

A TWENTIETH CENTURY FUND STUDY

ASIAN DRAMA

*An Inquiry Into the
Poverty of Nations*

by **GUNNAR MYRDAL**

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velopment problem, these terms are irrelevant. "Lesser developed countries" and similar expressions are more accurate. But they are used in connection with a tendency to de-emphasize the actual differences between the rich and the poor countries, and they thus become misleading. All these terms express an escapist attitude. As things are, such an attitude is quite understandable, but it introduces a temptation to deviate from clear thinking, which must be bluntly honest and face the real issues.

The term "underindustrialized countries" does not have that fault, but it is too narrow to express the meaning really intended. Economic development is much more than industrialization. Indeed, the extent to which investments in industry give rise to "spread effects" as opposed to "backwash effects" is an important problem for study in evaluating the relation of industrialization to a country's economic development.¹ This study should not be prejudiced by the choice of terminology. As we demonstrate in the body of the book, there is a tendency in discussing and planning development to expect industrialization to improve drastically the general economic situation in South Asia. In consequence, too little emphasis is placed on agriculture, on raising levels of education and health, on increasing the volume of labor input, and on improving labor efficiency in the economy as a whole. Such a tendency toward irrational beliefs — apart from valuations that may be diverse — should not be fortified by using the term "industrialization" to mean "economic development."

This note on semantics throws light on the nature of the two closely related problems of the sociology and the philosophy of knowledge, touched on in the Prologue: the problem of understanding the forces tending to cause bias that work on our minds when we study the underdeveloped countries in South Asia, which certainly do not stop at the terminological level; and the problem of counteracting these forces by adhering to strict logic if we are to attain objective knowledge.

¹ Chapter 24, Sections 5-9.

THE MECHANISM OF
UNDERDEVELOPMENT AND
DEVELOPMENT AND A SKETCH OF AN
ELEMENTARY THEORY OF PLANNING
FOR DEVELOPMENT

I

Circular Causation

1 *Purpose and Scope*

This appendix will seek to formulate in simple terms the logic of underdevelopment, development, and planning for development. As in the rest of the book, we shall be concerned only with the region of South Asia. Although many of our arguments will apply also to other underdeveloped countries and regions, and occasionally even to all countries, whether developed or underdeveloped, and touch the foundations of economic analysis, we shall not pursue these wider implications but shall confine our analysis to concepts and causal relationships that could be used for the study of our particular region. Whether the empirical questions we shall raise, the logical criticism to which we shall subject prevalent approaches, and the alternative way of analyzing the problems we shall put forward — in short, whether our "theory" applies to other parts of the world and other branches of economics is a question that lies beyond the scope of this book.

¹ See Preface and Prologue, Section 7.

Part I of this appendix deals with the basic notion of circular causation, which recurs, explicitly and implicitly, in much of the literature. Part II attempts to clarify the social processes of underdevelopment and development by examining certain categories of social conditions and their causal connections.¹ Parts III and IV deal with the theory of planning as an application of the preceding analysis to government action, that is, to conditions in which policies are adopted by public authorities with the specific intention of inducing change in the prevailing social conditions in order to engender and direct development.

A more technical treatment of economic models and their usefulness for planning in South Asia and, in particular, of the use of the concept "capital/output ratio," elaborating on some ideas here discussed, has been relegated to a separate appendix, 3.

2 The Idea of a "Vicious Circle"

An idea fairly widespread in the recent literature on underdeveloped countries is that the social processes in such countries tend to be dominated by "vicious circles." Thus Ragnar Nurkse refers to the "vicious circle of poverty" and explains:

It [the concept] implies, of course, a circular constellation of forces tending to act and react upon one another in such a way as to keep a poor country in a state of poverty. Particular instances of such circular constellations are not difficult to imagine. For example, a poor man may be weak; being physically weak, his working capacity may be low which means that he is poor, which in turn means that he will not have enough to eat; and so on. A situation of this sort, relating to a country as a whole, can be summed up in the trite proposition: "a country is poor because it is poor."²

What Nurkse here describes is a *low-level equilibrium that perpetuates itself* and results in economic stagnation.³ He assumes that his poor man produces

¹ An early attempt to use in a more systematic fashion the idea of circular causation as the basis for a study of underdevelopment and development was made in the writer's *An American Dilemma, The Negro Problem and Modern Democracy*, Harper & Bros., New York, 1944, Chapter 3, Section 7, "The Theory of the Vicious Circle," pp. 75 ff., and Appendix 3, "A Methodological Note on the Principle of Cumulation," pp. 1065 ff., reproduced in *Value in Social Theory, A Selection of Essays on Methodology*, Paul Streeten, ed., Routledge and Kegan Paul, London, 1958. See also Gunnar Myrdal, *Economic Theory and Under-Developed Regions*, Duckworth & Co. Ltd., London, 1957. For a critical note to this earlier attempt by the writer, see below, Section 9, p. 1875, footnote 1.

² Ragnar Nurkse, *Problems of Capital Formation in Underdeveloped Countries*, Basil Blackwell, Oxford, 1953, p. 4. Cf. his book *Some Aspects of Capital Accumulation in Underdeveloped Countries*, Oxford University Press, Cairo, 1952.

³ The idea of a vicious circle in this static sense of forces balancing each other so that the effect is stagnation, is now ubiquitous in the literature on underdeveloped countries. See H. W. Singer, "Economic Progress in Underdeveloped Countries," *Social Research*, Vol. 16, No. 1, March, 1949. The following are random examples:

"The term *vicious circle*, as it applies to the environment in underdeveloped countries, refers to an inextricable interrelationship of cause-and-effect that operates so as to imprison an economy in its own shortcomings. The notion is that a given effect, as evidenced by whatever it is that happens to exist, acts as the cause leading to a substantially similar effect. In essence, the status-quo tends to perpetuate itself — because

only enough food to keep himself in a state of health such as to maintain barely this level of production.

If, however, Nurkse had assumed that his man produced less than this critical amount of food, a *cumulative downward movement* would be established. It is this process that should properly be called a "vicious circle." Nurkse's poor man would become poorer because he is poor.¹

of a process of circular causation." (Walter Krause, *Economic Development*, Wadsworth Publishing Company, San Francisco, 1961, p. 20.)

"The vicious circle operates on both the supply and the demand sides. First, low incomes lead to low levels of savings and investment. The low rate of investment in turn leads to the perpetuation of low incomes and the circle is completed. This is the vicious circle on the supply side. Second, the low rate of investment keeps productivity and incomes low. Therefore, the purchasing power of the people in real terms is low. This leads to a relatively low private marginal productivity of investment. Inducement to invest being low, low incomes are perpetuated. This is the vicious circle on the demand side." (Raja J. Chelliah, *Fiscal Policy in Underdeveloped Countries*, Allen & Unwin Ltd., London, 1960, p. 26.)

"Here, then, is one of the vicious circles so common in any analysis of underdevelopment: underdevelopment yields low agricultural productivity, yields malnutrition, yields low productivity, yields underdevelopment." (Benjamin Higgins, *Economic Development*, W. W. Norton Co., New York, 1959, p. 271.)

"If any attempt is made to lift any part of this mesh of interlocking vicious circles, there is usually such a pull downward that any sustained progress becomes almost impossible." (S. R. Sen, "The Strategy for Agricultural Development," Presidential Address to All India Agricultural Economic Conference, 1959, New Delhi, 1959, p. 3.)

"It is not easy to see how this shortage of entrepreneurs can be overcome. Education can do much, but the best school for businessmen is business itself. It is by operating in the business world that one gets knowledge and ideas about business. Here also we face the familiar vicious circle. No entrepreneurs, therefore no development. No development, therefore no entrepreneurs." (B. B. Das Gupta, "The Theory and Reality of Economic Development," in Philip W. Thayer, ed., *Nationalism and Progress in Free Asia*, Johns Hopkins Press, Baltimore, 1956, p. 172.)

"An underdeveloped area is like a circle compressed by a chain whose main links generally are poverty, overpopulation, ignorance and a static order evolved to fit the requirements of a non-industrialized subsistence culture. To break out of this rigid circle some link of that chain must be broken. Low food intake creates barely sufficient energy to sustain life. Unless a surplus is produced, there is no possibility to accumulate the savings necessary to create more efficient production which in turn would permit an accumulation of savings, neither is there enough to sustain the effort of breaking out of the rigid pattern of social behaviour which is created by, and sustains, the underdeveloped community." (Frank J. Moore, "Some Aspects of Industrialization and Cooperative Development in Underdeveloped Areas," *Indian Economic Review*, Vol. 1, No. 4, August, 1953, p. 1.)

"The utter inadequacy of the facilities [for education] that are being provided, in relation to the needs, is well known. The economic backwardness of the country is responsible, in part, for these deficiencies, but the low level of economic development is itself, in a measure, a result of insufficient and faulty education." (India, Government of, Planning Commission, *The First Five Year Plan — A Draft Outline*, New Delhi, 1951, p. 219.)

¹ This true vicious circle has been less frequently noted in the literature. Nathan Keyfitz gives an illustration of it:

". . . Java is overpopulated and poor; as its population grows further, there is pressure from squatters who need land desperately and who take over the forest reserves. The capacity of the soil to hold water is reduced and some of it is washed away, so the food available is further reduced and pressure to take over more forest increases.

"Other instances are not hard to imagine. Some corruption appears in a country; it

But the process can also be reversed and turned into a "virtuous circle." Nurkse's example would then read: if a poor man is given more to eat, his health improves; since he is physically stronger, his working capacity is greater, which in turn means that he gets more to eat; and so on. The system could, in other words, be thrown out of its low-level equilibrium of economic stagnation and induced to describe a *cumulative upward movement* by improving a worker's productivity. If he is a subsistence farmer, he could be provided with irrigation, fertilizers, better seed, and tools and could be taught improved agricultural techniques. He would produce more and have more to eat; his health would be better, his working capacity further increased, and so on. Soon he would be able to sell some of his increased produce and buy more in the market to improve his production and consumption. Nurkse's proposition would then read: a country is becoming richer because it is less poor and therefore becoming richer.¹

Stagnation and the tremendous obstacles and inhibitions that thwart an underdeveloped country's attempts to emerge from stagnation and embark on economic development are such important parts of reality that low-level equilibrium is well worth studying. But Nurkse's metaphor explains very little — though it does bring out that there is generally a causal interdependence between the various factors in the social system even outside the so-called "economic factors," and that it is conceivable that the social and economic system remains in equilibrium. The problem is why in certain cases circular causation perpetuates stagnation, or permits only minor and temporary movements around a low-level equilibrium, but in others gives rise to a cumulative process downwards or upwards, that is, a true "vicious" or a "virtuous" spiral. Is the low-level equilibrium of stagnation "normal" in any particular sense? If so, why?

In every social system random changes are, of course, always occurring and we would expect their net effect to be the initiation of a cumulative process

gives people the thought that their government may not be stable and that ruin is ahead; this suggests to the individual the advisability of making something for himself while the opportunity lasts; the spread of corruption makes other individuals fear that the time of collapse is coming closer, and a vicious circle sets in which makes collapse inevitable unless some new force enters. Or in the matter of security of the currency: the word gets about that the currency is not safe; people start to buy goods, and prices begin to rise; there is fear of a further rise in prices, and further bidding for goods; the vicious circle of inflation and lack of confidence runs on." (Nathan Keyfitz, "The Interlocking of Social and Economic Factors in Asian Development," *Canadian Journal of Economics and Political Science*, XXV, No. 1, February, 1959, p. 39.)

¹ "Typical examples of such cumulative processes are the following: Capital supply: increased productivity: higher real income: higher capital supply, etc. Higher demand: higher incentive to invest: higher productivity: higher demand, etc. Improvements in the quality of the labour force (literacy, better knowledge, improved health, greater mobility): greater productivity of labour: more resources to improve education, health, mobility, etc.

"Reduced inequality: weakened revolutionary forces: stronger democracy: more concessions to equality, etc. Higher incomes: attraction of skilled men and capital: reduced costs of communal services: lower rates and taxes: higher incomes, etc." (Paul Streeten, *Economic Integration, Aspects and Problems*, 2nd ed., A. W. Sythoff, Leyden, 1961, p. 56.)

in the one direction or the other. If this does not happen, is it because of "thresholds" that prevent circular causation from initiating a cumulative process? If so, what constitutes a threshold? When and how does circular causation pass a threshold or thresholds and initiate cumulative change?

From the point of view of planning, the problem is how to break out of the equilibrium of stagnation and start a cumulative upward process. Nurkse was fully aware of this political and dynamic aspect of the problem of circular causation: "The circular constellation of the stationary system is real enough, but fortunately the circle is not unbreakable. And once it is broken at any point, the very fact that the relation is circular tends to make for cumulative advance. We should perhaps hesitate to call the circle vicious; it can become beneficent."²

3 The Theories of "Stages of Growth"

The idea of a "virtuous circle" has always been implied in the theories of "stages of growth" — though never systematically demonstrated. We are here concerned with two aspects of these theories: (1) the implied *theory* of circular causation with cumulative effects; (2) the implicit systematic *biases*. The biases operate through the *selection* of strategic *factors* on which interest is focussed and of *assumptions* about their role in historical processes. This selection of strategic factors and of assumptions about their role remains essentially *a priori*, however much illustrative material is amassed. It never is — and, in this teleological approach, it never can be — empirically verified or refuted. A fundamental preconception is, moreover, the *similarity of evolution* in different countries at different historical periods; this is why these theories can be, and are, used for prediction. But similarity depends on the level of abstraction and the choice of features compared. Such comparisons can be refuted only by demonstrating that other principles of selection and comparison are equally possible — and, of course, *ex post* that the predictions do not come true.

The theory that different countries at different times develop in a unidirectional process toward ever "higher" forms of production and society, so that their history and their destiny can be conceived in terms of identifiable "stages," goes back at least two centuries,³ even if one does not count in the

¹ *Problems of Capital Formation in Underdeveloped Countries*, p. 11.

Or, as Harvey Leibenstein expressed it:

"If we continue to think in terms of vicious circles, and it is sometimes a convenient shorthand mode of thinking about the problem, at some point we have to explain how the vicious circle can be broken. It is here that the critical minimum effort idea appears. . . .

"From what has been said, it should be clear that the minimum effort idea is both consistent with the vicious circle notion and at the same time offers a way out. In other words, the only reason the vicious circles appear vicious is because it is so very difficult to find and marshal stimulants to development that are of sufficient magnitude." (*Economic Backwardness and Economic Growth*, John Wiley & Sons, New York, 1957, pp. 96, 98.) Cf. the writer's works cited in footnote 1, p. 1844.

³ On the history of the doctrines of stages there is a large literature. For two more recent surveys see Edgar Salin, "Unterentwickelte Länder: Begriff und Wirklichkeit," *Kyklos*, Vol. XII, 1959, Fasc. 3, and Bert F. Hoselitz, "Theories of Stages of Economic Growth," in B. F. Hoselitz et al., *Theories of Economic Growth*, Free Press of Glencoe, Ill., 1960, pp. 193-238.

speculations on the development from "the natural state" that were so prevalent in the writings throughout the Enlightenment era and were presented by Adam Smith in amplified form in his *The Wealth of Nations*. It represents a type of philosophizing or theorizing about history of which most historians are suspicious and critical: first, because in adjusting the facts to the theory it does violence to what they know actually happened; and, secondly, because it frequently serves transparent political aims. Historians do, of course, arrange their data by periods for purposes of description and presentation. The criterion of division is the occurrence of a major change in a sequence of events whose direction they are studying. But the demarcation is, in principle, assumed to be empirical; it does not stem from any consciously conceived "philosophy" or "theory" of history. Admittedly, some historians have strayed from this principle. Arnold Toynbee has done so on a monumental scale, and he has been severely censured by his professional colleagues for selecting his voluminous evidence to suit his "philosophical" or "theoretical" thesis. Ironically, the thesis he propounds is itself tautological, and hence neither provable nor refutable.

The grossly arbitrary selections of the "stage" builders convince the historians that their own empirical method is sound and that the "philosophical" or "theoretical" approach is unscientific.¹ So does the fact that the history of historiography demonstrates that, one after another, most of the "stage" theories, after a brief period of popular appeal and excitement, fall into oblivion, while the humbler and less dramatic efforts to establish "what actually happened" continue to increase our stock of historical knowledge. It is the journeyman

¹ This is the essence of Gerschenkron's criticism:

"The regularity [according to which all economies are supposed to pass through the same individual stages as they move along the road of economic progress] may have been frankly presented as an inescapable 'law' of economic development. Alternatively, the element of necessity may have been somewhat disguised by well-meant, even though fairly meaningless, remarks about the choices that were open to society. (See Rostow, *The Stages of Economic Growth*, pp. 118 f.) But all those schemes were dominated by the idea of uniformity. Thus, Rostow was at pains to assert that the process of industrialization repeated itself from country to country lumbering through his pentametric rhythm. Accordingly, Soviet Russia was like everybody else and rather confidently expected in the end to be propelled by the 'Buddenbrooks dynamics' into the fifth stage of 'high mass consumption.' Leaving erroneous literary allusions aside, there is, within a fairly wide margin, nothing wrong in principle with an approach which concentrates upon the interspatial similarities in industrial development. The existence of such similarities is very real. Their study yields attractive simplicities, but it does so at the price of dismissing some refractory facts which a historian will ignore at his own peril.

"There should be a fine on the use of words such as 'necessary' or 'necessity' in historical writings. As one takes a closer look at the concept of necessity as it is appended to prerequisites of industrial development, it becomes clear that, whenever the concept is not entirely destitute of meaning, it is likely to be purely definitional: industrialization is defined in terms of certain conditions which then, by an imperceptible shift of the writer's wrist, are metamorphosed into historical preconditions. (It is not surprising, therefore, to see Rostow at one point (p. 49) mix conditions and preconditions of industrial development very freely.)

"The recourse to tautologies and dexterous manipulations has been produced by, or at any rate served to disguise, very real empirical difficulties." (Alexander Gerschenkron, *Economic Backwardness in Historical Perspective*, Belknap Press of Harvard University Press, Cambridge, 1962, pp. 355, 357.)

craftsman, not the speculator, who to the ordinary historians represents the best tradition of historical research.¹

Yet, for obvious reasons, the "philosophical" or "theoretical" approach to history appeals to social scientists trying to establish laws of change in society. The method of analysis by "stages" has tempted particularly those who have sought realistic explanations of economic and social processes by employing an institutional approach and drawing lessons from history. Among them have been some of the great geniuses of social and economic speculation like List and Marx, who were also accomplished craftsmen working on historical material. Within the framework of their arid theories of stages of development they have made important and lasting contributions in almost all fields of social and economic thought.² Indeed, as Knut Wicksell once pointed out, it is a hallmark

¹ As my colleague Professor Ernst Söderlund, himself an historian, pointed out when reading an early draft of this section, this is not to say that the ordinary "anti-philosophical" historian is free from preconceptions, even if he succeeds in hiding this fact from himself by being naive about the problem of value premises in social research. The view of history that is usually called the "empirical" but which he would prefer to call the "genetic" and that can be said to be the one adhered to by most ordinary historians is focussed on the facts and the inferred relationships between facts that have resulted in a situation, now or in the past. Since, however, the resulting situation is accepted as known and given, since the purpose of research is to demonstrate how it *must* have come about, and since the selection from a large number of equally possible sequences reflects a current interest, a normative element is concealed in the notion of inevitability. The (implicit) end is inherent in and predetermined by the "facts." A double bias pervades this approach, viz., the selection from facts and exclusion of hypothetical facts. Only *some of the facts* are selected to prove the non-purposive achievement of a purpose, and *hypothetical processes* of development, assuming different behavior by one or more actors in the historical drama, are ignored. When historians dismiss as "unhistorical" the question "what would have happened if . . . ?," which comes so naturally to the social scientists, the historical necessity implied in this dismissal is the "must" dictated by a purpose. All facts are contingent. Necessity and inevitability are characteristics of logical deduction, in this case from the "requirements" of the final situation. (Cf. Chapter 5, Sections 2 and 3.)

The anti-theoretical and anti-philosophical bias of many professional historians, especially in Britain, which leads them to suspect any attempt to move from the particular to the general, is thus at bottom a defense of their attempt to remain naive about that element of teleology that is the essence of the "genetic" approach, however empirical the presentation of what has happened. It is akin to a tendency in empirical economics, breaking through now and then, to claim that the researcher has been approaching the facts without any preconceived theory. (See Gunnar Myrdal, *Value in Social Theory*, pp. 232 ff. *et passim*.)

On the European continent and in America, the challenge of social science has more often forced historians to rise above details and reflect on the nature of historical explanation, the role of bias in historical research, and the selection of evidence in relation to interest and the questions asked. There can be no "purely objective" history in the sense of describing "what has actually happened." Ranke's "*wie es eigentlich gewesen*" calls for the impossible. All historical research, like other social research, must begin with questions guided by interest and must select, evaluate, and appraise. But to say that an object looks different from different angles is not the same as saying that the object can take on any shape. Full methodological clarity the historians will not achieve until they, too, recognize the necessity of working with explicit value premises and begin to clarify the role of these in objective research and the basis that should be found for them. See Prologue, Section 9.

² This is seldom fully recognized in modern writings, partly through ignorance, just as the origin of theorems is forgotten. But as always, ignorance is opportune (Pro-

of great scholars that, regardless of the approach and method they use — sometimes despite them — they create new insights.

The multitudinous theories of development stages¹ share some general and methodological traits worth noting. From an abundance of historical conditions and events, the theories select and highlight *certain factors* thought to be significant for development.² Secondly, they assume *certain relationships* between changes in those factors and between them and the entire social structure. From a logical point of view, the differences between their doctrines appear as a consequence of differences in this *selection* of operational factors and their *assumed* relationships. All exponents of this approach are, to some degree, aware of its arbitrariness and try to protect themselves by numerous reservations.³ In fact, they often arrange their illustrations so as to show differences in the historical processes they analyze. But in spite of this insight, and in clear contradiction to it, all of them are convinced that their analysis in terms of stages is broadly true of what is empirically known.⁴ They are even convinced that their analysis represents a valid *theory* of change in societies — that is, of development.⁵

logue, Section 6; Chapter 21, Section 7), and this is particularly true in regard to the non-recognition of the powerful impact of Marx on Western social science. Cf. Prologue, Section 6; and Section 20 below.

¹ The illustrations in footnotes to this and the following paragraphs are chosen from a recent specimen of this doctrine of stages, W. W. Rostow's *The Stages of Economic Growth, A Non-Communist Manifesto*, Cambridge University Press, London, 1960. As we shall see, it reflects in its teleological aspirations what we have called "the modern approach," to which critical references are made in several contexts in this book. In particular, it reflects the systematic set of biases in the approach to the problems of underdeveloped countries discussed in the Prologue. It has the virtue of illustrating in a compressed and lucid form the methodological traits common to this approach and brings out clearly the logical compromises and contradictions implicit in it.

² In Rostow's words: "We shall be concerned here, then, with certain 'particular factors of reality' which appear to run through the story of the modern world since about 1700." (*Ibid.*, p. 1.)

³ Rostow's work contains the following: "I cannot emphasize too strongly at the outset, that the stages-of-growth are an arbitrary and limited way of looking at the sequence of modern history; and they are, in no absolute sense, a correct way." . . . "Once again, history is full of variety: . . ." and: "The stages-of-growth analysis does not pretend to explain all of history: there are factors at work, relating to the onset of the great wars and power struggles of the twentieth century, which are quite independent of the analysis presented in this book." (*Ibid.*, pp. 1, 53, 118.)

⁴ "This book presents an economic historian's way of generalizing the sweep of modern history." . . . "It is possible to identify all societies, in their economic dimensions, as lying within one of five categories: the traditional society, the preconditions for take-off, the take-off, the drive to maturity, and the age of high mass-consumption." (*Ibid.*, pp. 1, 4.)

⁵ "The exposition begins with an impressionistic definition of the five major stages-of-growth and a brief statement of the dynamic *theory* of production which is their bone-structure."

"These stages are not merely descriptive. They are not merely a way of generalizing certain factual observations about the sequence of development of modern societies. They have an inner logic and continuity. They have an analytical bone-structure, rooted in a dynamic *theory* of production."

"They constitute, in the end, both a *theory* about economic growth and a more gen-

This presentation of the stages of development — from "lower" to "higher" — renders the whole approach teleological. By a teleological approach is meant one in which a purpose, which is not explicitly intended by anyone, is fulfilled while the process of fulfillment is presented as an inevitable sequence of events. Originally, the purpose was explicitly God's purpose unfolding itself in history. But with the growth of rationalism "nature" replaced God, and later such entities as "Zeitgeist," "history" itself, "progress," and more specific notions such as the "invisible hand," the "market," "the logic of events," appeared as secularized versions of Providence. Common to these various approaches are three features: *inevitability*, *unintended purposiveness*, and *implicit valuation* (though not necessarily that of the writer). The suggestion of *inevitability* gives the stream of historical forces a stickiness that reduces greatly the scope for maneuver, both in the past, ruling out hypothetical alternatives, and in the present, ruling out planning. The *unintended purposiveness* introduces terms like "natural progress" and "growth," in which *valuations* are disguised as descriptions, teleology as causality, and reason as nature.

As in Rostow's recent variation on this theme, so in those of List, Marx, and all the other great precursors, behind the reservations lies a doctrine of historical purpose inexorably unfolding itself. Each writer has a different destiny in view; each adjusts his theory and his selections of illustrative material to fit his preconceptions. Policies are allotted their role, positive and negative, together with other impulses and resistances to change. But in the teleological setting, policies are not presented as having been adopted by men and organizations that could have chosen differently. Instead, they are themselves part of "objective" processes that serve the unchosen purpose. Events, policies, and responses serving this purpose are presented as "functions" of certain situations, or as being "in the nature of things," or as "fulfilling certain requirements." What is "inevitable" is not merely what follows from certain causes but also what serves certain ends — though not willed by anyone — and the two are not clearly distinguished. It is as if we "explained" the fact that water is the only substance whose specific weight "must be" lighter when frozen than when liquid by the "fact" that otherwise we could not eat fish at Christmas.

The teleological approach leads to considerable logical confusion. On the one hand, it leads its exponents to regard policies as themselves caused by and emerging from development, or as mere elements in a historical process; on the other hand, the norms hidden in their teleological intentions often lead them to advocate certain policies as being "correct" from the standpoint of these implicit norms.¹ Because of its teleological framework and, more particularly, because of its basic assumption of similarity between development

eral, if still highly partial, *theory* about modern history as a whole." (*Ibid.*, pp. 3, 12, 1. Italics added.)

¹ This basic confusion is plainly visible in the works of List and Marx and, of course, Rostow. There are decisions, says Rostow, "that societies have made as the choices open to them have been altered by the unfolding process of economic growth; and these broad collective decisions, *determined* by many factors — deep in history, culture, and the active political process — outside the market-place, have interplayed with the dynamics of market demand, risk-taking, technology and entrepreneurship, to *determine* the specific content of the stages of growth for each society." (*Ibid.*, p. 15. Italics added.) Immediately after this statement, and apparently unaware that he is

processes in different countries¹ at different periods, the whole approach has an inherent tendency to play down the importance of policies,² or rather to organize them into the predetermined sequence of events. Even the "bad" policies — "bad" from the standpoint of the norms contained in the selected and assumed telos — are turned into servants of development.³

shifting his logical basis, Rostow raises a number of plainly normative questions in terms of "How . . . *should* the traditional society react to . . . ?" (Italics added.)

¹ In Rostow's variant also between the Soviet Union and the Western countries. "In its broad shape and timing, then, there is nothing about the Russian sequence of preconditions, take-off and drive to technological maturity that does not fall within the general pattern; although like all other national stories it has unique features, . . ." (*Ibid.*, p. 67; his Chapter 7, "Russian and American Growth," pp. 93 ff.)

² There is a *laissez-faire* element inherent in all teleological speculation, in the sense that the teleologist is confident that his scheme will be realized, and that interference with it is futile. According to the theories of stages, development is bound to take its course, predetermined by the teleological doctrine of the author. Marx, like the classical economists, was not a planner, although many popular and some learned writers assume that he was; see Gunnar Myrdal, *Beyond the Welfare State*, Yale University Press, New Haven, 1960, pp. 4 ff. ". . . the non-purposive achievement of a purpose through a natural development, moving towards an end which is inherent in, and predetermined by, the facts as they already exist, is the teleological conception underlying not only Marx's thinking but also the liberal economic doctrines in the classical . . . line. Indeed, Marx, and even more emphatically, Engels, condemned as 'unscientific' the free-wheeling schemes of economic planning embraced by earlier French and English socialists." (*Ibid.*, p. 7.)

Belief in inevitability or in a general pattern of events is incompatible with government planning toward freely chosen goals, yet it may inspire men to intense activity. Since the historical process acts *through* men, motives, organizations, and institutions, not apart from them, the belief in inevitability neither logically nor psychologically implies quietism. To be committed to the future, to speed up events, to acquire a vested interest in the inevitable, are natural reactions, as is shown by Islamic fatalist fanatics, Calvinists with their sense of predestination, and "Marxist" revolutionaries. The notion that the future is on their side gives them strength and courage to act and to force action through organizations, including the state. But, fundamentally, planning along the tracks of history can only speed up the historical process and planning against them is futile.

In the one view historical destiny shapes us, in the other we shape our destiny. In the teleological view, what will happen will happen; in the view of the planners what will happen is open and depends on what we choose to do.

³ See also Hegel's antithesis, which turns the thesis into a "higher" synthesis, and his notion of the "cunning of reason" by which the worst misery serves the end of progress, the "rose of suffering."

In Rostow's formulation: "Although imperial powers pursued policies which did not always optimize the development of the preconditions for take-off, they *could not avoid* bringing about transformation in thought, knowledge, institutions and the supply of social overhead capital which moved the colonial society along the transitional path . . ." (*Stages of Economic Growth*, p. 27.) This statement is, of course, only a more diplomatic expression of Marx's harsher dictum: "England, it is true, in causing a social revolution in Hindustan, was actuated only by the vilest interests, and was stupid in her manner of enforcing them. But that is not the question. The question is, *can mankind fulfil its destiny* without a fundamental revolution in the social state of Asia? If not, whatever may have been the crimes of England she was the unconscious *tool of history* in bringing about that revolution." (Karl Marx, "The British Rule in India," written in London, June 10, 1853; published in the *New-York Daily Tribune*, No. 3804, June 25, 1853 — as quoted from K. Marx and F. Engels, *The*

The mainspring of Rostow's particular theory of the stages of development — which has been quoted here because it is the last specimen of the genus and because, despite the harsh criticism by historians, it has influenced many politicians and economists and given them a new vocabulary for popular use — is, of course, the rapid awakening in Western countries after the Second World War of an intense interest in the development problems of the underdeveloped countries, the political causes of which were suggested in the Prologue (Section 2). There we also sketched the nature of the specific biases that underlie what we have called the "modern approach" and distort the views of students in both Western and underdeveloped countries (Sections 3–6). This modern approach tends to overlook or minimize the factors that make development so difficult in the underdeveloped countries or, conversely, that should necessitate radical and comprehensive policy measures. A teleological doctrine encompassing world history for the last two hundred and fifty years that, behind all its reservations, assumes a fundamental similarity between different countries at different periods and a uni-directional course of development toward ever higher stages thus acts as a *deus ex machina*.

Interest has been primarily focussed on the stage that Rostow has ingeniously called the "take-off," in analogy to the performance of an airplane that, after accelerating on the runway, becomes airborne. Leaving aside the intricate question of what precise meaning this concept can have,¹ a take-off into "self-sustained" development is what the articulate elites of all underdeveloped countries want their own societies to achieve and what we all hope they will achieve with the least possible sacrifice. The incorporation of this concept into a teleological doctrine of stages of development makes that prospect seem not only possible but probable, even inevitable. True, Rostow covers himself with the reservation that "it is still too soon to judge either the present Indian or Chinese Communist take-off efforts successful."² But that is not the main drift of his argu-

First Indian War of Independence 1857–1859, Foreign Languages Publishing House, Moscow, 1959. Italics added.) This is, of course, the "invisible hand" of Adam Smith that, for instance, leads smugglers to perform a useful purpose in enlarging the market and intensifying the international division of labor.

¹ See below, Section 18.

² *Stages of Economic Growth*, p. 38.

S. R. Sen points out: "Moreover, it is important to recognise that any 'take-off' may not turn out to be a 'sustained take-off.' In fact, take-off may be of various types. There may be an 'abortive take-off' reminiscent of Baudelaire's albatross. There may be a 'hailed take-off' comparable to that of a glider which just helps to raise the economy to a higher level but where further progress is limited. There is again the 'assisted take-off' as in the case of an aeroplane catapulted from an aircraft carrier where the initial push is only a precursor of far reaching progress in future. Lastly, there is the 'self-propelled take-off' of the space rocket which once it crosses the gravitational pull will not come back to earth again. It is obvious that the strategy for agricultural development has to be so devised that the take-off is not of the first two types and is at least of the third type, if not the fourth." ("The Strategy for Agricultural Development," p. 6.)

"Some of the recent writings inebriated by growth models are too confident that take-offs always result in soaring flights, forgetting that regions and economies can 'come a cropper.'" (Streeten, *Economic Integration, Aspects and Problems*, p. 60.)

Rostow can express his full agreement with such statements and he can point out that he has made the same reservation himself.

ment. Thus a little further on in the text he speaks of "the fact that the whole southern half of the globe plus China is caught up actively in the stage of pre-conditions for take-off or in the take-off itself" and refers to "their [the underdeveloped countries'] foreseeable maturity."¹

The observations made explain why the theory of underdevelopment and development as we conceive it (see Part II of this appendix) cannot employ the old framework of stages of growth. It must be purged of teleology and formulated in such a way that the valuations are brought out as explicit value premises.²

We must remember that the approach we have criticized contains the notion of circular causation, and this is the reason for the remarks above. Moreover, insofar as its exponents have used illustrations from history or from contemporary events, they have been concerned with the causal relationships between changes of conditions in the social system. Thus in the first stage, when society is stagnant, circular causation works to perpetuate the low-level equilibrium, as described in Section 2; this is what is usually, though wrongly, referred to as the "vicious circle." But when the social system starts moving

¹ Rostow, *Stages of Economic Growth*, p. 92. Italics added.

"For the central fact about the future of world power is the acceleration of the pre-conditions or the beginnings of take-off in the southern half of the world: South-East Asia, the Middle East, Africa, and Latin America. . . . Put more precisely, the take-offs of China and India have begun. Pakistan, Egypt, Iraq, Indonesia and other states are likely to be less than a decade behind — or at least not much more, given the acute pressures to modernize now operating on or within their societies." (*Ibid.*, p. 126. Italics added.)

" . . . it is as sure as anything can be that, barring a global catastrophe, the societies of the underdeveloped areas will move through the transitional processes and establish the preconditions for take-off into economic growth and modernization. And they will then continue the process of sustained growth and move on to maturity; that is, to the stage when their societies are so structured that they can bring to bear on their resources the full capabilities of modern technology." (Rostow, *The United States in the World Arena*, Harper & Bros., New York, 1960, p. 412. Italics added.) This is the language of the visionary teleologist as surely as was Marx's confident prediction of the proletariat in the industrialized countries "expropriating the expropriators."

Reflecting on the penultimate quotation, David Wightman, in a critical review of Rostow's book written from the historian's point of view, also raises the problem of the practical effects of the teleological doctrine: "To say, as Rostow does, that India is in the take-off stage may be very encouraging to those who are moved by magical phrases. But what if it proves to be wrong? What frustrations and disillusionments might follow? Rostow plays down the obstacles that might impede economic growth. The message derived from historical analysis appears to be that the trick is not too difficult, though it may appear so at the transition stage. This could be dangerous and misleading optimism. There is a tendency for underdeveloped countries to accumulate technique and capital yet repudiate Western values, institutions and forms of government. These non-economic elements in growth are the most difficult to tackle. So they tend to be minimized by economic practitioners and theorists." (David Wightman, "The Stages of Economic Growth," *Il Politico*, Vol. XXVI, No. 1, University of Pavia, 1961, p. 134.) I. M. D. Little makes a similar observation in "A Critical Examination of India's Third Five-Year Plan," *Oxford Economic Papers*, Vol. 14, No. 1, February, 1962.

² Prologue, Section 9.

upwards, circular causation engenders a cumulative process: the "virtuous circle." All the explanations of successive stages of development in these teleological speculations contain elements of analyses of just such a cumulative process.

On the one hand, the institutional and historical interests of these writers have tended to make the analysis of circular causation somewhat broader than traditional economic theory. This is one reason why the writings of some of them have had so substantial and healthy an impact on the development of social science. On the other hand, their arbitrary selection of significant factors and their assumptions about the interplay of these — a double bias that is neither made fully explicit nor always guided by their respective teleological intentions — have been detrimental to their research. In this respect, List and Marx delved deeper into the empirical material and tried harder to assimilate it and to clarify their concepts and terminology than did Rostow, whose approach is theoretically less rigorous, conceptually vaguer, and empirically more superficial.

We would emphasize, then, four features of the approach to development in terms of stages of growth:

(1) There is implied a political motivation, though it is concealed in the teleological reasoning of this approach suggesting inevitability, similarity, and powerful historical forces against which "non-historical" action is futile. (Rostow's subtitle, "A Non-Communist Manifesto," removes any lingering doubts on this score, so far as he is concerned.)

(2) This bias is in the direction of *laissez faire*, not in the ordinary sense of a do-nothing philosophy (List and Marx were certainly not adherents of *laissez faire* in this sense), but in the sense that it is considered futile and "unhistorical" for the state or any other group to intervene with the intention of promoting freely chosen objectives. If sufficiently compelling, the stages-of-growth prognosis may itself influence the programs and actions of people, parties, and governments and thereby alter the material analyzed in this prognosis. The logical role of policy remains ambiguous: it is both part of the process analyzed, in which the ends are implicit, and an advocated means to further these ends whenever they are made explicit.

(3) The doctrines cannot — and do not attempt to — "explain" events, least of all temporal or spatial differences in the character of development that do not fit their preconceived pattern.

(4) When challenged on this latter ground the doctrines tend to withdraw into qualifications and reservations that render them tautological and hence, though then foolproof against criticism, empty of empirical meaning.

It is, however, precisely this continual shift from a specious set of propositions to an empty tautology that may strengthen the survival value of this approach. The tautology lends it an air of scientific truth, the speciousness an impression of significance. Thus tautologies take such forms as the proposition that countries grow because they have propensities to grow, where the test of the presence of the propensity is actual growth,¹ or that civilizations flower be-

¹ "There are, then, two ways of distinguishing the propensities from the economic decisions to which they relate and of indicating the sense in which they may be regarded themselves as conceptually quantitative. . . . the propensities would define a

cause a suitable challenge meets with a proper response, where the test of the suitability of the challenge is the flowering of the civilization; or that it is the changing sequence of leading sectors that characterizes the stages of growth, where leading sectors are simply those that happen to be ahead of the others; or that industries are bound to grow at a decelerating rate beyond a certain stage, where the definition of industry abstracts from technical progress.¹ Clearly, all such propositions can be given empirical content. But insofar as the theories of the stages of growth contain empirical, and therefore refutable, propositions, they tend to select factors and to analyze their relationships in a manner that often neglects important differences in the experience of different countries at different periods.

It should not be concluded from what has been said that generalizing from empirical research or attempting to discover a common characteristic in the history and experience of different countries at different periods is either undesirable or impossible.² Scholars like Simon Kuznets have shown that such

relation between the level of real income and allocation of resources to fundamental science, applied science, and consumption. The propensity to apply potential innovations would show the quantitative relation between the level of income and the proportion of potential innovations accepted. With a given population, the propensity to have children would define the relation between changes in income and the number of births." (W. W. Rostow, *The Process of Economic Growth*, 2nd ed., Oxford University Press, London, 1960, p. 33.)

"By an alternative method, which is conceptually more precise but less susceptible of statistical investigation, one might regard the propensities as reflecting, for any short period of time, the response of a society to changes in the yields believed to be associated with the allocation of the resources in various directions. This approach involves certain difficulties." (*Ibid.*, p. 34.)

¹ E.g., Rostow, *Stages of Economic Growth*, p. 13, and *The Process of Economic Growth*, pp. 101 ff.

Whether, for example, the textile industry has followed a decelerating path depends on the definition used: if synthetic fibres are excluded, the proposition is true; if not, it is false. The more we disaggregate (e.g., specific processes of spinning or weaving wool or cotton), the greater becomes the number of decelerating growth paths in a growing economy if there is technical progress, and conversely. The succession: cotton, pig iron, steel, heavy engineering, shows deceleration in each sector, but if we chose clothing, transport, and all forms of engineering, it would not.

² ". . . there is, within a fairly wide margin, nothing wrong in principle with an approach which concentrates upon the interspatial similarities in industrial development. The existence of such similarities is very real. Their study yields attractive simplicities, but it does so at the price of dismissing some refractory facts which a historian will ignore at his own peril. Those who see the essence of industrialization in the establishment of a strong and independent manufacturing enterprise need only to look diagonally across the previous tabulation in order to find such an enterprise in existence everywhere — in advanced England as well as in lagging Germany or in very backward Russia. Seen *in latum et in longum* — which are the easy dimensions — Russia is like Germany and Germany is like England. But to say this is to debar oneself from looking into the *depth* of history, that is to say, from perceiving the industrialization in the making. What is the story of Central European industrializations without the role of the banks in the process? What is the Russian industrialization of the 1890s without the Ministry of Finance?

"The point, however, is not simply that these were important occurrences which

generalizations are both possible and valuable. Research into the changing importance of different sectors or the changing distribution of income by size, occupation, and region, or into sectoral savings, investment, capital/output ratios, population trends, urbanization, and so on, forms an essential part of any comparative analysis of development. But such comparisons, precisely because they try to take into account all relevant material, do not overlook differences in initial and subsequent situations or in their causes and effects. They yield no all-embracing explanations; only limited insights.

In Chapter 14 we discuss the differences in initial conditions as between the South Asian countries and the advanced Western countries when they were at a more or less "comparable" level of development. In doing so we make no use of the theory of stages of growth; in fact, the results of our analysis are not compatible with that theory.

4 *The Malthusian Theory of Population and Other Models of Circular Causation*

The notion of circular causation, discussed in Sections 2 and 3, covers instances in which a change in one condition causes changes in one or several other conditions *in the same direction* from the point of view of development. Thus in the second round the initial change is supported by consequential impulses, which in turn give rise to repercussions, magnifying the initial change. Circular causation thus starts a cumulative process in one direction or the other.

If, instead, an initial change in one condition gives rise to secondary changes going *in the opposite direction*, the cumulative process will be hampered or will even end in the restoration of equilibrium. The classical example of an economic model that postulates self-correcting movements within fairly narrow limits, so that equilibrium is restored, is Malthus' theory of population. Like the stage theorists, Malthus begins with a "propensity" and a "yield." The "propensity" is the "passion between the sexes," which he deems "in every age so nearly the same, that it may always be considered, in algebraic language, as a given quantity." The "yield" is the limited "power of the earth to produce subsistence." It is, of course, well known that Malthus' predictions, which he derived from his model, were mistaken because his assumptions were both inadequate and faulty. In particular he ignored the growth of imports of cheap

have just claims on the historian's attention. What matters in the present connection is that observing the individual methods of financing industrial growth helps us to understand the crucial problem of prerequisites for industrial development." (Gerschenkron, *Economic Backwardness in Historical Perspective*, pp. 355-356.)

¹ In its simplest form, the theory assumes constant fertility rates and the tendency of food production to increase less rapidly than population. Anything that has the effect of raising real wages, whether redistribution from the rich to the poor, or a rise in labor productivity due to improved techniques or to an increase in cooperating factors, will tend to decrease mortality and speed up population growth. The resulting increase in the supply of labor will in time reverse the rise in wages and tend to lower them again to the level at which they are just sufficient to cover the cost of reproducing the labor force. Mortality would tend to rise to that rate at which equilibrium between the size of the labor force and the demand for labor is re-established.

food from abroad and underestimated the rapid rise of productivity in both agriculture and industry at home.

Leibenstein has recently formulated more rigorously the Malthusian model¹ and other constructs. Some of his models are stable like Malthus', higher per capita income leading to population growth through falling mortality, and hence to a reduction in incomes. Others are stable within a range but unstable outside it, because, for example, higher investment, induced by the rise in incomes, outpaces population growth.² Others again are unstable throughout.

Leibenstein's various models bring out the fact that the response to an initial impulse may either reinforce or counteract it. We can therefore construct either Malthusian stable or fluctuating models or models of cumulative growth or decline or, given certain thresholds, a combination of fluctuations and trends. If one abstracts from all the other factors on which population growth depends, everything in these models depends on the population response to income changes. But income changes are only one of the determinants of population growth and under South Asian conditions they are insignificant;³ in any case this response is only one among a series of forces making for or against stability, just as the investment response is only one of many responses to an autonomous rise in per capita incomes.⁴ Nor is the *ceteris paribus* assumption justified.

¹ "Briefly, the mechanism is as follows: Any event that increases incomes will, at first, also increase the rate of population growth. This, in turn, implies an increase in the labor force, and both capital and land per worker are accordingly reduced. Furthermore, this tends to reduce income per capita, which depresses the 'induced' rate of population growth, if not the actual rate. The end result may be the sort of fluctuations around an equilibrium subsistence income considered previously." (Leibenstein, *Economic Backwardness and Economic Growth*, p. 56.)

"This growth will occur for one of two reasons. Either the growth in incomes will be transformed into consumption that is conducive to the reduction of mortality rates, or there may be secular changes that lead to improved knowledge, sanitation, or other public health measures, that in turn reduce mortality rates. In any event, the consequence of the operation of these forces will be an increase in the population size and, assuming decreasing returns with respect to increases in labor, a consequent reduction of per capita income. If the system is stable, the reductions in per capita incomes will proceed apace until per capita income reaches a 'subsistence equilibrium level.' That is to say, a level where the economy finds it possible just to replace those resources that wear out during the period, and just to maintain the population. This, in brief, is a description of a system that possesses a stable equilibrium with respect to average income. The system permits the occurrence of outside events the initial effect of which may be to increase resources per head, but eventually there is a return to the initial equilibrium per capita income while other magnitudes remain at their expanded level." (*Ibid.*, p. 20.)

² "This implies that unless the original increment in average income is large enough the system cannot be unstable even under the favorable condition that the income gain multiplier (M) is larger than the population multiplier (m). Furthermore, this also implies that a small injection of new capital may fail to improve living conditions in the long run, while a sufficiently large injection may succeed. Thus, if a program to increase capital resources cannot be carried out on a sufficiently large scale it may not be worth while to attempt to carry out such a program at all." (Harvey Leibenstein, *A Theory of Economic-Demographic Development*, Princeton University Press, Princeton, N.J., 1954, p. 58.)

³ Chapter 27, Sections 2, 7, 12, *et passim*.

⁴ "We could, for example, have considered an X-function and a Z-function where X represented those forces that were monotonic increasing functions of per capita in-

Neither the forces resisting development nor those reinforcing it are independent of each other. We therefore cannot call any one of them crucial. Since, as we shall see in Part II of this appendix, a series of retarding or reversing forces are related to each other in such a way that the removal of one affects some or all others, the social system does not permit simplification by singling out one crucial force reversing development because several forces interact. Even Leibenstein, who operates with several forces, tends to give principal stress to population responses.¹

Our discussion of the Malthusian model has brought out the great variety of possibilities of interdependence. A number of forces may interact, each responding in an upward direction to an initial improvement, and yet the initial equilibrium may be stable. Alternatively, there may be forces, acting either independently or in response to the initial changes, that counteract the positive forces and restore equilibrium. The initial equilibrium may be stable, so that small variations will tend to return the system to its initial state, or unstable, so that small changes will move it further and further away. Theoretical models in which small changes give rise to self-correcting movements that restore equilibrium, while changes beyond a critical size lead to cumulative processes, must assume certain thresholds at which the degree of sensitivity changes or at which the strength of the counteracting forces is weakened or reversed. Theories of the "minimum critical effort" and the "big push" tend to be of this type. We shall discuss these theories as they relate to the development problems of South Asian countries in the following parts of this appendix.²

II

Underdevelopment and Development

5 Categories of Conditions

We conceive of the situation in each South Asian country — as in any other country — as a *social system*. The system consists of a great number of *condi-*

come which, above some income level, tended to raise incomes further, and below some per capita income level tended to reduce them, while the Z forces reduced incomes, when incomes were above some specified level and raised them below that level. . . . *the main point, of course, is that these abstract and simple models enable us to see the process of economic change as one in which the outcome depends on a struggle between conflicting forces that operate simultaneously . . .*" (Leibenstein, *Economic Backwardness and Economic Growth*, p. 29.)

¹ *A Theory of Economic-Demographic Development*, p. 55, and *Economic Backwardness and Economic Growth*.

² Knut Wicksell's theory of the cumulative process that results from a deviation of the natural from the market rate of interest is another example of the application of the notion of circular causation. (Gunnar Myrdal, *Monetary Equilibrium*, William Hodge & Co., London, 1939, pp. 24 ff.) The writer's early attempt to use in a more systematic way the idea of circular causation in the study of underdevelopment and

tions that are causally interrelated, in that a change in one will cause changes in the others. We classify the conditions in six broad categories:

- (1) output and incomes;
- (2) conditions of production;
- (3) levels of living;
- (4) attitudes toward life and work;
- (5) institutions;
- (6) policies.

This structure of categories represents the conditions in a country viewed from the "economic" angle, which corresponds to the focus of the present study. The conditions in the first three categories represent broadly what is usually referred to as the "economic factors," while categories 4 and 5 represent the "non-economic" ones; category 6 is a mixture and is usually considered to belong to the "economic factors" when policies aim at inducing changes in conditions 1-3, but not otherwise. Often only categories 1 and 2 are considered in "economic" analysis. In the social system there is, however, no up and down, no primary and secondary, and economic conditions do not have precedence over the others. The demonstration and analysis of the interdependence pervading the system could just as well have been made from another angle, and the conditions classified in different categories and in a different order. Such classification would have covered the same social reality and would have had the same analytical content.

We shall consider here only categories 1-5, leaving category 6 for separate treatment in Parts III and IV of this appendix. The conditions in categories 1-5 are viewed as in different degrees "undesirable" from the point of view of *development*. The general problem of valuations will be discussed in Part III, but we can broadly say that judging conditions, and changes in conditions, from the viewpoint of development represents the application of the value premises of this study, discussed in Chapter 2. For the moment we are simply assuming that in the South Asian countries the various conditions can be categorically called *undesirable* because a one-way change in them is deemed desirable for engendering and sustaining development. The meaning of development will be clarified in Sections 6 and 7. A change of a condition in the direction of greater desirability from the development point of view will be called a change "upwards," and one in the opposite direction will be called a change "downwards." To begin with, we shall assume *uni-directional causal relationships* between the various conditions: a change in one condition will be assumed to tend to change the others in the same direction, upwards or downwards. In Section 11 we shall comment on exceptions to this rule.

We define the categories so that they refer to the national community as a whole or to any section, region, group, family, or individual — except the conditions in the fifth and sixth categories (institutions and policies), which can refer only to the national community or any of the sectional or spatially smaller communities. When no other sense is specified, we refer to the national community.

development, referred to in the second footnote to this appendix, was inspired by Wicksell; see *An American Dilemma*, pp. 1065 ff.

(1) *Output and incomes.* From an economic standpoint the most important general characteristic of the state of underdevelopment of the South Asian countries is low average labor productivity, and, consequently, a low national product per member of the labor force; the other side of this situation is a low national income per worker or per head of the population.¹ For reasons given in Section 7 below, this particular undesirable condition — low average labor productivity and low national income per head — can, with a number of qualifications, be taken as an approximate indication of all the others, that is, as an (imperfect) index of the level of underdevelopment in a country. It is not, however, a definition of "underdevelopment," nor is its upward change used as a definition of "development."

(2) *Conditions of production.* Together with low output per worker and low income per head another set of conditions affects the structure of the economy and the direction and intensity of economic activity, which are causes of low labor productivity and low income per head.

The industrial sector, and particularly organized large-scale industry, is small. In all other sectors, but especially in agriculture, crafts, and traditional industry, techniques of production are primitive and capital intensity is low. The savings/income ratio is low,² and therefore savings per member of the labor force and per head are lower still.³ There is little enterprise, particularly in long-term productive investments. The overhead capital in the form of roads, railways, ports, power plants, and so forth, is inadequate. Labor utilization is low in regard to participation and duration (which together determine labor input), and labor efficiency.⁴ This list can be enlarged and specified *ad libitum*.

These conditions are directly related to each other in the uni-directional way mentioned above. Thus the low savings ratio tends to keep down the formation of capital. Crude production techniques are partly the result of low capital intensity, insofar as more advanced techniques would require more capital per man. The same is true of the distribution of the labor force between the different sectors of the economy, and the relative size of these sectors: too many are occupied in activities requiring little or no capital, too few in those that require more capital and would raise output. Low labor input and low labor efficiency are in part a result of primitive techniques and lack of capital, wherever techniques employed and tools and machines available determine labor input and efficiency.

These conditions are, moreover, causes of the conditions in category 1 — low labor productivity and low incomes — while they are also, directly or indirectly,

¹ We abstract from differences in age and sex distribution and from differences in social customs with regard to work in different age and sex groups.

More generally, we abstract for the moment from the difficulties of aggregation in the underdeveloped countries of South Asia. See Section 23 below and Appendix 3, Section 5.

² For the difficulties of defining "savings" see Chapter 12, Section 2.

³ The relationship is as follows:

$$\frac{\text{Savings}}{\text{Income}} = \frac{\text{Savings}}{\text{Labor Force}} \times \frac{\text{Labor Force}}{\text{Population}} \times \frac{\text{Population}}{\text{Income}}$$

⁴ For a definition of these terms see Chapter 21, Section 15.

caused by them. Thus low incomes keep down total savings (even though the savings ratio in some income brackets is often remarkably high, compared with that in similar groups in rich countries) and lead to the undesirable effects mentioned above — low capital formation, poor techniques, low labor productivity.

(3) *Levels of living.* In the underdeveloped countries of South Asia levels of living tend to be low for the mass of the people and to manifest specific quantitative and qualitative deficiencies: insufficient food intake; bad housing conditions; inadequate public and private provision for hygiene and medical care; insufficient facilities for vocational and professional instruction and for training at all levels; and, more generally, insufficient educational and cultural facilities of all sorts.¹

The low levels of living are caused mainly by the low levels of productivity and incomes. In the opposite direction the low levels of living cause low input and efficiency of labor, which in turn are among the causes of low incomes. This triangular causal relationship between productivity and incomes, levels of living, and labor input and efficiency is among the crucial determinants of underdevelopment.²

(4) *Attitudes toward life and work.* The prevailing attitudes and patterns of individual performance in life and at work are from the development point of view deficient in various respects: low levels of work discipline, punctuality, and orderliness; superstitious beliefs and irrational outlook; lack of alertness, adaptability, ambition, and general readiness for change and experiment; contempt for manual work; submissiveness to authority and exploitation; low aptitude for cooperation; low standards of personal hygiene; and so on.

To these attitudes should be added unreadiness for deliberate and sustained birth control. The steep and accelerating rise in population in these countries is a principal cause of poverty,³ and birth control is the only means of checking this trend since we cannot wish to increase mortality or even check its continuing decline.⁴

All the other attitudes have indirectly the same effects by causing less favorable conditions of production under category 2, and by making the use of incomes for the achievement of the highest possible levels of living less effective. Thus low standards of personal hygiene are detrimental to health, and therefore to fitness for work and enterprise — apart from the ill health attributable to the lack of medical facilities.

In the opposite direction of causation, these undesirable attitudes and patterns of performance in life and at work are all, to some extent, a function of the low levels of living and thus, indirectly, of output and income, at the same time that they are a cause. Here is another causal relationship crucial for the explanation of underdevelopment.

¹ In this system of concepts low levels of health and literacy and of other intellectual aptitudes and capacities are not in themselves part of levels of living but the consequence of them and of conditions under categories 4 and 5.

² Section 21.

³ See Chapter 28, Part I; and Section 10 below.

⁴ Chapter 28, Section 9.

(5) *Institutions.* The national community is also characterized by a number of institutional conditions unfavorable for economic development: notably a land tenure system detrimental to agricultural advance; undeveloped institutions for enterprise, employment, trade, and credit; deficiencies of national consolidation; imperfections in the authority of government agencies; instability and low effectiveness in national politics; low standards of efficiency and integrity in public administration; ineffective organs for provincial and local self-government; and a weak infrastructure of voluntary organizations — the institutional conditions which together constitute these national communities as “soft states” in our terminology.¹ At the root of all these institutional debilities is a low degree of popular participation and a rigid, inegalitarian social stratification.

All these institutional deficiencies are closely interrelated. So are attitudes and institutions; attitudes generally support the institutions and at the same time are supported by them. Through their effects on conditions in categories 2, 3, and 4 — conditions of production, levels of living, and attitudes toward life and work — this whole set of unfavorable institutional conditions shares responsibility for the low levels of productivity and low incomes and thus also, indirectly, for the low levels of living. At the same time the low incomes and the low levels of living and, in particular, the low levels of literacy and education perpetuate the deficiencies in communal institutions.

The preceding enumeration and comments are in the broadest terms our “theory.” They are made to demonstrate in the abstract the mechanism of causal interdependence of all the undesirable conditions in an underdeveloped country. The analysis of this mechanism, to which this study hopes to contribute, will have to do two things:

First, it must break up the broad categories, in order to make the list more complete; define clearly and specify in greater detail the conditions for a fuller analysis; and attempt to measure the conditions thus listed, defined, and specified.

Secondly, it must characterize the nature and measure the extent of their interaction, that is, ascertain whether, and if so when, how, and by how much, a change in one of the conditions causes any of the other conditions in the same category or in other categories to change in the same direction.

(1)–(5) *“Economic factors” versus attitudes and institutions.* In general, the causal connections between the conditions in the first three categories depend on the conditions in the “non-economic” categories 4 and 5. Many economic models and the major part of the work on planning for development in South Asia are based on certain assumptions usually left implicit, or abstract and unclear. The three main ones are:

- (a) That analysis can be safely concentrated on the interaction of the conditions in categories 1–3 and on those policies in 6 that are directed at inducing changes in conditions 1–3. Frequently even category 3 is left out of account.
- (b) That the chain of causation between the conditions considered is not impeded by attitudes and institutions.

¹ Chapter 18, Sections 13 and 14 *et passim*.

- (c) That the conditions under 4 and 5 (attitudes and institutions) are highly responsive to changes in 1-3 or even 1 and 2.

The last and basic assumption often amounts to an acceptance, indeed an amplification, of the Marxian hypothesis that the whole culture is a superstructure erected on the "modes of production" and thus simply a function of the "economic" conditions under 1 and 2. Hardly any attempt is made to test or prove this hypothesis, which is usually merely implicit in the analysis. Alternatively, various reservations and qualifications illustrated by selected examples are made in the text, which, however, do not materially affect the main line of reasoning and the inferences for policy drawn from it.¹

In reality the attitudes and institutions are, as we shall point out, stubborn and not easily changed, least of all indirectly. Little reliance can be placed on the indirect effects of changes in categories 1-3 and still less in only 1 and 2. Attitudes and institutions represent heavy elements of social inertia that hamper and slow down the circular causation within the social system among the conditions in these categories. This, expressed in the most abstract terms, is the general reason for adopting what is customarily called an "institutional approach," which focusses the study of underdevelopment and development on attitudinal and institutional problems.² For the practice of planning, this implies the need for policies aimed at changing conditions under 4 and 5 directly and the futility of relying on the indirect effects of changes induced by conditions 1-3, or only 1 and 2.³

(6) *Policies.* On the assumption of complete *laissez faire*, that is, in the absence of policies, the social system would, as a result of primary changes and the interaction of all the conditions in categories 1-5, move in such a way that, depending on the initial situation and the coefficients of response to changes of the various conditions, there would be either an unchanged level of underdevelopment, which is to say stagnation, or else development to a higher level or a regression to a lower level. Policies, i.e., conditions in category 6, represent induced changes, applied to one or several of the conditions in categories 2-5. (Conditions under 1 cannot be influenced directly if we except pressure on other countries to give grants.) *Planning means coordination of policies in order to attain or speed up development.* Parts III and IV of this appendix will be devoted to the problem of plan-induced changes in the social system.

6 Conditions Differ but the Approach Is Generally Applicable

Conditions differ widely, of course, among the several countries in South Asia, as is pointed out in various parts of this study. Pakistan and India are the poorest. Average income is three and a half times as high in Malaya — and perhaps twice as high again in Singapore. The other countries fall between these two extremes. Health and educational facilities are usually better in the

¹ To this we shall return in Sections 14 and 19-21 and in Appendix 3, Section 3. See also Prologue, Sections 5-8.

² Prologue, Section 8, and below Sections 9, 19-21.

³ See below, Sections 20 and 21, *et passim*.

less poor countries. Agricultural techniques, capitalization, and yields are much higher on the plantations, particularly the large ones, most of which are owned and managed by Europeans. Plantations are more prominent in the economies of Malaya, Ceylon, and Indonesia than in the other countries of the region. In Southeast Asia more land is available for new cultivation. Among the Chinese population in Malaya and in some of the other countries, there is abundant enterprise. Some peasants also respond more to changes in profitability within the framework of traditional agriculture. Serious under-nutrition is a general cause of low labor efficiency mainly in India and Pakistan, though qualitative deficiencies are present in all the other countries. India, on the other hand, is further along the road to an indigenous industrialization. National consolidation is more advanced in India and political life and administration are marked by higher levels of efficiency and honesty there than in most, if not all, of the other South Asian countries. On the other hand, India's social stratification is more inegalitarian and rigid. Natural population increase is still somewhat lower on the Indian subcontinent — because of lower survival rates, related to lower levels of income and of living, including public health facilities — than in most other South Asian countries, though very much higher than in the Western world. But the less favorable relationship of population to land and natural resources in India and Pakistan and the lower levels of income that make it more difficult to reach a higher savings quota may be more detrimental to development on the Indian subcontinent than comparative rates of population increase alone would suggest. This inference is strengthened when we take into account the probability or near certainty that India and Pakistan, with an already huge population base, will experience an increase in the rate of growth unless, or until, more effective policy measures are taken to check new births.

In measuring the levels of the various conditions subsumed under the first five main categories, we shall also find important regional and sectional differences within each country. Individual differences are, of course, even wider, depending mainly on the disposal of land and other wealth and, more generally, on the position of individual in the social structure, which determines not only their share of income, their levels of living, and, consequently, their health and education, but also their attitudes, and thus their behavior in regard to the conditions in category 2 and ultimately to all conditions in categories 1-5. But allowing for these differences between and within the several national communities, all the South Asian countries regard themselves as "underdeveloped."¹ This is important because the people's desire for development — or rather the desire of those who think, speak, decide, and act on their behalf — implies an interest in inducing changes in all the conditions enumerated in the preceding section — institutions, attitudes toward life and work, levels of living, conditions of production, and, consequently, productivity and incomes. Unlike the geographical location, climate, and natural resources of these countries, the unfavorable conditions enumerated in categories 1-5 are not fixed but can, in principle, be altered by policies.

They are all in that sense "social" conditions. The social sciences today do not

¹ Appendix 1.

reckon with inborn differences in capacities and aptitudes between the peoples in South Asia and those in the rich Western or Communist countries. Hereditary differences in physical and mental make-up tending toward a low level of development in the countries of this area cannot be excluded, of course, but they have not so far been demonstrated. On the evidence brought to light by recent research on group differences in inherited qualities, we may legitimately assume that, even if such differences exist, they cannot be large enough to contribute substantially to the prevalence of these undesirable conditions. The "development" at which every country in the region aims, and which, with varying effectiveness, it tries to promote by planning and state policies, is, indeed, defined as improvement in precisely those conditions in the social system that are not rigidly imposed by nature.

When conditions are characterized as in various respects undesirable for an underdeveloped country, this judgment is made not from the speculative and *a priori* point of view of some form of "welfare economics";¹ nor is it made in terms of some postulated absolute ethical norms. The conditions are deemed unfavorable simply from the point of view of the concrete development goals of the people of that country or, more precisely, of those who in that country decide policy. In particular, a moralistic attitude toward the conditions in our fourth and fifth categories — attitudes toward life and work and community institutions — has no place in an analysis such as this, concerned with causal relationships. For its major assumption, exemplified above and discussed further in the following sections, is mutual dependence through circular causation; this is also the main methodological hypothesis for the whole study. The deficiencies in attitudes and institutions are viewed as being caused by each other and by the deficiencies in (1) productivity and incomes, (2) conditions of production, and (3) levels of living; these in turn have resulted, in part, from the inherited framework of (4) attitudes and (5) institutions. Our analysis assumes that the people in these countries are not by nature different from those who have had a more fortunate economic fate; their circumstances are simply the result of different conditions of living and working both now and in the past.

Although our interest is focussed on the underdeveloped countries in the South Asian region, the interdependence of various conditions of life and work is, of course, a general characteristic of organized society and thus present in every national community, however highly developed. But a low level of development has, as we shall find, important consequences not only for the character but also for the strength of that interdependence.² Our assumption of an entire social system of interdependent conditions has, for this reason, much greater relevance in South Asia.

7 *The Valuation of Changes in the Social System and the Index of Development*

The uni-directional causal interdependence of the various undesirable conditions in our list, which we have assumed as a first approximation, implies that

¹ See Section 14 below and Prologue, Section 9.

² See below, Sections 19 and 20.

an upward change in any one of these conditions has, in addition to the "independent" value attached to it, an "instrumental" value, dependent on the effect of such a change on the upward movement of other conditions, and thus of the whole system. The "independent" valuation may in turn be instrumental to some values that lie outside the social system, or it may be desired for its own sake.

The independent value of a change is most apparent for the components of our third category: levels of living. Adequate food, better housing, improved facilities for health, education, and training, and general improvement of cultural facilities are all desirable in their own right and as means to the fuller development of the human personality, and are to that extent independent of their effects on other conditions and, in particular, on productivity and incomes. The independent positive valuation of an upward movement in conditions in the social system other than levels of living is less evident. In the traditional valuations in an underdeveloped country some of the upward changes in other conditions, and especially those in categories 2, 4, and 5, might even be negatively valued.¹ Insofar, however, as people in an underdeveloped country become more intensively interested in development, it can be seen that all conditions tend to acquire an independent valuation in line with the desire for development. The less desirable conditions for production and even attitudes and institutional conditions that are adverse to development are increasingly regarded as characteristics of backwardness and an independent value is attached to their improvement, in line with levels of living. This is a major effect of the spread of the modernization ideology. This tendency in an underdeveloped country to attach an independent positive valuation not only to development as a whole, but to each of the various changes in those interdependent conditions that are in line with development, gives more force to the urge for development itself.

Still more basic to the conception of development is, however, the notion of a causal interdependence of the various conditions and the implied notion that a change upwards in one of the less desirable conditions has an instrumental value because of its ability to cause upward changes in other conditions. It is this interdependence that makes it possible to regard those conditions as forming a "social system" and to define development as the movement upwards of that entire system. This definition of development — and the implied definition of underdevelopment — clearly suffers from vagueness, particularly when we want to specify a "rate of development." The vagueness stems from the lack of logical precision and homogeneity in the valuations. To bring to light this vagueness, by determining its basis and its limits, serves logical clarity.² Contrariwise, to define development more precisely than is justified is logically faulty and yields "persuasive definitions."

The indeterminacy in the concept becomes apparent when we attempt to measure it by an index. In the same way as the causal interrelationships of individual prices in a price system, also largely circular, allow the movement of that system as a whole to be represented by a price index so, subject to the

¹ Chapter 3, Section 1 *et passim*.

² Chapter 2, Section 2; and Appendix 1.

arbitrariness common to all indexes, the relative level of underdevelopment and the movement toward levels of conditions that are higher from a development point of view could, in principle, be represented by an index, calculated as an average of the levels of the various interrelated conditions at a point of time, weighted by the valuations attached to each component. In a sense, the idea of an index measuring the position, and the changes in position, of the social system as a whole is implicit in the thought of that system and in the application to that system of the dynamic conception of development.¹

The weighting, however, is a much more complicated task. A change upwards in any of the several conditions in this system has, as was pointed out, two types of value: an independent value and an instrumental value depending on how much it causes other conditions to move. Higher levels of nutrition and housing, or improved health, educational, and cultural facilities, are of course important improvements in themselves; at the same time, they raise, in varying degree, labor input and efficiency and thus output. In the opposite direction, higher levels of efficiency, income, and output are instrumental in raising the level of living. *Mutatis mutandis* the same is true of improved attitudes and patterns of behavior in a great many respects, and of improved social institutions, such as, for instance, more effective and honest administrations or social orders free of caste distinctions. It is thus very difficult to arrive at an accurate basis for weighting the several conditions in the social system. Indeed, at the present stage of our knowledge of conditions in the South Asian countries and their interdependence it is impossible to attach weights with any degree of accuracy, for two reasons: uncertainty about and the heterogeneity of people's independent valuations of improvements of the several conditions, and lack of accurate knowledge of the actual conditions and the causal interrelationships that determine the instrumental value of an improvement in one of the conditions for improving, directly and indirectly, the others. Subject to this inescapable indeterminacy, *the movement of the whole social system upwards is what all of us in fact mean by development*. There is no escape from this, if we want to be "realistic."

In this situation, it is understandable and defensible that we turn to some *indication* of development that is easier to ascertain and measure than the ideal index. The rate of growth of the national product or income per head of the population is then a natural choice. Two general observations are pertinent. One concerns the reasons why—within wide margins of uncertainty—the increase in national income per head can serve as an indication of the movement of the entire social system. These reasons are, first of course, the basic interdependence of all conditions that makes it possible to conceive of them as constituting a social system; secondly, the dominant importance of people's incomes for their levels of living; thirdly, our assumption that levels of living are important, at least in the longer run, even for attitudes, patterns of behavior, and institutions; and, fourthly, our knowledge that if the latter conditions do not change or if they lag very much, this will show up by preventing productivity and incomes from rising substantially. The second observation is that "development" cannot be *defined* in terms of growth of national income

¹ Myrdal, *An American Dilemma*, p. 1068.

per head, but has to be defined as the upward movement of the entire social system. It might be argued that anyone is free to define his terms in any manner he wishes. But the difficulty with the term development is that we actually mean something much broader, as we easily discover if we watch our own inferences. The concept has also strong value connotations. We must avoid defining development in a way that would give rise to contradictions between our definition and the value implications the term carries in actual use.

A change in national income per head can thus never be used as more than a rough and ready *indicator* of that more complex change in the whole social system that we really want to record. This indicator is only a crude way of estimating development, not only for the well-known reasons that every index is necessarily arbitrary, that the statistical basis in an underdeveloped country, even for such basic magnitudes as production, income, and population, is inadequate, and that income distribution, the age and sex structure, leisure time, and so on, are neglected, but also for two more fundamental reasons: first, people's desires for development actually include the desire to improve many other conditions, which have independent as well as instrumental values for them; secondly, the interdependence of all conditions is not such that secondary changes in response to an initial impulse from income are always reinforcing;¹ and when they are, their size is not proportional in all sectors and for all groups and subgroups of conditions.

Still another note of caution should be sounded. The resort to a magnitude like the increase in income per head as an indicator of development should not be permitted to cause an undue concentration of interest on the more easily accessible "economic" conditions and in this way bias the choice of changes to be induced in the system, and thus of policies when planning for development. Undoubtedly, however, this "definition" of development and the concentration on the more easily measurable factors are partly responsible, in many countries, for turning planning in a more "materialistic" direction than would be rational from the point of view of people's actual valuations and of what we know about how "economic" conditions are, in fact, influenced by "non-economic" ones: this is recognized in a general way when it is said that in the final analysis "development is a human problem."²

The term "national income" or "product" is not in itself a very clear concept.³ In the more than two hundred-year-old tradition of economic theory, the recognition that magnitudes like the rate of growth of national income per head are inadequate to account fully for our conception of development has, in principle, been allowed for in at least one respect, namely, by a general qualification for income distribution. We cannot abstract, however, from distribution, because size and distribution of the national income are logically inseparable.⁴ Moreover, particularly in a changing society, the weights attached to the heterogeneous collection of goods and services that make up the "national income"

¹ See below, Section 11.

² See below, Sections 19 and 20.

³ Chapter 11, Section 1.

⁴ Gunnar Myrdal, *The Political Element in the Development of Economic Theory*, Routledge and Kegan Paul, London, 1953, pp. 129 ff.

depend on attitudes, behavior patterns, and institutions, which in turn change as a result of development. Thus the problem is not merely how to make the wants of different individuals commensurable, but also how to weight intertemporally, for any one individual, his wants as they change in the process of development, and how to weight his wants against his valuations, which may be critical of the wants, and which also change as a result of the movement of the whole social system. Precisely the same logical difficulties that inter-personal comparisons present in a static society, and that have led to the attempt to distinguish between "real income" and "distribution," are created in conditions of development by inter-temporal comparisons — both between generations and within the life span of a single generation. But the difficulties go even deeper. Not only do tastes change with development, but the valuations attached to a system of tastes change also, and they change *as a result* of changes in other conditions in the system. Although aggregate income is valued according to tastes and/or valuations, its increase will change them. To judge the performance of the system by standards that are partly its own creation is therefore circular.

8 *Circular Causation and Cumulative Change*

Let us return to the basic concept of the social system. The underlying idea is that the several undesirable conditions, abstractly categorized in Section 5, "cause" each other, directly and indirectly. If these conditions for a country were to be completely listed and specified so as to serve ideally the purpose of intensive analysis, and if all the causal interrelationships were assessed correctly, we could give a full explanation in terms of causes and effects, why things are as they are at a particular point in time and why they change as they do, or why they do not change.

This is the sense in which, in regard to a stagnant society, we say that "a country is poor because it is poor." The movement of the system, if and when it moves, would then also be fully explained. Over a period of time a change in any one of the conditions will tend to change other conditions. The important thing is then that as the conditions have been defined and organized in our list in terms of their being undesirable from the point of view of the development goals, these secondary changes must generally go in the same direction as the primary changes. We abstract for the moment from exceptions to this general rule.¹ Each one of the secondary changes will then in its turn exert a tertiary influence on other conditions in the entire social system, including the condition that had experienced the primary change, and so on. If initially the system was in balance, the circular interdependence of the conditions in the social system would thus give rise to a cumulative process of change of that entire system, proceeding in the same direction as the primary change and affecting most or all conditions in the system. If, as is more probable, the system is not in balance but already changing in one direction or another, and if there is not one primary change but a number of simultaneous changes, the causal interdependence within the system would also make this more complex process cumulative.

The primary changes can come from outside the social system — for in-

¹ See Section 11.

stance, by the accident of a good or bad monsoon that affects crops, or of economic policy measures applied by foreign countries. Or they can be induced by policy measures (category 6) taken within the country itself and directed at improving one or several unfavorable conditions within the country. The primary changes can be once-for-all, or they can operate over a limited period of time, or permanently.

Prima facie this causal interdependence would seem to indicate a highly unstable social system. It is, of course, conceivable that at a particular point in time the various conditions should have attained precisely such levels as to represent a balance between the forces. This would imply a perpetuation of prevailing conditions from that point in time to the next. But, first, there would seem to be no reason to expect that, except by rare chance, a social system would ever fulfill the requirements of such balance. Secondly, the balance, if established, would be broken as soon as some outside event or some policy intervention at home moved one or several of the conditions up or down. Any such change in some conditions would tend to cause other conditions to move in the same direction, and these secondary changes would, in their turn, result in tertiary changes all around the system, and so on in a circular fashion. Normally, one might, on purely theoretical grounds, think that the social system would regularly be moving in one direction or another since impulses to change would be continually fed by circular causation with cumulative effects.

9 *The Forces of Stagnation: (1) Time and Inertia*

In sharp contrast to this expectation are not only the common experience of "low-level equilibrium" in underdeveloped countries and the serious obstacles to development policies, but more generally the astonishing stability of most social systems in history. Balance, far from being the fortuitous result of an unusual and obviously unstable combination of forces, seems to be the rule, not the rare exception. The great bulk of historical, anthropological, and sociological evidence and thought suggests that social stability and equilibrium is the norm and that all societies, and underdeveloped societies in particular, possess institutions of a strongly stabilizing character. In view of these findings the real mystery is how they can escape from equilibrium and can develop. The Western experience of scientific, technological, and economic advance may well be unique: a series of extraordinary circumstances seem to account for the cumulative process of development in Western history — even though the classical economists attempted to explain it by the removal of restraints and thus assumed a spontaneous tendency to develop. In this light the low-level equilibrium and the strong resistances to all attempts to overcome stagnation, characteristic of most underdeveloped countries, no longer appear puzzling. They can be explained by the forces that tend to perpetuate the *status quo* in the face of impulses to change it. This and the following two sections will be devoted to a preliminary analysis of these forces.

We should first note that the reactions of other conditions to a change in any one of them are seldom instantaneous but usually delayed, often for a considerable period. Sometimes there is no reaction in some of the conditions — and

this becomes more important if it happens at an early stage, close to the initial change, so that circular causation via those conditions is stopped. A peasant who has the opportunity of cultivating more and better land or of adopting a technology that will raise yields on the land he already cultivates will not avail himself of these opportunities if he has no ambition to raise his level of living. The reaction of workers to higher wages, or of peasants to higher prices for their products, may be to work less; their incomes do not then increase (though their level of living does move up if leisure is considered a component of it). This type of behavior in pre-industrial Europe and in colonial territories has been given technical formulation in the backward-sloping supply curve.¹ Or institutional conditions, for instance in regard to land tenure, may be such that the peasant can have little rational inducement to exert himself.

The existence of genuine "backward-sloping" in South Asia has been questioned. It is clearly true that Indians and other Asians living outside their native countries often show "forward-sloping" reactions. It may be opportunities that are lacking, rather than the will to seize them, though the distinction is not always easy to draw. Nevertheless, there can be no doubt that in the traditional setting of South Asian societies (excepting to an extent the Chinese) many people are "survival-minded," striving for nothing other than to preserve their customary low levels of living. The very notion of a supply curve of effort is inappropriate, for it presupposes a calculation and weighing of alternatives, which is alien to a mentality whose aspirations are limited by custom and tradition, and it presupposes an institutional system in which efforts are matched by rewards. As always, attitudes and institutions support each other. Although it is uncertain how widespread and deep-seated survival-minded behavior is, it certainly is prevalent in many regions and strata in the South Asian countries. But even where people have followed traditional patterns, the introduction of higher monetary rewards may alter aspirations and reactions. Moreover, the introduction of cash payments, a direct attack on attitudes and institutions through such policies as land reform and the replacement of feudal by contractual relationships may change the way people respond to rewards. But such changes in attitudes and institutions may be difficult to engender or may take time to realize.²

Even apart from attitudes and institutions, reactions to changes may be delayed or altogether absent. An example is the direct relationship between levels of nutrition, the physiology and psychology of workers, and labor input and efficiency. A rise in nutritional levels should have some beneficial short-term effects on workers' health and willingness and ability to work, and thus on production and incomes. But the major effects may be delayed for years. Maximum improvement may not be realized until a new generation of workers, who have enjoyed improved nutrition from childhood, enters the labor force. And

¹ Chapter 21, Section 6.

It would follow, if workers did respond thus and the supply curve was symmetrical, that a *reduction* in wage rates or prices would be the measure appropriate to initiate development. Poll taxes imposed on poor indigenous peasants can be rationalized in this way.

² Cf. Part Five of this book on the problem of labor utilization.

these long-range effects may not occur at all if the rise in nutritional levels is only temporary. Circular causation that could give rise to a cumulative process will then be stopped. Similarly, a lowering of nutritional levels, if moderate and if people remain above starvation, may have only minor short-term effects on the quantity and efficiency of labor input, and more important ones only gradually; the full effects may not be felt until the next generation, and then only if the change has been a lasting one. The same is true for the effects of other changes in levels of living and, behind those, of changes in incomes as the main determinant of those levels.

But certainly the main resistance to change in the social system stems from attitudes and institutions (categories 4 and 5). They are part of an inherited culture and are not easily or rapidly moved in either direction. It will take time and endeavor for people to acquire discipline and habits of punctuality and cooperation, to want to improve their lot, to overcome their contempt for manual work, to become ready to experiment, and to take risks and accept change. And it will take time for the rigidities of an inegalitarian social stratification that supports these attitudes to begin to wear down in response to higher income levels, to more and better facilities for education, and to greater mobility, engendered by economic development. Again, a trend toward the improvement of defective community institutions — for example, increasing honesty and efficiency in the collective organizations for national government, or the spread and improvement of cooperatives and of local self-government — should normally be expected as a long-range effect of rising production; incomes, and levels of living and, in particular, of education, which should raise and improve popular participation. But all the existing community institutions, like the attitudes that are fostered within them and at the same time uphold them, are part of the wider cultural setting, and the results of gradual advances in these other respects may be insignificant for a long time. Even in the very long run, attitudes and community institutions may stay much the same, in spite of all efforts to raise educational levels, if the inegalitarian social stratification remains rigid and the national community remains a "soft state."¹

So far as both attitudes and institutions are concerned, the most important immediate result of higher incomes and levels of living and of anything that more easily and rapidly follows such a general development, may be, and often is, to prepare the ground for, and make more effective, deliberate policy measures directed specifically at improving the attitudes and reforming the institutions themselves, if such policy measures are applied as additional induced changes. Even under the most favorable constellation of all conditions, policies designed to alter people's attitudes and performance and to construct more appropriate and effective community institutions will be difficult to apply and will take time to bear fruit.

The probability that a primary change may not push the system over the threshold into a cumulative process is greater if that change is once-for-all. But even if the primary change is sustained, the sensitivity of all other conditions to that primary change and the speed of their reaction will determine whether

¹ Chapter 18, Sections 13, 14, *et passim*.

a cumulative process will be set off, and will acquire momentum, or whether things will remain at the same level of stagnation or possibly move onto a slightly higher equilibrium. An illustration of such a sustained change would be the introduction of a system of compulsory primary education, which would make literate successive generations of children and eventually the whole population. This process has begun in all the countries of South Asia but has gone far only in Ceylon and Malaya. However, a rigid inegalitarian social structure may stubbornly resist improvements in popular education. The chain of causation from higher educational levels among a people to their readiness to press for and carry out a land reform may thus involve a very long and uncertain process; should a land reform be requisite for changing attitudes and substantially raising yields in agriculture, education will not, through this particular chain of causation, react back on productivity. And continuing poverty will, at the same time, mitigate the effectiveness of the primary efforts to raise educational levels.

A development start focussed on some of the conditions in category 2 — for example, efforts of the government to carry out a policy of planning for development by investments in the infrastructure and in new industries, perhaps promoted by aid and credits from the richer countries — will result fairly promptly in increasing output and incomes in those particular sectors of the economy. There should be “spread effects” to other sectors, but if attitudes and institutions do not respond, or respond only slowly, those spread effects will be weak or absent.¹ This is more likely to happen if the initial development starts are restricted to small sectors of the national economy and do not result in a large rise in levels of output and income outside those sectors. But even with a wider dispersal of development efforts and a wider impact on levels of living among people in all sectors — which would have to be within limits set by available domestic savings, foreign exchange, administrative resources, and so on — the inertia of attitudes and institutions may be formidable. The check to development impulses from this kind of inertia is one of the main reasons why a “take-off” may easily be abortive and not result in “self-sustained growth,” to use the popular terms. It is just as true when the initial development starts are due to the accident of favorable circumstances as when they are induced by government policy.

We shall return to the practical planning problem in Part IV of this appendix when discussing the reasons for coordinating policies and generating a “balanced growth.” At the present stage of the argument we note only that the request for “balance” in the development process has a much wider bearing than on planning in regard to sectors, localities, and the time sequence of investments and other economic development stimuli and restrictions. Planners are confronted with the problem of how to strengthen the generally weak and tardy effects on attitudes and institutions exerted by the development starts themselves and the more immediate induced changes in the incomes and levels of living of some portion of the population.

¹ See Chapter 24, Sections 7–9.

The general reason why this factor of inertia may prevent a development process from becoming self-sustained or, at least, delay this event is that circular causation will give rise to a cumulative movement only when, by the interaction of all conditions in the social system, a change in one of the conditions will ultimately be followed by a feed-back of secondary impulses to a further change of that particular condition big enough not only to sustain the primary change, but to push it further.¹ Mere mutual causation is not enough to create this process; otherwise the ubiquity of mutual causation would be inconsistent with the widely observed stability of social systems. The relationship between the size of the coefficients of response and the speed of the response will determine whether mutual causation results in stable, neutral, or unstable equilibrium. This means that the task of planning may be much more difficult; planning not only must set in motion initial and sustained impulses, but also has to try to alter the coefficients of response and speed up the responses if stability is to be transformed into a cumulative upward movement.

If this is not done, the social system will easily slip back to the earlier level or move only to a new low-equilibrium level. The development starts will remain “enclaves” as in colonial times. That there are “thresholds” to pass is a well-known fact in psychology as well as in physiology; in economic theory this thought is expressed by the concept of stability of equilibrium within limits and cumulative processes beyond them, so that the functional relationships of the interacting variables are not linear.

10 *The Forces of Stagnation: (2) Independent Counteracting Changes*

The likelihood that policy-induced changes of conditions will give rise to a cumulative process upwards of some considerable momentum is, of course, further reduced if there are other changes working simultaneously in the opposite direction.

All the South Asian countries are now, though in different ways and with different degrees of effectiveness, instigating development policies in many directions: they are investing in social and economic overhead facilities; initiating industries; introducing more rational techniques in agriculture and making available irrigation, fertilizers, and tools; instituting and revitalizing organizations for provincial and local self-government and cooperation; improving educational and health facilities, and so on. They are receiving grants, loans, and technical assistance from the more developed countries both in the Western and the Communist orbit to facilitate these development policies. By themselves these induced changes, if they are big enough to overcome the factor of inertia discussed in the last section, should be expected, through the interaction of all the conditions in the social system, to push that system over the threshold of low-level equilibrium and so engender a cumulative process of development; as these policies are being intensified, this process of develop-

¹ The writer has in earlier publications expressed himself with too little caution. I am grateful to Trevor Swan for having pointed this out; see p. 1844, footnote 1.

ment should gain momentum, the more so as in time even those conditions that are slow to react also begin to change. This expectation would be more likely to be fulfilled if the governments were wise and courageous enough to take action against rigid and inegalitarian social structures and all the other attitudes and institutions that are particularly stubborn and will, if unchanged, hamper severely, or even block, the upward circular process.

But working against this whole complex of development policies are not only the forces of inertia, which build up thresholds that must be passed in order to release and speed the upward cumulative process. In all these countries there are also a number of changes, occurring *independently and at the same time* as the application of development policies, some of which tend to drag the social system downwards. The most important of these countervailing changes is undoubtedly the population explosion.¹ In all South Asian countries the high and rising rate of population increase tends to influence incomes and levels of living in a downward direction.² Therefore, if it continues, the upward movement of the social system will be hampered and development slowed down. The obstacles mentioned in the last section will then exert greater force, locking the system into low-level equilibrium. In time, the rate of population growth may even become the dominant influence on the social system. A powerful intensification of development policies and of foreign aid may then be required merely to prevent stagnation or decline. In the end, if the population increase continues and accelerates, these efforts might turn out to be futile. The situation will be all the more serious if, as seems established,³ such higher levels of living as can be expected in the foreseeable future do not result spontaneously in the spread of birth control and a substantial lowering of birth rates. This is the thought behind the insistence of demographers that, in the long run, if lower mortality is not followed by lower birth rates, mortality must rise again.

Another counteracting change is the deterioration in the trading position of most South Asian countries that has come about because of a slackening of the demand for their export products and a rise in their import needs.⁴

11 *The Forces of Stagnation: (3) Counteracting Changes Released by Development*

One of our assumptions has been that the causal interrelationships of all the conditions in the social system, as listed in our five categories, are such that a change in any one of them will tend to change the others in the same direction. It is for this reason that development efforts may through circular causation give rise to a cumulative upward process. Whether they do so or not, and if they do, how fast the cumulative process will move the social system upwards, depends then on a number of things listed in the two preceding sections: the magnitude and persistence of the development efforts; the direc-

¹ Chapter 27.

² Chapter 28, Part I.

³ Chapter 27, Section 12.

⁴ Chapter 13, Sections 1, 5, 12-15; Chapter 14, Section 4.

tion and speed of movement of the social system because of independent changes under way, some of which may be antithetical to development; and the size and rapidity of the response of the conditions in categories 4 and 5 — attitudes toward life and work and institutions — to changes in output, incomes, and levels of living. If in spite of considerable development efforts the cumulative upward process slows down or is altogether frustrated, so that the result is stagnation at the prevailing low level or slightly above it, this has to be explained either by the presence of counteracting changes (Section 10), or by the fact that some important conditions react so weakly or so slowly that the feedback of sustaining and spurring stimuli is absent or weak (Section 9), or by a combination of the two.

The basic assumption of uni-directional relationships within the entire social system is, on the whole, realistic, as our observations in Section 5 have indicated. Indeed, its realism and the opportunity this opens up of engendering development by planned policies form the basis for what hope there is that the underdeveloped countries in South Asia may succeed in lifting themselves out of underdevelopment. There are, however, exceptions to this general rule, when the *secondary changes instead move the system in the direction opposite to that of the policy-induced primary change*.

The classic example of an attempt to demonstrate the operation of a strong counteracting change resulting from development itself was the Malthusian theory of how a rise in income per head and levels of living induced population growth that wiped out that rise and returned the social system to its earlier stage of underdevelopment.¹ In our study of the population problems in South Asia, however, we have found the population increase to be a largely "autonomous" development, though the effects of rising levels of income per head and of living might lead to a minor rise in fertility and a perhaps somewhat larger decline in mortality.² There will certainly be a substantial decline in mortality in all South Asian countries, but this will not on the whole be caused by development there but by advances in medical science and technology and their progressive application in South Asia. The population outlook is very serious in South Asia, but for the most part it should be classified as a counteracting change, not released by, and dependent on, development itself but rather independent of it.³

It is not difficult, however, to imagine numerous counteracting changes resulting from development. The provision of irrigation works, for example, can lead to destruction of soils — if adequate attention is not given to drainage, and salination and waterlogging set in. The extension of cultivation in an area may lead to deforestation, dangerous for the climatic balance — if care is not exercised in choosing the new land for cultivation and reforestation is not carried out on other land. Schooling may have negative economic results if educational policy is not designed to prevent the newly educated from taking the attitude that they are too good to "soil their hands." Suffrage and greater

¹ Section 4 above.

² Chapter 27.

³ Section 10.

political participation such as that provided by local self-government may strengthen the caste system by providing a new field for its operation if measures are not taken to stamp out caste feelings and the whole institutional structure that supports them. Government controls may foster increased corruption if vigilance is not preserved. New legislation that is not enforced may breed cynicism if administration of the laws is not strengthened.

We find in this book many instances in which circular causation has not, as we have assumed up to now, operated uni-directionally. In all, or most, cases where an induced or spontaneous change upwards in one or several conditions has given rise to downward changes in other conditions, more purposeful planning could and would have prevented this regression. Rarely are such secondary effects necessary if the planners are circumspect and the government is prepared to act with determination. As, moreover, such counteracting changes are exceptions, planning can proceed on the basis that circular causation has mostly uni-directional cumulative effects, though they may be delayed or completely obstructed by independently occurring contrary changes.

III

The "Ideal Plan" and Planning as a Practical Art

12 Analysis in Terms of Ends

Part II of this appendix was devoted to a causal analysis of the mechanism of underdevelopment and development in the South Asian countries. We focussed our attention on the undesirable conditions that constitute underdevelopment, and the connections between changes in these conditions. In this part and Part IV we shall consider the problem of planning for development. This means that we regard the social system from the point of view of the sixth category of the conditions listed in Section 5 — policies, and the coordination of policies through planning, aimed at development.

We assume a government that wants to promote development, defined along the lines laid down by the general value premises of this study.¹ The conditions listed under 1 to 5 offer opportunities for, and raise *obstacles* to, the realization of that desire. In the following, the term "obstacles" will refer more particularly to conditions in categories 4 and 5, that is, attitudes and institutions. The government is also constrained by various *inhibitions* from using all the means necessary to achieve development and from accepting fully its consequences.² The actual course of change in the social system is the result of the policies adopted by the government (category 6) and of all the other conditions (categories 1-5). Also, the causal connection between those latter conditions is influenced by the policy-induced changes.

¹ Section 7 above; Chapter 2, Section 4.

² The concepts "obstacles" and "inhibitions," and the abstraction from the complex reality they imply, are clarified in Chapter 2, Section 2.

The consideration of planning for development means that we shift from the theoretical to the practical plane.¹ We reason in terms of means and ends instead of causes and effects. As has been shown in various contexts in this study, the failure to distinguish clearly between analyses in causal and in final terms has led to confusion and unnecessary controversy. The confusion has been sustained by the heritage of teleological metaphysics — in which what is and what ought to be are equated. This confusion is inherent in the philosophies of natural law and utilitarianism, from which the social sciences evolved. It still permeates their framework of implicit valuations. This influence is particularly strong in economics. It is concealed by the "objectifying" definitions of concepts, which are the means of keeping the valuations hidden. These definitions are the teleological ballast that prevents the achievement of logical clarity and opens the door to biases.² In the following discussion, as in the whole study, we attempt to bring out carefully the value premises applied in both the theoretical and the practical analyses.³

13 The "Ideal Plan"

Behind the general discussion of planning there is, mostly implicit but sometimes explicit,⁴ the concept of an ideal or optimal plan. If only we could take all relevant facts into consideration, it is thought, we could formulate and execute a plan that would engender development more effectively than any other set of policies.

Let us, in the light of the foregoing discussion of underdevelopment and development, consider what this notion of an optimal plan implies. It presupposes, first, knowledge of relevant conditions and their causal connections. Their initial magnitudes would have to be estimated and also their coefficients of change. These coefficients would have to be complex because they would vary with the direction, size, and speed of the change, and according to whether it occurs autonomously or in response to changes in any one of the other conditions — or a combination of several; the coefficients based on changes in several conditions could not be obtained by simple summation. Having gathered knowledge of the conditions and their relationships, we would then require a set of value premises for planning, sufficiently specific to solve the problem of optimization. In principle, the ideal plan would be concerned with the execution of the set of policy-induced changes in conditions that would move the social system upwards most effectively. To determine that set and thus the plan, we would have to attach definite independent valuations to the changes in conditions that, directly and/or indirectly, are the result of the execution of the plan. These independent valuations may themselves be instrumental to some ends that lie outside the plan, or they may be

¹ See Prologue, Section 9, footnote 2, p. 32, for definitions of the terms "theoretical" and "practical."

² Prologue, Section 9; below, Section 14.

³ Chapter 2, Section 4.

⁴ See, for instance, Jan Tinbergen, *The Design of Development*, Johns Hopkins Press, Baltimore, 1958, pp. 36 ff.

final valuations attached to the resulting conditions for their own sake. Because of circular causation between changes in conditions, the particular changes directly induced by the policy measures that constitute the plan have, from the planners' point of view, also instrumental value in furthering the objectives of the plan either directly or indirectly. But only a few of the changes in conditions can be considered by the planners as having *only* instrumental value. Most either have, or will acquire, independent values *also*.

By following out this scheme we would then be able to say which policies, inducing changes directly in certain conditions and indirectly in others, would result in an optimal upward movement of the social system, given our knowledge of conditions and their causal connections and given a set of value premises, specified sufficiently to allow the formulation of the ideal plan as inferences from this knowledge and the postulated value premises.

There is no need to stress the impossibility of gaining even a fraction of that full knowledge of conditions and their causal connections. Some of the significant data needed are among the most inaccessible social relationships, still largely unknown even in Western countries, where social research flourishes. Even if the set of value premises needed for planning could be thought of in terms of a volitional *a priori*,¹ their application would depend on our knowledge of conditions and their relationships, because changes in conditions would have to be considered in terms not only of their independent but also of their instrumental value. Moreover, not only the conditions but also the causal connections between them will change, both unintentionally, because of the movement of the social system as a result of all sorts of impulses to change, and intentionally, as a result of policies directed at changing not only conditions but also their interrelationships. The plan and its execution thus alter the material that was assumed to be given. Obstacles to, and thus opportunities for, development will be different at a future time as a result of development. And in drawing inferences from the value premises the instrumental value of various changes will then also alter.

What we have stressed so far is the impossibility of laying the basis for planning on a complete knowledge of the *facts and the relationships between the facts*. This in itself should not, however, invalidate the notion of an ideal or an optimal plan. To approximate and simplify is legitimate in all scientific endeavor and this principle applies fully to planning for development. But two reservations should be stressed. First, our knowledge of facts is exceedingly meager in South Asia. Rationally this should inspire a much greater humility than is usually demonstrated by the plan-makers and the economists who speculate about planning. Secondly, levels of living, attitudes, and institutions (categories 3-5) are of primary importance for the development effects of any induced change in incomes and production and in conditions of production (categories 1 and 2). This should exclude models of planning that do not take these conditions into account; to this we shall come back in Sections 19-21 and Appendix 3.

But in addition to the *empirical* difficulties of ascertaining the relevant facts

¹ The difficulty on that score will be commented on later in this section.

and the relationships between them, there are *logical* difficulties. They relate to the introduction of the value premises. The broad value premises, accounted for in Chapter 2 (Section 4) — the modernization ideals — which represent *the viewpoint from which we study the problem* of the South Asian countries, can only be presented with considerable vagueness.¹ Nevertheless, they permit us without much ambiguity to classify conditions and their changes as broadly "desirable" or "undesirable" from a development point of view and to define "development."² They also permit us to draw certain general conclusions about planning, which amounts to sketching a theory of planning.³ But for solving the problem of producing a definite plan in a particular country at a particular time they are entirely inadequate. For one thing, they are not specific enough. A more serious difficulty is that a plan has to be produced in terms of the actual *valuations of the government* that is responsible for the plan. A plan is fundamentally a political program.⁴ Even if those valuations are in broad agreement with our chosen value premises, actual planning requires a greater degree of specificity; moreover, on many points the more specific valuations of the government would be different from the value premises of our study.⁵ *The specific, relevant value premises for constructing the plan cannot be separated from the social system of which even the government is a part.* Moreover, that social system and the valuations implied in the attitudes of the people and the government are changing as a consequence of development itself and of planning for development.

To begin with, people's actual valuations implied by the attitudes in category 4, fortified by the institutions in category 5, represent *obstacles* to planning and development. These obstacles are revealed by the study of conditions and their interrelationships. They are part of what the government must want to change by planning. For the assumption of all planning is that there is a government bent on development and thus also on changing the valuations in the country. These obstacles will, however, remain a serious limitation to planning, and to the freedom to apply the modernization ideals in actual policies. For no government is entirely free to follow its own subjective valuations, independent of the reactions of people in different localities, occupations, and social strata — though the power structure gives some governments more freedom than others. These obstacles raise no logical difficulty. In principle, they are no different from climatic or other obstacles that planning has to take into account.

But in addition to these obstacles there are what we have called the *inhibitions* working on the minds of those whom we designate vaguely as the government. Those responsible for directing the work of planning and devising and implementing the plan are, of course, never wholly disinterested and socially

¹ Chapter 2, Section 3 *et passim*. Logical clarity requires that this be pointed out.

² Section 5 above.

³ Part IV of this appendix.

⁴ Section 15 below.

⁵ The application of a certain set of value premises in the study does not assume that they are actually applied in government policies; see Chapter 2, Section 3, and Postscript, Section 2.

detached; they are themselves part of the social system that is to be reformed, as are the planners and the rest of the articulate citizenry. They have their own economic and social interests, and share, to a greater or lesser extent, the popular attitudes that constitute the obstacles to planning. They also have political interests and want to maintain and increase their own power. All this tends to influence and limit their vision.¹ The remarkable thing about the spread of the desire for planning² and development among the articulate members of the South Asian national communities is not that they are unable to free themselves entirely from these attitudes or to act with complete disinterest, but that they can detach themselves at all from the prevailing attitudes in their societies and that they show any desire to change them.

The valuations relevant for planning are thus rooted in the actual conditions in category 4, which are fortified by the conditions in category 5, and cannot be separated even analytically from the empirical reality of the conditions prevailing in the social system. The very application of planning, however imperfect, *tends to change these valuations*, normally by reducing the limitation on planning imposed by the inhibitions of officials. This happens along several lines of causation. Although it is impossible, logically, to derive valuations from facts, psychologically people do rationalize their valuations in certain beliefs about reality. They think that they derive their valuations from what they believe they know. This is, in principle, as true of Westerners as of South Asians. They are mistaken, but undoubtedly there is a relationship between valuations and beliefs. As fuller knowledge modifies people's beliefs, valuations that do not accord with the new beliefs are deprived of support. Their "opinions," which are a blend of valuations and beliefs, change and the implicit valuations change with them.³

The planning process itself will help to rationalize the valuations toward greater conformity with the modernization ideals, the first of which is rationality.⁴ The collection and analysis of data concerning conditions and their relationships, the political process of discussion, decision-taking, and decision-enforcing, and the education and propaganda that enter into the formulation and implementation of the plan will so change both the beliefs and the valuations

¹ "The image projected is that of a farseeing ruling group bringing about change in a reluctant traditional society. Obviously, this is an oversimplification. The ruling groups are themselves part and parcel of the traditional society, share a great part of its emotional and cultural climate and have, in addition, their own particular prejudices and interests. These factors affect the formulation of the programs as well as their implementation. Political considerations color every situation; sometimes they dominate it. . . . Consequently, an interpretation and understanding of the various elements in the program, from the political point of view, are essential for evaluation both of the structure of the program and of the manner of its implementation." (D. R. Gadgil, "The Importance of Evaluation for Development Planning, With Special Reference to Land Reform," in Foreword to Erich H. Jacoby, *Evaluation of Agrarian Structures and Agrarian Reform Programs*, Food and Agricultural Studies, No. 69, FAO, Rome, 1966, pp. 10-11.)

² Chapter 15.

³ Myrdal, *An American Dilemma*, Appendix I, "A Methodological Note on Valuations and Beliefs," pp. 1027 ff.

⁴ Chapter 2, Section 4.

attached to means and ends in planning. This happens to both the government and the people and should tend to reduce the inhibitions among the former and the obstacles among the latter. More specifically, as we pointed out in Section 7, the attention drawn to development as an end will tend to incline people increasingly to attach a positive independent value, not only to rise in levels of living — itself a novel valuation to many people in a backward, stagnating country — but to a change upwards in all other conditions in the social system, including attitudes and institutions. This is what is implied in the spread of the modernization ideals. This aspect of planning for development has, more particularly, the effect of broadening the limits for planning set by inhibitions and will gradually also begin to break down those attitudes among the people which are obstacles for planning.

In the course of planning also, upward changes in conditions acquire instrumental value because people realize that such changes will push up other conditions too. From one point of view, development from a traditional to a modern economy is largely (though not entirely) the creation and expansion of a sphere of instrumental valuations where previously only independent valuations reigned. It thus leads to a widening of choice. To the primitive tribesman, the question "how many fishhooks is a banana worth?" is irrelevant. This widening of choice is not directly the result of greater opportunities but of changing valuations, although the opportunities may induce a change in the valuations, and stems from an increasing understanding of circular causation and greater readiness to regard changes as means to further ends. It would occur, for example, if certain trades or economic activities were detached from caste and evaluated according to their financial rewards; if the intrinsic dignity or stigma of certain jobs were transformed into differential compensation; if the taboos on work by Moslem and Hindu women in the upper strata were replaced by calculation of the advantages of leisure compared with work; if sacred cows, literal and figurative, were made into veal and beef.¹

Indeed, unless an area of instrumental valuations can be mapped out, the whole discussion of the optimal plan is pointless. Considered, calculated, rational choice assumes either that some events have no value in themselves or that whatever independent value they have is not absolute but can be compensated for by the achievement of rival objectives. In a world where nothing has a price, there can be no optimal plan and, indeed, no planning whatsoever. For what can then be compared are only total sequences, and even such a comparison would assume a highly developed capacity for surveying reality and evaluating it. In stagnant societies, bound by tradition and by attitudes and institutions supported by a host of superstitious beliefs, the arena of means and commensurable ends is very narrow and in many fields totally absent, whereas developed countries, whether of the Western or the Communist type, have been able to rationalize beliefs and thereby also attitudes and institutions

¹ It is clear that development will inevitably reduce the range of choice for some, while also widening it for others. But this change in the range of opportunities available must be distinguished from the values attached to the choices. Although some previously instrumental values may acquire independent value, the normal course of the transition from a traditional to an economically progressing society will be the reverse. The notion of "rationality" implies the existence of a sphere of instrumental values.

— that is, the whole mode of thinking, desiring, living, and working — so that inhibitions to development, and also obstacles, have been largely removed.

The point in this context, however, is not only that planning assumes that at least the people in power — whom we have called the government — have gone some way toward overcoming inhibitions and freeing choices, a process the people at large are induced to follow, but also that planning and development, once started, will by themselves tend to change valuations by further breaking down both inhibitions and obstacles created by traditional attitudes and institutions. The spread of the idea of planning among the articulate layers of an underdeveloped, stagnant society demarcates the beginning of this process. Any attempt at planning will, in the first instance, affect those engaged in planning. The examples chosen above show, however, that this process cannot be expected to be very rapid, particularly when there are no policies specifically directed at changing attitudes and institutions but reliance is placed on the indirect effects of changes in other conditions, in the first instance, those of 1 and 2, to accomplish this result.¹

Returning to the problem of an ideal or optimal plan, we conclude that since (1) the value premises for planning are not given *a priori*, since (2) we are not confronted with a satisfactory causal analysis of conditions, and since (3) there is change within the two spheres and interdependence within and between them, the optimal plan should be regarded as a *steadily forward-moving pattern of policies*, which has continually to be modified in the light of newly emerging events, changing causal connections, and changing valuations among the rulers as well as the ruled. The programs of the planners and the prognoses of the social researchers are not two distinct areas, superimposed on each other. The programs — intentionally and unintentionally — affect and alter the prognoses, and the prognoses in turn alter and modify the programs.

Looked at in this way, the optimal or ideal plan appears as a misleading abstraction, not only because it is impractical, but because it assumes two sets of static structures — one causal, the other final — where in reality there is change, interdependence, and interaction. The exploration of the facts alters the valuations and, since causal connections were constructed on the assumption of given valuations, alters the causal connections. *The plan is itself an evolving process. Planning cannot aim at an optimum, but at improvements.* It is guided by vision, but the vision is open-ended and flexible, not closed and rigid. It contains a rough perception of the connections between conditions prevailing over a period of time and the possibilities of moving, through rationally coordinated policies, in the direction of development.

14 A Note on the Tendency to "Objectify" Valuations and Its Relation to Model-Building

In the foregoing section it was taken for granted that, logically, there are no objective values, only subjective valuations. Valuations and beliefs are social facts that can be studied; between them there are psychological causal rela-

¹To this problem and the related problem of revaluation or evaluation we come back in Sections 19 and 20.

tionships that can be analyzed. Beliefs can, of course, also be scrutinized from the point of view of being more or less correct. But the valuations themselves are not true or false, right or wrong.

Almost every social scientist would probably agree with this view when stated in general terms. But the practice of social scientists, and of economists in particular, contrasts sharply with this profession of agreement. The practice in economic research is related to a specific conception of the importance of the distinction between "economic" and "non-economic" factors, which broadly corresponds to the conditions in our categories 1–3 (or primarily 1 and 2) on the one hand and 4–5 on the other. In the next part of this appendix and in other contexts we criticize this practice. In the Prologue we suggested that it reflects a bias, opportune to economists in the West as well as in South Asia,¹ and to intellectuals generally, whether of a conservative or radical bent.

The application by economists of this approach to the study of South Asia has three main explanations. In the first place, institutions and attitudes play a different part in Western countries, and their neglect in economic analysis there is less damaging. In South Asia, however, the interdependence of "economic" and "non-economic" factors is much more intensive and consequential. We shall return to this topic in the next part of this appendix.² Here we shall merely note that it is understandable that when economists after the Second World War hurriedly turned to the study of the development of the underdeveloped countries in South Asia they used the tools they were accustomed to using.³ The second reason is that "economic" facts are felt to be more easily accessible. They have been the object of more intensive observation and analysis than other social facts. We have found, in the course of our study, that even this knowledge is extremely thin in South Asia, partly because the collection and analysis of data are guided by inadequate Western concepts. Nevertheless, more is undoubtedly known about "economic" facts than about most other social facts. The third reason, related to the other two, is the mistaken idea that "economic" quantities are more "objective" because they can be reduced to a common denominator and expressed in monetary terms. It is now generally recognized that this procedure presupposes a whole set of more or less unrealistic assumptions, depending on the purpose for which the aggregation is used. For purposes of allocation of resources, the use of prices assumes not only fairly "rational" behavior and perfect competition, but also constant unit costs and the absence of external effects on the side of production not reflected in costs or prices. For purposes of estimating levels of living, it assumes a special psychology of consumers and the absence of external effects on the side of consumption, and so on. But, in spite of numerous qualifications, costs and prices can under certain conditions be used as indicators of forgone alternatives, whether in consumption or production. The "veil of money" can thus be pierced, it is held, and costs and prices can be taken to stand for the more ultimate facts of physical resources and of sacrifices and benefits.

The conclusion from these considerations has been that planners should thus

¹ Prologue, Section 6. Cf. Chapter 21, Section 9.

² Sections 20 and 21; cf. Appendix 3, Section 3 *et passim*.

³ Prologue, Sections 2 and 5.

be provided with a simple criterion for the determination of the relative profitability of allocating scarce resources between competing uses. The implication is that decisions guided by costs and prices are "objective," in contrast to decisions about alternatives that do not have a market value—a metaphysical notion that opens the door to several biases.¹ On the one hand there are "productive investments," guided by "objective" criteria; on the other hand there are policy decisions where alternatives have to be evaluated "independently," according to "political" considerations supposed not to be "objective." Simi-

¹ Prologue, Section 9; Appendix 3.

² Cf. the following statement in a United Nations document: "In view of the complexities and uncertainties surrounding the role of social factors in economic development, including the difficulties of measurement, it is not surprising that economic planners should be discouraged from trying to handle such factors in economic analyses and programming." (United Nations, ECAFE, "Co-ordination of Economic and Social Programmes," *Economic Development and Planning in Asia and the Far East*, in *Economic Bulletin for Asia and the Far East*, Vol. X, No. 3, Dec., 1959, p. 28.)

Even if their importance is acknowledged, the social aspects tend, in practice, to be excluded and regarded as alien to "rigorous analysis." Thus Tinbergen at one point notes that education is a "very important condition for development" but disavows the consideration of it as a part of "economic policy." (*The Design of Development*, p. 5.) At another point (p. 30) he writes: "To compare the advantages of an electricity plant with those of . . . a school will always be difficult, but at least it can be made clear what increase in material production is sacrificed if a school . . . is built." But the inability to calculate the returns of the school does not put it beyond the scope of economic policy. Looked at the other way, the returns of the electricity plant could be regarded as the increase in material production sacrificed by not building the school, and thus the opportunity cost of the electricity plant cannot be calculated. Choices cannot be arbitrarily limited in this way.

Lacking the tools for a broader analysis, the economist is tempted to confine himself to a few selected economic variables that are familiar, manageable, and measurable, and to spend his time studying the relationships of these variables to each other as in formal "models," excluding consideration of other variables that may affect them or be affected by them. (See Section 19 and Appendix 3.)

The United Nations document cited above continues with the following quotation from Kuznets: ". . . ever since the middle of the nineteenth century demography and population theory have been excluded from the corpus of orthodox economics, and only in the two most recent decades have economists been turning in haste to relearn something about demographic processes; just as demographers are beginning to recognize the dire consequences of their neglect of economics. The situation with respect to history of science and technology and the understanding of what moves it is even sadder, and our ignorance of these key processes in economic growth is truly appalling. Nor need I add a similar comment about the clearly increased importance of political and sociopsychological factors in the understanding of the economic growth of nations; or the helplessness of a mere economist when he observes, when he can observe, results of economic growth obviously ascribable to political factors and forces whose nature he cannot understand adequately. The outcome is either withdrawal into the refuge of mathematical models operating with a few variables, or amateurish cogitations on a vast theme. One has the advantage of formal elegance, and the other, that of at least calling attention to the wider array of factors that have to be taken into account; but neither outcome is satisfactory." (Simon Kuznets, "Notes on the Study of Economic Growth," *Items*, Social Science Research Council, XII, No. 2, June, 1959, p. 15, quoted in ECAFE, *Economic Development and Planning in Asia and the Far East*, in *Economic Bulletin for Asia and the Far East*, Vol. X, No. 3, December, 1959, p. 28.) On recent attempts to include "investment in man" in the capital/output models, see Chapter 29, Sections 4-7.

larly, considerations regarding the distribution of the national product have since the time of John Stuart Mill usually been excluded from the "objective" sphere of planning and left to be decided by "independent" "political" judgment. The economist, attempting to confine himself to "objective" facts, considers it safer to refrain from pronouncing on these "political" matters. These distinctions reinforce the irrational hold of Western models over the analysis of the problems of South Asia, on which we shall comment below in several sections and to which we shall devote Appendix 3.

This line of reasoning would thus define "economic" planning as an "objective" procedure, while the planning in all other fields would be "political." It would, more particularly, draw a line of demarcation between "directly productive" investments and so-called "social" investments and redistributive reforms. Several variations of this thought, implicit in much of contemporary economic discussion and elaborated in the theoretical systems referred to as "welfare economics," are in fact merely variations and amplifications of Mill's theme of a logical difference between, on the one hand, the sphere of production and exchange, where objective economic laws rule, and, on the other, the sphere of distribution where political judgment has to be exercised. Long ago, however, it was shown that such a distinction is logically untenable and the whole attempt metaphysical.¹

More specifically, even if we could abstract from all "non-economic" factors—a procedure that on logical grounds is not permitted—planning could not rationally be based on the existing price relationships. This would hold true even if markets were perfect in the technical sense. Even then the price relationships would first have to be changed by deliberate interventions in such a way as to give incentives to public and private enterprises in line with the actual goals of development planning—or such changes would have to be calculated and corresponding corrections carried out before price relationships could give an adequate basis for planning.² In the underdeveloped countries of South Asia actual costs and prices provide an even less legitimate "objective" basis for planning. A very large part of economic activity is non-monetized and outside all markets in the ordinary sense of the term. Where markets exist they are usually far from perfect; immense internal differences are evident in the capital and labor markets, for instance. It is, moreover, an institutional fact that people do not calculate their inputs and outputs rationalistically as is customary in the Western countries. As stimuli for changes in demand and supply the cost and price relationships are not effective in the same way, or to nearly the same degree, as in Western countries.

More fundamentally, however, this way of formulating optimal policies does not become more "objective" and is not liberated from its dependence on concrete value premises because markets, money, costs, and prices are used as criteria of allocation.³ This holds true generally, but especially in underde-

¹ Myrdal, *The Political Element in the Development of Economic Theory*, pp. 114 ff. *et passim*.

² A critique of the theory of "accounting prices" is presented in Appendix 5.

³ Appendix 5, Section 1.

veloped countries with their distorted price relationships, imperfect markets, and ineffective price incentives in many fields.

The traditional method of distinguishing between "economic" and "non-economic" factors, "objective" and "political" decisions, "quantitative" and "qualitative" determinants, and similar dichotomies has molded thought on planning. We shall return to it in various contexts. Section 22 below on physical versus financial planning takes up the relationship between the "veil" of magnitudes expressed in monetary terms and the "real" physical quantities behind it. Appendix 3 on models in development planning is devoted to a more detailed criticism of the type of thinking inspired by the tendency to select and objectify certain relationships and relegate others to a "political," "non-economic," "exogenous" limbo. Appendix 3 should be regarded as a continuation of this section that has been separated from the main text for reasons of exposition and length.

15 *The Plan as a Political Program*

The valuations relevant to planning are determined by the political process taken in its widest meaning. The people who act in this process can have a more or less comprehensive and correct knowledge of the complex reality that is evaluated. It is the purpose of rational planning to improve the basis of this knowledge and to use it for political action. But, in the final instance, planning is no substitute for policy-making. On the contrary, its value premises must come from and by the political process. In planning, value premises cannot be simple and general; they must be as specific and complex as the valuations that determine, and become determined by, the political process.

To work out a policy for husbandry in India without taking into account the common aversion to "cow slaughter" is, of course, impossible. This aversion represents an obstacle to government action. The planners may simply regard it as brute fact, like hurricanes and floods; but it may be part of their own valuations. If it is, it is then not only an obstacle but also an inhibition. In most cases policies run up against the need to change institutions that are supported by attitudes and by strong vested interests. An agricultural policy cannot be framed without specific premises covering the changes in land ownership and tenancy that the government will find both feasible and desirable in view of the actual power situation in a country. Similarly, the level and distribution of taxation, which is such an important complex of variables in planning, cannot be determined for the practical purposes of producing a plan by the intellectual exercise of drawing conclusions from the facts; it must result from a political decision by a government whose members have certain attitudes and are limited and conditioned in their actions by the structure of power relations and the attitudes and institutions in their country.

All planning thus implies political choices. The choices do not concern only broad and abstract goals. *They relate to all stages in the process of planning and to each specific step implied in planning.* Means have to be evaluated as well as the goals they are designed to serve. As the formulation and execution of the plan proceeds, beliefs and valuations are modified, not merely by those immanent changes that stem from the emergence of new facts and the clarifi-

cation and modification of valuations, but also by those changes that result from the changing distribution of power and influence among individuals, departments, social strata, and political parties.¹ *A plan for development is thus in essence a political program*, and we are likely to be seriously confused if we do not keep this clearly in mind. (From the opposite point of view, it would, of course, be rational if every political program were as much a considered plan as the politicians are capable of making it; but this inference does not concern us in the present context.) In the normal course of state planning, the plan is the program of public policies of the national government, though conceivably an opposition party — where an opposition is permitted, as in India — or, indeed, anyone whose views differed from those of the party in power, might work out a national plan.

That a plan can have no existence except as a political program is evident on logical grounds. The point also has practical importance, for it implies that planning cannot be carried out as an isolated technical exercise but requires political decisions on public policies. In its final form the plan is a coordinated system of such policy decisions as have emerged by a long sequence of discrete and preliminary political decisions. For, as the work on planning proceeds, political decisions have to be taken continually. The technical work on a plan has only one purpose: to enable these political decisions to be taken on more rational lines and with a fuller understanding of the facts. No work, even on the details of a plan, can be undertaken and brought to a successful conclusion, except on the basis of seriatim political decisions. *Plan-making, therefore, is itself a part of the political process in a country.*

If India has advanced much further in its economic planning than other underdeveloped countries, this is largely because planners there have recognized from the beginning that planning must be backed and carried out by the gov-

¹ This is why, for logical reasons, the value premises cannot be separated from the facts; see above, Section 13. The following quotation is an example of a mistaken conception of planning:

"The theoretical reason for a statement of objectives is that it defines ends from which choice criteria can be derived. In this way, value judgements can be made by responsible leaders *at the beginning* of the planning operation and the remainder of the planning work can be turned into *purely technical process of deducing and applying criteria* that select the set of actions which will best serve the stated objectives. If more than one objective is stated, it is necessary also to state the limits which each imposes on the others so that unambiguous criteria can be deduced. *Logical separation* of the activity of making value judgments from the activity of choosing particular courses of action, which is attained in economic theory by taking the preference function as given, was not attained in the actual planning procedure of the [Pakistan Planning] Commission. In the first place, the Commission was never able to present, much less was it able to expect agreement on, an unambiguous statement of objectives." To illustrate the difficulty the writer quotes from the Planning Commission's *Revised Draft Frame* a passage reading in part: ". . . We are . . . of the view that the maximization of national income should be the overriding objective. The other objectives, to the extent that these conflict with it, must be subordinated to it." (Fred C. Shorter, "Planning Procedures in Pakistan," *Pakistan Development Review*, Vol. I, No. 2, Autumn, 1961, pp. 8-9. Italics added.) Cf. the present writer's "Ends and Means in Political Economy," translated and republished in *Value in Social Theory*, pp. 206 ff., from *Zeitschrift für Nationalökonomie*, Vol. IV, No. 3, 1933.

ernment, in contact with the people, through whatever of its organs, in all sectors and at all levels, it can cause to function effectively. And the plan is in the end sanctioned in the regular manner by parliament. It follows from the fact that planning is political programming that, like all other political organs in a country, the planning organs, if they are to cope successfully with their task, become *largely negotiating and almost diplomatic agencies of the government*, and that only a small part of their activity is devoted to scientific study. This is, of course, what has happened to the Indian Planning Commission. As such it is a healthy development, and, indeed, necessary if planning is to be more than an intellectual exercise. The Indian Planning Commission certainly needs to conduct more and better economic research and analysis; in particular, it needs to devote more effort to the collection of better statistics. But this should not be done at the expense of its political functions. For it is these political functions that give practical importance to its scientific analysis. Practically as well as logically they form the basis for all its technical considerations.¹

In those countries of South Asia where planning has been only loosely connected with the government it has not gone far or deep, even as a technical exercise. The main reason is that these countries do not yet have strong and unified governments with sufficient authority, stability, and singleness of purpose among their individual members to fulfill the functions of government planning.² Ambitious work on plans has been initiated from time to time in all of the countries under discussion. Special organs for state planning have often been set up, and they have produced studies and reports. But this work has not gone far or had much impact on policy-making. Planning has been frustrated and has never reached the operational stage. It has not been integrated into the political process. This was the situation even in Pakistan until the military takeover in 1958 and the formation of a consolidated government, in this case a more authoritarian one.

When there is no government able or willing to integrate planning into its functions — that is, to take decisions continually as the work on planning proceeds and to use the eventual plan as its program for policies — the temptation is particularly strong to overstress the technical and “objective” character of planning and sometimes to employ experts from abroad. The purpose is not to help the government to make up its mind rationally on the major economic problems of the country in a continual and systematic way on the basis of expert knowledge of the facts — which is what planning is and the only thing it can be — but to give the impression that planning is going on when it is not. The public is deluded into thinking that experts, given time to apply the skills of their craft, will fashion a plan for the country — as if it were a question of ordering a golden Buddha for a temple. This has, for instance, been the situa-

¹ “The collection and analysis of data certainly is one important aspect of planning . . . ; but democratic planning, at least, takes place within a political environment that impinges on the process of decision-making at many points.” (Edward S. Mason, *Economic Planning in Underdeveloped Areas: Government and Business*, Fordham University Press, New York, 1958, p. 66.)

² Chapter 15, Section 7.

tion in Ceylon.¹ The other side of the coin is that lack of government influence often gives the experts a freer hand to produce a “plan” — one that will not work, however, unless a new government comes to power that is prepared to back it. For this to occur the experts must have correctly anticipated what the new government would be willing and able to do within the power constellation in the country.

The habit of working with irrationally simplified economic “models” has facilitated evasion of responsibility. The models are constructed on the pattern of the “ideal plan” and suffer from the false separation of ends from means, of “economic” from “non-economic” factors, and of “objective” from “political” decisions. As a result of these misleading divisions, a spurious simplicity is given to the plan, which is presented as the solution to a technical problem. Attention is diverted from the lack of adequate knowledge, from the absence of specified and relevant valuations, and from the power realities and the moral, psychological, and political stresses and strains, while the soothing and elegant functional relationships between a few “economic” variables set the mind and the will at rest. We have seen how this leads to the systematic introduction of bias.²

The idea that all one has to do is to draw up an ideal plan, with a vision of goals and an exposition of means to achieve them, derives its force both from liberal rationalists steeped in the doctrine of the harmony of interests and from technocrats who regard people and social organizations simply as cogs in a machine. Utopian anarchism and ruthless autocracy here converge in their conclusions and planning practices. In fact, it is instead *part of the function of the plan to assist in striking compromises and bargains between conflicting interests and to construct a framework within which conflicts of convictions and interests can be thrashed out.*³ Neither the assumption of harmony nor that of the application of absolute authority wherever conflict arises is warranted. The idea underlying both is that political choices have objective solutions, and this is deeply rooted both in the liberal harmony doctrine and in totalitarian ideology. In fact political choices are the result of a great number of different factors and forces: they are limited by social facts, though these facts are not unalterable themselves; they are constrained by vested interests, though these can be weakened; and they are guided by the moral and political convictions and the interests of the politicians themselves, though these can be changed by, among other things, inculcating more rational beliefs. For this reason, the political process of planning cannot be neatly, clearly, and briefly demonstrated by singling out one or a few of these forces. Neither a technocratic model, nor one based on a harmony of interests, nor one allocating to the po-

¹ At least until recently. The new government after the election in early 1965 decided to accept responsibility for a more serious planning effort; see Chapter 9, Section 4.

² Section 14. See also Prologue, Section 6; Chapter 21, Part II *et passim*.

³ Chapter 15, Section 8.

litical authority the function of reconciling clashing interests, can do justice to the complexity of the facts and their interactions.

16 *Planning as a Practical Art*

The idea of an ideal plan is ever present, but the reality of effective planning can only take the shape indicated at the end of Section 13: a moving design of a society in which conditions shall, sooner or later, be improved.

"Objectives" or "main goals" that are broadly in line with the modernization ideals are usually stated in the introduction to the plans. But little effort is made to clarify their relationship to the actual policy prescriptions in the plan. This is natural and, indeed, necessary, because the planners for good reasons are not inclined, or not permitted, to make explicit the inhibitions of the government to implement these ideals, and because it is felt that it would be awkward in a political document to enlarge upon the other limitations of planning, which consist in the obstacles raised by the attitudes of the people and the institutions supporting these attitudes. The stated objectives and goals thus appear as conventional and stereotyped rationalizations without relation to those valuations according to which the government is actually prepared to act. Often they serve as tranquilizers offered to the intellectuals and radicals. They belong to the dreamworld of ideals that have little relation to the immediate and practical work of constructing the plan. For the political process, however, it is not unimportant that the modernization ideals have been given that expression and that significance.¹

Within the vague vision of a moving design for improving conditions in a country, the actual plan cannot spring simply from an attempt to solve the problem of how to promote development in this sense. At an early stage of the work on the plan a choice has to be made of certain main features. This choice must be guided by a broad conception of the current attributes of the country: its natural resources and its people, its trading position in the world, and so on. It must conform to the major ambitions and valuations of the government, including the inhibitions of the governors; and it must permit a working compromise between the various social and political forces — pressures, vested interests, ideals, and the heavy obstacles in prevailing attitudes and institutions with which the government has to cope in order to remain in power and be effective. But there is at bottom an institutional and a volitional element in all planning.

The procedure in a planning agency has perhaps its closest analogy in an architect's preparation of a sketch of a public building for a city council. He takes into account the purpose of the building and the financial resources available for constructing it; the nature of the ground at his disposal; and the inclinations of the people he serves, which are partly influenced, as he is himself, by the fashions of the day, though he knows that his ideas are ahead of theirs and he wants to "sell" them as many new ideas as he dares without risking a falling out with them. Taking all these considerations into account, he applies his artistic imagination and his professional skill and accomplishes a sketch that will be

¹ Part IV. Cf. Chapter 3, Section 1.

as good as he can make it. If he gets it approved, he then produces the work drafts. The planning part of his work is to coordinate the elements and fit them together. There must be a roof, staircases, doors, and windows. The space should be utilized with economy. Being of the modern functional school (we assume), he will attempt to present both his sketch and his later drafts as rational responses to given requirements. This is partly true but mainly a trick of the functional school.

Similarly, once the crucial choice of the main features of the plan is made and this choice has been presented to the government in power and to other interest groups, including possibly the entire articulate part of the general public, the planners can go on to elaborate it in greater detail. As this work proceeds, more specific data are assembled and further research is done, always in the directions indicated by the sketch of the main features. In this process, these will themselves be modified, and new features will be added. Generally, the plan has to be made internally consistent. If steel plants are to be set up, coal, electric power, and transport have to be provided. Various difficulties — factual and political — will have to be taken into account. Much discussion and persuasion will take place. Generally, the makers of the plan will be much less free to move within the valuations and power relationships than the architect when designing a building. The plan, as it gradually takes shape and is finally accepted, will differ from the original sketch. But the importance of the sketch and the initial choice of the main features should not be missed. It has conditioned and given direction to the later work. What is thus partly a work of art will finally be presented as much as possible as the rational and objective conclusions from certain facts and from the general will to development as expressed in certain broad goals that will be given prominence at the head of the document in which the plan is presented. As we saw in the last section, political considerations, which are much more specific than and differ from those broad goals, have been important both in producing the original sketch and in amplifying it. In the end the plan has to fit the country's actual circumstances and at the same time be both politically acceptable and practical.

This characterization of how a plan comes into being and what it is should not be taken as a criticism: the knowledge of the facts is scanty; the valuations are not available *a priori* as an explicit and comprehensive system or list of value premises, but have to be ascertained as the work proceeds, by direct confrontation with the existing and relevant power structure in a country; and this structure itself is changing in this very process. This is, therefore, in fact the only way of making a realistic plan. There is scope and need for ideals and desires and for imaginative thinking, and at the same time it is necessary to face the actual material conditions in the country, and to seek political moorings.

As the plan takes its final shape, having passed various political hurdles and having been put to some extent into operation, it will have created conditions for further work on planning in the next period. Changing conditions, experience gained, and the lack of correspondence between the plan and its fulfillment will make alterations necessary in the plan even during the plan period, but the pattern of working with a plan covering several years will tend to make

for major revisions and reconsiderations only between plans. We shall return to this problem in Section 25.

17 The Effects of Planning on Planning

We have seen in this part that if a plan is to be more than an intellectual exercise or a showpiece, it must meet certain conditions:

(a) It will have to be a political program, determined by, paying attention to, and itself altering, actual power relationships, obstacles (presented by the attitudes and institutions of the people), and inhibitions (of the planners themselves). While the plan therefore aims at changing the social system, it must itself be seen as part and parcel of the process of that change. Although (i) scientific analysis and (ii) clarity of objectives are essential for an effective plan, the interaction between the two must also be fully allowed for. (Section 15.)

(b) The relationship between scientific diagnosis and prognosis, on the one hand, and the political program on the other, is not static, but itself subject to change as a result of the progress of the plan and its implementation. Initially an intuitive vision, inadequately supported by comprehensive analysis, the plan develops — through pressures, stresses, and tensions, successes, failures, and compromises, through the growth of experience and knowledge — toward a more concrete design. (Section 16.)

(c) This does not mean that planning is not a rational activity. On the contrary, to postulate an "optimal" plan in which an "objective" set of functional relationships is confronted with an independent set of abstract objectives, and to proceed on the maxim "give me your ends and I'll churn out the means" is itself irrational. For if irrationalities are to be reduced they have first to be acknowledged and brought to light, not neglected or denied, (Sections 12 and 13.) We have seen that effective planning will, in various ways, tend to correct irrational beliefs and modify valuations previously based on those irrational beliefs in the direction of greater rationality, and so reduce obstacles and inhibitions to planning and development. Although there is no inevitability about this, and although some changes will be in the opposite direction (Sections 10 and 11), there is a presumption that fuller knowledge of the facts, clarification of issues, experience of change, and the encroachment of a growing sphere of instrumental values upon a declining area of taboos and superstitions will enlarge the area of rationality. Planning of this kind represents, in view of the initial situation of the South Asian countries, a truly heroic effort.

(d) Just as, according to the argument in (c), the area of irrationality is reduced as the plan is developed and executed, so, according to the argument in (b), the area of vague vision is narrowed down. Neither area can ever be assumed to be eliminated entirely: to believe that it can is to fall victim to the illusion of "optimal" planning in which unadulterated teleology confronts purely objective causality. (Section 13.) The more particular the project, the easier it will be to clarify the issues by specifying the relationship between analysis and policy, fitting the means to the ends, and treating the problem as a technical one. But even particular projects will have wider repercussions. Decisions regarding these wider issues, and the broad structure of the plan

generally, will tend to be guided longer by the vaguer intuitions that inspire and pervade the process of planning. Nevertheless, technical considerations of efficiency will spread from projects to sectors and from sectors to the whole society, as a result of better collection of data, fuller knowledge, wider experience, and more accurate analysis. Thus social technology will gradually encroach upon intuition and vision.¹

All this applies not only to "economic" planning, but to all social policy efforts. Detailed calculations for facilities required to train skilled personnel in new industries can be made. The need for doctors and nurses for new hospitals and other health projects, and for teachers for new educational institutions, can be specified. Such concrete planning problems are almost entirely of a "technological" nature. But the ultimate decision as to the rate and direction of efforts to promote health and education and their place in relation to other objectives in the plan, and the estimate of their effects on other items in the plan, are bound to remain the result partly of intuition and partly of the buffeting of pressure groups, interest groups, and different opinions within the government and outside it.

Similarly, even in India, and not least there, where the state governments are well organized and exert a powerful influence on the central government, decisions about, for instance, the location of large investment projects will be the result of the intuition and imagination of the planners and of political bargaining. This is natural and inevitable, and should not be deplored as irrational from the point of view of "optimal" planning.² It would be impossible to evolve

¹ Speaking about the second Indian plan, Edward Mason makes the following comment: "There appears to have been no analysis either inside or outside the Planning Commission of the question whether the proposed investment was a better or more efficient way of attaining the output and employment targets of the Plan than some alternative pattern of investment. Nor, outside the field of irrigation, is there any evidence that the calculation of prospective rates of return on proposed projects was considered to be a necessary function of the Planning Commission." (Mason, *Economic Planning in Underdeveloped Areas: Government and Business*, p. 79.)

D. R. Gadgil's judgment about the Indian plan is fair: "Was anything done in the formation of the Second Five-Year Plan which made a striking departure from the earlier practice? There were, no doubt, a number of papers produced by statisticians and some even by economists. It does not appear that they affected materially the structure of the Plan. Ultimately, given the policy biases which had been evolved, the Plan frame was based on common sense projections out of rough available data in various directions. It was always known that there had never been any real technical examination of the individual projections." (D. R. Gadgil, "Prospects for the Second Five-Year Plan," *India Quarterly*, January-March, 1957, p. 11.)

"Within the limits imposed by these political and administrative considerations, there still remains a large and important field for economic calculation. The problems of economic calculation center around considerations of efficiency and consistency." (Mason, *Economic Planning in Underdeveloped Areas: Government and Business*, p. 69.)

² "Indian planning pays a great deal of attention to a 'proper' distribution of public investment among the various states. And in Pakistan a politically acceptable allocation of development funds between the East and West wings is the first prerequisite of planning. This means that the development planner is concerned rather with the problems of 'sub-optimization' than with the *optimum optimum* from the point of

a policy of "optimal" location that would, in a power vacuum, weigh the advantages of regional equality, of wider regional dispersion, and of creating external economies in stagnating areas against the advantages of reaping external economies from areas that already have flourishing growing points; or weigh the benefits of exploiting existing markets against those of creating new markets; or weigh the drawbacks of higher costs and waste from putting up plants in stagnating places against the disadvantages of forming or strengthening congested enclaves of privilege. Intuition and bargaining must go hand in hand. But as planning proceeds, more serious study can and will be devoted to the direct and indirect consequences of various policies of location. These will affect in turn the content of planning and the valuations that guide government policy.

From these points of view, the process of planning can be regarded as a "learning process" in which intuition is transformed into hunches and hunches into knowledge, political pressures into technical considerations, wholly independent into partly instrumental valuations, and in which the obstacles presented by social inertia and vested interests, the inhibitions of the planners, and the area of genuine ignorance and uncertainty are gradually reduced. Numerous other illustrations could be cited of areas in which successful planning will tend to increase rationality, such as the issue of concentration versus dispersal of efforts, many small versus a few large community development schemes, urban versus rural development, large-scale versus small-scale industry. In all these matters, the planners will begin by "feeling their way," but will gradually be able to prepare the ground for more rational decisions, through the broadening of information and the weakening of obstacles and inhibitions. "Weights" determined by intuition and political pressures will be replaced by "weights" based on calculations of secondary economic and non-economic effects. What begins as a game of blindman's buff will end as an attempt to piece together a jigsaw puzzle.

IV

Elements in a Theory of Planning for Development

The abstract analysis, in Part II of this appendix, of conditions in the social system and their causal interrelationships could be carried out, up to a point, without specific value premises; that is, with merely a general indication as to which conditions are undesirable for development and the desirable direction

view of national development." . . . "As I have pointed out, political considerations in Pakistan direct a relatively equal division of public development expenditures between the two provinces — regardless of the location of economic opportunities and administrative capacities." (Mason, *ibid.*, pp. 67, 74.) The point is that, from a wider point of view, so-called "sub-optimization" may be more realistic and, indeed, more efficient than some narrowly defined, imagined "optimization."

of change. In Section 5 we argued that such an analysis can derive from a broad conception of the modernization ideals, which constitute the general value premises of this study. Some important conclusions about rational planning can also be drawn from our knowledge of the interdependence of the conditions for development and these general value premises, without a deeper examination of the more specific valuations that are relevant in a particular country at a particular time. In this part we shall consider some of these conclusions, which should be the building bricks of a theory of planning for development.

18 The Rationale of the "Big Push"

One of these conclusions concerns the rationale of the "big push." The government of an underdeveloped country has many good reasons for pushing development as hard as it can. One reason is simply to achieve higher levels of development. There is, however, the additional fact that unless the push is hard enough, no development will occur. In the absence of what Leibenstein calls a "critical minimum effort," attempts to develop will fail.¹ Efforts beyond this minimum will tend to yield increasing returns.

The same notion is vaguely present in the popular metaphor of a "take-off" and in the formulas, recurrent in the plans and in discussions of the plans, that the aim is to reach as soon as possible a state of "self-generating" or "self-sustained" growth.² The precise idea underlying these expressions is not clear. Presumably it is not that development beyond the critical minimum effort will occur automatically, without any further planning and government policies. If the implication is rather that further growth can take place without reliance on non-commercial foreign loans and gifts,³ there ought to be some indication of the numerous other conditions and policies in a country on which such a desired autonomy depends. Much also depends on the commercial and foreign exchange policies pursued by other countries, even their domestic policies and their rates of growth, and, more generally, on structural changes in world demand and supply. These conditions, which are beyond the control of an individual underdeveloped country, will make a big difference in its ability simultaneously to service past debts and pay its way internationally as development proceeds.

In spite of this lack of precision, the idea of a critical minimum effort suggests that one or a whole series of thresholds have to be passed before the

¹ *Economic Backwardness and Economic Growth*, p. 96 *et passim*.

² "If a self-generating economy is to be achieved within a reasonable time, the proposed increase in national income is the minimum required during the Second Plan period." (Pakistan, Government of, Planning Commission, *Outline of the Second Five Year Plan (1960-65)*, Karachi, January, 1960, p. 2.)

³ "The Third Plan was conceived as 'the first stage of a decade or more of intensive development leading to a self-reliant and self-generating economy.' The perspective was that 'progressively external aid will form a diminishing proportion of the total investment, and by the end of the Fifth Plan the economy will be strong enough to develop at a satisfactory pace without being dependent on external assistance outside the normal inflow of foreign capital.'" (India, Government of, *The Fourth Five Year Plan: A Draft Outline*, New Delhi, 1966, p. 2.)

cumulative process gets under way at all. In Sections 9–11 we discussed some of the forces, either independent of or themselves released by development, that will slow down, halt, or even reverse the upward movement. In particular, we noted the role that population growth and an unfavorable trading position play in this process. The strength of the feedback and its direction as well may thus crucially depend on the size of the initial stimulus and the speed of its application.

The discussion of the necessity for a “big push” is regularly directed to “economic” factors. Numerous illustrations are cited of the hoped-for gains after the point of minimum effort. The explanations turn essentially on external economies, discontinuities, indivisibilities, complementarities, imperfections, and asymmetries. The arguments from external economies stress that there are numerous occasions when the total gains from an investment greatly exceed the direct returns to the investor. Both existing enterprises and new ones gain from the action, without the agent being able to charge others fully for these gains. The investment may therefore not be undertaken, unless policies rectify the discrepancy between the gains to those who do not pay for them and the profits to the investors. When the act of investment is undertaken, it leads to more development than cost and profit calculations for the individual enterprise would indicate. The training of workers and personnel by a firm that may lose them later is a favorite example. Even this could be viewed as a special case of an indivisibility, for training cannot be conducted in small parcels. Other indivisibilities arise from the technical need to add to productive capacity, to demand, and to investments in blocks of a minimum size, the benefits of which accrue largely to others.¹ Other traditional examples are the need for social overhead capital (power, transport, housing, and so on) and for mutually supporting or “balanced” demand.²

But the idea can be extended to other areas, such as the ability to learn by one’s own and others’ experience, to gain confidence, to benefit from example by imitation. Not only technological complementarities exist between different investment projects, but also attitudinal and institutional complementarities and indivisibilities. As soon as the argument turns to external economies, it is, indeed, not possible to distinguish clearly between “economic” and “non-economic” forces. And the general case for the big push is based on the interrelationship of all conditions in the social system, not only those in our categories I and 2. The big push must jerk the system out of the grip of the forces of stagnation. In addition to inertia (Section 9), there are forces, both independent of development (Section 10) and caused by it (Section 11), that impede or reverse progress. Unless conditions are changed by specific, powerful,

¹“A minimum quantum of investment is a necessary (though not sufficient) condition of success. This is in a nutshell the contention of the theory of the big push.” (P. N. Rosenstein-Rodan, “Notes on the Theory of the ‘Big Push,’” *Economic Development for Latin America*, Howard S. Ellis, ed., Macmillan, London, 1961, p. 1.) Ragnar Nurkse wants “a frontal attack . . . a wave of capital investments in a number of industries” to assure what he describes as “balanced growth”; see Section 24 below. (*Problems of Capital Formation in Underdeveloped Countries*, p. 13.)

²Section 24.

and coordinated efforts,³ they will not change at all or will change too slowly or perhaps even in the wrong direction, and thereby either bring the development process to a halt or reverse it. Even if the process is not reversed and some upward movement is created, all that may be achieved is a somewhat higher level of equilibrium.

The development efforts will therefore not pay off until, through the mechanism of circular causation, there is a *substantial positive feedback* from those conditions that were not initially lifted by these efforts to those that were. A cumulative process will then be started. The “gains” to development derived from the feedback can then either take the place of some of the efforts or, if those are continued, can reinforce them. These gains will tend to be larger, the greater the momentum that the process of development has gathered. At the start, big efforts are needed to set the process in motion. Thereafter, the planners can relax or they can harvest proportionately ever larger and quicker yields from sustained efforts.² It is for this reason that *underdeveloped countries cannot rely on a “gradualist” approach* and that a growing number of economists have come to support the “big plan.” Backwardness and poverty naturally make it difficult for a country to mobilize enough resources for a big plan, but they are precisely the reason why the plan has to be big in order to be effective.³ From one point of view, the very idea that planning is needed to start development, and that market forces by themselves cannot do it, implies the thesis of the big push.

The thesis of the big push, as commonly advanced, has two aspects: the *size* of the initial efforts and the *speed* with which they are applied. In connection with the big push, other types of concentration are often proposed, such as concentration in *space*, or on *large-scale projects*, or on *capital-intensive techniques*. A large effort per unit of time — say the year or the planning period — highly concentrated on a few sectors and on a few regions, using capital-intensive techniques would combine several of these aspects. These other types of concentration, however, raise quite different questions, the answers to which are not necessarily the same as that with respect to size and speed.

¹Section 19.

²“After all, it is an elementary principle that if a certain mass has to be moved against a certain friction, a strong enough force has to be applied to start with although once the mass has been set in motion, relatively less force may be required to keep it moving. If, therefore, any backward agricultural area has to be developed, the first impact of the agricultural extension service must be very intensive, although once the process of development has started, the size of the staff can be reduced.” (Sen, “The Strategy for Agricultural Development,” p. 14.)

³This dilemma has, for instance, been a main source of controversy about Indian planning from the time of the preparation of the Second Plan. The anti-gradualist approach is illustrated by the following quotation: “One might also glean from Indian experience a warning against gradualism. In terms of the resources in sight in 1956, the second Plan was of course fairly ambitious; in terms of what is needed to bring appreciable changes in productivity and to alter fundamentally the prognosis for future growth, however, it was clearly too modest. And if even this plan is abandoned for lack of resources, it may turn out that India will have missed her ‘optimum moment’ for generating a take-off.” (Higgins, *Economic Development*, p. 730.)

An example of the debate about concentrated versus dispersed effort is centered on India's community development program.¹ The attempt to spread community development and agricultural extension work over the 500,000 villages of the country has been criticized on the ground that this dispersal of effort would fail, in our terminology, to initiate circular causation, with cumulative effects, anywhere. The "push" would not be "big" enough. It is argued that concentration on a few villages or districts where opportunities are most favorable would yield greater all-round benefits in the end than dispersal of efforts at the start. On the other side it is argued that the entire countryside must be prepared for development if rural India is to emerge from backwardness. Concentration on industry, particularly heavy industry, has likewise been propounded as the only course by which an underdeveloped country can be set firmly on the road to development.² Opponents of this policy argue that it would merely create small enclaves in an otherwise backward and stagnant economy. The proponents of concentration have to rely on spread effects for their policies to be effective; but spread effects are themselves a function of the level of development and are generally weak in South Asia.³

No abstract solution to these dilemmas is possible. Everything depends on the strength and direction of the series of repercussions, and they will vary from country to country, period to period, and project to project. Moreover, these repercussions can themselves be altered by policies. The practical problem whether to concentrate or disperse in space, or with respect to industries or sectors, must be posed in more concrete terms to be meaningful. It has, however, this relationship to the problem of the big push, so far as concerns the size and speed of the development efforts: the bigger the efforts are in a given period of time, the greater the possibilities of combining a certain concentration in regard to space, industries, and sectors, giving higher immediate yields, with widely dispersed efforts to lift general levels, partly by increasing the spread effects.⁴

¹ Chapter 18, Section 8; Chapter 26, Sections 10 and 19.

² Chapter 17, Section 8; Chapter 24, Sections 1, 3, *et passim*.

³ Chapter 24, Sections 7-9.

⁴ The dilemma of concentration versus dispersion is related to the controversy over unbalanced versus balanced growth, which we shall review in Section 24.

Generally, Western writers have an exaggerated belief in the ability of the underdeveloped countries in South Asia to begin to develop once a strong enough spurt has given the lead; this unfounded optimism is connected with a lack of faith, which may instead be well founded, in their ability to carry out effectively a great number of policies at the same time.

J. K. Galbraith argues against "the inclusion of all good things in the Plan" and gives an example of the usefulness of concentration: "In the late eighteenth and early nineteenth centuries the accessible agricultural area of the United States - that between the Appalachian Plateau and the sea - was relatively small and there were occasional food shortages in the sense that grain had to be imported from Europe. The solution was to drive a canal to provide access to the abundant and rich lands of the Ohio Valley. No other way of increasing production was so important; it was obviously worthwhile at this stage of development to concentrate on this one thing alone. This in effect was done. After the Erie Canal was opened in the eighteen-twenties food became abundant and cheap along the eastern seaboard. Had a modern agricultural mission set about increasing food production in the early nineteenth century, and in

19 The Need to Coordinate All Policies

Planning for development must aim, as we have said, at jerking the entire social system out of its low-level equilibrium and setting off a cumulative process upwards. *There is economy in the big push.* Smaller efforts mean waste. The effectiveness of the push depends, of course, not only on the size of the efforts but also on their timing and direction. Much will depend on which conditions are changed, by how much and how rapidly. We cannot rely on circular causation to see to it that the impulses that the plan has imparted to a few conditions will be propagated throughout the social system. Yet this is necessary for acceleration. Even if those impulses were sufficiently strong to spread widely, development would be slower than if change had been induced directly in many other conditions *at the same time* and efforts had been *coordinated*.

Coordination of policies should not, however, stop short at "economic" policies, for there are many causal sequences outside the "economic" field that would hamper development in the absence of policies acting on them either directly or indirectly through other changes large enough to transform their braking power into a motive force. As was observed in Sections 9-11, numerous forces hamper or reverse the process of cumulative development, either by reacting too weakly or too slowly or by acting against it. We may therefore conclude from our general knowledge of conditions in South Asia and their causal interrelationships, not only that the efforts have to be larger than a critical minimum, but also that *they must be directed simultaneously at a great number of conditions, concentrated within a short period of time, and applied in a rationally coordinated way.*

The effects of any given policy will depend on the policies simultaneously pursued in other areas. Government policies can never be planned in isolation. In no field, therefore, can targets be set up and policy means chosen independently of what is done, or not done, in other fields. National planning implies

light of modern technology and organization, it would have urged the establishment of experiment stations, proposed an extension service, suggested the development and adoption of new varieties of grain, advocated supervised credit, proposed more attention to marketing services, and quite possibly have used the occasion to stress the importance of starting work in home economics, farm management, rural health and rural sociology. The canal would have been only one among all of these good ideas and would probably not have got built. And all the rest being of far less immediate effect, the food imports would have continued. At a later stage it is worthwhile in a country such as the United States to devote itself to ways by which central opportunities are exploited. It is not a pattern to be applied to countries where concentration on essentials is still the urgent requirement." (J. K. Galbraith, mimeographed and undated note on Pakistan's Second Plan Outline, pp. 17 ff.) See also the same author's *Economic Development*, Harvard University Press, Cambridge, Mass., 1964, pp. 58 and 74.

Galbraith's moral may not be applicable to South Asia. Even were there similar big ventures to be undertaken, their spread effects would be unlike those that followed upon the opening of the Erie Canal. Actually, the United States government did a number of other things at the same time it built the canal, including some of those mentioned by Galbraith as in his view having lower priority.

the comprehensive and coordinated execution of a program of state intervention in all fields of social and economic life, based on the available knowledge of the conditions and their interrelationships, and aimed at the acceleration of development (Appendix 3, Section 6 *et passim*).¹

Still another conclusion can be drawn from our general knowledge of the causal interrelationships of conditions in an underdeveloped country, without introducing more specific value premises than those contained in the modernization ideals: The need for a set of policies on a broad front, in which all state intervention is coordinated, is *very much greater in underdeveloped than in developed countries*.²

There are several reasons for this difference. First, both the rewards of success and the penalties of failure are greater in an underdeveloped than in a developed country. The poorer a country and the greater the danger that it may not be able to lift itself beyond the thresholds to cumulative development, the more imperative that whatever efforts it makes and whatever scarce resources it scrapes together be used with maximum efficiency. It cannot afford waste.³ Secondly, in underdeveloped countries attitudes and institutions are

¹ We do not mean attaining "maximum" development in any simple sense. If development has any costs, and it obviously does, maximum development regardless of costs cannot be the aim of the planners. Beyond a certain point, the sacrifices imposed by raising the rate of development further will appear excessive. These constraints depend not only on physical facts such as the extent to which consumption can be kept down without impairing people's willingness and ability to work, but also on moral and political value judgments. The simple quantitative connotations of "maximum" ignore this. Moreover, even apart from physical and valuational constraints, "maximum" is ambiguous, because it leaves the time distribution of development open. Which is "bigger": 10 percent more next year and thereafter staying put; or no more for ten years and thereafter a permanent annual increase of 60 percent; or a continuous annual increase of 2 percent? Inter-temporal value judgments are required to give meaning to a "maximum" rate of development. We reject the term "optimum" because it conceals behind a pseudo-objective idea a multiplicity of valuations. "Maximum desirable" or "as fast as is possible and desirable" are empty, evasive phrases.

The "maximum" thesis has occasionally been defended by making two assumptions: first, that there is a maximum rate at which the economy can absorb the bundle of coordinated policies and beyond which yield becomes negative; second, that gains short of this maximum rate are so great that they compensate for any sacrifices. The limits to this maximum rate are set by resources available for investment, attitudes, institutions, health, administration, and so on. This view implies the assumption that the ability and willingness to apply policies are not themselves constraints. (See Otto Eckstein, "Capital Theory and Some Theoretical Problems in Development Planning," *American Economic Review, Papers and Proceedings*, Vol. LI, No. 2, May, 1961, p. 94.)

² The dilemma is that, while the *need* to coordinate is much greater in underdeveloped countries than in advanced countries, the *ability* and *willingness* to do so are much less. That the need is greater we argue in some detail below in this appendix. That the ability to coordinate and even the willingness to do so are frequently less is apparent in many contexts in our study. Without this important proviso, the present discussion of the limitations of comprehensive planning in South Asian countries may appear unduly naive.

³ "The smaller the resources and the more formidable and complex the problems, the greater the need for planning in order to achieve maximum results in the shortest

normally much less favorable to the spread of development impulses than in highly developed countries. In the latter a long process of adjustment toward rationality has already taken place. It has resulted in attitudes, patterns of behavior, and institutions sanctioned by laws and regulations, collective agreements, customs, and accepted ideas, disseminated by education, and permeating social intercourse generally. These forces provide for the regulated but free propagation of impulses from one field of activity and one location to others. In underdeveloped countries, on the other hand, the "spread effects" meet with stronger resistance, and attitudes and institutions may check or even counteract the impulses for development.

An illustration of the need for reforming attitudes and institutions is provided by our study of labor utilization in Part Five of this book. We find that the modern Western concepts of "unemployment" and "disguised unemployment" — in South Asia translated, or rather transformed, into "underemployment" — do not apply to the greater part of the population of working age — the "labor force" — in South Asian countries.¹ These concepts imply that there is a fluid labor market, that idleness within regulated working hours is normally involuntary, that inability to work can be clearly distinguished from unwillingness to work, and that the differences in the quality of labor input, which is to say its intensity and efficiency, can be disregarded. In the West these assumptions and, consequently, these concepts are meaningful. Attitudes there fit an analysis in the simple aggregative terms of employment and unemployment. For particular occupations, working hours and working conditions have been standardized, and differences in the quality of labor input either are not very important or can be reduced to a common scale. With few exceptions, a man without a job can be assumed to seek work, so that a sufficient rise in the demand for labor will create "full employment."

In the South Asian countries the situation is entirely different. Increasing the demand for labor, or creating opportunities for productive work by the self-employed, will by itself not lead to a better utilization of the labor force or will do so only to a minor extent. Such measures have to be supplemented by policies directed not only at investment and expansion of labor demand but also at changing organizations and habits, attitudes and institutions, and religious beliefs and social valuations. The presence or absence of such policies is crucial to the productivity of investments, a situation for which there is no parallel in the West. On the other hand, properly selected and directed investments are often an indispensable condition for implementing policies intended to improve attitudes and institutions. The exclusion of "non-economic" factors from the ordinary models used in economic analysis and planning has led to a serious distortion of the concepts used in relation to labor utilization.

20 *The Neglect of Attitudes and Institutions*

In the writings on development problems of underdeveloped countries, it is a commonplace to acknowledge that a close relationship exists between the ef-

time." (Pakistan, Government of, National Planning Board, *The First Five Year Plan 1955-60*, Karachi, 1958, pp. 59-60.)

¹ Chapter 21, Part II; Appendix 6.

fectiveness of development policies in the economic field and prevailing attitudes and institutions.¹ But it is fair to say that almost all economic studies of these problems, whether by South Asian or foreign economists, imply an almost complete neglect of this relationship and its consequences. In particular, all the development plans suffer structurally from this defect.² Prejudices derived from Western and "Marxist" thinking — which on this as on so many other points converge — and given support by vested interests or inhibitions in policy formation, blur economists' broader insights into South Asian conditions and confine their range of vision to "economic" factors.

In the Prologue (Section 6) and in many other contexts³ we characterized

¹ "Prices do not respond to changing relative scarcities, or entrepreneurs do not respond to changing prices, or immobilities of resources are such as to prevent necessary movements of factors, or some other characteristic of the general social milieu interferes with the economic process working in such a manner as to generate continuing economic growth. It is apparent that such barriers must be eliminated before a society can play host to the kind of cumulative developmental process with which advanced countries have become familiar." (Gustav Ranis, "Economic Development: A Suggested Approach," *Kyklos*, Vol. XII, Fasc. 3, 1959, p. 440.)

"Sustained growth requires a considerable transformation in the educative process. . . . that is, it requires drastic changes in the mores, habits, and traditions of the populace. But the educative process and the consequent mores and traditions are so fundamental to the life of the society, and so pervasive in the day-to-day life of the community, especially within the family group, that it is almost unthinkable that these should respond drastically to small stimulants or shocks." (Leibenstein, *Economic Backwardness and Economic Growth*, pp. 35-36.) The writer gives "a partial list of the attitudes that it would be desirable to develop in order to promote economic growth" (p. 109): "(1) Western 'market' incentives, that is, a strong profit incentive, an eagerness to maximize money incomes, etc., (2) a willingness to accept entrepreneurial risks, (3) an eagerness to be trained for industrial and 'dirty' jobs rather than white collar jobs or those that have cultural prestige value, and (4) an eagerness to engage in and promote scientific and technical progress rather than devotion to an honorifically valued 'cultural' education. In sum, it is necessary to create an outlook in which success is gauged by market performance and in which rational, rather than conventional or traditional, considerations are the determinants of action." This list, as we find in the present study, is a very partial one.

"Development is not governed in any country by economic forces alone, and the more backward the country the more this is true. The key to development lies in men's minds, in the institutions in which their thinking finds expression and in the play of opportunity on ideas and institutions." (A. K. Cairncross, "International Trade and Economic Development," *Economica*, Vol. XXVIII, No. 109, February, 1961, p. 250.)

Everett Hagen correctly appraises the significance economists attach to these factors. He notes that "A number of economists who are students of economic growth make generous reference to the importance of noneconomic factors" and then — citing Kaldor, Leibenstein, Rostow, Lewis, Nurkse, Eckaus, Hirschman, and Mason and referring in general to "virtually all of the writers of texts on economic development" — he adds that "many of these treat these factors much as Mark Twain accused everyone of treating the weather. Having mentioned noneconomic factors, they then proceed to ignore them and discuss development as though only economic factors bring it about. The others (including present company) in essence say, 'change in noneconomic factors must be taken into account, but I don't know what causes it.'" (Everett E. Hagen, "Turning Parameters into Variables in the Theory of Economic Growth," *American Economic Review, Papers and Proceedings*, Vol. I, No. 2, May, 1960, pp. 624-625.)

² Appendix 4.

³ For instance, Chapter 21, Section 9.

this approach as biased and discussed the social forces that have led to it. The economic models⁴ to which we repeatedly refer are symptomatic of this bias. Even when the plans express a wider conception of the problem of planning and devote much space to proposals for changing non-economic factors, they still have at their core an investment program in which output is treated as a function of capital input, usually in terms of physical investment.⁵ When, as in the treatment of labor utilization, the facts seem to underscore the necessity of altering attitudes and institutions, it is minimized by the use of the concepts of employment, unemployment, and disguised unemployment or underemployment — relevant and realistic in the West but not in South Asia.

This narrow approach to planning in the underdeveloped countries of South Asia implies one or both of two assumptions:

- (1) that development efforts directed at raising output by investment will induce changes favorable to development in all other conditions;
- (2) that efforts to change the non-economic conditions directly are difficult, impossible, or ruled out.

The first assumption has a long and honorable history. Adam Smith and the classical economists laid great stress on such non-economic factors as rationality, enterprise, efficiency, mobility, skills, education, and honest government, as pre-conditions of production. But they tended to regard their improvement as inevitable. They had, indeed, good reason for such optimism with respect to the countries with which they were concerned. Moreover, their liberal philosophy, inspired by a very different experience from that of the South Asian countries, made them hostile to state intervention. In their view, development — including reforms of attitudes and institutions — would result from giving free rein to individual initiative and market forces. Marx — no more a planner than his predecessors⁶ — also thought in teleological terms and regarded the realization of his ideals as the inevitable outcome of a historical process. Planning against the process was futile, planning for it unnecessary. His view of the entire culture — with well-known reservations — as a superstructure of the "modes of production" reflects an extreme optimism about the spread of impulses from the "modes of production," and particularly from industrialization, to cultural and social attitudes and institutions.⁷

The majority of contemporary Western economists, with a few notable exceptions, are planners, at least with regard to the underdeveloped countries. But influenced by Marx to a degree they are rarely aware of, they usually make the first assumption that economic advance will have strong and rapid repercussions on attitudes and institutions, especially on those important for development.⁸ Without this assumption, one cannot make sense of the numer-

⁴ Appendix 3.

⁵ Appendix 4.

⁶ See in Section 3 above.

⁷ Prologue, Section 6; Chapter 5, Section 4.

⁸ The present-day Communist doctrine is well expressed by Oskar Lange: "What is the essential of planning economic development? I would say that the essential consists in assuring an amount of productive investment which is sufficient to provide for a rise of national income substantially in excess of the rise in population, so that per

ous models and plans produced for the underdeveloped countries of South Asia. It has become almost a cliché in the region to say that the political revolution must be followed by a social revolution in order to permit an economic

capita national income increases. *The strategic factor is investment, or more precisely productive investment.* Consequently the problem of development planning is one of assuring that there be sufficient productive investment, and then of directing that productive investment into such channels as will provide for the most rapid growth of the productive power of national economy.

"These are the essential tasks of development planning. The problems which planning faces can be divided into two categories. One is the mobilization of resources for purposes of productive investment, the other is the direction of the investment into proper channels. These are the essential problems implied in planning." (Oskar Lange, *Economic Development, Planning and International Cooperation*, Central Bank of Egypt, Cairo, 1961, p. 10. Italics added.)

Shonfield and Hoselitz state the most common Western assumptions:

"Implicit in our whole approach is the decision to try and push economic development by purely economic means. We permit ourselves to hope that certain kinds of economic change will have political consequences; the ideology of the West is Marxist enough for that. We expect that the new middle classes will, once they are large and rich enough, eventually overthrow the corrupt government to which we are giving economic assistance today. But we are not going to do anything directly to bring that government down." (Andrew Shonfield, *The Attack on World Poverty*, Chatto & Windus Ltd., London, 1960, pp. 17-18.)

"As concerns present instances of economic development, it is quite proper to regard such factors as accumulation of (or mobilization of accumulated) capital, planned introduction of new skills and new work techniques as the primary variables, and to regard adjustments in the social structure as positive, negative or neutral 'responses' to these 'stimuli.' In other words, the governments of underdeveloped countries are resolved to plan for economic development and to carry out these plans to the extent of their abilities. The impact of social and cultural factors consists thus not in determining whether or not, or even in what form, economic growth is to take place, but how easily and smoothly the objectives of a development plan can be attained and what costs — not all of which are strictly measurable in terms of money or other resources — are involved in reaching the goals." (Bert F. Hoselitz, "Social Structure and Economic Growth," *Economia Internazionale*, Vol. VI, No. 3, Chamber of Commerce, Industry, and Agriculture, Genoa, 1953, p. 18.)

Nehru observes the similarity between the "Marxist" and the Western approach and attributes it to the rationalism of science: "... broadly speaking, planning for industrial development is generally accepted as a matter of mathematical formula. It is extraordinary how both Soviet and American experts agree on this. If a Russian planner comes here, studies our projects and advises us, it is really extraordinary how his conclusions are in agreement with those of — say, an American expert. It has been quite astonishing for me to come across this type of agreement from planners belonging to two different and contradictory political and economic systems. You see, they happen to be men of science, planners, experts, who approach our problems from purely a scientific point of view. Once they do so, they forget about ideologies and all that, and they agree, broadly, that given certain pre-conditions of development, industrialization and all that, certain exact conclusions follow almost as a matter of course. Of course, I am not talking of non-scientific people, like the American businessman, for example, who will talk about private enterprise and all that, or the Soviet politicians who will press Communist or Marxist solutions. They always do so. But the moment the scientist or technologist comes on the scene, be he Russian or American, the conclusions are the same for the simple reason that planning and development today are almost a matter of mathematics." (R. K. Karanjia, *The Mind of Mr. Nehru*, Allen & Unwin Ltd., London, 1960, pp. 50-51.)

revolution. But despite this stereotyped declaration, practice suggests that social changes are expected to follow in the wake of economic changes, inasmuch as only an economic revolution, or in other words economic development, is in fact attempted.

The first assumption of the inevitability of sufficiently strong and rapid, indirectly induced changes of attitudes and institutions is related to the second assumption of the difficulty or impossibility of directly inducing changes, for acceptance of the second assumption demands acceptance of the first if planners are to maintain faith in the usefulness of Western-type economic models. The second assumption, though usually implicit, is occasionally made explicit.¹ Unfortunately, the evidence, as set forth in the present study, suggests that whereas the first assumption is glaringly untrue, particularly in the larger and poorer countries of South Asia where the accelerating increase in population adversely affects both economic and social conditions, the second assumption may well be true.

As we point out in various contexts in this study, "economic" policies are undoubtedly easier to carry out than are social policies that challenge vested interests, violate deep-seated inhibitions, offend cherished traditions and beliefs, and work against the heavy weight of social inertia. If, however, development policies are, for these reasons among others, mainly directed at economic development in the narrow sense, they will prove less than effective. Tibor Mende has made this point well:

... no country has seen a frontal attack on all the major problems at the same time. I should like to remark here that I am absolutely convinced that, sociologically speaking, one of the reasons for the communists' success wherever they are active is that they go on attacking all the major problems simultaneously. In an inert society where the deformations of the past have accumulated, you are exactly in the same situation as the man who cuts a clearing in the jungle, if you go on attacking one problem; that clearing will not resist the jungle when it grows back, it will disappear. Either you go at it seriously or better you don't touch it, because you will be disillusioned. I think this is what has been happening in Southeast Asia. They have attacked one problem at a time; I am not condemning them for it, because after all they had no personnel, they had no capital, and it was very difficult to be more general. But anyway I think it is important to realize that to create the general dynamism which makes people work wonders — you see sometimes in these communist countries that people do extraordinary things which statistically speaking are not expected of them — it is necessary that they go on attacking all the problems simultaneously and generate this almost superhuman en-

¹"Underlying these remarks is the assumption that desired patterns of fertility, desired attitudes toward thrift and investment, desired rates of savings, and desired changes in and stimuli to the growth agents, and, most important, desired changes in mores and traditions that underlie these changes cannot be achieved easily by direct methods, . . . Belief in the efficacy of direct action in establishing desired attitudes, traditions, and behavior patterns seems to be somewhat similar to advocating direct action in fostering the spirit of optimism during periods of economic depression. Our present knowledge of social psychology does not suggest that very much can be hoped for in this direction at present. Of course, we cannot foresee the future, and future socio-psychological discoveries may possibly change all this." (Leibenstein, *Economic Backwardness and Economic Growth*, pp. 258-259, f.n. 6.)

thusiasm which makes people do extraordinary things. This has not been attempted anywhere in Southeast Asia.¹

To Mende's observations about the policies of the Communist countries one may add that the Communists themselves have obviously not relied on Marx's optimistic hypothesis of the rapid and effective spread of impulses from the economic sphere to the "superstructure" but have directly intervened to change social conditions, while, as always, preserving Marx's doctrine in reinterpreted form. In the first place, they have used the government to reshape society, instead of letting society, changed by the modes of production, determine the government.² They have thus created something very different from Marx's dream of the "realm of liberty" that would replace the "kingdom of necessity" and in which, after the collapse of the capitalist system, the state would "wither away" and the government of men would give way to the "administration of things." The adjustment of the doctrine was clearly marked by Lenin's famous assertion that "Communism is *Soviet power plus electricity*" (italics added), although it is doubtful whether Lenin foresaw the amount and duration of the compulsion that would be used.³ This adjustment of the doctrine

¹ Tibor Mende, "Southeast Asia and Japan," *Bulletin of the International House of Japan, Inc.*, Winter, 1959, No. 3, p. 26. When he speaks of Southeast Asia, Mende is referring to what in this book is called South Asia.

² As Edward Mason has noted: "The critical question confronting research on the role of government in economic development is the extent to which government can shape, or is inevitably shaped by, the society of which it is a part. To a generation deeply influenced by Marx, society, or rather basic economic and social change, was the shaper and government very much a strictly determined product. And indeed in the society that Marx described and analyzed — the society of Western Europe, and particularly Britain — government was shaped by the society. As George Unwin put it, 'The main feature of British history since the seventeenth century has been the remoulding of a State by a powerful Society.' (George Unwin, *Studies in Economic History*, London, 1927, p. 28.) But the political descendants of Marx have demonstrated in no uncertain manner that the state, appropriately equipped with instruments of authority, including terror, can go a long way in reshaping the surrounding society." (Edward S. Mason, "The Role of Government in Economic Development," *American Economic Review, Papers and Proceedings*, Vol. L, No. 2, May, 1960, p. 636.)

"The cardinal advantage of communist economic planning is that it can and does think consistently in these terms; for the communist, once he has consolidated his regime politically, has both the power and the will to impose on the community the physical distribution and utilisation of men and materials that his calculations show to be necessary for the attainment of his objectives. He need have no regard for immediate sectional interests, whether of landlords or capitalists, peasants or proletarians, and can act with a ruthlessness tempered only by the need to avoid provoking rebellion and to maintain producers' morale — in both of which tasks he is notably assisted by his monopoly of the means of propaganda. Non-communist governments cannot use similar methods, and consequently are unable to plan the economy in so comprehensive a manner." (A. H. Hanson, *Public Enterprise and Economic Development*, Routledge and Kegan Paul Ltd., London, 1959, pp. 98–99.)

³ Sarvepalli Radhakrishnan, on returning from his ambassadorship in Moscow, told the present writer of a conversation he had had with Stalin, in which the latter had said that he foresaw, and hoped for, much more individual liberty once economic development had been pressed forward so much that further development would be compatible with it; but he meant that in the initial stages the planned development in the Soviet Union required the harsher rule.

may have been motivated by another circumstance that conflicted with Marx's forecast: the fact that the revolution occurred first in an underdeveloped country. In both respects revolutionaries like Bakunin, who saw the importance of changing attitudes, and who predicted the arrival of the revolution in countries like Russia, showed deeper insight and more accurate vision.

As is brought out in the fourth part of this book, the South Asian countries do not want to follow the Communist line of development. They aim at "democratic planning." In Chapter 18, Sections 13 and 14, on the "soft state," and elsewhere, we have argued that the term "democratic planning" has been used to justify a very serious lack of determination and ability to apply compulsion in order to enforce existing laws and regulations and to enact and enforce new ones. The dictum of the highly respected American jurist Learned Hand that "law is violence" would not appeal to, or be understood by, the greater part of the South Asian intellectual elite. The governments of these countries have been much more reluctant to promulgate and enforce obligations than have the rich democratic welfare states of the West, which do not regard the use of force for social ends as a retreat from democracy.

This reluctance not only helps to explain the relative absence of successful development in South Asia but can itself be explained by the status of underdevelopment. The "soft state" falls under the heading of our fourth, fifth, and sixth categories of undesirable conditions — attitudes, institutions, and policies — and is one of the main characteristics of underdevelopment. It derives historically from feudal or pre-feudal traditions, and was in many ways reinforced by the reaction against the colonial regimes and by the liberation movements they bred. But in the present era, the soft state does little to remove, and in fact helps to create, almost insurmountable obstacles and inhibitions to planning. By preventing vigorous attacks on all those conditions that lie outside the narrowly defined economic sphere, it impedes economic development. In this situation, *planning that is based on simple economic models and neglects non-economic forces serves as an opportune rationalization*. Necessity, especially political necessity, is made a virtue when it is lightheartedly assumed that investment will by itself engender development. To buttress this rationalization analogies are claimed to exist between conditions in South Asia and conditions in advanced countries, either as they now exist or as they did exist when these countries approached a period of rapid development.¹

But the prospects of breaking down the barriers to development in the South Asian countries would be quite different if in a country like India, for example, the government were really determined to change the prevailing attitudes and institutions and had the courage to take the necessary steps and accept their consequences. These would include the effective abolition of caste, prescribed by the constitution, and measures, accepted in principle, that would increase mobility and equality, such as effective land reform and tenancy legislation; a rational policy for husbandry, even if it required the killing of many half-starved cows; eradication of corruption at all levels; enforcement of tax laws; effective taxation on income from land; a forceful attack on the problem of the "educated unemployed" and their refusal to do manual work —

¹ The differences in "initial conditions" are played down; see Chapter 14.

in general, enactment and enforcement, not only of fiscal, but also of all other obligations on people that are required for development. It would mean mobilizing the underutilized agricultural labor for permanent improvements in agricultural production and creation of social capital; a large-scale and effectively carried out campaign to spread birth control; and so on.

In many respects a large and rapid change of attitudes and institutions is not more difficult than a series of small and gradual changes — just as a plunge into cold water is less painful than slow submersion. Whatever resistance is called forth by any one gradual step forward will usually be more effectively mustered against the next step, whereas there is less chance for resistance when the change is rapid and multiple. This is particularly true if the small changes are attempted half-heartedly and if reliance is placed either on the indirect effects induced by economic changes or on exhortations and empty threats; in these circumstances the forces of resistance may be encouraged. Worse still is the practice, common in South Asia, of pronouncing or even legislating large-scale reforms and not implementing them. Such behavior breeds cynicism and contempt, and makes subsequent reforms more difficult.¹ All this having been said, it is admittedly very difficult to carry out reforms that offend against established institutions and attitudes, especially since those in power, responsible for reforms, often share these attitudes and have a stake in preserving the institutions through which they are molded; in other words, they suffer from what we have called inhibitions. To a varying extent this is as true, or almost as true, of the dictatorships in the region as it is of those governments that come to power through elections. Against this background the concentration in South Asia of planning on the narrow front of investment and production, expressed in the economic models and in the structure of the plans, becomes understandable.

As we noted, at the more general level of discussion the desirability of attacking on a broad front is generally recognized; but the gap between profession of principle and actual practice remains wide. The plans often include policies in many non-economic spheres, but the actual proposals are much more limited, and usually more lenient toward prevailing attitudes and institutions, than rational considerations of a high rate of development warrant.² One

¹The problem referred to in this paragraph is a crucial one. Social anthropologists, interested in the potential dynamics of stagnant communities in the dichotomy of revolution or evolution, could make path-breaking contributions to the theory of planning for development. Cf. J. D. N. Versluis, "Social Factors in Asian Rural Development," *Pacific Affairs*, Vol. XXX, No. 2, June, 1957, pp. 161–162.

²The plans regularly contain general statements about the necessity to change the general social framework.

The Second Five Year Plan of India, for example, made it clear that "the task before an underdeveloped country is not merely to get better results within the existing framework of economic and social institutions but to mould and refashion these so that they contribute effectively to the realization of wider and deeper social values." (India, Government of, Planning Commission, *Second Five Year Plan*, New Delhi, 1956, p. 22.)

"... the Philippine three-year programme of economic and social development also felt the need not to upset unduly existing non-economic value patterns, but, if this

influence in the direction of a wider approach in India is the Gandhian ideology;¹ similar ideas exist in other countries. They have not been very powerful, however, partly because planning and modernization represent a conscious break with these ideologies, and partly because they have urged voluntary changes in attitudes and institutions and opposed any form of external compulsion.

But it is not only the discussion inspired by Gandhian ideologies that has stressed the understanding of development and planning for development in terms of simultaneous changes in a multitude of conditions, both economic and non-economic. Writers unaffected by indigenous South Asian ideologies, and firmly in the tradition of the Western ideals of modernization, have also emphasized this need.² It has been summed up in the commonplace observation

was necessary, to plan for desirable changes in the political and social institutions." (Philippines, Government of, National Economic Council, *Three-Year Programme of Economic and Social Development (FY 1959/60 to FY 1961/62)*, Manila, 1959, p. 12.)

The plans of Ceylon and Pakistan "... view social development as a positive instrument for economic progress." (United Nations, ECAFE, "Experience of ECAFE Countries with Social Development Programmes," *Economic Development and Planning in Asia and the Far East, Economic Bulletin for Asia and the Far East*, Vol. X, No. 3, December, 1959, p. 10.)

The rationalization of the lack of determination to undertake any vigorous reforms of the social framework is put in terms of the need not to upset "the existing value system," to have a "smooth transition," to avoid or compensate for "traumatic disturbances," and, ultimately, the determination to remain within the bounds of "democratic planning," working with the means of "persuasion and not compulsion." These reservations point to important political inhibitions and obstacles, generally making these countries what we have called "soft states." Cf. Chapter 3, Section 8.

¹"Whereas the modern concept of planning refers mainly to economic planning, Gandhian planning was concerned with the overall, balanced development of society, with special emphasis on the spiritual and moral development of the individual." (T. K. N. Unnithan, *Gandhi and Free India, a Socio-Economic Study*, J. B. Wolters, Groningen, Netherlands, 1956, p. 116.)

²"Technically, the essence of the problem of growth is that all parameters become variables. Any theory of growth which places great reliance on a few simple relationships does not deserve serious consideration as an explanation of so vastly interdependent a phenomenon. The classical view that economic growth would be engendered 'if only' restraints were removed and the contemporary view 'if only' several prerequisites were met, are oversimplifications which are not applicable to newly developing countries." (J. M. Letiche, "The Relevance of Classical and Contemporary Theories of Growth to Economic Development," *American Economic Review, Papers and Proceedings*, Vol. XLIX, No. 2, May, 1959, p. 492.)

"... it will be argued in this paper that development is not a mere matter of funneling technical knowledge or capital but that it involves people. People co-operate in institutions such as schools and banks and factories, and what takes time in the creation of these is not the construction of the edifices, but the training and motivating of the participants. Development requires that people be in some ways changed, and by the recognition of this we bring history back into the picture. Events force us to believe that development is more than the sum of simple technology, simple economics, and simple management." (Keyfitz, *Canadian Journal of Economics and Political Science*, Vol. XXV, No. 1, February, 1959, p. 36.)

"It is the conjuncture of forces causing economic growth that is important, and no one of them alone will have the same effect as it does in conjunction with others. The

that development is a "human" problem and planning means "changing men."

If intellectual conflict is not more apparent, this is largely because a division of responsibility has led some to speculate in general terms and others to build models and conduct technical discussions; often the second group maintains the appearance of sophistication by indicating an awareness of the broader perspective without, however, letting this interfere with their work.¹

21 Levels of Living

In the last section we argued that in planning for growth in the advanced Western countries there may be good reasons for neglecting the fourth and fifth categories of conditions — attitudes and institutions² — but that these reasons do not hold for planning for development in South Asia. In this section we shall attempt to show that the same is true of the third category, levels of living.

In poor countries a change in the levels of living affects the contribution men make to production. We define levels of living in a broad sense, including health and educational facilities and cultural activities as well as nutrition and housing. By human productivity we refer not only to the quantity, intensity, regularity, skill, and general efficiency of labor inputs, but also to enterprise and other aptitudes and dispositions that, when improved, tend to raise production; in the following discussion we shall for simplicity's sake refer to all of them as labor input and efficiency. In rich countries, a rise in levels of living has either no effect, or a very much smaller effect, on human productivity. People normally consume enough — occasionally and in some respects perhaps too much — to maintain an optimal level of labor input and labor efficiency. Higher consumption would not raise labor input and efficiency, nor would lower consumption,

system is bound to be rather complicated; it is doubtful whether the method of 'successive approximations' will give the right answers. Dealing with the whole system at once enormously increases the intellectual difficulty of handling the problem." (Higgins, *Economic Development*, p. 415.)

¹ For instance, Jan Tinbergen warns that the "importance [of training and education] should not be overlooked," but he keeps them out of his analysis because "these activities are not as a rule considered a part of economic policy," a statement that implies all the metaphysical notions mentioned in Section 14 above. (Tinbergen, *The Design of Development*, p. 5.) Ragnar Nurkse, among others, more humbly explains that he is not taking up "matters relating to cultural, social and demographic conditions, partly because of the great diversity of those conditions . . . but mainly because of [his] lack of knowledge in these fields," which leaves open the question, how he then can come to such definite conclusions. (*Problems of Capital Formation in Underdeveloped Countries*, p. 2.)

As Everett E. Hagen observes: "Almost every economic analyst studying economic development agreed that some other factors are of importance. However, when an economist presented [his] analysis he often ignored other factors, because he claimed no competence with respect to them. And of course ignoring them when making prescriptions is equivalent to assigning them zero importance." ("The Role of Different Sciences in the Teaching Curricula of the Institutes," paper given at Tavistock Institute of Human Relations, roneod, London, no date, p. 3. Italics added.)

² We are aware that this concession is far too generous; a more institutional approach is needed even in the Western countries. However, our study is not concerned with this problem.

within practical limits, reduce them. Hence there is, in rich countries, a fairly clear line of demarcation, both for the community and for the individual, between that part of income which is consumed and that part which is saved. Saving, like income, is a composite term and covers, for the present purpose, all those activities which, *by reducing present consumption below what it would otherwise be*, raise future income above what it would otherwise be. It can take the form of the creation of productive assets different from consumption goods, such as fixed equipment, or it can take the form of using consumption goods, such as seedcorn, to increase productivity directly. Workers have to be fed while they are not adding to current consumption or simple "waiting" has to be done. The common feature is that saving is done with the intention of raising future production and income above what they would be if no saving had occurred, and the intention will be realized only if, and insofar as, direct investment is carried out. Although there are types of expenditure that, though not consumption, do not, and are not intended to, raise future production (e.g., military expenditure), by and large the distinction between consumption and saving or investment corresponds in rich countries to the distinction between non-productive and productive expenditure.

It follows that in the rich countries analysis of and policies affecting levels of consumption can be neglected when growth and development are considered, except insofar as they determine the resources set aside as savings and thus available for investment. A model for growth can be confined to the use of such concepts as savings, investment, employment, production, and price formation, which form the basic tools of economic analysis and policy.

Before turning to the theoretical implications of this difference between rich and poor countries, let us consider the components of the level of living briefly. In the rich countries, standards of nutrition are generally so high that a rise in the quantity or an improvement in the quality of food intake has no effect on labor productivity. They may, indeed, lower it. This is not so in any South Asian country.¹ For a large part of the population of India and Pakistan, and a smaller part of the population in the other South Asian countries, even the calorie intake is inadequate to maintain optimal levels of health, energy, and labor input and efficiency. Qualitative deficiencies and dietary imbalance, particularly shortages of protein, vitamins, and essential minerals, are even more widespread. Both undernutrition and malnutrition impair the energy of a large part of the population of these countries, and decrease labor input and efficiency. The same is true for housing, sanitation, and health facilities in general. In the rich countries the standards are such that higher expenditure has little effect on labor input and efficiency. Again this is not so in the countries of South Asia. The impact is greatest in the poorest countries, Pakistan and India. Even though mortality rates have fallen rapidly, high morbidity rates and the frequency of illnesses that lower stamina and energy, and reduce resistance to disease, have large effects on productivity.²

¹ Chapter 12, Section 4; Chapter 30, Section 11.

² Chapter 30, Sections 1 and 11.

Similarly, the level of elementary education has in the West for a very long time been so high that further advances have no great and immediate effect on the ability to work and the efficiency of the labor force.¹ Low levels of labor input and efficiency in all the South Asian countries, on the other hand, are partly the result of the low levels of elementary education. Industry there is starved for literate workers who can understand a complicated production process and follow written instructions and drafts. Agriculture and crafts would greatly profit if more people could read simple books and professional and trade journals, and if they could write, calculate, and keep accounts. The persistence of primitive techniques and the difficulty of introducing improvements through extension work and other methods are largely due to the low levels of elementary education. So is the resistance to the organization of co-operatives from which the bulk of the population, not only the better situated, could benefit. The absence of a rational credit system and the importance of the moneylender can be attributed in part to the same cause. If, on the one hand, there is a dearth of usefully educated, there are, on the other hand, the "educated unemployed." Schools turn out graduates who are neither fit nor willing to become semi-skilled and skilled artisans, fitters, electricians, mechanics, or even bookkeepers. Not just more but a different kind of education is needed, along with a change in attitudes, so that the "educated" will not shun manual work. Effective government policies along these lines are a pre-condition for a rapid advance in almost every direction.

These differences have important implications for planning. Although it makes sense in the rich countries to think of economic development in terms of savings, investment, employment, and output, and to disregard levels of living, except insofar as consumption decreases that part of income which could be saved, the situation in the underdeveloped countries is quite different. For the broad masses there, *an increase in consumption raises productivity, with variations according to the direction and composition of the increase.* This is another fundamental difference that renders Western concepts and theories inapplicable to the problem of development in South Asia.

To this must be added a further complication. Whereas in the rich countries of the West the expansion of certain policy measures directed toward higher levels of living, such as improved health services, has now become essentially a technical problem that can be treated in isolation, except for the question whether it is to be a public or private responsibility, *in the South Asian countries all policies affecting levels of living are interdependent.* The reason again is that these levels are so low. Western thinking applied to South Asian problems is bound to yield false conclusions. In South Asia health is closely connected with nutrition, housing, and education. Whereas the general level of education is such in the rich countries that popular attitudes present no serious obstacle to implementing health policies, or at any rate none that cannot be

¹The situation is different for higher education and professional and technical training, but this is not commonly regarded as consumption or included in the level of living, but, quite properly, is considered investment, even if this is not yet fully recognized in national accounting.

For substantiation of what follows in this paragraph, see Chapters 32 and 33.

removed by an appeal to good sense, the obstacles presented by illiterate and tradition-bound communities are larger and much harder to overcome. Implementation of health measures there depends on raising the general level of education and changing fundamental beliefs.¹

We have reached two conclusions for the underdeveloped countries in South Asia: first, it is not possible to deal with specific components of the level of living as technical problems, isolated from other components. They are all closely interrelated. Secondly, measures that increase production and productivity cannot be separated from measures that raise certain kinds of consumption. It follows that development policies, if they are to be effective, must be coordinated over a much wider range of activities, including some that are components of the level of living insofar as they raise production. As we have indicated, this conclusion has important corollaries for the adequacy of certain concepts and theories to development and planning for development.

To raise levels of nutrition, housing, and sanitation, to improve medical facilities for prevention and cure, to provide elementary education — these are objectives to which all communities attach independent value, for they enable people to lead a better and fuller life. They are an important reason why the underdeveloped countries of South Asia desire development, and in particular why they want higher production and incomes. In this they do not differ from the developed countries.² In addition, however, the underdeveloped countries should attach instrumental value to raising levels of living, for labor input and efficiency can thereby be increased. Raising one component of these levels has instrumental value in raising others, and raising all components increases productivity. The cumulative effects on productivity are thus both direct and indirect. In the developed countries consumption has either no instrumental value or a very much smaller one. There, raising levels of living is desirable only because of the independent value attached to consumption. This is not because of a particular value premise — for instance, the notion of the classical writers that we produce only in order to consume — but because of certain biological, physiological, psychological, and social facts. Living levels in rich countries are so high that changes, within practical limits, affect productivity little if at all.

Obviously, if consumption were substantially reduced, productivity would suffer even in the rich countries. We may speculate about a minimum consumption level necessary to preserve optimal productivity, and such speculation has been reflected in some of the arguments in the theory of public finance for basic allowances before taxable income is assessed. We may further speculate about a level of consumption at which the cost of a marginal increase is exactly equal to its marginal value productivity. This would presumably be the optimal consumption level from the point of view of a calculating slave-owner

¹ Chapter 30.

² Thus there is, for example, no limit to the expenditure that all countries may want to devote to prolonging lives and to eliminating disease, and even the richest are nowhere near these ultimate objectives. Indeed, solving one set of problems often raises many new ones.

or horse breeder. But such speculations about the minimum level of consumption that it is necessary or advantageous to maintain — and that, it could be argued, should be included in calculating the gross costs of production — have little practical relevance for the rich countries, except as motivation for an already existing system of income redistribution through social security and other policy measures financed by taxation. Consumption is so high that none of the policies for raising levels of living actually under consideration would affect productivity very much. In any case the difference in degree is so great that it amounts to a totally different type of problem.

This is the reason why saving in the sense of non-consumed income, which *ex post* is identical with investment, has a fairly clear meaning in the rich countries, and why aggregate output can be viewed as a function of the increase in the stock of accumulated capital. In the underdeveloped countries, where “under-consumption” on a vast scale is normal, the basic distinction between investment and consumption does not hold, and reasoning based on it is irrelevant and invalid. Higher consumption forms “investment” — that is, raises production — and *at the same time* remains consumption.

The productivity of this “investment” in the form of consumption varies with the amount of additional consumption, its duration, its direction, its composition, and its rate of change in time.¹ Extra savings in the sense of lowered consumption, imposed on people with depressed levels of consumption, would thus be a form of “disinvestment” in the wider sense. Even if, in a particular case, an investment in productive physical capital appeared so profitable that the government felt justified in reducing food consumption to enable the investment to take place, the depressing effect on labor productivity should be deducted in the calculations. For this type of calculation, models that work with savings (in the sense of non-consumed income), investment, and capital/output ratios are useless. These models isolate the conditions under categories 1 and 2 in Section 5 from those in category 3; as we saw in the previous section, they also neglect attitudes and institutions in categories 4 and 5 when they use notions such as employment, unemployment, and underemployment. More generally, approaches, concepts, models, and theories that fit conditions and policies in the West lose relevance when applied to the underdeveloped countries in the region because they are not adequate to reality.

It should be noted that the savings-investment-output models cannot be salvaged simply by the inclusion of productive consumption in the definition of investment. As we shall see in Appendix 4 on the structure of the plans, this is often attempted by including in the “development expenditures” of the plans an assortment of public expenditures that normally appear in the current account as public consumption.² The inclusion or exclusion of a particular item of expenditure of this type in the development budget is entirely arbitrary —

¹ Thus better feeding of workers has direct and rapid effects on productivity, better feeding of children has delayed effects, and better feeding of old people has no effects. Again, feeding has different effects from housing and clothing. Some part of better feeding contributes to the slow building up of strength and vigor and resistance to disease, while another part enables the worker to work harder almost immediately.

² Appendix 4, Section 3.

unless the *whole* budget is renamed “development budget.” In addition, no attempt is made, or can be made, to redefine on the same principle that part of private expenditure on consumption that would on the same grounds have to be treated as “savings” and “investment.” The composite figures for “private and public savings,” which are so glibly used in scientific as well as popular discussion of development and planning for development in these countries, are, quite apart from their exceedingly weak statistical origins, arbitrary and unclear.

Since “underconsumption” in the underdeveloped countries in the region is, as we have noted, ubiquitous and relates to all major items of expenditure on nutrition, housing, health, and education, it is impossible to distinguish between that part which is productive and that part which is strictly consumption. In fact, for the overwhelming majority of people in these countries almost all consumption is, *at the margin*, lower than that required for optimum productivity. Almost every increase in workers’ consumption raises productivity. Almost all consumption is *simultaneously* productive, though in varying degree. From this follows the logical defect of the concept “investment in man,” which has recently become popular among economists.³

It is interesting that “Marxists” usually do not challenge the Western approach. Marx himself called man “the most productive force of all”; in particular he regarded all acquisitions of skills as investment.⁴ But his followers have largely forgotten this, and its neglect in recent “Marxist” theory has undoubtedly contributed to the ready acceptance in South Asia of the distinction between investment and consumption, and the largely unquestioned use of Western models in planning. If anything, the mainstream of “Marxist” theory is even more restrictive in defining investment merely in terms of physical capital accumulation. The South Asian practice of including in the development budget expenditures other than on physical capital has no foundation in this layer of “Marxist” thinking. The political practice of the Soviet Union, how-

³ This problem is further discussed in Chapter 29; see also Appendix 3, Section 7.

As suggested in Section 12, it may in principle be possible to separate the productive part of marginal consumption from that part to which independent value only is attached. But independent value is, of course, also attached to the productive part. As long as some independent value is attached to consumption, the optimum productivity must be less than that for identical outlays in directions having only instrumental value.

⁴ Occasionally Marx went even further and emphasized that all consumption has a productive aspect. This is partly a terminological or taxonomic problem, such as his insistence that a product only becomes a product (“as distinguished from a mere natural object”) by being demanded for consumption; partly a matter of classifying consumption as a necessary condition for carrying on production. But he also wrote: “Consumption is directly also production, just as in nature the consumption of the elements and of chemical matter constitutes production of plants. It is clear that in nutrition, e.g., which is but one form of consumption, man produces his own body; but it is equally true of every kind of consumption, which goes to produce the human being in one way or another. [It is] consumptive production.” (*A Contribution to the Critique of Political Economy*, New York, 1904, p. 277.) His insistence that this is true of every kind of consumption detracts from the value of his insight and merely leads him to conclude: “Hence, it is the simplest matter with a Hegelian to treat production and consumption as identical” (p. 282).

ever, did not conform to this "Marxist" theory that capital accumulation is the only source of higher productivity. In addition to their investment programs, the plans always contained sections devoted to huge expenditures on the creation of non-physical productive assets. It is now evident that the Soviet Union's high growth rates were largely due to this "investment in men," and that earlier underestimates by Western observers of Soviet growth rates were due to their neglect of these expenditures. It is fairly certain that "Marxist" theory and its influence on the manner of presenting the plans in the Soviet Union contributed to these mistaken estimates by Western economists.

Faced with the practical problem of mustering the resources for the huge investment in physical capital, the Soviet Union did not simply enforce high savings by reducing consumption all around. The government was able to free resources for investment by a consumption *squeeze*, while at the same time *twisting* and redirecting consumption in such a way as to combine suppression in some directions with rapid and substantial increases in others, as dictated by the requirements of growth. The Soviet planners could do this because they controlled all production and prices, and felt no inhibitions in supplementing price policies by direct controls. The task was, however, much simpler in the Soviet Union than it is now in the bigger and poorer countries of South Asia, because there was a considerable food surplus to start with. In spite of the many glaring shortcomings of Soviet agricultural policies, it was possible, by and large, to maintain a fairly adequate level of nutrition. With this as a base, the government attempted until fairly recently to save resources by severely restricting consumption of housing and clothing, while pressing on with education and health. Recognizing the differing effects on productivity of the various components of consumption, Soviet planners did not apply a simple formula of enforcing a savings ratio to secure expansion of planned physical investment. The savings *squeeze* was supported by a consumption *twist*.

The rich Western countries can, of course, afford to let consumption take its course because it is in all directions above the level where changes have much effect on productivity. The main problem of policy is then to achieve a level of savings equal to the desired level of investment, so as to obtain internal and external balance.¹ *The underdeveloped countries of South Asia, however, should accord consumption policies an integral and important role in their economic planning.* Their task should not be merely to compress consumption in order to achieve a certain savings ratio, as domestic and foreign experts usually assume. Since their levels of living are so low that reduced consumption in almost all directions lowers productivity and even the prevention of an increase in consumption is detrimental, they must weigh carefully the effects on productivity of changing the components of consumption, and must then attempt to steer consumption in the most productive directions.

They must, in other words, break with the Western policy of allowing the

¹ However, the Western governments usually use fiscal and other devices to check undesirable consumption, such as that of tobacco and alcohol, and to stimulate consumption that is considered desirable, such as education and health. But these policies, important as they are, do not form an integral part of their general economic policies, except insofar as they affect the relationship between aggregate savings and investment. They can be, and are in fact, pursued in isolation from economic policies.

free choice of consumers to be decisive. Otherwise they will not be able to provide the necessary conditions for raising production, including the provision of enough savings for desirable investment — and they will inflict undue suffering on their people. Those countries that, unlike the Communist countries, do not tightly control all production and prices, and that cannot use an apparatus of controls over consumption, are obviously at a disadvantage not only in squeezing consumption in general but also, and more important, in steering it into productive channels. They must nevertheless face the problem. Their taxation policy, for example, should be conceived in these broader terms.¹ They have to accomplish what the Soviet Union has done, though their methods may be different. Failure to do so will frustrate their hopes of development.

22 *Physical versus Financial Planning*

The reliance on Western concepts, theories, and models, which have to do with savings, investment, and output, invites the presentation of the plans in terms of financial aggregates. As is stressed in Appendix 4 on the structure of the plans, all the actual South Asian development plans are financial or, even more narrowly, fiscal plans. Though a fiscal plan is necessary to insure administrative efficiency and a wider financial plan may also have limited usefulness, neither of them, as Appendix 4 makes clear, can be *the* plan. A plan that conveys what it purports to convey must be based on some kind of physical planning in terms of input requirements and output expectations of physical factors, goods, and services in the various sectors of the economy.²

It has been argued that the setting of targets for specific categories of final output from specific investments and their coordination in order to minimize the risk of bottlenecks and excess capacity, although desirable in principle, is often not feasible because adequate statistical information is lacking.³ If this is so, it is pertinent to ask how it is then possible to draw up a workable financial investment plan. One difference between financial and physical planning is

¹ Appendix 8, Section 8.

² The term "physical planning" is occasionally used to denote a particular *method of implementing* certain objectives in a plan. Thus licensing, rationing, and allocations are called "physical planning," and are contrasted with "market conforming" measures such as global monetary and fiscal measures. The expression is a legacy of wartime "planning" in the United Kingdom, which was concerned with mobilization for one over-riding objective — the war effort — and keeping all non-essential activities down to a minimum without too much inflation. But this usage gives rise to confusion. It is possible to have numerous physical controls without a plan of the physical quantities, and it is possible to have a physical plan implemented largely by policies that work through the pricing system. Indeed, it has been argued that one of the functions of "planning" is, or should be, to overcome distortions caused by the use of administrative "physical" controls — which would lead to the paradoxical conclusion that the purpose of planning is to eliminate the results of planning. As we point out in Chapter 19, all the South Asian countries rely heavily on physical or direct controls (in our terminology discretionary controls), but they do little physical planning in the substantive sense.

³ See, for example, United Nations, ECAFE, *Economic Development and Planning in Asia and the Far East, Economic Bulletin for Asia and the Far East*, Vol. VI, No. 3, November, 1955, Bangkok, 1955, pp. 7 ff.

simply that the latter cannot help revealing the weak factual information on which the plan is based, while the former often serves the function of concealing it. This is not to deny that every government must plan investments and their coordination as best it can, even though it cannot draw on adequate information and must rely largely on guesses. The point is that these guesses and estimates must, in the final analysis, relate to concrete physical items and their changes. The fiscal-financial plan can be at best only a superstructure, built on the basis of a physical plan.

Let us begin by considering public investment in a particular sector. In planning it, specific investment projects will be scrutinized. The different departments regularly draw up a "shopping list" of projects, which clearly must be done in physical terms. It is, of course, true that the pruning of these proposals, carried out by the departments, the treasury, and the planning agency, will often be discussed in financial terms. The fact that there are limitations of supplies will play an important part. The plan will ultimately present the agreed projects in financial terms, but behind these, giving them meaning and substance, must be the physical objectives.¹ As a country advances in effective planning, its financial plan becomes more firmly anchored to detailed physical plans. These may appear in appendices or remain in the files of the government. It is the details of physical planning that make the difference between planning in the clouds and planning on a firm foundation.

There are serious obstacles to the coordination of the physical investment projects. The departments and the agencies working under them, on whose information and judgment the planners must rely, often have little interest in, or competence for, the required coordination. Competent officials are scarce and the initial "shopping list" has probably not been worked out in sufficient detail and with sufficient accuracy to make physical coordination possible. The decision to spend a certain sum on a public investment project will then mark the beginning, instead of the end, of the determination of its physical equivalent

¹The Ceylon Ten Year Plan makes it clear that the basis for planning is physical planning. "The Plan as a whole was drawn up primarily but not wholly in physical terms. This was done partly because financial processes are secondary to the physical, partly because the nature and magnitude of the financial problem can only be assessed in the light of the particular pattern of resource distribution which results from the process of planning in real terms. The essential point, from a financial point of view, is that the process of growth requires a relative shift in the use of resources from consumption purposes to those of investment. Of the increase in income generated during growth a higher proportion has to be devoted to investment than that which was obtained at the beginning of the period. In physical terms this means that external earnings have to be devoted to the purchase of machinery, building materials and raw materials rather than to the purchase of finished consumer goods and foodstuffs, and that an increased proportion of domestic output is required to provide food, clothing and shelter for the workers who are engaged in producing and erecting physical capital equipment and structures, which, in the short period, do not add to the current flow of consumer goods. The financial problem inherent in this process is how to ensure that a proportion of present incomes and a proportion of the increased incomes accruing during the process of growth are made available for engaging persons on construction work and for purchasing capital equipment." (Ceylon, Government of, National Planning Council, *The Ten Year Plan*, Colombo, 1959, p. 107.)

and the desired coordination with other projects, which is the essence of planning. If then, as is normally the case, the financial calculations have been excessively optimistic, shortages will later further curtail the physical scope of the projects or delay their completion. These reductions will then often be concealed from general inspection by inflated figures in plan evaluations made in financial terms. The fear of future inflation may again necessitate additional financial cuts in the budget; these cuts will further reduce whatever physical coordination there may initially have been in the plan.

One reason why this type of planning, and the ever-present specter of inflation, are so detrimental to the physical coordination of public investments is the concentration of the planners' and the government's interest on the scarcity of financial resources. It distracts attention from the scarcity of agents of production such as skilled labor, managers, technicians, and administrators, and from underutilization of completed projects as a result of deficient demand. These bottlenecks are much more serious in the underdeveloped countries of South Asia than in industrially and commercially advanced countries. Consequently, financial magnitudes are much less capable of reflecting the physical reality behind them, and any deficiency in accurate and detailed physical planning is much more damaging.

The result of inadequate physical planning behind the financial plan is waste. Inflation or the fear of inflation erodes the already imperfect edifice of initial planning. The resulting waste takes various forms. Projects started are not completed or are carried out in an inferior way, or completions are delayed. This has repercussions on the rest of the economy. The structure is out of joint, and even completed and successful investments will not be fully utilized. Thus the construction of a main road without the implementation of a plan for the construction of side roads to the villages, related to how and by whom these should be used and what should be carried on them, carries the risk that these side roads will not be built, or built only in part and/or in the wrong places, so that the investment in the main road will not yield the best returns. The same is true of an irrigation system that lacks the implementation of a plan for smaller canals to and from the fields, related to what crops should be watered and how the peasants should be persuaded to use the system.¹ It is often easier

¹"This is the problem of the alleged current non-full utilization of irrigation resources. It is obvious that in case full utilization of water resources provided by a work of irrigation is sought early, much more action must be planned and executed than the mere construction of the irrigation work. This planning in advance includes the supply of water to the ultimate user in the field, proposals for the pattern of future land utilization with rotations of crops and appropriate tested varieties established for use in particular circumstances, the technical training of the cultivator in the adoption of the new programmes, and the supply to him of credit, materials, etc. required for them. It involves also the planning and construction, together with the new works of a system of transportation, of market centres, processing plants and other equipment which go with the new crops and production patterns. Of recent years, considerable interest is being shown by those in charge of irrigation works in assessment of economic benefits of the future or of economic performance of the past. In relation to this I would advocate that the approach be not confined to merely economic calculations. In relation to all future programmes, for example, it appears to me necessary to undertake full planning by joint expertise of engineers, agronomists, economists and others, of the region that is being commanded by new irrigation works. Such an effort at pre-

to provide new industries with markets — by import restrictions — so that their capacity is fully utilized, than to plan for the full utilization of overhead investments such as roads and irrigation. But even for new industries absence of the required complementary inputs, especially transport, power, and raw materials, may make for waste and underutilization.

A public investment plan in fiscal and financial terms is nevertheless fairly easily anchored to calculations of necessary physical *inputs*, though it may have to include precarious estimates of the increase in the output of other major industries required, and the repercussions on output in other sectors of the economy. But real and coordinated planning of the *output* of major products as well as inputs is a much more intricate task. Instead of one balance in terms of money spent on the project, a separate balance for each product is required, time lags have to be estimated for the various investments, and the calculations have to embrace the private sector.

So far we have been thinking only of conventional physical investment. This, however, forms only a small part of the changes in the social system that have to be induced in order to engender development. With regard to all other policies, a financial plan is still more vacuous. A budget figure for the cost of setting up birth control clinics has, for instance, little significance beyond stating the fact that a certain public policy entails certain charges on the budget. These charges are only a minor consideration compared with the obstacles and inhibitions this policy has to overcome that cannot be expressed in financial terms. An effective literacy campaign implies expenditures for teachers; it also requires certain amounts of printed material and, consequently, the construction of paper, pulp, and printing industries or the use of foreign exchange. But its value in engendering development and raising production is not closely related to these expenditures even when they are properly calculated. Other important reforms might not, at least directly, involve any financial costs at all. The effects of such policies will depend on how they are interrelated. Some, of course, will be related to investment in the conventional sense, others not. The point is that costs in terms of money or even in terms of physical resources are an entirely inadequate index of what development is attempted and what can be expected to be accomplished.¹

We may sum up this section by stressing again that *all effective planning is physical planning*. Financial and fiscal planning is at best a reflection of physical planning. Physical planning is exceedingly difficult, and rough estimates and guesses are necessary, particularly in countries with an extreme scarcity of knowledge of the relevant facts. The practice of presenting the plan as a financial or fiscal plan has several flaws. First, it tacitly assumes that finance is the

paring an optimum plan for use of water and land resources in the region will bring to surface all the problems involved in the development process, and the resulting quicker and fuller utilization of new irrigation resources will amply repay the expenditure and effort put in." (D. R. Cadgil, "Technical Address, Planning for Agricultural Development in India," at the Thirteenth Annual Conference of the Indian Society of Agricultural Statistics, Poona, January 8, 1960, pp. 14-15.)

¹ Appendix 4, Section 2.

only bottleneck and that physical resources flow smoothly, at constant unit costs, in the direction indicated by money expenditure. Secondly, even if the financial or fiscal plan is given the more modest role of merely reflecting an underlying plan that coordinates physical magnitudes, it is impossible to avoid the implicit assumption that all of the obstacles to development can be overcome by a sufficient expenditure of physical resources and that, even where non-physical obstacles exist, the effectiveness of policies to remove them is related to resources used up in the process. Neither assumption is justified in the countries of South Asia. Money expenditures are not unequivocally related to physical resources, nor are physical resources alone related to the policies required for development. Thirdly, it gives an entirely false impression of the planning actually done. Fourthly, it permits the entry of a set of systematic biases, supported by vested interests. These problems are discussed further in Appendix 4.

23 *The Danger of Inflation and the Notion of a Ceiling*

The presentation of a financial plan not properly supported by physical planning is, from one point of view, an extreme case of misplaced aggregation.¹ The present section is intended to illustrate the problem of financial versus physical planning from this particular point of view. The planners in the South Asian countries are aware of serious limitations to their efforts to engender and accelerate development. Because the influence of Western models leads them to concentrate on expenditure and, in particular, on investment, the limitations to their planning efforts are seen primarily to concern these two quantities. This implies an aggregation that permits the planners to envisage an over-all ceiling for public expenditure on investment above which no further increase in output can occur. The result of further increase in expenditure is inflation.

The Western approach has two variants, very broadly definable as the quantity theory approach and the Keynesian and post-Keynesian approach. The first attributes price rises to an excessive supply of means of payment, the second to an excess of investment over saving and/or excessive rises in money costs. The first approach is typified by the very structure of the plans in the countries of South Asia and will be discussed in some detail in Appendix 4; this structure is fiscal with a loosely attached financial superstructure in terms of national accounting. There is an underlying idea of a "balanced" public budget being "neutral" to the economy, though a certain amount of "deficit finance" may be allowed to accommodate the supply of means of payment to the growth and the increasing monetization of the economy.² It is astonishing how much of the discussion of economic development in these countries is carried on, even by economists, in terms of this simple and otherwise discarded quantity theory. Inflation is regularly attributed to too much deficit finance, implying the creation of excessive means of payment.

But often this approach is combined, not always very clearly, with the second approach, inspired by the present-day analysis of inflation in Western

¹ Appendix 3, Section 5.

² Appendix 4, Section 4.

countries. This rests on a Keynesian analysis of excess demand and usually incorporates elements of cost-push analysis as well.¹ Unlike the first, the second approach allows for the existence of unemployed and underutilized productive resources, for the effects of changes in interest rates and other credit conditions, and generally for the motivation of expenditure flows and the way by which money and credit are introduced into the economy. But it is also aggregate and envisages a ceiling to aggregate demand in real terms that is set by aggregate supply. If aggregate money demand rises above this limit, expenditure plans cannot be realized and prices rise or shortages occur; the result is inflation. This approach can also be formulated in terms of savings and investment. Investment generates demand for consumption goods without adding to currently available consumption goods, while *ex ante* savings are that part of expected income not used for consumption. If planned investment exceeds *ex ante* savings, plus net capital inflow from abroad, aggregate demand runs into the ceiling; prices rise and the gap between aggregate money demand and real supply, or between *ex ante* savings and *ex ante* investment, is eliminated *ex post*, either by "forced savings," i.e., an unplanned reduction in consumption, or by unplanned disinvestment (e.g., running down of inventories) or by a curtailment of fixed investment. The price rises and shortages of such an inflationary process are usually considered to be undesirable, and much thought and effort are devoted to keeping investment down to *ex ante* savings.

There are a number of difficulties in using even this second and more sophisticated approach for the analysis of inflation. Some of these difficulties are present even in developed countries. Thus (1) the absolutely fluid markets, (2) the complete internal exchangeability and mobility within the two juxtaposed magnitudes supply and demand, and (3) the absence of any cost-push element that makes it possible to assume that price rises do not appear below full employment, are assumptions not warranted even in developed countries. Particularly in regard to the first two conditions the difficulties with the Keynesian approach are very much greater in South Asia. In addition, there are also the following difficulties in using the "modern" approach to inflation.

(1) Higher employment — not to speak of "full employment" — is usually not attainable as a result simply of raising demand, particularly not in the short run relevant to an analysis of the problem of inflation. These countries are "low-elasticity economies"; and this applies particularly to the labor factor. Labor is far from homogeneous; idleness is not "unemployment" in the Western sense of the term.² The discussion of inflation has to be conducted on the assumption that there is "unemployment" and "underemployment" in large sectors of the economy even at the ceiling where inflation becomes rampant,³ and the further

¹ This type of analysis was developed earlier by Knut Wicksell and his Swedish followers; see Myrdal, *Monetary Equilibrium*, Introduction.

² Chapter 21, Part II.

³ In Chapter 21 and Appendix 6, where we discuss the problem of labor utilization in the South Asian countries, we show that the concepts of "unemployment" and "underemployment" are not adequate to reality in the South Asian countries. Low participation ratios, partial or total idleness, and low labor efficiency are, however, realities.

assumption that labor supply responds rather weakly, or not at all, to a rise in the demand for labor.

(2) Although South Asia has little that resembles a "labor market," policy measures to change institutions and attitudes in order to increase labor utilization are likely to be more effective when there is a shortage of labor in some sectors. The proviso must be added that even then the effects of such policy efforts will not be large in the short run.

(3) We have stressed that in South Asia much consumption is productive.¹ Increased supplies of certain consumption goods and services can thus increase labor utilization — labor input and labor efficiency — by improving health and physical and mental vigor and reducing apathy. In such a situation a reduction in "savings" unaccompanied by an equivalent reduction in "investment" would be less inflationary than in the Western countries; this amounts to raising the ceiling.

(4) Also, some of any extra money income earned will be going, or may be diverted by policy measures, into "innocuous demands," such as demands for entertainment and transport, where existing production facilities can be strained a bit further. The opportunity to raise production by a selective encouragement of expenditure is likely to be greater in South Asia where there is much underutilization of resources.

(5) The Keynesian analysis assumes that for a considerable time investment does not yield any addition to the flow of consumption goods. Hence increasing attempted savings and investment equally does not raise the ceiling now, but merely reallocates resources. But in fact some forms of investment raise without much delay the supply of consumer goods. Ships bought from abroad can be used immediately for catching more fish, if extra fishermen are available. This is probably more important in South Asia than in the West; here again, as when consumption is raised without reducing investment, the ceiling can be pushed up. Even in Western countries the ceiling is not such a definite limit as is often assumed. In South Asia there are additional reasons to suppose that it can be raised, particularly if the appropriate policies are pursued.

(6) The concern with avoiding inflation has a justified source in the concern with the balance of payments. But as long as controls are maintained on imports and as long as exports do not suffer, a moderate inflation may do little damage and may do some good, particularly as compared with a situation in which potential production is sacrificed for the sake of price stability. A good deal of dual morality prevails on this issue in the South Asian countries, as, indeed, also in the Western countries. Although it is rarely said in the plans, almost everyone says unofficially, and many say officially, that some inflation is inevitable in a country attempting development; some even say it is healthy and desirable.²

¹ Section 21 above.

² "But provided the increase is not substantial and is limited to about seven to eight percent during a period of five years and provided also the prices of food and other essential consumption goods are not permitted to rise too much, a slightly increasing price level is on the whole desirable. It would give resilience to the economy; it would keep profits at a reasonable level and thereby act as a spur to further savings and production. It would neutralise the inefficiency of the public and private sectors to some

More fundamentally, however, the whole notion of a single ceiling must be called into question when applied to the South Asian countries. This notion presupposes an inverted L-shaped aggregate supply curve: short-run supply is highly elastic up to total capacity and full manpower utilization (a distinction is not always drawn between these two aggregates) and thereafter almost totally inelastic. This in turn assumes fluid markets, mobility and flexibility of resources, and a response mechanism by which the composition of production is rapidly adapted to demands. Only then does aggregation make sense.¹ A country with ample foreign exchange reserves and credit lines to draw upon could always use imports to correct maladjustments of domestic production, and supply elasticities would thereby be increased. This is approximately true of many developed Western countries and was so even in their early development stage, but it is not true of the underdeveloped countries of South Asia. Here immobilities, inflexibilities, indivisibilities, imperfections, monopoly elements, and weak or nonexistent response mechanisms fragment the market into a great number of separate demands and supplies with little hope for substitution on the side of either consumption or production.² The concept of a "ceiling" can hardly be used for something that is compressible, can be pushed up to a different extent in different places, is craggy and of uneven height, and is called into existence as well as conjured away by elevators in other parts of the building.

Considerations such as these lead to the third approach, sometimes called "structural" or "structuralistic." It rejects the notion of a ceiling, a general price level, and analysis in terms of aggregate demand and supply, and stresses the

extent." (P. S. Lokanathan, "Pricing Policy," in India, Government of, Ministry of Information and Broadcasting, *Problems in the Third Plan—A Critical Miscellany*, New Delhi, 1961, p. 75.) "Finally, there can be no disguising the fact that inflation will continue to beset the Indian economy for several years. It is an inevitable accompaniment of the process of rapid development. The country must accept the consequences of some inflationary pressures and develop [a] certain degree of inflation tolerance." (*Ibid.*, p. 79.)

In the same publication Nehru says: "It is true that in a developing economy there is bound to be inflation. In fact, some inflation is good; it is itself a sign of development. We need not be frightened by that. But if it goes beyond that measure, then it is obviously harmful." (The Prime Minister [Nehru], "Strategy of the Third Plan," in *ibid.*, p. 40.)

In recent years prices have begun to rise very much more rapidly in India under the influence of the wars and crop failures (Chapter 7, Section 4; and Postscript, Section 1), and these arguments in favor of a moderate inflation have lost their relevance, as they did, of course, in unfortunate Indonesia long ago (Chapter 9, Section 10).

¹ Appendix 3, Section 5.

² "Perhaps the chief difference between under-developed and advanced countries in this connexion can be summed up by saying that in advanced countries the elasticity of supply is high. A given stimulus to expansion is less liable to run up against obstacles, indeed, it will be argued that bottlenecks present a desirable stimulus to further growth. The whole industrial hinterland, with a supply of skilled labour, a tradition of law and order and efficient administration, financial institutions and a population conditioned to systematic change and innovation can be drawn upon, if required. This explains why a Tennessee Valley Authority is more successful than a Helmand River Development scheme. It is the old story that nothing succeeds like success." (Streeten, *Economic Integration, Aspects and Problems*, p. 59.)

fragmentation, the disequilibria, and the lack of balance between supplies and demands in different sectors of the economy and between different groups in the community. The main criticisms of the notion of a ceiling implied in this approach are these:

(1) It suggests a global limitation, whereas limitations in fact are diverse and specific.

(2) It suggests an insuperable limitation whereas particular limitations can often be overcome, particularly if policy measures are applied to this purpose.

(3) It thus suggests an absolute limitation, whereas limitations are relative to the composition of demand and supply, to the technical methods adopted, and to the policies pursued.

(4) It focusses on the limitation of physical resources, whereas the real obstacles often consist in administrative or managerial ability and in attitudes and institutions in the form of inhibitions on the part of the planners and obstacles on the part of those planned for.

It is a truism to say that there are supply limitations and supply inelasticities: that we cannot have everything. But it does not follow that this situation can be relevantly characterized by saying that a ceiling sets the inflation barrier. The typical situation in the underdeveloped countries of South Asia is substantial underutilization of both capital and labor side by side with shortages and bottlenecks. It is questionable whether the terms "inflation" and "deflation" can be applied to such a situation. If we mean by "inflation" a tendency for prices to rise and shortages, rationing, and queues to appear, clearly there is inflation. If we mean by "deflation" capacity and manpower not fully used, equally clearly there is "deflation." There is also large-scale underutilization of a particular type of labor in some sectors and localities and in others scarcity of some other type of labor or even of the same type. Looking at the national economy as a whole, we would thus have to acknowledge "inflation" to coexist with "deflation," a "ceiling" to coexist with unused resources.

Since we have already seen that the notions of "aggregate demand" and "aggregate supply" cannot be applied to these countries, the inflationary symptoms we observe cannot be attributed to either demand-pull or cost-push or a combination of both. For the reasons we gave in showing the limitation of the Keynesian approach, the tendencies to inflation as they appear in the underdeveloped countries of South Asia are related to "bottlenecks." This more realistic "structural" approach takes into account the gross imperfections of markets, the fragmentation of the economy into non-competing sectional or spatial groups, and, indeed, the relative or absolute absence in large parts of the economy of the type of rational motivation that Western theory assumes.¹

¹ The following remarks have merely the negative purpose of illustrating abstractly one set of reasons why we cannot work with a single ceiling for the whole economy. In the South Asian countries there are not two homogeneous sectors, as we assume, but a great number of largely unrelated sectors. The argument thus holds *a fortiori*.

We consider an economy consisting of two sectors: Agriculture (A) and Manufacturing Industry (M). As a result of development and industrialization, incomes, demands, and supplies rise. However, workers in M and A together want to buy more A products than are available and less M products than M capacity can supply. Modern technology in the M sector imposes new habits, new responses, and new meth-

According to this more realistic approach, the bottlenecks may, in a sense, have been caused by development policies, as those are applied to the situation described above in an underdeveloped country; the inflationary tendencies that appear are, indeed, often called "development inflation." Different types of bottlenecks will be accompanied by different types of price rigidities, different supply elasticities, different response mechanisms, different degrees of substitutability on the part of the purchaser, and different distributional effects. Such bottlenecks will appear not only in agriculture but also outside it, and in particular, in electricity, fuel, imported raw materials, transport, repair facili-

ods of work, and runs into fewer obstacles. Hence productive capacity in M rises more rapidly. In the A sector, habits, traditions, and institutions are hardened and the introduction of improved methods means not only learning but also unlearning, not only doing but also undoing. Hence A supplies lag behind M supplies. It is quite possible that total demand and supply are "balanced" in a sense (or, if deflationary policies are pursued, that demand is deficient). But demand and supply are not balanced in each sector separately. Demand exceeds supply in A, and falls short in M.

In the theoretical model usually applied in Western countries, either or several of the following would happen:

- (1) Prices of M products fall and prices of A products rise; this will tend to reduce the demand for A products and increase the demand for M products among members of a fairly homogeneous population buying both;
- (2) Unemployment rises in the M sector and a labor shortage occurs in the A sector;
- (3) For either of the previous reasons resources move out of M and into A, thus raising the supply of A products and reducing that of M products. The balance between total supply and total demand will thus tend to be restored.

On the whole, this will not happen in the underdeveloped countries in South Asia. In one respect, however, they resemble advanced countries: industrial prices will tend to be inflexible downwards. This is due to lack of competition, whether caused by monopolistic organization of the M sector or by government regulations or labor union resistance to a reduction of wages. As a result of increased demand for A products, A prices will tend to rise but M prices will not tend to fall. In spite of underutilization of labor in the M sector as well as the A sector and rising prices in the A sector, resources are not transferred. The "general price level" rises (M prices stay put, A prices rise) and underutilization of labor continues. According to where we look we can diagnose the situation in terms of either inflation or deflation.

The A sector is peculiar not only because demand for its products is rapidly increasing but also because in the short run supplies are very slow to respond to price rises unaccompanied by other reforms (such as induced changes of attitudes and institutions). Indeed, the A sector may reduce its supply to the M sector when A prices rise, both because A producers retain more A goods for themselves and because they can now afford to work and produce less. This response will aggravate the price increase. If the government pursues Keynesian expansionist policies, this will feed the inflation without increasing labor utilization (in A). If it deflates, it will decrease labor utilization (in M) without necessarily stopping inflation (in A). A different therapy, based on a different diagnosis than the one based on the Keynesian approach, is indicated.

To fit this model more closely to the Indian situation in recent years we should assume a serious shortfall of production in the A sector; this would intensify the tendency toward imbalance between demand and supply in that sector; at the same time, shortage of foreign exchange, created by the need for increased import of foods, could cause a decrease of supply in the M sector due to scarcity of imported raw materials, spare parts, and other production necessities. There is, however, no assurance that supplies in the two sectors would decrease in a parallel way; besides, the demands have very different price and income elasticities.

ties, and credit facilities. This terminology should not lead to complete fatalism, however. To some extent, "development inflation" is not inevitable but can be counteracted, though less by general anti-inflationary policies than by specific controls based on effective physical planning, which should mainly aim at overcoming bottlenecks.¹

When facing "structural inflation," planners should both do and avoid doing certain things.

(1) They should avoid trying to cut demand for the bottleneck products by cutting total demand, thus reducing production unnecessarily and slowing down development.

(2) They must, instead, attempt to raise the supply of the bottleneck items. This may sometimes be done by permitting their prices to rise — though not necessarily to the equilibrium level — and bigger profits to be made in their production; entrepreneurial responses may have to be created, as well as used. This is particularly true as in South Asia very high rates of return can ordinarily be enjoyed by lending money and by speculation. But outside a small modernized industrial sector, price rises by themselves are not likely to bring about the required responses and adjustments. Other measures have to be taken, perhaps along with the creation of price incentives. In the case of food, price rises are often not sensible because of lack of response (or even perverse response) of supply and lack of substitutability of demand both for any given consumer and between consumers.²

(3) Another aspect of promoting higher production of the bottleneck item is to encourage mobility of factors and, more generally, to raise labor utilization by inducing changes in attitudes and institutions.

(4) Sometimes demand may have to be diverted from the bottleneck item

¹ One may ask at this point what precisely is meant by a "bottleneck" and, more particularly, by a "series of bottlenecks." Are we not simply concerned with various degrees of scarcity, which could and should show up in a price rise of the bottleneck item? The answer is that in the economies of South Asia price rises, particularly if they occur in isolation without other policies, do not tend to allocate the scarce commodity while the scarcity lasts, nor do they tend to remove the scarcity. Simply defined, a "bottleneck" would exist where the price that would equate demand to supply is substantially higher than production costs. In a system where attitudes and institutions are adapted to economic incentives, resources would move into the production of the bottleneck item. In the countries of South Asia a high price by itself does not normally induce additional supply and may even reduce supply. Even where resources are attracted, smaller price rises than "equilibrium" calls for may be more effective in encouraging supplies than large price rises. On the side of demand, a high price has in advanced economies the policy function of allocating the scarce item where it is most needed and enforcing economy in its use there. In the countries of South Asia, not only is ability to purchase a less adequate test of need, but the price rise, particularly if it is large, may spark other price increases, in which case it cannot fulfill its allocative function. Thus price increases that, in a different institutional setting, would be confined to a few items and carry their cure with them, will in an underdeveloped country tend to spread to other items and to be self-defeating. None of this implies that price policies do not have an important part to play in an integrated and coordinated set of policies. Cf. the discussion of devaluation and the need for import controls, Appendix 8, Part I.

² Chapter 26, Section 4 *et passim*.

toward products and services where surplus capacity of plant and equipment exists or where production can be increased quickly by turning to the use of somewhat obsolete equipment.

(5) Planners must attempt to confine the price increases to those sectors where they promote growth, or at least do little harm (most often the industrial sector), and prevent them from spilling over into the sectors where they would penalize the poor and have little effect upon supply. Within the sector where inflationary price rises are permitted, the profits made should be used to mobilize savings through direct and indirect taxation and through redistribution toward income receivers with high savings propensities.

(6) Planners must attempt to anticipate *future* bottlenecks and direct their planning at breaking them.

The success of the planners in avoiding damaging inflation and wasted capacity will depend on their success in working out the *direction, composition, and phasing* of supplies and demands — that is, on physical planning — rather than on their success in keeping within an aggregate ceiling. The implementation of more detailed physical plans will often require the use of price policies (I and 5 above). India's Third Five Year Plan mentions a rise in prices charged by certain public enterprises as a method of mopping up purchasing power and also says that "it is particularly important to avert an adventitious or haphazard rise in prices." This principle could be carried much further and prices could be allowed to rise, sometimes substantially, in some carefully chosen areas while prices in other areas were strictly controlled. If experience comes to determine expectations in accordance with such policies, the cumulative momentum would also be taken out of the inflationary process and runaway inflation avoided.

In several sectoral divisions that are particularly important for an analysis of supply limitations, the assumption of a high degree of substitutability and aggregation is particularly dangerous.

(1) Internal and external resources are often subject to entirely different rules. Foreign exchange can be used to buy substitutes for almost any home product. But domestic resources can much less easily be used to increase exports or substitute for imports. Hence traditional foreign-trade multiplier analysis cannot be used. A cut in imports, traditionally assumed to be inflationary, may cause severe unemployment if the import items cut are indispensable raw materials or pieces of equipment for which there are no domestic substitutes; while a rise in imports may start an inflationary process by stimulating complementary spending. A rise in export earnings may have hardly any domestic effects if foreign companies are the main beneficiaries, whereas a decline in export earnings which affects many exporters of primary products will impose the need for domestic structural changes that can easily touch off an inflationary process. A deflation of internal demands, at any rate below a critical level, may not reduce imports, which may in any case be controlled, nor increase exports because it will not increase the supply of exportable products; even besides this, exports may be limited by low foreign demand and tight

¹ India, Government of, Planning Commission, *Third Five Year Plan, A Draft Outline*, New Delhi, June, 1960, p. 15.

foreign restrictions. On the other hand, excessively high domestic demand may encourage people to circumvent import controls, may suck some exportables into the domestic market, and/or may raise production costs so that traditional exports are outpriced in the export market.

(2) The most important distinction for domestic consumption must be drawn between a rise in prices of essential goods, consumed by the mass of the people, like food-grains and simple textiles, and a rise in the prices of luxuries and semi-luxuries, consumed by the small middle class. India's Second Five Year Plan makes this quite clear:

... but a policy of "playing safe" is not always conducive to development. A measure of risk has to be undertaken, and the most effective insurance against this risk is command over reserve stocks of food grains — and a few other essential commodities — which can be used to augment the supplies in the market as and when necessary. Prices of food and cloth occupy a strategic position in the Indian economy, and a sharp rise in these prices has to be prevented by the use of all available devices. So long as these prices can be maintained at reasonable levels, the cost of living of the large bulk of the population can be kept under control. Increases in prices of other commodities would be a matter of comparative unimportance . . . ¹

The reasoning behind this approach is as follows. Excess demand for items other than necessities, whether it manifests itself in shortages or price rises, does not matter and may even be beneficial. In the former case, if there are shortages, unsatisfied buyers may save rather than buy more food, or they may make fuller use of facilities already available. If prices of non-necessities rise to the full extent, some additional production may be forthcoming and income will be redistributed toward private and public savers as long as money wages are kept under control. We assume then that import controls should prevent the extra demand from drawing in more imports; special devices such as tax reclamation could be used to prevent it from frustrating exports. It may not always be easy to prevent domestic inflation from harming the balance of payments and this may constitute the main limitation of the policy outlined above. A spilling over into the market for food-grains and other necessities will be easier to prevent because of low substitutability. Price control of necessities will thus be easier to administer.

Admittedly, such a policy by its nature cannot make a large contribution to forced savings, because mass consumption goods are protected against price rises. There is also the socio-political problem that the politicians who decide upon, and the officials who would have to administer, such a policy are members of the class that would be its chief victim: their money incomes will tend to be fixed while the prices of the goods they buy will rise.

¹ India, *Second Five Year Plan*, p. 86. Cf. Appendix 4, Section 5.

"The prices of luxury articles going up does not make very much difference, but price rise in essential goods does. The question of control of prices really applies to the essential commodities . . . In other words, a kind of selective control may become necessary." (The Prime Minister [Nehru], "Strategy of the Third Plan," in India, *Problems in the Third Plan — A Critical Miscellany*, p. 40.)

What has actually happened in India in recent years, on the contrary, has been that food prices have been allowed to rise very fast and substantially, while prices of less essential goods have often been more steady.

(3) The aggregate savings/income ratio conceals important differences between advanced Western countries and the underdeveloped countries of South Asia. The savings of the rich may finance the consumption of the poor in return for the transfer of land to moneylenders. Some savings go into hoards of precious metals and ornaments. The channeling of savings into productive assets is very imperfect. This is reflected in the wide divergence between rates of return in different lines. We have already seen that some reductions in consumption also entail reductions in production.

We may conclude this section by stating the obvious fact that there is a point at which a further rise in investments will raise a number of prices. Indeed, the low supply elasticities and bottlenecks will make this point come much sooner than it would in a corresponding situation in developed countries. But this very fact suggests that the limitation is not that of a single ceiling, but of a large number of specific physical supply limitations and other, non-physical obstacles that make themselves felt as development proceeds.

If the concept of a ceiling is used simply as a reminder that resources, including skills, administrative talent, and foreign exchange, are scarce and that attitudes and institutions adapted to development are absent, it is innocuous enough. But if it diverts attention from the fact that numerous demands run for different reasons into limitations of numerous supplies and that it is the task of planning to reconcile these and to anticipate and break specific bottlenecks at the proper time, it is misleading.

24 *Balanced versus Unbalanced Growth*

In recent years there has been a lively controversy between two schools of economists, one urging balanced growth, the other unbalanced growth. In the preceding sections we presented many observations and arguments by protagonists of both schools relating to various points dealt with in other contexts in this study. But the main controversy respecting balanced versus unbalanced growth has little relevance for the problem central to this appendix: how South Asian countries should plan development. *Both doctrines are essentially beside the point.* The purpose of this section is merely to demonstrate this negative proposition.

We might first note in passing that both schools move largely within the limitation of the modern Western approach. In their models they neither pay much attention to the needs for induced changes in attitudes¹ and institutions, nor do

¹ Hirschman's stress on *decisions* implies, however, a shift of emphasis, though very partial, toward attitudes, which he does not, as is usual in models developed by others, assume to be constant or automatically adjusted to precisely the required extent. This is undoubtedly an advance, though a limited one because Hirschman confines himself largely to *investment* decisions. Even if we disregard the broad category of attitudes of the masses of peasants and workers and confine ourselves to those of the upper strata, which we must remember decide and implement development policies, there are other decisions of great importance, as Walinsky has pointed out.

"Hirschman, on the other hand, might find it more difficult to support, by reference to the Burmese experience, his thesis that development strategy should be directed at maximizing investment (which he equates with development) decisions. Decision-

they observe the productive effects of consumption in very poor countries. In other words, they apply the customary reasoning in terms of savings, employment, investment, and output, and they focus their interest on physical investments, primarily in large-scale industry and public utilities, which in the ordinary way they assume to be the vehicles for development; all observations outside this framework are marginal and inconsequential for the conclusions they draw. Rather than repeat our criticism of this general approach, we shall in this section accept the assumptions implicit in it and confine ourselves to an immanent criticism of the two schools of thought.

We turn first to the role of supply limitations and supply inelasticities in the controversy regarding balanced versus unbalanced growth. Surprisingly enough neither school pays much attention to the presence of a ceiling and, consequently, the danger of inflation if investment is pushed beyond this limit — or rather, as we argued in the preceding section, the limit set by a great number of specific, successive physical bottlenecks and other obstacles to rising production. Nurkse explicitly confined his discussion to the demand side. He assumed supplies to be available and asked what investment would have to be like in order to justify them. He made the reservation:

There is no suggestion here that, by taking care of the demand side alone, any country could, as it were, lift itself up by its bootstraps. We have been considering one particular facet of our subject. The more fundamental difficulties that lie on the supply side have so far been kept off-stage for the sake of orderly discussion.¹

Nevertheless, Nurkse's main stress is on markets as the principal limitation on growth, not on supplies. We might observe already at this stage of our immanent criticism that if the creation of complementary markets as an inducement to invest were really the crucial development problem, it should ordinarily be fairly easy to solve. Final markets can be created by import restrictions and, though less easily, by export expansion.² If Nurkse stresses markets as the main

making was indeed a critical factor in this experience. But the decisions which were most needed and most lacking were not investment decisions, but administrative, managerial and policy decisions." (Louis J. Walinsky, *Economic Development in Burma 1951-1960*, Twentieth Century Fund, New York, 1962, p. 593.)

It should be added that sometimes Hirschman has a somewhat wider concept in mind, as is shown by his use of the terms "development decisions" and "developmental tasks." (Albert O. Hirschman, *The Strategy of Economic Development*, Yale University Press, New Haven, 1958, p. 25.)

¹ Nurkse, *Problems of Capital Formation in Underdeveloped Countries*, pp. 30-31.

² Nurkse's main line of reasoning relates to final goods and principally to consumer goods. As far as intermediate markets are concerned, Nurkse came out in favor of unbalanced growth (vertical imbalance) in his second Istanbul lecture. (Ragnar Nurkse, *Equilibrium and Growth in the World Economy*, Harvard University Press, Cambridge, Mass., 1961, pp. 259-278.) Social overhead investment provides the conditions and inducements for consequential direct productive investment. As for horizontal balance, he believed that the case "rests on the need for a 'balanced diet'":

"The difficulty caused by the small size of the market relates to individual investment incentives in any single line of production taken by itself. At least in principle, the difficulty vanishes in the case of a more or less synchronized application of capital to a wide range of different industries. Here is an escape from the deadlock; here the

limitation on growth, the other doctrine, particularly in Hirschman's version, stresses investment decisions. The implication of Hirschman's theory is also that supplies will be forthcoming with relative ease if only the lack of decision-taking can be overcome. It should readily be admitted that lack of entrepreneurs willing and able to venture into long-term investments is a serious obstacle to development in most South Asian countries — though to a differing degree — but there are also supply limitations and they are not overcome by "unbalanced" decision-taking.

The tendency of both schools — and particularly of the adherents of the doctrine of unbalanced growth — to *underplay supply limitations* diverts attention from the fact that planning must be directed as much at *restricting* investments, production, and supplies in certain directions as at *expanding* them in others. The policy package in rational planning presupposes a *choice* of allocating limited supplies — that is, supplies growing at a limited rate, and in response to certain stimuli — to the most important uses, combined with the creation of stimuli to decisions of *all kinds* (not only investment decisions). Supply limitations are considerably less important in advanced industrial countries now, and they were also less important in the early developing phase of many now advanced countries such as Sweden or the regions of recent settlement. These countries had almost unlimited access to capital at low interest rates, a reserve of literate and skilled labor, and plentiful natural resources. Again, certain underdeveloped regions in advanced countries (Southern Italy, the South of the United States) can draw on supplies from the other regions in the country but lack development decisions. The models developed in the controversy between the two schools and, in particular, by Hirschman seem to have drawn on this kind of experience in "ceilingless economies"; to a limited degree the analogy may be relevant to some South American countries like Argentina, but not to the entirely different problems of South Asia. The two important differences between, on the one hand, the advanced countries now and in their early development phase, and, on the other hand, the underdeveloped countries of South Asia are (1) that investments in advanced countries can more often be treated as marginal than those in underdeveloped countries and (2) that advanced countries are, and were, high supply-elasticity economies with responses and institutions already adapted to economic growth.

The absence in both doctrines of a proper consideration of supply limita-

result is an over-all enlargement of the market. People working with more and better tools in a number of complementary projects become each others' customers. Most industries catering for mass consumption are complementary in the sense that they provide a market for, and thus support, each other. This basic complementarity stems, in the last analysis, from the diversity of human wants. The case for 'balanced growth' rests on the need for a 'balanced diet.' (Nurkse, *Problems of Capital Formation in Underdeveloped Countries*, p. 11.)

He later drew a distinction between balanced growth as a method and as an outcome or objective. (*Equilibrium and Growth in the World Economy*, p. 279.) What remains of the doctrine is the emphasis on the complementarity of markets for final goods as an ultimate objective for investment incentives. But the absence of markets is not normally a serious obstacle to development; even where it is, it is by no means the main obstacle nor one that will always yield to balanced growth.

tions and supply inelasticities, which tends to make them irrelevant to the study of development problems in South Asia, should be viewed in connection with another common feature that is *prima facie* equally astonishing. *Neither school has related its theses to planning*; this relationship has been left in the air. They have not made clear whether they are arguing a principle to be followed when working out a plan or whether they are thinking of a development that takes place without planning or, alternatively, one that takes place with only an initial impulse of planning in the form of an investment project and thereafter takes its own course with market forces responding to demand and supply.

Both schools are unclear and, occasionally, hesitant on this point, though they generally seem to think in terms of one or the other of the latter alternatives. Thus Nurkse, in arguing balanced growth, seems to have been thinking primarily of a private enterprise economy without much comprehensive planning.¹ It is, he argued, private investment that needs market inducements from the demand side. As we pointed out above, demand can fairly easily be created by import restrictions (and, though with greater difficulties, export promotion); balanced growth would thus appear not to need comprehensive planning. In any case, Nurkse did not explain how his limited desideratum of balanced growth of different industries reached by an adjustment of demands should be fitted into the type of comprehensive planning that is the declared policy in all South Asian countries and that has a strong rationale in their actual situation.² Neither does the doctrine of unbalanced growth as propounded by Hirschman require *initial* and still less *continued* planning. In any case, it is not his main purpose to lay the theoretical foundations for comprehensive planning.³

In planning for development supply limitations *have* to be taken into consideration. The planners must therefore *choose* between possible investments; they must induce restrictions as well as expansion. In a sense much wider than Nurkse's they must aspire to *balanced growth*, where the balance is concerned

¹ Nurkse, *Equilibrium and Growth in the World Economy*, pp. 249–250, 280.

² Chapter 15, Section 3.

³ The role of the state in Hirschman's theory is both to induce and to repair disequilibria. Thus state action becomes a dependent as well as an independent variable. (Hirschman, *The Strategy of Economic Development*, pp. 65, 202.) This is, by itself, a realistic observation (see Section 13 above) and should not be lost sight of; in particular, Hirschman's discussion of forward and backward linkages — part of what we discuss as "spread effects" — is provocative and fruitful: it brings out the previously neglected possible effects of one investment on investment at earlier and later stages of production. But the doctrine underplays obstacles (also resistances in attitudes) called into being by imbalance. Shortages create vested interests; they give rise to monopoly gains; entrepreneurs may get their fingers burned by malinvestments and may get frightened by the growth of competition. The business attitudes and institutions evolving through development will arouse opposition and hostility. Once again, the absence from the models of this type of reaction is more appropriate for Western countries and is at the same time opportune for the planners in South Asia. But the basic weakness of the doctrine is the neglect of the supply limitations, which is related to the unclarified relationship to planning.

with increasing certain supplies as much as, or even more than, with catering to demand. When the plan calls for investment in a steel plant, the planners must prepare for its operation by providing for supplies of raw materials, power, and transport. It would be wasteful to wait for them to be produced as a result of the linkage effect of the initial investment in the steel plant. Planning means coordination of policies — and, indeed, coordination over a much wider field than that of physical investment in modern industry and public utilities to which our immanent criticism of the two schools in this section is limited.

At the same time it is *inevitable* that most, or all, of the investments decided on in a plan will be *unbalanced* in the sense that they provide more supply than can be taken up instantaneously by demand. They are usually lumpy. For technical reasons — and also because planning should have a long-time perspective — investments in industrial plants and equipment and those in the basic infrastructure have to consist of large indivisible units. Adjustments required by development in an underdeveloped country cannot be made in infinitesimally small steps,¹ least of all in the sectors we are discussing in this section. In addition, there are rigidities and very sluggish responses not only on the demand side but also on the side of supplies. There will be difficulties in meeting many urgent requirements, whether of products, raw materials, or power and transport facilities, as well as in finding markets permitting full utilization of the main investment. Too much faith cannot in such situations be put in market forces.

This is indeed one of the principal reasons for planning. But even with the best planning there will not be balanced growth (in the wider sense). That investment has to be unbalanced, does not mean, however, that this is a desideratum.² Whatever the planners can do by means of coordinating investments, and

¹ The concept “marginal,” which has played such an important part in neo-classical Western economic theory, is largely out of place in the discussion of South Asian conditions, and remarkably enough, particularly so in the “modern” or “organized” sector. In the Western countries a new profitable investment project is (and was) normally small relative to the size of existing capital equipment (however measured), relative to new investment, and relative to the hinterland of facilities on which it draws. In underdeveloped countries indivisibilities are more prominent and marginal adjustments rarer for at least four reasons. First, insofar as economic development is directed at industrialization, this normally implies an increase in the number of big and indivisible units. Secondly, both the existing stock of equipment and the additions to it are small compared with those in advanced countries with comparable populations. Since plant and equipment often have to be of a minimum size for technical reasons, the addition of a plant or a piece of equipment constitutes a greater proportion both of the stock of capital and of total investment. Thirdly, the basic infrastructure of industry (power, steel, transport, housing, government buildings) consists of large indivisible units. Fourthly, complementarities between enterprises and activities are likely to be more important in the meager economies of underdeveloped countries, so that a given investment is more likely to require complementary and supplementary investments in other industries.

² There is a danger that planners will turn necessity into virtue, as the following euphemistic passage from India’s Second Five Year Plan shows: “There cannot be a complete balance between developments in each five year plan; to some extent, a measure of imbalance — seeming over-expansion in some lines and under-expansion in

all other policies to avoid imbalance — and insure full servicing and full capacity utilization of their investments as soon as possible — means greater economy. A degree of imbalance is unavoidable, but balanced growth — in the wider sense — is obviously what the planners will try to aim for, though they will not achieve it.

In a situation where some imbalance is *inevitable* but where the planners have to do their best to keep the imbalance to a *minimum*, the admonitions of the Hirschman school to seek imbalance are obviously inappropriate.¹ Although nobody really has said “create an imbalance and this will call forth responses that will engender development,” it is a fact that a favorable connotation has been affixed to investments being unbalanced. This has been possible because of two closely interrelated, usually only implicit, assumptions — that supply limitations can be disregarded and that there is no effective planning.

25 The Continuity of Planning

Most of the plans contain declarations that planning must be a continuing activity and that flexibility is therefore essential. Adaptation must be made to unforeseen events, and new opportunities must be seized as they present themselves.² Subject to these reservations, the planning agencies have, however, produced plans for fixed periods of three, four, five, or ten years. Within these periods the governments are supposed to fulfill the plan objectives. In some cases, a long-term plan is made spanning several plan periods. In India this is called perspective planning.

A plan for a fixed future period is obviously essential when planning is started. It has also the advantages of simplicity and of encouraging the govern-

others — may facilitate more rapid and better-balanced development over a period. Considerations of this kind apply particularly to sectors like development of power, transport and basic industries where investments are by nature ‘lumpy.’” (India, *Second Five Year Plan*, p. 17.)

¹ “. . . to those not readily enchanted by the paradoxical, the Hirschman strategy may seem to resemble that incorporated in such statements as ‘The most efficient way to walk a tightrope is to advance, swaying precariously first to one side and then to the other,’ or ‘To teach your child to conduct himself safely in traffic, set him off to cross Times Square against the traffic light.’” (Walinsky, *Economic Development in Burma 1951-1960*, p. 594.)

² “Through careful annual planning, it should be possible not only to implement the Five Year Plan with greater flexibility, introducing such changes as may be called for by current developments in the economy, but also continuously to correct targets and estimates in the Five Year Plan and take a forward view of the growth of the economy and of favourable technological and economic possibilities.” (India, *Fourth Five Year Plan: A Draft Outline*, p. 156.)

“Because planning is a projection of programmes over a number of years, its process must necessarily contain a substantial element of flexibility.” (Pakistan, *Outline of the Second Five Year Plan (1960-65)*, p. iii.)

“Moreover the Plan, even after adjustments and improvements, must not be taken as representing a once and for all statement. Periodical revisions over time are of special importance. Such revisions must take into account changes in internal and external circumstances and actual experiences in respect of performance.” (Ceylon, *The Ten Year Plan*, pp. 55-56.)

ment and the people to move along the chosen track and to resist the temptation to backslide. But against this, it has grave disadvantages. Administratively, it means that an additional rigidity is superimposed on a system already teeming with rigidities. Necessary or desirable adjustments to unforeseen changes or corrections of errors may not be made, and the adaptations that are made will tend to occur abruptly between plan periods.¹ Psychologically, too, the compulsion to revise the plan downward when no formal provision for this is made can have demoralizing effects. This is illustrated by the experience in India after 1957, when those in authority issued contradictory statements and were even tempted into pious falsification of the facts. This tended to spread confusion, cynicism, and defeatism in business, in the administration, and among the public. More flexible planning could have prevented some of the miscalculations of foreign exchange requirements and some of the faults in the handling of import licenses in the beginning of this period.

On the other hand, when things turn out better than anticipated, a plan for a fixed period strengthens the inhibitions against stepping up efforts. If India's Second Plan illustrates the dangers of events turning out less favorably than planned, its First Plan illustrates the dangers of their turning out better. In the beginning of the 1950's India could have more than fulfilled the plan in view of the good monsoons, her underutilized industrial capacity, and her strong balance of payments position. Tax efforts also could have been raised and the five-year targets could perhaps have been hit within three or four years, had there been more built-in flexibility. It is therefore arguable that, in addition to the administrative merits, there are also psychological merits in a rolling plan, which would elicit on balance greater and more persistent efforts by compelling the government to raise or lower its sights.

The South Asian countries borrowed their pattern from the Soviet Union, as the East European Communist countries had done. Planning over several years had been popularized and adopted in specific fields by certain Western countries, but it was undoubtedly more appropriate for the Soviet Union. Foreign economic relations there are less important. They are, moreover, regulated by state monopoly and can thus be fitted into a plan more easily. Domestic activity also is more fully controlled by the state. In spite of this, as we have seen in the post-war era, other Communist countries, more vulnerable to unforeseen changes abroad, and the Soviet Union itself occasionally, have had to change a plan in midstream.

The question therefore arises whether the countries in the region should not adopt a more flexible planning system, at least after they have once got started during an experimental period. This applies particularly to the provision of opportunities for adaptive responses to changes in their trading position

¹ "... one of the disadvantages of a plan limited by a definite time-period is this lack of flexibility. Too many things are so neatly tied in that a basic change can only be made when a new plan is drawn up, and even then, past commitments are likely to limit the area of manoeuvrability. A lack of flexibility is also the necessary price enforced upon a plan which starts with a process of capital formation in projects with long-gestation periods. Giving them up half-way through is often less economic than either not having them at all or completing them." (United Nations, ECAFE, *Economic Survey of Asia and the Far East, 1961, Bangkok, 1962, p. 86, f.n. 41.*)

as a result of changes in world markets. There is a particular danger here that an already inflexible economy may be burdened with yet another element of inflexibility. As we have seen in our criticism of the ideal plan, the purpose of planning is the rational adjustment of means to ends in the light of changing circumstances, including new experiences and new ideas generated in the process of planning and plan implementation. It is not to put the economy into a straitjacket but to increase flexibility and thus liberate efforts for progress, so that favorable opportunities can be seized and pitfalls avoided. Thus the required curtailments during India's Second Plan, as well as the possible increases during the First Plan, were made more difficult or prevented because of the fixed planning period.

Not only for the sake of greater flexibility, but also for a clearer perspective and a better view of the priorities, a "rolling plan" would have advantages. Every year three new plans should be made and acted upon.¹

First, there should be a plan for the current year. It should include the annual budget as well as a carefully worked out foreign exchange budget. Fixed five-year plans cannot relate these matters closely to economic planning. The annual plan should lay down economic policies for the public sector and, as far as it can be controlled, for the private sector. Secondly, there should be a

¹ The same proposal is made by Ragnar Frisch:

"Whatever method is used for the elaboration of a plan, it is not possible in the changing world of today to publish at a given date a plan for any five years, with much detail and petrify it, trying to follow this petrified pattern for the five years. Planning is a continuous process. At intervals, most conveniently perhaps every year, the whole problem should be reconsidered in great perspective taking account of new information, improved data and improved analyses. At each such round certain commitments will have been made that cannot be changed, while others are such that they may be modified in the light of the new information and analyses. A technique for such periodic revision should be worked out and incorporated as an essential part of the planning machinery.

"At each revision it will be well to look into the future a number of years which is determined by the nature of the factual circumstances and not determined by the formal question of how many years 'are left' out of some five years whose beginning was conventionally fixed at some date in the past. If five years is deemed to be a suitable horizon, this number of years may be applied at each of the yearly revisions. In a sense one would then always be working in the beginning of a five-year period." (Ragnar Frisch, "The Methodology of Planning in an Underdeveloped Country," *roncod*, undated, p. 3.)

Ceylon's plan advocates a "rolling plan": "Reference should be made in this connection to the concept of a 'Rolling Plan.' In terms of such a concept a forward perspective would at all times be maintained. Actual programmes would then continue to remain within the context of a long term perspective. It would be desirable to adopt such an approach in Ceylon." (Ceylon, *The Ten Year Plan*, p. 56.)

Professor P. C. Mahalanobis had early developed this view in connection with the formulation of the Draft Plan-frame to the Second Plan: "Planning must be flexible and continuous. There should be a general frame-work for five years; and detailed annual plans should be prepared every year. Targets, projects and policies must be continually re-assessed and reformulated in the light of new experience. Also, we must always keep in view the growth of the economy over a long period of 10 or 15 or 20 years, so that a balance can be secured between short-term and long-term objectives." ("Approach to Planning in India," radio lecture, September 11, 1955, p. 7.)

plan for a number of years — three, four, or five — which, however, should be changed each year. In this plan, targets and techniques should be laid down. As in the annual plan, price relationships and price policies and all other controls¹ should find their place. Thirdly, every year a perspective plan for ten, fifteen, twenty, or even more years should be presented, in which the broader goals are stated and the outlines of future development are forecast. The annual one-year plan should be fitted into the same year's new three-, four-, or five-year plan, and both should be framed in the light of the perspective plan.

This system of rolling planning would not increase the work by much, for the plans of earlier years would provide the basis for the succeeding plans. Moreover, some of the required alterations and adaptations would, in any case, have to be made. To some extent any planning inevitably involves rolling planning. The difference is that formal expression would be given to this, and the effectiveness and rationality of planning would be thereby increased.

There remains the question whether — and if so, how and to what extent — parliaments and governments could and should make decisions that are binding, within limits, on themselves and future parliaments and governments. But this question is not answered by fixed period planning. Both systems of planning raise the problem to what extent future parliaments and governments can be committed to specific undertakings made to public corporations and other decision centers inside or outside the administration.

¹ Chapter 19, Sections 1 and 2.

ECONOMIC MODELS AND THEIR USEFULNESS FOR PLANNING IN SOUTH ASIA

1 Introduction

Social scientists are in an unusual position in that the objects of their studies and their own activities are within the same context. For these studies are themselves socially conditioned activities. Social scientists should therefore have a head start over other investigators. Yet the traditions, habits, and biases of economists, rooted in the philosophies of natural law and utilitarianism and reinforced by their ambition to be "scientific," are such that they have preferred to remain unaware of this. They have continually tried to lift their investigations out of the social context into a supposedly "objective" realm, from which other socially determined relationships are surveyed — as from an Archimedean point, from which the earth, on which we all still stand at the time of writing, is lifted. This attempt makes economists naively innocent of their own social determinants.¹

This unawareness is reflected in their separation of "economic" from "non-economic" factors and their identification of the former with "objective" and the latter with "political" or "moral" issues.² Behind this separation is the thought, to some extent correct, that the "economic" facts are more accessible to investigation. "Economic" quantities can, moreover, be expressed in monetary terms and made commensurable, at least in market economies. But the idea that commensurability in this sense renders the analysis "objective" is wrong. The distinction between "objective" choices guided by criteria of "yield" and "subjective" choices guided by morality or politics is a deeply metaphysical one that leads to the false belief that economic recommendations

¹ For a fuller development of the discussion in this and the next few paragraphs, see Prologue; Appendix 2, Sections 12–14 and 19–20, *et passim* in the several chapters of this book.

² Appendix 2, Section 14.