

**SOME IMPRESSIONS
OF A VISIT
TO CHINA**

by

P. C. Mahalanobis

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1. We reached Canton in the afternoon of 19 June 1957 and halted there two nights at a beautiful garden house before catching the plane for Peking. We thus got the opportunity of seeing in some detail the work of the Provincial Statistical Bureau of Kwantung. We visited an agricultural cooperative near Canton and saw the system of maintaining the village statistical records; and got acquainted with the method of "purposive sampling" (on the Soviet model) which was being extensively used for estimating agricultural production and for family budget enquiries.

2. We reached Peking on June 21st and found that our programme of work was being jointly arranged by the National Statistical Bureau (NSB), the Planning Commission, the Peking University, and the People's University. The host organisations were particularly interested in "Sample Surveys" and "Recent Developments of the Theory and Application of Mathematical Statistics". On our side we were eager to know about planning and statistical work in China.

The statistical system of China.

3. Hsue Mu-chiao (Director of the National Statistical Bureau, and a Vice-Chairman of the Planning Commission) gave us a brilliant survey of the statistical work in China which made it clear to us why they were so deeply interested in sample surveys and mathematical statistics. The National Statistical Bureau (NSB) was established in 1952. During the last five years they have built up an integrated statistical system, on the Soviet model, reaching down to the level of the village cooperatives. At the apex is the National Statistical Bureau (NSB) in Peking which has a central staff of 650 and is in charge of practically the whole of the statistical work in the Central Government. The Central Ministries have a small statistical staff (for example, of about 15 in the Agriculture Ministry) attached to the "planning bureau" of each Ministry. At the second level are the statistical offices in about 20 provinces which report to the

NSB at Peking; and which, in their turn coordinate and guide the work of the statistical offices in the Hsien (roughly 2,200 in number, corresponding roughly to "municipality" or "taluka" or "thana" in India). At the next level is the statistical work in the Hsiang administration (over 100,000 in number, which correspond roughly to the "union-board" in India); and finally, the statistical work in the village cooperatives (about 750,000 in number) which are both done by part-time workers.

4. The first responsibility of the NSB is to supply statistical information for the planning work; and to check (monthly, quarterly, and every year) whether the plan was being properly fulfilled. The NSB is, therefore, in complete charge of all statistical work relating to planning; and is very closely associated with the Planning Commission, which is responsible for perspective or long-term planning. Vice-Premier Li Fu-chun is the Chairman of the Planning Commission and is also the Minister in charge of statistics. On the otherhand, Hsue Mu-chiao, the Director of the NSB, is Vice-Chairman of the Planning Commission. The NSB (with a staff of about 650) and the Planning Commission (with a staff of about 700) are located in the same building and work in close collaboration. Annual plans and current projects are in charge of a separate Economic Commission (with a staff of about 1200 located in a separate building) of which another Vice-Premier, Po-Yi-po, is Chairman.

5. China had learnt planning work from USSR; and had, therefore, also learnt and closely followed the statistical techniques used in USSR. The scope of statistics is comprehensive (as in USSR) and covers population, agriculture, industry, transport, trade consumption, health, education, finance, national income, employment etc. All statistical work falls within the jurisdiction of NSB (which is under the direct control of the State Council and) which is responsible for all statistical accounting and audit. All statistical data and reports come to the NSB which supplies the required information to every Government agency. The NSB is responsible for all Central

statistical publications; and lays down statistical standards for the whole country. The Provincial Bureaus however are under the administrative control of the respective Provincial People's Councils; and the expenses of the Provincial Statistical Bureaus are met out of the Provincial budgets. The Director explained that the Chinese system was administratively more decentralized in this respect than the Soviet system (in which the statistical staff in the different Republics are borne on the budget of the Central Statistical Board); but he thought that the Chinese statistical system was probably as integrated as the Soviet system. The Government of China being of the unitary type, the problem of coordination between the Centre and the Provinces is comparatively simple. From our discussions at Canton and in Peking we also got the impression that central coordination was fully effective; and that the NSB supplies leadership and guidance for the statistical work all over the country.

6. The Director explained that in much of their work the method of Complete Enumeration (CE) was being used, as in USSR. This was working quite well in industries (about 3000 units send monthly returns and 60,000 submit annual reports); construction (about 1000 important projects report every month and the rest every year); railways, ships and trucks (monthly reports); Government purchase and consumption of important commodities (monthly); and so on.

7. It was, however, also necessary to collect information on agricultural production such as area sown, yield per unit area, outturn of important agricultural crops, livestock etc. The Provincial Statistical Bureaus are trying to collect such information by Complete Enumeration from about 750,000 village cooperatives. There was much delay in receiving the results of such Complete Enumerations. The NSB also thought that the results were not always accurate. In 1955 attempts were, therefore, made to carry out sample surveys of the rate of yield of crops per unit area over a large part of the country.

8. Besides agricultural statistics, it is also necessary to collect continuing information on the level of living of rural, working class and other urban households. The only possibility is to use the sampling method. The NSB therefore carried out sample surveys in rural areas in 1955 covering over 15,000 farm families in 23 provinces, and about 6000 urban families in 1956. The technique was the same as that used in the USSR, namely, "purposive sampling". The first problem on which the Chinese Government wanted our advice was the best methods of using sample surveys in agriculture and in family budget and socio-economic enquires.

9. The Director then told us that they had been feeling the need of organizing scientific research for the improvement of statistical methodology for a long time but have not been able to do anything so far. The Director mentioned that Prime Minister Chou-en-lai, after his visit to the Indian Statistical Institute, had asked them to seek our help on the matter. The Chinese Delegation of four experts under the leadership of Wang-Szu-hua (Vice Director of the NSB) went to the Indian Statistical Institute about six months ago; and, after a careful study of statistical work in India, submitted a report to their Government recommending (a) the use of sample surveys on Indian lines; and (b) the establishment of an institute for statistical research and training. The Government of China would like to have our advice on these two questions.

10. I should like to mention here that in USSR the sampling method is being used extensively since about 1927 or 1928, but the technique is that of "purposive sampling" in which an attempt is made to select sample-units (agricultural fields, households etc) which are typical or have characteristics close to the average. This method was in general use in the 1920's in Europe. (In India also the old method to determine the "normal" yield of crops per acre used to be of this type in which attempt were

made to select for experimentation those fields which were considered to be "typical"). It is now recognized that the method of "purposive sampling" is not scientifically correct. The only sound method is "random or probability sampling" which can be relied upon to supply truly representative results; and which alone makes it possible to calculate valid estimates of the sampling error. In USSR, however, a very big organization had grown up which got accustomed to "purposive sampling" and large (administrative) vested interests were created in its favour which had retarded progress.

11. It is also necessary to mention that in USSR (as in other countries) statistics used to be treated, until recently, as a part of economics while the theory of errors of observations and sampling (which is based on the theory of probability) were considered to be the concern of mathematicians. This dichotomy became at one stage particularly rigid in USSR partly due to the conservation of older statisticians (who were mostly economists lacking the knowledge of mathematical statistics) and partly to the antagonism of a certain school of thought which objected to the use of "abstract" mathematical methods in biology and agriculture. Soviet mathematicians (among whom Kolmogorov is recognised all over the world as the greatest expert in the theory of probability of the present age, who has supplied the rigorous mathematical foundations of modern statistical theory) and mathematical statisticians have, of course, always recognized the superiority of "random or probability sampling" and have always advocated its use in sample surveys. During the last 3 or 4 years this question is being increasingly debated in USSR. From published reports of the proceedings of scientific and statistical conferences as well as from personal discussions with Soviet statisticians I have the impression that opinion is turning increasingly in favour of "random or probability sampling". Statistical practice in USSR, however, still continues to be based on "purposive sampling". In spite of increasing efforts at the unification of statistical theory and practice, the dichotomy between mathematical statistics and what is called economic

statistics still persists in the USSR. China had learnt and adopted Soviet statistical techniques; and, therefore, used "purposive sampling" in agricultural crop surveys and socio-economic enquiries in 1955 and 1956. There was also a gap (as in USSR) between mathematical statisticians (who were teaching theory) and the practical statisticians who were using obsolete methods.

12. From our discussions in Peking it became clear that the Chinese had been, however, keeping an open mind in this matter. They were not satisfied with the accuracy of the results based on "purposive sampling"; and the Chinese Statistical Delegation to India made a special study of the Indian National Sample Survey and began to think seriously of adopting similar methods in China.

13. Secondly, the Chinese Statistical Delegation to India was much interested in the applications of mathematical statistics in economics, demography, psychology, industry, and other fields. They reported to the Chinese authorities on the need of giving greater attention to the applications of mathematical statistics. This is why our Chinese friends asked us to give our views on the usefulness of such methods as the design of experiments, analysis of variance, econometric models, inter-industry (input-output) analysis, linear programming, operational research etc.

Lectures and discussions in Peking.

14. * We were in Peking for 15 working days (excluding Sundays). In this short time we had eight group discussions (each lasting from 3 to 4 hours) on "Sample Surveys". We were also asked to give lectures on topics selected by the host organisations. I had five sessions of double-lectures (each session lasting about 3½ hours) of which two were on "Sample Surveys" at the NSB; one on

"Planning in India" at the Planning Commission; and two on "Recent Developments in the Theory and Applications of Mathematical Statistics" at the Peking University and the People's University. The audience was about 300, mostly statisticians, economists, and senior mathematical students and members of the mathematical staff of the two Universities.

15. D.B. Lahiri had four sessions of double-lectures on "Applications of the Theory of Mathematical Probability in Sample Surveys" of which two were given at the NSB, one at the People's University, and one at the Academy of Sciences. Lahiri's lectures were highly technical; and, at our request, the audience was restricted to about 30 or 35 persons with experience of statistical work and knowledge of mathematics.

16. Lahiri and I thus had 8 sessions of group discussions and 9 lecture-sessions or 17 sessions altogether on "Sample Surveys" and "Mathematical Statistics". We had to prepare a synopsis of each lecture in advance which was translated into Chinese and circulated. This was quite a heavy programme.

17. The Chinese were clearly aware of gaps in their own knowledge and showed much eagerness to profit by the experience of other countries. In our group discussions and lecture sessions they repeatedly mentioned that they wanted to learn from India as well as from USSR and other countries whatever was likely to be useful for the progress of China. They said that China had a "clean sheet of paper" before her in the field of statistics, and was therefore in the fortunate position of adopting the best methods from all over the world. We were deeply impressed by their seriousness of purpose and by the probing questions which they asked us to clear up logical and technical difficulties.

18. After the first round of discussions and lectures was over, I prepared, in consultation with the Chinese officials, a very brief note for the Chinese authorities containing the following

recommendations.

(a) I pointed out that the method of Complete Enumeration, when properly carried out, would be suitable for the collection of information which is available in records maintained for regular administrative purposes (for example, records and accounts of industrial establishments, school and hospital records etc.). The method of Complete Enumeration was however unsuitable and was likely to be inaccurate when information (on such items as the area sown and the rate of yield per unit area of agricultural crops; age and sex composition of families; household income and expenditure, or consumption of foodgrains and other items etc.) would have to be collected from a large number of small units (farms, households etc.). Sample surveys would be preferable and superior to Complete Enumeration in such cases in respect of (i) speed; (ii) economy of cost; (iii) accuracy of results; and (iv) the possibility of obtaining valid estimates of the margin of uncertainty of the results. I, therefore, advocated the setting up of a permanent Sample Survey covering the whole of China for agricultural crop surveys, population, family budget, and socio-economic enquires. I recommended the use of "random and probability samples" and also of "interpenetrating or replicated samples" which had been developed and were being used in India.

(b) I recommended the establishment of a Statistical Institute for research and training to function under the joint auspices of the NSB, the Planning Commission, and the Academy of Sciences to ensure close contacts being maintained between theoretical research and practical applications.

19. On July 3rd we had an interview of nearly two hours with Vice-Premier Li Fu-chun (Chairman, Planning Commission and Minister for Statistics) and Vice-Premier, Po Yi-po. (Chairman, Economic Commission) at which the above recommendations were discussed. We were told that the setting up of a Sample Survey in China on Indian lines was under active consideration. Li Fu-chun asked us whether we could send some statisticians from India to help in this matter. I told him that we should be, of course, glad to cooperate. Po Yi-po asked me whether it would be possible to organize a sample survey of the outturn of the cotton crop in Hopei Province in

September and October of this year. I thought this would be difficult as time was short; also it was necessary to collect some preliminary information and give training to the sampling staff which would take time. The two Vice-Premiers informed me that they would like the NSB to undertake some pilot studies at an early date, and requested me to explain the line of work to the Directors of the NSB (who were present at the interview). It was agreed that we would have further discussions with the NSB and explain our ideas about pilot studies in detail which we did subsequently.

20. At the interview I mentioned that it would be of great help if the Chinese Government would kindly agree to send to India one or two technical men with knowledge of planning and statistical work to facilitate exchange of information between China and India. I mentioned that we had already set up a very small Chinese Unit in the Indian Statistical Institute to translate important Chinese papers and publications into English. If one or two Chinese experts could be made available to us it would be possible to organize the work of the Chinese Unit properly and make it extremely useful. The two Vice-Premiers were seriously interested in this idea and asked me to mention it to Premier Chou-en-lai.

21. After this interview we had further discussions with the NSB in considerable detail regarding pilot surveys in sampling which the NSB might undertake in China. We also met some of the members of the mathematics and economics faculties in the Peking and the People's Universities who had attended my lectures on mathematical statistics. They told us that courses in mathematical statistics had been recently started in the Peking University but were so far primarily theoretical in character. I emphasized the need of orienting both research and teaching in mathematical statistics to practical applications. The staff members were greatly interested in our experience in India and asked us many questions. We learnt that the question of organization of

statistical research and training on modern lines was being actively discussed. This was the reason why the host organizations had asked me to make a general review of the whole subject (which had involved covering a very wide range of topics). I was glad to know that they thought our lectures and discussions had been of some real help in giving a concrete shape to their ideas.

22. On July 9th, a day before our departure from Peking, we were asked to have dinner with Premier Chou-en-lai and his wife at their residence. Besides our own party of three, only Mr. and Mrs. R.K. Mehru and two Directors of the NSB were present. The dinner was entirely informal and most enjoyable. We had some general conversation at the table but most of the time we had discussions on the recommendations made by me. Chou-en-lai had seen the reports which the NSB had prepared on these recommendations and had also had discussions with the two Vice-Premiers. I was surprised to find that he had evidently studied some of the rather technical points in my recommendations as he asked some searching and critical questions on methods of assessing the accuracy of the results of sample surveys. He then informed us that it had been decided to organize a country-wide sample survey in China on Indian lines. He agreed that it would not be advisable to organize a survey of the cotton crop in September of this year (as had been suggested by Po Yi-po) as time was too short. He accepted my suggestion that pilot surveys should be carried out on paddy. He then went into great details about successive stages of organizing the sample survey in China, especially the methods and the time-programme for the training of the technical staff. He repeatedly asked for our help in this matter; and enquired how many statisticians we would be able to send to China and for what period. I told him that we would gladly give all possible help; and explained to him that it might be difficult to send senior men for a long period, they might be able to come to China from time to time. I was told that the NSB would start pilot studies to collect basic information and send the results to India as soon as possible. Two staff members of the NSB (who had been introduced to us earlier) would come to India in October of this year;

and we agreed to help in preparing the design of a trial sample survey in one or two selected provinces. We would also try to send some of our statisticians to help in organizing the work.

23. As regards statistical research, Chou-en-lai said it had been decided to establish some units in one or two Universities in the first instance. He said China did not have enough trained personnel to set up a research institute immediately but this might be feasible at a later stage. He would like to have our help in the organisation of statistical research and training and would like some Indian statisticians to come to Peking from time to time to give lectures and participate in the research work.

24. As regards sending one or two Chinese experts to India, he said it would be difficult to secure suitable men for this purpose immediately. The two staff members of the NSB, who would come to the Indian Statistical Institute for one year from October of this year, would be able to help in the work of the Chinese Unit for the present. He would see what can be done in this matter later on.

25. I have written at some length about sample surveys and mathematical statistics because we got the impression that our discussions and lectures were really appreciated and might lead to some fruitful results. We were deeply impressed by the seriousness of purpose with which the Chinese discussed these questions and by the amount of details into which they entered to clear up obscure points and to formulate a concrete programme of work.

Discussions and impressions relating to China

26. Because of the heavy programme in connexion with sample surveys and mathematical statistics, there was not much time for discussions on planning in China. We could manage to have only three group discussions at the Planning Commission and the NSB; and I also had a short session at the Ministry of Health. We found that the Chinese were quite willing to give us detailed information and technical data of all kinds. I had handed over a long list of questions immediately on my arrival. Some replies were prepared in the Chinese language but we did not have time to discuss these matters. If we had only another statistician or economist with us, we could have asked him to follow up these questions while Lahiri and I were busy with the other discussions.

27. We, however, got some information in writing and read some reports and publications in English. We attended the opening session of the National People's Congress on 26 June 1957 in Peking and read (in English translation) some of the important reports presented during the session. We looked round the city, visited some of the stores and bazars and collected prices of some consumer goods. We also got a good deal of information by asking questions during personal conversations. In this way we succeeded in getting some interesting and instructive impressions regarding Chinese planning and present conditions in China.

Reliability of Chinese statistics

28. I should like to make one point at this stage. In the course of our technical discussions at the NSB and the PC we had the opportunity to see published statistical reports as well as much unpublished material. We were favourably impressed not only by the size of the statistical organization but also by the wide coverage and internal consistency (which we had occasion to test in some cases) of Chinese statistics. Changes in production, income, employment etc., from year to year (1952-1956) should be quite reliable and comparable. The statistical position (with the exception of sample surveys and mathematical statistics) seems to be appreciably better than that in India in respect of coverage, availability, and accuracy of data required for purposes of planning and current policy

decisions. It is, therefore, possible to use Chinese official statistics with confidence for a general appraisal of economic conditions in China.

General impressions

29. Hongkong, which we saw for the first time, is a free port and shows the usual contrasts between ostentatious living and great poverty. Every individual is on his own; and there is some looseness in the way of doing things (except, of course, by Government or the police). Immediately we crossed the border at Shenchan there was a complete change. We became aware of something more orderly, more disciplined, and more dependable. The only word I can find is a higher level or more efficient state of social organization. The contrast I have in mind is not between capitalism and communism. I am aware of the same feeling of a higher level or state of social organisation as soon as I reach Geneva or London, or even more vividly, when I am in New York. Crossing the border we had the same feeling of all activities going on with greater efficiency, and in a more orderly way. The train was scrupulously clean. In Peking most of the streets and houses are old and often dilapidated; but everything was clean. There were no flies; and no fear of pickpockets. We also had a feeling that the people were working with a sense of responsibility, with some unity of purpose, and with the awareness of an orientation to some common aims and objectives. This was no doubt partly due to the fact that we were all the time moving among Government circles; but we thought that there was some change also among the wider public.

30. This higher level or more efficient state of social organization must have been brought about at least partly by political pressure or even by the fear of physical force. It is not necessary for me to discuss or to express any views on this point. I am simply registering the fact that China seemed to us to have attained a level of social organization which is comparable to West European countries, North America, or USSR (and possibly Japan, which I have not yet visited).

31. On our way and in Peking we saw a gigantic programme of construction (industrial projects, scientific and cultural institutions, Government offices, residential buildings) in progress which is only comparable to what I had seen in Poland or USSR. There were visible signs

of rapid industrialization. The first Five Year Plan would cover the period 1953-1957. Industrial production has nearly doubled and agricultural production has increased by 20 per cent during the first four years (1953-1956). The rate of capital accumulation has increased from about 18 per cent in 1952 to an average level of 24 per cent of the national income during the first FYP. National income increased by 45 per cent during 1953-56; as population also had increased by 9 per cent from 569 million in 1952 to 621 million in 1956, the per capita national income increased by 36 per cent. Consumption per person (which is a good index of the improvement in the level of living) increased by 19 per cent in four years. There were important gains in the employment position. The non-agricultural population had increased by about 12 million (which added about 5 or 6 million to the labour force) while non-agricultural employment was expanded by about 10 million. Another remarkable achievement has been the steadily increasing labour productivity which is continually bringing down the cost of production. The cost of construction (which is of vital importance) decreased by nearly 14 per cent between 1953 and 1956 so that the same financial outlay would now yield appreciably larger real investments.

32. We also got the impression that the poorer section of the population and the middle-class had an appreciably higher level of living than comparable families in India. The purchasing power of the Chinese yuan, for the basic necessities of life, is probably more or less the same as its exchange value of two Indian rupees. In comparison with Calcutta we found that the price of foodgrains, common vegetables, eggs and ordinary fish was about the same; cloth was somewhat more expensive but the Chinese can manage with a smaller quantity; rent was very much lower; education was free; and ordinary medical treatment was probably more easily available and less expensive; and there was very much less unemployment. Prices have been, on the whole, extremely steady; the average price index for consumer goods had risen by only about 2 per cent

between 1953 and 1957. There were much sharper rises for particular commodities in the latter half of 1956 and the earlier months of this year (owing to unplanned deficit financing) but this has been definitely checked and in some cases prices have fallen. Only three important items, foodgrains, cloth, and edible oil are rationed. The price of sugar and of non-essential items are generally higher compared to India; and the price of luxury goods often very much higher so that the average purchasing power of the yuan for families with fairly high incomes may very well be equivalent to one Indian rupees (or half the official exchange value) as was the view expressed by some officials of the Indian Embassy. For families at a still higher level of expenditure, the current prices of luxury goods may appear to be fantastically high compared to the old days (or to prices in Hongkong where, for example, a good Swiss watch can be purchased for a quarter or a fifth of the price in Peking). However, for the poorer or middle-class families there cannot be any dispute that the present cost of living in relation to earnings is quite reasonable. The level of living has been steadily rising since 1950 or 1951; and, what is even more important, is likely to continue to improve in future which gives hope and confidence.

3. China has also made big advances in what they call "Socialist reconstruction". All basic and important industrial units are in the public sector; most of the other units have been converted into joint State-and-private enterprises in which effective control is with Government. Most of the agricultural and handicrafts families have been organized in the form of cooperatives. All wholesale and most of the retail trade are in the hands of Government or are being carried on by joint State-and-private concerns. House property still belongs to the original owners who have the right to let out. In the case of joint State-and-private enterprises, the original owners receive fixed interest at 5 per cent per year on the imputed value of their capital; and they themselves are usually

employed on a monthly salary as managers or assistants in their respective enterprises. There are only a small number of individual cultivators or owners of small enterprises who have not yet joined any cooperative organization. The private sector has ceased to have any importance; and most of the means of production either belong to Government or to cooperative institutions. Much of this transformation occurred during the last year or two. To what extent this change was brought about by persuasion and to what extent by social or political pressure or even by threat of physical force are questions on which I am unable to say anything. I am again taking note of the fact that this change has taken place.

34. To sum up, Chinese society has been transformed and placed on the basis of socialism and cooperative institutions. The national economy has developed and is continuing to develop at a rapid rate together with steady progress of industrialization, improvement in the level of living, and decrease in the cost of production and of construction.

Planning in China

35. During our own discussion on sample surveys we came to know something of the Chinese way of planning. Our first discussions were with a small group of Directors and top officials of the NSB. They asked us to give our advice on sample surveys. At this stage they desired to get a precise idea of aims and objectives; and, once this was clear, they wanted to know the successive stages of implementation. They asked probing questions until they were satisfied. They remarked: "We are satisfied but now the others must be convinced". Then they arranged the next stage of discussions with the second ring of about 25 or 30 heads of divisions and technical workers. I had two sessions with them and D.B. Lahiri had three or four. Finally, they wanted me to explain the general ideas of sample surveys before a fairly large audience of about 300. Many questions were asked even at this stage to clear up obscure points. Evidently these discussions and lectures were arranged to convey the basic ideas of sample survey to different levels. We also had discussions at higher levels, first with the two Vice-Premiers, Li Fu-chun and Po Yi-po, and finally with Premier Chou-en-lai. I found that they were fully informed of the basic issues. The two Vice-Premiers wanted to know whether some preliminary work could be started in two or three months and requested me to discuss the details with the NSB. Chou-en-lai was keen to know what would be the successive stages of organisation of a country-wide sample survey and especially the arrangements for the training of the staff at different levels, and how long it would take to complete the work. The discussion was at a concrete level and again directed to, firstly, ~~clarification~~ of aims; and secondly, to the formulation of a definite programme of implementation. Also, from our discussions with the statistical staff and our lectures we could see that the training of the staff itself had two aspects at each level, firstly, conveying a correct idea of basic principles and aims in a convincing manner; and, secondly, the technical part of training.

36. In connexion with sample surveys and mathematical statistics and also in many other ways we found that, although they had learnt their planning work from USSR and were extremely grateful for the help they have received from USSR, the Chinese were not blindly copying the Russian methods but were continually trying to develop methods suited to Chinese conditions. The Chinese planners have an open mind, and are receptive to suggestions from all over the world. Our own discussions on sample surveys and mathematical statistics, of course, supply a good illustration but we found many other examples some of which I shall mention below.

Two aspects of planning

37. The visit to China made it vivid to me that there are two aspects of economic planning which, in one sense can be clearly distinguished but which, in another sense, are closely related. One aspect is the development of modern industries with increasing use of machinery driven by power. The other aspect is the socialist transformation of the national economy. At the technical level, planning for industrial development can be dealt with independently of socialist transformation. Within the limits of resources available for industrial development (inclusive of mining, power, and transportation) decisions relating to the pattern of investment can be made (a) on the basis of purely technical considerations; (b) by a small group of persons (namely, the planning authority and Government); and (c) the decisions can be implemented by setting up appropriate industrial projects (which also would affect a comparatively small number of persons, not exceeding several thousands in the case of each project). In principle, such decisions do not require carrying conviction to a very large number of persons or the public at large. For example, the decision reached in India in 1951 to omit a new million ton steel plant (which had been previously announced by Government) from the 1st Five Year Plan or the decision two or three years later to expand steel production by two or three million tons could be and were actually taken from the top. In the same way, within the limits of available financial resources, it is possible in the 2nd FYP in

India, to make from the top decisions relating to the pattern of industrial investments. The availability of financial resources, of course, would be determined by the rate of taxation which, in India, would require the approval of the Parliament. But within the limits of available resources, decisions relating to industrialization can be (and, in fact, are usually) made by a small group of persons at the top and can also be implemented by a comparatively small number of persons.

38. Socialist transformation, on the other hand, requires the concurrence and support (voluntary or otherwise) of the persons affected by each decision. When the number of persons involved is comparatively small (as in the case of the recent nationalization of life insurance in India), decisions can be made and implemented from the top. As the number of persons affected increases, the task of implementation also becomes more and more difficult and calls for persuasion on an increasing scale.

39. It was instructive to see the dual or bi-polar approach of Chinese planning (a) with, on one hand, emphasis on rapid industrialisation from immediately after "liberation" when conditions had not become ripe for socialist transformation and, (b) on the other hand, a more gradual transformation of the national economy into the socialist pattern. Although industrialization was proceeding independently of socialist transformation, the two phases were inter-related. The Chinese planners had realized that without adequate progress of industrialization it would be difficult to make any effective advance in socialist transformation. The rapid development of modern industries in the public sector gave the Chinese Government a dominant position in the national economy, ensured adequate and increasing flow of resources out of the profits of the State enterprises, and placed Government in a strong position to make a rapid advance with socialist transformation. The Chinese planners appear to have worked on the basis of a grand strategy in which a rapid development of modern industries in the public sector was the first phase.

Heavy machinery and heavy electricals

40. The Chinese have been giving from the very beginning great attention to the need of becoming self-sufficient in the supply of essential capital

goods as early as possible. The planning of a medium size machine building factory at Taiyuan in Shensi began in 1951; construction was started in 1953 and would be completed in 1958. This year it has already started producing 10,000 tons of machinery (upto 30 tons of single piece castings at present) and production would reach 30,000 tons per year (with steel castings upto 50 tons) in time. The investment during the 1st FYP (inclusive of township, local transport etc) was 180 million yuan or Rs. 36 crores. The capacity of this plant would be raised to 70,000 tons per year with an additional all inclusive investment of 80 million yuan (= Rs. 16 crores) in the 2nd FYP. Thus a total investment of Rs. 52 crores would ensure in a few years a capacity output of 70,000 tons with a gross value of Rs.50-55 crores per year.

41. A bigger plant is being established in Fulakwei, in North-east China, with Soviet help. This would have a capacity of 60,000 tons (with steel casting up to 120 tons) and seems to be almost identical with the integrated project (forge/foundry and fabrication) for heavy machine building which Russian experts have prepared for India. The capital investment would be 350 million yuan or Rs. 70 crores inclusive of township, and local transport (which is comparable with the estimate of about Rs. 62 crores for the Indian project exclusive of township and local transport). Construction work started in 1956 and would be completed in 1960; but the factory would start producing from 1959. The gross value of the product would be about Rs. 50 crores per year.

42. I should like to explain here that costs of construction and hence, basically of investments (as machinery and equipment are usually priced at world market rates) would appear to be roughly of the same order in China and India. For example, the (national) average of cost of construction in China was given as 40 yuan per sq. metre equal to about Rs. 8 per sq. ft. in rupee currency. In Peking the cost is higher and 50 to 60 yuan per sq. metre or Rs. 10-12 per sq. ft. The price of cement is about 45 yuan or Rs. 90 per metric ton; steel about 300 yuan or Rs. 600 per ton; and steel products roughly 500 yuan or Rs. 1000 per ton and upwards. Labour charges in Peking would be one yuan or two rupees per day. Costs in India and China are not widely different

43. It will be noticed that up to about 1962 the total investment in integrated heavy machine building projects would come to (180 + 80 + 350 =) 610 million yuan or Rs. 122 crores with a production capacity of 130,000 tons which means a gross value of product of the order of Rs.100 crores per year. If mining machinery, heavy cranes etc., are included (but excluding machine tools, or machinery for light industries like textiles, sugar, paper etc) the total production in 1957 would be about 110,000 tons (value Rs. 85-90 crores) and would increase to about 230,000 tons (about Rs.200 crores) per year by 1962,

44. China has also invested during the 1st FYP about 350-400 million yuan or Rs. 70-80 crores in plants for manufacturing heavy electrical equipment and further investments of about 800 million yuan or Rs.160 crores would be made during the 2nd FYP. The gross value of the output for the total investment of Rs.240 crores would be about Rs.500 crores per year when full capacity is reached. The case of "generators" is quite interesting. In 1952 China could manufacture only very small generators of 100 kw. In 1957 China is already making generators of 15000 kw and the total production would reach 250,000 kw. By 1962 China would be able to manufacture generators of 100,000 kw and total production would reach about 1.4 million kw per year.

Self-sufficiency in capital goods

45. I have given some examples of China's efforts to attain self-sufficiency. I also got some over-all appreciation of the position from the Planning Commission. In heavy electricals, China can manufacture only about 10% of the requirements in 1957; this would rise to 50% by 1962 and 100% by 1967. In machine tools, China would produce 75% of basic requirements by 1958, about 90% by 1962 (by which time requirements would also be of a more complicated nature) and 100% by 1967. In metallurgical machinery, China would produce less than 20% by 1957, about 40% by 1962; and 100% by 1967. In heavy trucks, the proportion of home production would be 14% in 1957; 90% by 1962; and 100% by 1967. Domestic production of machinery for light industries (textiles, sugar, paper etc) would come to 90% of requirements in 1957 with full production by 1962. Taking basic capital

goods as a whole, the domestic production would reach 60% by 1957 and from 75% to 80% by 1962. In ship-building also China expects to be self-sufficient for inland navigation by 1962 but progress would be comparatively slow for sea-going vessels. Chinese planning evidently laid great emphasis on self-sufficiency in capital goods, and it is expected that by 1956 China would become basically independent of foreign imports although China would no doubt continue to purchase capital goods abroad through normal trading in exchange for her own exports.

46. It is interesting to note how the Chinese have utilized the Russian loan. The total amount received before 1953 was 2174 million yuan (= about Rs. 435 crores), much of which was utilized for rehabilitation. During the 1st FYP (1953-57) the total amount was 3,120 million yuan (=Rs.624 crores) most of which was used in the first three years. The amount of foreign loan decreased to only about 117.4 million yuan or Rs. 23.5 crores in 1956; and credit has been taken for only 23.3 million yuan or Rs. 4.7 crores in the 1957 budget. China thus appears to have already overcome foreign exchange difficulties, and would be able to finance the import of capital goods through normal trading. Furthermore, China would go on increasing the domestic production of capital goods and would attain self-sufficiency in 10 years by 1967. The future programme of industrialization has been clearly placed on a very sound foundation.

47. As regards the relative importance of the Soviet loan, it will be seen that during the 1st FYP (1953-57) the total amount was 3120 million yuan (= Rs.624 crores) which is only about 2.34 per cent of the total State budget of 133,170 million yuan (= Rs.27,382 crores) for the same five years. Taking the whole period of 8 years (1950-57), the Soviet loan of 5294 million (Rs.1058.8 crores) would represent just over 3 per cent of the total State budget (for the corresponding period) of the order of 170,000 million yuan = Rs.34,000 crores. The Soviet loan used during the 1st FYP (1953-57) can also be expressed as about three-quarters of one per cent of the total National Income (calculated in terms of material products) during the same period and the total Soviet loan would probably come to roughly nine-tenths

of one per cent of the National Income for the 8 years from 1950 to 1957. It is difficult to give equivalent figures in relations to the Indian economy because the State budget of China includes both plan and normal expenditures and also because the national income in India is calculated on a different conceptual basis. However, for a very rough comparison it can perhaps be said that the Soviet aid to China (of Rs. 1058 crores) would probably be equivalent to something like Rs. 650 crores in the case of India on a population basis and about Rs. 600 crores on the basis of National Income. In China, a part of the Russian aid was probably used for rehabilitation and defence. At a very rough guess, the Russian aid to China would probably be equivalent to foreign loans of the order of Rs. 500 or 600 crores for economic development in the case of India.

48. The point to be noted is that with the help of the Russian foreign loan China seems to have succeeded, first, in overcoming foreign exchange difficulties and attaining a position which would apparently enable her to manage her economy without further foreign loans in future; and, secondly, in laying such a sound foundation for industrialization as would enable China to attain self-sufficiency in respect of capital goods by 1967. Furthermore, the level of personal consumption in real terms has been rising and would continue to rise at the same time at an average rate of about 4 per cent per person per year.

49. At one stage I had asked the Chinese planners what from their own experience they would consider the highest priorities in connexion with industrialization. They said the metallurgical (both ferrous and non-ferrous) and heavy machine-building industries should have the highest priority in their opinion. In this connexion shortage of competent technical personnel was their greatest difficulty. Design of machinery required very early attention. Training started in 1952; and during the last 5 or 6 years 2000 design engineers have been trained which would be quite adequate for some considerable time. Graduate engineers with 2 or 3 years of training in design followed by one year of practical experience can do quite good work under proper direction. For leadership and to give personal guidance and

direction there is need of much wider experience. The Chinese required the help of experienced Soviet experts for this purpose; and without much help it would not have been possible for them to build up the basic industries.

50. The Chinese planners said that machine tools should have second highest priority, next to the metallurgical and heavy machine building industries. The Chinese planners are also giving high priority to the introduction of "automation" in selected industries. They intend to introduce automation as early as possible in power generating stations and in industries in which a good deal of complicated machinery would have to be maintained in operation properly. The Planning Commission, I found, was making serious studies of automation and other technical engineering and industrial problems; and, I may add has good facilities for this purpose as out of a staff about 700, about one-third are engineers, technologists and scientists.

Independent and critical outlook

51. Although China learnt planning from the USSR it is now well known that the Chinese have been often taking an independent line of their own and adopting methods suited to local conditions. The successive stages of "mixed economy" followed by joint State-and-private enterprises in commerce and industry, or the mutual-help agricultural associations followed by lower-type and then full-fledged agricultural cooperatives, or the recent "rectification campaign" are well known examples of independent lines of action in China regarding which it is not necessary for me to say anything.

52. I have mentioned that we did not have time to study Chinese planning in detail. I cannot, therefore, make any systematic observations. I shall only briefly refer to some miscellaneous points which I had either occasion to discuss or about which I came to know something directly during our visit to China.

Building programme

53. When we were discussing the cost of construction the Chinese told me that although the cost had been brought down by about 14 per cent since 1953 they were aware of having made mistakes in their building programme. We found that lively discussions had been going on for some time in this matter. We were told that one Vice-Premier had recently made a special tour to examine this question. It was also receiving serious consideration at the session of the National People's Congress which had started in Peking at the end of June of this year. The Chinese have taken the view that building standards were too high and have decided that, in future, standards would be more modest. The highest priority would be given to build dormitories and quarters for the staff and some of these would be let out. Government housing standards must be the same or only a little better than those of local housing. Workers would be also encouraged to build their own houses. There would be a ban for some years on the construction of big Government offices and public buildings; and where such buildings or schools, hospitals, etc., were absolutely essential the style must be plain, simple, and functional. Temporary structures have been completely stopped. Much careful thought was being given to the building programme and standards.

54. I may mention another interesting point in this connexion. The standard office hours everywhere are from 8 to 12 in the morning, followed by a recess of 2½ hours from 12 to 14-30, and a second spell of work from 14-30 to 18-30. As Saturday is a full working day, all offices work for 48 hours (exclusive of the midday recess) per week. The recess of 2½ hours made it possible for each worker to have his mid-day meal at home or at his residence and to have some rest after the meal. In fact, all workers are advised to sleep after the meal and before coming to office in the afternoon as this is considered not only good for health but also desirable for greater efficiency of work in the afternoon. In Peking we found that most of the workers live in dormitories or quarters within walking distance of their office. This is an extremely sensible and convenient arrangement which the workers greatly appreciate. This also explains why the Chinese attach the highest priority to the construction of dormitories and quarters for the staff.

Discussion on a deficit budget

55. During our stay in Peking there was much discussion on what we would call "deficit financing". The Chinese have been balancing the State budget from the very beginning; and have been carrying over a moderate cash balance from year to year. They keep their accounts on a "receipt-and-expenditure" basis (except that they do have some borrowings and foreign loans which, however, form a very small fraction of the budget); and they meet all capital expenditure out of the annual budget. Up to the end of 1955 they never had any deficit. In 1956 the expenditure on "capital construction outlay" and "outgoings on loans" given to agricultural and handicrafts cooperatives and joint State-and-private enterprises exceeded the budget estimates with the result that the Government cash-balance of 1011 million yuan (= Rs. 202 crores) carried over from 1955 was exhausted; and Government had to increase the currency in circulation by issuing additional notes to meet the excess expenditure of 810 million yuan (= Rs. 164 crores approximately). The supply of money exceeded the budget estimates and led to a larger demand for consumer goods and a rise in the price of certain commodities which were in comparative short supply. The total amount of the deficit of Rs. 164 crores (or of Rs. 366 crores,

if we include the cash-balance carried over from 1955), was small in comparison with the size of the budget of 30,574 million yuan (= Rs. 6115 crores) and amounted to about 2.7 per cent (or alternatively taking the larger amount just under 6 per cent) of the total budget. The consumer price index for 1956 had increased by less than one per cent; the amount of currency in circulation was decreased by 970 million yuan (Rs. 184 crores) by May 1957; and prices also had been brought under control. The disturbances caused by the budget deficit were thus not very serious. And yet there was much discussion in this connexion; and I also was asked to give my views on the subject. The Finance Minister, Li Hsien-nien in his report to the National People's Congress on 29 June 1957, gave a great deal of attention to this question. He gave a detailed analysis of the economic situation and explained the remedial measures which had been taken. He mentioned that the budget for 1957 had been balanced, and provision had been also made in it for a special credit fund of 600 million yuan (= Rs. 120 crores) and an uncommitted general reserve of 594 million yuan (= Rs. 119 crores). From all this one gets the impression that the financial position is extremely sound.

Birth control

56. Shortly before our departure I saw a Birth control Exhibition in the Chungshan Park in the heart of the city. It was extremely interesting. At the entry-gate I found that a simple tally was being kept with coloured chips of the visitors who were being classified as Government workers (blue chips), military personnel (green chips), and other citizens (white chips). At the entrance was a big placard (of course, in Chinese language): "For protection of women and children". It was this aspect (and not that of excessive increase of population) which was throughout emphasized. The exhibits (69 in number, or 70 including, the placard) were arranged in seven rooms, that is, about 10 (on three walls) in each room which gave a good display and allowed room for about 15, or 20 visitors to see each exhibit at the same time. In each room there was one girl guide (with some additional guides to take care of peak loads) to explain the exhibits in, what appeared to me (through English translation by my interpreter), a very competent manner. The attitude of the guides was lively and enthusiastic. There were placards, charts, cartoons, photographs and some cinema films (which were worked by

pushing a button). The exposition was extremely frank and clear. A special feature was a collection of 9 or 10 anatomical models and exhibits of birth-control appliances. There were also charts illustrating the rhythm (or safe-period) method with the warning that this method was the least reliable. Reference was made to sterilization (in two exhibits) but the emphasis was overwhelmingly on birth-control. Finally, there was a map of Peking showing the location of all hospitals and clinics where birth-control advice and services were provided. It took about 35 or 40 minutes to go through all the exhibits carefully.

57. I was eager to get some information regarding health services but owing to lack of time I could manage to have only a short discussion at the Ministry of Health two days before our departure. I got some information on the present campaign to promote birth-control. The movement started only about 3 years ago and that also in a very small way. Following the lead of USSR (which is definitely opposed to birth control) the Chinese Government, I believe, were not in favour of birth-control for some considerable time. However, they changed their views; and once the decision was taken, the birth-control movement began to gather momentum rapidly. Exhibitions are being arranged all over the country. I understand either an exhibition has been already put up (or will be soon put up at the headquarters of each Hsien (about 2000 in number). These exhibitions would be supported by clinics with a trained staff. I found that a great deal of attention was being given to the training of personnel. I saw a fairly big training manual of perhaps 200 pages of which 92,000 copies have been printed. I also saw a small pamphlet of 30 pages with one picture or diagram on each page with a few lines of explanation at the bottom. I was told one million copies of this pamphlet have been printed for distribution. As there are about 750,000 village cooperatives, it means that each village has or would receive a copy and there would be several copies available for each urban area.

58. I was told that this year (1957) was selected for the organisation of a special campaign for the promotion of birth control throughout the country. The work is being organised with the cooperation of the existing staff of the Ministry of Health and of other Ministries which are in a position to help in this matter and with the active assistance of Cooperatives of the village level, the Chinese Women's Federation and its branches and affiliated institutions, the

Trade Unions, the Medical Associations etc. All existing maternity and other appropriate clinics and medical and health units are giving special attention to the promotion of birth control this year.

59. I may mention here that in my discussions at the NSB and the PC, I noticed that there was serious concern regarding the present rate of increase of population by about 2.2 per cent per year. I also found a good deal of confidence that the birth control movement would be able to retard the growth of population. The population at present (1957) is about 633 million (mainland) and at the present rate of growth would become 780 million in 1967 and 970 million in 1977. I found, however, that the Chinese are using 700 million as the notional figure for population for long-term planning. It seems that they expect to be able to stabilise the population at the level of 700 million over the present generation.

Doctors of the traditional type

60. I was eager to have some information on the long-term programme of health services and the training of doctors. I knew that the Chinese had made some experiments with short-term (3 year) training courses in the allopathic system of treatment. I had heard that about 40,000 doctors had been turned out; and that many of them, were now being given additional training for two years to raise their qualifications to the normal level, I wanted to know their experience and views on the short courses of training. The Director in charge of the Western-type (i.e. allopathic) system was, however, busy with a conference and was not available. I, therefore, left some written questions to which replies were given in Chinese the next day but which I did not have time to get translated or discuss. The Director in charge of the traditional system of medicine (corresponding to "Ayurved" or "Yunani" in India) was present at the interview and gave some interesting information.

61. There are about 500,000 doctors of the traditional type in China but their qualifications and competence differ very widely. An attempt was made just after "liberation" to introduce a system of "licensing" on the basis of some objective tests of qualifications but this attempt was given up as the proposed tests were found to be too strict and too rigid. Many of the doctors of the traditional

type are however very competent; and Government decided to make the best use of the traditional system. A separate division was established for this purpose in the Ministry of Health. Government have given direct appointment to about 20,000 traditional-type doctors and are utilizing the services of another 10,000 or so in connexion with Government work. They work in hospitals of the traditional type and in teaching institutions and also give medical service to Government servants. The appointments were made on the basis of their academic qualifications and training and on their professional reputation. (The Director said "the best practitioners are quite well known in the community"). The scale of pay is same for both Western type (allopathic) and traditional-type doctors; and ranges from 70 or 80 yuan (= Rs. 140 or 160) per month in grade 12, to 280 yuan (=Rs. 560) in grade 2, and 330 yuan (Rs.660) in grade 1. Some exceptionally able doctors get even higher salary (500 or 600 yuan).

62. About half of the traditional doctors (i.e., roughly 250,000) have joined cooperative or united clinics; and another part have joined clinics affiliated to agricultural or village cooperatives. In this way a majority of the traditional-type doctors are doing some medical work. Those whose qualifications are really low have been asked to get some more training either in a six-month course at district training schools or in an one-year course at provincial schools; these two types of schools are turning out about 3000 graduates every year. In addition, correspondence courses are being given by post to about 40,000 students for periods of from one to two years. The students receive a syllabus, graduated lessons, and also questions to which they send written replies. There is some inspection also, but the main object is to help those who already have some qualifications and desire to improve their knowledge. The traditional method of doctor-disciple type is also going on; and there are about 50,000 students studying in this way. This method is recognized to be satisfactory but is being allowed to continue until something better can be substituted.

63. Government also set up about one year ago four medical institutions at the college level to give training of the traditional type at Peking, Shanghai, Canton, and Chen-tu. The course is for 6 years and about 500 students

have been enrolled. This is simply a kind of a pilot experiment at present. Some provinces intend to establish some junior medical schools for training of the traditional type. Another programme has been started to give facilities to Western-type doctors to learn traditional methods; 303 qualified doctors were enrolled and have been making intensive whole-time studies for two years; about 60% or 70% are doing very well and are deriving a good deal of benefit. Another experiment was also started for 4000 Western-type doctors. While doing their other duties, they were also to receive part-time (one half-day per week) training in traditional methods; but this experiment has not been successful and will be abolished. Experience has shown that intensive training is essential to get the Western-type doctors seriously interested in, and to overcome their mental habit of looking down with contempt on traditional methods. The view of the Health Ministry is that this attitude must be changed and every effort must be made to utilize whatever is of value in the traditional system. At the same time, training and research facilities in the allopathic system have been and are being continually expanded. China has also started producing penicillin, streptomycin, synthomycin and other antibiotics, and sulpha and other essential drugs in increasing quantities.

Alphabetical script

64. The Chinese seemed to me to have a basically experimental approach to national problems. After my lecture at the Peking University, I had dinner there and had some discussions with Dr. Ma Yin-chou, the President of the University, who is also a Deputy of the National People's Congress. He is 76 and has been a progressive intellectual for a very long time. He gave me an interesting account of the programme of simplifying and modernizing the Chinese script. On stage of simplification (with the help of a set of standard symbols which can be printed and used on type-writers) has been already accomplished. The aim is to adopt ultimately an alphabetical system on the basis of the latin script with necessary diacritical marks and some additional symbols. New scripts which are being prepared for languages of minority groups (who did not have any written script at all) are all based on the latin alphabet; and these new scripts are experimental ventures to try out the latin script. A draft modified latin alphabet for the Chinese language has been already prepared and is now under examination. This alphabet would not be immediately introduced. The change over would be made in successive stages which would give further opportunities for experimentation; and would also give time to the public to get gradually adjusted to the changes. To transform the ideographic Chinese script into a modified latin alphabetical script is an extremely difficult task but Dr. Ma Yin-chou was confident that this would be accomplished in time. The aim has been clearly formulated; the programme of implementation is being worked out at a concrete level and on an experimental basis; and the matter is being steadily pursued.

The question of big and small industrial units

65. During our discussions the Chinese were particularly interested to know the Indian view on small scale and village industries. I found that the Chinese planners were giving a good deal of thought to a somewhat similar problem. Apparently one view was in favour of setting up very big industrial units as in USA or USSR on the ground that such

big units usually have greater efficiency of production. The Chinese have however decided to adopt a diversified policy. They have clearly recognized that some really big basic units must be set up which would be of strategic importance for future progress. This would be done in the case of the most modern and complicated plants for which it would be necessary to have the help of USSR or some other friendly country. Such strategic units would, however, be supported by medium and small units which would be normally designed by Chinese engineers and would be equipped by machinery manufactured in China. Many more medium and small industrial units would be, therefore, set up in future. This new policy would enable domestic resources being utilized to the fullest extent. It would be also possible to set up such small and medium size units in different parts of the country and much more quickly than bigger units which would be of help in raising production rapidly. This increasing emphasis on small units also extends to a policy of greater utilization of manual labour both in semi-mechanized production and in cottage industries. In agriculture also the Chinese have clearly recognized that there is no question of early mechanization (partly because of technical difficulties in the case of the wet-cultivation of rice) and that they will have to rely on intensive manual labour for a long time to come.

66. The emphasis on small units and manual labour may also have some connexion with the question of employment. There is increasing recognition that it would be many years before employment can be expanded fast enough to keep pace with the increase of the labour force. I believe this was one of the reasons which made the Chinese change their views on birth-control. They are also aware that, although all the students who have graduated from the middle schools so far were absorbed in higher institutions because of the rapid increase in the demand for trained personnel, this could not continue indefinitely in future. They are, therefore, laying emphasis on the concept of educated manual labour; and pointing out that socialist advance necessarily implies the emergence of a class of workers who would be educated but would be doing manual work.

Awareness of future difficulties

67. The Chinese have made amazingly rapid progress in eight years. Orderly administration has been established over a large country with a population of 600 million. A steady progress of industrialization has been ensured by laying down a firm foundation of basic industries. The level of living has been rising; and prices have been kept remarkably stable. There is continuing expansion of education, scientific research, health services, and cultural amenities. The structure of the national economy has also been transformed into the pattern of socialism. All this was possible because the Chinese succeeded in releasing and utilizing the human energy which was being formerly wasted in internal conflicts and through lack of organization. The process was somewhat analogous to the rehabilitation of an old plant which was working much below full capacity. The Chinese reaped the full advantage of replacing the previous state of disorder by a higher state of social organization which made very rapid progress possible in eight years. The chaotic conditions into which the country had fallen turned out to be an advantage in one way. "Liberation" meant an immediate and visible improvement in the life of the common man. The rapid rate of improvement itself created hope and confidence among the general public and gained their emotional support in favour of progressive forces.

68. I believe the Chinese are aware that this first period of rapid advance is coming to an end; and it is necessary to take a very long view. They intend to build up by 1967 (by the end of the 3rd FYP) a comprehensive industrial system which would be supported by the coordinated production of both food and industrial raw materials and which would be able to produce the principal machinery, equipment, and materials for future industrial expansion as well as consumer goods to ensure a steady improvement of the level of living at a reasonable rate. They are aware that this also would be only a second phase; and that it would take a very long time to improve the conditions of living of the vast mass of people to a really high level. This is why the Chinese are giving a great deal of attention to long-term planning.

69. Certain characteristics of Chinese planning deeply impressed me. They try to formulate the objectives in a precise and concrete form. They also try to work out a plan for implementation in successive stages always with emphasis on the training of the technical and organisational staff which would be required at different levels. They have much discussion while the basic aims and the plan of implementation are being prepared; and, once the plan is ready, they take great care to communicating, in a clear and precise form, the basic ideas to successive levels of personnel. The Chinese planners have an open mind, and are receptive to new ideas, willing to make experiments and to learn from experience. They have, of course, made many mistakes. But they are very serious regarding "self-criticism", and have the sincere desire to detect and have frank discussions about their mistakes and to correct them. They have been, of course, adopting Russian methods and fashions very closely in many things; but I also saw signs of their getting out of this imitative phase and evolving ways of doing things more suited to Chinese conditions and culture. I was most impressed by their self-confidence and maturity of outlook which had roots in the traditions of a great civilization.

New Delhi
26 July 1957.

H.Dev.