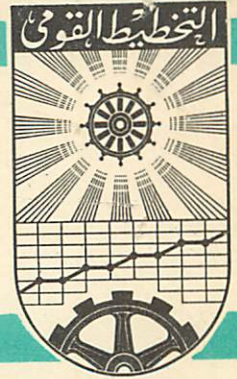


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THE REQUIREMENTS FOR REGIONAL AND NATIONAL PLANNING

by

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The Requirements for Regional and National Planning.

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1. The Planning Process

1.1. Introduction

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The Requirements for Regional and National Planning.

1. The Planning Cycle.

In any rationalised action involving a planning function, we may recognize a number of successive and related steps, as follows:-

1. Planning-propositions.
2. Decision by authority on plan.
3. Action and implementation.
4. Realisation and accomplishment.
5. Reflection and reconsideration.
6. Aspiration for further development.
7. Demand-determination.
8. Planning-propositions.

and the cycle is repeated. The steps may be called, for our purpose here "a planning cycle", and be denoted by P D A R R A D P. Situations could be cited, in which the cycle may start, at any step and follows round, until the cycle is completed, then repeated again and again. Step 2, is a common starting point. Authorities decide about things, without (proper) planning, probably after Reflection (step 5), in response to an imaginative or unrealistic aspiration (step 6), or under the insisting demand and preassure for action. Step 5 is another starting point, identified easily in large systems as discussed in this study. Societies and individuals, exposed to experience or information about other societies and individuals, come to (reflect) about and imagine things. This is a breeding phase, in which aspects of mis-information, criticism, demagogy and enlightened cultural and political leadership abound. Then, the mixture of these aspects, settle down to a better defined individual and social expectations, calling for action.

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The planning cycle of steps may be apparently incomplete. On careful examination, one discovers that no steps can be completely eliminated altogether, some steps may be less emphasised or summarily considered than others, according to situations. In building a private house, for example, the architect's role of design and contractor's job of construction, are very conspicuous steps in the cycle, other steps exist nevertheless. In the new summer fashions for ladies garments, step 4 is all prominent. The fashion becomes (there and everywhere), the previous planning, decision and action steps are not given prominence, while one wonders at all, who ever (aspired) for and demanded such new fashions.

2. The Planning Aggregate - Large Systems.

In large systems, such as nations and regions, there are a multiplicity of authorities, capable of completing planning cycles. Individuals in their private life, and as citizens act within the limits of their resources, and the boundaries set by the law and tradition. Business directors of enterprises, small and large, set in action planning cycles. Public authorities at local, state and national levels have as their duty and responsibility to initiate and activate such actions, with due consideration to the extent allowed by their mandate of power.

In a large system a multitude of planning cycles, at different levels of authority, exist. Their content, extend and continuity vary widely. They exist in the large system, together with a lot of (fragmented) steps, which do not seem to tie together to form a P D A R R A D P cycle. We find actions being taken, with apparently no decision. We find reflections and aspirations - just reflections. Decisions not implemented. Demand unsatisfied. Then we find "Planning" done every morning by armchair readers, who, on reading the news come directly with "Plans" to help the President. These fragments, or unsaturated (rings) (if we borrow from a well known chemical term), appear to be incapable of being planned. It may not be desirable at all to do so.

These are deterministic sets of actions, with not much scope for choice and decision. Such actions are considered to be planned once and for all either by (nature), or by the (municipal laws). These are (instinctive) actions, like reflex actions in a human body. They follow in situations, without any need for reflection, desire, plan or decision. In animal life, instinctive action is an interesting field of study. In human society, some phenomena are described as instinctive, and seem to be incapable of planning.

The multitude of planning cycles and other sets referred to above form planning aggregates. The planning aggregate may be recognised by the most important (planning cycles) actively working in it, though these planning cycles may not cover completely or uniformly all the activities in the aggregate.

National existence - in the current sense - is a planning aggregate, identified by the authority structure in the State, the functions and responsibilities of government, and the rights and duties of the citizens. Individuals vote rulers to power - rulers draw programs of action - establish machinery of law - defense and finance This is a case of an (authority for order and peace) aggregate. Within this large aggregate, public finance, national defense, the judiciary and security machinery are all sub-aggregates, depending upon the authority and functions of the (national) aggregate system.

In modern business engineering it is the technique and not the authority that matters. In aviation, for example, there are a variety of authorities of designs, of production, but the controlling aspect is the (technology) of air-transport. The financial, administrative and users aspects of this function are all important, but seem to be relate and rather subordinate to the technology.

3. Rich Countries and Poor Countries - At Present and in the Past.

Rich Countries in the world seek security. They are rich and prosperous, they like to feel secure. They need so many other things, but security predominates. Poor countries need security too, but they aspire for development, economically and socially.

What is new in the quest for security by the rich and the strong, is the emerging idea of (collective security). No one nation, or a group of nations, according to this new concept can feel secure, if they do not succeed in bringing other nations into a common system of collective security. The poor newly established nations in Africa and Asia, are equally important members in the hoped for system of collective security, though their military and economic potential is admittedly limited. The undeveloped countries feel the pinch of poverty and social backwardness (a loose term, but clear enough), so they aspire for balanced economic and social development. What is new in the quest for economic and social development, is that it can be (planned) and implemented with the aid of rich countries. A bargain, a very honorable one, is thus indicated. The word bargain may not be pleasant, it means a deal, and nations, big and small, follow principles and high ideals, rather than seek bargains and deals. So, we do not call it bargain, but we say, that mutual cooperation could be and must be established between rich and poor countries to secure (collective security and development). In a more recent stage, the rich countries discovered that they might as well continue to develop too. And on a second thought, poor countries discovered that they also need peace and security in order to develop. Well, this is an even better approach to mutual cooperation between rich and poor countries.

This extremely aggregative, and possibly premature, description of national basic attitudes of rich and poor countries, may not be justified by facts such as the atomic armament race and the brutal disregard for human rights in some areas. It is not the purpose of this address to go into detail in elaborating national and universal goals,

but, the following comparative observation may be sufficient to drive home the basic thesis.

One or two centuries ago, there were rich and poor countries. There were no possibility of thinking of collective security amongst the rich, except by dividing the spoils of small and poor nations, or by forming military alliances, leading in practice to the supremacy of a single world power. The small and poor countries were supposed to enjoy the protection of the strong. Non-whites, were asked to believe in the civilising mission of the white man, which included colonialism, exploitation and subjugation. They were told to be thankful to the white man, and to help him in shouldering his burden and to be convinced that a very long time is needed for them to advance even a short way in the road of civilisation.

The two pictures of the present and the past are distinctively different. They represent different concepts, and different practices, but each has its (logic) within the context of social evolution.

The discussion of the planning aspects relevant to the contrast between rich and poor countries will be taken up later.

4. Two Sciences - Partial and Global.

Within the last few decades, a new science has emerged, which is basically different from the science and technology of the last century or the science of the nineteen thirties. This assertion of basic difference is justified by the following remarks, which compare the present (global science) with the previous (partial science).

Scientific knowledge and technological applications created modern industrial society, with its producers of utilisation of natural resources in the service of man. Thus, great advances have been accomplished in agriculture, mining, transport, energy, industry, medicine,

housing, recreation, education and cultural dissemination. War weapons and subjugation instruments were highly developed too. Far-reaching economic and social consequences took place in society. Science and technology became an important factor of social change in science and technology advanced in many fronts, in physics, chemistry, geology, biology and psychology and in the corresponding applied fields of engineering, industrialisation, mining, agriculture, medicine and education. The quest for scientific knowledge and the systematic purposeful efforts to put to practical application in society, led to the establishment of research laboratories and development agencies, by private firms and by public authorities. Two world wars, a series of economic depressions and a growing need for resources enhanced interest and support to science and technology. The single university professor, experimenting with wax and string glass ware and handmade (primitive) implements, seems to be very far away. Giants of science like Rutherford and J.J. Thomson only 30 - 40 years ago, worked actually with (stone-age-implements). Science budgets expanded manyfolds, and science teams grew enormously and quickly.

Global science began by combining different disciplines to the solution of (practical problems). This is a re-composition of isolated facts, obtained from the ever-branching avenues of over specialisation, characteristic of (partial science). Science came to tackle (complex) problems which exist in a society undergoing a change at a higher rate than before. The problems were (complex) in comparison to (isolated) problems of physics, of chemistry, of medicine etc., more than being much more (complex) in themselves. The change is more in the (scientific approach), rather than in the (problem).

Organisation, administration, management, experimentation and control methods used successfully in the 19th century (partial) science, were extended to such problems as war-effort mobilisation, large scale regional development of river-basins, construction and rehabilitation of war-devastated areas, and the management of international coordination and development programs in the U.N. system and outside it.

The State-sponsored science itself became to a large extent (decisive) in the same sense that alternative propositions are advanced to allocate funds and personnel to a project (x), or to a project (y); and the decision is made on the assumption that in each project certain targets will be achieved at certain dates. Discoveries and technologies are now ordered over the counter. No more they are (discoveries), which you may find if you search for them. They are almost a manufactured product of known physical and human inputs, which is produced in a big science machine-factory. This is an exaggeration, but essentially indicative of the new-global science.

Partial science is very similar to agriculture. You choose the seed to the land, irrigate the fields and add fertilizers, but the plant grows in the soil and the final crop is subject to many uncontrollable factors. Global science is similar to industry, you know pretty well what you are producing and all that you need to produce it. In fact, you planned production when the design of the factory was first considered.

Now, let us combine the two aspects of global science just mentioned, namely the (complex) nature of the problems tackled, and the (target setting) planning. The result is a new endeavour of (social engineering), more familiarly known by the name of national and regional development planning, the purpose of which is to use resources and techniques to induce and manage desired and planned modifications, in the pattern and structure of society. As a new and emerging endeavour, purposeful regional and national planning must develop its producers, techniques and instruments, through experience and trial, and benefiting from existing knowledge and technology. National and regional planning may be thus considered as an extension of the scientific method to a wider field.

5. A Dangerous Game.

If national and regional planning is considered as an extension to the application of scientific logic to the complex problems of economic and social developments of nations and regions, it could then draw on the experiences of economics and social science, together with the knowledge of physical and biological sciences and technology. Mathematics, logic, statistics and electronic computers could play a useful role in the job. Scientific theory in chemistry or physics seems solid and well established when we look at it in general terms, but for the active scientist in the front line of discovery, the same theory is not all that solid, many empirical facts lack logical relations and exceptions baffle the investigator. Planning as a scientific aid to socio-political management is not supposed to fare much better. In general terms, and big lines, principles of regional and national planning could be enunciated, but when you approach the front line of practical action and be asked what to do, you start using frequently the words "likely", "probably" and "perhaps". Yet, state-managers and decision-makers seek increasingly the help of planners, in order to reach more rational decisions to the problems they face.

The master-planner-mind when approached, should not say, "well, Mr. Manager, I cannot tell you much. Our science is still new and it is far from perfect, and the little I know about it needs much information and data, which you do not have and that will require years and millions of Dollars to obtain. So, you better go on with your intuition or hunch, and come back to me ten or perhaps twenty years later."

Neither could the master-planner-mind say, "well, Mr. Manager, I have been wondering why you did not come to me earlier. I would have saved you a lot of money and trouble. Now let me see, what is it that you want, and I will give you the best prescription to follow, and you cannot fail."

Most of the down to earth planners, are in the unhappy, yet *actual position* of not being impractically modest, not deceptively

boastful. They say, "we will examine the situation, and see what can be done. This will be a help, but Mr. Manager, you are responsible for accepting the recommendation or discarding it." In doing so, they render a real service to the Manager, to the science of national and regional planning and to themselves. After all, scientists have been acting like that for the last 5 000 years, and the results are not bad at all. With one difference, physical scientists, biologists, engineers and medical doctors, had the luck of not dealing with managers of business, mayors of cities, governors and presidents of countries. In dealing with inanimate nature, or with living organisms, even if it were a human patient, other scientists were in a relatively better position than the national planner, at least in two respects. The first is that in partial sciences observations and experimentations could be repeated under control, and secondly, in partial sciences one deals with existing systems to discover their properties and control them later, while the systems studied do not react to the study. In social planning, one deals with "authorities" who have power and with human social structures which react to ideas and to actions. National and regional planning becomes a really dangerous game to play.

No wonder, that the early beginning of the activity, found better chances of being attempted with business-managers who are used to taking big risks, and with military commanders, when fighting desperately against big odds.

More recently, politicians and authority leaders are getting interested. If they are really so, cooperation with planners would lead to useful results.

6. The Approach to National Planning.

State craft existed from the early dawn of history. Social reformers have always enriched human experience and created schools of thought and leadership in social management of communities. Army leaders

and conquerors followed a shortcut, by seizing power and giving orders to be accepted at the point of the bayonet, or in milder cases, with the aid of the gracefully staged patronage of a compliant priest or chieftain.

Technology - even in its primitive forms had little to do with this game, except in devising instruments of war. Planning cycles, as described above, were few in number and not permeating the social group as a whole. Production processes were followed traditionally. Social concepts and authority settled down to a standard form, except within a small group of priests, philosophers and statesmen. The practice of power and authority fitted with individual concepts and social tradition, and was loosely related to production patterns. Changes were slow, and concentrated in the limited group of priests, philosophers and chieftains.

Across the centuries, technology and science advanced. Economics of production and social authority systems, became closely inter-related. More and more planning cycles came to be recognised in society. The consumer became separate from the producer, and both consumer and producer became more actively affected by influencing public authority. In short, modern societies are increasingly acquiring the characteristics of "planning aggregates" as mentioned before. It would be a nice game to write down planning cycles in a modern society. They can be identified very clearly in business and production activities, and equally clearly in state and federal budgets, and public administration (presumably). They can be traced in community activities, in private work-relations, insurance and saving systems, in summer vacation forward planning and in the difficult task of managing social and financing over commitments.

Cities are planned, and so are metropolitan areas. Transport systems, water-ways, industrial investment, agricultural production and prices, wages and salaries, employment opportunities.

Some planning cycles in the huge aggregate, get related to

each other forming a huge structure, a loosely knitted, yet coherent association, involving a large number of small units, who loose individually and partially independence, to gain collectively and partially also some advantages - material or otherwise.

The national and regional planner will most advisedly examine carefully the "planning aggregates" under-study. He would thus discover, the most important 7-phase planning cycles (P D A R R A D P) actively operating. He should be able to classify the main actions and attitudes under one of the following types:-

deterministic - by nature
deterministic - by other action (consequential)
instinctive - (natural)
accidental - unplanable
un-planned

This looks like an onerous task, which could be much simplified by the two following procedures:

The first is to select a limited number of national and regional problems, according to a set of criteria.

The second is to consult with key authorities, who will later give the decision and order action. The consultation should cover the four following questions:-

1. What is going on?
2. What is wrong with it?
3. Any suggestions proposed for action?
4. Why action was not taken?

The first question seeks information. The second is diagnostic and reveals preference. The third insures active participation in planning by a wide group of authorities and specialists at a less

comprehensive level. The fourth question brings forward contradictions or obstacles, which need to be examined carefully before drawing the final planning recommendations.

The planner would be in the meantime building up a model of the system he is examining. The model may be very tentative and simple at the start, but would be continuously re-examined, according to the facts and information obtained. The model is a logical frame to hang facts and ideas upon, in a way that makes coordination and judgment easier. But the model is not a recommendation in itself, it is a tool for the technician.

In most cases, the facts and figures for the answer of the first question, cannot be found readily. It may be very difficult to collect through specially designed statistical operations or field work. One wonders how many serious decisions are made on such incomplete data. On the other hand, scientists working in national systems of planning retain a lot of attitudes which are more appropriate to scientific work in partial fields. It is unusual that not enough use will be made finally by data collected at great cost.

The answers received on the second question, are usually subjective and objective. What is wrong is that Mr.(x) is in office, or that Mr.(y) is not a good man. All others are wrong-doers. Another pattern of answers is, as follows "I do not really see anything wrong myself. At least nothing that one can do anything about. But we have to show we are doing something. Psychological management, you know."

Technicians and users will be more helpful than managers in answering questions, but their points of view must be considered as being particular and not comprehensive.

A suggested simple model will be outlined now, which may be generally useful in defining the main factors in a planning process.

7. A Simple Model of Social Evolution.

In a social unit, a nation or a region, let us identify three components P, B and A.

P: indicates the private and individual domain of the citizen. It includes his private life, income, expenditure and also the individual's concepts, hopes, fears, beliefs and system of values. P signifies the sum total characteristics and magnitude of the private, physical and moral effects of the citizens in the society.

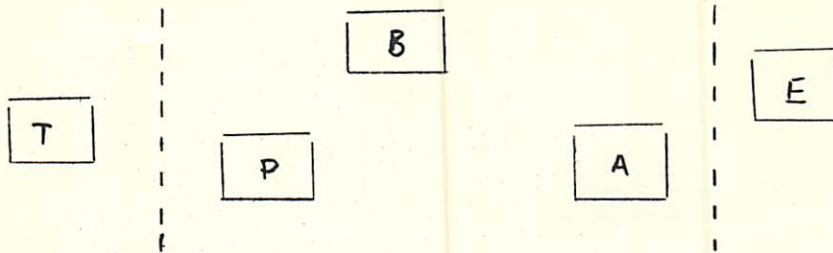
B: indicates the business of the society, that is to say, the organised employment of individuals in production of goods and services. It includes self employment as well as management. B - as a social component - includes the whole of the structure, authority and activities of (work) in the society. It is not just management of business enterprises, but also all employees, all products, concepts and magnitude of work in the society.

A: represents collective authority in the society, which is established formally (public authority) or informally (ethics, traditions, customs, social morals) to regulate the activities of individuals in their private life (P) and in their work functions (B). The authority is exercised by the law and the constitution, or by non-official social grouping, by public opinion and by moral law, and social consciousness of the individual.

E: is the external world, outside the society, which is presumably composed of other social groups, with certain inter-relations with the three components of society.

T: is the prevailing level of technological knowledge and its

application in business (B), in private life (P) and in authority structures (A).



The society exists in equilibrium, with its three components, the technological and the external world. There will be equilibrium relations between the three components, and the two exogenous factors. Authority rests on delegation by citizens or by acquiescence. The working relations of individuals lead to the production of goods and services needed by the society, part of which allocated to authority, and the other part goes to individuals as income expenditure. Law and orders is maintained by the authority, on the basis of equilibrium relations of the three components.

If the magnitude or attributes of any factor change, the equilibrium relations are disrupted and subsequent changes occur in the other components, until equilibrium is regained. By definition, the inter-relations between the three components must be stronger than the relations with the external world, otherwise the identity of the social group is lost. The individual's devotion for the group, in contrast to other groups, builds up the national feeling, which is a real force in the society. If B is stationary and T is not developing in the society, the likely changes will be all in the line P - A. On the other hand, if T is developing, even by transmission from the outside, all components will be affected, and new equilibrium relations emerge. Technology affects private life in consumption and means of living, recreation, culture and mobility. It affects B, in changing the exploitation techniques of natural resources, producing new products for investment and consumption, new work and employment relations and management structures and possibly a redistribution of income between property and labour. Technology affects authority directly, it may weaken moral or traditional ties, it may increase the strength of the authority and the power of the law.

In addition to these possible direct effects of technology, there will be many indirect effects, which lead finally to a new social configuration.

Let us assume that B increases suddenly, while the physical consumption of P is reduced, then the consumption of A must increase, P must accept to work more and delegate wider authorities to A and yet receive less. This is the well-known case of war and national emergency.

Let us assume, next, that B is reduced suddenly, private component will be unemployed, lacking normal amenities of life and feeling insecure. (A) steps in to ration resources, since the normal distribution channels fail, creates hope and feeling of security, and in the sequel may rough-handle B, or assume some of its responsibilities in the interest of the community. This is similar to distress relief situations.

If confidence and/or loyalty of P towards A is impaired, A reacts by demonstrating its military strength and extends the arm of the law. This leads to counter-demonstrations from P, which include strikes or sabotage in B, designed to exert pressure on A. If this rebellion is successful a new form of authority is established.

It would be both unwise and unjustifiable to over-stretch the model to explain all the phenomena of social evolution, while the main purpose of the model is to classify the multitude of socio-political and techno-economic factors, that may be involved in a national or regional planning problem. But one important aspect of the model need to be explained, namely the stratification, or class-structure of society. This may be described to be the development of a small-sub-group with greater control of authorities and of production, and with strong inhibitive influence on introducing change in individuals' ideas and concepts. It is assumed that the interests of the sub-group, or the remainder of the group thus excluded, may be more identifiable with similar groups in other societies, than with the general characteristics

of the society as a whole. Thus the social cohesive action of (nationalism) becomes less important than class concepts. As far as the present analysis is concerned, this is not a relevant question. Because, we are dealing with a model for action to be proposed and accepted or rejected by the existing authority, which is capable of its implementation.

8. The Strategy of Planners.

National planning is thus an intermediary function in a series of steps, which include decision by a responsible authority, which is capable of action, designed to realise the objectives of the plan. The results of action would be followed up and examined and the situation of development (whether economic - social - political - and whether comprehensive or sectoral) would be reconsidered, and a new series of aspirations (representing common national expectations, though expressed by lawful authorities) is redefined as objectives to a renewed planning cycle.

The planners in preparing their recommendations to be proposed to the decision makers, will consider that the real worthwhile results (in the line of preference determined by the authorities concerned) will be more certain to be attained, if the rationalisation of decisions becomes an integral part in the cycle of steps.

Close contact and consultation with the authorities become a necessity. A proper evaluation of potential resources, that could be mobilised in the development process must be made and re-examined from time to time. The examination of the executive capacity of the development mechanisms, which exist already or could be established and introduced integrally in the plan proposals. Direct and indirect effects of development action, especially as regards social, political and psychological factors, must be kept in mind and followed carefully.

Partial planners engaging in industrial development, for example, or educational development, should consider their work as a part

of an overall development effort. Social and economic planning, with all its intricacies and projects, would be only successful, if it takes into consideration the political and psychological factors, which cannot be numerically expressed in an investment plan for example.

In advanced economies, the political and psychological situation is generally stable and insensitive to relatively small (though absolutely appreciable) investment decisions in a road program or in a new textile factory. The situation is totally different in an underdeveloped country. The apparent absence of direct inter-relations between economic, educational, and infra-structure investment on the one hand, and day to day political action, which is a common feature of advanced economies, is not found in underdeveloped countries, which attempt to initiate and sustain an active development program. The simple equilibrium model described above, would help to elaborate this point in the next paragraph.

A careful examination of the model as applied to the system in question, would reveal the significant forces promoting development planning. The mere announced intentions are not a sufficient answer. It may be, that educational expansion and demonstration effect transmitted from the outside, are creating a higher demand on goods and services. If B (business) could increase production, through creating new capacities and increased productivity, the demand will be met, provided that enough purchasing power is made available to consumption. If business cannot find the capital to expand production, prefers to gain trading profits through increasing prices (so as to limit demand), or does not help to increase the purchasing power of the masses, in either case, the problem is not solved. Demand pressures may be directed towards the government in the form of unrest and political action, proclaiming other slogans. The motive force of development may be, on the other hand, activated by leadership exercising political authority on the masses, and guiding authority on business, according to a carefully established plan, well managed in all of its aspects and supported by a politically stable system. A proper strategy for planning could thus be established to