse River Bridge at Wuhan to link up the important trunk lines running between the north and south of China—the Peking-Hankow Railway and the Hankow-Canton Railway. The railway deck will be opened to traffic in 1958 and the highway deck in 1959.

We will rebuild 692 kilometres of railways whose traffic capacity at present is low. The most important sections will be the 352 kilometres in Heilungkiang Province between Harbin and Nancha, Yichun County, and 163 kilometres in Shansi Province between Yutse and Nankuan; these will be relaid with standard rails. Some of the principal trunk lines will be relaid with heavy rails.

Station-spur lines will be extended by more than 1,100 kilometres.

We will enlarge 14 important stations; one hump yard will be rehabilitated and another newly built.

We will acquire 550 heavy-duty locomotives and repair 136 others. In 1957 we will have 16.6 per cent more locomotives than in 1952.

We will acquire 33,720 new goods wagons and repair 805 others. In 1957 we will have 51.6 per cent more goods wagons than in 1952.

We will acquire 1,437 new passenger carriages and repair 145 others; we will add another 1,704 converted passenger carriages to our stock. In 1957 we will have 58.7 per cent more passenger carriages than in 1952.

We will build four new locomotive repair works and reconstruct one old works. We will build one wagon and carriage repair works and rehabilitate one old works.

Besides carrying out the above-mentioned measures to improve and reconstruct the technical equipment of existing railways, we must see to it that existing transport equipment is used to its greatest possible extent so as to enable the existing railways to fulfil their tasks more efficiently. Therefore:

1. We must improve the organization of railway transport. We must reduce the time spent by rolling-stock in stations, factories and mines; speed up the

turn-round of rolling-stock, and raise the average gross tonnage of freight trains. In 1957, the turn-round rate of goods wagon should be 3.07 days, the average daily freight kilometres of a locomotive should be 365, and the average gross tonnage of freight trains should be 1,370 tons.

2. We must improve the work of maintenance, overhauls and repairs, and gradually improve the technical equipment of our railways. In 1957, depreciation funds for overhauls will increase from 1.2 per cent of the total value of fixed assets in 1952 to 2.87 per cent and part of this will be used to replace very old rails and light rails.

3. We must learn diligently from the Soviet Union's experience of railway management, popularize experience gained on the China Changchun Railway, improve planned management and gradually introduce the business-accounting system.

B. New Railways In these five years, 4,084 kilometres of new trunk lines and branch lines will be built. About 3,284 kilometres will be trunk lines, of which eight are important lines:

1. The Lanchow-Sinkiang Railway connecting Kansu and Sinkiang. Linking up with the Lunghai Railway, this will become the main east-west artery of our country. It will also be an important international line linking the Soviet Union and China. It is also essential to exploitation of the resources of Sinkiang. By 1957 it will be built for a distance of 830 kilometres up to Paiyangho, Kansu Province.

2. The Paochi-Chengtu Railway connecting the Northwest and the Southwest. This will link the Southwest with the rest of China, and be an important factor in developing the economy of the Southwest. With a length of 678 kilometres, it will be completed in 1957.

3. The Chining-Erhlien Line in Inner Mongolia. This will link China with the People's Republic of Mongolia and the Soviet Union, and is of great importance to international communications. With a length of 337 kilometres, it will be completed in 1955.

4. The line from Paotow, Inner Mongolia, to Lanchow, Kansu Province. This connects two big industrial areas in Inner Mongolia and the Northwest. Starting from Lanchow, 82 kilometres of this line will be built in these five years.

5. The line from Yingtian, Kiangsi Province, to Amoy, Fukien Province. This is important to the economic development of these two provinces. In these five years, 443 kilometres will be built reaching the neighbourhood of Yungan, Fukien.

6. The line from Litang, Kwangsi Province, to Chanchiang, Kwangtung Province. With a length of 317 kilometres, it will be completed in 1955.

7. The line from Shacheng to Fengtai in Hopei Province. With a length of 106 kilometres, it will be completed in 1955.

8. The Peking-Chengteh Railway is another important line of communications between the areas inside and outside the Great Wall. Part of the existing roadbed can still be used and in these five years 72 kilometres will be built from Shangpancheng station to the Yingshouyingtse mining area.

In addition, about 800 kilometres of branch lines will be built in these five years to keep pace with the requirements of lumbering and industrial development, while about 2,500 kilometres of industrial and other special lines will be built.

C. Improving the Work of Surveying and Designing The work of surveying and designing should be improved both in relation to reconstructing old lines and in building new ones.

The task of building new railways, laying double-track lines, expanding yards and stations and other construction is one of considerable difficulty. This is especially so where some of the new lines traverse mountain regions with complex natural conditions and the reconstruction of some of the old lines requires modern technical equipment. All this demands a high level of technique in railway construction. Moreover, a considerable amount of preparatory work for railway construction in the Second Five-Year Plan must be done in the period of the First Five-Year Plan. However the railway designing forces which we have at present cannot meet our needs either in quality or number. To strengthen our technical forces, therefore, we should improve the political and technical leadership given in designing work, raise the vocational level of designers, improve organizational work and make a vigorous effort to train more cadres.

So far as concerns the disposition of our construction forces, we cannot allocate assignments and construction forces equally to all areas because our construction projects are varied in character and scattered over wide areas and started at different times. That is why we must draw up plans for proper arrangements in good time, in accordance with the general task and progress of designing and actual construction.

We must, in accordance with the actual needs of transport, settle on economical and rational standards of designing and budgetary norms in regard to railway construction, improve management in construction work, eliminate waste in materials and manpower, gradually introduce mechanized and prefabricated methods of construction, so as to raise the quality of engineering work and lower building costs.

SECTION III. WATER TRANSPORT

As water transport is the most economical way of moving goods and passengers, it must play a bigger part in the field of transportation. In this five-year period, the main emphasis in water transport will be on river transport, with the Yangtse River as the key artery. Sea transport will also be suitably developed.

The main task of transport on the Yangtse River is to move grain from Szechuan Province, increase the exchange of goods between the Southwest and other parts of China, and the transport of coal and other important commodities on the middle and lower reaches of the river.

Tug and barge transport occupies first place in inland water transport. During these five years, 289,000 deadweight tons will be added to inland water shipping under the central authorities (including joint state-private enterprises).

In sea transport, the main task is to ensure supplies of coal and other important commodities to coastal areas. Timber rafts and short-distance tug and barge transport will be used along the coast. In these five years, 111,000 deadweight tons will be added to our fleet of coastal and sea-going vessels.

We must improve dispatching and harbour administration so as to better co-ordination and co-operation between the movements of shipping, loading and unloading in ports, and repairing; we must reduce waste of time in berthing and eliminate major shipping accidents. We must improve the work of our business departments; simplify shipping procedures; improve the dockers' organizations, and the work of loading, unloading and checking and storing, so as to reduce damage to cargoes to a minimum and make suitable reductions in transport charges.

In order to meet the needs of sea transport and transport on the Yangtse River, new harbours will be built at Chanchiang in Kwangtung Province and at Yuhsikow in Anhwei Province; we will increase facilities for mechanized loading, unloading and telecommunications at Shanghai, Hankow and other important ports; and a dispatchers' telephone service will be set up along the Yangtse River.

We must systematically improve the navigation channel on the Yangtse River in Szechuan Province, establish a new system of navigational aids, and practise night navigation section by section on the river, so as to increase the rate of navigation. Management of transport on the Pearl River must be centralized; preliminary steps must be taken to regulate its navigational channel and build a suitable number of new vessels.

The southern and northern sections of the Grand Canal and the upper reaches of the Yangtse River must be thoroughly surveyed.

Local manpower, materials and financial resources must be relied on to dredge medium and small rivers which can be utilized for transport, maintain existing navigational channels and promote navigation on medium and small rivers to satisfy local needs.

The transformation of capitalist shipping enterprises into joint state-private enterprises will in the main be completed in this five-year period.

SECTION IV. HIGHWAYS

In this five-year period, construction will start on more than ten thousand kilometres of highways with funds provided by the central authorities, and more than seven thousand kilometres of new highways will

be opened to traffic. The main effort will be concentrated on building highways in national-minority areas in the Southwest and on important highways in the border regions and along the coast.

During this five-year period the following main highways are to be built, reconstructed or restored:

The 827-kilometre highway from Sining to Yushu, Chinghai Province, will be reconstructed and completed in 1954. The 189-kilometre highway from Hokow, Kansu Province, to Sining, Chinghai Province, will be reconstructed and completed in 1953.

The 209-kilometre highway from Chungpu to Langmusze, Kansu Province, will be built and opened to traffic in 1953.

The 1,570-kilometre section of the highway from Manikengo, Sikang Province, to Lhasa, Tibet, of the Sikang-Tibet Highway will be built and opened to traffic in 1954.

The 735-kilometre northern line of the highway from Canton to Haian, Kwangtung Province, will be reconstructed and completed in 1956.

The 224-kilometre highway from Kukong, Kwangtung Province, to Kanchow, Kiangsi Province, will be reconstructed and completed in 1957.

The 280-kilometre highway from Yanglin to the mine site at Huitse, Yunnan Province, will be reconstructed and completed in 1957.

In addition, we will build highways totalling 2,372 kilometres with funds allocated for construction in Tibet and other funds; these include the Chinghai-Tibet Highway, the highways from Yangpaching to Shigatse and from Shigatse to Gyantse in Tibet.

The work of building these main highways during the First Five-Year Plan period is a gigantic and extremely difficult task; the leadership of this work, therefore, must be strengthened politically, organiza-

tionally and technically; the entire body of workers and staff members and the local authorities must be called upon to ensure completion of these projects within the time set and according to the required standards; the quality of the work must be raised and building costs lowered.

Due attention must be paid to maintenance of existing highways, bridges and ferries; the fine tradition which the Chinese people have in repairing bridges and roads must be fostered; according to local needs, the availability of manpower and financial resources, priority must be given to the repair of highways carrying heavy traffic, and roads adapted to local means of transportation should be built or repaired.

The carrying capacity of state transport enterprises run by local authorities must be steadily increased; management and administration of such enterprises must be improved and vigorous efforts should be made to lower costs and bring about suitable reductions in transport charges.

SECTION V. CIVIL AVIATION

During the First Five-Year Plan period, the main stress in the sphere of civil aviation will be on strengthening the links between the capital and the main cities in every area as well as with the remote and border regions. Meanwhile, special aerial services will be organized to meet the needs of agriculture, forestry and geological survey.

In these five years, 17,200 kilometres of airlines will be put into operation. Direct air communications will be established connecting Peking with Shanghai, Canton, Paotow and Yinchuan; and connecting Canton with Haikow.

Our fleet of large transport aircraft will be increased. The central airport of the capital will be built.

Technical installations along the air-routes will be suitably improved, existing airfields maintained, and the necessary steps taken to ensure safety in air travel.

Vigorous efforts must be made in the training of air crew and ground personnel.

SECTION VI. POSTS AND TELECOMMUNICATIONS

In developing posts and telecommunications the emphasis must be on improving communications between the capital and all the main cities as well as the new industrial cities, and meeting new needs occasioned by the building of new industrial cities.

Sixty-three thousand kilometres of parallel long-distance telegraph and telephone lines will be installed and increased during this five-year period; carrier current will be applied on the main trunk lines connecting Peking with Shenyang, Hankow, Sian, Paotow and Shanghai.

Special attention will be paid to the development of wireless communications. Our main cities and the remote and border regions will be suitably equipped with wireless apparatus.

The main purpose of our city telephone service is to serve construction in our new industrial cities and meet part of the urgent needs of our main cities. Telephone services will be installed or expanded in these five years to serve 91,000 new subscribers; more than 44,000 of them in Peking, Sian, Shenyang, Wuhan, Taiyuan, Harbin, Changchun, Lanchow,

Shihchiachuang, Chengchow, Chungking and Tientsin will be served by automatic telephone exchanges.

The main task of the postal services during this five-year period is to set up a number of branch offices in cities, factories, mines, forest areas and towns, and to increase transport facilities on the trunk lines to a certain extent.

By 1957, the total length of post routes will be 1,968,000 kilometres, an increase of 45.2 per cent over 1952.

Communications in the rural areas will be improved with vigorous efforts and developed systematically to keep pace with the growth of co-operation in agriculture, and the accompanying economic and cultural development. The main task of the county telephone service is to overhaul the existing equipment and installations, and improve the work of maintenance and inspection. Building or reconstruction of installations should be undertaken appropriately only where there is real need for it and where local financial resources are available. Post offices will be opened in a number of selected towns and the postal services now handled by private postal agents may be turned over gradually to the supply and marketing co-operatives and other organizations. We must gradually develop the system of voluntary postal service stations in townships relying on the local population; we must try out a system of delivery by co-op farm members themselves.

Postal and telecommunications personnel should make every effort to raise their vocational and technical levels, devote attention to research in communications, improve management and administration, and so raise the utilization rate of equipment and installations as well as the quality of their work.

CHAPTER SIX

COMMERCE

SECTION I. HOME TRADE

A. Volume of Retail Trade Commercial activities have an important part to play during the transition period, in increasing the exchange of goods between town and countryside, bringing about a reasonable distribution of industrial and agricultural products and guaranteeing supplies of goods to the market.

With an increased output of industrial and agricultural products and the growth of the people's demand for them, the total value of the country's retail trade in 1957 will rise to approximately 49,800 million yuan, that is, about 80 per cent more than in 1952.

Compared with 1952, the volume of major consumer goods sold to the people by state and private trading concerns will increase in varying degrees by 1957, as shown as follows:

Grain: from 52,500 to 59,500 million catties, a 13.3 per cent increase.

Pork: from 2.396 to 3.761 million tons, a 57 per cent increase.

Edible vegetable oil: from 0.778 to 1.291 million tons, a 65.9 per cent increase.

Aquatic products: from 1.614 to 2.746 million tons, a 70.1 per cent increase.

Salt: from 2.978 to 3.999 million tons, a 34.3 per cent increase.

Sugar: from 0.471 to 1.05 million tons, a 122.9 per cent increase.

Cotton piece-goods (including homespun cotton cloth): from 101.19 to 156.99 million bolts, a 55.1 per cent increase.

Knit goods: from 0.341 to 0.7 million bales of yarn, a 105.3 per cent increase.

Rubber shoes: from 59.77 to 101.5 million pairs, a 69.8 per cent increase.

Kerosene: from 0.193 to 0.47 million tons, a 143.5 per cent increase.

Machine-made paper: from 0.259 to 0.49 million tons, an 89.2 per cent increase.

Cigarettes: from 2.465 to 4.61 million crates, an 87 per cent increase.

The increased sales of major consumer goods, shown in the foregoing planned figures, can only satisfy the people's basic demands. We must therefore make every effort to develop production in all fields and increase the supply of goods.

B. Measures for Ensuring Stability of the Market A situation will exist over a fairly long period where the rate of growth of the people's purchasing power will exceed that of the production of consumer goods, and the rate of growth of purchasing power will rise even quicker in the countryside than in the city. This is because of the constant improvement in the people's livelihood, because of the fact that a large number of new state-owned industrial enterprises will only be able to make big increases in supplies of commodities after the lapse of a certain period of time, and because of the fact that the relatively slow increase in the production of industrial crops will, for the time being, unavoidably retard to a considerable extent great increase in production of a number of light industries. Over a short

period of time it is hardly possible to avoid a situation in which supplies of many kinds of commodities fail to meet demand.

In order to continue to maintain stability of the market and thus guarantee the smooth progress of the present Plan as a whole and protect the interests of the entire nation, the state must, by implementing step by step the policy of planned purchase and supply of goods in the light of the different conditions of production of the most important commodities, control sources of supply and organize the supply of commodities according to plan, and deal effectively with speculators to prevent them from manipulating the market.

In order to carry out the planned purchase and supply of grain, the state will introduce a fixed quota system for producing, purchasing and marketing. For the purpose of encouraging the initiative of the peasants in increasing production, the state will announce to the peasants before the spring sowing every year the amounts of grain to be purchased and supplied to consumers throughout the country.

First, measures to control sources of supply must also help to increase production. An increase in purchases of commodities can be achieved only on the basis of increased production according to plan. The following are the chief measures by means of which sources of commodity supply can be controlled:

1. Industrial products:

- a. The various industrial departments will, step by step and according to the public need, unify arrangements for production in their branches of industry throughout the country.

- b. State-owned trading departments will, according to the public need and conditions of supply of raw materials, continue to arrange contracts with

private industrial enterprises for the manufacture and processing of goods. They must improve their planning in this field and avoid dislocation in production.

Important materials, raw or semi-processed, needed for the manufacture and processing of goods will be provided by central and local authorities under a unified management, and distributed in a rational way.

Contracts for the manufacture and processing of goods will guarantee not only the quantity but also the quality of products. Steps should be taken to prevent private enterprises from doing shoddy work and using inferior materials on government contracts.

Private enterprises engaged in the manufacture and processing of goods will be allowed reasonable profits. The following policy should be followed in determining the sums to be paid by the government to the private enterprises for the goods they manufacture and process, and in determining the prices of these goods. Goods should be classified and paid for according to their quality; encouragement should be given to progressive enterprises, taking into consideration the standing of the majority of enterprises; backward enterprises should be helped ahead and harmful enterprises eliminated.

c. Local industries, local handicrafts and households engaged in subsidiary occupations should be directed to produce goods suitable to the actual needs of the local population and of foreign trade.

2. Agricultural products:

Agricultural production being less centralized than industrial production, it is a more difficult task to control sources of supply in rural areas than in cities.

a. There must be a reasonable allocation of quotas for purchasing grain among the various districts according to their grain output and the needs of the nation.

An estimated 58,000 million catties of grain will be purchased in 1957 according to plan.

b. On the basis of the state's planned purchase of such agricultural products as grain, oil-bearing crops and cotton, appropriate measures will be taken step by step to improve the planned purchase of other important agricultural products in short supply. Meanwhile appropriate economic measures should be linked with political work in the rural areas, taking account of specific local conditions, to increase rapidly the marketable portion of agricultural subsidiary products.

c. We must fix reasonable prices in the various areas for all agricultural products with grain as the standard while taking account of the different circumstances in these areas, so as to stimulate agricultural production and bring about a proportional increase in the production of grain and industrial crops.

d. We must make a timely summing up of experience gained in the planned purchase of agricultural products and gradually establish various kinds of purchasing systems that will encourage the peasants to increase production.

The state must make vigorous efforts to try out various types of contracts with agricultural producers' co-operatives, mutual-aid teams and individual peasants to provide them with loans and technical aid, supply them with industrial goods and purchase grain and other agricultural products from them. Such contracts should be popularized on an ever wider scale. They are an important means of consolidating the worker-peasant alliance led by the working class; when popularized, they will help to increase production and draw agricultural production into the orbit of state planning.

e. We must adopt suitable measures to encourage

national minorities, according to their specific circumstances, to raise more cattle and sheep and turn out more animal products and mountain and forest products for the market.

f. We must raise the political and vocational level of personnel in charge of the purchase of agricultural products. Goods to be purchased must be given fair assessment according to their quality. Procedures and specifications concerning purchases must be simple and easy to follow.

Secondly, the proper organization of commodity supplies calls for due consideration of the various needs of the people and necessary adjustments in the supply of goods to meet these needs. The following are the principal measures for achieving this purpose:

1. Arrangements for the supply of commodities must be made in accordance with the varying circumstances governing production of different commodities and the specific conditions existing in town and the countryside and in the various districts.

a. The distribution of certain staple commodities in short supply should be carried out by adopting planned supply or by providing supplies only to places where these commodities are urgently needed. In distributing commodities to various districts, due consideration should be given to the special local needs in the daily life and productive activities of the people.

b. Experience gained in carrying out planned supply should be summed up in due course so that necessary improvements can be made in this field. We must guarantee that the people receive according to plan all commodities listed under the system of planned supply. We must allow provinces and municipalities to take suitable steps to regulate the supply

of commodities among themselves within the limits of the state plan.

c. We must guarantee supplies of grain and other foodstuffs to cities and industrial areas, and supplies of grain to areas growing industrial crops and to the rural population who are short of grain. We must make adequate arrangements for the supply of grain, edible oil and meat to the catering trade in towns and cities. We must give due consideration to the fodder needs of rural areas.

An estimated 70,000 million catties¹ of grain will be supplied to the people in 1957 according to plan.

d. We must establish markets under state control, dealing in grain (including oil and fats) in districts, townships and towns, where the peasants can trade directly with consumers on their own initiative, supply and marketing co-operatives, or purchasing organizations of the state. Such markets can play an important role in regulating the grain supply between town and countryside. We must give it vigorous leadership and protection, and help it to function.

e. We must increase the supply of industrial goods suited to the needs of the peasants and national minorities, and especially means of production in agriculture. The countryside should receive priority in the supply of industrial goods needed in both town and countryside.

¹This estimated amount of grain to be supplied to the people includes, in addition to grain to be purchased according to plan, the agricultural tax (in kind) to be delivered by the peasants to the state. It is bigger than the amount of grain dealt with in retail trade, since it includes not only grain retailed on the market but grain supplied directly to the catering trade and distilleries, grain reserved for industrial uses and grain stored as part of the state's financial reserves.

f. We must use certain high-quality consumer goods of a suitable kind to regulate commodity consumption in areas where the people enjoy a relatively higher standard of living. We must guarantee a bigger increase in the supply of daily necessities to areas where the people's living standards are relatively low.

g. With the exception of grain, oil and fats and other goods, only limited amounts of which are allowed to be exported, home consumption of such commodities as needed by both domestic and foreign trade should be suitably reduced so as to guarantee exports of these commodities.

2. We must maintain the stability of prices. Suitable measures may be taken to regulate the prices of commodities that are not indispensable to the people but are in short supply, and also the unreasonably high or low prices of certain other commodities. Raising or lowering of the prices of industrial or agricultural products must be carried out with discretion and only after due consideration is given to the over-all situation of supply and demand, remuneration for labour and operation of the law of value.

3. We must gradually increase state reserves of staple commodities which are indispensable to the people, especially grain, in order to ensure that the people under all circumstances will be provided with the necessary amounts of such commodities.

We must continue to carry out a system of unified control in the distribution of grain and other staple commodities and improve the work of storing, transportation and processing of grain.

SECTION II. FOREIGN TRADE

We shall help increase economic co-operation within the socialist camp headed by the Soviet Union; we shall expand our trade with the Soviet Union and steadily increase our trade with the People's Democracies.

Trade with the Soviet Union and the People's Democracies, and particularly our trade with the Soviet Union, forms a solid foundation for fulfilment of our import and export task in these five years and for ensuring normal growth of our foreign trade. It is of the utmost significance for the economic development of our country. This type of economic co-operation will enable us in the first place to obtain immense aid from the Soviet Union in the form of superb technique and guarantee imports of equipment and materials necessary for our socialist industrialization. The People's Democracies will also be able to help us in varying degrees in these respects. This type of economic co-operation will also enable us to bring about a steady increase in our export trade and at the same time greatly stimulate the growth of our productive forces.

In keeping with our peaceful foreign policy, and in accordance with the principle of equality and mutual benefit, we should expand trade with the countries of Southeast Asia. At the same time, on condition that it benefits our socialist economic construction, we should continue to develop trade with other capitalist countries to increase imports of certain necessary materials.

We should tighten the state's control over foreign trade to prevent capitalists from infringing our interests and to defend our socialist construction.

The total volume of our import and export trade in 1957 will be 66.5 per cent greater than in 1952.

In order to improve our work in the sphere of foreign trade,

1. We must familiarize ourselves with conditions on the world market, energetically organize the production of export goods and improve the work of purchasing such goods on the home market.

We must steadily increase exports of major agricultural products and minerals; expand exports of mountain and forest products, handicraft goods and certain industrial products, increase our range of export products, and improve the specifications and quality of our exports.

2. We must strictly implement the terms of trade contracts. Within the scope of plans already drawn up, we must, in case of demands simultaneously presented by the export and the home market, guarantee in the first place fulfilment of the terms of export contracts and of the export plan.

3. We must adopt a checking system to ensure that orders follow a unified plan and so avoid incoordinated ordering. We must unify the control of foreign exchange, strictly economize the use of foreign currency in order to guarantee imports of materials essential to our economic construction.

4. We must improve management and organization in our foreign trade, and guide and regulate the trading activities of import-export merchants.

SECTION III. MANAGEMENT OF STATE AND CO-OPERATIVE COMMERCE

A. Amount of Trade Handled by State and Co-operative Commerce In these five years, state and co-operative trading will develop as follows:

In 1957 the value of goods purchased by departments under the Ministry of Commerce will amount to 27,100 million yuan or 180 per cent more than in 1952, while the total value of their sales will be 34,300 million yuan or 219 per cent more than in 1952. The supply and marketing co-operatives will purchase agricultural products to the value of 12,500 million yuan or 222 per cent more than in 1952.

The value of state retail sales will rise to 10,220 million yuan in 1957 or 133.2 per cent more than in 1952; this will be 20.5 per cent of the total value of retail sales of commodities of all kinds as compared with 15.8 per cent in 1952.

The value of co-operative retail sales will amount to 17,150 million yuan in 1957 or 239.5 per cent more than in 1952; this will be 34.4 per cent of the total value of retail sales of commodities of all kinds as compared with 18.2 per cent in 1952. Of this amount, the value of retail sales handled by supply and marketing co-operatives will be 16,690 million yuan or 235.5 per cent more than in 1952.

B. The Unification of Leadership in Commercial Work State trade and co-operative trade guarantee that our country's commercial activities will develop in a rational and systematic way, and that the circulation and supply of commodities will be such as to meet the requirements of our economic construction plan and the purpose of serving the people. At the same time, they promote the expansion of our industrial and agricultural production. We must see to it that state trade and co-operative trade work together in harmony; we must make great efforts to strengthen the role of state trade as the central leader and regulator of the market and at the same time fortify the position of co-operative trade.

1. The Ministry of Commerce must shoulder the

responsibility of leading all commercial work in the country. It must pay attention to the following tasks:

a. It must investigate into the requirements of the people in the various parts of the country and assume responsibility for seeing from time to time that a balance is maintained between supply and demand on the market.

b. It must co-ordinate the activities of state, co-operative and private commercial organizations, supervise the activities of private merchants and carry through the socialist transformation of their enterprises.

c. It must work out a draft plan for the fixing of prices.

Local commercial departments should follow the leadership of the central commercial departments.

2. The supply and marketing co-operatives should follow the lead of government commercial departments at the same level as themselves on the question of planning for management, price policy and other commercial policies. Attention must also be drawn to the following points:

a. They must devote great efforts to organizing the supply of means of production for the countryside to meet the needs of agricultural production and the steady development of agricultural co-operation.

b. They must fulfil the purchasing plan entrusted to them by the state by forward purchases of agricultural products and various other suitable purchasing methods.

c. In accordance with the needs of the state and the rural population, they must assist the handicraftsmen in a planned way to increase production so as to provide more articles of daily need, household utensils and furniture for the rural population.

d. They must regularly study the experience

they have gained in making contracts with agricultural producers' co-operatives, mutual-aid teams, individual peasants, handicraft producers' co-operatives, and individual handicraftsmen in order to improve the contract system.

C. Improving Commercial Work State trading organizations and the co-operatives should work hard to improve their work, increase the rate of circulation of commodities and the turnover of capital, reduce costs needed for the circulation of commodities, extend the system of business accounting and accumulate more capital for the state.

a. Wholesale trade organizations must be strengthened and their work improved. The circulation of commodities must be properly organized and the number of unnecessary links in circulation reduced.

b. We must make unified arrangements for establishing a retail-trade network of state, co-operative and private trading establishments that will bring shops nearer to the consumer and give him more convenient service.

c. We must, taking account of the actual needs of the inhabitants of different areas, increase the supply of goods to them and manage distribution so that, step by step, we can provide and distribute goods of the required type and specifications when they are needed. We must make great efforts to organize the interflow of commodities and see to it that the organizations dealing with the circulation of commodities are closely linked with one another.

d. We must, step by step, bring about a balance in the production and marketing of major commodities according to zones and introduce a rational system of through-transportation.

e. We must improve warehouse management,

rationalize procedures for withdrawing and depositing goods and improve facilities for safe storage.

f. We must reduce the rate of damage to goods, cut miscellaneous expenditure and, while reserving a reasonable amount of stock in hand, try to economize on working capital.

g. We must improve political work in state and co-operative trading enterprises, raise the level of political consciousness of the people working in the commercial field so that they will increase production and serve the consumers even better.

SECTION IV. UTILIZATION, RESTRICTION AND TRANSFORMATION OF PRIVATE COMMERCE

The socialist transformation of private commerce should be steadily carried out while taking account of market conditions and drawing a distinction between capitalist commercial enterprises and small proprietors working independently. It should be carried out under a unified plan of the state and with the state trading departments sharing responsibility with the supply and marketing co-operatives. Suitable arrangements should be made as the transformation takes place; that is to say, while transformation goes ahead in the commercial field, on the one hand, to increase the proportion of trade in favour of the socialist sector and to strengthen socialist leadership of commerce as a whole, it is necessary, on the other hand, to see that the livelihood of the people engaged in private commerce is maintained during the transformation.

1. In order to stabilize the market and stimulate trade between town and countryside, we must take local conditions into account and correctly arrange the

proportions of retail sales to be handled by public and private enterprises.

2. When state trading organizations and co-operatives expand the scope of their business, suitable arrangements should be made, trade by trade, for those private trading concerns which are affected by such expansion, suitable means should be found to employ and re-educate the people (including those representing the interests of private capital) working in such concerns. In the cities, including the larger county towns and market towns all such arrangements should be the responsibility of state trading organizations; in smaller county towns and ordinary towns and villages the responsibility should rest with the co-operatives. In towns which do not fall clearly into either of these two categories, arrangements should be put under the care of one or the other according to the actual situation.

3. Existing small-scale capitalist wholesale businesses, retail businesses and import-export businesses should be transformed step by step into various forms of state capitalist enterprise.

In wholesale trade, the supply and marketing co-operatives should organize private wholesalers for joint purchasing of the less important agricultural subsidiary products.

In retail trade, private retail enterprises in the cities and the countryside should be transformed into distributors or retail dealers to work for state trading organizations and supply and marketing co-operatives on a commission basis, to purchase goods from state and co-operative stores for retail at fixed prices, or to be organized into joint state-private concerns.

In the sphere of foreign trade, import-export dealers will be transformed by undertaking to import or export goods for the state on commission or by

being merged with state enterprises so that they will shoulder, in part, trade with capitalist countries.

4. Small traders and pedlars working independently should be allowed to continue in business if their operations benefit trade between town and countryside. At the same time they should be organized step by step through co-operation or be enabled to act as distributors working on a commission basis for state trading organizations or co-operatives, or to purchase goods from state and co-operative stores and retail them at fixed prices. Alternatively they (pedlars, for instance) can be employed as regular salesmen or purchasing agents for state trading organizations or co-operatives.

5. We must strengthen controls over private merchants (including the commercial dealings of rich peasants in the countryside) and prevent speculation and cheating of consumers.

In these five years, the value of privately-run retail sales will change as follows:

In 1957 the total value of retail sales handled by private commerce, business enterprises in various forms of state capitalism, and small concerns of co-operative types will be 22,460 million yuan or 23.2 per cent more than in 1952 (when it was 18,230 million yuan). But their share of the total value of retail sales of commodities of all kinds will drop from 66 per cent in 1952 to 45.1 per cent.

Of the above total, business enterprises in various forms of state capitalism, and the small concerns of co-operative types will account for approximately 53.2 per cent, and privately-handled retail sales will account for 46.8 per cent, of which a considerable proportion will be handled by peasants and handicraftsmen who sell their products themselves or by small traders and pedlars.

CHAPTER SEVEN

TARGETS FOR RAISING PRODUCTIVITY OF LABOUR AND REDUCING COSTS

SECTION I. RAISING PRODUCTIVITY OF LABOUR

Lenin once said: "In the last analysis, productivity of labour is the most important, the principal thing for the victory of the new social system. Capitalism created a productivity of labour unknown under serfdom. Capitalism can be utterly vanquished, and will be utterly vanquished, by the fact that socialism creates a new and much higher productivity of labour." "Communism is the higher productivity of labour—compared with that existing under capitalism—of voluntary, class-conscious and united workers employing advanced technique." (*A Great Beginning*.)

The working class and the broad mass of labouring people have shown such zest for work since liberation, that there has been a great and steady rise in productivity of labour. As a result, we have been able to achieve, within a short space of time, a rapid recovery of our national economy ravaged by the imperialists and the Kuomintang gangsters. This demonstrates the superiority of socialism over capitalism, and has led to the rapid growth in strength of the socialist sector of our national economy. That is why an increase in productivity of labour is of prime importance to the victory of the socialist system. Higher productivity of labour makes it possible to increase

production and opens up abundant possibilities for expanding the scale of production. It provides the most important condition for the reduction of costs; it is a vital factor in accumulating capital for national construction and it is the principal means of ensuring a constant improvement in the material welfare of the people.

In this five-year period, labour productivity in the state-owned industries will rise 64 per cent, an average rise of about 10 per cent each year. Labour productivity in building and installation of equipment in industrial capital construction projects will rise 72 per cent, an average rise of 11 per cent each year.

In this five-year period, the rise in labour productivity in industries under the various industrial ministries and local authorities will be as follows:

Ministry of Heavy Industry	67.9 per cent
Ministries in charge of the fuel industry	63.6 per cent
Ministries in charge of the machine-building industry	65.2 per cent
Ministry of Textile Industry	10.4 per cent
Ministry of Light Industry	75.5 per cent
Factories and mines under other ministries	68.5 per cent
Factories and mines under local authorities	87.9 per cent

In this five-year period, the rise in labour productivity in transport departments will be as follows:

Ministry of Railways	77.9 per cent
Ministry of Communications	
River transport	163.8 per cent
Sea transport	100.2 per cent

We must see to it that the above targets are fulfilled, or, as a result of further effort, overfulfilled.

Over two-thirds of the increased value of output of state industries from 1952 to 1957 will result from rising productivity of labour. In this five-year period, an increase of one per cent in productivity of labour

in all state industries equals approximately 182,820,000 yuan in terms of value of output.

To raise labour productivity it is necessary to achieve a heightened sense of responsibility on the part of the broad mass of workers and staff, to strengthen labour discipline, to raise the professional, technical and cultural levels of workers and staff, to improve labour organization and methods of work, to bring about technical and organizational improvements in production, to make more rational use of equipment, to adopt improved techniques and the latest experience, to reform the wage system, and gradually to introduce strict systems for a fixed number of staff and for fixed production quotas.

Labour emulation campaigns are an effective method at all times of raising productivity of labour. We should constantly work to bring about a new upsurge of the emulation movement.

We must further strengthen measures for labour protection in industrial enterprises.

SECTION II. REDUCING COSTS

A. In the Sphere of Industry, Transport and Circulation of Commodities The cost of a product is a basic indicator of the quality of work of an enterprise. Productivity of labour; the extent to which rational use is made of equipment, raw materials, materials, fuel and power, and money-capital; the economies made in the use of raw materials, materials, fuel and power; the quality of products; the level of management and of labour organizations—all these will be reflected in the cost of a product.

We must constantly and systematically reduce costs of industrial products and transport and circula-

tion charges on commodities so as to improve our economic work, push forward technical reforms in production, speed up the accumulation of capital, and consolidate and expand the socialist sector of the national economy.

The targets for reduction of costs in this five-year period will be as follows:

Costs of production in enterprises under industrial ministries will be reduced by approximately 22 per cent (calculated in comparison with those goods whose costs are known). This includes:

Ministry of Heavy Industry	20.7 per cent
Ministries in charge of the fuel industry	18.3 per cent
Ministries in charge of the machine-building industry	40.1 per cent
Ministry of Textile Industry	9.1 per cent
Ministry of Light Industry	23.0 per cent

Industries under the control of other ministries should also endeavour to reduce their costs of production.

State industries under local authorities will reduce costs by about 28 per cent.

Transport departments will reduce costs by about 24 per cent. This includes:

Ministry of Railways	21.1 per cent
Ministry of Communications	47.6 per cent

Charges on circulation of commodities in state trading concerns will be reduced by about 33 per cent (taking account of the reduced rates of interest on loans granted by the banks in 1953). This includes:

Ministry of Commerce	43.6 per cent
Ministry of Food	9.3 per cent
Ministry of Foreign Trade	29.7 per cent

To ensure fulfilment of the target for reduction of costs, every enterprise, in addition to relying upon a rapid increase of labour productivity, must introduce a system of fixed production quotas, economize raw materials, materials, fuel and power, use the wage fund correctly, and cut down non-productive outlays. Commercial departments in particular should see to it that commodities are properly distributed in a reasonable way and that the number of links in the distribution of commodities is reduced.

B. In the Sphere of Capital Construction Reduction of costs of building and installation of equipment in capital construction is of the utmost importance in saving capital for the state. While the quality of engineering work must be strictly maintained we must reduce costs to the utmost extent and as far as possible shorten the time taken in building operations and the installation of equipment. In the last three years of the present Plan, costs of building and equipment installation in productive projects should be reduced at least 10 per cent as compared with the figure originally planned; while building costs of various non-productive projects should be at least 15 per cent less than in the original plans. At the same time, with this as a basis, we should strive for a further annual reduction of 2 to 3 per cent in the costs of both productive and non-productive construction projects. In this way a huge amount of money will be saved for the state.

Departments responsible for capital construction must pay great attention to implementing the various measures prescribed in Chapter Three for fulfilling the plan of industrial capital construction; that is, they should see that they adhere to the system of business accounting and put it on a sound basis, introduce a system of making budgetary estimates at

the stage when blueprints are being drawn up, tighten up financial control, rationalize operations on construction sites, economize materials and manpower, and combat waste so as to reduce costs of building and equipment installation.

CHAPTER EIGHT

TRAINING OF PERSONNEL FOR CONSTRUCTION AND PROMOTION OF SCIENTIFIC RESEARCH

Large-scale national construction, the growth of industrial and agricultural production, transport and communications, the exchange of goods, and the promotion of cultural and educational work—all these require large numbers of personnel, particularly industrial technicians, loyal to our motherland and to the cause of socialism and with necessary educational, technical and professional qualifications. At the present time, however, the numbers and qualifications of such personnel as we have cannot meet the needs of the country. Apart from making rational use of existing technical personnel, and seeing to it that they make the greatest possible contribution to national construction, we must make vigorous efforts to train new personnel during the period of the First Five-Year Plan.

The ranks of workers in the various fields of the national economy and state organs will, in this five-year period, need to be augmented by about one million additional specialized personnel graduating from the various institutions of higher education and secondary schools. The departments of industry, transport, agriculture and forestry under the central authorities need to be reinforced by about one million additional skilled workers. To meet our needs

in these five years and carry out the necessary preparations for the Second Five-Year Plan, the state will systematically reorganize, expand and establish all types of colleges and secondary vocational schools, make full use of the favourable conditions which exist in enterprises and government bodies to train personnel for all kinds of construction and, at the same time, without taking them away from their regular jobs, give office workers training in political theory and government policy, and improve their vocational knowledge, general education and knowledge of technique.

During these five years, to promote scientific research in our country, we should suitably expand our scientific research institutions and draw up scientific research plans on the basis of the immediate as well as long-term needs of national construction.

SECTION I. PERSONNEL TRAINING

A. Higher Education The main effort in higher education in this five-year period will be to develop engineering colleges and natural science departments in universities. Colleges of agriculture and forestry, teachers' colleges, medical colleges and institutes of other types will also be appropriately expanded. The state will reorganize and expand existing universities and colleges of various types, and establish 60 new institutions of higher learning (including one university, 15 engineering colleges, 4 colleges of agriculture, forestry and meteorology, 2 colleges of economics and finance, 3 colleges of political science and law, 19 teachers' colleges, 6 medical and pharmacological colleges, 2 languages institutes, 4 institutes of physical culture, and 4 colleges of fine arts).

By 1957 China will have 208 institutions of higher education, of which 15 will be universities, 47 engineering colleges, 29 colleges of agriculture and forestry, 5 colleges of economics and finance, 5 colleges of political science and law, 43 teachers' colleges, 32 medical and pharmacological colleges, 8 languages institutes, 6 institutes of physical culture, 14 colleges of fine arts, and 4 other institutes. Of the afore-mentioned institutions of higher education, six will be exclusively for national minorities.

The table below shows the planned number of students to be enrolled in higher educational institutions in regular and special courses and the planned number of graduates in this five-year period, the total number of students in 1957, and relevant percentages:

Course	Planned Enrolment 1953-1957	Percentage of Students Enrolled	Number of Graduates 1953-1957	Percentage of Graduates	Number of Students in 1957	Percentage of Students	Ratio of 1957 to 1952 (per cent)
Total	543,300	100.0	283,000	100.0	434,600	100.0	227.4
Engineering	214,600	39.5	94,900	33.6	177,600	40.9	266.8
Agriculture and forestry	41,800	7.7	18,800	6.6	37,200	8.6	240.7
Economics and finance	16,400	3.0	25,500	9.0	12,700	2.9	57.9
Political sci- ence and law	10,600	2.0	4,800	1.7	9,300	2.1	242.3
Public health	57,600	10.6	26,600	9.4	54,800	12.6	221.4
Physical culture	6,000	1.1	2,800	1.0	3,600	0.8	1,107.7
Natural sciences	32,600	6.0	13,800	4.9	27,100	6.2	283.4
Arts	29,300	5.4	21,600	7.6	20,400	4.7	150.9
Pedagogy	130,700	24.0	70,400	24.9	89,000	20.5	282.0
Fine arts	3,700	0.7	3,800	1.3	2,900	0.7	79.3

A study should be made to determine the type of personnel required by the departments concerned during the Second Five-Year Plan so that we can gradually ensure that graduates of various types of engineering colleges meet the requirements of these departments; measures should be included in annual plans to reorganize engineering colleges where necessary, readjust the proportion of students training in regular and special courses and in the higher and intermediate grades, and open various special courses where needed. In opening and enlarging special courses, emphasis should be on machine-building, civil engineering, geological prospecting, mining, power and metallurgy.

The number of students in engineering colleges given in the table above will be distributed in thirteen specialized fields as follows:

Specialized Field	Planned Enrolment 1953-1957	Percentage of Students Enrolled	Number of Graduates 1953-1957	Percentage of Graduates	Number of Students in 1957	Percentage of Students	Ratio of 1957 to 1952 (per cent)
Total	214,600	100.0	94,900	100.0	177,600	100.0	266.8
Geology and prospecting	17,500	8.1	10,000	10.5	12,500	7.1	219.2
Mining and mine management	16,000	7.4	7,600	8.0	12,400	7.0	258.8
Power	15,500	7.2	7,500	7.9	13,300	7.5	232.8
Metallurgy	10,000	4.7	3,200	3.4	8,900	5.0	398.4
Machine and tool making	54,100	25.2	19,300	20.4	46,100	26.0	395.2
Manufacture of electric motors and electrical supplies	9,400	4.4	1,700	1.8	8,800	5.0	870.2
Chemical technology	10,600	5.0	5,100	5.4	9,100	5.1	219.3

Specialized Field	Planned Enrolment 1953-1957	Percentage of Students Enrolled	Number of Graduates 1953-1957	Percentage of Graduates	Number of Students in 1957	Percentage of Students	Ratio of 1957 to 1952 (per cent)
Paper making and lumbering	700	0.3	600	0.6	600	0.3	127.1
Light industry	4,400	2.0	3,300	3.4	3,600	2.0	138.0
Surveying, drafting, meteorology and hydrology	4,600	2.2	2,100	2.3	3,500	1.9	273.0
Building construction and city planning	37,400	17.4	25,100	26.4	28,200	15.9	163.5
Transport, posts and telecommunications	9,600	4.5	4,700	5.0	8,500	4.8	200.5
Others	24,800	11.6	4,700	4.9	22,100	12.4	406.2

As the number of specialized engineering students given in the above table cannot fully meet the needs of the country, the annual plans should provide for further suitable readjustments in the proportion of students in different specialized fields.

In order to fulfil our task in promoting higher education and raising the standard of teaching, special attention should be paid to the following points:

1. Promotion of higher education must conform to the needs of socialist construction and must be co-ordinated with plans for development of the national economy. Schools should not be overconcentrated in a few areas, and their scale of development generally should not be too large. Engineering colleges should gradually be located near industrial bases.

2. Vigorous efforts should be made to train new teachers, rally together the old teachers and raise their standards, making full use of their capabilities. At the same time, we should organize scientific research workers, technical personnel in factories and mines and specialized personnel in the various departments concerned to teach concurrently in higher educational institutions. To ensure that we have a sufficient number of teachers for the promotion of higher education, a total of 34,000 graduates, 11,000 of them from engineering colleges, will become assistants or post-graduates (including those to be sent to the Soviet Union for further studies).

3. Vigorous efforts should be made to absorb the latest teaching experience in the Soviet Union and, in accordance with conditions in our country, reform the teaching system, draw up or revise teaching plans and syllabi, compile and translate teaching materials and improve our teaching methods.

4. We should enforce the system of providing students with field work and improve the leadership given to such work; we should gradually introduce the system of establishing close contact between colleges of engineering, agriculture, economics and finance on the one hand, and factories and mines, farms and other enterprises concerned on the other. We should install more apparatus and equipment in laboratories, workshops and farms for practical work in higher educational institutions and make full use of such equipment to achieve better results in teaching.

5. In accordance with immediate and long-range needs and in keeping pace with the development of educational work, we should steadily improve the educational system, raise the proportion of enrolments in regular courses, and gradually abolish special courses.

6. We should give better leadership to higher educational institutions, improve the leadership given to political-ideological work, and put more emphasis on the study of Marxism-Leninism and government policies by teachers, staff and students.

In addition, we should take vigorous and systematic action to set up spare-time institutes of higher education, university night schools and correspondence courses, and enrol government workers, technical personnel and skilled workers to study in these schools while carrying on their usual jobs.

B. Secondary Vocational Education In this five-year period, the main emphasis in secondary vocational education will be on training technical and administrative personnel for industry. At the same time, in keeping with the rapid development of agricultural co-operation, attention should also be paid to training technical and administrative personnel for agriculture.

The table below shows the planned number of students to be enrolled in all types of secondary vocational schools and the planned number of graduates in this five-year period, the total number of students in 1957, and relevant percentages:

Specialized Field	Planned Enrolment 1953-1957	Percentage of Students Enrolled	Number of Graduates 1953-1957	Percentage of Graduates	Number of Students in 1957	Percentage of Students	Ratio of 1957 to 1952 (per cent)
Total	1,005,700	100 0	888,300	100 0	671,800	100 0	105 6
Engineering	346,300	34 4	186,400	21 0	244,000	36 3	219 0
Agriculture and forestry	121,600	12 1	82,900	9 3	98,800	14 7	148 3
Economics and finance	51,000	5 1	52,700	5 9	33,300	5 0	63 7
Pedagogy	360,500	35 8	465,500	52 4	218,500	32 5	63 3
Public health	118,500	11 8	98,700	11 1	70,900	10 6	119 3
Physical culture	4,100	0 4	800	0 1	3,500	0 5	
Fine arts	3,700	0 4	1,300	0 2	2,800	0 4	385 1

We should pay special attention to the following points in secondary vocational education:

1. The growth of secondary vocational schools must be better planned; specialized training must have clearly defined aims; any expansion without a definite purpose should be avoided; and the relative growth of various types of specialized courses should be re-adjusted so that the training of junior specialized personnel is geared to meet the needs of national construction.

2. We must raise the standards of veteran teachers, and pay attention to the training of new ones.

3. The various departments concerned must strengthen their organizations in charge of educational work, improve their leadership over secondary vocational schools under their jurisdiction, reform the teaching systems and raise the standard of teaching.

4. We should make vigorous efforts to establish more spare-time secondary vocational schools and night schools, particularly spare-time secondary engineering schools.

5. We should expand the system by which secondary engineering schools maintain close contact with factories and mines.

C. Students Going Abroad for Study or for Practical Training The sending of students abroad to study or get practical training is an important measure for raising our general scientific and technical levels and improving the management of enterprises in our country.

In this five-year period, 10,100 students will be sent abroad to study; 9,400 of them will go to the Soviet Union, and 700 to the People's Democracies and other countries.

The number planned for each of the five years is as follows:

<i>Year</i>	<i>Number of Students to Be Sent</i>
1953	700
1954	1,500
1955	2,400
1956	2,600
1957	2,900

During these five years, 900 students will complete their studies abroad and return home. By 1957, there will be 9,900 students studying abroad, which is about 15 times the number in 1952.

To ensure that this scheme function smoothly, the Preparatory Department for Further Studies in the Soviet Union will enrol 12,800 students in this five-year period. The number and standard of students to be sent abroad for further studies must be guaranteed.

In this five-year period, about 11,300 students will be sent to the Soviet Union and the People's Democracies for practical training, and the great majority of them will have completed their practical training by 1957. Such students should be sent abroad in time and in complete groups, taking into consideration the scope and progress of our basic construction projects.

SECTION II. TRAINING SKILLED WORKERS

Over 920,000 skilled workers will be trained in this five-year period by the ministries of industry, agriculture, forestry, transport, posts and telecommunications, and labour. Detailed figures are given below:

<i>Ministry</i>	<i>No. of Skilled Workers to Be Trained</i>
Ministry of Heavy Industry	176,800
Ministries in charge of the fuel industry	172,000

<i>Ministry</i>	<i>No. of Skilled Workers to Be Trained</i>
Ministries in charge of the machine- building industry	174,100
Ministry of Textile Industry	55,400
Ministry of Light Industry	22,900
Ministry of Geology	11,800
Ministry of Building Construction	39,800
Ministry of Agriculture	21,500
Ministry of Forestry	33,000
Ministry of Railways	158,800
Ministry of Communications	19,800
Ministry of Posts and Telecommunications	19,900
Ministry of Labour	14,500

Workers' technical schools are one of the main means of training skilled workers. In 1952, there were 22 such schools under the above-mentioned ministries; in 1957 there will be 140 and it is planned to train 119,000 skilled workers in this five-year period.

In this same period, about 362,000 skilled workers will be trained in workers' technical training classes in different enterprises.

Vigorous efforts must be made to popularize various effective methods of training skilled workers on the job. In this five-year period, about 439,000 skilled workers will be trained in various enterprises by the "master-apprentice" method.

Vigorous efforts must also be made to organize workers to receive general and technical education in their spare time, to study extensively the latest Soviet techniques, to study and carry out the proposals of the Soviet experts, and to popularize the most up-to-date experience of workers and staff, so as to maintain a constant rise in their technical level.

Special departments should be set up in the various enterprises to strengthen the leadership in workers' technical schools and training classes and the guidance given to general educational activities and technical

training among workers and staff; to reform the system of education in this field, and provide more teachers and equipment; and to compile uniform syllabi for different schools.

SECTION III. SCIENTIFIC RESEARCH

Efforts must be made in this five-year period to lay a firmer foundation for scientific research, to improve the work of rallying the scientists together, to establish closer contacts between scientific research organizations and related departments, to improve scientific research and experimental work, to sum up constantly new scientific and technical experience, to master the latest achievements in Soviet science and technique, to promote step by step the investigation and study of the natural conditions of our country, its natural resources and social conditions, and to raise stage by stage the level of research work in the fundamental branches of the natural sciences and in social science.

In view of the fact that scientific research bodies are being established gradually in all departments concerned, the research institutes under the Academia Sinica should put the main emphasis of their work on the study of scientific problems relating to national construction, and problems of key importance and general interest raised by scientific development in every field. The Academia Sinica should also pay attention to the training of personnel for scientific research.

During the First Five-Year Plan period, the Academia Sinica will pay particular attention to research work in the following eleven fields: (1) peaceful use of atomic energy, (2) problems connected with the building of new iron and steel bases, (3) petroleum

(4) seismology, (5) problems connected with investigation and research into the multiple-purpose exploitation of river valleys, (6) investigation and research into tropical plants in South China, (7) China's natural divisions and economic divisions, (8) antibiotics, (9) polymers, (10) theoretical problems relating to national construction during the period of transition to socialism, and (11) China's modern and contemporary history and the modern and contemporary history of philosophy in China.

In 1957, there will be 51 research institutes under the Academia Sinica, 23 more than in 1952; the number of research personnel will exceed 4,600 which is over 3,400 more than in 1952.

In addition to the Academia Sinica, all departments concerned should set up a certain number of scientific research bodies. We must strengthen the leadership and provide more personnel and equipment in these units so as to enable them to play their part in national construction. Scientific research work in the sphere of industry, especially fuel, metallurgy, machine building, basic chemistry and building construction, should all be energetically developed. The scientific research units established to serve agriculture are fairly well founded. Existing agricultural scientific research institutions and experimental farms in the various parts of the country must be strengthened and the division of labour must be properly organized according to varying local conditions. We must improve the leadership in agricultural scientific research work and improve the quality of the work done so that it can keep up with the growing demands of large-scale agriculture for scientific techniques. Scientific research institutes under the various departments concerned must draw up their own research plans.

Higher educational institutions should organize scientific research work and advance it as much as possible while closely co-ordinating it with the work of teaching. They should give full scope to the abilities of scientific experts they now have, draw up plans for scientific research so that scientific research work in higher educational institutions may be still more closely connected with the practical work of national construction and able to play its proper part in it.

All scientific research organizations must intensify their study of practical problems relating to national construction; the departments concerned should make wide use of various scientific inventions and advanced technical experience and supply the various scientific research organizations and higher educational institutions with necessary materials for research work.

The scientific research plans of research units under the Academia Sinica, under various departments and the higher educational institutions must be submitted to the State Planning Committee so that they can be co-ordinated.

The state will draw up regulations to reward scientists and engineering technicians for their inventions and innovations.

CHAPTER NINE

IMPROVING THE MATERIAL WELL-BEING AND CULTURAL STANDARD OF THE PEOPLE

SECTION I. IMPROVING THE MATERIAL WELL-BEING OF THE PEOPLE

A. Increasing the Number of Workers and Staff Members In 1952, the number of workers and staff members employed throughout the country was about 21,020,000. With the expansion of economic, cultural and educational work, it is estimated that the number will increase to 25,240,000 in 1957.

The number of workers and staff members in state, co-operative and joint state-private enterprises, in organs of the state, in people's organizations and cultural, educational and public health departments will increase from 10,124,000 in 1952 to 15,484,000 in 1957, an increase of 5,360,000 in five years. Detailed figures are given below:

	Number of Employed in 1952 (in thousands)	Increase in Five Years (in thousands)	Number of Employed in 1957 (in thousands)	Ratio of 1957 to 1952 (per cent)
Industry	2,864	2,272	5,135	179.3
State enterprises	2,513	1,323	3,836	152.6
Co-operative enterprises	130	92	222	170.3
Joint state-private enterprises	220	857	1,077	489.8
Agriculture, water con- servancy, forestry and meteorological services (all state enterprises)	239	371	610	255.5
Building	1,021	744	1,765	172.9
Transport and posts and telecommunications	716	376	1,093	152.5
State enterprises	707	360	1,068	150.9
Joint state-private enterprises	9	16	25	277.8
Commerce	1,134	953	2,087	184.1
State enterprises	492	583	1,075	218.3
Co-operative enterprises	641	371	1,012	157.8
Banking	305	71	377	123.4
State enterprises	298	71	369	124.0
Joint state-private enterprises	8		8	100.0
State organs and peoples organizations	1,523	55	1,578	103.6
Culture, education, public health	2,282	463	2,744	120.3
Municipal public utilities	41	55	96	234.7
Total	10,124	5,360	15,484	152.9

In 1952 there were about 2,542,000 workers and staff members in private industries, about 2,320,000 in private commerce and about 6,035,000 in handicrafts¹ and carrier services—a total of about 10,897,000. By the end of these five years, as a result of the socialist transformation of capitalist economy and

¹Referring to assistants and apprentices employed by individual handicraftsmen.

individual economy, it is estimated that 1,140,000 persons will have become workers and staff members in state, co-operative and joint state-private enterprises, while the number of workers and staff members in private industrial enterprises, private commerce, handicrafts and carrier services will be reduced to 9,757,000.

It is estimated that the net increase in the number of workers and staff members throughout the country in these five years will be 4,220,000 persons. At the same time, vacancies resulting from workers and staff members going to attend schools, or from their retirement or death will have to be filled; so the total increase during these five years will exceed 4,220,000, thus greatly expanding employment in the country.

The number of workers and staff members in state, co-operative and joint state-private enterprises in the various branches of the economy—industry, agriculture, forestry, capital construction, transport, posts and telecommunications, commerce and banking—will increase from 37.8 per cent in 1952 to 54.5 per cent in 1957; that in private enterprises will decrease from 30.6 per cent in 1952 to 18.2 per cent in 1957; and that of workers in handicrafts and carrier services will decrease from 31.6 per cent in 1952 to 27.3 per cent in 1957.

Workers and staff members engaged in the production of goods constituted 73.9 per cent of the total in 1952, and this will increase to 74.9 per cent in 1957; those engaged in other services constituted 26.1 per cent of the total in 1952, and this will be reduced to 25.1 per cent in 1957. Workers and staff members in state organs and banking constituted 9.8 per cent of the total in 1952, and this will be reduced to 8.8 per cent in 1957.

We must see to it that there are timely replenishments of skilled labour. Approximately an additional one million skilled workers will be needed in state-owned industrial and transport enterprises during these five years. The greater part of these will be trained within the enterprises themselves and in workers' training schools. Workers and staff members transferred from private trade will be the main source of replenishments for state trading organizations and the co-operative trading network.

If we are to make more rational use of labour power, we must pay attention to the following points:

1. Every state organ and state enterprise must step by step establish a permanent organization with a fixed number of personnel. They must make an earnest effort to simplify and reduce the size of their administrative branches and reduce the number of personnel not actually engaged in production while increasing the proportion of those engaged in production.

2. We must improve the distribution of labour power and step by step establish a proper system for this work. An annual plan for replenishment of labour power must be mapped out by each enterprise, on the basis of its production and manpower plan. The various sections of departments which require replenishments of labour power should, in the first place, secure them from surplus personnel in their respective departments or trades (including private enterprises). If this cannot be done, the organizations in question must not blindly go ahead enrolling additional workers or staff members they need, but the central or local labour offices must assume the responsibility for making the necessary adjustments or arranging transfers.

3. The various economic departments and local authorities must, in accordance with the state plan, explore every possibility of production in various fields to make full use of the country's abundant labour power.

4. The central and local labour offices must, in a planned way, help surplus labour power in the cities to secure work in their trade or to change their occupation.

B. Increase of Wages and Welfare Grants for the Workers and Staff Members Wages and welfare grants for workers and staff members will be raised appropriately on the basis of a continuous increase in production and labour productivity.

In these five years, the average wage of workers and staff members in state, co-operative and joint state-private enterprises, state organs, people's organizations, and cultural, educational and public health departments will be increased by about 33 per cent. Taking into consideration differences in existing wage scales, the nature of work and working conditions, the average wages of workers and staff members in the various departments will be increased as follows:¹

¹In determining wage increases for workers and staff members during these five years, we have made allowances for changes in the parity units and the complete replacement of the *pao-kan* system by the money-wage system.

The targets for increases in the average wage of workers and staff members in cultural, educational and public health departments and in other state organizations are higher because their original average wages were lower. Conversely, the targets for increase in wages for workers and staff members in capital construction are lower because their original average wages were higher.

Industry	27.1 per cent
Agriculture, water conservancy and forestry	33.5 per cent
Transport and posts and telecommunications	20.4 per cent
Capital construction projects	19 per cent
State and co-operative trade	28 per cent
Banking	24.6 per cent
State organs	65.7 per cent
Culture, education and public health	38.2 per cent

During these five years, the state must strengthen its centralized control of wages and gradually improve and reform the existing wage systems:

1. We must suitably revise wage standards in accordance with conditions in the various departments, enterprises and areas, making a distinction between skilled and unskilled, light and heavy labour. We must step by step establish reasonable wage scales so that the wages of workers in various branches of production will be properly graded in relation to their skills, thus eliminating equalitarianism in the wage system as well as other unreasonable conditions and adhering to the principle of "to each according to his work."

Wages for unskilled workers must not be fixed at too high a level. During these five years bigger increases in wages must be given to highly skilled technical personnel and scientific research personnel.

2. We must actively and stage by stage popularize the piece wage system on the basis of scientifically determined production norms and fixed working hours.

3. We must step by step introduce reasonable systems of bonuses and subsidies, reform and gradually abolish irrational systems of bonuses and subsidies. Taking account of the needs of national construction and differing conditions in various areas, workers and staff members transferred to remote border regions should receive appropriate local subsidies.

4. The *pao-kan* system¹ which is still used for a number of personnel must step by step be replaced by a normal wage system.

5. After thorough preparations, the parity units system² of calculating wages must be abolished, and replaced by the money-wage system.

6. Control over wage funds must be tightened and the system of supervision of wage funds by the state banks must be gradually introduced and perfected so as to put an end to excessive use or waste of wage funds.

7. There must be better supervision over the management of wages in private enterprises; the political consciousness of workers and staff members in private enterprises must be heightened; and unlawful activities by capitalists, such as bribery or excessive exploitation of workers, must be opposed and put a stop to.

In addition to disbursements for suitable increases and reasonable adjustments of wages, the amount to be paid out in these five years by state enterprises and state organs for the labour insurance funds, medical expenses, welfare funds, and cultural and educational expenses, will exceed 5,000 million yuan. Welfare funds for workers and staff members must be properly used and managed with great care.

In these five years housing with a floor space of about 46 million square metres will be built with state

¹A variation of the "supply system." The supply system was practised during the revolutionary civil wars, when workers and staff members received their means of subsistence in kind, in addition to a certain sum of pocket money. Since the liberation, the part paid out in kind began to be converted into cash payments. This was known as the *pao-kan* system.

²Calculated according to the current prices of five staple commodities such as food grain, oil, salt, cloth and coal.

funds for workers and staff members. Of this, housing for personnel in industrial, agricultural, water conservancy, forestry, transport, posts and telecommunications, cultural, educational and public health departments will amount to more than 33 million square metres. Living conditions will be suitably improved.

In accordance with the Labour Insurance Regulations, the state will make suitable provisions to care for old and disabled workers and staff members.

C. Improving the Standard of Living of the Peasants When the people's government was established following the liberation of the whole country, the peasants were freed from the burden of scores of exorbitant taxes and miscellaneous levies imposed on them by the reactionary government. With the abolishment of the feudal land-ownership system, the peasants were further freed from the burden of rent which they had had to pay to the landlords. This used to amount to 50 to 80 per cent of a peasant's grain crops. (The peasants paid a total of 70,000 million catties of grain in rent each year.) They were also freed from the crushing burden of debts from usurious interest rates charged by their landlord creditors. At the same time the people's government has helped the peasants organize production and given them all kinds of financial and technical aid. This has brought about a quick recovery and rapid advance of agricultural production. In 1952, the output of most agricultural products had already exceeded the peak attained in any one year before liberation. All this added up to a great improvement in the well-being of the peasants.

The development of agriculture during these five years will enable the peasants to enjoy a still higher standard of living.

There will be an increase of 23.3 per cent in the value of production of agriculture and subsidiary farm occupations in these five years as a result of the development of co-operation in agriculture, the tremendous help given to the peasants by the state in the form of agricultural loans, building water conservancy works, supplying farm tools, increasing the use of fertilizers, improving agricultural techniques, eliminating plant diseases and pests, etc. There will be an increase of 12.2 per cent in the average value of per capita production in the rural areas.

The decision of the state in 1953 that the rate of agricultural tax would remain unchanged for three years has encouraged the development of agricultural production; it has brought about a relative reduction of the tax burden on the peasants and raised their income.

By purchasing large amounts of farm produce and special rural products, and by adjusting the ratio between the prices of industrial and farm products, the state will greatly increase the purchasing power of the peasants. In 1957 the purchasing power of the rural population will be almost double what it was in 1952.

Planned purchase and supply of grain enables those peasants who have surplus grain to sell it at a reasonable price and those who do not have enough grain of their own or who grow industrial crops, or who are affected by natural calamities, to buy grain at a reasonable price. This protects the peasants from being exploited and cheated by rich peasants and merchant speculators when selling or buying grain.

In this five-year period, a considerable part of industrial production and construction in our country will be designed to meet the peasants' needs both as producers and consumers. The policy of giving pri-

ority to the countryside in supplies of industrial products which are needed both by town and countryside, is of great importance to the development of agricultural production and improvement of the livelihood of the peasants.

In this five-year period, the state will develop culture, and education and public health in the rural areas in order to raise the cultural standards and improve the health of the peasants.

During these five years 1,440 million yuan will be allocated for social relief—1,060 million yuan will be used to help those peasants who, because of natural calamities, get into difficulties either in carrying on production or maintaining their families. In addition, the state will allocate 1,170 million yuan for relief to the families of revolutionary martyrs and armymen. Most of this will be used to help disabled soldiers and army dependents in the villages to develop production and improve their livelihood.

D. Improving Public Health Work for the People The development of the public health and medical services plays a significant role in improving the people's well-being. Existing institutions for anti-epidemic work, hospitals, clinics and sanatoriums will be expanded; we will continue to promote the patriotic movement for better sanitation on a broad scale; the administration of public health service will be strengthened; steps will be taken to wipe out diseases which are particularly harmful to the people, and to improve and protect their health. Public health and medical services in every area and organization should rationalize their work according to the policy of centralized planning with due consideration for all parties concerned.

The following measures will be taken to improve

the public health and medical services during this five-year period:

The number of beds in hospitals under the national health authorities and central departments in charge of various enterprises will be increased to 244,000 in 1957, an increase of 77.2 per cent over 1952. The detailed figures are: 165,000 beds in city hospitals, an increase of 100 per cent, and 79,000 beds in county and town hospitals, an increase of 42.4 per cent.

The number of beds in sanatoriums under the national health authorities and the central departments in charge of various enterprises will be increased to 55,000 in 1957—an increase of 237.1 per cent over 1952. The detailed figures are: national health authorities—19,000 beds, central departments in charge of various enterprises—36,000 beds.

The number of district clinics, epidemic-prevention stations, health centres and health stations under the national health authorities and central departments in charge of various enterprises will be increased to 17,000 in 1957, an increase of 65.1 per cent over 1952.

The number of doctors under the national health authorities and the central departments in charge of various enterprises will be increased to 47,000 in 1957 (this includes 4,000 doctors trained in classical Chinese medicine), an increase of 74.3 per cent.

In 1957, in addition to the above, there will be 18,300 beds in private hospitals, and in hospitals jointly managed by groups of doctors; there will also be 174,800 clinics run by individual doctors or clinics jointly managed by groups of doctors. In these hospitals and clinics the service of 343,000 doctors will be enlisted—320,000 of them trained in classical Chinese medicine.

In developing health and medical services priority must be given to improving the work in industrial

areas, in areas where capital construction is in progress, and in forest areas, and sanitation work in rural districts must be gradually improved.

We must continue to improve health and medical work in national minority areas, send appropriate numbers of doctors and medical personnel there, organize supplies of pharmaceuticals, and make energetic efforts to train health and medical workers from among the national minority peoples themselves.

We must exert active efforts to make full use of the services of doctors trained in traditional Chinese medicine, conscientiously rally them together and improve their work; study and summarize their experience; conduct research into Chinese medicines and Chinese medical science; collect and study secret medical prescriptions; discard what is unreasonable, and absorb and improve what is reasonable and efficacious, so as to enrich our medical science. We must increase the production and improve the quality of Chinese medicines in a planned way, reduce production costs and prices, and improve the work of purchasing and supplying Chinese medicines.

We must improve the leadership given to the work of public and private health and medical services, centralize the planned use of public and private forces, make full use of all their potentialities, and increase their efficiency.

We must steadily improve the work of child care. Health administration departments should strengthen their guidance of child welfare work.

We must popularize physical training among the people throughout the country—beginning with the young people in factories, mines, schools, armed forces and government organizations so as to improve the health of the people in general.

SECTION II. RAISING THE CULTURAL STANDARDS OF THE PEOPLE

In the sphere of culture and education, we have already dealt in Chapter Eight with the training of higher and intermediate technical and administrative personnel and skilled workers, and the development of scientific research. The present section deals mainly with the plan for raising the cultural standards of the people in general. The following plan of general school education and worker-peasant spare-time education will play an important part in raising the cultural standards of personnel now employed and training large numbers of new personnel.

A. General School Education Suitable progress should be made in general school education to the limit of the teachers and state funds available, and by fully utilizing personnel and equipment in existing schools. At the same time, guided by the state plan and relying on the efforts of the people, we should expand primary and middle schools in accordance with the policy of encouraging the peasants themselves and permitting private persons to run schools.

The development of general education should be adapted to the needs of our economic advance. We must pay attention to maintaining a proper geographic distribution of new schools and speed up their development in a planned way in new industrial areas, in national minority areas and in the old liberated areas so that the unbalanced distribution of the past can be gradually corrected.

In promoting general education during this First Five-Year Plan period, special attention will be devoted to middle schools, especially senior middle schools.

In this five-year period, 1,080,000 new students will enter senior middle schools and 602,000 students will graduate from them; 724,000 senior middle school students will be attending classes in 1957, an increase of about 180 per cent over 1952. Of the total number of senior middle school students in 1957, 695,000 will be studying in schools run by the state (including 6,000 students in schools run by industrial enterprises) while 28,000 will be in private schools.

In this five-year period, 6,037,000 new students will enter junior middle schools and 4,093,000 students will graduate from them; 3,983,000 students will be attending classes in 1957, an increase of 78.6 per cent over 1952. Of the total number of junior middle school students in 1957, 3,666,000 will be studying in schools run by the state (including 58,000 students in schools run by industrial enterprises) while 316,000 will be in private schools.

In this five-year period, 53,260,000 new students will enter junior primary schools run by the state, by the local people and by individual persons and 43,260,000 students will graduate from them, while 47,630,000 students will be attending junior primary schools in 1957. In this five-year period, 26,950,000 new students will enter senior primary schools and 20,150,000 students will graduate from them, while 12,170,000 students will be attending classes in 1957. Thus the total enrolment in junior and senior primary schools in 1957 will be approximately 60,230,000 (including 430,000 pupils in primary schools in Sinkiang in which there is no division between senior and junior classes because of a local difference in the school system). This is about 17.9 per cent more than in 1952.

In this five-year period, kindergartens should be established wherever possible. They can be organized

in cities by state authorities, people's organizations, enterprises and the people themselves. In rural areas, agricultural producers' co-operatives should be encouraged to organize kindergartens.

Schools organized by the people themselves should be given assistance with teachers and teaching materials. Private senior middle schools should be gradually transformed into state schools. Private continuation schools of all types should be reorganized separately according to their respective conditions and the needs of society.

We must implement a policy of all-round development of school education, and raise the quality of general school education. To do this, we must give special attention to training and raising the qualifications of teachers and key leading personnel of the schools, improving curricula and teaching methods and materials, reforming educational system, and strengthening the leadership and supervision of general education by local authorities.

B. Spare-time Education for Government Personnel, Workers and Peasants We must make a big effort to promote spare-time education on a large scale. Regular spare-time primary and middle schools should be set up on a wide scale in state organs and enterprises to serve large numbers of government personnel and workers without taking them away from their work. This is the principal method of raising the educational level of government personnel who come from working class or peasant families, and fostering worker and peasant intellectuals.

Within these five years more education will be given to government personnel and workers who have had more than a junior primary school education. The educational qualifications of the majority will be raised to the senior primary school standard, others

to the junior middle school standard, and still others to the senior middle school standard, according to the requirements of the state organs and enterprises in which they work.

The task of wiping out illiteracy among government personnel with working class or peasant backgrounds, industrial workers and those playing a more active role in work in the rural areas, should in the main be completed within these five years. Twenty-three million illiterates will have learned to read and write.

We must make energetic efforts to start up all types of technical and scientific continuation schools, correspondence schools and night schools; organize scientists and technical experts to popularize scientific and technical knowledge in various ways, so that government personnel and the broad mass of the working people can employ their spare time to improve their vocational qualifications and increase their scientific and technical knowledge.

In developing spare-time educational work the voluntary principle must be observed. This work must also be linked with production and political education.

C. Publication and Distribution We must improve and expand our work in publishing newspapers, magazines and books; have a bigger variety and larger quantities of publications dealing with the social and natural sciences, industrial techniques, fiction and belles-lettres, publications for children and popular booklets and magazines, etc. We must improve the quality of all original writing and translations so as to satisfy the needs of national construction and the cultural demands of the people. In publishing scientific books and journals, attention must be paid to the task of spreading a knowledge of dialectical mate-

rialism and opposing all types of idealist doctrines, including metaphysics.

Systematic publication of the classics of Marxism-Leninism is an exceptionally important task in our publishing work.

The following table gives percentage increases for all types of material published in these five years and the number of copies to be printed in 1957:

	Percentage Increase 1952-1957	Number of Copies in 1957 (in thousands of copies)
Newspapers	55 2	2,496,710
<i>Published by</i>		
State enterprises		2,281,250
Joint state-private enterprises		215,460
Magazines	93 0	394,230
<i>Published by</i>		
State enterprises		362,320
Joint state-private enterprises		31,290
Private enterprises		620
Books	54 2	1,211,650
<i>Published by</i>		
State enterprises		916,700
Joint state-private enterprises		294,730
Private enterprises		220

During this five-year period, 49 state-owned and joint state-private publishing houses will be established or reconstructed and, in addition, we will in the main complete the reorganization and socialist transformation of 17 private newspapers, 57 private magazines and 356 private publishing houses.

We must improve book distribution, especially in factories, mines and rural areas. Reorganization of state enterprises distributing books and the socialist transformation of privately-owned enterprises in this

field will serve as the basis for the establishment, during these five years, of 968 state bookshops and sales departments attached to them. In 1957 there will thus be a total of 2,503 such bookshops and sales departments, representing an increase of 63 per cent over 1952. In addition, we will have 271 book kiosks. About 500 of the state bookshops, sales departments and book kiosks to be set up during these five years, will be in industrial areas and national minority areas which have hitherto suffered from a shortage of bookshops; about 250 of these will be formed by re-organizing state bookshops run by local authorities, and about 40 will be formed by transforming private bookshops.

State bookshops will have circulation to the value of 280,000,000 yuan in 1957, an increase of 102 per cent over 1952. State publishing houses will reduce the price of books by more than 10 per cent within these five years.

State bookshops must assume responsibility for making over-all arrangements for the book trade throughout the country, carrying out the plan for distribution of books in every sphere of society, and shoulder the task of carrying through the socialist transformation of all private distributing agencies. State bookshops must take energetic steps to distribute books through private distributing agencies, transform private book retailers into distributors or retailers for state bookshops and also transform some of the private lending libraries into book-distributors, or see that they take up the work of distribution in addition to their normal activities.

D. Broadcasting In these five years our broadcasting system will have at its disposal 2,174.4 kilowatts of additional power. In 1957, it will have 2,650.2 kilowatts or 5.6 times as much power as in

1952: our central station will have 2,150 kilowatts, or 7.4 times as much as in 1952; and local stations will have 500.2 kilowatts, or 2.7 times as much as in 1952.

In 1957, short-wave broadcasts from our central station's home service will be able to reach every part of the country while its medium-wave broadcasts will serve the densely-populated areas east of Lanchow, Chengtu and Kunming. The home service will carry simultaneously three different programmes, including broadcasts in five of the national minority languages. Broadcasting stations in most provinces will have enough power to satisfy the basic needs of radio audiences in those respective provinces. Our broadcasting system will further increase its foreign services.

By 1957, there will be approximately 30,000 broadcasting and receiving posts in cities and villages throughout the country.

E. Art and Literature We must foster art and literature on an extensive scale to educate the people in the spirit of patriotism and socialism.

We must encourage and guide specialists and other personnel in the fields of literature, drama, fine arts, music, dancing and variety show to continue to raise their political-ideological level and perfect their art, to intensify the struggle against manifestations of bourgeois ideologies in the realms of art and culture, to go deep into the everyday life of the people and, by forging ahead along the road of socialist realism, to create works that are correct ideologically and attain an adequate standard of artistic excellence. These are our first and foremost tasks in fostering art and literature.

In developing our art, we must carry out the policy summed up in the phrase: "Let flowers of all kinds blossom side by side, weed through the old to let the

new emerge." Reforms must be carried out step by step so that art can more effectively serve the cause of socialist construction. We must strengthen our unity with the artistes and our educational work among them. We must make full use of local and folk forms of art and literature that are popular among the masses. We must vigorously promote artistic and literary activities of a mass character.

State-sponsored theatrical troupes must be well managed. The political, vocational and cultural levels of the actors, actresses and other theatre staffs must be gradually raised. Their repertoires must be enriched and their productions improved. They must be organized according to plan to give performances in urban theatres and also to tour factories, mines, army units and rural areas. A number of the best troupes should be selected and helped to set an example in stagecraft.

We must make greater efforts to lead local professional theatrical troupes and supervise their work; and give better guidance, as well as aid where needed, to amateur theatrical troupes of the people.

In these five years we will organize eight more state-sponsored theatrical troupes under the cultural departments, making a total of 184 in 1957. There will be, in addition, 28 state-sponsored theatrical troupes under other departments and 2,100 professional theatrical troupes organized by the people themselves.

In these five years we will build 309 more state-operated theatres under the cultural departments, making a total of 663 in 1957. In the same year there will be 75 joint state-private theatres. There will be in addition 140 state-operated theatres under other departments and 1,200 private theatres.

All art and theatrical undertakings of the state

should be made self-supporting so as to save the nation's capital resources and increase our capital reserves. This will also stimulate theatrical activities and help to improve our work in this field.

We must make a bigger effort in giving leadership to private theatres and in supervising their work; we should suitably encourage people to build new theatres and reconstruct old ones. We should make full use of such theatres, and at the same time carry out necessary reforms among them step by step.

F. Cinema We must show greater activity in organizing writers to write scenarios. We must extend the scope of themes for such scenarios, do as we can to increase our production of films, and gradually raise their ideological and artistic levels.

In these five years we shall produce 400 films of all kinds and dub 308 foreign pictures. In 1957 we shall produce 97 films (including 24 feature films) of our own and dub 72 foreign pictures: in both cases this will be more than double the number in 1952.

We shall extend the network of cinemas and mobile teams giving film shows in urban and rural areas. In these five years, there will be 201 more state cinemas under cultural departments, making a total of 629 in 1957; there will be 17 more cinemas jointly operated by the state and private interests, making a total of 60 in 1957. In addition, there will be 109 cinemas under other departments and 98 private cinemas. There will be 4,720 more mobile film projection teams under cultural departments at the end of this five-year plan, making a total of 5,279 in 1957. There will be an additional 1,335 projection teams under other departments.

We shall build new film studios, film laboratories and factories to manufacture film stock. In 1956 we shall start to build a new film laboratory with facili-

ties to process 45 million metres of film a year. In 1957 we shall start building a new film studio with facilities to produce four to eight technicolour feature films a year and a factory to manufacture 65 million metres of film stock a year.

G. Cultural Centres, Libraries and Museums We must improve and consolidate our socio-cultural work and give priority to a selected number of cultural establishments in order to increase the people's store of knowledge, raise their cultural level, and enhance their socialist consciousness and their initiative in developing production.

The following shows the number of cultural centres, libraries and museums in the country in 1957 and the rate of increase over 1952:

Cultural centres: 2,600, 6 per cent more than in 1952.

Libraries: 109, 31 per cent more than in 1952.

Museums: 57 (including 22 in preparation), 63 per cent more than in 1952.

We must steadily develop our popular recreational centres such as clubs in mining areas and factories and in rural areas, and give them more help and better guidance.

We must make greater efforts to give leadership to private lending libraries and supervise their work. We must see to it that they are steadily but energetically reformed; we must supply them with good books and ban books that are reactionary, obscene or preposterous in content so that, by changing the character of the books they lend to readers, they can gradually become agents for the circulation of books under the leadership of the state. In addition to this, we should give stronger leadership to private recreational centres, supervise their work, and step by step carry out reforms among them.

In co-ordination with the nation's economic construction, we must carry on excavations and classify our historical relics, protect antiquities of historical and artistic value.

H. Cultural Developments in National Minority Areas We must take active steps to develop culture and education in the national minority areas and train personnel for cultural construction from among the national minorities. At the same time, in accordance with the demands of their economic development, we must also train personnel from among them to staff industrial, agricultural, transport and commercial undertakings.

There should be a relatively large-scale development of general school education in the national minority areas during these five years, based on actual circumstances there. In some places primary schools should receive priority, while in others the stress should be on the growth of middle schools. Vigorous help should be given to those nationalities who as yet have no written languages of their own, to create their own written languages.

We must foster the publication of books, periodicals and newspapers in the languages of the national minorities. In 1957, we will print in their languages 22 million copies of newspapers and 12.5 million copies of books, the latter being more than double the 1952 figure. We must pay special attention to improving the distribution of books, periodicals and newspapers in the national minority areas.

The Central People's Broadcasting Station should gradually increase its programmes in the languages of national minorities and set up more receiving stations in their areas.

We must also pay special attention to dubbing films in the languages of national minorities. We must

establish and expand the network of cinemas and projection teams in these areas, and take care to select pictures so as to better meet the needs of propaganda and education in such areas.

We must develop art and literary activities in the national minority areas, make a vigorous effort to improve and extend the work of cultural troupes and song and dance ensembles of national minorities, and organize their tours in those areas according to plan. We must try to discover and carry on research in the fine folk arts and literature of the national minorities and develop and popularize these arts while preserving their national form.

We must promote the development of socio-cultural work in the national minority areas, and establish cultural centres or cultural work teams there.

CHAPTER TEN

THE QUESTION OF LOCAL PLANS

The single state plan consists of the plans of the various departments under the central authorities in co-ordination with the plans of local authorities at all levels. Local plans cover agriculture, local industries and handicrafts, transport, trade, culture, education and city construction.

In drafting and implementing plans for their areas, local authorities must conform to the principal task that heavy industry is the nucleus of national construction. In accordance with the unified state plan and recognizing the interests of the state as a whole, they must integrate their local interests with those of the state, and overcome any tendency towards provincialism or departmentalism. They must rely upon the initiative and creativeness of the broad masses; mobilize and utilize all available local resources, and guide the activities of the various economic departments and economic sectors of their localities to fulfil and overfulfil the tasks assigned them by the state plan, thus ensuring the needs of construction projects given priority by the state and furthering the economic and cultural development of their localities.

China's national economy is very unevenly developed in different parts of the country. The levels attained by agriculture vary from area to area; in some areas it is advanced, in others, it is backward.

In different areas agriculture produces a wide variety of grain and industrial crops. The movement for mutual aid and co-operation in agriculture, developing at different times and under differing conditions, cannot advance at the same pace everywhere. There are old as well as new industrial areas in the sphere of local industry, some industrial areas are relatively well developed, some are less so, while others are not developed at all. Some of those areas which have relatively well developed or not so well developed industries give priority to heavy industry, while others give it to light industry. At the same time, the level of development of handicraft production varies from area to area, and it turns out a variety of products in different places.

Local plans must provide for specific tasks concerning the economic development of the localities concerned, as well as practical measures for carrying out these tasks while taking account of the special characteristics of the localities resulting from the above-mentioned differences and the possibilities of developing production in various sectors of the national economy.

Local plans for economic and cultural development in national minority areas must take care of the needs of the different national minorities and gradually bring to an end their economic and cultural backwardness. In the matter of socialist transformation the fullest attention must be paid to the special characteristics of the various national minorities.

In making local plans we should attempt to achieve a local balance in the economy only in so far as a nationally balanced economy is achieved. We should make every effort to avoid an unbalanced development, and should such an imbalance arise, we must adopt suitable measures to redress the situation. In draft-

ing local plans we must pay special attention to a balanced development of agriculture and industry. On the one hand, we should develop all the latent productive power of agriculture to supply marketable grain, edible oil crops, meat and the necessary raw materials for industrial production. On the other hand, we should do all we can to enable industry to satisfy the demand for the means of agricultural production and provide daily necessities for the peasants.

Guided by the above-mentioned principles, we should, when making plans for local agriculture, industry, transport, commerce, culture, education and city construction, pay particular attention to the following points:

A. Agricultural Plans 1. State and Party organizations in provinces, counties and townships should investigate and study the natural and economic conditions of their respective areas, and, bearing in mind local needs and possibilities, draw up realistic, practicable five-year plans and annual plans for development of the agricultural economy of their areas (this includes forestry, livestock breeding and fishery). These organizations should decide on the rate of growth of agricultural co-operation in their particular area and take concrete steps to popularize the use of improved farm tools and new types of farm tools, develop small-scale irrigation projects, store and prepare manure, make effective use of land, improve farming techniques, promote the widespread use of good-quality seed, combat various kinds of plant diseases and insect pests, improve the work of water and soil conservation, plant trees and forests, increase the number of cattle and develop fisheries. They should, in addition, popularize all the valuable experience gained in agricultural co-operation and in increasing farm output that is acceptable to the masses.

When preparing and drafting their plans, state and Party organizations in counties and townships, particularly in the latter, must hold detailed consultations with agricultural producers' co-operatives, mutual-aid teams and individual peasant households, so that the masses will willingly and energetically carry out the plans agreed upon.

2. Local authorities should draw up, as conditions permit, over-all plans for long-term development of mountainous areas and for water and soil conservation to bring about a well co-ordinated growth of agriculture, forestry, livestock breeding and subsidiary rural occupations. Taking the natural conditions of their localities into consideration, they should try to make full use of hilly land and slopes, gradually planting them with kapoks, mulberry and oak trees, tea-oil trees, walnuts, Chinese pepper, fruit trees, tung-oil trees, oil palms and lacquer trees, as the case may be, so as to increase supplies of food and of materials for light industry.

3. When setting targets for the output of agricultural crops, provincial, county and township authorities should, in the light of local conditions, set targets for the localities concerned which will not only meet the needs of state plans but also surpass the state plans; in this way they will bring local initiative into play and make the fulfilment of state plans still more certain.

4. The plans of provinces, counties and townships should include provisions for staple grains, industrial crops, and important export materials, and, as far as possible, subsidiary farm products, local and special products which are of importance to the life of the local population so that local agricultural plans take full account of the requirements of the state as a whole and give conscientious consideration to the

specific needs of the localities concerned. When agricultural plans are drawn up particularly in townships and counties, great efforts must be made to ensure that the targets fixed by the state for the output of the main agricultural crops are reached and that there are increased outputs of those farm products which come under the scheme of state purchase and supply. On the other hand, in drawing up plans for agricultural crops other than those mentioned above, village authorities should encourage the peasants as much as possible to show greater initiative in managing their farms in accordance with their own needs and wishes so that the output of agricultural crops will satisfy the various needs of the peasants.

In provinces where foodstuffs are in short supply it is necessary to increase the output of high-yield crops as much as possible and try gradually to achieve self-sufficiency in foodstuffs while ensuring fulfilment of the plan for industrial crops.

5. All local state and Party organizations in the vast agricultural regions must regard the leadership of agricultural production and agricultural co-operation as their most important, everyday task; they must make a constant study of state and Party policies concerned with agricultural co-operation, planned purchase and supply of agricultural produce, prices of farm produce and the supply of manufactured goods to the countryside, and carry these out so that these policies can play their part in fostering and regulating the constant growth of agricultural production and regulating it to the nation's needs. In carrying out these policies it is vital to overcome various deviations detrimental to the peasants' enthusiasm for production.

B. Plans for Local Industries 1. In accordance with the needs of the state plan and the specific needs

of the local population, particularly the needs of the peasants in respect to production and their daily livelihood, provincial, municipal and county authorities should endeavour to make full use of local resources—raw materials, fuel, power, productive equipment and labour power—and take centralized measures in accordance with the specific circumstances to organize the industries and handicrafts belonging to various economic sectors in their localities.

2. In accordance with the principle of achieving a balanced and co-ordinated economy on a national scale and the state policy of unified planning with due consideration for all parties concerned, all provincial and municipal authorities should make suitable and rational arrangements to plan industrial production and industrial capital construction, and make every effort to avoid any sort of clash between local plans and the plans of the various departments under the central authorities or the plans of other areas. At the same time they should endeavour to solve gradually all contradictions existing between local industries belonging to different economic sectors, between advanced and backward industrial enterprises, and between industrial and handicraft production.

3. In accordance with the principle of co-ordinating supplies of raw materials, production and marketing of goods on a national scale, provincial and municipal authorities should make over-all arrangements to achieve balance in production assignments to local industries, supplies of raw materials and marketing of products. While taking into account differing local conditions, they must settle on a plan of production quota of various industrial products which may place local industrial production plans on a firm and progressive basis. Energetic efforts should be made to increase the output of generally needed goods if pos-

sibilities exist for the increase. If it becomes difficult to obtain raw materials for the production of such goods, then, while striving to economize such raw materials as are available, possible steps should be taken to discover new sources of raw materials so that the output of these goods can be suitably increased. Where conditions exist for increasing the production of certain goods but there are difficulties in marketing them, then a suitable limit should be placed on their production, a switch should be made to other types of goods, or efforts made to improve the quality.

4. Provincial and municipal authorities should divide their local industrial products into several categories, each placed under separate management. Products which fall within the scope of over-all state plans (including products which are distributed by the state under centralized control, products whose distribution and co-ordination are in the hands of industrial ministries, and products which government commercial departments have arranged to be manufactured and processed, should be incorporated into centralized state plans as well as local plans. Products which fall within the scope of local plans should be both incorporated into local plans and co-ordinated with over-all state plans. At the same time products which are made and marketed independently by private industries and which have not yet been incorporated into local plans should be gradually incorporated.

5. Provincial and municipal authorities should give stronger leadership to the work of socialist transformation of private industries, and dovetail this process with arrangements for trade-by-trade transformation of private enterprises in the fields of supply of raw materials, production and marketing of goods, with improvements in management and technical re-

forms in private industries, and with re-education of managerial staff representing capitalist interests.

C. Plans for Local Transport 1. In drawing up their transport plans, local authorities should, on the basis of the existing economic conditions for transport, make an estimate of the amounts of various types of transport which their localities require; plan and guide the movement of goods; investigate the capacity of various local means of transport; and co-ordinate their plans with the unified transport plan of the state.

2. Local authorities should build and repair highways, build roads suitable for the use of local transport, dredge small and medium-sized rivers and suitably increase means and equipment of transport in order to meet the need of promoting the interflow of goods between town and countryside, revitalizing the economy of the rural areas, developing the economy and culture of mountainous areas and areas inhabited by national minorities, and serving construction projects in new industrial areas, while taking into account the available manpower and financial resources of the localities concerned.

3. Local authorities should make maximum use of various types of local transport and get them properly organized—particularly those used in great numbers in the countryside—to satisfy local transport needs; and at the same time ease the burden to a certain extent on railway transport and merchant shipping in certain areas, particularly in regard to transporting goods on short runs on certain railways.

4. In carrying out the socialist transformation of private transport enterprises, a distinction should be made between capitalist transport enterprises, transport enterprises run by independent working people and those attached to agriculture, and different forms

of transformation should be adopted as provided for in Chapter Five of the present Plan. Local authorities should combine the work of transformation with that of utilization and organization.

D. Commercial Plans 1. Provincial, municipal and county authorities should investigate and study the general and special needs of the local population as regards production and daily life. They should, in the light of what supplies of commodities are available, calculate to balance supply and demand on the market in their respective areas, and then formulate plans for developing commerce there. Their plans should be designed to help develop the latent potentialities of agricultural production, subsidiary rural occupations, local industries and handicrafts and facilitate the adequate and gradual solution of the problem of the lag of supply behind the market demand for certain commodities.

2. Provincial, municipal and county authorities should take unified measures to regulate the activities of state trading concerns, co-operatives and private firms and fix the proportion of retail sales of the principal trades to be handled at any given time by state and private trading concerns, in accordance with the actual conditions and special circumstances existing in old and new cities, in areas growing grain and industrial crops and in pastoral areas. At the same time, they should, in accordance with the need to develop trade between town and countryside and facilitate sales and purchases of goods by the local population, study the geographical link between wholesale trading centres and places where purchases are made, so as to make a more rational rearrangement of the routes along which commodities are transported for sale, proper arrangements for the better geographical distribution of wholesale centres and whatever

other measures are needed to remedy abnormalities in the circulation of commodities.

3. State trading concerns and co-operatives in the various parts of the country should strengthen their leading role in primary rural markets, and pay particular attention to the role they play in enlivening the exchange of goods in rural areas and stimulating agricultural and handicraft production.

At the same time, as provided for in Chapter Six of the present Plan, they should, in various forms, carry through the socialist transformation of capitalist commerce and independent small traders in their localities, and, in the process, make suitable arrangements to carry on their businesses.

4. Provincial, municipal and county authorities should consistently improve their management and planning of trade, suitably strengthen administrative and planning organizations in the commercial field at the county level, as well as county, district and town wholesale trade organizations. The counties should be gradually made the primary units responsible for drafting commercial plans and at the same time important links in carrying out the policies for planned purchase and supply of commodities, for the socialist transformation of private commerce, and regulation of commodity prices. It is essential at any time to prevent and stop anything which might lead to dislocation and chaos in the sphere of trade.

E. Plans for Cultural and Educational Development 1. Provincial, municipal and county authorities should give more effective leadership to educational and cultural work which comes under their administration and to educational and cultural undertakings in enterprises run by the state, by joint state-

private interests, by people's organizations or individual persons, so as to draw all these various types of cultural and educational undertakings gradually into the orbit of state planning and enable them to play their proper part in satisfying the cultural needs of the local population and the needs of the state and local authorities in training cadres.

2. Provincial, municipal and county authorities should, bearing in mind the local level of economic development and available financial resources, make full use of all available local talents and local material facilities so that cultural and educational work can serve the needs not only of the cities and rural areas in general but the special needs of the new industrial areas, areas where national minorities live in compact communities, the old revolutionary bases and economically and culturally backward areas.

3. Provincial, municipal and township authorities should foster the creativeness of the masses and encourage the peasants to establish primary schools themselves and carry on other cultural and educational work serving the needs of the masses, as provided for in Chapter Nine. If the local people cannot support these undertakings themselves, the local state authorities should come to their aid with money or manpower. At the same time, cultural and educational undertakings run by the people themselves or those run by the people with the aid of government grants, should be brought into line with a unified plan for local cultural and educational undertakings so as to prevent blind expansion, lowering of quality and waste of the people's resources.

F. Plans for City Construction 1. Observing the principle of economizing funds and rationalizing distribution, provincial and municipal authorities should make over-all plans for new cities, for cities which

must be reconstructed or which will be enlarged to prevent guideless building and over-concentration of populations.

2. Observing the policy of giving priority to industrial construction and industrial production, all public utility construction projects in new cities and cities being reconstructed or enlarged should make timely provision for the needs of new and reconstructed enterprises and enterprises which are expanding production in the fields of water supply, drainage, roads, bridges, etc. At the same time, taking into consideration the needs of over-all city planning, public utility construction projects should be got going at a rate dictated by the degree of their importance and urgency so as to avoid any waste which might result from incorrect planning.

3. Provincial and municipal authorities should make full use of the potentialities of urban public utilities with their existing equipment, and, as local financial resources permit, acquire such new equipment as is needed to satisfy the immediate, urgent needs of the urban working people.

4. Provincial and municipal authorities should exercise stricter control over the expenditure on city construction, and draw a proper distinction between allocations for public utilities, and investments in ordinary municipal construction. Certain funds for urban development and maintenance should be allocated as needed from local revenue.

CHAPTER ELEVEN

PRACTISING STRICT ECONOMY AND ELIMINATING WASTE

The First Five-Year Plan for Development of the National Economy centres on the vigorous development of heavy industry. This requires large, long-term capital investments. These needed funds have to be accumulated internally. This requires the strictest economy, which eliminates all unnecessary expenditure and all uncalled-for, non-productive expenditure, and which permits no waste, not even the slightest, so that all possible funds can be accumulated for national construction and for building up necessary reserves for the state. Comrade Mao Tse-tung in his *Economic and Financial Problems During the Anti-Japanese War* wrote: "Economy deserves the attention of all our organizations, and particularly those engaged in economic and financial work."

Now that we are carrying on planned economic construction on a nation-wide scale, all organs of the state, every government worker and every enterprise must follow these instructions of Comrade Mao Tse-tung with still greater zeal, and master the methods of managing state organs and state enterprises in the spirit of strict economy.

Since liberation, our national economy has been advancing steadily along the road to prosperity. Still, China is a poor and economically backward country. Unless the Chinese Communist Party leads the arduous, long sustained, and self-sacrificing efforts of

the entire nation, it will be impossible to end this poverty and backwardness and build a happy, prosperous socialist society. It is clear, therefore, that any state organ, government worker or enterprise will be committing a crime against the state and the people if they refuse to take a serious, conscientious and responsible attitude to this question of practising economy, and carelessly waste the state's money or property.

In building socialism and communism, the Chinese people are faced with the task of consistently practising strict economy in every sphere of work throughout the country. All socialist enterprises in capital construction, production and distribution and all state organs, both civil and military, must firmly adhere to the principle of economy.

1. In capital construction, the state requires that the various departments and the local leading organizations allocate funds rationally and spend them economically to avoid dispersal and waste. It also requires that each new or reconstructed enterprise do its utmost to lower construction costs and get returns on investments as quickly as possible and to the maximum extent possible, so that the target fixed by the state for reduction of costs can be attained.

There are, however, many cases of serious waste of funds in not a few departments and localities and on capital construction projects. The following are some of the chief examples:

The leading bodies of some departments and localities fail to use national construction funds in a rational way. Sometimes they go blindly ahead with construction without properly considering actual needs and without making a distinction between what is more or less important and urgent, so they dissipate state funds and hamper the construction of priority proj-

ects. Sometimes they are so preoccupied with the idea of building giant enterprises that they neglect small and medium enterprises, irrationally concentrate funds on a few large projects and as a result fail to get quick returns on their investment.

Other organizations engaged in construction work do not strictly follow proper procedures for capital construction. They go ahead with designing before they have familiarized themselves with the raw material resources and geological conditions involved. They stockpile materials blindly and place orders for equipment before they have completed their designs. They start construction when very little preparatory work has been done. All this results in gross waste of manpower, materials and money.

Errors have been made in designing quite a large number of projects for lack of a correct conception of the problems involved, especially of an understanding of business accounting. This is shown by the fact that the assortment of goods produced and the scale of production of such new and reconstructed enterprises fail to meet the needs of society; that the general layout of such enterprises is not well thought out; and that the equipment of the various departments within such enterprises is not well balanced and co-ordinated. Mistaken ideas show themselves also in the exaggerated emphasis placed on safety factor in the buildings built and in the adoption of conservative technical-economic norms and out-of-date equipment, all of which results in much higher construction costs and low productivity.

Many enterprises which fail to differentiate between productive and non-productive projects adopt inappropriately modern standards for various auxiliary buildings and welfare undertakings. Some have even completed all the welfare amenities before their pro-

ductive installations are put into operation. In building houses, an attractive exterior is sometimes sought at the expense of utility and economy, with consequent waste of no small amount of state funds.

In building and reconstructing cities, unduly high standards of design have been adopted. There has been premature modernization laying undue emphasis on magnificent street and city prospects. This has likewise resulted in waste of state funds.

Defective management during construction has resulted in serious waste on many construction sites. Unsuitable arrangements for the progress of construction result in enforced idleness at one period and rush work at another. Poor organization of labour results in swollen staffs and consequently low productivity of labour and swollen payrolls. Loose storekeeping systems and regulations for handing out materials for use lead to extravagance and serious loss. Under such conditions bulky materials are employed where only small parts are needed, good materials are used where inferior ones will serve the purpose just as well, and all this results in increased expenditure on materials. Administrative and preparatory offices for capital construction projects are too big and this also pushes up non-productive expenditure.

All such waste in capital construction must be eliminated.

2. In regard to production and distribution by state enterprises, the state requires the leading bodies of the various departments and localities to make full and rational use of the existing production, transport and distributing apparatus and give scope to the initiative and creativeness of workers and office employees, so that every enterprise attains or exceeds the target for reducing costs and distribution expenses, thereby

fulfilling or overfulfilling their quota in accumulating capital.

There are at present, however, not a few departments, localities and state enterprises which frequently fail to fulfil their plans for reducing costs and accumulating capital; serious cases of waste can be found in production, transport and distribution. The following are some of the chief examples:

Instead of making more effective use of the resources of existing enterprises to increase production, the leading bodies of some departments and localities are prone to demand that the state invest in new enterprises and additional equipment. The result is that the utilization rate of existing equipment is low while the new enterprises and additional equipment fail to function properly when they are put into operation.

Some industrial enterprises do not make adequate plans for supplies of raw and other materials. They have no strict management system nor any system of control by quotas over the expenditure of raw or other materials, fuel or power. They do not conscientiously look for and use economical and suitable substitutes, nor do they try to recover scraps. The result is that certain raw and other materials, fuel and power are wastefully used while large quantities of materials and equipment lie idle, causing serious waste.

Other industrial enterprises which lack effective technical leadership, strict systems of inspection, and balanced and co-ordinated production organizations, produce many rejects or goods of inferior quality, or suffer serious damage to their equipment. Sometimes, they fail to carry through plans for the trial manufacture and production of new types of articles with the unsatisfactory result that there is a surplus of one kind of article while another is in short supply.

Some transport enterprises do not take effective

steps to increase the turn-round rate of transport and to increase carrying capacity; they do not strictly follow the methods of a rationalized transport system. The result is that the utilization rate of equipment is very low and there is a serious waste of transport capacity.

Some commercial enterprises fail to pay proper attention to regulating the circulation of commodities and ensuring their timely distribution, nor do they pay attention to improving the transport and storing of goods. This results in anomalous situations where there are too many goods in one place and too few in another, or where at one time goods lie idle while at another they are in short supply. As a consequence, the turnover of circulating capital in trading departments is slow while expenditure on commodity distribution is increased, and may even cause serious material losses.

Administrative offices in many industrial, transport and commercial enterprises are inflated and over-staffed with non-productive personnel. No effective solution has yet been found for this problem. This results in considerable waste of labour power and increased administrative expenditure. Many enterprises and their administrative offices lack a strict system of staff organization and fixed number of staff. They fail to pay attention to reorganizing labour power within the enterprises themselves, and so it often happens that one section blindly takes on more workers while another section has surplus personnel, with the result that the more the personnel, the lower the efficiency.

All such waste in production and distribution in state enterprises must be resolutely eliminated.

Similar waste in co-operative, joint state-private and private enterprises must be eliminated.

3. The state requires that, while raising their efficiency, state organs at every level should simplify their organizational structure, reduce both their staffs and administrative expenses, and continue to foster and develop the revolutionary spirit to overcome difficulties.

At the present time, however, there are still serious cases of waste in state organs at various levels. The following are some of the chief examples:

Some state organs have unsuitable organizational structures while others do not strictly comply with state regulations concerning personnel; they freely enlarge their administrative apparatus and increase the number of their employees, creating unneeded sections and inflated organizations, with redundant personnel and no clear division of responsibility.

Other state organs and their personnel frequently violate the principles of the financial system of the state. They do not take proper care of state property; they belittle the importance of accumulating capital and fail to economize administrative expenses as much as possible. In some departments and places, too many meeting halls, offices, flats and club-houses have been built and excessively high building standards have been adopted; a number of buildings suffer from superfluous ornamentation. All this results in high building costs and excessive expenditure. Serious cases of waste due to other kinds of extravagance occur in other state organs.

Unsuitable and inflated administrative structures and swollen administrative expenses are completely incompatible with socialist economic construction. We must effect the most stringent economy in administrative organization and expenses so that we can continuously cut down the percentage of the administrative expenses to the expenditure of the state and

thus every year we accumulate ever more capital for economic construction.

In the light of what has been said above and with the aim of successfully fulfilling and overfulfilling our First Five-Year Plan and making it a good start for our future long-term economic construction, we must promote a regular and comprehensive campaign for practising strict economy and eliminating waste throughout the country. We must develop this campaign first in state organs and state enterprises. Here, we must formulate effective measures for encouraging those who practise economy and punishing those who waste, and set up and improve various measures for achieving economy. We must see to it that the masses exercise greater supervision over expenditures, economize state funds and materials and grain. We must correct everything that violates financial discipline and wastes state property, and wage a struggle against all forms of bureaucracy, corruption, embezzlement and sabotage.

We must encourage our people to live frugally, care for public property, save up, and buy state bonds.

Under the leadership of the Communist Party of China, we must consolidate the unity between the various nationalities in China, the unity between the working class and the peasantry, and the people's democratic united front. Working industriously, living frugally, and acting with prudence and forethought, we must unify our efforts. In this way we shall certainly be able to overcome all difficulties and complete the great task of the First Five-Year Plan.

