

# DRAFT PLAN FRAME FOR THE SECOND FIVE YEAR PLAN 1956—1961

P. C. MAHALANOBIS

## CHAPTER ONE

### GENERAL AIMS AND OBJECTIVES

1.1. *The First Five Year Plan* :—At the beginning of the First Five Year Plan the country was still dislocated by war and partition. There was shortage of food and raw materials. There were signs of inflationary pressures after hostilities had started in Korea. In this situation it is understandable that the targets of the First Five Year Plan were kept modest. Judged in this context, the progress achieved so far may be regarded as satisfactory.

1.2. There are, however, disquieting features. Agricultural prices are declining. Unemployment, especially in urban areas, is increasing. Even the modest expenditure targets in the First Five Year Plan have not been fully achieved on account of delays in preparing projects, inadequate administrative organisation, and lack of sufficient facilities to give training to technical personnel.

2.1. *The need of a bold plan* :—The population of India is increasing roughly at the rate of 1.5 millions per year. With a proportion of about 40 per cent in the labour force, about 1.8 millions of persons enter the labour force every year. In addition, a large number of persons are without employment in urban areas and a great deal of under-employment exists in villages. Planning must be bold enough to provide new work for about 1.8 million new entrants into the working force every year; and also to offer more work to the large number of persons who are without jobs or who are under-employed at present.

2.2. The level of living is extremely low. Expenditure on consumer goods per person is about Rs. 22 per month of which about Rs. 13 is spent in cash and about Rs. 9 is the value of consumption of home-grown food and home-made articles. Housing is primitive in villages, and extremely short in urban areas. The supply of nutritive foods is meagre although nearly two-thirds of the total expenditure is spent on food items. The expenditure on edu-

cation is only about four annas, per person per month and on health less than seven annas.

2.3. The above estimates are for all classes taken together. The position of the poorer section is much worse. Half the population of India or 185 millions of persons spend less than Rs. 13 per month on consumer goods and possibly half of this amount is consumed in kind or in the form of home-grown food and home-made articles. Of children in the school going age, less than half attend at the primary stage, and less than one-fifth at the secondary stage. There is probably less than one qualified physician per 30,000 inhabitants in the villages.

3.1. *General objectives of the Second Five Year Plan* :—There is a large pool of idle manpower, and many are without jobs; also about 1.8 millions of persons would be added to the working force every year. The country has large resources of water for hydro-electric and irrigation projects; coal, iron ore and other important minerals; forests, fertile land and cattle. The aim of planning must be to utilize these resources to increase rapidly the level of production and thus of national income.

3.2. Conditions are favourable in many ways. There is economic stability and confidence in Government. Unemployed manpower and unexploited resources can be brought together to increase both consumption and investment simultaneously. India's prestige is high at the international level. Finally the Congress Party and Government have decided that the time has come for economic development on a socialistic pattern.

3.3. The Second Five Year Plan is therefore being formulated with the following objectives in view :

(1) to attain a rapid growth of the national economy by increasing the scope and importance of the public sector and in this way to advance to a socialistic pattern of society;

(2) to develop basic heavy industries for the manufacture of producer goods to strengthen the foundations of economic independence;

(3) to increase the production of consumer goods as much as possible through the household or hand industries; and to provide an adequate market for the products;

(4) to develop factory production of consumer goods in a way not competitive with hand industries;

(5) to increase productivity in agriculture; and to speed up agrarian reforms with an equitable distribution of land to peasant cultivators so as to stimulate the increase of agricultural production and of purchasing power in rural areas;

(6) to provide better housing, more health services, and greater opportunities for education especially for the poorer sections of the population;

(7) to liquidate unemployment as quickly as possible and within a period not exceeding ten years;

(8) and as the result of such measures, to increase national income by about 25 per cent over the plan period, and achieve a more equitable distribution of income.

3.4. The basic strategy would be to increase purchasing power through investments in heavy industries in the public sector and through expenditure on health, education, and social services; and to meet the increasing demand for consumer goods by a planned supply of such goods so that there would be no undesirable inflationary pressures. Planning would be thus essentially a feed-back process of matching a continuously increasing (planned) demand by a continuously increasing (planned) production giving rise to a steadily expanding economy.

4.1. *Heavy industries* :—In the long run, the rate of industrialization and the growth of national economy would depend on the increasing production of coal, electricity, iron and steel, heavy machinery, heavy chemicals, and the heavy industries generally which would increase the capacity for capital formation. One important aim is to make India independent, as quickly as possible, of foreign imports of producer goods so that the accumulation of capital would not be hampered by difficulties in securing supplies of essential producer goods from other countries. The heavy industries must, therefore, be expanded with all possible speed.

4.2. The new producer goods industries would be developed mainly in the public sector. The private sector would continue to play an important part in the development of basic industries like cement, chemicals, etc.

4.3. The heavy industries being capital intensive would, however, give relatively little scope for employment; and would also generate a large demand for consumer goods which they themselves would not be able to supply.

5.1. *Household and hand industries* :—The increasing purchasing power and consequential demand for consumer goods must be met by increasing the supply of such goods as much as possible through the expansion of household or hand production. This would also quickly generate a large volume of work all over the country.

5.2. Construction work (roads, houses, irrigation and flood control projects, etc.), by hand would also be increased which would create a good deal of employment and generate demands for consumer goods.

5.3. The greater the marketable surplus of consumer goods in the household or hand industries the greater will be the possibilities of investments in heavy industries without any fear of inflation.

5.4. By expanding the household and hand-industries and construction work, the aggregate national consumption would increase continually. Also, relatively more employment would be created among the poorer sections of the people so that a greater portion of the increase in income would go to them.

6.1. *Factory production of consumer goods* :—The production of consumer goods in factories requires heavy investment of capital per engaged person and in many cases competes with the household or hand industries. Until unemployment is liquidated or brought under control, it is necessary to prevent competition between factories and household or hand industries by not permitting investments to be made in such consumer goods factories as would prevent expansion or lead to a shrinkage of employment in the hand industries.

6.2. In the immediate future the factory production of consumer goods would be expanded (where it is not competitive with hand industries) to increase the supply of essential goods (like anti-biotics, fine drugs, etc.) or of goods for export to earn foreign exchange.

6.3. It is recognized that the price of hand-made goods would be often higher than the price of factory-made goods of comparable quality. Appropriate excise duties (which would be selective) would be imposed on factory products to maintain desired price parities with hand-made goods in such cases.

6.4. Once mass unemployment has gone, the aim would be to provide cheap power and small machines to the household sector and hand industries to increase productivity per worker and hence the total national product. At this stage the factory production of consumer goods would also be increased.

7.1. *Agriculture and allied pursuits* :—The fixation of ceilings and procedural arrangements for the redistribution of land to peasant cultivators must be decided at an early date in each State in accordance with general principles and standards settled on an all-India basis, and the redistribution must be completed by 1958. This would make visible important structural changes in the economy resulting in stimulation of agricultural production, provision of a large market for the growing output of industry and handicrafts; and would also transfer a part of the national income from recipients who use it largely for luxurious consumption to recipients who will use it for productive purposes and for raising their low standard of living.

7.2. The National Extension Service Blocks (—and Community Projects where possible—) would be extended all over the country to help and speed up the improvement of living conditions in rural areas.

7.3. Because of the urgent need of increasing the production of foodstuffs and raw materials, the highest priority would be given to the setting up of a State Bank, as recommended in the Report of the Rural Credit Survey Committee, for the supply of agricultural credit.

7.4. The same or an associated system would be used for the supply of credit, raw materials, and marketing facilities to the household and hand industries through an organization of co-operatives with the support (or the direct participation or partnership) of Government.

7.5. As an increase in the caloric value is not enough for a balanced diet, concerted efforts must be made to increase the supply of food of higher nutritive and protective value, such as fruits and vegetables, milk and milk products, eggs, fish, meat, etc.

7.6. Continuing efforts must be made to increase the production of milk products by improving the quality of cattle through the introduction of better breeds, by increasing the production of fodder crops and cattle feed, and by providing better veterinary services by increasing the number of trained veterinary surgeons and veterinary assistants.

8. *Health* :—There must be a rapid increase in the care of health. A national health service would be established in the rural areas with paid health assistants in charge of a group of villages who would work in contact with fully trained physicians. The number of dispensaries and hospitals, and facilities for medical training would be increased in urban areas.

9.1. *Education* :—There must be a rapid increase in literacy, improvement in the pay of teachers, and better organisation of education at all levels.

9.2. On the basis of merit, able students, at all levels and in increasing numbers, must be provided with adequate living and educational expenses to enable them to receive education up to the highest standard according to capacity without regard to sex, creed, caste, or social status of the parents. Special educational scholarships and facilities must also be provided for women and backward groups and communities.

10.1. *Social security and welfare* :—Existing social security schemes such as Employees State Insurance and Provident Fund schemes would be expanded. A scheme for unemployment benefit in the form of paid attendance at training centres with placement facilities would be introduced in urban areas.

10.2. There must be increasing provision for the social welfare of children (foundling homes, creches, nursery schools, health and recreation centres, etc.), of women (houses for widows, destitute and deserted women; maternity, health, and family planning centres), of juvenile delinquents (remand homes, schools, after-care hostels, etc.), of the handicapped (homes, schools and workshops for the blind, the deaf and the dumb, the crippled, and the mentally deficient or ill), and homes for the aged and the infirm.

11. *Sports and cultural pursuits* :—Increasing facilities must be provided for sports and health activities, educational and cultural broadcast and cinema; and the promotion of literature, music, drama, art and other cultural pursuits.

12. *Housing* :—Better housing must be provided especially for factory workers and poorer sections of the people in urban areas.

13. *Social overheads* :—Expenditure on housing, health, education, social security and welfare, sports and cultural pursuits, and housing would necessarily increase purchasing power and create additional demand for consumer goods which must be met by increasing the production of additional consumer goods

through household and hand-industries in the first instance.

14.1. *Balanced development and controls* :— With the stepping up of production of both producer and consumer goods, it would be necessary to provide for adequate increases in the supply of electricity and fuels, irrigation, transport, and communication. Proper balances must be maintained between different sectors so that production is not hampered by bottlenecks.

14.2. The aim of planning would be to avoid shortages giving rise to inflationary pressures on one hand and over-production with falling prices on the other. In the case of falling prices, especially of consumer goods, the demand would be stimulated promptly by increasing purchasing power through investments in the public sector and through expenditure on social services and by open market operations by Government.

14.3. Government would acquire and keep adequate reserves of foodgrains and important raw materials produced by agriculture to provide against emergencies of short crops in bad years and to maintain prices profitable to peasants in years of exceptionally plentiful crops. This would maintain a minimum level of peasant incomes, stimulate production, and promote the welfare of both peasants and the working class in urban areas.

14.4. Shortages may, however, develop in the short run which would be dealt with as they arise by appropriate methods such as Government intervention in the market, Government trading, physical controls, rationing, and similar measures. Also, the production programme would be adjusted as necessary to restore equilibrium between supply and demand as quickly as possible.

14.5. Rationing of foodgrains, clothing, and similar essential commodities would be avoided. Control over consumption, when necessary, would be related to the shortages of specific physical resources.

15. *Regional development* :—Special attention must be given to regional development to reduce disparities in economic opportunities and the level of life between different States.

16.1. *Technical training and scientific research* :—A bold plan will require a rapidly increasing technical staff to prepare the various projects as well as to implement them. Training facilities must be expanded sufficiently quickly to turn out technical and scientific personnel in adequate numbers at all levels.

16.2. Scientific and technological research would be expanded and oriented to serve the needs of national development in an effective manner. The National Laboratories, Universities and other scientific institutions and organizations must undertake co-ordinated researches in accordance with national needs.

16.3. Fundamental research as well as training in research must also be encouraged at the same time to foster the accumulation of basic knowledge and skill for the expansion of applied and technological research.

16.4. The survey of natural resources, especially prospecting for oil and minerals, must be greatly and rapidly increased through State Organizations.

17.1. *Expansion of the public sector* :—Key industries would be established and developed in the public sector generally in accordance with the Industrial Policy Declaration of 1948 as interpreted in December 1954. Government would also take up the factory production of certain consumer goods which are of strategic importance for the growth of the national economy.

17.2. The public sector must be expanded rapidly and relatively faster than the private sector for steady advance to a socialistic pattern of economy. In order to make available large capital resources for investment and national development and to facilitate the implementation of the Plan, Government will be prepared to enter into such activities as banking, insurance, foreign trade or internal trade in selected commodities.

17.3. Government would also promote enterprises in partnership with the private sector so that, although Government would hold a controlling share, initiative can be left to private management subject to policy decisions by Government.

18.1. *The private sector* :—A large majority of the population would be engaged in household production in agriculture, in hand-industries and in various services which would continue to remain private.

18.2. As the planned demand would have to be matched by the planned production, it would be necessary for the private sector to conform in a general way to the overall programme of production as provided in the Plan. The private sector would be helped by Government by the supply of credit, raw materials, and marketing facilities to undertake production in accordance with the Plan.

18.3. Inducements (such as tax exemption or preferential permission for capital issue)

would be given to channel the profits of the private sector into desirable forms of investment in both private and public sectors or in Government bonds and securities.

18.4. The private sector would enjoy the advantages of an assured and growing market in an expanding economy, and thus of reduced risks and uncertainties.

19.1. *Finance and foreign exchange* :—Large financial resources would be required for the Second Plan. A small portion would come from sterling balances or foreign loans and aid; and the bulk of the resources must be found from within the domestic economy.

19.2. The tax system would be directed to collect an increasing part of the growing national income in order to permit greater capital formation in the public sector and to finance an expansion of social services.

19.3. The public sector would be extended to industrial and commercial activities where necessary for raising resources for public purposes.

19.4. Deficit financing would be undertaken on the scale necessary to bring about the greatest possible expansion of production without introducing permanent and all-embracing rationing of essential commodities.

19.5. Conspicuous consumption would be discouraged by graduated excise duties; and a more equitable distribution of income would be assured by taxes on property and unearned income.

19.6. Excise duties would be levied to raise additional resources and also to maintain desired price parities between different sectors.

19.7. Steps would be taken to promote exports; and the import on non-essential and luxury goods would be discouraged by heavy duties in order to release foreign exchange resources for more urgent needs.

## CHAPTER TWO

### TARGETS OF PRODUCTION

1.1. The targets of production (mostly in physical quantities) of some important items are shown in Table 1. The physical unit is given in column (2) and actual production for 1950-51 and 1953-54 in columns (3) and (4) respectively. Estimates for 1955-56 and planned target for 1960-61 together with the estimated increase in (percentage) during the

plan period are shown in columns (5), (6) and (7) respectively.

1.2. The above targets are provisional. Estimates of requirements and likely supplies have been examined in a general way on available information. The next task is to carry out a detailed check and make necessary adjustments on the basis of projects to achieve internal consistency in the form of a balanced supply and demand on material and labour resources. Such balancing must also have a proper phasing over time so that neither serious bottle-necks nor excessive supplies, emerge at any stage of the Plan.

1.3. Explanatory notes are given on some (but not all) of the items mentioned in Table (1). The number shown within brackets after each item gives the serial number of the same item in Table (1)

2.1. *Electricity* (1) —Planned electrification must be a main link in economic development in India. The hydro-electric projects started in the First Plan must be continued on an increasing scale in the Second Plan.

2.2. Regional grid-systems combining both thermal and hydel power stations must be planned to secure the best of local fuels (low grade coal, lignite, etc.), and of installed capacity by large consumers (electric-intensive industries like aluminium, alloy-steels, etc.), keeping in view the development of a future super-grid for India as a whole.

2.3. Small power stations (hydel and diesel) would also be developed for urgent requirements in small towns and rural areas.

2.4. The use of electricity for small-scale and household industries, irrigation by tube-wells, etc., must be steadily increased.

2.5. The production of electricity must forestall the growth of industrial production; and the installed capacity must increase from 2.8 million kilowatts in 1953-54 to 6 million kilowatts in 1960-61, that is, must be more than doubled. Also, the utilization of capacity must be increased.

3.1. *Coal* (2) :—The production of coal must be increased from 37 million tons in 1955-56 to 60 million tons in 1960-61 (an increase of about 62 per cent) which would be difficult to achieve but should not be impossible.

3.2. There is great wastage at present of high grade coking coal of which supply is short. Necessary Government action must be taken

without any delay to prevent such wastage and to promote better conservation.

4.1. *Synthetic petrol and products* (3) :—India is short of petrol and meets most of its requirements by imports. In addition to increasing oil-prospecting as quickly as possible, a State plant to produce about 300,000 tons of synthetic petrol must be installed during the Second Plan, and future production must be increased as necessary.

4.2. The above plant must also be used to establish a base for the development of associated chemical industries.

5.1. *Steel* (4) :—India has vast resources of iron ore; and increasing production of steel must be made an important link in economic development. The installed capacity would be increased to 6 million tons and production to 5 million tons by 1960-61.

5.2. Necessary action (in the way of establishing a heavy machinery industry and promotion of metallurgical research) must be taken in the Second Five Year Plan to build up the base for the future expansion of the installed capacity of steel by at least one million ton per year from 1961.

5.3. Increasing production of steel would supply a secure foundation for the fabrication of plants and machinery of all kinds, expansion of construction work and of railways and transport generally. If necessary, steel can also be exported to neighbouring countries which are in urgent need of it.

6.1. *Aluminium* (7) :—India has large reserves of bauxite and the production of aluminium must be rapidly increased to take the place of copper which is in short supply and mostly imported. Increasing production of aluminium would, in its turn, facilitate electrification; and the production of both electricity and aluminium must be continuously increased at the same time.

6.2. The production of aluminium should be increased from about 5 to 40 thousand tons during the plan period. One or more aluminium plants must be established in the public sector for this purpose.

7. *Manganese ore* (8) :—The extraction of manganese ore must be increased and some of the ore must be converted into ferro-manganese before export so as to retain a part of the value created by semi-manufacture.

8. *Cement* (9) :—The production of cement must be increased from 4.6 to 10 million tons or more than doubled during the second plan

period. The production of other building materials must be increased proportionately to avoid shortages and bottlenecks in construction work.

9.1. *Fertilizers* (10) :—The production of nitrogenous fertilizer must be increased by about three times by establishing at least three more factories of roughly the same capacity as Sindri.

9.2. Fertilizer production must also be steadily and continuously expanded along with irrigation to secure a rapid increase in the outturn of agricultural crops in future.

10. *Heavy chemicals* (11) :—The production of sulphuric acid, soda ash and caustic soda must be increased by 1960-61 to roughly four times of the actual production in 1953-54.

11.1. *Heavy machinery* (12) :—For rapid industrialization it is essential to fabricate plants and machinery at home. To install a plant for the production of one million tons of steel per year it is necessary at present to import machinery worth about Rs. 40 or Rs. 45 crores from outside. Provision has been made for investment of Rs. 150 crores to establish large engineering workshops to fabricate machinery needed for producer goods plants. An immediate aim would be to manufacture every year most of the machinery required for installing a one million ton capacity steel plant.

11.2. Investment of Rs. 40 crores is contemplated for establishing plants for the manufacture of heavy electrical equipment.

11.3. The production of machinery for the manufacture of consumer goods (textiles, etc.) must be roughly doubled during the plan period, and an investment provision of Rs. 50 crores has been made for the purpose.

12. *Railway rolling stock* (13) :—The annual production of locomotives must be increased from 100 to 400; of wagons from 7,000 to 20,000; and of coaches from 800 to 2,000 so as to attain self-sufficiency in rolling stock by the end of the plan period.

13. *Jute textiles* (14) :—Immediate steps should be taken to ensure a fuller use of the existing capacity and to see that by 1960-61 the full rated capacity is utilised.

14.1. *Factory-made consumer goods* :—The factory production of essential consumer goods would be increased in such a way as to prevent competition with the household and hand-industries.

14.2. *Cotton textiles* (15) :—Production would be increased to 5,500 million yards per

year by 1960-61, the additional production being used mainly for exports. (The remaining part of the internal demand would be met by hand-made cloth.)

14.3. *Woollen textiles* (16) :—Manufacture of woollen textiles should increase by about 25 per cent during the second plan period.

14.4. *Sugar* (17) and *vegetable oil* (18) :—The production of sugar must be increased (preferably through co-operatives) by about 50 per cent and reach 2.1 million tons. A rise by about 33 per cent of the production of vegetable oil will be necessary.

14.5. *Paper* (19), *bicycles* (20), *sewing machines* (21), and *electrical goods* (22) :—Production must increase by roughly between 40 per cent and 100 per cent to meet anticipated increase in demand and also partly for export.

15.1. *Hand-made consumer goods* :—Every effort must be made to expand the hand production of consumer goods to provide a marketable surplus to meet the increase in demand.

15.2. *Khadi and handloom* (23) :—Production would be increased to 3,200 million yards (from the level of about 1,200 million yards in 1953-54).

15.3. Production of other hand-made articles must be increased by from 20 per cent to 40 per cent.

16.1. *Agriculture and allied pursuits* :—The production of *cereals* (28) must be increased from 56 million tons (in 1953-54) to 63 million tons in 1960-61, and of *pulses and grams* (29) from 10 to 13 million tons. This would make the country self-sufficient in foodgrains at a somewhat higher standard of consumption than at present.

16.2. *Cotton* (32) :—Output must increase by 38 per cent to 5.8 million bales so that the net import of cotton can be considerably reduced by 1960-61.

16.3. *Sugarcane* (34) :—Output must increase to 7.5 million tons of raw sugar (50 per cent increase).

16.4. *Milk* (37) :—Production of milk and other edible animal husbandry products should go up by about 25 per cent.

17.1. *Irrigation* (41) :—In order to achieve the agricultural targets mentioned above, the

total irrigated area must increase from 70 to 100 million acres.

17.2. Special attention must be given to devising suitable measures for flood control.

18. *National Extension Service and Community Projects* (42) :—Vigorous organization and persistent efforts would be required for the expansion of production in agriculture and in household and hand-industries. NES blocks, which can supply a convenient machinery for this purpose, must cover the entire country by the end of the Second Plan.

19. *Transport* :—*Railway tracks* (43) would be increased by 3,000 miles (9 per cent increase); *passenger miles* (44) and *freight ton miles* (45) by 30 per cent and 40 per cent respectively. *National highways* (46) would be increased from 12,500 to 17,500 miles (40 per cent increase) and *State roads* (47) from 20,000 to 35,000 miles (75 per cent increase). *Shipping tonnage* (48) would increase from 525,000 (in 1953-54) to about 1,500,000, an increase of 185 per cent.

20.1. *Education* :—The number of pupils in schools between the ages of 6 and 14 would increase from about 29 millions in 1955-56 to about 46 millions in 1960-61.

20.2. The expenditure on *technical training, higher education and research* (53) must increase by 75 per cent.

21.1. *Health* :—The number of *hospital beds* (54) must increase from 112,000 in 1953-54 to 250,000 in 1960-61; and the number of *registered doctors* (55) from 65,000 in 1953-54 to 90,000 in 1960-61.

21.2. Two new cadres of junior and senior *health assistants* (56) would be created with two levels of training of two years and four years respectively. Each junior health assistant would be placed in charge of a group of 10 villages or one NES block and one senior health assistant would be in charge of 5 such groups or 5 NES blocks together with one registered doctor in charge of two such units or 10 NES blocks in such a way that the whole of the rural area is covered by the end of the Second Plan.

22. *Urban Housing* (57) :—The number of urban houses must increase sufficiently to provide additional accommodation for 3 million families during the Second Plan.

TABLE I  
TARGETS OF PRODUCTION FOR THE SECOND FIVE YEAR PLAN : 1956-57 TO 1960-61

Name of item	Unit	Actuals		Provisional estimates		
		1950-51	1953-54	1955-56	1960-61	percentage increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Factory producer goods</i>						
1. electricity	m. kw	2.3	2.8	3.5	6.0	71
2. coal	m. tons	32	36	37	60	62
3. synthetic petrol	th. tons	nil	nil	nil	300	—
4. steel	m. tons	1.1	1.1	1.3	5.0	285
5. pig iron (for foundries)	m. tons	—	—	0.4	1.8	350
6. iron ore	m. tons	3	4	4	13	225
7. aluminium	th. tons	3.7	3.8	5	40	700
8. manganese ore	m. tons	1	2	2	3.5	75
9. cement	m. tons	2.7	4.0	4.6	10.0	108
10. fertilizers				90	360	300
(a) nitrogenous	th. tons nitrogen	9.2	61.4	100	200	100
(b) superphosphates	th. tons	55	66			
11. heavy chemicals				150	450	200
(a) sulphuric acid	th. tons	99	120	75	200	167
(b) soda ash	th. tons	45	56	33	100	203
(c) caustic soda	th. tons	11	25			
12. heavy machinery to fabricate plants						
(a) steel and producer goods (investment)	Rs. crore	nil	nil	nil	150	—
(b) electrical equipment (investment)	Rs. crore	nil	nil	nil	40	—
(c) consumer goods	index	—	—	100	200	100
13. railway rolling stock				100	400	300
(a) locomotives	no.	nil	86	7000	20000	186
(b) wagons	no.	1095	6892	800	2000	150
(c) passenger coaches	no.	479	786	1000	1200	20
14. jute textiles	th. tons.	892	864			
<i>Factory consumer goods</i>						
15. cotton textiles	m. yds	3718	4906	5000	5500	10
16. woollen textiles	m. lbs	18	20	20	25	25
17. sugar	m. tons	1.1	1.1	1.4	2.1	50
18. vegetable oil	m. tons	1.2	1.4	1.5	2.0	33
19. paper	th. tons	114	137	140	200	43
20. bicycles	thousand	101	290	500	1000	100
21. sewing machines	thousand	33	68	90	150	67
22. electrical goods	index	—	—	100	166	66
<i>Hand made consumer goods</i>						
23. khadi and hand-loom	m. yds.	742	1200	1600	3200	100
24. soap	th. tons	—	—	28	40	43
25. footwear	m. pairs	—	—	80	100	25
26. food industries	index	—	—	100	120	20
27. metalwares	index	—	—	100	133	33
<i>Agricultural and associated pursuits</i>						
28. cereals	m. tons	41.7	56.1	56	63	13
29. pulses and grams	m. tons	8.3	9.6	10	13	30
30. total foodgrains	m. tons	50.0	65.0	66	76	15
31. oilseeds	m. tons	5.1	5.6	5.6	7.0	25
32. cotton	m. bales	2.9	3.9	4.2	5.8	38
33. jute	m. bales	3.3	3.1	5.0	5.4	8
34. sugarcane (raw sugar)	m. tons	5.6	4.6	5.0	7.5	50
35. tobacco	th. tons	257	256	250	300	20
36. tea	m. tons	607	675	675	750	11
37. milk	index	—	—	100	125	25
38. wool	m. lbs	—	—	40	50	25
39. timber	index	—	—	100	130	30
40. fish	index	—	—	100	125	25



Name of item	Unit	Actuals		Provisional estimates		
		1950-51	1953-54	1955-56	1960-61	percentage increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Rural development</i>						
41. irrigation ..	m. acres	50	58	70	100	43
42. NES and community projects ..	no. of blocks	—	479	1200	5600	367
<i>Transport : railway</i>						
43. mileage ..	miles	—	—	34,500	37,500	9
44. passenger miles ..	index	—	—	100	130	30
45. freight ton-miles ..	index	—	—	100	140	40
<i>Roads</i>						
46. national highways ..	th. miles	11.9	—	12.5	17.5	40
47. State roads ..	th. miles	17.6	—	20.0	35.0	75
<i>Shipping</i>						
48. tonnage ..	thousand	391	525	610	1,500	146
<i>Social service : education</i>						
49. pupils : age 6-11 ..	lakh	187	—	236	380	—
50. pupils : age 11-14 ..	lakh	34	—	51	80	—
51. percentage of students in age groups:						
6-11 ..	percent	42	—	50	75	50
52. " " 11-14 ..	percent	14	—	20	30	50
53. technical training, higher education and research ..	index of expenditure	—	—	100	175	75
<i>Health</i>						
54. hospital beds ..	thousand	107	112	125	250	100
55. doctors (registered) ..	thousand	—	65	70	90	29
56. health assistants ..	index	—	—	100	300	200
<i>Housing</i>						
57. urban houses ..	lakh	101	—	120	150	25
<i>Communication</i>						
58. post offices ..	thousand	37	47	53	78	47
59. telegraph offices ..	thousand	36	39	48	70	46
60. telephones ..	thousand	168	220	300	600	100

## APPENDIX

(Provisional)

## COMMODITY BALANCES IN 1960-61

1. Attempts have been made to see, in a rough way, that the targets given in Table (1) are consistent. This appendix gives relevant information for five major commodities : electricity, coal, steel, cement, and heavy chemicals.

2. *Electricity* :—The consumption of electricity in 1960-61 is expected to be 20,000 million kilowatt hours (kwh) which should be possible to secure from an installed capacity of 6 million kilowatts (mkw) with a slightly higher rate of utilization than the present rate. The following allocation of power in million kwh is envisaged in 1960-61 : iron and steel (2500), aluminium (1300), cement (1100), cotton textiles (1500), fertilizers (1000), all other industries (5600) and light, small power, traction and all other uses (7000)—total (20,000).

3. *Coal* :—The industrial development envisaged would require at least 60 million tons of coal. The allocation in million tons in 1960-61 is expected to be as follows : railways

(14.0), electricity (5.0), iron and steel (15.0), cement and bricks (5.0), cotton textiles (1.5), jute mills (0.5), paper (1.0), fertilizers (1.0), other industries (4.0), bunker and steamer service (2.0), domestic (7.5), synthetic petrol (1.5) and all other uses (2.0)—total (60.0).

4. *Steel* :—The rough pattern of utilization in million tons in 1960-61 is given below : steel processing industries (1.5), railways (0.8), industrial development schemes both public and private (0.8), other Government development schemes including multipurpose and State irrigation projects (0.2), construction (0.5), industrial maintenance and packing (0.3), defence and roads (0.1), and all other uses including export (0.7)—total (5.0).

5. *Cement* :—The allocation envisaged in million tons in 1960-61 is as follows : all construction (6.4), cement products (0.4), railways (0.5), roads (0.3), multipurpose and State irrigation projects (1.8), and all other uses including export (0.6)—total (10.0).

6.1. *Heavy chemicals* :—Balances have been worked out for sulphuric acid, caustic soda and soda ash.

6.2. *Sulphuric acid* :—The allocation in 1960-61 in thousand tons will be as follows : ammonium sulphate (60), superphosphate (110), iron and steel (90) and all other uses (190)—total (450).

6.3. *Caustic soda* :—The allocation in 1960-61 in thousand tons will be as follows : soap (30), textiles (20), paper (15), aluminium (5), and all other uses (30)—total (100).

6.4. *Soda ash* :—The allocation in 1960-61 in thousand tons will be as follows : glass (100), textiles (10), silicate of soda (10), paper (10), other chemicals (25) and all other uses (45)—total (200).

### CHAPTER THREE

## INVESTMENT AND DEVELOPMENT

1.1. *Allocation of investment* :—The allocation of investment (or net capital formation) by broad sectors is shown below in Table (2).

TABLE 2  
ALLOCATION OF INVESTMENT (Rs. crores)

Sector (1)	Public (2)	Private (3)	Total (4)	Per- cent- age (5)
1. Electricity	450	50	500	8.9
2. Industry	1,000	400	1,400	25.0
3. Transport & communi- cation	850	50	900	16.1
4. Agriculture & irrigation	750	200	950	17.1
5. Construction	250	1,100	1,350	24.0
6. Stocks	100	400	500	8.9
<b>TOTAL</b>	<b>3,400</b>	<b>2,200</b>	<b>5,600</b>	<b>100.0</b>

1.2. Electricity includes both hydro-electric and thermal power stations. Industry includes the household and hand-industries. Construction includes residential houses, schools, hospitals, and public buildings.

1.3. Strictly comparable figures are not available for the First Five Year Plan, but the total investment in the public sector as planned was roughly Rs. 1600 to Rs. 1700 crores and the same amount was estimated for the private sector. Thus, investment or net capital formation through the public sector in the Second Plan would be about double of the planned estimates in the First Plan; and the estimated investment in the private sector would be about 40 per cent higher.

2.1. *Allocation by industries* :—The break-down of investment by important industries is shown in Table (3).

TABLE 3  
ALLOCATION OF INVESTMENT BY INDUSTRIES

Industry (1)	Invest- ment (Rs. crores) (2)	Per- cent- age (3)
1. Iron and steel	425	30.4
2. Synthetic petrol	80	5.7
3. Heavy machinery to fabricate plants for (a) steel and producer goods	150	10.7
(b) electrical equipments	40	2.9
(c) consumer goods	50	3.6
4. Cement, chemicals, etc.	100	7.1
5. Existing State enterprises	50	3.6
6. Aluminium	30	2.1
7. Minerals and prospecting	75	5.4
8. Fertilizers	100	7.1
9. Factory consumer goods	100	7.1
10. House-hold and hand-industries	200	14.3
<b>TOTAL</b>	<b>1,400</b>	<b>100.0</b>

2.2. The provision for iron and steel includes expansion of capacity of existing plants; three new plants (Rourkela, Madhya Pradesh and one more); factories for the production of pig iron for foundries, and miscellaneous items.

2.3. Along with the installation of one synthetic petrol plant, necessary action must be taken to train personnel and build up experience through pilot plants for the establishment of associated chemical industries.

2.4. The production of electrical appliances would include electrical machinery (such as turbines, generators, transformers, transmission equipment, etc.), required for hydro-electric and thermal projects.

2.5. The heavy machinery industry to be established in the public sector must be able by 1960-61 to fabricate machinery required to instal every year a steel plant of a million ton capacity or plants to manufacture producer goods of roughly equivalent value.

2.6. The aluminium industry must be developed to make the country independent of imports of copper by 1960-61; and must continue to be further expanded in future.

2.7. Geological surveys and especially prospecting for oil and minerals by Government organization must be rapidly expanded. Mining operations must also be greatly expanded. A provision of Rs. 75 crores has been made for this purpose.

2.8. Rs. 100 crores have been provided for the installation of fertilizer plants with capacity equivalent to roughly four times the current production at the Sindri factory.

2.9. *House-hold and small industries* :—The greatest importance is attached to the expansion of the household and hand-industries as this would be the principal method of liquidating unemployment and also of creating a marketable surplus of consumer goods to meet the increase in demand arising from investments in heavy industries, construction work, and expenditure on social services. Rs. 200 crores or Rs. 40 crores per year have been provided for this purpose.

3.1. *Public development expenditure* :—In the First as well as in the Second Plan certain items of current expenditure have been included in addition to provision for investment. This is shown in the following Table (4).

3.2. Comparable figures for the First Five Year Plan are given in Columns (6) and (7). The total development expenditure of Rs. 4,300 crores in the Second Plan is just short of double the planned development expenditure of Rs. 2,248 crores in the First Plan.

included in Table (4), there are current expenditures for purposes of development not included in the Plan. The position is shown in Table (5) below.

TABLE 5  
TOTAL GOVERNMENT EXPENDITURE (Rs. crores)

item	1955-56 (esti- mated)	1960-61 (esti- mated)	Total Second Plan
(1)	(2)	(3)	(4)
1. Non-development (defence and civil administration)	625	725	3,400
2. Development (a) not in the plan (b) in the plan	200 600	225 1,100	1,100 4,300
3. Sub-total	800	1,325	5,400
TOTAL	1,425	2,050	8,800

TABLE 4  
PUBLIC DEVELOPMENT EXPENDITURE

Sector (1)	Second Plan				First Plan	
	investment (Rs. crores) (2)	current (Rs. crores) (3)	total (Rs. crores) (4)	percent (5)	percent (6)	total (Rs. crores) (7)
1. Electricity	450	—	450	10.5		
2. Agriculture, irrigation and rural development	750	200	950	22		
3. Sub-total			(1,400)	(33)	44	990
4. Industry & minerals	1,000	100	1,100	26	8	178
5. Transport and communication	850	100	950	22	24	536
6. Construction and social services	250	500	750	17	24	544
7. Stock	100	—	100	2	—	—
TOTAL	3,400	900	4,300	100	100	2,248

3.3. In the Second Plan there is a much larger actual expenditure for industrial and mineral development (Rs. 1,100 crores against Rs. 178 crores in the First Plan); and the relative proportion is also much higher (26 per cent of total development expenditure in the Second Plan against 8 per cent in the First Plan). The actual expenditure in the Second Plan is greater but the relative expenditure (as a proportion of the total) is less in all the other sectors.

4.1. *Total development expenditure* :—In addition to the current development expenditure

4.2. The total Government expenditure is expected to increase from Rs. 1,425 crores in 1955-56 to about Rs. 2,050 crores in 1960-61; the total development expenditure would increase at the same time from Rs. 800 crores to Rs. 1,325 crores; and the development expenditure included in the Second Five Year Plan would increase from Rs. 600 crores to Rs. 1,100 crores.

4.3. The total Government expenditure during the Second Five Year Plan is expected to be Rs. 8,800 crores out of which Rs. 3,400 crores would be non-development (defence and

civil administration), Rs. 1,100 crores development expenditure not included in the Plan, and Rs. 4,300 crores development expenditure included in the Plan.

#### CHAPTER FOUR EMPLOYMENT AND INCOME

1.1. *Employment* :—In India a very large number of families (comprising a majority of the population) are self-employed, many of which use their labour power only partially and thus suffer from chronic under-employment. They must be provided with opportunities of doing more work and thus increasing their income.

1.2. In the urban areas there is a large number of persons without jobs and seeking work for whom new employment must be created. New work must also be found for roughly 1.8 millions of persons who, on an average, would enter the working force every year (calculated on the basis of a labour composition of 40 per cent of a net average increase in population of 4.5 millions per year).

2.1. The programme of production, investment, and development (discussed in Chapters Two and Three) is expected to generate a volume of employment shown in Table (6).

TABLE 6  
ESTIMATED VOLUME OF EMPLOYMENT IN 1960-61

Sector (1)	(in millions)		increase	
	1955 -56	1960 -61	actual (in millions)	per cent
(1)	(2)	(3)	(4)	(5)
1. Agriculture & allied pursuits	109.5	111.0	1.5	1.4
2. Mining & factory establishments	4.0	5.7	1.7	42
3. Household enterprises & construction	12.0	15.0	3.0	25
4. Communications, railways, banks, insurance	1.6	2.0	0.4	25
5. Wholesale and retail trade, transport (other than railways) etc.	10.0	12.0	2.0	20
6. Professions, services (including Govt. administration) and the rest	14.9	17.3	2.4	16
<b>TOTAL</b>	<b>152.0</b>	<b>163.0</b>	<b>11.0</b>	<b>7</b>

2.2. If the targets of production are realized then the problem of unemployment should be brought under control by the end of the Second Five Year Plan. Because of the rapid rate of industrialization proportionately the biggest increase of employment, about 45 per cent, would occur in mining and factory enterprises. The household and hand-indus-

tries, communication, transport, trade, etc., would have an increase of about 20 per cent or 25 per cent and the professions and services of about 16 per cent. Even in the Second Plan labour would not begin to be drawn away from agriculture and allied pursuits, but would increase at a small rate of the order of only 1.5 per cent, which would still mean an increase of 1.5 million persons in the labour force in this sector.

3.1. *Income* :—The net domestic output at 1952-53 prices had increased from Rs. 91.9 abja in 1950-51 (the base year of the First Five Year Plan) to about Rs. 103.1 abja (provisional estimate) in 1953-54. This represents an increase of Rs. 11.2 abja or 12.2 per cent in 4 years or just over 3 per cent per year. A part of this increase was probably due to exceptionally good agricultural crops in 1953-54 and another part possibly to a partial correction of previous under-estimation of crops. If allowance is made for these factors the real increase would be probably about 10 per cent in 4 years.

3.2. In the Second Five Year Plan the rate of investment and development would be roughly double that of the First Plan.—The rate of increase of income is also expected to be roughly double or about 5 per cent per year. The same estimate has been generally corroborated from more detailed calculations by sectors on the basis of the investment and development programme.

3.3. The expected increase in national income is shown in Table (7).

TABLE 7  
DOMESTIC PRODUCT OF THE INDIAN UNION AT  
1952-53 PRICES RS. ABJA (= 100 crores)

Sector (1)	(actual) (estimates)			increase per cent (5)
	1950 -51 (2)	1955 -56 (3)	1960 -61 (4)	
1. Agriculture and allied pursuits	45.2	52.8	63.4	20
2. Mining and factory enterprises	6.6	9.0	15.0	67
3. Household enterprises & construction	9.3	10.2	14.3	40
4. Communications, railways, banks, etc.	3.1	3.6	4.7	30
5. Wholesale & retail trade, other transport	13.4	15.1	18.8	25
6. Professions, services including Govt. administration and the rest	14.3	17.3	20.8	20
<b>7. TOTAL</b>	<b>91.9</b>	<b>108.0</b>	<b>137.0</b>	<b>27</b>
8. Population (millions)	359.3	383.7	409.7	7
9. Per capita income (Rs.)	256	282	334	19

## CHAPTER FIVE

## FINANCE AND FOREIGN EXCHANGE

1. *Rate of investment* :—The planned net investment covering both public and private sectors is Rs. 5,600 crores over the period of the Second Plan. The current rate of investment is about 7 per cent; this will have to be raised to about 11 per cent of national income by 1960-61.

2.1. *Resources for the public sector* :—The total expenditure of the Centre and State Governments combined is estimated at Rs. 8,800 crores for the Second Plan as a whole (Table 5). Expenditure outside the plan would increase from Rs. 825 crores in 1955-56 (estimated) to Rs. 900 crores on an average in the Second Plan. Expenditure on the Plan is expected to increase from Rs. 600 crores in 1955-56 (estimated) to an average of Rs. 860 crores in the Second Plan.

2.2. The total receipts from taxes and non-tax revenue, at the current rate of intake of 8.5 per cent of national income, would bring in about Rs. 5,200 crores. Borrowings (net) from the public should yield Rs. 1,000 crores (about Rs. 600 crores from loans and Rs. 400 crores from small savings). Allowing for Rs. 200 crores for receipts from railways and miscellaneous items on capital account, the total receipts from domestic sources, at current rates, would be Rs. 6,400 crores.

2.3. This leaves a gap of Rs. 2,400 crores in the public sector. As against this external assistance may provide Rs. 400 crores. The balance of Rs. 2,000 crores will have to be found at least in part by fresh taxation and profits of such commercial or industrial undertakings as can be started in the public sector. The aim should be to limit deficit financing to a total of Rs. 1,000 to 1,200 crores. A taxation target of 9 to 10 per cent of national income as against the present level of about 7 per cent must be attained.

3.1. The budgetary position on the above basis is shown below :

TABLE 8  
GOVERNMENT BUDGET : 1956-57 TO 1960-61 (Rs. crores)

expenditure (1)	(2)	receipts (3)	(4)
1. On the plan	4,300	1. on the revenue account	5,200
2. Outside the plan	4,500	2. loans from the public	1,000
		3. railways and miscellaneous funds	200
		4. foreign assistance	400
		5. sub-total	6,800
		6. additional taxes and loans and profits from State enterprises	800-1,000
		7. deficit financing	1,000-1,200
<b>TOTAL</b>	<b>8,800</b>	8. <b>TOTAL</b>	<b>8,800</b>

3.2. A good part of the additional income in the Second Plan would be created at lower income levels. The heavy industries would take time to become profitable. Also, foreign assistance may not be realised to the fullest extent. It would be essential, therefore, to keep a stringent watch on expenditure outside the Plan; to make necessary adjustments in the price and subsidy policy of Government; to reach new strata for tapping savings; and finally, to make changes in the tax structure to raise additional resources required to finance the Second Plan.

4.1. *Finance of the private sector* :—Investment in the private sector is estimated at Rs. 2,200 crores out of which Rs. 1,100 crores or about a half is for housing and Rs. 400 crores for industries.

4.2. With deficit financing of Rs. 1,000 to Rs. 1,200 crores by Government, the banking system should be able to provide the credit required for working capital. In fact, conditions of easy credit are likely to emerge.

4.3. The newly set-up financial institutions (such as the Industrial Investment and Credit Corporation) will assist the private sector. The pattern of investment in the private sector will have to be watched continuously and influenced in the desired direction through tax incentives, selective credit controls, capital issue control and similar devices.

5.1. *Foreign trade and payments* :—Much larger imports will have to be made of capital goods in the Second Plan. The total needs would come to about Rs. 1,200 crores; adding Rs. 400 crores for imports of equipments for replacements, the total requirement would be about Rs. 1,600 crores for imports of capital goods.

5.2. This must be met partly by increased production of foodgrains, sugar, cotton, and petrol; partly through foreign assistance and withdrawal from sterling balances; and by curtailment of non-essential imports and promotion of exports in every possible way.

## CHAPTER SIX

PLANNING ORGANIZATION AND  
ADMINISTRATION

1.1. *Planning Organization* :—Planning must be continuous and flexible. In addition to the Five Year Plan, detailed annual plans must be prepared every year. Targets, projects, and policies must be continually reassessed and reformulated to suit changing needs and conditions.

1.2. At the same time it is imperative to keep in perspective the potential growth of the economy over a long period so that decisions can be made to secure a balance between short-term and long-term objectives.

1.3. For planning on lines explained above, it is necessary to build up an appropriate planning organization. A technical organization (consisting of economists, statisticians, scientists, engineers, technologists, and administrators) must be established within the Planning Commission for the preparation and continuing examination of the national plan and for working out the various balances relating to it. Technical units must also be established in the Central Ministries, State Governments, and other agencies to prepare detailed projects and estimates and to revise them as necessary.

1.4. There must be a continual two-way flow of information. Plan targets from the top must be continually checked against possibilities of realization at the level of projects. Possibilities of development envisaged at the bottom must continuously shape the targets formulated at the top.

1.5. Information of many kinds would be continually required for the formulation and revision of the plan and of detailed projects as well as for the assessment of the progress and implementation of the Plan.

1.6. The information service and planning and project activities must be closely related.

The Central Statistical Organisation in association with the Indian Statistical Institute must function as an integral part of the planning machinery at the Centre. Following the same pattern, the State Statistical Bureaux must serve as focal points for statistical services in connection with planning activities at the State level.

2.1. *Administrative machinery* :—Planning on bold lines with a steady expansion of the public sector and advance to a socialistic pattern of economy would require the building up of appropriate administrative machinery of a new type at all levels.

2.2. There must be decentralization, on business like lines, of the day to day management of public enterprises with large delegation of financial, administrative, and executive control to develop initiative and responsibility at the periphery so necessary for efficient conduct of business enterprises.

2.3. Attention must be focussed on the implementation of the Plan—on getting things done at the right time—and rules of procedure must, if necessary, be revised to ensure effective action. Secretariat control of the present type must be replaced to a large extent by control by truly autonomous public corporations set up by Government or through the supply of credit by State Banks working under the general guidance of Government in matters of policy.

2.4. Administrative difficulties inherent in the existing Government machinery are likely to prove the greatest obstacle to efficient planning. To overcome such difficulties, large organizational and even constitutional changes may become necessary. The problem is urgent and requires immediate and serious attention.

2.5. Government must rally public support in favour of the Plan; and encourage and help non-official organizations to promote its fulfilment.

17th March 1955

P. C. Mahalanobis