India as a Late Beginner

——With Emphasis On Her Five-Year Plannings——

*Soon Kim**

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I. Introduction

India, today, is engaged in a vast experiment to bring its giant economy into the main stream of modern life. Even if this effort of economic expansion concerned only the Indian people, the scale and vision of the attempt should still catch the imagination of the world. To create the conditions of modern living for over 450 million people, to rescue from extreme poverty nearly half the inhabitants of the free yet underdeveloped world, to bring into the age of atomic energy and outer space one of the most ancient of the world's great civilizations—all these are stirring adventures of the human spirit in their own right. But the significance of India's plans extends beyond the frontiers of India. They are a vital, perhaps a decisive, chapter in the wider history of modern man.

India is undergoing the profound process of economic change and development which began in the West about two hundred years ago— in which sense alone I am referring to India as one of late-beginners or late-comers. This article is mainly purporting to review four series of Five-Year Economic Development Plans of India, with some comments added to the plans, and to contemplate general bottlenecks impeding the economy of underdeveloped

* The author is lecturer in College of Commerce, Seoul National University.

countries as a whole and their relevancy to Indian economy.

As is pointed out by Prof. Gerald M. Meier[1], it is apparent that during the period 1870 to 1913 some countries proceeded at a rapid rate through the transition from being underdeveloped countries to becoming advanced economies (for example, Argentina, Australia, Canada, New Zealand), while other countries remained underdeveloped (for example, Bolivia, Brazil, Ceylon, China, India, Indonesia, Java, Malaya). Some economies which were economically backward in 1870 are still so; in some areas there has been a tendency toward a condition which might be termed "underdevelopment equilibrium"[2].

Without drastic changes in her economy, India has no other alternatives to feed, say, 362 million yesterday, 450 million today and maybe 560 million by 1975 as Barbara Ward surmises[3]. This, the most vicious of all the vicious circles of development, is built into the foundations of the Indian economy. And here lies the necessity for planning, for the need for planning arises because labor and productive resources are scarce relative to the demands upon them. If there were enough productive capacity to provide everything desired, there would be no need for choice or planning. Goods and services and the labor and productive resources to produce them are scarce in any country, even the wealthiest. Hence even in the technically most advanced countries, for example in the United States, although the term planning is not usually applied to governmental processes, the government must coordinate its actions and polices so that they will have the most advantageous impact on the nation's economic activity.

The political leaders of economically underdeveloped countries, however, are most apt to be acutely aware of the need for careful economic planning. Among the urgent tasks confronting an underdeveloped country is to increase its ability to produce, and its leaders are likely to feel intensely a need to take positive actions toward that end. Almost every country which seeks a rapid economic development will be able to obtain aid for this purpose from

(1) Gerald M. Meier, "The Problem of Limited Economic Development," (*Economia Internationale*, Vol. VI, No. 4, 1953.) in The Economic of Underdevelopment selected edited by A.N. Agarwala and S.P. Singh, Oxford University Press, 1958. pp. 54 ff.

(2) Ragnar Nurkse, *Some Aspects of Capital Accumulation in Underdeveloped Countries*, Cairo, 1952, p. 4., quoted by G. M. Meier.

(3) Barbara Ward, *India and the West*, Norton, New York, 1964. p. 143.

the economically advanced countries either directly or through international agencies, although some formed requirements are generally entailed. Such aid, however, will never be enough for that purpose; most of the resources which are to be devoted to the development program must be provided from within the country itself. Moreover, even if an unlimited amount of external aid was availabe, most of the necessary programs could be carried out only with the use of materials and skills available ony in the recipient country itself. Hence if economic growth is to be attained, a significant fraction of the country's own productive resources must be allocated to this purpose.

Moreover, quite apart from this intensity of feeling on the part of national leaders, there are two purely objective reasons why planning is especially important in newly developing countries. First, in a society where change in the past has been little and slow, resources are scarce or have not been developed, and yet an effort is now being made to obtain rapid change, the need for seeing that the various governmental measures fit together sensibly and have the desired impact on development is much more urgent than in acountry whose institutions have long been adjusted to continuing change.

Second, the national unity may be weak in a newly developing country, and development plans may become an integrating force, drawing the people of the country toward national unity as they are drawn into the development effort. This effect is now likely be achieved, however, merely by a preparation of a blueprint for development by a group of national planners. National economic development requires a sense that the desires and purposes of individuals and of localities and regions are being recognized and given their place in a national program.

The machinery of government inherited from colonial administration is not fully adapted to planning, and executing measures for development. (This is true even if the colonial power sincerely desired to develop the region, and much more surely true if it did not.) Neither is the machinery inherited from a traditional government which had no particular interest in economic development. Therefore, whenever a new government interested in development appears in any country, some drastic changes in genernmental machinery must be made.

II. Historical Phases of Indian Economic Planning

The Background to Planning

The idea of economic planning has an ancestry which antedates Indian independence by some years. In the late 1930s the Congress party set up a national planning committee and secretariat under the chairmanship of Jawaharlal Nehru, and it produced a series of reports on individual industries and how they might be developed. The committee was planning *in vacuo* with very limited funds at its disposal and without the comprehensive statistical data which has since become available. The concept of a planned Indian economy was given further impetus by the publication in 1944 of the first installment of a 15-year program of development which became known as the Bombay plan, because five of the eight prominent industrialsts who sponsored this were Bombay men. The second part of the plan followed early in 1945. The main target was to double the then per capita income within a period of 15 years, which required that the aggregate national income should be trebled.

In 1939, in spite of substantial recovery from the depression of the 1930s, no long-term trend toward improvement in the general standard of life could be discerned in the then undivided India. Output and trade had been greatly expanded by the opening-up of the country in the second half of the 19th century, but the increase in national income was counterbalanced by the population growth which was greatly accelerated after 1921. In the circumstances of the time the Bombay plan was no more than a paper exercise and, like those of the national planning committee of the Congress party, its economic assumptions have only a limited significance which is mainly historical. But the real importance of both the National Planning Committee reports and the Bombay plan is that they prepared Indian public opinion for the more serious decisions that had to be taken when the country became an independent sovereign state.

World War II brought certain advantages, including substantial industrial progress, when India became the arsenal for the eastern theater of the war. Basic industries, however, could not be established owing to the impossibility of importing the requisite plant and machinery. This was the situation when

India became an independent member of the Commonwealth in August 1947, and for a time the successor Indian government under Jawaharlal Nehru appeared to be continuing to pursue the previous policy of economic nonintervention. The fact is that the new government had many matters other than economic planning on its mind in these first three or four anxious years of independence—the absorption and integration of the former princely states, the Kashmir dispute, the problem of the refugees, the 1949 devaluation of the rupee and the economic consequences of partition. When the war ceased, India faced some serious economic dislocations and problems which made the transition to normality extremely difficult. It was not, therefore, until late in 1952 that the five-year plan, covering the period 1951 to 1956, was published in detail.

The First Plan(1951—56)

This first plan represented a very modest venture in planning and is chiefly significant for the fact that most of its targets were comfortably attained, and in not a few cases exceeded, thus giving the authorities a considerable measure of confidence for future planning exercises. In scope and purpose the first plan was small and consisted largely of the collation of existing investment projects some of which had been left in various stages of incompleteness by the British.

Notwithstanding its limitations, the first five-year plan was an important milestone in the development of India's post-independence economic policies. It laid the foundations of the machinery of planning and required the planners to evolve and state for public acceptance some kind of philosophy in support of their actions. The Planning Commission (which was set up in 1950 and later made responsible to National Development Council consisting of the chief ministers in the central and states governments) stands at the centre of the whole complex of Indian economic planning for which it both gathers the intelligence and provides the strategy.

The proclaimed objectives of the First Indian Planning were to raise the standard of living of the people, to create the setting for a richer and more varied life and to reduce inequalities of income, wealth and opportunity. "A program aiming only at raising output might result in most of the increased

wealth flowing into the hands of a few, leaving the mass of the people in their present state of poverty; it would thus fail to achieve wider social objectives... Our program must, therefore, be twofold leading at once to increased productivity and the reduction of inequalities"[4]

As a result of this massive injection of resources during the First Five-year Plan (1951—56) national income was raised by 17.5%, average per capita income by 10.5% from Rs. 253 to Rs. 281 per annum which would make it Rs. 331, or about £25.10.0 or $71.40 per head of the population; annual food-grains production increased by over 11,000,000 tons on 1949—50 output; about 16,800,000 additional acres of land were brought under cultivation by new irrigation projects, and cotton, jute and oilseeds production was considerably higher than in 1951, though output has varied from year to year.[5]

The Second Plan(1956—61)

Though the first plan served to make the country think in terms of planning, it made little impact on India's basic economic problems. Population continued to increase faster than resources, and poverty, malnutrition and under-employment abounded. In this situation no government coult afford to stand still. The Second Five-Year Plan was accordingly drawn up as a much bolder venture over a wider front. It was submitted to the parliament in May, 1956 with its main objectives recommended by Professor P.C. Mahalanobis[6] : 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

(4) Quoted from the Preamble of the First Plan.

(5) See Soon Kim, "Objectifs et réalisation du Premier Plan Quinquennal de Inde" unpublished Thesis Université Lavl,

(6) P.C. Mahalanobis, "Recommendation for the Formulation of the Second Five Year Plan."

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% over the plan period and achieve a more equitable distribution of income.

The detailed resources budget for the second plan disclosed that, after taking credit for all normal heads of revenue and borrowing, there remained a gap of Rs. 1,200 crores to be covered by deficit financing and that the expected shortfall on foreign exchange account for the five-year period was no less than Rs. 800 crores. Assuming that these deficiencies would somehow be made good, there still remained an uncovered gap in the account of about Rs. 400 crores (1 crore=100 lakhs=10,000,000 rupees). Nonetheless, the Indian leaders decided to go ahead with the second plan, proceeding on the basis that it represented India's minimum needs rather than resources in sight. The centerpiece of the industrial part of the plan was three new state-owned steel works designed to provide the expanding secondary metal-using industries with their raw material and, by raising production from 1,300,000 tons in 1956 to 4,300,000 tons of finished steel in 1961, to reduce the country's heavy steel import bill. The distribution of development expenditure, by major heads in the public sector is given in Table 1.

Specific targets set for achievement by the end of the second plan in 1961 included an increase in national income from Rs. 10,800 crores in 1955—56 to Rs. 13,480 crores in 1960—61; i.e., by about 25%. This implied an

Table 1. The Distribution of Development Expenditure

Major Head	Total Expenditure (Rs. crores)	Per cent
Agriculture and Community Development	565	12
Irrigation and flood control	458	9
Power	440	9
Industries and Minerals	891	19
Transport and Communications	1,384	29
Social Services, Housing and Rehabilitation	946	20
Miscellaneous	116	2
Total	4,800	100

Source: *Encyclopedia Britanica* Volume 12, p. 45

increase of about 18% in per capita income.

The Third Plan(1961—62 to 1965—66)

The Third Five Year Plan was formulated keeping in view the long-term objectives for the next fifteen years which have already been described. Its immediate aim was to: a) secure an increase in national income of over 5% per annum, and at the same time ensure a pattern of investment so as to sustain this rate of growth during subsequent plan periods; 2) achieve self-sufficiency in foodgrains and increase agricultural production to meet the requirements of industry and exports; 3) expand basic industries like steel, chemicals, fuel and power, and establish machine-building capacity, so that the requirements of further industrialization could be met within a period of ten years or so mainly from the country's own resources; 4) utilize to the fullest possible extent the manpower resources of the country and ensure a substantial expansion in employment opportunities; 5) establish progressively greater equality of opportunity and bring about reduction in disparities in income and wealth a more even distribution of economic power.

To achieve a cumulative rate of growth of over 5% per annum it was necessary to undertake net investment of more than 14% of the national income against a level of about 11.5% in 1960—61. This involved raising the rate of domestic savings from 8.5% in the second plan to about 11.5% at the end of the third plan. The plan envisaged a total investment program of the order of Rs. 10,400 crores, part of which was to be financed through external assistance. Of this, fixed investment and outlay on current expenditure in the public sector was to account for Rs. 7,500 crores, while the balance (including the contribution of some public sector resources to the private sector) was to represent investment in the private sector. The indispensable foreign exchange content of the third plan investment of Rs. 10,400 crores has been estimated at Rs. 2,030 crores.

The last year of the Third Five-Year Plan was marred by the Indo-Pakistan War and the resultant stoppage of aid to both belligerents, the resumption of which was only agreed at the Paris meeting of the Aid-India consortium in November 1966. Indeed, 1966 was a fateful year for the Indian economy: on June 6 the rupee was devalued by 36.5%; at the end of August the draft

outline of the fourth plan was made public; and throughout the latter half of the year there was another severe shortage of food grains, with violence in many parts of the country and a serious breakdown of law and order which adversely affected industrial production.

The Fourth Plan

The draft outline of the Fourth Five Year Plan sets out the substance of the Planning Commission's proposals for the Plan. The outline was prepared for consideration by parliament and state legislatures and for eliciting public comments and opinion before working out the detailed proposals for the Fourth Plan. It gives only the broad contours of the proposals and briefly mentions some of the policy issues involved. In laying down the targets of the Plan, the principal aims kept in view are as follows. The highest priority is claimed by the programme for increasing agricultural production. Necessary financial outalys have been provided, and the industrial plan has accorded a high priority to the production for the inputs required, such as fertilizers, pesticides, agricultural implements, etc. Programs for major and minor irrigation, rural electrification, land reforms, credit facilities, etc., have also been formulated with this in view.

A major objective of planning is the achievement of self-reliance. An important programme toward this end is machine-building which would secure freedom from external credits and promote capital formation. The programmes included in the Draft Outline aim at increasing domestic capacity for machinebuilding so as to build by the end of the Plan steel mills, fertilizer plants, power generating and transmission equipment, and transport and a variety of other equpments. Associated with this programime is the need for decreased dependence on imports of spare parts and components as also expansion and diversification of consultancy and design services in the country. Export promotion and import substitution are other keys for self-reliance. Stressing the need, the outline states that import liberalization should not act as a disincentive to import substitution, but should be used for the speedy promotion of capacity for import substitution and export promotion.

Among other aims of the Plan as laid down in the draft outline are the

following. To achieve self-reliance, education should be more directly linked with developmental and manpower requirements. Although difficult to achieve, family planning is a kingpin in economic development and failure in this field will give a set-back to the attempt at self-reliance. Public co-operation must be secured in the programmes of development in a higher degree than before. Employment should be maximised. Under the prevailing conditions, the estimated increase in employment opportunities during the Plan period would not be sufficient to absorb the entire addition to the labour force; therefore, it will be necessary to undertake a large rural works programme.

III. Comments on Indian Economic Planning

Besides current terminological information of economic planning such as long-range, medium-term, annual and perspective, and the distinction between plan, program, and project(7), we might as well have in mind a clear understanding of the defining characteristics of a good economic plan,

First, a good economic development plan both proposes government expenditure projects for development and for current purposes and indicates policies which will best influence and regulate private investment and consumption. It rests upon an evaluation of the relative desirability of all govermental programs and projects and all anticipated private expenditures. After this evaluation, government expenditure programs and policy measures intended to affect private investment and consumption are so designed that, if the expectations of the planning officials are realized, every public or private expenditure made will be more advantageous than any possible alternative one.

Second, each project included in a development plan should be not only technically and economically sound, but also within the country's capacity to execute—which means that the feasibility of a project must be considered in the light of all other simultaneous demands on a country's resources and talents.

Third, the total program of government employment and government

(7) For terminological information, see E.E. Hagen, "The Aims and Tools of Economic Development Planning," (*Planning Economic Development*, 1963) in *Selected Articles in Eonomic Planning* published by the Institute of Economic Research, Seoul National University. pp. 24 ff. See also United Nations, *Programming Technique for Economic Development* (Bangkok, 1960) p. 33 quoted by E.E. Hagen.

purchases plus anticipated private demand for goods and services should be no greater than the economy can supply (with the assistance of available foreign aid). The pricinple that planned government expenditures plus the auticipated private use of goods and services should not exceed the country's capacity to produce does not imply that the estimated existing maximum productive capacity of the country should be accepted passively as a limit.

Fourth, an economic plan should be flexible enough to permit alterations to meet unforeseen contingencies. A poor harvest may force the diversion of foreign exchange from other uses to food imports; an unexpectedly low or high rate of private investment may force an increase or decrease in government programs or the rationing of foreign exchange; an underestimate of the rate of growth of power needs may require an emergency program of construction of power generating or distribution facilities, or an overestimate may permit curtailment of construction plans and diversion of resources to other projects; and so on.

Fifth, a high multiple-year goal may challenge planners and operators, stir the imagination and energies of the nation, and lead to greater growth than a smaller goal would have done. But in striving to serve these purposes it is unwise to set a goal so high that planning technicians know it is not attainable. Thus the Egyptian plan of 1961, "A Plan to Double the National Income in Ten Years," called for tripling or more than tripling the ratio of saving to gross national product, bringing it to 20 per cent and thereby increasing output at 7 per cent per year. The goal was so unrealistic that it must have placed serious impediments in the way of planning.

Sixth, the provisions of the plan for stimulating and regulating private economic activity must be adapted to the institutions of the country. With such six criteria of good plan in mind, let us review the four plans.

The First Plan may be said to follow traditional government budgeting practice in a sense; it was a collection of discrete projects with very little interdependence. The great procedural achievement of Indian planning during the period when the Second Five Year Plan was being formulated was, to my opinion, establishment of the principle of the central importance of internal consistency in development design. Under the aggressive intellectual leadership of a few key planning technicians (notably Professor P.C. Mahalanobis)

and with the active personal support of the prime minister, it came to be accepted that traditional budgeting practice was an extremely bad procedural model for those major portions of the planning problem that required the balancing of goals and particular expansion programs, of outputs and inputs, of the output of one industry with those of others, and of many variables through time.

In formulating the Second Five Year Plan and during most of the period of that Plan, India's central development designers fell far short of fully carrying out the mandate for internally consistent programming. The Second Plan excercise did start with the development of a so-called "plan-frame" that, for a preliminary document of that period, was a cogent piece of central design work. Nevertheless, the plan-frame itself was sketchy. For example, it and the early chapters of the Second-Plan document that were fashioned after it like the First-Plan window-dressings before them, still placed major reliance upon operationally meaningless and purely emotional projections of the economy's over-all capital-output ratio. In many instances the connections between the general plan framework set forth at the beginning of the Second-Plan document and the more specific industry and sector chapters that filled up the bulk of the book were tenuous; a number of the latter still had the look of piecemeal agency programs.

Worst of all, the phasing of the expansion programs during the latter half of the fifties was highly unsatisfactory. Planners tried to do their decision-making too much in a single five-year lump. Perhaps the worst aberration was in the area of private investment, where the entire five year allocation of foreign exchange for this sector was made available at once. When, to everyone's dismay, private sector proceeded to use up the bulk of this ration in the first two years of the plan period, the result was the well-known foreign exchange crisis of 1957—58 and a consequent foreign-exchange stringency that continued to impede, not only further expansion, but current production in many industries during the balance of the Plan period.

Phasing was highly imperfect also in the public sector, where very little provision was made for those projects that would need to start in the late Second-Plan years and completed early in the Third Plan if a steady thrust of expansion from plan to plan was to be maintained. Moreover, as the

Second Plan unfolded, many temporary inter-industry inconsistencies developed. Cement capacity was installed considerably before there was need for it. Steel lagged badly and coal and coal washeries, even worse. There were other similar difficulties. Some of these, of course, were the result of engineering problems and other physical difficulties that could not have been foreseen. But much of the trouble was chargeable to bad detailed planning. Such spotty procedural record of the Second Plan reflected a weakness of programming technique.

By the time the Third Five Year Plan was formulated Indian planning had undergone an inconspicuous but important transition in these respects. While the final Third Plan document includes some emphatic language, as well as some evidence, indicating a determination to eradicate this sort of programming fuzziness, I think it is fair to conclude that the radical improvement in Indian programming techniques that had been under way for the previous five years had not yet been fully consolidated at the time of the Third Plan's adoption. There was still room for a more explicit recognition of the merits of the planning-backward approach,[8] and there was still a need, as a means of implementing that approach, for an explicit formulation of final-demand targets.

Indian economic statistics are better than those of many economically underdeveloped countries, and there are instances—notably that the technical coefficient data already cited—where planners have shown great initiative in assembling the empirical information they need. However, there still are surprising gaps in the national income estimates when one considers that national income accounting and national-income-oriented economic planning both are more than ten years old in India. The country at this writing still has no official historical series on final demand. Even the available estimates of investment are exceptionally week and sketchy. And planners have been led into the practice of working out their whole quantitative program in a net-national-income rather than a gross-national-product frame (thereby submerging the problem of replacement investment). Indian national income

(8) For the contents of "planning backward" approach, see John P. Lewis, Quiet Crisis in India, Brooking Institution, 1962. also in Leading Issues in Development Economics by Gerald M. Meier, Oxford University Press, 1964. pp. 551 2.

accounting's perverse failure yet to supply any regular series of historical estimates of the gross national product makes such practice an extremely risky venture. All in all, it is fair to say that the development of statistics in India has fallen well short of potential in view of the fact that, in terms of advanced theorectical statistical competence, India may well be the most richly endowed country in the world.

The Indian system of planning and plan-implementation is an admirable, indeed a remarkably good, one for any country with a per capita income of less than one hundred dollars a year. It is an experienced, sophisticated system of high average integrity. But it is also highly susceptible of improvement. In the realm of programming techniques, the Indian planners (encumbered no little by inappropriate economic theories learned mostly from the West) have been groping their way toward a serviceable set of procedures for spelling out a comprehensive, internally consistent production program that is well enough articulated both cross-sectionally and chronologically to be truly implementable. But there are still a number of statistical gaps to be filled, analytical techniques and administrative practices to be sharpened up, and political reinforcements to be provided before the battle for cohesive planning will have been clearly won.

So much for the comments on the mainly technical side of Indian plans. We are now ready to overhaul the relevancy of modern economic theory or Keynesian theory applied to Indian plans with possible reference of Professor Gunnar Myrdal[9] and Professor V.K.R.V. Rao[10]. To begin with, we have here a predominantly agricultural country, where capital equipment is low and the standard of technical knowledge applied to production vastly inferior to that in the west. Moreover, the number of employees or workers employed on wage is comparatively small, the vast majority of earners falling under the category of self-employees or household enterprises. Added to this is the fact that a significant proportion of the national output is not produced for the market but is intended for self-consumpion. Under these circumstances, the multiplier principle does not work in the simple fashion visualized by Keynes primarily for the industrialized economies. An increase in investment

(9) Gunnar Myrdal, *Economic theory and Underdeveloped Regions*, London, 1957, pp. 97—102.
(10) The same as References (7).

leads to an increase in income and in employment. The next increase ought to come from a secondary increase in income, employment and output in the comsumption-goods industries, to be followed by a tertiary increase and so on, till income, output and employment have increased by k times the initial increase in investment, and saving has increased by an amount equal to the additional investment. I am aware that the investment multiplier and the employment multiplier are not identical, and that increase in output cannot be proportional either to the increase in money income, or to that in employment; but for purposes of argument, it is convenient to ignore these differences at this stage. Now in the case of a country like India the secondary, tertiary and other increases in income output and employment visualized by the multiplier principle do not follow, even though the marginal propensity to consume is very high and the multiplier should, therefore, function in a vigorous fashion. This is because the consumption-goods industries to which the increased demand is directed are not in a position to expand output and offer effective additional employment. The most important reason for this is the technical nature of the chief consumption industry to which the additional demand would presumably be directed, viz, food. This means in most underdeveloped countries primarily the agriculatural industry. Now, agriculture all over the world is notoriously an industry where the supply curve is steeply inelastic in the short period. Futher, variations in agricultural output in a country like India, where irrigation accounts for less than 20% of the cultivated area, are largely dominated by the vagaries of nature, and response to price increases is less effective in terms of aggregate output than in those of individual crops. Moreover, the belief is widely held, and not without justification, that the supply curve of agricultural industry as a whole is not only inelastic but also tends to be backward sloping, so that an increase in the value of output need not necessarily lead to a subsequent increase in the volume of output. The primary increase in income following on given increment of investment does get spent to a large extent on the output of agriculture, and leads, therefore, to an appropriate increase in the income of the agricultural producers. But it is not followed up by these producers increasing their own output and thus adding to both employment and real income. Apart from the reasons mentioned above, the

agricultural producer is rather reluctant to act in the way postulated for entrepreneurs by classical economists or even by Keynes himself in response to increase in profits.

The same inference also applies when we consider the behaviour of agriculturists as consumers in response to the increase in their money income resulting from the initial investment. Marginal propensity to consume being high, the larger proportion of the increased income will be sought to be spent on consumption goods.

My assertion, therefore, is that the multiplier principle as enunciated by Keynes does not operate in regard to the problem of diminishing unemployment and increasing output in an underdeveloped economy, an increment of investment based on deficit financing tending to lead more to an inflationary rise in prices than to an increase in output and employment. In that sense, the multiplier principle with its accepted relationship between increments of investment and increments of income, output and employment does not hold for an underdeveloped economy like India. The further conclusion also seems to follow that the existence of disguised unemployment, household enterprise, production for self-consumption, dominance of agriculture, and deficiency of capital equipment and of technical knowledge all characteristic of an underdeveloped economy create conditions analogous to those of the full employment visualized by Keynes, when in actual fact there is no full employment in the economic, or even the popularly accepted, sense of the term.

The economic process consists of two distinct categories; one where given the level of economic development, you move from low employment to full employment, and the other where you move from full empolyment at the next level of economic development. The Keynesian thesis applies only to one of these categories, viz. where, given the level of economic development, you move from low employment to full employment; it is the classical thesis which is operative for the other category where you move from one level of economic development to a higher level of economic development. The mixing up of these two categories and a consequent blind application of the Keynesian formulae to the problems of economic development has inflicted considerable injury on the forces of inflation that are currently afflicting the

whole world. The old-fashioned prescription of 'work harder and save more' still seems to hold good as the medicine for economic progress, at any rate as far as the underdeveloped countries are concerns.

As we can peceive some socialistic tints in the objectives of respective plannings, of India, it may be somewhat worthwhile to see the traces of socialism in planning. As early as 1929, Jawaharlal Nehru asserted that "the philosophy of socialism has gradually permeated the entire structure of society the world over and almost the only point in dispute is the pace and methods of advance to its full realisation." "India," he added, "will have to go that way too if she seeks to end her poverty and inequality though she may evolve her own methods and may adopt the ideal to the genius of her race." Thirty five years later, in 1964, we find President Kamaraj echoing at Bhubaneshwar the same passion for socialism, when he says: "The question today before Congressmen is not whether socialism is good or right for the country, but whether the legislative and executive measures in this country are in furtherance of the socialist goal that the people have set before themselves."

The churnings of the socialist thought in the Congress, however, ring loud for the goals of the Second Plan which aims at the establishment of a 'socialist pattern of society' in India. The numerous references to socialism in the Congress election manifesto of 1957 are reflected in the Third Plan, which not only quotes at length the Second Plan's reference to the 'socialist pattern of society' but also indicates "a number of directions" for "Progress towards socialism." The Bhubaneshwar Resolution on Democracy and Socialism, drawn at the instance of President Kamaraj to propose practical measures for its early implementation, point to the fact that the Fourth Five Year Plan would be more geared to socialism than even the Third Plan. The objective of the Fourth Plan cannot thus be different from that of the earlier two, a measure of difference in accent and emphasis notwithstanding. It is, however, noteworthy that some striking similarities between the Soviet and Indian planning models exist in spite of the differences in economic and political conditions of the two countries, as was found out by Professor A. S. Bhalla.[11] These are: (a) the Marxian setting of two departments of a

(11) A.S. Bhalla, "From Fel'dman to Mahalanobis in Economic Planning," (*Kyklos*, 1965, Fasc. 1

closed economy, (b) the aim of achieving neglect of propensity to save as a crucial variable in the process of growth. The affinity between the Indian and the Soviet models is so strong that the former seems to answer the Soviet rather than the Indian conditions.

IV. The Bottlenecks Impeding Indian Economy

In analyzing the reasons of Asian poverty by the principle of circular and cumulative causation, Professor Myrdal underlines the initial conditions of underdeveloped countries that are quite different from those of developed countries. The factors of initial conditions are numbered [12] : 1) endowments of natural resources, 2) climate 3) population, 4) size of overseas market, 5) inducement of foreign capital, 6) disparity in terms of trade, 7) income level, 8) social structure, 9) orientation of the people, and 10) technique and skill.

In addition to such fundamental difficulties in initial condition, we should pay no less attention to spiritual attitude of developing countries. In other words, the point is whether they are well equipped with modernization ideal or not, to quote again Professor Myrdal.[13] Modernization Ideal is referred to as a value system comprising: 1) rationality, 2) development zeal and development planning, 3) increase of productivity 4) enhancing standard of living, 5) realization of social and economic equalization, 6) institutional reform and attitudinal shift, 7) national integration, 8) national independence, 9) institutional formality of democracy, 10) mass-democracy, and 11) establishment of social discipline and democratic planning.

Third impediments may be population explosion. In the following table 2. are summarized the figures for all the countries for which comparable results can be obtained. Density of agricultural population is classified by the number of persons engaged in agriculture per square kilometer of cultivable land.

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reprinted in *Selected Articles in the Economics of Underdevelopment*, Seoul National University, 1966. p. 231.

(12) cf. Gunnar Myrdal, *Asian Drama—An Inquiry into the Poverty of Nations*, Panteon, New York, 1968, quoted from Jong Chul Lim, "Modernization Ideal and Economic Development —Myrdal's View on Asian Poverty—, *The Korean Economic Journal*, Vol. Ⅶ, No. 2. pp. 105—107.

(13) *ibid.*, p. 108.

Table 2. Classification of 26 countries with respect to the relationship between the intensiveness of cultivation and agricultural output per person engaged in cultivation

Source: Reference(6), p. 37.

Value of Agricultural production per person engaged (rupees per year)	Number of persons engaged in agriculture per square kilometre of cultivable land.					
	0—5	5—10	10—15	15—20	20—25	25—30
Below 1,000		Philippines				India
1,000—1.500			Turkey, Yugo U.S.S.R.			
1,500—2,000			Poland	Rumania		Italy
2,000—2,500	Brazil	Greece	Cyprus Bulgaria	Portugal		
2,500—3,000		France Austria	Spain		Hungary	
3,000—3,500	Sweden	Ireland	Syria			
3,500—4,000			Germany Czecho	Belgium		
4,000—4,500						
4,500—5,000		Britain		Netherlands		
Over 5,000			Denmark			

We can see from the table how little relation there is, if any, between density of settlement and average product per head. About the same density of settlement prevails in Denmark as in Soviet Russia, but product per man in one case is five times what it is in the other. Many people are concerned about the density of the agricultural population in India, and it is undoubtedly high. But it is equally high in Italy, where the average cultivator produces about twice as much as does the Indian. There is much talk about the possibility of introducing the Indian to tractors and milking machines and all the most modern agricultural equipment.

It is, however, difficult to teach the Indians any new agricultural methods. Better to try to obtain the same objective by reducing population density. For the sake of argument, let us consider this latter proposition. To carry it out, you will have to reduce the Indian population to one-quarter of what it is now. A statistical estimation of the operation of the law of diminishing returns, made by comparing different provinces or regions in the same country, indicates that there is probably an inverse square root relationship between the density of settlement and productivity per man. The stoutest Malthusian would hesitate at the prospect of having to reduce the population

by threequarters and, in any case, how long would it take him to do it, even if he had his way in every respect, short of murder? Any observation of these facts must make us realize what immense improvements are possible in agricultural productivity in most part of the world. Such improvements cannot, of course, be had for the asking. To get them, an immense dissemination of education and technical knowledge will be needed, new equipment to a steadily increasing degree, and capital to provide equipment, livestock and buildings.

Even though the statistical interpretations of it may differ somewhat, there can be no doubt about the deceleration of the rate of India's population growth. Prior to 1921 the rate of growth was less than 1 per cent per annum. From 1921 to 1931 India's population grew by 11 per cent, and from 1931 to 1941 by 16 per cent, but between 1941 and 1951 the increase was again only about 11 per cent (taking India and Pakistan together for the latter year). In India, therefore, which many people thought to possess the world's most intractable population problem, the situation is very different from what is commonly supposed. The work of Indian statisticians projects that the rise in production beginning 1970 will be far greater than the rise in population, and there is every prospect that, with increasing industrialization, this process will continue.

Another cancer-like impediment to Asian economic development is preponderancy of consumer goods industry. As for India, the ratio of producer's goods industry and consumer's goods industry is 35.6 : 64.4, while 18.2 : 71.8 for Pakistan, and 23.0 : 66.7 for Philippines.

Assuredly, the socio-political aspects are so important that to a certain extent problem of why some areas have remained underdeveloped might be answered by merely noting that they have lacked the socio-political prerequisites for development. The restrictive character of semi-feudal institutions, weak governments, lack of social legislation, absence of incentives, inadequate education, and poor health all bear witness to this. There is, indeed, much truth in maintaining that a country is economically backward because it is politically, socially, and physically backward.

Nevertheless, relevant as the sociological approach is, it is in many respects too easy a way out of the problem, and one may suspect that it

does not get to the essence of the problem. Certainly from a purely economic viewpoint, there is more to be said about the process of development *per se*. A popular answer to our problem immediately suggests itself—lack of resources and overpopulation. If a country has no natural resources which can be tapped, the possibility of development is, of course, obviated. But regarding how many underdeveloped countries in 1870 could it be said that there were no resources for import-competing commodities, or no resources for increasing exports, or that no increase in food production was possible? The answer must be very few. In fact, in some underdeveloped areas for example, Africa and Brazil the amount of resources per head was quite high. It might however, be contended that in many countries resources were scarce relatively to existing population or potential population. Although this is now true in several backward area, it was much less apparent during the 1870—1913 period. The present phenomenon of a low amount of resources per head is the result of either the exhaustion of resources or such a rapid growth in population that over population now puts pressure on the available resources.

Where there was population pressure, development was certainly handicapped. Contrary to the stagnation theory, population growth, if it is in a backward country, does not induce capital-widening investment or innovations. Instead, it diminishes the rate of capital accumulation, raises costs in extractive industries, increases the amount of disguised unemployment, and in large part simply diverts capital to maintaining children who die before reaching a productive age.

If then, many underdeveloped countries had resources which could have been utilized, and if over population is simply a manifestation of underdevelopment, what other reasons might be offered to explain why development was retarded in some countries? A review of the literature on development suggests many obstacles to development. Most of these obstacles can be according to Professor Meier[14] classified under the following three categories.

i) Market Imperfections:

Many market imperfections might be listed as having prevented an opitmum

(14) Gerald M. Meier, "The Problem of Limited Economic Development," *Economia Internationale*,, Vol. VI. No. 4. 1953.

allocation of resources, thereby limiting the extension of the actual production frontier out to the maximum possible frontier. The imperfections most frequently cited are those of imperfect knowledge, imperfect mobility, specificity of factors, and imperfect divisibility of factors. Ignorance of potential resources and ignorance of technique were two manifestations of the imperfect knowledge. Ignorance of domestic, let alone world, market conditions was another. Dominated by custom and status, indigenous labor was immobile both geographically and occupationally. Nor were the prospects of higher economic rewards effective in removing this immobility. Many of the socio-political elements previously mentioned also fall into place here as additional frictions.

ii) The Vicious Circle

According to the second view of underdevelopment, a backward economy remains backward because its total output is low, and reserve stocks are negligible, so that after consumption needs are fulfilled, little remains for capital accumulation. Consequently, there can be no marked increase in output. In the extreme form, such an economy remains a subsistence economy.(15)

iii) Repercussions of Foreign Investment

Importation of foreign capital is necessary for India (1) to meet the needs of facing aggression against her; (2) to increase the national dividened and raise per capita income and (3) to get the machinery and the technical knowhow which she lacks today.

The need for external borrowings does not mean that the development problem is solely a financial one, solved if only foreign investment is forthcoming. A recollection of nineteenth century experience dispels this view. Many countries which were recipients of large amounts of British capital in the pre-1914 era had made relatively little progress by the end of the period. There was, moreover, no clear positive correlation between the amount of capital inflow and the extent of development. Even though the relative magnitudes of the development problem differed among countries, it is nevertheless significant that by 1913 British foreign investment in Brazil had

(15) The vicious circle of poverty in detail can best be referred to Ragnar Nurkse, *Problems of Capial Formation in Underdeveloped Countries*, Oxford Basil Blackwell, 1955. pp. 4—5.

amounted to four times that in New Zealand, and foreign investment in India surpassed that in Argentina or Australia. While it has broken the vicious circle, the mere access to foreign capital has not alone been sufficient to guarantee development. The repercussions of the foreign investment are what have been crucial: the direction of the foreign investment, the type of economic organization which accompanied it, and its income effects.

Having considered how the obstacles imposed by imperfections of market, the vicious circle, and the income leakages abroad have been historical limitations to development, Professor Meier seems to conclude by briefly enquiring whether development might not have proceeded further if the underdeveloped countries including India had pursued policies designed to raise the level of home demand and reduce the dependence on foreign trade. Two policy areas are then immediately suggested by him—inflation and protection. The efficacy of inflation, however, as a method of accelerating and sustaining growth has given rise to conflicting view. While some feel that the best way to attain economic development is to pursue a policy of relative price and financial stability, the other group consider a slow and steady rate of inflation as a necessary evil, for it provides a powerful stimulant to the attainment of a steady rate of economic progress. Though it is difficult to establish any correlation between price-changes and rates of growth, it may be concluded that inflation has acted as a stimulant to increased investment as is shown in the following Table 3.

Table 3. Inflation and Economic Development

Year	Rate of Inflation	Rate of Economic Growth	Year	Rate of Inflation	Rate of Economic Growth
1951—52	4.32	2.82	58—59	5.36	7.35
52—53	−0.95	3.96	59—60	4.24	0.51
53—54	1.92	6.03	1951—52 to 1955—56 (a)	−0.87	3.45
54—55	−6.60	2.49			
55—56	−3.03	1.94	1956—57 to 1959—60 (a)	6.43	2.96
56—57	11.46	4.96			
57—58	4.67	−1.00	1951—52 to 1959—60 (a)	−2.38	3.23

Note: (a) annual average

Based on the Sources: 1. Reserve Bank of India Bulletins
2. Monthly Statistical Commentary on Indian Economic Conditions.
3. Central Statistical Organization's Estimates

Quoted from Mr. Madhavan, "Inflation and Economic Development, *Indian Economic Journal*, Vol. X, No. 3. p.265.

On the other hand, professor Vakil contends that the case for a steady rise in the price level in the context of development policies in countries like India is made on the following assumptions:(16)

(a) A steady rate of rise in the level of prices enables the savings ratio to be higher than what would have been the case otherwise; it tends to keep the savings ratios rising year by year.

(b) A steady rate of rise in the price level causes the ratio of marketable surplus to crop production to be higher than what would have been the case otherwise.

(c) A steady rate of rise in the price level causes the capital-output ratio or the incremental capital-output ratio to be lower than what would have been the case otherwise.

(d) A steady rate of rise in the price level raises the rate of growth of productivity at a faster rate than what would have been the case otherwise.

(e) A steady rate of rise in the price level causes a redistribution of wealth and income in favour of growth promoting processes as against growth retarding forces.

(f) A steady rate of rise in the price level causes the socio-political climate to be more oriented towards economic progress than what would have been the case otherwise.

(g) A seady rate of rise in the price level prevents a potential deterioration in the terms of trade.

Professor Vakil is, however, in the negative in seeing the above arguments hold true in the case of India.

V. Conclusion

The Fourth Five Year Plan is likely to highlight the importance of perspective planning in a way never known before. The first and Second Five Year Plans did give some simple projections of national and per capita income, but their (Plans') time-horizon was limited essentially to a five-year period. The Third Five Year Plan in contrast gave the national vision of long-term

(16) C.N. Vakil, "Development with Stability," *The Indian Economic Journal.* Vol. XV, No. 3. p. 309.

planning by devoting an exclusive chapter to it.

The emerging importance of perspective planning was pinpointed by the 1962 election manifesto of the Congress Party, which said: "The process of development is not limited to specific periods, but is a continuous one and the objectives for each period are to be considered in connection with the larger perspective. Unless the larger perspective is kept in view, short-term objective may lead to wrong results... The importance of perspective planning has been more and more recognised and, indeed, is now considered to be essential. It is proposed to draw up a perspective plan for the next fifteen years."

All this unmistakably points to the increasing volume of thought likely to be bestowed on perspective planning in the preparation of the Fourth Five Year Plan. Before closing this article, we may have to ponder about what kind of sectors are so important as to exert impact on the coming economic development plan of India. They can be epitomized as: 1) public sector, 2) agriculture, 3) price policy, 4) public administration.

The Fourth Five Year Plan is likely to carry forward in actual implementation of the Industrial Policy Resolution of 1956, with public sector growing from strength to strength. In view of Indian policy of socialisation, the public sector will increasingly expand and play a dominant role, both for the purpose of accelerating the speed of industrialisation and yielding additional resources. Bhubaneshwar Resolution asserts that the public sector has to play a strategic and predominant role in the field of trade and industry and that the public sector must grow progressively in large-scale industry and trade, particularly in the field of heavy and basic industry as well as trade in essential commodities. The division of responsibility for industrial development between the public and private sectors should be geared to the socialist objective of increasing the proportion of means of production under socialist control. That the public sector would occupy a "commanding position" in basic and capital goods industries at the end of the fourth Plan period is made out by Dr. V.K.R.V. Rao in his study on the role of public enterprises in Indian Economy. According to tentative estimates of Fourth Plan, investment in private sector is likely to be Rs. 7,000 crores and in the public sector Rs. 14,500 to Rs. 15,500 crores. The

correponding figures in the Third Plan were Rs. 4,100 crores and Rs, 6,300 crores. The growing ascendency of the public sector, as anticipated by many theoretical approaches, is thus likely to materialise in actual practice.

Indian experience of planning during the last 18 years suggests that agriculture is the Achilles' heel of Indian economy. It is a sign of health that the whole nation and the governments in the states have become conscious of the significance of agriculture not only for the development of rural areas but also for the building up of the entire economy. The changed circumstances during the last five years culminating in the severe spell of food shortages in the present demand that consciousness of the significance of agriculture for the building up of the entire economy on the part of the whole nation and the governments in the States is considered not barely a sign of health but a necessary condition of survival. We must recognize the overwhelming importance of agriculture; industrial growth itself depends upon the improvement in agriculture. Agriculture is thus today and will continue to be the most important factor of our economy, and on its expanding production will depend progress in industry and other fields. With all possible progress in other areas of economic activity, it still remains indisputable that, for the foreseeable future, the agricultural sector will be the main provider of employment and consumption articles to the mass of the people, and only a sufficiently high level of agricultural production will ensure a higher rate of growth for the economy.

The rising price spiral has for some time past been the most knotty problem bedeviling a solution. The wholesale prices have gone up by 15.4 per cent since the beginning of the current financial year and are now ranged about 20 per cent above the level prevalent at the beginning of the Third Five Year Plan, causing untold hardship to the common man, particularly to the fixed income groups. If the socialist pattern of society that we envisage is to be made a reality, firm meassures have to be taken within the next two years for effective regulation of the prices of food articles, particularly food-grains, and of other articles of common consumption such as textiles. Without a commanding position in food-grains trade, it will be impossible to assure proper prices to the farmers on the one side of the consumers, particularly the more needy sections of the consuming public, on the other.

The implementation of a plan is the function of public administration. On its integrity, efficiency and earnestness depends the degree of the success of a plan. The Fourth Five Year Plan places a greater strain on the administrative fibre of the nation than any of its predecessors. According to the draft of the Fourth Plan presented to the National Development Council, the total outlay on organized industry during the Fourth Plan exceeds, for instance, the aggregate outlay on industry in all the three previous plans. A burden so heavy as this calls for an imaginative rationalisation and an overall overhaul of public administration which, will necessitate decentralisation of authority, allocation of responsibility and proper appraisals of the work done.

We have tried to cover a large ground of complex forces, factors in a brief space. We have reviewed the historical phases of Indian economic plannings with some comments on their merits. We have also reviewed some hindrances impeding Indian economy. Neither temporary expendients nor natural luck like a monsoon would solve the problems of creating a viable and self-sufficient Indian economy. To remove the causes of economic backwardness, which have gone deep in many cases, self sustained efforts by all concerned are necessary both in the non-economic and in the economic spheres. Let us hope, however, that Indian people shall have not only economic wisdom, but also statesmanship based on patriotism. To make her every citizen to see a light of hope out of the present darkness, India must make a determined effort to creat a lasting economic prosperity.

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